Metaphysical Ecumenicism

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Some Main Rival Theories in Phenomenology, Ontology, Metaphysics, Epistemology, and Ethics as Distinct Only in Reason

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To

Panayot Butchvarov

with Honor

and

in Friendship

There is great philosophical wealth in Jan Dejnožka's [work] .... His knowledge of my work is thorough and insightful. It is also informed by his expert grasp of the foundations of analytic philosophy, on which he has published two major books and many articles....

Many readers... did not see what Dejnožka does see, namely, that, as he nicely puts it..., my "position is only analogous to realism."

—Panayot Butchvarov (2004)

It is a truism that there is such a thing as recurrence or repetition in nature. The same colors, shapes, and sounds occur over and over again. We are continuously presented not only with novel things but with qualities and features of things that we have observed time and time again.... The distinction between a particular thing and its qualities is well-entrenched in our everyday thinking and speaking about the world. The phenomenon of natural recurrence seems easily explained and accounted for. It consists of the fact that different objects have qualities in common.... Nevertheless, at the very beginning of the western philosophical tradition, Plato found that, upon reflection, the truisms led to certain puzzles.
—Charles Landesman, *The Problem of Universals*

The idea that an entity is given in many ways or under many aspects is indeed fundamental; it is universally accepted in Western philosophy and needs no illustration.... Both Aristotle and Frege analyse an entity into its different aspects or ways of being given.... The connection between Frege and Aristotle may be established *via* Leibniz, who was aware (since his dissertation) of the subtle traditional distinctions between the different aspects (*rationes*) of an entity....
—Ignacio Angelelli, *Studies on Gottlob Frege and Traditional Philosophy*

That is what Aristotle had asserted of being in the... Categories (substance, quality, relation, and the rest); they were not ten species of a common genus, 'being', nor were they wholly different from one another in their 'being'; there was identity amid the difference and differences amid the identity.
—William George de Burgh, *The Legacy of the Ancient World*

But isn't a chessboard, for instance, obviously and absolutely, composite?—You are probably thinking of the composition out of thirty-two white and thirty-two black squares. But could we not also say, for instance, that it was composed of the colours black and white and the schema of squares?
—Ludwig Wittgenstein, *Philosophical Investigations*

In part, the *history of philosophy* presents only one philosophy at different stages.... In part, it also shows that the specific *principles* each one of which formed the basis of a given system are merely *branches* of one and the same whole. The latest philosophy... is the result of all those that precede it and must therefore contain the principles of all of them.
—G. W. F. Hegel, *Encyclopedia of the Philosophical Sciences in Basic Outline, Part 1: Science of Logic*

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Preface

This book presents some main rival theories in phenomenology, ontology, metaphysics, epistemology, and ethics as very different but distinct only in reason. This results in a comprehensive new unified philosophy that includes all these ostensible rivals within it.

I summarize the main ideas of the book as follows.

Anything and everything is an *object in the wide sense*. Objects in the wide sense have being in the minimal sense of not being nothing. For otherwise they would not be anything. Objects in the wide sense fall into two mutually exclusive and jointly exhaustive categories. *Qualified objects* are objects that are logically possible objectual ways of presenting other objects. They are logically possible direct objects of perception or thought, construed as widely as possible. All objects of perception are also objects of thought, but not all objects of thought are objects of perception. *Objects in themselves* are objects that are not qualified objects. All qualified objects logically can be directly presented, and also can be indirectly presented via higher-level qualified objects. Objects in themselves are always indirectly presented via qualified objects. There is a simple type-hierarchy of levels of phenomenological presentation. Objects in themselves are level 0, and qualified objects are levels 1, 2,... n. There are infinitely many type-levels of qualified objects. Again, they are logically possible objectual ways of presenting other objects. Thus they are basic, and are categorially unlike *merely* possible objects such as unicorns.

Modern classical (Frege-Russell type) logic admits four basic senses or uses of "is:" existence, identity, predication, and class or set membership. The present theory of objects admits a fifth, "being," which is always surrounded by double quotes. A factually informative existence judgment is a judgment that some qualified object of level n "is" an object of level n - 1. A factually informative identity judgment is a judgment that two different qualified objects of level n "are" the same object of level n - 1. In conceptual origin, my being relation is based on Panayot Butchvarov's being relation, and I give him full credit for the idea. But my qualified objects are not at all his objects, and my objects in themselves are not at all his entities. In grounding factually informative existence and identity judgments, qualified objects function much like Frege's senses, Russell's descriptions, and Butchvarov's objects. No one could ever confuse any of these four kinds of entity with each other. But they are functionally distinct only in reason. I credit Castañeda and his guise theory for the general idea. But I argue that my theory is the best in that it is the most illuminating and the phenomenologically most correct theory.

"No entity without identity," or better, 'entity if and only if identity' ontology, logically ties (in the wide *a priori* sense of logic) the "is" of existence to the "is" of identity. But since Butchvarov, it also logically ties the "is" of existence to the "is" of the being relation. And on metaphysical ecumenicism, these two ties are distinct only in reason. Qualified objects of level n would be factually informatively identical with each other if and only if they "were" the same object of level n - 1. And on the face of it, the being relation "is" tie is more deeply illuminating of what it is to be real. For the lower-level object is what the qualified objects "are."

I also admit a sixth sense of "is," which is surrounded by asterisks. Two objects of the *same* level *are* each other if their names are intersubstitutable salva analycitate. Thus even objects in themselves can *be* (distinct only in reason from) each other.

Facts (Wittgenstein, Russell) are objects in the wide sense, since they are not nothing. Propositions expressed by statements are qualified facts, which may or may not "be" facts in themselves. This is my grounding of the correspondence theory of truth.

An epistemic *seeming* is a presentation of a qualified object that is presented as objectively, rationally seeming to "be" a lower-level object. Not all presentations of qualified objects are seemings. For in a reductio ad absurdum, we are trying to prove that some qualified object "is" *not* an object in itself. There are both qualified seemings and seemings in themselves. For there can be factually informative existence and identity judgments about all objects, including seemings. A seeming in itself is a presentation in itself of a qualified object that is presented as just described.

Values are objects in the wide sense at the very least, since they are not nothing. A value continuum has two different values, one at either end, with the degree by which either defeases (trumps, outweighs) the other cardinally or at least ordinally ranked along the continuum for all logically possible situations in which the values conflict, and with a logically indeterminate middle where neither value determinately defeases the other. Any finite in re value logically can be defeased by a greater finite in re value in the continuum of which they are the end points. Many rival value theories admit exactly the same values, and differ only on which values outweigh which in which situations. Such theories are commonly said to "shout" one value and "whisper" the other.

I summarize the chapters and main kinds of ecumenicism as follows.

In chapter 1, I argue that Continental phenomenology and British empiricism are distinct only in reason, since via moderna ideas are basically just via antiqua ideas minus objective realities.

In chapter 2, I discuss the various sorts of ontological distinction. I admit real distinction, formal distinction, distinction only in reason, and modal distinction, but reject merely mental distinction and merely linguistic distinction as not based in reality.

In chapter 3, I offer two main arguments to show that many metaphysical theories usually understood as rivals are in fact distinct only in reason, and that if the theories meet a certain three conditions, then all of them are correct in admitting the entities they do, and are wrong only in rejecting each other's entities, since the entities are distinct only in reason. This includes theories about phenomena, properties, individuals, space, time, values, and so on.

In chapter 4, I argue for epistemological ecumenicism. I argue that holistic epistemology is only formally distinct from, and is epistemically supported by, foundationalist theory of epistemic seeming, and that logicist probability is distinct only in reason from subjective probability and from frequency theory. The theory of seeming also refutes the argument that since many different things are rightly called evidence, evidence cannot be defined, since these things have nothing in common, but only "family resemblances" at best; and that therefore knowledge cannot be defined either, or at least not in terms of evidence. The refutation is that all evidence is either a seeming or is ultimately based on seemings; and *that* is what all evidence has in common. For if purported evidence does not seem to be the case, and is not based on anything that seems to be the case, not even in the least, then it is simply not evidence.

In chapter 5, I argue for ethical ecumenicism on three levels. On the deepest level, facts and values are shown to be distinct only in reason, *contra* Hume. Next, utilitarianism, deontic (intrinsic value) ethics, and some of their main variants are shown to be distinct only in reason. On the shallowest level, many partisan rivalries in politics, social philosophy, and aesthetics are logically analyzed using value continuums, such that the rival partisans admit exactly the same value continuum, and merely favor different end points of it. That is, they admit exactly the same values, but weight them differently, each "shouting" one and "whispering" the other, so that they locate any given situation very differently along the continuum of defeasements. Unfortunately, showing this will not resolve any specific dispute. But it does show that they share a common underlying logical foundation, namely the continuum. Continuum theory also shows that in the case of any two finite in re values, neither defeases the other in any automatic, absolute, or necessary sense. For each defeases the other in infinitely many logically possible situations, and neither defeases the other in the infinitely many logically possible situations in the indeterminate

"logical middle" of the continuum. And changing the facts of a situation logically can change the defeasement. Thus continuum theory is just a logical analysis of the ordinary, common sense view that all defeasements of finite in re values by finite in re values are logically contingent, and none of the low-level rival partisan theories is logically necessary, true *a priori*, or even true at all. A continuum is itself a sort of sliding distinction of reason for all logically possible situations involving the values in question. There are multiple continua for multiple values. Even the facts and values of the four main kinds of mysticism are shown to be distinct only in reason, and to be subject to continuum analysis.

The Introduction is a longer summary of the book for those who may wish it.

The book also serves as a wide-ranging discussion of the philosophy of Panayot Butchvarov, and it is high time a monograph did.

This is a long book. It is full of new theories and dialectical objections and replies. Key points are repeated to show the role they play at each stage. And the reader may often simply need refreshing. Also, repetition in somewhat different and progressively deeper terms may help acclimatize you to this new philosophy. And one way of stating things may be easier to understand for some, and other ways for others. Of course, you can always go back. But with the repetitions, you should not have to. Also, travelling "criss-cross in every direction" (Wittgenstein: PI p. ix) is the best and at bottom the only way to grasp philosophical dialectics.

The term "metaphysical ecumenicism" is extant. Unlike Quine's naturalistic ecumenicism, mine is based on traditional ontological distinctions. Mind-body dual aspect theory is the very limited extant metaphysical ecumenicism. I subsume it into mine.

Besides the special ontological use of "be" for my being relation, I also use double quotes to express quotation, and to mean "the ostensible or so-called." Single quotes bracket parts of quotes, near quotes, paraphrases, and terms of interest.

About twenty percent of this book is from earlier works.

I thank everyone who helped me in life. I especially thank Panayot Butchvarov, my graduate advisor for six years and friend for over fifty. I thank the editor of *European Journal of Science and Theology* for kind permission to use material from my papers. I thank my family and friends for their love.

Wake Forest, North Carolina
April 6, 2025

Introduction

This book presents four new theories. Metaphysical ecumenicism is just one of the four. The natural progression is from (1) theory of qualified objects to (2) metaphysical ecumenicism, then to (3) theory of seeming, i.e. of evidence as always ultimately based on objective seeming, and last, to (4) theory of value continuums. Each theory can be accepted independently of the other three. But together, they form an even more comprehensive new philosophy than just metaphysical ecumenicism, as each illuminates the others.

Metaphysical ecumenicism is the main theory of the book. I apply it to phenomenology, ontology, metaphysics, epistemology, and ethics to show that many of the main ostensibly rival theories are distinct only in reason. But to follow the natural progression, let me begin with theory of qualified objects.

I call anything and everything an object (or thing). I divide all objects into those that are qualified and those that are not. The thesis of my phenomenology / cognitive science is that all and only objects of perception or thought are qualified objects, as opposed to objects in themselves. Qualified objects are objects that are logically possible objectual ways that an object can be presented in perception or thought. That is their defining essential feature. A second feature, no less essential, is that qualified objects logically can be veridical, illusory, or delusory. For, at least without some sort of "ontological argument," it does not follow from the fact that something is a way that a thing logically can presented, that it actually does present the thing, either veridically or even at all. I list twenty-one essential features of qualified objects in chapter 1, and that list may be considered their *full* definition. I define objects in themselves as objects that are *not* qualified. That is, objects in themselves are objects that are as they are, as opposed to how they are objectually perceived or conceived. These definitions leave it open whether at least some qualified objects and objects in themselves are or logically can be distinct only in reason.

Since anything and everything is an object in the wide sense, the concept of an object in the wide sense does not presuppose the concepts of public, private, objective, subjective, body, or mind, whatever senses might be assigned to those terms, except for the unlikely, question-begging sense of *being* anything and everything, and for any sense *presupposed* by that sense. This is certainly true in the ordinary, pre-philosophical senses of those terms, which I often use in this book, and also in any *reasonable* senses of those terms. Even if, perhaps per impossibile (i.e. in a purely hypothetical sense), every object *were* public, or private, or objective, or subjective, or a body, or a mind, those concepts are

still not presupposed by the concept of an object in the wide sense. In fact, objects qua objects are prior to any concept formation.

All qualified objects are directly cognizable objects of perception or thought. Thus they are essentially dependent on the logical possibility of minds. Thus, while no actual mind is logically required to exist for qualified objects to exist, the concept of mind is an essential part of the concept of a qualified object. For the concept of minds is a logical part of the concept of the logical possibility of minds. And since an object in itself is defined as any object in the wide sense that is *not* a qualified object, the concept of mind is *negatively* an essential part of the concept of an object in itself as well. But since the existence of no actual mind is required for either qualified objects or objects in themselves to exist, neither is it required that qualified objects or objects in themselves be private, subjective, or minds, nor, by parity of reason, public, objective, or bodies. Thus the applicability of any of those concepts to an object is logically posterior to the applicability of the concepts of object in the wide sense, of qualified object, or of object in itself, to that object. Nor need concepts exist in order that objects in the wide sense, qualified objects, or objects in themselves exist. We need concepts to define the *concepts*. But it is logically possible that the world contain no concepts at all. (It may help to think of logically possible worlds in which only bodies, or only ante rem universals, or only empty space and time exist.) Even a qualified object whose objective reality *is* a certain concept does not require the existence of that concept, any more than a qualified object whose objective reality is the winged horse Pegasus requires the existence of Pegasus. (I discuss objective realities in chapter 1.) All these things are the case whatever sense might be assigned to the term "concept," except for the unlikely sense of being anything and everything, or of being a qualified object, or of being an object in itself, or any sense presupposed by any of those senses. All these things are certainly the case in the ordinary, pre-philosophical sense of the term "concept" (roughly, 'descriptive idea'), and in any reasonable sense of the term.

The *concept* of logical possibility is presupposed in the *concept* of a qualified object, and therefore also by definition in the concept of an object in itself; and so is the *actual* logical possibility of minds. But if, per impossibile, *nothing* were logically possible, then there would be no world to discuss, and we would not be here to discuss it. Some reject such exotic modalities as unintelligible or categorially confused. But that is not my view. *All* the ordinary, pre-philosophical modal terms are prima facie 'all right', and the burden of proof is on those who wish to show otherwise.

I broadly agree with Descartes, Kant, and Husserl that we are directly (immediately, without mediation, simply, simpliciter) given things not as they are in themselves, but only in the way they are presented in sensible experience, or more deeply and generally in consciousness. But I also broadly agree with Aristotle and Aquinas that our direct presentations are not an impenetrable barrier between us and things in themselves, that is, are not a veil or curtain hiding the world in itself and making it unavailable to cognition, much less to evidence or knowledge. Far from it, I agree with Aristotle and Aquinas that direct presentations are the very vehicle through which we indirectly cognitively understand, and also have evidence for, the world in itself. Thus, broadly speaking, my theory is a meeting of two great traditions. But it also deeply differs from both on how this is to be categorially explained.

That some qualified objects are ways other qualified objects can be conceived or regarded allows and requires infinitely many levels of qualified objects, with level 0 being objects in themselves, if there are any. This is essentially like Gottlob Frege's senses (or better, the modes of presentation that senses contain), or Bertrand Russell's definite descriptions, regarded as ways of cognitively grasping and/or describing things. But I shall mainly discuss cases where a level 1 qualified object either qualifies or does not qualify a level 0 object in itself.FN0-1

Theory of qualified objects is far more natural than Frege's theory of senses or Russell's theory of descriptions. Russell's theory is the worst, if not everything can be described. But Frege's and Russell's theories are equally bad phenomenologically, insofar as our presentations are ordinarily of ordinary objects. In ordinary life, we more often than not have no awareness of ordinary senses or descriptions as such. And ordinary people usually do not single ordinary things out via descriptions or other linguistic means. And most people have never even heard of Frege's senses! At best, Frege's senses are his *theory* of what people grasp when they think. Similarly for Russell on descriptions. These criticisms are due to Butchvarov (1979: ch. 1), and I completely agree with him on this.

Driving at seventy miles per hour in rush hour traffic, I see many rapidly moving cars around me. If I did not directly grasp those ordinary objects of perception, I would soon be dead. While I am driving, I am aware of no Fregean modes of presentation, much less of his senses, even though I have studied them for over forty years. I do not think about Frege's philosophy during rush hour! And there is no time to formulate any linguistic descriptions in my mind, not even of a single car. I am lucky if I can even read the major road signs. I take in the colors and specific shapes of the cars

in a diminished way. I am far more concerned with their speed, mass, size, and relative motion. Clearly, I am seeing cars, and not phenomenal sense-data. I am not worried about the speed, mass, or size of any sense-data. Sense-data logically cannot have mass, and they cannot crash into me. Even if the cars were, perhaps per impossibile, *logically composed* of sense-data, sense-data are not what I *see*. Friedrich Nietzsche would say that whether sense-data exist or not, they are "useless" to my driving in rush hour: "What does a drowning sailor care for the chemical composition of the sea?" (translator unknown; see Nietzsche 1984 / 1878: § 9).

I shall now discuss our initial (not: full) definition of qualified objects as having two essential features in more detail.

Feature (1), that qualified objects are ways things can be presented, is deeply traditional. From Aristotle to Antoine Arnauld and beyond, the Aristotelian metaphysics tradition is full of qualified substances or qualified things. Aristotle does not mention qualified things often, nor does he seem to make much use of the notion. But it is there (Ross 1997 / 1924: lxxxvi n.1 quoting and translating Aristotle: *Categories* 3b10–21).

Feature (2), that qualified objects can be veridical, illusory, or delusory, deeply departs from that tradition. For in that tradition, there is no such thing as a qualified thing that does not veridically qualify a real thing. For in that tradition, a qualified thing is a thing that is qualified by a quality it *has*. I am widening that to say that a qualified thing is what *would* qualify a thing, if there *were* a thing there to be qualified, regardless of whether there actually *is* a thing there to be qualified, and if the thing *had* the quality in question, regardless of whether the thing (if any) actually *has* the quality. This opens a new approach to philosophy. It makes basic new theories possible that were impossible in the Aristotelian tradition.

In ontology, two notorious problems are the problem of informative identity statements and the problem of negative existential statements. How can we informatively identify a thing, if a thing is simply always the same as itself, end of story? We cannot, if that is all there is to it. This already rules out the theory that names or descriptions are mere labels of things, but gives no positive guidance on what the right theory is. And how can we say of a thing that it does not exist? If it does not exist, then how can the statement be about it? It is not there for the statement to be about! This too already rules out the mere label theory, but gives no positive guidance on what the right theory is. The two problems both concern informativeness. They are also deeply linked in "no entity without identity," or better, 'entity if and only if identity' theory, where there are true informative existential statements

about a thing if and only if there are true informative identity statements about it. On that theory, there are no entities that are not informatively identifiable. And conversely, we can scarcely have true informative identity statements about things that do not exist. They are not there to be identified, informatively or not.

If names are mere labels, that is, if they *merely* refer or denote, and do not express any sense or connotation, then how can "A = B" be any more informative than "A = A"? And how can the singular negative existential statement "A does not exist" be about anything if it is true? And how can "A does not exist" be about anything even if it is *false*? True *or* false, would the statement not have the same semantic structure? Indeed, true *or* false, would it not be the same statement, and therefore about the same thing?

Frege's and Russell's solutions of such problems are well known. For Frege, ordinary names both express senses and refer to referents. Hence "A = B" is factually informative if "A" and "B" express different senses, and "A exists" is factually informative if "A" expresses a sense. For Russell, ordinary names both describe and denote, "A = B" is factually informative if "A" and "B," are covertly different descriptions, and even if only one of them is (Russell 1971e / 1918: 247; see 244–247); and "A exists" is factually informative if "A" is covertly a description.

Qualified objects theory uses basically the same sort of "dual object" solution (both senses and descriptions are objects in my wide sense). It uses qualified objects in place of Frege's senses and Russell's descriptions, and uses lower-level objects in place of Frege's referents and Russell's denotations. Our objects are *both* referents and denotations; see chapter 1. In qualified objects theory, "A = B" is *factually informative* if "A" and "B" connotatively express and directly refer to and denote different qualified objects, and "A exists" is *factually informative* if "A" connotatively expresses and directly refers to and denotes a qualified object. "A = B" is *true* if the qualified objects "are" the lower-level object, in an arguably indefinable sense of "'are'" which I always surround with double quotes. "A exists" is *true* if the qualified object "is" a lower-level object in the same arguably indefinable sense.

Here qualified objects theory goes far beyond traditional qualified things in the following way. Traditional qualified things always use qualities things actually have to qualify them. Thus traditional qualified things can only be veridical. We may say that traditional qualified things are mere objectual or objectified *aspects* of things. If there is no thing, then there can be no traditional qualified thing either. And if the thing does not have the quality in question, then there can be no traditional qualified thing either. But

in my qualified objects theory, qualified objects can be either veridical, illusory, or even delusory. They are veridical if they "are" a lower-level object and if the lower-level object sufficiently has the quality, or more widely speaking, property in question to justify judging that the qualified object is veridical. They are illusory if they "are" a lower-level object, but the lower-level object does not sufficiently have the quality (or property) in question to justify judging the qualified object to be veridical. And they are delusory if they "are" not a lower-level object at all.

That is, traditional qualified things can ground only *true* factually informative identity and existence judgments, while my theory grounds not only those, but also *false* factually informative identity and existence judgments—and both illusory and delusory such judgments. And that is how things should be. For the logical structure of statements and of the judgments they express should be exactly the same regardless of whether they are true or false.

In my theory, the "no entity without identity," or better, 'entity if and only if identity' thesis, can be stated as follows. An object exists if and only if there are *sufficiently many* true informative identity statements about it, that is, sufficiently many whose subject-terms connote qualified objects that *would* qualify the same object if there *were* one. This is my improvement on Quine's "no entity without identity" thesis, or really, of his implicit 'entity if and only if identity' thesis. I credit Butchvarov with the basic insight (Butchvarov 1994: 44). By "sufficiently many," I mean enough that we would be justified in judging the identity statements as denoting or referring to an actual object, as opposed to merely connoting a dreamed, hallucinated, or other more or less "well-integrated" delusion. Due to the nature of the subject, it is impossible to be more precise than that; and to borrow a phrase from Aristotle, it is a "mark of lack of education" to expect anything more precise than that. Phenomenologically, our analysis is far more natural, and is therefore far closer to the 'common-sense' ontology of Aristotle, and by extension, to Continental phenomenology, than Quine's is.

There are only two ways one can try to show that the 'entity if and only if identity' thesis is false. First, one can try to show that there are entities that have no identity. Second, one can try to show that there are things that have identities but are not entities. And of course, one can try to show that both sorts of counterexamples exist.

But on the face of it, it is logically impossible, and in a word, self-defeating, to *identify* any *existing* counterexamples to the 'entity if and only if identity' thesis, nor to either of its two

conjuncts, "no entity without identity" and 'no identity without entity'.

One might object that non-identifiability, even in principle, i.e., even to any logically possible cognizer, does not entail that the object does not exist. Surely it is at least logically possible that, as Shakespeare says, "There are more things in heaven and earth... Than are [identifiably] dreamt of in your philosophy" (Shakespeare 2024: *Hamlet* 1.5.187–188).

My reply is that identifiability is said in many ways. I identify ten ways in my (2003: 13). The objector is confusing cognitive and/or epistemic identifiability with logico-ontological identifiability. Logico-ontological identifiability is the logically necessary and sufficient condition of existence. No logical possibility of identification, no existence. 'Entity if and only if identity' is a biconditional, but the concept of identity is prior in that it illuminates, explains, and grounds the concept of existence. We seek to understand the concept of existence through the concept of identifiability, not the other way around. The concept of existence is the one that needs illumination or explaining. This point, too, is due to Butchvarov (1979: 41).

Identifiability in principle, that is, the logical possibility of identification, is required for the very intelligibility of existence assertions, and of the very concept of existence. We logically can understand something as existing if and only if we logically can identify it. This is the analytic tradition's version of Hegel's Platonic thesis that the rational, i.e., the intelligible, is the real (Hegel 1969 / 1821: 10), discussed in chapter 3. Frege holds that in an ideal language, we are not entitled to assert "A exists" unless every identity statement at least one of whose subject-terms is "A" has a determinate truth-value. Frege says, "If we are to use the symbol *a* to signify an object, we must have a criterion for deciding in all cases whether *b* is the same as *a*, even if it is not always in our power to apply this criterion" (Frege 1974 / 1884: 73).

Also, "We cannot identify this, therefore it has no identity" commits the fallacy of argument from ignorance. Again, the objector is confusing cognitive and/or epistemic identifiability with logico-ontological identifiability.

One might conversely object that there are things of whose existence we are sure, but of whose identity we are very unsure. One might cite Søren Kierkegaard's view that we must always start from the fact or at least "presupposition" that something exists, and then try to assess what the thing is, on pain of there otherwise being nothing whose identity or nature we are looking into. Kierkegaard says:

> ....I always reason from existence, not toward existence, whether I move in the sphere of palpable sensible fact or in the realm of thought. I do not for example prove that a stone exists, but that some existing thing is a stone. The procedure in a court of justice does not prove that a criminal exists, but that the accused, whose existence is given, is a criminal. (Kierkegaard 1962 / 1936: 49, see 50–54)

This is basically the same as Plato's problem of the *Meno*, where an object of inquiry must be given first, if we are to have anything to investigate (Plato 1937a). It has been held to help ground the "via negativa" thesis that we can sufficiently understand and speak of a thing that we cannot describe in positive terms, by saying only what it is not. For there must be something there, for us to say either what it is or what it is not. On Kierkegaard as a negative or apophatic theologian, see Law (1993). On the traditional via negativa, see Aquinas (1969: 195–202, 227–229; 1955: 96–97). Aquinas' via negativa is not to be confused with his via positiva or cataphatic theory of positive analogical meaning, where if we cannot describe a thing in literal positive terms, we can still describe it analogically (Aquinas (1969: 56–58, 93–95, 195–229; 1955: 143–148). Conceptual analogies are resemblances; I agree with Butchvarov that nonspecific, i.e. generic, resemblances are generic universals (Butchvarov 1979: 205; see 1966: 128–172).

My reply is that if there is no initial characterization or identification at all of the thing in question, then we have nothing to say either positive or negative things about. "Something exists: tell me what it is!" does not indicate an object of investigation. The most we could say is that it must *be* identifiable; but we are given no clue on *how* to identify it. We are really being told, "Go investigate some X such that X exists, whatever X may be!" And that shows the problem. X is a variable, not a constant. It is a mere logical place-holder for constants. Frege makes clear that variables are not names of 'variable entities'. For there is no such thing as a variable entity. Frege discusses Husserl's example of a black cat and a white cat sitting together. We abstract from ("stop attending to") their color, their posture, and even their being cats. Frege says:

> By continued application of this procedure, we obtain from each object a more and more bloodless phantom. Finally we obtain from each object a *something* wholly deprived of content; but the *something* obtained from one object is different

> from the *something* obtained from another object—though it is not easy to say how.... (Frege 1970c / 1894: 85, Frege's emphasis)

And, I submit, that is just Kierkegaard's "Something exists," if we take it at face value. And of course, "Something" is not a predicate referring to a property, but the existential quantifier. Whether Frege was fair to Husserl (Hill 1994) is of no interest. I am concerned only with the true view, which I take to be that when we abstract, we do not change the object (the cats remain cats), but attend to a series of different, progressively more abstract objects; but if we abstract completely from all features, only variable X remains.

Plato solves the problem of the *Meno* by requiring a minimal initial indication of an object of inquiry. But Kierkegaard is caught flat-footed. He says, "But what is this unknown something...? It is the Unknown.... So let us call this unknown something: the God. *It is nothing more than a name we assign to it*" (Kierkegaard 1962: 49, my emphasis). The truth is that when we do 'negative theology', knowing that we are investigating God, as opposed to a breadbox or a mineral, already tells us a great deal.

Granted, an object of inquiry can be very obscure indeed. We can and must admit kinds or degrees of identifiability ranging from vague to clear. But then we can and must admit corresponding kinds or degrees of existence claim, ranging from vague to clear.

So much, then, for the Shakespearian and Kierkegaardian objections. On the via negativa, see also 'the rational is the real' in chapter 3 and the indescribability of mystical states in chapter 5.

In ontology of cognition, *direct presentations* of qualified objects in our perception or thought are the cognitive "given." Veridical given cognitions are directly presented qualified objects that sufficiently accurately ("adequately") "are" lower-level objects to be judged veridical. Illusions are qualified objects that "are" lower-level objects, but not sufficiently accurately to be judged veridical. Delusions are qualified objects that "are" not lower-level objects at all. Again, traditional qualified things cannot ground or explain illusions or delusions. For traditional metaphysics admits only qualified things that veridically qualify things in themselves. And that is simply because in the tradition, a qualified thing is understood as a thing that is qualified by that quality. But our qualified objects are understood far more deeply and generally, as logically possible objectual ways of presenting things. It is logically possible to present a thing as different from what it "is," and that grounds illusion. And it is logically possible that a way of presenting a thing present nothing at all, and that grounds delusion.

Again, it is logically possible for any qualified object to be presented directly, if not to us finite humans, then to a logically possible cognizer. But it is also always logically possible for any level n qualified object to be singled out indirectly via indefinitely many level n + 1 qualified objects which "are" it. However, an object in itself is always level 0, and an object in itself logically can only be singled out indirectly via indefinitely many level 1 qualified objects which "are" it. All this follows from the structure of qualified objects theory. Specifically, it follows from the logico-ontological role of qualified objects in grounding or explaining the logical structure of informative identity and informative existence statements, and more deeply, the logical structure of the judgments such statements express. Here I speak of logical possibility in the wide *a priori* sense of logic, which includes categorial and other synthetic *a priori* possibilities; the logical possibilities we have been discussing would of course be ontologico-categorial. Also, I speak of informative identifiability *indefinitely* many times because I agree with Frege that some objects, both in his sense of "object," and therefore also in my far wider wide sense of "object," which includes but is scarcely limited to objects in his sense, cannot be *counted*. For some objects fall under no individuating or "sortal" concept. Frege notes that the concept *red* is not a sortal concept, since a red object can be divided into red parts in indefinitely many ways. Frege says, "To a concept of this kind no finite number will belong" (Frege 1974 / 1884: 66). Butchvarov notes that we cannot even acquire sortal concepts unless identity is already understood (Butchvarov 1979: 76–81). And it is very well known that counting presupposes identity, for fear of counting the same thing twice.

No one need actually be presented with qualified objects in order for them to exist. They are objectual ways things logically *can* be presented, regardless of whether anyone is actually presented with them (or is indirectly presented with things *via* them). They are mind-independent, timeless ways things logically can be presented, though they are not logically independent of the *logical possibility* of minds. For (again) they are objects of perception or thought, that is, objects that logically can be perceived or thought of. Thus they are not logically possible if perceiving or at least thinking minds are not logically possible.

This may seem to drive an impossible wedge between timelessness and mind-dependence. How can a timeless object be mind-dependent? But there is no wedge between timelessness and the *logical possibility* of minds. Since all qualified objects are logical possibilities, they exist in all logically possible worlds, hence are logically necessary, hence are timeless objects, hence are

mind-independent. That is to say, they are logically independent of the existence of *actual* minds, with the possible exception of dependence on a logically necessary, timeless mind such as God's, if God exists. And this makes all the sense in the world for *logically possible* ways of perceiving or conceiving a thing. Such ways clearly must be independent of actual minds (waiving God), but just as clearly cannot be independent of the logical possibility of minds. In fact, it is a special merit of qualified objects theory not only to make this distinction, which I believe has never been made before, but also to ground it in a clear and intelligible manner.

The concept of a *presented* qualified object is logically prior to the question whether our cognitive data are public or private as well. That is because both the concepts of a qualified object and of a presentation are prior to the question of publicity and privacy. And that is because publicity and privacy are not part of their definition or conception, nor are they implied. And that is just how things should be. For a qualified object is an objectual way of conceiving or regarding things. And we conceive or regard some things as private mental entities, and others as public or social. And we logically can conceive or regard some things either way, as when Berkeley regards a house as a bundle of mental ideas across persons. We logically can even regard a house neutrally, as when Hume regards a house as a bundle of sensible impressions across persons who are themselves bundles of sensible (including introspectible) impressions. We can even simply *disregard* whether a thing is physical or merely mental, in the way we conceive it. And likewise for conceiving of its presentation.

Metaphysical ecumenicism may be understood as the thesis that many seemingly incompatible metaphysics are really logically consistent with each other, since they are distinct only in reason, that is, since all their seemingly incompatible entities exist, and merely parse the same things in different ways. Qualified objects, too, are ecumenical if they group into different parsings of the same lower-level objects into different categories, and if the groups are intersubstitutable salva analycitate. An object in itself logically can be parsed in indefinitely many ways via qualified objects.

On my wide use of the term "qualified object" to include any object of perception or thought, qualified objects include qualified universals ante rem, qualified universals in re, qualified particular properties (qualified perfect particulars or tropes), and qualified bare particulars.FN0-2 All such parsings are correct and perfectly valid as qualified parsings at the very least. For they logically can be directly given in thought and even in perception as ways that things can be presented. The question then devolves to

which of these qualified parsings "are" objects in themselves, for example as universals ante rem in themselves. And if all are merely different logical parsings of ordinary properties in themselves, then metaphysical ecumenicism solves the problem of universals.

One need not admit qualified objects in order to admit metaphysical ecumenicism. Frege, Russell, and Quine can admit metaphysical ecumenicism just as easily, if they admit distinctions in reason among objects in themselves. In place of qualified objects, Frege would use many senses as informatively presenting a single referent, and Russell and Quine would use many descriptions as describing a single denotation. But qualified objects are better phenomenology, since they are an objectual logical analysis of ordinary objects of perception or thought precisely as such.

Of course, *all* qualified objects are distinct only in reason from each other insofar as all of them exist in all logically possible worlds, so that all of them are logically necessary beings. But that is not to say that their perceptual or conceptual *contents* are distinct only in reason. Far from it! Following the tradition of via antiqua ideas, I distinguish between the formal reality and the objective reality of qualified objects, and call their perceptual or conceptual contents their objectual realities. Thus all qualified objects are distinct only in reason from each other in their formal reality; but they are distinct only in reason from each other in their objectual reality if and only if their objective realities are distinct only in reason. For example, the qualified Eiffel Tower and the qualified Statue of Liberty are distinct only in reason in their formal reality, but are really distinct in their objective reality. For if they "were" the objects in themselves in question, those objects in themselves would be really distinct. This is *contentual* real distinction.

In chapter 1, I find that Continental phenomenology and British empiricism, or what is basically the same, via antiqua ideas and via moderna ideas respectively, are distinct only in reason. For a via antiqua idea is essentially just a via moderna idea plus an objective reality. In that sense, some but not all via moderna ideas are via antiqua ideas. Via moderna ideas are the genus, via antiqua ideas are the species, and objective reality is the differentia. Thus this distinction in reason is more specifically a modal (one-sided) distinction. To be sure, we usually make the two kinds of ideas mutually exclusive by stipulating that a via moderna idea has no objective reality. But to borrow a phrase from Russell, stipulation has all "the advantages of theft over honest toil" (Russell 1971 / 1919: 71). The obvious genus-species relationship is just swept under the rug, even though it makes the modal distinction clear and precise. Many other phenomenologies may be distinct only in

reason as well, but I must leave that issue to others.

In chapter 2, I mainly discuss the ontological distinctions as such: real distinction, formal distinction, modal distinction, and distinction in reason. I reject the traditional mental distinction in favor of mind-independent distinction in reason.

In chapter 3, I offer two main arguments for metaphysical ecumenicism, called the containment and dependence arguments. I then apply the arguments to various ostensibly rival metaphysics. I require three conditions for the two arguments' applicability: the metaphysics must be intelligible, logically possible, and logically equivalent in that their statements logically analyzing ordinary, pre-philosophical things logically correspond one-one. I find that the two arguments are themselves distinct only in reason as well, on the relevant entailment containment theory of logical validity. The arguments apply to all cases of metaphysical ecumenicism across the board, including all cases of phenomenological ecumenicism.

The proper and robust ontological "positive construction" interpretation of logical analysis, based on the containment and dependence arguments, and the multiply limited validity of Ockham's razor, are major topics in chapter 3.

In chapter 4, I argue that a distinction in reason between cognition and evidence is basic to epistemology. Namely, some but not all direct presentations of qualified objects are not merely *given* to us, that is, are not merely the *cognitive* given, but also epistemically *seem* to "be" objects in themselves, that is, are also the *epistemic* given. I call epistemic presentations of qualified objects "seemings." A merely cognitive presentation as such is only cognitive, but it is distinct in reason from an epistemic seeming. This distinction in reason is more specifically a modal (one-sided) distinction. For presentations of qualified objects are the genus, seemings are the species, and the epistemic given is the differentia. The distinction is foundational to epistemology. For it shows that epistemology and phenomenology are formally distinct with a foundation in reality in phenomenology. And this is merely an abstraction, or conceptual bracketing. For if we abstract from or disregard its epistemic aspect, what remains of an epistemic presentation is a purely cognitive phenomenological presentation.

Seemings are the basic epistemic data that are the directly given epistemic foundation of all that we have reason to believe, and of all knowledge, if there is any knowledge. The concept of a seeming is the basic concept that all evidence is ultimately based on. Thus this concept allows us to define knowledge as sufficiently justified true belief, per tradition. This answers Butchvarov's objection that this traditional definition of knowledge fails because

we have no concept of evidence, since we call indefinitely many sorts of unrelated things evidence (see Butchvarov 1970: chs. 3–4). The answer to Butchvarov is just that all these ostensibly unrelated kinds of evidence are justified by seemings. They are all related as kinds of evidence precisely in that they all seem to be the case. We may say that an object in itself is *evidence in itself* if a presentation that epistemically, that is, rationally and objectively, seems to "be" that evidence in itself, actually "is" that evidence in itself. *Rationality* and *objectivity* overlap in that whatever is rational is objective, and conversely in that it is rational to accept whatever is objective; thus these two concepts are distinct only in reason. On the face of it, they take us out of epistemology and into logic. In fact, they amount to Hegel's equation of the rational with the real.

Butchvarov is right that the indefinitely many kinds of things that we justifiably call evidence are indeed unrelated, *considered simply in themselves*. But the ultimate justification for any kind of evidence can only be that some presentations of qualified objects epistemically, that is, rationally and objectively, seem to be the case. And *that* is what all the kinds of evidence have in common. That is, things are rightly called evidence if and only if they objectively seem to be the case. If something does not even *seem* to us to be the case, how can we have genuine evidence that it *is* the case? We cannot even seem to, if the thing does not even seem to be the case. It is simply, automatically defeased by that.

Actually, there are two levels to this. First and more basic, a qualified object is evidence for an object in itself if and only if it seems to "be" that object in itself. This level resolves the problem of how we can have evidence that there is an external world, or that there is any object in itself at all. Second and less basic, we often speak of a bloody dagger as evidence of a murder. That is, we often speak of one object in itself as evidence in itself for another object in itself. On my analysis, there is a presented qualified bloody dagger that *primarily* seems to "be" a bloody dagger in itself, and *secondarily* seems to "be" evidence in itself for a murder in itself.

For Russell, there is "no backward road from denotations to [connotative] meanings," nor from objects to descriptions of objects (Russell 1971b / 1905: 50). For any denotation can be intensionally described in indefinitely many ways. Likewise, for me there is no backward road from objects in themselves to qualified objects. For any object in itself can be presented via indefinitely many different qualified objects. But then there is no backward road from evidence in itself to seemings either. This is by a very simple logical instantiation. For all seemings are presented qualified objects. They are the presented qualified objects that

seem to "be" objects in themselves. That is, they are the presented objects of perception or thought that objectively, rationally seem to be the case. And any evidence in itself can be presented via indefinitely many different seemings. For example, a bloody dagger in itself is presented via indefinitely many objects of perception or thought that seem to "be" it, such as from this angle or last night.

Except for grounding it on my theory of qualified objects, my theory of evidence is basically that of Chisholm and Carneades (Chisholm 1966: ch. 3 citing Carneades). Chisholm and Carneades can reply to Butchvarov as well as I can. But my theory of qualified objects is far deeper and wider than their theory of evidence or any other. For my theory shows that evidence is grounded not merely on 'having reason to believe', but ultimately on qualified objects theory, that is, on phenomenology. My theory shows that the proper locus of evidence is indeed in the theory of seeming, but also that this theory is in turn located within the theory of qualified objects.

Again, the concept of a presented qualified object that seems to be the case is prior to the question whether epistemic data are public or private. This too is a simple logical instantiation from theory of qualified objects. For the concept of a qualified object is prior to the question of publicity versus privacy. For publicity and privacy are not part of the definition of a qualified object. Thus my theory of epistemic qualified objects is logically prior to the dispute whether epistemic data are essentially or at least primarily private ("first person" or Cartesian epistemology) or essentially or at least primarily social ("third person," scientific, or holistic epistemology). *Within* the dispute, my theory is foundationalist, but is such that both personal and social evidence can seem to be the case.

In Hume's neutral monism, sense-impressions are neither mental nor physical, but prior to the mind-body distinction. Hume eliminatively analyzes minds and bodies as bundles of these neutral building blocks. (Only minds include ideas, but both minds and bodies include impressions; a house is a bundle that includes all our individual impressions of it.) Thus, just like qualified objects, impressions, and even ideas, are prior to the public-private distinction. But neutral monism is not metaphysical ecumenicism, and Hume's impressions and ideas are not qualified objects. (They are both via moderna.) Far from it, neutral monism is one of the many ostensibly rival theories, such as materialism, idealism, and dualism, that metaphysical ecumenism finds distinct only in reason.

There are infinitely many logically possible levels of logically possible seemings. For there logically can always be a higher-level seeming that some qualified object is a seeming. But since seemings are *actually presented* qualified objects, we limited

humans cannot ascend very high up the possible levels. But we must be able to ground all logically possible informative identity and existence judgments about all logically possible seemings on all the possible levels. For there are infinitely many levels of qualified objects. And seemings are presented qualified objects that seem to be the case. But while no qualified objects as such logically need be presented, seemings as such must be. Perhaps the qualified God is a necessary presentation to himself, but actual presentations to the rest of us are logically contingent. And that includes all seemings to the rest of us. For they are presented. To be sure, if God exists, things do not merely seem to him. He knows!

Seemings are the datanic foundation of my foundationalist epistemology. But I also argue that foundationalist epistemology is distinct only in reason from holistic epistemology. This is only a shallow, "in-house" ecumenicism within epistemology, as opposed to grounding evidence outside epistemology in phenomenology and objective reason. Again, both personal and social evidence can seem to be the case. We can support holistic evidence by using foundationalist evidence *for* holistic evidence, and even vice versa.

In chapter 5, I discuss ethical ecumenicism. Much as I ground evidence on phenomenology, objectivity, and reason, thus escaping the "family circle" (Grice and Strawson's term, Grice 1956) of epistemological terms, so I ground values on facts, thus escaping the family circle of ethical terms. In both cases, there is a distinction only in reason. Just as epistemology is distinct only in reason from objective, rational phenomenology, so ethics is distinct only in reason from the world of facts. And that is the deepest level of my ethical ecumenicism.

Hume raises a deep question about "is" and "ought," or fact and value. He argues that no "is" entails an "ought," and no fact entails a value. But are not values part of what is? Are not what we ought to do, and what is of value, based on the facts? I hold that even if facts and values cannot be identical, values are distinct only in reason from facts, and can only have a foundation or basis in reality in facts. What we ought to do cannot be unrelated to what is the case. Even if *a priori* truths about values and obligations are both true and logically necessary in all logically possible worlds, and are in that sense indifferent to the facts of each individual possible world, the facts in each world are still the foundation in reality for the *instantiations* of values and obligations to that world. Also, *a priori* truths about values and obligations are grounded in certain *a priori* non-ethical facts about the nature of any sentient rational being. Or so I shall argue in chapter 5.

As our "in-house" ethical ecumenicism within ethics, I find

that the main meta-ethical theories of what it is to be good, such as deontic ethics, utilitarianism, act-based ethics, and rule-based ethics, are distinct only in reason.

I include a brief discussion of fact and value in the topic of mysticism. I find that the four main kinds of mysticism are distinct only in reason, and their values fall into place as well. This may be called mystical ecumenicism, and it is not unrelated to the religious ecumenicism historically exemplified in the very accepting Hindu religious tradition at its best. I agree with those who hold that psychology, in the traditional sense of the rational study of the soul, has mysticism as its deepest level, where the soul is united in some way with ultimate reality. On our view that values are grounded in facts, it is a sort of ultimate grounding of ultimate value in ultimate fact, not to say grounded in an ultimate soul (a personal God), or perhaps more deeply in an ultimate impersonal divine being. I am an agnostic about all this, but I am very concerned with the logic of it. As always, I am concerned with the principle of the thing! Many philosophers are uninterested in mysticism, but I think that is their own great loss, both as philosophers and as ordinary sentient rational beings. If nothing else, mysticism is a well established philosophical and human topic. It also relates to love at its deepest level, but I discuss love only very briefly. I leave love to Spinoza, religious mystics, and indeed to all love-mystics, religious or not.

I end chapter 5 with continuum theory as a kind of ethical ecumenicism that applies to all values, with pairs of rival values ironically occurring as the end points of the same continuum.

The plan of the book should be clear at this point. We start with phenomenology to see what we are given. We find that the two main ostensibly rival phenomenologies are distinct only in reason. Then we describe the main sorts of ontological distinction in the ontology chapter. Then we move to metaphysics, finding that many ostensibly rival theories are distinct only in reason. Then we find that evidence has a foundation in reality in phenomenology. Specifically, we find that epistemic seemings are a proper sub-class of qualified objects. Then we find values to have a foundation in reality in facts. Along the way, we find that the main ostensibly rival theories *within* epistemology and *within* ethics are distinct only in reason as well. Mystical ecumenicism is the final specific topic. I then end with continuum theory as a general kind of ethical ecumenicism that logically includes all possible finite in re values.

The problem of reconciling rival philosophies was already big in ancient times. Lucian of Samosata even wrote a humorous skeptical satire of it, *Hermotimus, or The Rival Philosophies*. The greatest attempt to reconcile them was Hegel's grand dialectic, in

which all the main philosophies of the past appear as "moments" in Hegel's logico-historical system. But Hegel is notoriously hard to understand, and the present book is far clearer. That is because instead of using Hegel's obscure dialectical method, which Hegel never really explains, I use the traditional ontological distinctions, and I define and discuss each one of them. As I recall it, a book by G. R. G. Mure called *The Secret of Hegel* received a three word review: "He kept it." Even if Mure's book was good and the review unfair, the joke is iconic. Hegel scholars who try to make sense of Hegel's often puzzling terminology have my highest respect.

Qualified objects theory first appeared as the topic of my faculty presentation (1987) in the U. S. Naval Academy that year. Brief mentions occur in my (2023 / 2015: 30, 575–76, 590; 2003 / 1996: xxvi, 47, 61, 73).

1

Phenomenology

It may be fairly asked why this chapter is entitled "Phenomenology." For as we saw in the Introduction, theory of qualified objects is based on Aristotle's notion of a qualified thing. And whether or not Aristotle might be said to have a phenomenology, his qualified things would not be part of it in any case. In fact, he scarcely makes any use of the notion at all. But I have greatly changed his notion (as the caterpillar says to Alice, "I have *improved* it"), so that my qualified objects ground the difference between veridical, illusory, and delusory directly presented cognitions. Thus while Aristotle might not have a phenomenology / cognitive science, I do. And even though it is based on his notion of a qualified thing, it fully belongs to Continental phenomenology (Descartes, Husserl, Sartre, and Heidegger), as opposed to British empiricism (Locke, Berkeley, Hume, Moore, and Russell).

What is Phenomenology?

Just what is phenomenology? Herbert Spiegelberg says in *The Phenomenological Movement*:

> The difficulties of stating point-blank what phenomenology is are almost notorious....
>
> I shall use the following criteria for drawing the line around the Phenomenological Movement in the full sense:
>
> α. Explicit or implicit adoption of... (a) direct intuition (in a sense still to be clarified) as the source and final test of all knowledge; (b) insight into essential structures ["the intuitive study of essences;" "the essential ways in which objects... appear... in experience"] as a genuine possibility and a need of philosophical knowledge.
>
> β. Conscious adherence, however qualified, to the Movement as such in full awareness of these methodological principles. (Spiegelberg 1976: 1, 5–6, note 1 omitted)

On this definition, what could be more phenomenological than my theory? Let us take it point by point. α(a). I admit direct presentations of phenomena. Direct presentations exist on the face of it (we are constantly presented with things), and also on pain of vicious infinite regress of indirect presentations of indirect presentations, with nothing ever being presented. α(b). I find that phenomena have at least twenty-one essential features. Thus I find them very 'essentially structured' indeed. β. I admit to a "conscious adherence to the Movement, however qualified." And my qualifications concern only scope of application or mere terminology. I have five qualifications. (1) Only this chapter is phenomenological. But the rest of the book uses that as a springboard for discussing all sorts of philosophical issues. That is the scope qualification; the rest of the qualifications are terminological. (2) Instead of speaking of 'intuition', I prefer to speak of being presented, given, or cognized. I admit both direct and indirect presentation. And I find it easier and less confusing to speak of being indirectly presented, given, or cognized than to speak of being indirectly intuited, which sounds counterintuitive and virtually self-contradictory to my ear. (3) I speak of phenomena as objects of perception or thought. This minimally advances the analysis from the monolithic and opaque single concept of a phenomenon to three very different concepts: (a) object, (b) perception, and (c) thought. I classify introspection as a sort of internal perception or inspection. Introspection is often of my body, such as feeling my tired limbs or a painful foot; but it is also of emotions, decisions, or other mental phenomena. (4) Accordingly, I prefer to speak of direct perception of objects of perception, direct introspection of objects of introspection, and intuition, or for lack of a better term, intellectual intuition, only of objects of thought. We may define objects of thought as any objects of cognition that are not objects of perception in the broad sense that includes objects of introspection. But (5), perception, introspection, and intellectual intuition, if admitted, would clearly be species of a common genus, which I would call presentation, cognition, or awareness. In fact, on the face of it, the species differ not as kinds of direct awareness, but only in the kinds of objects they are direct awareness of. Indeed, we can simply define perception, in the direct sense of the term, as direct awareness of objects of perception; and similarly for any other species of direct awareness. I am happy to credit G. E. Moore with this point. And if anyone wants to call direct awareness "direct intuition," I find it verbally awkward, but have no substantive complaint. Few have a problem admitting awareness. Many have a problem admitting some sort of spooky, occult entity like intuition. But I think the referent of both terms is the same. Here intuition is just another term for awareness.

I can offer two consolations about all this. First, theory of qualified objects is based on Butchvarov as much as on Aristotle, if not more so. And there is no doubt at all that Butchvarov is a phenomenologist. Butchvarov's mediation of Husserl, Sartre, and Heidegger into his own new philosophy is a refreshing new point of departure for phenomenology. His thinking is very deep and original. Second, the chapter is my own original phenomenology, and not a scholarly monograph on the great phenomenologists. It might be a great interpretive project to "translate as best [we] can the real import [of the European phenomenologists] into the kind of analysis with which [we in American philosophy] are familiar" (Spiegelberg 1976: xxi quoting Herbert W. Schneider). But that is not my project. Quite the opposite, and much like Butchvarov, I am rethinking phenomenology freshly and anew. I am even rethinking the traditional notion of a qualified thing freshly and anew.

Where Spiegelberg finds it almost notoriously hard to say what phenomenology is, Butchvarov offers a very simple account of what it is. He says it is "the philosophical description of the most general character of the objects of consciousness qua objects of consciousness" (Butchvarov 1979: 5). My theory of objects is clearly phenomenological in Butchvarov's sense.

Phenomenology is the description of experience in terms of its essential features. And experience consists of presented objects of perception or thought. Thus a phenomenon is a presented object of perception or thought. And phenomenology is the description of the logically intuited essential features of objects of perception or thought. This is in the wide sense of logical intuition that includes the synthetic *a priori*, and which can even be based on *a priori* philosophical reasoning. This differs from intellectual intuition in the sense of awareness only of objects of thought. For we can and must logically intuit the essential features of objects of perception and objects of thought alike.

There are two kinds of phenomenological enterprise that can be and often are pursued at great length and in great detail. The first is the project of giving a phenomenological description of a specific category of phenomena. The second is the project of giving a general theory or analysis, or theoretical analysis, of phenomena. This chapter is the second kind. It presents my theoretical analysis of phenomena (and really of all objects of perception or thought) as qualified objects. I also discuss objects in the wide sense and objects in themselves. All the other chapters present more specific theoretical analyses, but they are still extremely general: kinds of being, the metaphysical categories, seemings, and values.

More precisely, this chapter presents my theory (or list) of the logically necessary and sufficient conditions of objects of perception or thought, regardless of whether they are actually

presented in experience. Thus my theory is really a description of the logically essential features of objects of perception or thought whether they are presented or not. It is a theory in the sense of a theoretical definition, that is, a definition of what an object of perception or thought is. A phenomenon can then simply be defined as an object of perception or thought that *is* presented. That is our theoretical definition of what a phenomenon is.

Again, there are two main conceptions of phenomenology in the literature. I shall briefly state these conceptions in my own way. The first may be called the British empiricist view. It is that phenomenology is the description of the sense-data that are given to us, such as a phenomenal red, round spot in a visual field, or a phenomenal sound in an auditory field. The second may be called the Continental, or more precisely Kantian, view. It is that phenomenology is the description of ordinary objects of perception or thought, such as a tree, a human being, or even a number, qua objects of perception or thought. Numbers are ordinary objects of thought in that even children think about them. British empiricism is phenomenalistic, and Continental phenomenology is not.

I accept the Continental view as correctly describing the phenomena we are ordinarily presented with. I accept the British view as describing phenomena we are only rarely presented with. We are indeed presented with sense-data, but only if we are, for example, painters working with phenomenal colors, musicians working with phenomenal sounds, or British empiricists discussing sense-data in general. The theory that ordinary phenomena can be logically *analyzed* into sense-data might be true, but it is not a correct phenomenological *description* of ordinary phenomena. Nor is it a theory of the logically necessary and sufficient conditions of phenomena in the same way my theory is. The logical analysis of an ordinary phenomenon into sense-data is a theory of specific sense-data and their specific features, while my theory is a theory of general logico-metaphysical features of ordinary phenomena. The logical analysis of an ordinary phenomenon into sense-data can in principle never be completely stated, since there are infinitely many ways an ordinary thing can be sensed via sense-data in infinitely many possible cognitive situations. But my theory can in principle be completely stated. For at least on the face of it, there is only a limited number of major or significant general logico-metaphysical features of ordinary phenomena.

The two conceptions of phenomenology should not lead us into a binary polarization. Would we really wish to say that purely uninterpreted sense-data are a real asymptote at one end, and pure interpretation is a real asymptote at the other? The quick answer is that abstraction is disregarding of other features, and that we can disregard either our raw sensations or our interpretation of them,

and still be presented with an object of perception or thought. In any case, there are degrees of interpretation or conceptualization. As I recall it, in one of his books, Joseph Conrad distinguishes degrees of interpretation as follows. A civilian merely sees a large boat, while a sailor sees a far more conceptualized frigate. I cannot find the cite, and I may have changed the details, but the idea should be clear. Both 'large boat' and 'frigate' are interpretations or conceptualizations of experience, and 'frigate' is more specific than 'large boat'. Thus the two objects of perception are different, yet both "are" the same ship in itself.

Objects and Phenomena

I define an object as anything and everything. We can also define an object as 'anything that can be existentially quantified over in some intelligible logic'. That might sound more precise, but where the existential quantifier implies ontological commitment, the two expressions basically say the same thing. Certainly they are logically equivalent, i.e., intersubstitutable salva analycitate. In fact, this is rather trivial, since "anything" and "everything" *are* the ordinary language quantifiers. A third equivalent expression is 'has being in the sense of not being nothing'. That is the most general traditional sense of being / reality / existence. Francisco Suárez says, "Fonseca states most truly that [a certain] sort of mode is not properly a thing or an entity, except in the widest and most general sense of the term 'being', as designating whatever is not nothing" (Suárez 1947 / 1597: 31). I argue elsewhere that being in the sense of not being nothing is Russell's famous "robust sense of reality" (my 2003, ch. 4; 1988). And of course Quine basically says the same thing: "What is there?... [E]verything[!]" (Quine 1971a / 1948: 1). I call this existence in the wide sense. Thus to be an object in the wide sense is not to be nothing. Thus there is no such thing as a merely possible object, and no such thing as nothing. Phenomena, of course, are objects, since they are not nothing. In fact, they are *presented* objects. But as I shall explain later, *merely* possible objects and even nothing (*das Nicht*) can be the objective realities of via antiqua objects of perception or thought.

Aristotle admits anything as a being if it is related in any way to a primary being, which is for him a substance (Aristotle 1968a: 1003b5–15; see Owens 1963: 268–269, 436–437). This is his theory of pros hen being, which is just a term for related being. This, too, is an expression that is logically equivalent to not being nothing, if everything either is a primary being or is related to a primary being in some way. I widen this to the thesis that everything is a being if it is related in any way to a being, that is,

related to anything that is already admitted as a being. Or more simply, if everything is related to a being, then everything is a being. (While all beings are self-related by self-identity, something must be admitted as a being first, for the widened thesis to apply via a noncircular argument.) This is the logical basis of my containment and dependence relational arguments for metaphysical ecumenicism in chapter 3. Note that there are both negative relations and positive relations. If my cat is not a horse, that is a negative relation. Hence the Hegelian paradox, that to be unrelated is to be (negatively) related, is easily resolved, as Hegel knows.

If everything that is quantifiable must be identifiable and must have properties, and if the converse is true as well, then being identifiable and having properties are logically equivalent to being an object in the wide sense as well. Even nothing (Heidegger's *das Nicht*) is at least an object of thought, or so I shall argue later. "No entity without identity" ontology, or better, 'entity if and only if identity' ontology, with properties as the basis of the identity, is almost as old as philosophy, or so I argue in my (2003 / 1996).

Meinongian objects exist as objects in the wide sense. For they can be quantified over in Lejewskian logics whose quantifiers make no ontological commitment to entities (existents). This is so even though like Frege and Russell, I hold that there is no such thing as a merely possible object. If there were objects that are nothing, then they could not be distinguished from each other, since they would all be nothing. Even Meinong would admit that his nonexistent objects are not nothing. What Meinong overlooks is that the most fundamental sense of being or existence—Russell's "robust sense of reality"—is precisely not to be nothing (my 2003 / 1996: ch. 4). Thus all objects exist in the sense of not being nothing. Implicitly or in effect, Meinong is merely abstracting from or disregarding their existence. And an object whose existence is abstracted from or disregarded is not an object that has no existence. It is an object whose existence is abstracted from or disregarded. Like nothing (*das Nicht*), Meinongian 'nonexistents' are in fact objects of perception or thought, or so I shall argue later.

Abstraction, disregarding, or logical parsing is basic to metaphysical ecumenicism. I admit objects whose existence is *abstracted* from, but I admit them as objects that really *do* exist in the sense of not being nothing. Both admissions are due to the same reason: the abstraction. For when we abstract, we abstract something from something. For neither what is abstracted nor what it is abstracted from can be nothing. Thus neither can fail to exist in Russell's "robust sense of reality," which is ironically also the minimal sense of not being nothing. This is a paradox—a seeming contradiction—but no more than that, since I have explained it. In the case of Meinongian objects, we may call this the Meinongian

paradox. Namely, Meinongian objects not only exist in the minimal sense of not being nothing, but they are robustly real in Russell's sense for that very reason, since that is the same thing.

The most basic objection is that Meinongian objects are a counterexample to 'entity if and only if identity' precisely because they have identities and are therefore not nothing, yet do not have any kind of being. My reply is that not being nothing is precisely the most basic kind of being.

The definition of objects in the wide sense as anything and everything also allows items other than particular things (this stone, this person, the number two) to be objects in the wide sense. This includes universals, relations, Fregean senses, and Fregean forces. Frege would no doubt say "entity" instead of "object in the wide sense," and that may be a better term. But I can use "object" to explain the Meinongian paradox without even appearing to beg the question against Meinong. For "object in the wide sense" is wider than "Meinongian object." And perhaps that is why Meinong failed to see that all his objects exist after all, precisely in the wide sense.

Likewise, "object in the wide sense" is clearly wider than "Fregean object." For Frege's objects are all particulars.

I argue elsewhere that Frege's senses are not and cannot be Fregean objects (my 2007; 2003 / 1996; 1981). Michael Dummett held for many years that Frege's senses are Fregean objects, but finally came to agree with me that they cannot be Fregean objects (Dummett 2007; my 2010; 2022 continue the discussion). But Frege's senses, forces, objects, and universals (including relations) alike are clearly all objects in my wide sense. And so are Wittgenstein's and Russell's facts. For all of these have being in the sense of not being nothing. And anything we can directly think of is an object of thought at the very least.

My definition of objects in the wide sense as anything and everything is very Quinean. Granted, Quine would reject senses, forces, and many other objects that I admit. But that is only because Quine is not anywhere near as ecumenical as I am. In fact, where I ontologically interpret logical analysis as positive construction, Quine interprets it as negative elimination. I discuss the proper ontological interpretation of logical analysis in chapter 3.

I divide objects in the wide sense into two sorts: objects of perception or thought, and objects in themselves. These two sorts are mutually exclusive and jointly exhaustive. That is, all objects in the wide sense belong to one and only one of these two sorts. Many broadly accept this sort of division. Their descriptions of the two sorts might not be exactly the same as mine, but they locate more or less the same objects on each side of the division that I do. On the side where I locate objects of perception or thought, Aristotle locates formulae, Frege locates senses, Russell locates descriptions

(for him these are incomplete expressions and do not exist, but the descriptive universals that are their determinate constituents do exist; see Russell 1976a / 1910–1911: 159–167; and of course even descriptions exist in the sense of not being nothing, *contra* Russell himself), Castañeda locates guises, and Butchvarov locates his objects (these do not exist for him in the sense of being re-identifiable, but they do exist in the sense of not being nothing). I say this not to appeal to authority, but only to show that at bottom, my thinking is more familiar and easier to understand than one might think.

This broad sort of "dual object" division is natural and easy to understand, and solves or explains some general and well known problems about informative existence and identity statements and judgments in ways that are natural and easy to understand. All the just-mentioned theorists can solve the problems in much the same way. I contend only that my solution is phenomenologically more natural and correct than theirs. Far more so! For I use objects of perception or thought to explain the problems just mentioned, while Aristotle uses formulae, Frege uses senses, Russell and Quine use descriptions, Castañeda uses guises, and Butchvarov uses his nonrecurrent objects that can be singled out only once.

Butchvarov presents his objects as Continental-style objects. He praises Husserl and Sartre. But I find that Butchvarov's *sensible* objects are basically indistinguishable from Russell's nonrecurrent sensed and unsensed sensibilia, which are in turn indistinguishable from Hume's neutral monist nonrecurrent sensed and unsensed sense-impressions. In contrast, my objects of perception or thought genuinely *are* Continental-style objects, such as tables and chairs qua objects of perception or thought, both when they are directly presented phenomena and when they are not.

All and only phenomena are directly presented objects of perception or thought. We are never directly presented with objects in themselves, but only indirectly through objects of perception or thought. This too is natural and easy to understand. Again, many have offered similar "dual object" theories. I contend only that my theory is phenomenologically more natural and correct than theirs.

Note that phenomena are distinct only in reason from objects of perception or thought. More specifically, the distinction is a one-sided or modal distinction. For all phenomena are directly presented objects of perception or thought, but not all objects of perception or thought are ever presented directly or even indirectly. This is our first type of phenomenological ecumenicism.

A "dual object" distinction is also found in ordinary language and thought. In ordinary English, the word "object" has two main meanings of philosophical interest: 'object of perception or thought', and as opposed to that, 'object in itself'. An object of

perception or thought is an object as someone perceives it or thinks of it, as opposed to how the object is in itself. Another way to put it is that objects of perception or thought are objectual ways to cognize things. This includes any objects of cognition, including imagined, dreamed, and hallucinated objects (hence Meinong's objects and even *das Nicht*), as well as perceptual, introspected, and memorial objects, and even foreseen objects, if any. What counts is not the reality of the object (I mean beyond its existing in the sense of not being nothing), but our logically possible objectual awareness of it, regardless of whether it "is" or corresponds to (Descartes' term in his own idea-thing dualism) an object in itself.

I want to emphasize that objects of perception or thought require not actual awareness, but logically possible awareness. Otherwise, in order for objects of perception or thought to exist, we would have to be actually aware of them. This is much like Russell's sensed and unsensed sensibilia. But while all of his sensibilia are my objects of perception or thought, not all of my objects of perception or thought are his sensibilia. Far from it! Certainly no intellectual object of thought, such as the number two, can be a sense-datum. Neither can the apple or orange I see on my table. Nor can an electron. Russell has logical analyses of all of these things, but all of his analyses are ontologically eliminative. All of Russell's sensibilia are things like "little patches of colour or sounds, momentary things" (Russell 1971e / 1918: 179); parts of our total sensory experience "that might be singled out for attention: particular patches of colour, particular noises, and so on" (Russell 1976d / 1914: 109; 1976a / 1910–1911: 153). That is, Russell's sensibilia are instances of sensible qualities. They are not Bergmannian bare particulars that exemplify sensible qualities (my (2003 / 1996: 159–160). We can single sense-data (sensed sensibilia) out as objects, if we focus our attention on them. But usually we single out apples and oranges, not red or orange patches of color. Thus my objects of perception or thought are phenomenologically correct: they include all ordinary objects of perception and thought, while Russell's sensibilia are presented only on the rare occasions when we attend to mere phenomena as such, as in an art studio, a music performance, or the doctor's office if we feel a pain. The same thing applies to phenomena. My phenomena are directly presented objects of perception or thought, and they include far more phenomena than Russell's directly sensed sensibilia. But at least Russell's sensibilia are phenomenologically more correct than Bergmann's bare particulars. The painter sees color patches, not mere bare space-time individuators. We are presented with bare particulars only when we are thinking of them, and only as objects of thought, since they have no sensible qualities. Thus directly presented bare particulars are never perceptual phenomena, but can

only be intellectual phenomena. That is, they are products of metaphysical thought in a way that color patches are not.

Objects of perception or thought logically can and logically must be able to be given directly. This is on pain of vicious infinite regress of levels of indirect presentation of objects of perception or thought via objects of perception or thought. There is no doubt that the regress would be vicious. For if there is no direct first object of cognition, there will be no object of cognition at all. And even if the regress *were* benign, we finite limited cognizers could never traverse it. And unless perhaps we are in a mystic state of consciousness without an object, we are directly presented with objects all the time. Just open your eyes and look! Are we not directly presented with some things? And if not, how could we ever be indirectly presented with anything?

Our ordinary objects of cognition are not usually presented via *higher*-level objects of cognition. If I am driving my car during rush hour, I just see other cars. I have no time to think of a certain car on a higher level of cognition, such as 'the Alfa Romeo going 60 miles an hour one lane to my left'. And while I might be able to do it for one or two cars, I cannot do it for a hundred. I have to pay attention to my driving. I am not even a car buff!

But objects of perception or thought logically can and must be *capable* of being given indirectly via higher-level objects of perception or thought. This is on pain of violating the 'existence if and only if identity' thesis. It must be logically possible for all objects, including objects of perception or thought, to be given via objects of perception or thought, on pain of its otherwise being logically impossible for there to be any informative identity or existence judgments about them. Thus we admit an infinite series of phenomenological levels of objects of perception or thought, very few of which are ever directly or even indirectly presented. But that is not so bad. Frege seems to have a very similar infinite series of levels of senses, and Russell of descriptions. And objects of perception or thought must not be confused with phenomena. They are modally distinct. Objects of perception or thought are logically possible objectual ways that things can be presented. Phenomena are directly presented objects of perception or thought. Phenomena are directly cognized objects of cognition.

From the fact that all objects of perception or thought logically can be directly given, it follows that they have a *cognitive* 'thisness' (cognitive haecceity). We may define that property as the logical *capacity* to be singled out directly in cognition. "Disposition" seems not the best word. Objects of perception we would have if we were on Venus are not *disposed* to be given directly. We simply would *have* them if we were there. The term "disposition" might be better reserved for objects in themselves.

Again, from the fact that all objects of perception or thought logically can be directly given, it does not follow that they are all particulars, as opposed to universals or other categories. For we can single out universals in perception or thought just as directly as particulars. The right word is not particulars, but individuals. We cognitively individuate particulars and universals alike by directly singling them out as objects of cognition. More precisely, I distinguish between the formal reality and the objective reality of objects of perception or thought. It is their objective realities that can be particulars, universals, senses, groups, or even nothing (*das Nicht*), in short, anything we logically can perceive or think of. But in their formal reality, objects of perception or thought are always particulars. For in their formal reality, they are always particular objects of cognition and ultimate particular subjects of predication. I shall discuss this distinction later.

Consciousness Without an Object

Perhaps the deepest test of any phenomenology, or for that matter psychology, is the ability to give an adequate account of mystical experiences or states, if any. For a phenomenology must ground (explain by providing a metaphysical account / description / analysis) all ordinary (meaning not common, but pre-philosophical) phenomena, and a psychology must ground all mental phenomena, states, actions, and so on. And mystical experiences or states would seem to be the deepest and most paradoxical ones to ground. For at least the deepest mystical experiences or states are described as consciousness without an object, and as thus transcendent of all other experience, i.e., transcendent of consciousness *of* an object.

Hegel's philosophy is so deep in part because of his study of mysticism. Hegel took mysticism very seriously (Findlay 1962 / 1958: 26, 35–36, 45, 65, 135–136, 267). In fact, for Hegel ultimate reality is the Absolute. And that is very mystical indeed. (I do not mean that in the pejorative sense.) Paradoxically, Hegel says a great deal about the ostensibly indescribable Absolute. But then many mystics say a great deal about "The Ineffable One" too.

Phenomenology and psychology are distinct only in reason, certainly when it comes to act theory, which grounds or analyzes a cognition as consisting of three things: a cognizing subject (mind or person), an act of cognition such as seeing a tree (as opposed to an act of doing something such as cutting down a tree), and a cognized object. For us, all three of these 'elements' are objects in the wide sense. They are also objects in themselves, if they are real enough to count as such. I shall discuss what it takes to be an object in itself later in this chapter.

If there logically can be consciousness without a direct presentation of an object of perception or thought, then there can be consciousness without a presentation of any object at all, either directly or indirectly. For indirect cognitions can occur only via direct cognitions. This might be called an unusually strong way to understand the act-object distinction, in that here a act of consciousness would exist *without* a cognized object. That would certainly make acts logically independent of cognized objects! On the other hand, it seems odd to speak of an *act* of consciousness when all we have is consciousness without an object. In fact, here we seem to have neither act nor object, but only pure consciousness as such. And mysticism is even more paradoxical than that. For the cognizing subject is in a sense given as an object in every cognitive act. This may be called the Descartes-Kant "I think." I mean that trivially, every cognitive act I have is given to me *as* had by me. Talk of "first person" psychology, not to mention epistemology! (In contrast, social epistemologies are called "third person.") But in pure consciousness without an object, there cannot be a cognizing subject either. For *it* would be an object of consciousness. It would be an object of *self*-consciousness. Thus even the Descartes-Kant "I think" cannot occur in consciousness without an object. And with neither a cognizing subject not a cognized object, how can we speak of a cognitive act? How can we even speak of an experience? Experience of what? Whose experience? This is why many speak instead of a mystical "state." Is a mystical state grounded only in mere consciousness as such, that does not even belong to anyone? Is not consciousness without an object itself an object in the wide sense? For here we are talking and thinking about it, as opposed to other objects of discourse and thought. How can consciousness without an object exist without being an object itself? Even if we must admit logically simple / primitive / indefinable entities in every area of philosophy, this one seems too categorially confused.

The best answer is that act theory is correct as far as it applies, but mystical states are beyond its scope of application.

A word on terminology. An object of cognition is called the "intention" of the act. Certainly relative to ordinary language, using "intention" in a merely cognitive sense seems awkward. It is a word use we can either do with or do without as we please. For it adds nothing to the discussion; it does not advance the analysis. But if we so use it, it is common to make this point: all intentions in the ordinary sense of choosing to do something logically must include intentions in the cognitive sense of cognizing the thing to be done, but the converse is not so. For we logically can cognize something in the ordinary sense without intending to do anything in the ordinary sense of choosing it. In fact, it is logically possible that absolute causal determinism is true, that free choice is a delusion,

and that therefore there is no such thing as an act of freely choosing to do something. We could still have *cognitive* acts, but our whole mental life would be epiphenomenal.

Mysticism even raises a problem for my interpretation of logical analysis as positive ontological construction of logically complex entities. For we can understand conciousness without an object easily enough as an abstraction, simply by disregarding the object in consciousness *with* an object. But my interpretation of logical analysis, and the containment and dependence arguments on which it is based, require that consciousness *without* an object exist as a logical constituent in the logical analysis of consciousness *with* an object. And I must impale myself on that horn of the dilemma, on pain of otherwise having to reject my interpretation of logical analysis, and also the containment and dependence arguments on which it is based. The other horn is to reject consciousness without an object as too problematic to admit as an object in itself.

To be sure, consciousness without an object is a perfectly fine object of thought. But then so is the round square.

I discuss abstracting logical parts from wholes in chapter 3, and discuss mysticism in chapter 5.

Are Dual Object Theories of Cognition Ontology or Metaphysics?

It might be held that the distinction between objects of perception or thought and objects in themselves is categorial, and therefore belongs to metaphysics, not ontology. My reply is that they are indeed categories, but are categories of kinds of *reality* that kinds of things can *have*, and are not categories of kinds of *things*. Thus I locate this distinction primarily in ontology. Phenomenology is thus bound up with ontology, if that were not evident already. And that is not a problem, since phenomenology is philosophical theory of phenomena. And the philosophy required to belong to phenomenology includes both ontology and metaphysics.

I so conceive the relation of ontology to metaphysics that two philosophers can admit the very same metaphysical categories of things, but differ in ontology by each assigning a different ontological status to the same category. For instance, both might admit bodies and minds, while one deems bodies more real than minds and the other deems bodies and minds equally real. Even if we admit only one category and one ontological status, say minds and substantial reality, these are two very different admissions. Categories concern what the kinds of things are; ontological status concerns how real the things are. Categories are ultimate kinds of things. An ontological status is not a kind of thing, but a kind of

being. But while ontology and metaphysics are different, they are also intimately related. They are distinct only in reason. To deny any ontological status to things of a certain category is to reject that category. And to admit things of a certain category is to require of them the minimal ontological status of not being nothing, though it is not to fix their ontological status fully. Due to this relationship, identity is basic to metaphysics as well as to 'entity if and only if identity' ontology. Thus 'objects of perception and thought' and 'objects in themselves' are not so much kinds of thing as they are kinds of ontological status. And my most general category, objects in the wide sense, marks the deepest ontological status: not being nothing. That status is logically minimal, and is therefore the sine qua non of any logically possible ontological status. But it is also Russell's "robust sense of reality," since that comes down to not being nothing (my 2003 /1996: ch. 4; 1988). Thus dual theories of cognition primarily belong to ontology, but also to the metaphysics of phenomenology. And they belong to rational psychology as well.

Objects of Perception or Thought

We come now to my actual logical analysis or grounding of objects of perception or thought. In a word, I analyze or ground them as what I call qualified objects. That is just one of the many features in their full analysis. But it is their crowning feature.

I logically analyze objects of perception or thought as having at least twenty-one essential features, some familiar, others not. That will be my theoretical analysis of phenomena, or theory of general phenomenology. The primary thesis of the theory is the last feature I shall present: objects of perception or thought are qualified objects. This feature is primary because it unifies all the other features into a coherent account. Thus I shall present twenty-one features as individually logically necessary and jointly logically sufficient for an object's being an object or perception or thought, and present the twenty-first feature as grounding the other twenty, in the sense of *explaining* why, in the sense of intuitively and self-evidently *being* why, they too are essential features. That is, the twenty-first feature entails and thereby logically includes the first twenty, and states what an object of perception or thought is. Thus this full analysis (it is as full as I can make it) is in effect a far more detailed definition of "qualified object" than the brief definition stated in the Introduction. More precisely, the definition is the same, but is now explained as logically including the twenty other essential features by logical containment entailment, so as to provide a more or less full or complete logical analysis of objects of perception or thought. And on my ontological interpretation of

logical analysis, this analysis positively constitutes objects of perception or thought as entities. Of course, we already knew they are objects in the wide sense. And we already knew they are not objects in themselves. And that already told us their basic status.

I hold that any statement A logically entails any statement B if and only if A logically contains or includes statement B in the minimal sense that the truth-conditions of A include the truth-conditions of B. I have discussed this thesis in two of my books (my 2023 / 2015, ch. 9; 2021a / 2012). And without wishing to commit the fallacies of appeal to authority or to popular belief, it is a thesis which almost every logician accepts. But what is important is not *that* they accept it, but *why*: it seems intuitively and self-evidently true. How else could A entail B except by A's truth conditions including B's truth-conditions? And that is most deeply why I accept the ontological interpretation of logical analysis as positively constituting the analyzed item as an entity, if its logical constituents are entities. See chapter 3 for more.

Qualified objects provide new solutions of the puzzles of how informative identity and existence judgments are possible. Namely, in a unique sort of sense of "is," the statement "a = b" is factually informative if "a" and "b" intensionally connote and directly refer to different qualified objects which "are" the same lower-level object, which is therefore the same indirect referent of "a" and "b". And the statement "a exists" is factually informative if "a" intensionally connotes and directly refers to a qualified object which "is" a lower-level object, which is therefore the indirect referent of "a". There is more to these solutions, but that is the gist of it. The honor of discovering this "dual object" (two kinds or at least levels of objects) sort of solution is due to Butchvarov, though my solution also deeply differs from his. Thus there are at least two sorts of this unique sense of "is," his and mine. "Factually informative" is not "novelly informative." Novel information is factual information that is actually new to someone. Thus only novel information is relative to the cognizer's current information.

Other solutions have long been available in the literature. They are at least initially plausible solutions. They generally belong to several main types. (1) Non-objectual solutions include: Frege's senses; Russell's descriptions, which have universals as their determinate constituents; or even Russell's concepts, which are universals "with which we are acquainted." Russell does not actually give this last solution, even though he could admit possible concepts as easily as he could admit possible descriptions, so as to explain all possible informative identity and existence judgments. Also in (1): Castañeda's guises (bundles of universals that can be the basis of Russellian descriptions); and even Saul A. Kripke's causal chains. All these items are objects in my wide sense; and on

the rare occasions on which we think of them, they are presented objects of thought. I admit them all in metaphysical ecumenicism. But phenomenologically they are unnatural and incorrect as objects of perception or thought. In fact, they do not even *seem* to be the objects of perception or thought we are ordinarily given. They are rarely given as objects of *thought* (I daresay only when we are thinking about such theories), and can scarcely be said to be given as objects of *perception* at all. (2) Neo-objectual solutions include mental ideas and neutral monist sense-data. These are at least more phenomenologically natural and correct than type (1) solutions. In fact, they generally belong either to the branch of phenomenology known as theory of ideas (either via antiqua or via moderna) or to British empiricism (basically via moderna ideas). Here the ideas or sense-data are genuinely objects of perception or thought. They can represent, deputize, correspond to, or stand in for objects in the real order. Thus type (2) solutions are genuinely dual object theories. But such 'objects of perception or thought' are rarely given, and are certainly not our ordinary objects of perception or thought, such as the tree over there or the Morning Star. (3) Neo-objectual "bundle" solutions are type (2) solutions that assay ordinary objects (either ordinary objects of perception or thought, ordinary objects in themselves, or both, as bundles of ideas or sense-data. Berkeley, Hume, and the 1914–1919 Russell belong to this camp, but Descartes does not. (4) Meinongian solutions use objects which, as such, do not exist. Butchvarov belongs to this camp. In fact, his solution really belongs to all of types (2)–(4), which overlap in a progression of ever–narrower types of solution. I offer my solution as type (5), the phenomenologically natural and correct solution.

This division of possible solutions into five types is not intended as exact scholarship, but only as a helpful guide. And there can always be another type of solution just around the corner. In fact there is a sixth type, which I proceed to describe now.

Pre-philosophical ordinary objects of perception or thought provide solutions of these puzzles too. An informative identity judgment is one whose subject-terms connote and directly refer to different objects of perception or thought. An informative existence judgment is one whose subject-term connotes and directly refers to an object or perception or thought which is judged to be or correspond to an object in itself. That is the type (6) solution.

Looking at the type (6) solution, one might wonder: Why bother to offer any theory or analysis of objects of perception or thought at all? Even if my theory of qualified objects is the best theory, as I claim, it is not needed to solve these two puzzles at all. For all it does is analyze what objects of perception or thought *are*, and ordinary, pre-philosophical objects of perception or thought can *already* do the job of solving the two puzzles, regardless of

whether they are analyzed at all. Thus why not use Ockham's razor to eliminate all such theories as unnecessary, my own included?

My reply is that it is one of the most basic jobs of a philosopher, if not the most basic job, to state what things are. From the philosophical point of view, logical analysis is needed to elucidate ordinary notions. And phenomenology is no exception. Indeed, that is what phenomenology is all about! And I think that qualified objects theory is the best logical analysis and the most natural phenomenology of objects of perception or thought.

The job of philosophy is to state the ultimate nature of reality, if there is such a nature and if its statement is possible, and otherwise to illuminate or elucidate what or how things are to the extent possible, by positive analogy, by negative description of what things are not, or by any other means we can think of. And objects of perception or thought belong to the real order in the wide sense, since they are objects in the wide sense, and are not nothing. Thus we are obliged to state what they are in any case, if we can.

The concept of an object of perception or thought is very different from the concept of an object in itself, that is, an object which is as it is independently of our perceptions or thoughts. Both concepts are ordinary, and we use them all the time. And dictionaries of English attest that the ordinary word "object" may be used in either sense.FN1-1

In fact, the difference is so deep that I simply define an object in itself as an object that is *not* an object of perception or thought. That is, I define an object in itself as an object that is not a way of presenting another (and therefore lower-level) object.

One might object as follows. If I happen to perceive or think of an object exactly as it is independently of our perceptions or thoughts, that is to say, veridically, then regardless of whether I have reason to *believe* that, would not one and the same object *be* both my object of perception or thought and an object in itself?

My reply is that the answer depends on our theory of the relationship between objects of perception or thought and objects in themselves. And the answer in qualified objects theory is that no, they are not identical, but are deeply different. And except for veridical objects of perception or thought that "are" *logically necessary* objects in themselves, they are not even distinct only in reason. And even in that case, they are not distinct only in reason in the ordinary sense that either logically can exist without the other, since neither logically could fail to exist, but only in the sense that they do not have wholly distinct contents.

The truth is that the objection is categorially ill-formed, at least in qualified objects theory. In that theory, we are not and categorially cannot be directly given objects in themselves, but only objects of perception or thought. And since the two classes or

domains of objects are categorially different, no object in either of them logically can be an object in the other.

Granted, it is logically impossible for an object of perception or thought to be *veridical* or even *illusory* if the object in itself fails to exist. The *veridicality* or *illusoriness* logically depends on the object in itself's existence. But it does not follow, and it is incorrect to say, that the object of perception or thought logically depends on the object in itself's existence. For some objects of perception or thought are delusory. And even just one delusory object of perception or thought suffices to make clear, if it were not clear already, that objects of perception or thought and objects in themselves are different categories. For far from being identical, a veridical object of perception or thought is not even *logically dependent* on the object it itself it veridically "is," such as the planet Venus. Note here that any object is logically dependent on itself *because* it is identical with itself. Thus to reject its logical self-dependence is to reject its self-identity. And contrapositively, if a supposed two objects were identical simpliciter, they would be not two objects, but one object that is logically self-dependent.

More precisely, we may say that: in veridical cognition, the qualified object adequately or sufficiently accurately qualifies the object in itself; in illusory cognition, the qualified object qualifies the object in itself, but not adequately or sufficiently accurately to be considered veridical; and in delusory cognition, there simply is no object in itself there for the qualified object to qualify. I am relying on a scholastic terminology, but I think it is a good terminology on its face, and I think it is not possible to be any more precise than that. I can live, and I think we have to live, with the fact that in cases of vagueness, reasonable people can disagree on whether a cognition is sufficiently adequate for us to admit it as veridical. In fact, if a case is vague, there is no more that need or can be said. Nor, for much the same reason, can we be very precise about what counts as qualification adequate for being veridical. As Aristotle would say, "It is a mark of lack of education to expect more precision than a subject-matter permits."

Also more precisely, I use the word "object" in a general, transcategorial sense. I use the term "object of perception or thought" as including any objects of cognition, including memory, and introspection and, if there are such faculties, telepathy and precognition. Thus my wide use of "object of perception or thought" is basically co-extensive with Descartes' wide use of "idea" or "thought" to include perceptions and thoughts (Descartes 1969 / 1642: 222 principle 9 distinguishes cognition (*cogitatio*) from both sensation (*sensu*) and seeming to be the case). Whether our uses are exactly co-extensive would depend on Descartes scholarship which we cannot do here. In any case, neither his term

nor mine can be defined by enumeration, but must be left open-ended. In fact, each term is a determinable which logically can have indefinitely many determinates. But all my objects of perception or thought do have a feature in common: our perceptions, thoughts, memories, and so on are *about* them. In short, they are what philosophers call intentional objects. But that is just a different term for objects of cognition. Descartes and the whole early modern tradition of ideas might be a bit murky on whether ideas *are* objects or are *of* objects (see e.g. Descartes 1969 / 1642: 158 on "ideas or thoughts... of things"), but we need not worry about Descartes scholarship. And in any case there is only so much precision anyone can expect to have here. In fact, cognition seems to be indefinable, at least on the level of its direct presentation as being itself an introspected or at least intellectual object of cognition. But unlike indefinables such as phenomenal red or blue, which might never be presented to a blind cognizer, nor in a world without red or blue things, cognition is the Descartes-Kant "I think" which is at least implicitly present in every cognitive act.

The expression "object of perception or thought" does not refer to a disjunction of two radically different kinds of object, objects of perception on the one hand and objects of thought on the other. For all are objects of cognition. And all objects of perception are objects of thought. For we logically can think about whatever we logically can perceive. Descartes (1970 /1642: 222) even deems perceiving a kind of thinking. But we cannot perceive everything that we can think about. This makes objects of perception a proper species of the genus object of thought. Thus I agree with Descartes in rejecting the "maxim in the Schools that there is nothing in the understanding which was not [first] in the senses," and in thus rejecting that "all that is not capable of being imagined [is] not intelligible at all" (Descartes 1969 / 1642: 104, my editing). And that is not only for Descartes' reason that "the ideas of God and of the soul" (Descartes 1969 / 1642: 104) and of other substances are intelligible only to the reason, a view which basically goes back to Aristotle, but also because of Fregean or other contextual definition of imperceptible objects like numbers.

Again, there is a big difference between phenomenological description and phenomenological theory or analysis. If we merely describe how the world seems to be, we are describing phenomena. For example, I may say that I see a red, round apple. But if I offer a philosophical theory of what it is to be a phenomenon, or of what it is to be an object of perception or thought, then I am giving a logical analysis or other theory of my seeing the apple. Perhaps not every phenomenologist has been clear about this distinction. In fact, some seem to actively promote their philosophical theories of what it is to be a phenomenon as mere neutral phenomenological

descriptions. In particular, Husserl's ostensibly presuppositionless philosophy arguably has many presuppositions.FN1-2 The key to understanding the difference is that the logical analysis is simply not *presented* along with, or as part of, the presented phenomenon. My own theory analyzes phenomena as direct presentations of objects of perception or thought that have twenty-one essential features. And except when I am doing philosophy, I do not think I have ever been presented with an object of perception or thought as having any of those features, much less all twenty-one!

The Traditional Concept of a Qualified Thing

The notion of qualified substance is due to Aristotle, if not to any earlier thinkers. It may be found in the Stoics, Plotinus, Simplicius, John of Damascus, Maimonides, Aquinas, Scotus, Ockham, Spinoza, Leibniz, Suárez, Arnauld, Brentano, and many others. I shall change the notion radically to suit my philosophical purposes, but I shall explain the traditional understanding first.

W. D. Ross translates Aristotle's *Categories* as saying, "Every substance seems to mean a 'this'.... But the secondary substances, while they appear to indicate a 'this', do not really do so, but rather a quality. Yet they do not indicate simply a quality—they determine quality with reference to a substance, they indicate a qualified substance" (Ross 1997 / 1924: lxxxvi n.1 quoting and translating *Categories* 3b10–21). The text that Ross translates as "qualified substance," E. M. Edghill translates as "substance qualitatively individuated" (Aristotle 1968: 3b20). I take it that their translations are logically intersubstitutable, hence at most distinct only in reason.

In the substance tradition, substance is ontologically prior to qualified substance. For substance is prior to its qualification. Plotinus says in *Ennead* 2.6, "[T]he substance... must be there before it is qualified.... [T]he substance... is there before the qualified substance" (Plotinus 1990 / 253 or earlier: 183). Anna Zhyrkova says a basic notion of John of Damascus is "*being in such a way* (τὸ τοι.σδε ε.ναι)... (*Dial*. 31, 3–6)" (Zhyrkova 2010: 88; 2009: 111 quoting John, Zhyrkova's emphasis). A substance which is in a certain way is a substance considered as belonging to a certain species, and that means a qualified substance. Zhyrkova says this is "apparently" or "presumably" as opposed to an unqualified or (in that sense) 'simple' substance, which is a substance not so considered (Zhyrkova 2010: 88–90; 2009: 112–113). We may say that "being in such a way" means 'being in a certain specific way' with reference to the substance's species, though it logically might also include 'being in a certain general

way' with reference to the substance's genus, or even 'being in a certain categorial way' with reference to the substance's category. In any case, I hope that Zhyrkova would agree with me that the notion of an unqualified substance is simply the notion of a substance, and this notion is ontologically prior to the notion of a qualified substance. For just as she points out, the notion of an 'unqualified substance' is the notion of a 'simple' substance; and *adding* to that the notion of 'being qualified', that is, of 'being in such a way', results in the logically complex and derivative notion of a qualified substance, which is logically posterior. Note that 'being in such a way' makes the qualification essentially veridical.

In Antoine Arnauld's *The Art of Thinking*, qualified things are things considered or regarded as having a certain determinative qualification. Arnauld says, "A substance as determined by a certain manner or mode I call a qualified thing" (Arnauld 1964 / 1662: 39). 'Determination' makes the qualification veridical by definition. And just as 'unqualified' substance is prior to qualified substance for Aristotle, Plotinus, and John of Damascus, so it is for Arnauld as well.

Since all of these traditional thinkers make qualification essentially or even definitionally veridical, it is clear that for them, there logically can be no such thing as an illusory or delusory qualified thing.

But making substance prior to qualified substance in this way makes the notion of a qualified substance unable to solve the basic puzzles of informative existence and identity judgments, with the sole exception of veridical logical subjects. The traditional notion of a qualified substance simply cannot do any more than that. And surely the traditional notion was surely never intended to do any more than that. But I think it is the best notion to do the job, if it is radically modified so as to admit veridical, illusory, and delusory logical subjects alike. Specifically, therefore, and at any rate with respect to substances, I must omit the traditional requirement that there must be a substance there to be qualified. In this way, and only in this way, can we open the door to the logical possibility of illusory and delusory qualified things, and thereby to explaining all the logically possible informative existence and identity judgments about them. And to arrive at the deepest and most general theory, I shall also replace the single category of substances with objects in the wide sense, that is, with anything and everything. What we then arrive at is the notion of a qualified object as a logically possible objectual way of presenting another object. And that notion does not predetermine whether any presentation is veridical, illusory, or delusory. For it omits the requirement that there must be an object there to be qualified.

My omission of the requirement that the substance must be there for it to be qualified, that is, for there to be a qualified substance, is basically just an instance of what the tradition calls abstraction. I am basically just abstracting the requirement that there be a substance from the notion of a qualified substance. Many would object to this on the ground that this requirement is essential to the notion, and that the notion cannot be understood apart from the requirement. They might even object that this requirement is so fundamental to the notion that there would be nothing left. How, indeed, can there be a qualified substance if there is no substance there to be qualified? We would have a "homeless" qualification. It would be a qualification that is not a qualification *of* anything.

My reply is that as we saw in the Introduction, Aristotle's concept has at least three logical components. I am omitting two of them and retaining only one; and that is perfectly intelligible and self-consistent. And that is also a more precise statement of my abstraction. The objector merely has to get used to the simpler, deeper, and more general concept that results from this abstraction.

The three component concepts of Aristotle's concept of a qualified thing are these. First, a qualified thing is a way a thing can be conceived or regarded. Second, the thing that is conceived or regarded must exist. This eliminates delusion as a possibility; both veridicality and illusion remain as possible. Third, the qualification must be veridical. This eliminates illusion. The three component concepts are listed in order of logical priority. For if the first concept applies to a thing, it does not logically follow that the second or third concepts apply; and if the first two concepts apply, it does not follow that the third concept applies. I am simply retaining the first and logically deepest and most general concept, and discarding or disregarding the other two. If you please, I am purifying the concept of a qualified object of the logical dross, and making it as general as possible. But there is no doubt that the first component is Aristotelian, since it is the most general logical component of the Aristotelian tripartite concept. And how can it fail to be intelligible, if Aristotle's tripartite concept is intelligible?

Of course, my *qualified objects* must exist to be qualified, and *they* are always veridical, since they must be as they appear to be! But they may or may not be like the objects in themselves they may "be," and they may not even "be" objects in themselves at all.

The ancients knew identity as a relation that can occur in informative identity judgments. Plato notes that if Socrates is the person we see at a distance, and if we know Socrates, it does not follow that we know whom we are seeing at a distance (Plato 1937c: 191). Aristotle attributes to the Sophists a similar problem concerning Coriscus in the Agora and Coriscus in the Lyceum. Aristotle uses formulae to solve the problem: Coriscus in the Agora

and Coriscus in the Lyceum are one in substance but distinct in formula (Aristotle 1968c: 219b). So are teaching and learning, and "the road from Thebes to Athens and that from Athens to Thebes" (Aristotle 1968c: 202b). I assume that Coriscus regarded under the formula *in the Agora* is the same as, or is at least distinct only in reason from, Coriscus qualified as being in the Agora, at least if being in the Agora counts as a qualification. Eubulides, who knew Aristotle, raises the problem of The Hooded Man (I both know and do not know my brother), but unlike Aristotle, offers no solution. For Aristotle every informative identity statement about Coriscus, e.g., "The person sitting in the Lyceum is Coriscus," is either true or false. And if Coriscus exists, then indefinitely many identity statements that can be made about him are true. As Hippocrates G. Apostle says, "Socrates and the gadfly of Athens and the philosopher of Athens who drank the hemlock are numerically one and have just one substance" (Apostle 1973: 340). But while Socrates is unqualified, the gadfly of Athens is qualified; thus even that identity is informative. Russell notes that an identity statement is informative even if only one of its subject-terms is a description (Russell 1971e / 1918: 247; see 244–247). But the main point for us is that Aristotle's theory of informative identity, whether it uses formulae, qualifications or even qualified substances, fails to explain informative identity judgments in cases of illusion or delusion, while my theory succeeds.

Aristotle might write off all such identity judgments either as false or as lacking a truth-value, since for him there is no such thing as an illusory or delusory qualified thing, since for him they fail to meet the requirements for being a qualified thing at all. Thus such judgments would not be about anything. But that is a negative write-off, not a positive explanation. Aristotle says that a definition should not be negative where it can be positive. He means that a definition should be negative if and only if the thing it defines is a negative thing. Of course, this rule applies to the definition of a qualified thing—which for both of us is positive. Now, illusory and delusory things are in a clear sense negative. But they are not wholly negative, and thus they should not be wholly negatively defined. For they are positively objects of perception or thought. It is only that they are *not like* the objects in themselves they "are" in cases of illusion, and *"are" not* objects in themselves in cases of delusion. And I think that informative identity judgments about them should not be defined *wholly* negatively as simply false when we *can* have at least *partly* positive definitions of them.

Russell (1971b / 1905) analyzes ordinary names as covert definite descriptions such that statements about things that do not exist are false. Peter F. Strawson (1967 / 1950) basically argues that Russell's analysis is false to ordinary language, since ordinary

statements about things that do not exist are neither true nor false. That is his negative write-off. Russell then famously replies:

> My theory of descriptions was never intended as an analysis of the state of mind of those who utter sentences containing descriptions.... I was concerned to find a more accurate and analysed thought to replace the somewhat confused thoughts which most people at most times have in their heads. (Russell 1967 / 1959)

Keith Donnellan (1966) offers a reconciliation by distinguishing between the attributive use (as in Russell) and the referential use (as in Strawson) of definite descriptions. This might be viewed as a synthesis with Russell's view as the thesis and Strawson's view as the antithesis. Thus there is room for both, as it depends on the use.

Russell's reply would seem to refute Strawson, if Russell has correctly described his theory of descriptions as replacing, not describing, ordinary thought. That claim is in doubt, since Russell's theory of descriptions in 1905 "On Denoting" looked like a descriptive analysis of ordinary descriptions, as well as of ordinary names, to basically everyone who read it. Russell might then reply that people did not read what he wrote carefully enough. But the historical claim does not really matter. For Russell can simply say that he gives his theory of descriptions as a replacement analysis *now* (meaning in his 1959 "Reply"), regardless of whether back in 1905, it was given as a descriptive analysis (again, it came across as one to most readers). Back in 1905, Russell might not even have been clear on the distinction between replacement and descriptive analysis. For he does not even state the distinction in 1905, much less state which side of it his theory of descriptions falls on. But he certainly makes the distinction *now* (meaning in 1959). To use Irving M. Copi's distinction among five main kinds of definition, Russell's 1959 theory of descriptions is not a *theoretical* definition that aims to state what ordinary descriptions and ordinary names are, but a *precising* definition that aims to replace them with something more precise. See Copi (1978: 139–141; see 126–130 on some of the different purposes we can have in giving definitions).

My criticism of Russell is very different from Strawson's. By making his theory of descriptions a precising definition, he easily succeeds in sidestepping Strawson. But Russell takes himself out of the running in phenomenology, precisely *because* his theory is a precising definition, not a theoretical definition, of ordinary objects of perception or thought. Russell is not even trying to do phenomenology here, but to replace it with something he thinks is better. His British empiricist phenomenology is his theory of

acquaintance, not his theory of descriptions. And his theory of acquaintance with sense-data succeeds only on those rare occasions when we actually single out sense-data as opposed to ordinary objects of perception or thought. The truth is that phenomenal sense-data are almost never our objects of perception or thought. Usually only philosophers and artists single them out very often, though we all do when looking at color samples, hearing sound samples, and so on. But to use Russell's (1971b / 1905): 45–46) own famous example against him, the present King of France (who does not exist) is not a sense-datum. And it is a category confusion to think that he is. Nor is the King a 'temporal series of classes of sensed and unsensed sensibilia' (Russell 1971e / 1918: 274). This seems to be another precising definition that aims to replace the King with something more precise. Instead, the King is an ordinary object of perception or thought. And as such, we have no more trouble thinking of him than of the present King of England, who does exist. The only difference is that the present King of France has a much thinner description. He is now, is a king, is of France, and is discussed in philosophy. And that's about it! But that is enough to make him an object of thought, and even an object of perception in any dreams or hallucinations about him. To be sure, Russell holds that the present King of France is neither a sense-datum, nor even a bundle of sensibilia, but is strictly nothing. But then the present King of England is not a sense-datum or a bundle of sensibilia either. Russell is spared from the charge of category confusion only because he is offering a precising definition that aims only to replace ordinary objects of perception or thought with descriptions, and does not aim to state what the objects are.

In contrast, my theory is not a precising definition. It is a theoretical definition of ordinary objects of perception or thought that aims to state what they are. Namely, it aims to describe their essential features. And my theory offers a very different resolution of the puzzles of (both informative and uninformative) existence and identity judgments about things that do not exist, including the present King of France, such as "The King of France does not exist" and "The present King of France is identical with Russell's most famous example of an ostensible nonexistent."

To begin with, denoting, i.e., satisfying a description, and referring, i.e., singling out an object via a name or description, are distinct only in reason. More precisely, denotation and reference are modally distinct, since referring is prior to describing. There can be referring without any describing, but there cannot be describing without any referring. There are two reasons why. First, describing presupposes conceptualizing, and at least our first concepts are formed as abstractions of common features from objects we single out and thereby can already refer to. In fact, there

can be no conceptualization if nothing is singled out as being there to be conceptualized. That is, conceptualization cannot be of nothing. And it must be of something that is singled out by the conceptualizer. As Butchvarov says, we cannot even acquire sortal concepts unless identity is already understood (Butchvarov 1979: 76–81); he means identitative singling out. Second, descriptions presuppose universals or at least properties that we single out, so as to be their content. I credit Tyler Burge for noticing that at least implicitly for Russell, any description that denotes, say, a red spot, *refers to* (not: denotes) the *universal* (red) which is its determinate *constituent* (Burge 1983: 80). And surely these two reasons are themselves distinct only in reason. Of course, properties are always the *basis* for singling things out. For we cannot single out objects that are "absolutely bare" (Butchvarov 1979: 122). But that basis need not be described in order to be the basis. In fact, we may not even always be able to describe the properties that are the basis of our singling a thing out. It is not always that the properties are vague or obscure. Sometimes they are too rich and concrete, as when Wittgenstein asks us to describe "how a clarinet sounds" (PI § 78); he means describe it not just as "the sound of a clarinet."

For us, ordinary names both directly denote and directly refer to the objects of perception or thought which are the names' connotations. If those objects of perception or thought "are" objects of the next lower level, then those lower-level objects are the indirect denotations / referents of the names. Thus the lower-level objects (if any) are the names' indirect denotations and referents as opposed to the names' connotations. And that is my own synthesis of Russell and Strawson. Donnellan appears in my synthesis as in effect making the point that we can successfully refer to a lower-level object via a higher-level object of perception or thought even if the latter gives or implies an incorrect description of the former. That is, in my theory, a successful reference to a misdescribed object is a reference to an *illusory* lower-level object. And in my theory, a reference failure, or a failure to satisfy a description is a reference to a *delusory* lower-level object. Even a lower-level object of perception or thought can be delusory, even though all such objects are necessary, in the sense that, for example, I did not actually see the hallucinated pink rat I thought I saw last night.

Level n delusory objects of perception or thought are simply objects of perception or thought that "are" not lower-level n - 1 objects. But there logically can be both true identity judgments and false identity judgments about the level n objects whose subject-terms directly denote, refer to, and connote *level n + 1* objects of perception or thought. In fact, I already gave an example of a true (and factually informative) identity judgment about a delusory object of perception or thought: "The present King of

France is identical with Russell's most famous example of an ostensible nonexistent." I call this phenomenological ascent (to a higher phenomenological level of objects of perception or thought), to distinguish it from Quine's semantic ascent. Of course, since objects of perception or thought are the connotative meanings of names, a phenomenological ascent is *also* a semantic ascent in Quine's sense, if not one to Quine's liking. Phenomenological ascent is also distinct only in reason from Frege's infinitely many levels of senses and from Russell's infinitely many type-levels of descriptions; recall that universals are the determinate constituents of all his descriptions. Thus this is multiple semantic ecumenicism.

My semantic ecumenicism is actually a triple ecumenicism. On its deepest level, I use phenomenology to ground semantics, thus going outside semantics to base it on phenomenology. For objects of perception or thought belong to phenomenology, and function as connotations and as denotations / referents in language. Thus phenomena, referents, and denotations are distinct only in reason. On the second and next shallower level, within semantics, objects of perception or thought ground reference and denotation as distinct only in reason from each other. That is indeed a logical part of the first level, but it is the shallower part. And on the third and shallowest level, the first two levels ground truth. For at least on my theory, propositions that are either true or false are logically composed of objects of perception or thought. And to *understand* a proposition, we must be *directly presented* with all the objects of perception or thought that compose it. I call that the principle of presentation. It is my Continental phenomenology version of Russell's British empiricist principle of acquaintance, which states: "Every proposition which we can understand must be composed wholly of constituents with which we are acquainted" (Russell 1974 / 1912: 58, Russell's emphasis deleted).

Likewise for existence judgments for Russell, Strawson, Donnellan, and me, in our respectively different ways. Of course, there can be no true existence judgments about delusory objects of perception or thought in the sense of true judgments that they "are" objects of the next lower level, since by definition they "are" not. But all existence judgments about delusory objects of perception or thought are true in the sense that the delusory objects of perception or thought *themselves* cannot fail to exist, in the sense that they cannot be nothing. In fact, as logically possible ways that things can be presented, objects of perception or thought not only exist, but are logically necessary, since they exist in all possible worlds. This is on the rather safe assumption that perceivers and thinkers are logically possible. More on that later.

Twenty-One Logically Essential Features of Objects of Perception or Thought

I now describe twenty-one essential features of objects of perception or thought, and that will be my theoretical definition or logical analysis of what they are. Again, a phenomenon is a direct presentation of an object of perception or thought. Add that in, and this will be our theoretical definition of phenomena as well. I may not have discerned all the main essential features, and of course there are infinitely many logically necessary features that are trivial logical consequences of the features I give, e.g. disjunctive ones.

One might object that not all the logically necessary properties of a thing are part of its essence. For the essence of the number two should be statable in a finite definition, but the number two has infinitely many logically necessary properties, such as being one less than three, two less than four, and so on. My reply is that a thing would not be what it is if it lacked any of its logically necessary properties. Thus all and only logically necessary features are essential features. More precisely, they are distinct only in reason from the essence of the thing. For the terms for them are intersubstitutable salva veritate *a priori*, if not also analycitate, with the term stating the essence. Granted, we finite beings cannot state an infinitely long definition of the number two. Indeed, there is no such thing as an infinitely long statement, since it would have no determinate truth-value. But all of the number two's logically necessary features will be logically contained in its definition, in virtue of being logically implied. At least this is so on the relevantist theory that logical validity is logical containment entailment. For purposes of this reply, it is not necessary actually to state the essential definition of two. But I suggest that Frege's and Russell's finite (and in fact rather brief) logicist definitions of the number two state the essence of the number two well enough, and they are distinct only in reason from each other. Note that I offer a "local" solution to Russell's paradox as rejecting only individual problematic classes, such as the class of classes not members of themselves (my 2007: 103–104). Thus there is no need to posit any Procrustean theory of types that rejects infinitely many innocent classes merely to preserve the logicist definition of numbers as classes of classes from the paradox.

In any case, there is no logical limit to the number of essential features of objects of perception or thought. For 'essential feature of objects of perception or thought' is a determinable of which there logically can be infinitely many determinates. These are merely the ones I have thought of and think are important to describe. I can only hope I give all the main features of interest.

Essential Feature 1

1. Objects of perception or thought are essentially mind-independent in the ordinary and direct sense that they logically can exist even if no minds exist. This follows from the definition that objects of perception or thought are ways that objects logically *can* presented, i.e. conceived or regarded. Thus the actual existence of a conceiver or regarder is not required.

This is supported by phenomenology. Ordinary things are ordinarily presented as mind-independent. The cars I see driving by me are presented to me as being out there on the road, not as being in my mind as my private mental ideas, nor as neutral sense-data.

The private language argument supports this too. If objects of perception or thought were private mental ideas, then all communication about them, teaching and learning words for them, and agreeing or disagreeing about them would be impossible. For then systematic reference inversions across minds would be both possible and unknowable. The idea you name "red" might be the idea I name "blue," and so on. But this support is limited. For there is also an ancient 'mental language argument' that communication is possible if mental ideas are formally identical across minds, and if ideas are formally identical with things outside minds. If so, then we can logically analyze public objects of perception or thought as bundles of formally identical mental ideas across persons, where the ideas are also formally identical with things in the world that we can publicly perceive or conceive. Of course, on metaphysical ecumenicism, if this 'mental language' analysis of talk is logically equivalent to the 'public language' analysis of ordinary public talk of objects of perception or thought, then the two theories are distinct only in reason. And that would show that all the objects admitted by either theory exist in the sense of not being nothing, by the very success of each ostensibly rival analysis. And in that sense the private language argument wins, in that its public objects of talk are admitted. But on either analysis, there is enough mind-independence for public talk of objects of perception or thought.

Feature (1) is perhaps best supported by G. E. Moore's arguments that in act-object theory, a sensation of blue is mind-independent. *Qualified* sensations of blue are objects of perception or thought, in the very few cases in which we attend to sensations as opposed to ordinary things. And on the face of it, Moore's arguments can be generalized to apply to all objects of perception or thought. I shall not discuss his arguments here, since I basically agree with them and have nothing to contribute to their discussion (Moore 1903). Granted, it is hard to see how cognitive *acts* could exist outside a mind, or independently of a mind, or be anything but

mental. But objects of perception or thought are the *objects* of cognitive acts, not the acts themselves.

Feature (1) is controversial. Philosophers have disagreed on whether objects of perception or thought are mind-independent, in large part because they understand them differently. In both ancient (via antiqua) and early modern (via moderna) theory of ideas, objects of perception or thought are mental ideas and therefore mind-dependent for Descartes, Locke, and Berkeley. In Hume's neutral monism, ideas and impressions are mind-independent. Despite his mentalistic-sounding terminology, they are neither mental nor physical in themselves. For they are logically prior to the mind-body distinction. For him, minds and bodies alike are eliminatively analyzed as bundles of ideas and sense-impressions. Mind-bundles include both, while body-bundles include only impressions. There is overlap of impressions, but no overlap of ideas. If several people see a house, each mind-bundle includes an impression of the house, and all the house-impressions constitute the house-bundle. But an overlap of ideas across minds, i.e. shared ideas, would mean telepathy or something like it, and in any case an end to the privacy of ideas. And ideas in bodies would make bodies mental in part. In the realism of Moore and Russell, objects of perception or thought would include mind-independent sense-data and mind-independent ante rem universals. For Russell, sense-data (sensed sensibilia) are not only mind-independent, but physically real, since they help compose bodies. There is no difference between them and *unsensed* sensibilia, except that they happen to be sensed (Russell 1976d / 1914: 110–111, 114; see Moore 1903). Perceived bodies are composed of a few sensed sensibilia, but mostly of unsensed sensibilia. Unperceived bodies are entirely composed of unsensed sensibilia. It is interesting to look back at Hume in light of Russell's views. Russell says bodies are logical fictions, since he analyzes them as temporal series of classes of sensed and unsensed sensibilia, and for him *classes* and *series* are logical fictions; they are literally nothing. But would Hume say his *bundles as such* (classes, series) are fictions?FN1-3

Objects of perception are often *given as* seen by thousands of people at once, as in a football stadium. So too for objects of thought. In a large mathematics classroom, the same numbers are publicly *given* to the teacher and students alike. Numbers are given as public and therefore mind-independent objects of thought, but not of perception as such. Three oranges can be on the table, but the number three is not a fourth object on the table. Not only are numbers publicly given to us, but so are the ways they can be presented, such as 'the only even prime number', or 'the number of oranges on the table'. This is logically the same as 'the thrown

football' and 'the smallest football'. And the private language argument applies to numbers as well as to footballs.

Also, all objects of perception or thought essentially are as they are directly given. (I shall discuss that feature shortly.) Thus if they are directly given as public, then they essentially are public. This is another argument for feature (1).

In fact, even mental acts and private mental objects of introspection are in a sense public. That is the phenomenology of it. That is, they are given as being in some sense objects that can be publicly discussed, even though they are also in some sense mental and private. This is therefore also the implication of ordinary language use in general, and of the private language arguments in particular. We may conclude that all objects of perception or thought, including even objects of introspection, are mind-independent. This is on pain of our otherwise being logically unable to talk about them in a public language. The resolution is that mental objects are mind-dependent only on the mind they are in. They are mind-independent of all other minds.

Again, phenomenology supports this. When we speak of Smith feeling a toothache, and the dentist asks if it is sharp or throbbing, we are simply, nonreflectively *given* these acts and sensations as things *we* can publicly talk about, even though we are also given them as private *to Smith*. This concerns the distinction between formal reality and objective reality, which I shall also discuss shortly. As an object of perception or thought, a toothache is formally public but objectively private. That is the solution offered by the via antiqua, in which ideas have both formal reality and objective reality. Mental ideas are one kind of object of perception or thought, footballs and oranges are another, and numbers are yet another; and on the face of it, the formal-objective reality distinction applies to all ordinary objects of perception or thought. Thus the domain of objects of perception or thought is "astonishingly rich and complex," to borrow a phrase from W. A. Sinclair (1944: 86). And on metaphysical ecumenicism, the domain of objects in themselves, including toothaches, trees, and numbers in themselves, is also astonishingly rich and complex.FN1-4

Essential Feature 2

2. Objects of perception or thought are essentially mind-dependent in the indirect sense that they are logically impossible if minds are logically impossible. Ironically, this follows from the very same fact that feature (1) follows from. For there logically can be no ways that objects logically can be conceived or regarded, if conceivers or regarders are logically impossible. That conceivers or

regarders *are* logically possible does not detract from this point. The point is hypothetical, and whether the hypothesis is impossible is logically irrelevant. The *logical possibility* of a conceiver or regarder, that is, of a mind in the ordinary sense, *is* required for the existence and even for the logical possibility, of objects of perception or thought. This is in the wide *a priori* sense of logical possibility that includes synthetic *a priori* categorial possibility; and feature (2) really describes a categorial impossibiliy.FN1-5

Feature (1) is the feature of *logically direct* mind-*in*dependence. Feature (2) is the feature of *logically indirect* mind-*de*pendence. The two features are logically consistent, but must not be confused with each other.

Feature (2) is not part of our ordinary understanding of objects of perception or thought. At any rate, I have not seen it in the literature. In fact, as far as I know, I am the first person who has thought of it. But it fits perfectly with our ordinary understanding. And if feature (2) is logically implicit in the concept of an object of perception or thought, then it is a logically implicit *part* of our ordinary understanding, at least on the theory that logical validity is relevantist logical containment entailment.

To state feature (2) in slightly different words, objects of perception or thought would be logically impossible if, perhaps per impossibile, minds (meaning here at least perceivers and thinkers, or cognizers) were logically impossible. No object logically can be perceived if there logically cannot be perceivers. And no object logically can be thought of if there logically cannot be thinkers. This is an essential feature of objects of perception or thought which cannot be a feature of objects in themselves. But if, perhaps per impossibile, perceivers and thinkers were logically impossible, stones in themselves could still exist. For not only do they not *need* to be directly cognizable, but they *cannot* be directly cognized.

Here we can see that no object of perception or thought can be an object in itself, and not just because we defined an object in itself as an object that is not a qualified object. For even if we offered some other definition, or offered no definition at all, "There can be imperceptible objects of perception" and "There can be unthinkable objects of thought" are self-contradictory on their ordinary, pre-philosophical face. But "There can be imperceptible or unthinkable objects in themselves" is logically self-consistent on its ordinary, pre-philosophical face.

There seems to be no reason why everything there is must be perceptible or understandable by us. Hegel's thesis that the real is the rational and the rational is the real seems wrong on its face. At the least, the burden is on Hegel to show that it is true. Either that, or we need to find a really good interpretation for that thesis. For example, we might substitute for "real," "real to us," or "what

we could ever understand as real." But interpretations like that only change the subject and thus sweep the problem under the rug. And even if Hegel were to appeal to the verification principle to argue that all "real" can mean *to us* is what we can in principle verify, the principle cannot even verify itself. Also, even if the verification principle were not self-defeating, 'verifiable in principle by us' seems a far cry from 'verifiable in principle simpliciter'. The most famous formulation of the principle is of course by Moritz Schlick: "The meaning of a statement is the method of its verification."

I shall discuss Hegel's thesis later. For now, the problem with it is not that "unthinkable" is itself an intelligible term. Yes, it merely conjoins two intelligible terms, "not" and "thinkable." But then "round square" is an intelligible term by mere conjunction too, and that is precisely how we know there can be no round squares.

The term "real" is said in many ways. On its face, the term is a determinable which can have indefinitely many determinates, only a few of which we might ever know. This is on a strict par with the possibility that there are colors which we, constituted as we are, can never experience. For we know there are colors the blind person cannot see, and colors the red-green blind person cannot distinguish. And by parity of reason, even if Hegel is right about all the senses of "real" and "rational" that we, constituted as we are, might ever know, there might be other senses of those terms which we can never think of.

Butchvarov says, "Only insofar as something can be an object of consciousness can it also be singled out" (Butchvarov 1979: 237). Or if you please, if there were no such thing as consciousness, then there could be no such thing as an object of consciousness. But that is just an object of perception or thought, and this is just feature (2) in other language, or at least implies it.

It might be objected that some objects in themselves, like a toothache in itself, a feeling of happiness in itself, or the courage of Achilles in itself, are not only logically dependent on the logical possibility of minds, but logically dependent even on the existence of actual minds, or at least on the existence of one. And that makes such objects in themselves more logically dependent on minds than objects of perception or thought are, which is contradictory.

My reply is that there are such objects in themselves, but their logical dependence on actual minds, and therefore on the logical possibility of minds, is not at all the same thing as a qualified object's logical dependence on the logical possibility of minds. For a qualified object is a logically possible way that a thing can be presented. And the logical dependences in themselves of toothaches, happinesses, and in re personal (particular) qualities (virtues), e.g. courage, in themselves upon minds in themselves, are none of them ways that things can be presented, but are all level 0

things just like minds. Far from being ways that things can be presented, all objects in themselves, including toothaches in themselves, are presented indirectly through objects that *are* ways that things can be presented. For we can make informative existence and identity judgments about toothaches in themselves just as much as we can make them about footballs or oranges in themselves. And a toothache depends only on one mind.

Essential Feature 3

3. Objects of perception or thought essentially are as they directly appear to be. This feature is a familiar one; compare Descartes' ideas. Descartes' principle is that we know what seems to be the case with absolute certainty, and surely he means ideas that are directly presented. He says, "it is at least quite certain that it seems to me that I see light, that I hear noise and that I feel heat. That cannot be false.... (Descartes 1969 / 1642: 153, see 157, 159). Even the evil genius cannot deceive us about that (Descartes 1969 / 1642: 148, 150–151)!

An object of perception or thought essentially is as it is directly presented. But objects in themselves can be illusory or delusory, since they can only appear to us indirectly.

Likewise, in indirect presentations of level n objects of perception or thought via direct presentations of level n + 1 objects of perception or thought, the level n + 1 objects essentially are as they appear to be, but the level n objects can be illusory or delusory. For the level n + 1 apple of perception or thought I saw last night might "be" a level n tomato of perception or thought (illusion), or even a false memory (delusion).

When directly grasped, that is, when not indirectly grasped in indirect speech, Frege's senses and their modes of presentation essentially are as they appear to be, on pain of vicious regress of indirect graspings. And when given in acquaintance, Russell's ante rem descriptive universals (the determinate constituents in all his descriptions) and his sensibilia essentially are as they appear to be as well. Also like my objects of perception or thought, Frege's senses and Russell's universals (and arguably thereby sensibilia) are timeless and logically necessary. And in both cases, no wonder. Just like my own objects of perception or thought, Frege's directly presented senses (and their modes of presentation) and Russell's universals and his sensibilia function as their analyses of (or substitutes for) ordinary, pre-philosophical objects of perception or thought. Of course, Russell's sense-data function in this way as well. They too essentially are as they directly appear to be. But

they are logically contingent. They correspond to *presentations* of my objects of perception or thought. For they are *sensed* sensibilia.

Butchvarov says, "By phenomenal individual things and qualities, I mean those that can be objects of consciousness,... and that can be *wholly* objects of consciousness" (Butchvarov 1979: 237, his emphasis. This is not only very plausible, but can be used to explain feature (3), why objects of consciousness essentially are as they directly appear to be. For if they are wholly presented, then nothing can be hidden, and nothing can be mistaken about them qua objects of consciousness. But there is a counterexample, really indefinitely many counterexamples, that apply both to feature (3) and to Butchvarov's claim.

Henri Poincaré offers the counterexample. He argues that in fact, sense-data are not always as they appear to be. Russell says:

> When we are considering the actual data of sensation in this connection, it is important to realise that two sense-data may be, and must sometimes be, really different when we cannot perceive any difference between them. An old but conclusive reason for believing this was emphasized by Poincaré. In all cases of sense-data capable of gradual change, we may find one sense-datum indistinguishable from another, and that other indistinguishable from a third, while yet the first and third are easily distinguishable. (Russell 1960 / 1914: 112–113)

That is, *directly presented* indistinguishability of Russell's sense-data is not logically transitive. Direct presentations of my objects of perception or thought, and of Frege's sensible ideas, are logically intransitive as well. Russell attempts several solutions (e.g. Russell 1960 / 1914: 114–116), which I discuss elsewhere (my 2003 / 1996: 164, 202, 204). Russell's main solution is that there must be more to sense-data than they appear to be. That is, we are not *wholly* acquainted with them. That is inconsistent with feature (3), or at least seems to be.

My reply is that Poincaré's counterexample is explained by phenomenological ascent. As soon as we question whether there is a cognitive difference, however slight, between the first sense-datum and the third, we are presented with a higher-level object of perception or thought. The 1914–1918 Russell cannot offer this sort of solution. For all his sense-data are all on the same logico-ontological level. They are all level zero type zero particulars. His sense-data are not and cannot be ways of sensing other sense-data, though they can be ways of sensing ordinary things, since they are

sensible aspects of ordinary things, in Russell's logical analysis of ordinary things. Russell can admit ascending levels of descriptions of descriptions, and of the descriptive universals they contain as their determinate constituents; but this will not solve the problem. This is a problem about the sense-particulars themselves, not how they are described. It is about a difference we can *see* when we look at three of them at once. We cannot see a description, except on a printed page or other visual medium. Russell cannot describe his way out of this one! And even if he could, his solution would be artificial and lack the naturalness of phenomenology. Likewise for Frege and his levels of senses. Thus Russell is forced back to a hopeless admission that appearances *can* be other than they appear to be. Nothing could be further from Descartes' basic insight that we know with absolute certainty what *seems* to be the case, though in fairness, Descartes wrote long before Poincaré.

But what if we are directly presented with the three sense-data and all their relations of qualitative distinguishability or indistinguishability all at once? Does transitivity fail for directly presented indistinguishability after all? And why *should* it succeed? Not every relation is transitive. Why *should* directly presented qualitative indistinguishability be transitive? For clearly it is not. And that arguably avoids Russell's solution that while directly presented objects are essentially as they appear *as far as they appear*, they do not *wholly* appear. In fact, we must reject Russell's solution, since it contradicts the feature (3) principle that objects of perception or thought essentially are as they directly appear to be. Thus Russell's solution is desperate dialectics indeed. In fact, it is a hopeless dialectical move. But phenomenological ascent is the answer here too. It applies as soon as we notice the intransitivity.

Russell's theory of acquaintance applies only to those sense-data and to universals with which we are acquainted. My theory of direct presentation of objects of perception or thought is far more general, since it applies to far more than just sense-data and universals. Thus the intransitivity of indistinguishability is far more general in my theory as well. It applies not only to qualitative indistinguishability, but to any indistinguishability. Russell does not seem to notice that even in his own theory, the intransitivity of indistinguishability applies to more than just sense-data and sense-quality universals such as shades of red. For he also admits abstract universals with which we are directly acquainted; and at least in principle, the intransitivity of indistinguishability applies to them too.

It follows from feature (3) that even when we are presented with a spatio-temporal or other *surface, part, feature, or aspect* of an object in itself, we are not directly presented with it, but only with an object of perception or thought which "is" it. For a surface,

part, feature, or aspect of an object in itself is itself an object in itself, and logically need not be as it appears to be. Note that even the front surface of an apple is identifiable in indefinitely many ways via objects of perception or thought.

Perhaps we can say in ordinary language that when we eat a bite of a sandwich, we are eating the sandwich (Butchvarov 1998: 33 citing T. Clarke 1965). And when we are seeing the front surface of the apple, we say we are seeing the apple. But we are not seeing the whole apple, any more than we are eating the whole sandwich. Not unless it is a small sandwich that we eat in one bite!

It also follows from feature (3) that objects of perception or thought are essentially public if they directly appear to be. Public objects of perception or thought logically can be directly given to different minds and at different times. To question whether they are really public objects, that is, wonder if they are really just private mental ideas after all is to do a phenomenological ascent to a next higher-level object of perception or thought. Even if my object of perception or thought is my own feeling of happiness or toothache, if (perhaps per impossibile) it directly appears to be public, then it is essentially public, even if the happiness in itself or toothache in itself is not. In that case it would be an illusory object of perception or thought. And of course public psychic or telepathic cognition of another person's feelings is *logically* possible.

Even if an object of perception or thought directly appears to be private and is thus essentially private, it still can be publicly thought about and discussed. For example, I can talk to my dentist about how my toothache feels—an object of perception. How is that possible? It is explained by the distinction between its formal reality and its objective reality. In that case, its formal reality is public, but its objective reality is essentially private, even if the toothache in itself is public! And that is logically possible, since this is a logically contingent matter. Allow me to explain further.

In his *Human Knowledge*, Russell says that "two people looking at different trees might, theoretically, have exactly similar percepts.... Two people may see exactly the same shade of colour" (Russell 1976 / 1948: 92–93). Russell discusses the possibility of physically linked neural pathways, such as linked optical nerves, that cause two people to have exactly similar percepts, or we may as well say exactly the same percept. But we do not need neural pathways to explain how a toothache that appears private logically can be public, since we have a good phenomenology to begin with.

It also follows from feature (3) that objects of perception or thought essentially have whatever *essences* they directly appear to have. They can and do directly appear to have all sorts of essences. When we think of them in philosophy, they directly appear to have many different essences, ranging from the mythical winged horse

Pegasus to the supremely real Platonic form. All have the essences they directly appear to have. But that is not true of objects in themselves. We logically can be subject to illusion or delusion about objects in themselves, including even their essences.

It might be objected that on my view, if an object of thought appears to be logically impossible, then it is logically impossible, and is therefore necessarily delusory. Yet we can be mistaken about whether objects in themselves are logically impossible, for example in a complex mathematical proof. That is, objects of thought that directly appear to be logically impossible may turn out to be logically possible after all. Perhaps even an object of perception can appear to be logically impossible, as in a dream of a round square. It might be an unstable object, but many objects of perception are unstable, such as a shimmering oasis or a twinkling star. Russell once wrote a humorous piece called "The Metaphysician's Nightmare," in which Satan (directly) appears to his followers to be (essentially) "pure Nothing, total non-existence, and yet continually changing[,] absolutely black [which makes him an object of perception,] and the only true reality" (Russell 2009 / 1954: 73–74), at least until Russell sorts them out with logic.

My reply is that the objection confuses objects of perception or thought with objects in themselves. If an object of perception or thought directly appears to be essentially possible, such as a tree or the number two, then it, the object of perception or thought, is essentially possible. If it directly appears to be essentially impossible, such as Satan or the round square, then it, the object of perception or thought, is essentially impossible. We usually take it that the corresponding objects in themselves follow suit, but we do not always. In the case of fairly simple objects of perception or thought, we generally take the object in itself to follow suit. But we can be very mistaken about whether more complex objects in themselves are logically possible or impossible, for example in a long and complicated mathematical proof.

If logically impossible objects were not thinkable as objects of thought, then we could not understand that they are logically impossible. I credit Butchvarov with this point, though I reverse his terminology of thinking and understanding (Butchvarov 1970: 81). The point generally applies to fairly simple objects of perception or thought which directly appear to be logically impossible. In their case, we can simply understand that they cannot "be" objects in themselves merely by thinking about them. But again, not so in the case of more complex objects of perception or thought which directly appear to be logically impossible.

How can one and the same object be both thinkable and logically impossible? This is a fallacy of complex question. An object of perception or thought, even a logically impossible one, is

always thinkable. What is logically impossible, or in the case of fairly simple impossible objects, simply unthinkable on the face of it, is that they can "be" objects in themselves.

More precisely, feature (3) applies to the *objective reality* of objects of perception or thought. Their *objective reality* is essentially what it directly appears to be, but their *formal reality* is not. Thus it is properly speaking not the whole object of perception or thought but only its objective reality that is essentially public, or alternatively, essentially private, if it directly appears to be. And it is only its objective reality that essentially has any *essence* it directly appears to have. It is also only its objective reality that is essentially intransitive with respect to indistinguishability, if it directly appears to be. But there is a paradox in that objects of perception or thought are essentially imperceptible or unthinkable if they directly appear to be. For an object of perception or thought is, even if not perceptible, at least thinkable, or else it would not be an object of perception or thought. The resolution is that unthinkability is itself thinkable. For it is a mere conjunction of "not" and "thinkable," both of which are thinkable. Thus 'the unthinkable object' joins the list of thinkable objects of thought like nothing (*das Nicht*) and the round square. When we say they are unthinkable, I analyze this as meaning that what is unthinkable is that they could "be" objects in themselves. But while nothing in itself and the round square in itself cannot exist, it seems at least thinkable that it is logically possible there are unthinkable *objects in themselves* that exist beyond the limits of any thought, even if *examples* are unthinkable. This concerns Hegel's thesis that the rational is the real and the real is the rational, which I discuss in chapter 3, and also the verification principle, which is self-defeating because it cannot even verify itself.

All this brings us to feature (4).

Essential Feature 4

4. Objects of perception or thought essentially have both formal reality and objective reality. This feature goes back at least to the Middle Ages, and makes objects of perception or thought belong to the via antiqua, even though they are not mental ideas. First, objects of perception or thought exist in the sense that they are not nothing. Second, they are logically mind-independent. Their existence and logical possibility depend not on actual minds, but only on the logical possibility of minds. Thus they exist in the sense that they are mind-independent. Third, they are also logically necessary beings, since they are logically possible ways that things can be presented. (Of course, their being is prior to their being

necessary. Being is essentially nonmodal. For the modalities themselves must exist in the sense of not being nothing, if not also in other senses.) And those are the three main features of the *formal* reality of objects of perception or thought, or if you please, their three kinds of formal reality. Their objective reality is whatever we directly perceive or think of, for example a tree, or a round square. Thus while objects of perception or thought are logically necessary beings due to, and indeed as part of, their formal reality, their objective reality can be logically contingent, and can even be formally self-contradictory, as in 'the round and not round object', or categorially impossible, as in 'the object of perception or thought that is an object in itself'.

Objects in themselves have only formal reality and no objective reality. That is because objects in themselves are not ways of presenting anything. They are not even ways of presenting themselves. They simply are what they are. In fact, we *defined* an object in itself as an object that is not a qualified object, that is, not an object of perception or thought. Thus we made this point of categorial form into a point of logical form.

In their formal reality, objects of perception or thought constitute a "third realm" much like Frege's senses, Russell's descriptions, or Butchvarov's domain of objects.FN1-6

Frege is careful to distinguish a sense from the mode of presentation it contains. This seems much like the distinction between an object of perception or thought and the objective reality it contains, and even a bit like the distinction between Russell's descriptions and the universals they contain as their determinate constituents. The difference is that Frege's modes of presentation all have the same kind of reality, and likewise for all Russell's universals; but an objective reality can have any kind of reality, or even no reality. It is the items that modes of presentation or definite descriptive universals pick out that can have different kinds of reality. This suggests to me that Frege and Russell are not digging deeply enough into the phenomenology of presentation here, and that their theories, not to mention modern theory of ideas (via moderna), though very sophisticated, are a retrograde step, in at least this one respect, from the via antiqua. The natural reply is that they are offering simpler, more uniform, standardized accounts of cognition that leave the different kinds of reality out there in the world without duplicating them within cognition as objective realities. One might even appeal to Ockham's razor to shave away objective realities as unnecessary. But that presupposes that these via moderna accounts are adequate explanations of cognition, or at least are explanations *as adequate as* the via antiqua.

The issue is the proper locus or loci of the different kinds of reality when things are cognized. The resolution of the issue in

metaphysical ecumenicism is that all these ostensibly rival accounts of cognition are distinct only in reason; but my account, and the via antiqua in general, are phenomenologically more adequate. When I see an apple, I see it *as* a physical object. Thus objective realities are not a *needless* duplication. Indeed, what theory needs to be more phenomenologically natural and correct than a theory of cognition? A cognition *is* a phenomenological presentation!

In fact, in order to explain and ground the sense in sense-perception, Russell has to add sense-data to his theory of cognition. And Frege has to add sensible mental ideas. In contrast, my theory needs to add no such thing. Whose theory is simpler now?

Even beginners in philosophy know the distinction between formal and objective reality from Descartes' *Meditations* (1969 / 1642: 161–164). For Descartes, the formal reality of an idea is what all ideas have in common as their categorial form, and the objective reality of an idea is what it 'represents', which is "very different" in different ideas (Descartes 1969 / 1642: 162). Thus the distinction is not very hard to understand, at least at a beginning level. In fact, the distinction makes good sense and might even be considered self-evident, certainly for ideas that represent things. Even ideas that are of mere sensations, such as blue or pain, arguably represent physical neural patterns. For us, the distinction applies to objects of perception or thought, in the same way and for the same reasons.

The distinction between formal reality and objective reality was widely accepted in late scholasticism. No doubt Descartes found it in Suárez, Fonseca, Toletus, Eustace of St. Paul, and Raconis, all of whose works he seems to have studied during his three years at the college in La Flèche (Cronin 1987: 31–36). And the distinction goes back even earlier.FN1-7

Some may think that the concepts of formal reality and objective reality are sui generis, that is, *indefinable*. If so, then at least I have theoretically *explained* them, and have even *explicated* them by examples, as best I can.FN1-8 But in fact I defined them, and as well as they can be or need to be. We can now give seven theoretical definitions: (1) An *object* is anything and everything. (2) An *object of perception or thought* is an objectual way that an object logically can be presented. (3) Such a way is a *qualification*. (4) Thus an object of perception or thought is a *qualified object*. ("Wayed object" is ungrammatical. "Way-object" and "objectual way" are acceptable as terms. But "qualified object" seems the best and most structurally illuminating definition of what an object of perception or thought is. It also recalls the conceptual connection to Aristotle's notion of a qualified thing.) (5) The *formal reality* of any object is its metaphysical category. (6) The *objective reality* of an object of perception or thought is the object we take ourselves to be directly cognizing when we are directly presented with that

object of perception or thought. (7) An *object in itself* is an object that is not an object of perception or thought, i.e., is not qualified.

The form of any object is its essence, or more precisely, is distinct only in reason from, its essence. Its form is its nature, or *what* it is; its essence is its being or ontological status, or *whether* it is, and *if* it is, what *kind or kinds of being* it has. The *formal reality* of an object is the kind of reality it has in virtue of its form. In contrast, the *objective reality* of an object of perception or thought is the reality or essence of the object which the object of perception of thought cognitively (not: epistemically) appears to "be," and which it would have if it "were" that object. Butchvarov makes this point concerning his own objects and entities (Butchvarov 1994: 44; see 1979: ch. 6).

Via antiqua ideas cannot be singled out by their formal reality, since that is always the same, but only by their objective reality, which is always different. Likewise for objects of perception or thought. This is just like Moore's act-object theory, where cognitive acts can be identified only by their objects. Even if we identify an object of perception or thought by its relations to other things, that too can directly be only via objective realities

Thus an object of perception or thought essentially has two logical constituents: its formal reality and an objective reality. This is the case even if its objective reality is nothing, since an objective reality is representational. Representation may be indefinable, like other basic concepts, and like the color red. But "ostensible object" might define it by genus and difference. And that suggests another definition. Since considering an objective reality, or representation of reality, merely as such is essentially the same thing as using Husserlian ontological bracketing, i.e., suspending judgment or disregarding whether the thing exists, *representation* considered merely as such can be defined as perceiving or thinking of an ostensible object but disregarding whether it exists. Or conversely, ontological bracketing can be defined as singling out an objective reality without regard for whether it "is" a lower-level object.

It might be objected to feature (4) that an object of perception or thought essentially must be as it directly appears to be. And it directly appears to have a single essence, a single kind of reality, and not a double essence, a double kind of reality. How then can it have two kinds of reality, formal and objective?FN1-9

One might reply that phenomenologically speaking, an object of perception or thought is really one object, just as it appears to be, and that its dual nature is an intellectual analysis, a distinction in reason logically posterior to the phenomenological presentation. For it is possible to make (discover) the distinction only after the object of perception or thought is presented. One might then further reply that once we are aware of this post-

presentational analysis, and are singling it out in thought and attending to it, *then* the object of perception or thought *does* appear to have two natures. This reply might be supported by appealing to the amphibian nature of ordinary thinking about objects of perception or thought. It is an ambiguity in ordinary thinking about ordinary objects of perception or thought that an object of perception or thought is in some sense an object of perception or thought, and is in another sense the apple, number, or muon we are thinking of. But ordinarily, we do not *attend* to this ambiguity. Thus, when we *do* reflect on objects of perception or thought as such, and *do* single out and attend to this ambiguity in them, they *do* directly appear in thought to have a double essence.

One might object to this reply that if our attention shifts in this way, then we are no longer singling out the original *unitary* object of perception or thought, but a new and very different *dual* object of perception or thought. Russell says that if we attend to the "parts" of a sense-datum, they become new data in their own right (Russell 1971e / 1918: 203; see 1971d / 1911: 114; 1985 / 1940: 334). Russell is thinking of colors and shapes, but surely this would apply to the formal reality and the objective reality of a qualified object as well. (Russell admits no such distinction for his sense-data.) We may call the first, unitary object of perception or thought the *analysandum* (or that which is to be analyzed), and the second, dual object of perception or thought the *analysans* (or that which is the analysis). Strictly speaking, in Russellian terms a *description* of one would be the covert logical analysis of an ordinary *name* for the other. The logical analysis succeeds if and only if the two objects are 'logically equivalent' and the analysans is logically more complex. And that is just what we have here, since the first object is essentially unitary, and the second is essentially dual.

We might reply that while the two objects are not identical, they are nonetheless distinct only in reason. This reply admits the objection, since to be distinct in reason is to be not identical, but different.

A better reply would be that an object of perception or thought really does have only one essence, only one kind of reality, namely, its formal reality. Its objective reality is merely what it cognitively *appears* to "be," and might or might not "be." And with respect to its objective reality, it very well may *not* "be" as it appears to "be." For it may be veridical, illusory, or even delusory. And even in the case of a *veridical* object of perception or thought, it is not the whole object of perception or thought as such, but more directly and precisely only its objective reality, which "is" the object in itself. (Likewise for cases of illusion.) This is why the "is" or "being" relation is logically indirect with respect to the whole object of perception or thought.

The best reply is that both of these replies are correct. They are logically consistent with each other, and each illuminates in its own way the problematic nature of the objection. My first reply shows that the objection conflates the phenomenological object with its analysis. And my second reply shows that the objection does not understand the analysis in the first place. The two kinds of reality are not really distinct, but are really one. They are different objects only in that they are distinct in reason. And that is my general solution of our old friend, the paradox of analysis. How can analysans and analysandum be both the same (so as to be correct) and different (so as to be factually informative)? The answer is that the two kinds of reality are distinct only in reason. Specifically, they are modally distinct. For an object can have formal reality without having objective reality, but cannot have objective reality without having formal reality. And an object of perception or thought cannot be the object it is without having both.

Again, I agree that a single, unitary object of perception or thought is *ordinarily* directly presented. But on my logical analysis, this one object does have a formal reality and an objective reality; and they logically can be directly presented as objects of thought in a new and different act of cognition, even if only in philosophy.

Essential Feature 5

5. Objects of perception or thought always have the formal reality of a single particular, but their objective reality can be anything that can be perceived or thought of, including particulars, universals, relations, facts and states of affairs, classes and sets of things, and even merely possible objects, impossible objects, and nothing ("das Nicht"). It is virtue of their formal reality as particulars that objects of perception or thought logically can be directly singled out as particular objects, and thus logically can be directly referred to in language by what Russell would call logically proper names, and by what Donnellan would call referentially used definite descriptions. If an object cannot be directly singled out as a *particular* object, then it lacks the formal reality essential for being an object of perception or thought.

Feature (5) is the feature of essential intentionality, where a thing's logical capacity to be singled out in perception or thought is called its cognitive intentionality, as opposed to intention in the agent sense of planning or choosing to do something, i.e., perform an action. Agent intending presupposes cognitive intending, but the converse is false. I cannot choose to feed my cat if I am unaware of my cat. But if I am merely aware of my cat lying on the floor, it does not logically follow that I will choose to do anything. All this

is certainly the case in the ordinary, pre-philosophical world. But total physicalists reject agent intentionality and even cognitive intentionality. In terms of our theory, they hold that qualified agent intentions and qualified cognitive intentions "are" not intentions in themselves. Of course, they might reject objects of perception or thought, that is, qualified objects, too.

It is common to distinguish two senses of "singling out." I can directly or indirectly single out an object either as a *particular*, as opposed to a property or relation, or as an *individual*, including particulars, properties, relations, and even individual groups or sets of objects. It is little noted that this gives us two senses of cognitive intentionality. This is not merely a terminological difference. These two kinds of cognitive intentionality are objectually different. All particulars are individuals, but not all individuals are particulars. Therefore all intentions of particulars are intentions of individuals, but not all intentions of individuals are intentions of particulars. Thus this is a modal (one-sided) distinction in reason.

A particular is an ultimate logical subject of predication. That is, things can be logically predicated of it, but it is not itself predicable of anything else in turn. Thus when I single out a thing as a thing which has properties and stands in relations to other things, but which cannot itself be a property or relation of anything else, then I single out the thing as a particular, or ultimate logical subject of predication. An object of perception or thought is a particular in its formal reality. For things can be predicated of it, but it cannot be predicated of anything else. In contrast, an object of perception or thought can be anything in its objective reality. It can be a property or a relation. It can even be nothing. It can even be ten different nothings! This is by parity of reason with the round square, which is a perfectly fine object of perception or thought.

An individual is anything that can be individuated as one thing. Even a group of things can be individuated as one group as opposed to another group. For us, an individual is an object in the wide sense. And every object in the wide sense is an individual. The objective reality of every object of perception or thought is also an individual. This includes the objective reality, nothing. That may sound paradoxical, but really it is not. The objective reality nothing is an individual, since we can and do single it out as an object of thought, usually when we are talking about Heidegger. It is an *individual of perception or thought*. But there is no such thing as nothing in itself. Individuals are logical subjects of predication. Even the universal green is. Green grow the rushes, ho! But green is not an *ultimate* logical subject of predication. For we predicate green of things, such as rushes.

Note that nothing is not the same as a vacuum in classical Newtonian physics. Such a vacuum is empty space-time. Thus it is

defined in relation to space-time and mass-energy, namely as the absence of mass-energy in a region of space-time. Thus a vacuum is an entity on Aristotle's principle that anything that is related to an entity is an entity. In contrast, nothing in itself logically cannot exist, therefore it cannot be an entity, therefore it cannot be related to anything. This validly contraposits Aristotle's principle. But also note that vacuums do not exist in general relativity theory or in quantum physics. In general relativity, all space is warped by matter via gravity. The very concepts of space and time are operationally understood in terms of matter warping (Hawking 2012 / 2010: 100–102, 131–135). Space and time are "no longer a fixed ground to events. Instead, they [are] dynamical quantities that [are] shaped by... matter and energy.... They [are] defined only within the [physical] universe" (Hawking 2018: 44). In quantum physics, "there is no such thing as empty space" because the uncertainty principle implies that "the value of a field and its rate of change" cannot both be accurately determined (Hawking 2012 / 2010: 113). Thus "the gravitational field.... can't be exactly zero even in what we think of as empty space.... Instead [all space] would have to have a certain minimum amount of [quantum] fluctuations[. We] "can interpret... so-called vacuum fluctuations as pairs of particles and antiparticles [that cancel each other out]" (Hawking 2018: 135–136). But like all physics, the existence or nonexistence of physical vacuums is a logically contingent matter, while the nonexistence of nothing (*das Nicht*) in itself is a logically necessary matter of ontology. See chapter 3 for more on physics.

Essential Feature 6

6. Objects of perception or thought cannot be Humean sense-impressions, Russellian sense-data, or Butchvarovian objects, or anything else that is merely an assay of a sensible quality. This follows from the fact that objects of perception or thought essentially have both a formal reality and an objective reality. Everything real has a formal reality, but only objects of perception or thought also have an objective reality. Sense-impressions, sense-data, and Butchvarovian objects essentially lack objective reality. They do not and cannot present anything through or beyond themselves, except in the sense that ordinary things are analyzed as bundles or classes of them, in virtue of which Russell calls them "aspects," and in which there literally *is* no more to the things they "present" other than (bundles of) them themselves. Thus they have no representational content in the Cartesian sense. But my objects of perception or thought always go beyond their formal reality to *present* an objective reality, even if we suspend

judgment on whether the objective reality *"is"* a lower-level object, as in Husserlian ontological bracketing, or more ordinarily, when we *believe* or even *know* that the objective reality of perception or thought is delusory, that is, "is" not a lower-level object. Consider again the round square and nothing (*das Nicht*). Practically by definition, we suspend judgment even if we are simply not *sure* it "is" a lower-level object.

Unless illusions or delusions of level directly appear, an objective reality is the same level as the object it may "be," but is still higher-level insofar as it belongs to an object of perception or thought that is one level higher than the object it may "be."

One must not be confused here. Hume's ideas and sense-impressions, Russell's sense-data, and Butchvarov's objects cannot be our objects of perception or thought. For they have no objective realities. But they can be the objective realities *of* our objects of perception or thought. In fact, philosophers think of them very often! Again, sense-data in themselves are not objects of perception or thought, but *qualified* sense-data are.

One must not be confused here on a matter of scholarship either. Butchvarov expressly favors Continental phenomenology, and cites thinkers like Husserl, Heidegger, and Sartre. But his own objects are private, momentary, and nonrecurrent just like Hume's impressions and Russell's sense-data. And they all lack objective realities. Thus Butchvarov obviously belongs to British empiricism.

It is trivial that the objective realities of the lowest level of objects of perception or thought cannot have objective realities themselves in turn. That is because the lowest level of objects of perception or thought is level 1, and anything they may "be" is level 0, the level of objects in themselves. And objects in themselves have no objective realities. If they did, they would be objects of perception or thought instead of objects in themselves.

It is equally trivial that the objective realities of all objects of perception or thought must "be" the objective realities of higher-level objects of perception or thought. For even objective realities need to have factually informative identities. But the real level of an objective reality is that of the object of perception or thought it occurs in. And all objects of perception or thought have objective realities. If they did not, they would be objects in themselves.

What about objective realities that are groups of objective realities of different levels? The group of the level 0 Eiffel Tower object in itself and my level 1 object of perception or thought that "is" the Tower is certainly a thinkable object of thought, hence certainly has an objective reality. The only possible answer is that where the *highest*-level member of the group of objective realities group is level n, the level of the group objective reality is level n + 1. Hence in the example, the objective reality of the group is level

2, since its highest level member objective reality is level 1. But this is only by logical courtesy. For some "round square" objective realities contain objective realities of all levels as their constituents.

Essential Feature 7

7. Objects of perception or thought are public and in that sense objective. Objects of perception or thought are essentially public, objective, and capable of being singled out indefinitely many times, that is, repeatably identifiable. This is always the case with their formal reality, and sometimes also with their objective reality, though not always. Some objective realities are private and mental, such as selves, ideas, and volitions.FN1-10

I already discussed three reasons for admitting this feature in the section on feature (1): phenomenology, the private language argument, and the act-object realism of Moore. I also discussed what might seem to be a fourth reason in the section on feature (3): an object of perception or thought essentially is as it directly appears to be. But this ostensible fourth reason applies only to those objects of perception or thought that directly appear to be public. The very same reason can be used to show that the ones that directly appear to be private are essentially private. But this fourth reason strictly applies not to the object of perception or thought, but only to its objective reality. And feature (7) is that the object of perception or thought is *formally* essentially public, i.e., essentially public in its formal reality, regardless of its objective reality.

I have seven reasons all told for admitting feature (7). Three are the first three above; I omit the ostensible fourth reason.

First, publicity accords with mainstream phenomenological thought from Kant to Heidegger.FN1-11 Hubert Dreyfus (ca. 1992) gives the example of a crowd watching the ball in a tennis match. They all simply assume they are watching the same ball. In my own terms, they all naturally and unquestioningly think they are directly presented with the same level 1 object of perception or thought. Its formal reality is public, and so is its objective reality. If we then ask if each spectator has a slightly different private presentation, then we are in a phenomenological ascent to level 2 objects of perception or thought which have public formal reality, but private objective realities. And since their formal realities are what they are as a formal ontological category, they are public objects of perception, even though they have private objective realities.

Second, the private language argument, or I should say, the many private language arguments, support this. For we discuss objects of perception or thought in public languages. That is just what we are doing right now. This applies to both their formal

reality and their objective realities, and even when their objective realities are minds or mental ideas. Thus I am applying the later Wittgenstein's private language argumentation wholesale to my objects of perception or thought, regardless of any scholarship on his own talk of objects. If there is any conflict, I would say that he is bewitched by his own rejection of the phenomenology of objects of perception or thought. But there is arguably much less conflict between Wittgenstein and phenomenology than one might think; see Gier (1981).

One might object to this second reason as follows. What may be called the mental language tradition, going from Plato and Aristotle to medieval times and beyond, implicitly inverts the main private language argument into what is called the mental language argument. The main private language argument is: 1. We talk in public languages. 2. Private (mental) meanings are not publicly accessible (and can be systematically inverted across speakers). 3. Therefore meanings must be public. The mental language argument dialectically inverts this to: 1. We talk in public languages. 2. Meanings are mental ideas. 3. Therefore mental) ideas must be publicly accessible, at least in the sense that mental ideas are or involve concepts which identify and differentiate things in the same way across minds and times. Public accessibility is typically cashed out in terms of the *formal identity* of mental ideas across minds and times, and also with the forms of things in the real order. Thus even though my mental idea of a horse is essentially private in its formal reality, it is public in its objective reality, insofar as that is formally identical with the objective reality of your idea of a horse, with that of my later idea tomorrow, and with the form of horses. As we say, one philosopher's modus ponens is another philosopher's modus tollens. Formal identity applies to all the objective realities in our own theory, even to those of nothing and the round square.

My reply is that on *either* the private language argument or the mental language argument, objects of perception or thought would be *sufficiently* public for talk about them to be public. My reply is like a Hegelian synthesis which finds what is best (and here ironically *in common*) in a thesis and antithesis. Historically, the mental language theory is the thesis, and the private language argument the antithesis. Wittgenstein (PI § 1) is very clear on this historical order when he finds the thesis in Augustine.

One might object that the private language argument and the mental language argument are in a dialectical standoff. Thus there is no reason to prefer either to the other. Thus the private language argument for the public nature of objects of perception or thought does not win.

My first reply is to repeat that both arguments sufficiently establish a public nature. In fact, they are distinct only in reason.

My second reply is that on metaphysical ecumenicism, the standoff is precisely what *establishes* the publicity of objects of perception or thought. For if the analyses are logically equivalent to each other, then we must admit *all* the entities posited in *both* analyses. And then the public parsing wins, in that we must admit the public objects of perception or thought. And even the private mental ideas, via their objective realities, will be *formally* identical.

One might object that objects of perception or thought must be private and nonrecurrent even if they are not mental. Thus they cannot be public after all.

My reply is that this confuses objects of perception or thought with their direct presentations. The former are logically possible ways of presenting things that anyone logically can be presented with. And even the latter logically can be public. When a crowd is watching a tennis match, it directly appears to everyone that they are directly presented with the same tennis ball, and so they are, in that all their direct presentations are formally identical.

One might object that my view that objects of perception or thought are public and mind-independent in their formal reality only postpones the problem of privacy to their objective reality. For their objective reality can be anything, even a private mind or a private mental idea.

My reply is that both the private language argument and the mental language argument prove sufficient identity of objective realities across minds and times for public talk of them to be possible. In fact, their conclusions are distinct only in reason.

One might more subtly object that the mind-independence which the private language argument confers on entire objects of perception or thought precludes even the logically *indirect* sort of mind-dependence I described as feature (2).

My reply is no, and it is a non sequitur to think so. For a private language argument to succeed, it suffices that it establishes the ordinary logical mind-independence of the meanings and referents of public languages. That is all such arguments were ever intended to do, and all they logically can do. They need not and cannot show that the existence or possibility of publicly discussed objects does not logically depend even on the *logical possibility* of minds, that is, that the objects are our sort of objects in themselves.

Wittgenstein never suggests that his private language arguments imply anything but the logical mind-independence of meanings and referents in public languages. He never says that his arguments imply that the *logical possibility* of meanings and referents of words does not logically depend on the *logical possibility* of minds, *pace* texts suggesting robots can behaviorally mean or refer. Many philosophers have lost their way on this, and even offer noncognitive behavioral or "operational" substitutes. As

if a behavioral or operational theory of meaning could even confirm itself! Alas, no one can lose sight of obvious facts or distinctions as easily as a philosopher. It is an occupational hazard. But it is embarrassing when behaviorists and operationalists reject their own cognitive acts because of their own theories.

Of course, this might be a merely scholarly point. Perhaps Wittgenstein never *thought* about the distinction between logically direct and logically indirect mind-independence in *Investigations*. But a principle of charity in interpretation suggests that he might have agreed with me, if he had been asked.

Third, Moore's argumentation for the mind-independence of objects in act-object theory applies to our objects of perception or thought, and even to their objective realities via formal identity. Again, I am simply accepting Moore's argumentation as sound.

Fourth, any counterexamples would be self-defeating. For any supposed example of a private or non-reidentifiable (not: nonrecurrent) object of perception or thought or objective reality which you could describe to me would be publicly identifiable, at least via formal identity across minds, by your very description.

Fifth, the expression "objective reality of an object of perception or thought" is itself a public expression in a public language. Likewise for the expressions "formal reality of an object of perception or thought," "object of perception of thought," "object in itself," and "object in the wide sense."FN1-12

Sixth, Bernard Bolzano says, "Man is so constituted that most [!] of his thoughts, sensations, wishes, and intentions, even without his knowledge and intent, are with more or less accuracy *reflected and recognizable in* his facial expressions, gestures, sounds, etc." (Bolzano 1972: 310, my emphasis). And this implies that *all* of our thoughts, sensations, wishes, and so on *logically can* be so reflected. Thus all objects of perception or thought, and even their direct presentations, logically can be reflected and recognized in our public behavior, and are in that sense public.

The concept of *being reflected in* would seem to be a primitive concept which we either admit as presented in daily life or we do not. Note that the concept is cognitive, not epistemic. It is very little different, if at all, from Thomas Reid's or Aristotle's concept of physical objects as being presented through or via our sense-experience. If it is a mystery how or why such a concept (or concepts) are given to us, the concepts of phenomenal green and of salty taste are just as mysterious. They are mysterious only in the sense of being indefinable. They are the opposite of mysterious in that we are presented with them all the time. All these concepts are very commonplace! And as Kripke says, the admission of indefinable entities "may in a sense be irrefutable" (Kripke 1982: 51). This includes formal identity; see chapter 2 for more.

The seventh and last reason why objects of perception or thought are public is perhaps the most basic. It is that they are logically possible ways that objects can be presented. Thus they exist in all logically possible worlds. But no object of perception or thought is *presented to a mind* in every possible world. In fact, infinitely many possible worlds do not even have minds for them to be presented to! Thus objects of perception or thought are clearly mind-independent in the ordinary sense. I omit any omniscient minds that exist in all possible worlds, meaning God, *contra* George Berkeley. On my agnosticism, see my (2022a / 2019).

Essential Feature 8

8. Objects of perception or thought are robustly real in the sense of not being nothing. Again, I argue elsewhere that not being nothing is Russell's famous "robust sense of reality" (my 2003, ch. 4; 1988), and I find equivalent expressions in Suárez and Quine.

Objects of perception or thought are obviously not nothing, since they are public and mind-independent in their formal reality. Their *formal* reality cannot be nothing, thus they cannot be nothing. Merely possible Pegasus in itself does not exist. There is no such horse. But *qualified* Pegasus, the object of perception or thought, the objectual way things logically can be presented, exists in all possible worlds, and has basic ontological jobs to do in all of them.

The *objective* reality of an object of perception or thought can be a merely possible Pegasus or even nothing (*das Nicht*). Such objective realities do not correspond to reality. For there are no such objects in themselves there for them to "be." But objective realities exist in all possible worlds and have basic ontological jobs to do in all of them. For they are the ontological core, the objectual content, of objects of perception or thought.

Some members of the analytic school criticized Heidegger for overlooking that the term "nothing" can be logically analyzed away as meaning 'not anything'. But this is correct only on the ontologically eliminative interpretation of logical analysis. On the reductive and the constructional interpretations, it is not. On the reductive view, nothing has no special nihilistic character of its own, but does have a logico-quantificational character. much as numbers have no special arithmetical character of their own, but are only classes of classes. On the positive construction view, 'Nothing' (*das Nicht*), *would* be established as an entity that has a special nihilistic character, if Heidegger *were* right that *"Das Nicht nichtet*" (Heidegger 1970 / 1929: 339, "Nothing nihilates," see 340, "*das Nichten des Nichts*"), much as numbers are established as arithmetical entities that have special arithmetical features, such as

being odd or even, and numerically greater or less than. But here the positive construction view is overruled by the fact that there can be no such thing as nothing for qualified nothing to "be." Thus here metaphysical ecumenicism must accept reductionism as the (next) most real or positive interpretation. Thus our view devolves to a reductive analysis of nothing as being 'not anything': a complex logical universal logically composed of negation and the universal quantifier. And the eliminative analysis retains a limited validity.

On this reductive interpretation, the analytic school retains the merit of not admitting nothing (*das Nicht*) in itself. On this view, there is no such thing as nothing in itself, and talk of nothing is reductively analyzed as talk of a complex logical universal. And Heidegger retains the merit of having an object to think about: the object of thought whose objective reality is nothing. This object of thought is literally delusory, since there is no such thing as nothing in itself. But on the reductive interpretation, the object of thought is analyzed as illusory, since it seems to be about nothing (that is precisely its objective reality), but "is" a complex logical universal that is not nothing. As Russell says in 1904:

> It is plain that there is such a concept as nothing, and that in some sense nothing is something. In fact, the proposition "nothing is not nothing" is undoubtedly capable of an interpretation which makes it true—a point which gives rise to the contradictions discussed in Plato's *Sophis*t. (Russell 1964 / 1903: 73 citing Plato 1937b)

This (and much else) shows that Russell was a reductionist in 1903, even though he was an eliminationist from at least 1914 on.

Meinong's nonexistent objects are not nothing, and therefore exist in the sense of not being nothing. Meinong overlooks this point. See my (2003: ch. 4), superseding my (1988). If they were really all nothing, then they could not be different from each other. So to speak, nothing cannot be different from itself. Thus they are not "beyond being and nonbeing" after all.

Meinong's golden mountain is an object of perception or thought. (It is really Hume's golden mountain; Meinong studied Hume.) The qualified golden mountain "is" not a golden mountain in itself, though it logically could "be." This object of perception or thought not only exists in the sense of not being nothing, but it also exists in the sense of being independent of the existence of minds, though it is not independent of the logical possibility of minds.

Likewise for Meinong's logically impossible objects, such as the round square. When we say the round square does not and cannot exist, we mean only that this object of thought "is" not and

logically cannot "be" a round square in itself. This object of perception or thought, too, not only exists in the sense of not being nothing, but also exists independently of the existence of minds, though not independently of the logical possibility of minds.

One might object that this only postpones the problem to the level of objective realities. For if there cannot be a nothing in itself that is genuinely nothing, then there cannot be an objective reality that is genuinely nothing either. For it must be something that can be thought about, if it is to be an object of thought at all.

My reply is that it is the nature of objective reality that it can have any reality, and even no reality. For it is representational, and representing in this sense is not nothing. In our sense of the term, it is prelinguistic and even prehuman. It is *formally* cognitive.

Objective realities qua objective realities are not nothing. They are all different, so at most one could be nothing. Even the perfect candidate for the one to be nothing, namely nothing (*das Nicht*), is different from the others; and the categorial argument that they all ought to have the same kind of being still applies. They are also mind-independent per Moore's act-object argument. And there is the factual sense in which qualified objects and their objective realities belong to the real order in itself. For it is a fact in itself that they exist. But the main thing is that qua objective reality, nothing is not nothing, but an objective reality, and there are such things as objective realities. But nothing qua itself, i.e. qua nothing, is nothing, meaning there is and can be no such thing.

My theory is more congenial to Heidegger and Meinong than most theories in the analytic tradition. For at least I am making them out to have perfectly fine, perfectly intelligible objects of thought. That is because here my theory belongs to the Continental tradition more than to the analytic tradition or British empiricism.

Essential Feature 9

9. Directly presented objects of perception or thought are not only directly given cognitive data, but are also essentially directly presented epistemic data, if they are directly presented as such. They are direct *cognitive* data because they are what is directly given in cognition. Without them, we could cognitively perceive or understand nothing. And it follows from feature (3) that if they are directly given as evidence, then they essentially are evidence, specifically, direct *epistemic* data. For they essentially are as they directly appear to be. Without them, we logically cannot have evidence for anything.

They are our basic epistemic data in two different ways.

First, we *know* presented objects of perception or thought are as they directly appear epistemically to be. For they essentially are as they directly appear to be. Again, that is feature (3). But this point does not extend to theories or analyses of their nature, such as the one I offer in this chapter. Our theories or analyses of them certainly can be mistaken, unless they are directly presented as part of the direct presentation of objects of perception or thought. For there are many such theories, and they cannot all be true, except on a metaphysical ecumenicism in which they are all distinct only in reason from each other.

The second way that objects of perception or thought are our basic epistemic data is that they are evidence, and are the only evidence we can have, for lower-level objects that are not directly presented. And that includes all objects in themselves.

Chapter (4) includes an extended discussion of feature (9).

Essential Feature 10

10. Objects of perception or thought are intensional in the sense that different objects of perception or thought which "are" the same lower-level object are not always interchangeable salva veritate. All directly intentional entities, that is, all objects of perception or thought, are intensional entities in this salva veritate sense. For *some* of them are intensional in this sense, and this is a *categorial* feature; therefore *all* of them are. All the usual examples of propositional attitude (Russell's term) or referential opacity (Quine's term) apply. I do not know the hooded man, even though he is my brother (Eubulides' example). The king wished to know if Scott was the author of *Waverley* (Russell's example). The number of planets is nine, but nine is necessarily greater than seven, while the number of planets is not (Quine's example). On our theory, all such identities are factually informative because they are about whether different objects of perception or thought "are" the same lower-level object.

Frege asks how informative identity statements are possible if names are mere labels (Frege 1970f / 1892: 56–57; see my 2003 / 1996: 42–74, updating my 1981; 1979). We may explain Frege's puzzle as follows for statements, and also for nonlinguistic informative identity judgments, which are both prelinguistic and prehuman. How is it possible that the expressions "the Morning Star" and "the Evening Star" refer to the same planet, Venus, yet that be an informative astronomical discovery? My explanation is that the Morning Star and the Evening Star are different objects of perception or thought which "are" the planet in itself Venus. This logico-phenomenological analysis is phenomenologically far more

natural and correct than Frege's solution, which I interpret as being that each subject-term expresses a different timeless abstract sense (my 2003 / 1996: ch. 2; 1981). It is also phenomenologically more natural and correct than Russell's solution that the subject-terms are either expressly or covertly different definite descriptions.

Our solution applies also to Plato's *Meno* problem, and to the twentieth century paradox of analysis. The *Meno* problem is that any inquiry must have an object to inquire about; but if we already know what we are inquiring about, then there is nothing to inquire about. The paradox of analysis is that an informative analysis must state something different from what the analyzed term means; but if it does state anything different, then it cannot state what the term means. These problems are distinct only in reason from the puzzle of informative identity judgments. In fact, they are instances of it. For the initial object of an inquiry is factually informatively identical with the object as understood at the end of a successful inquiry. And a successful logical analysis states a factually informative identification of the analysandum (thing that is analyzed) with a logically equivalent analysans (analysis of the thing). In all such cases, the factually informative identity judgment is true if and only if its subject-terms directly refer to different objects of perception or thought which "are" the same lower-level object.

My logical analysis of factually informative identity judgments is also my logical analysis of Hegelian identity-in-difference. Namely, the two objects of perception or thought are different, but they "are" the same lower-level object, if the judgment is true. I also admit a second logical analysis of Hegel via the ontological distinctions. Namely, objects in themselves that are distinct only in reason are different objects in reason but really one object in itself. I shall argue later that objects of perception or thought cannot be ontological constituents of objects in themselves. If so, then my two analyses of identity-in-difference are for different situations.

The problem of factually informative negative existence judgments is that if Pegasus does not exist, then there seems to be nothing for the judgment that he does not exist (or indeed for any other judgment ostensibly about him) to be about. My logico-phenomenological analysis is that "Pegasus does not exist" states that "Pegasus" directly refers to an object of perception or thought that "is" not an object in itself, or more deeply and generally, "is" not a lower-level object.

Intensionality in the salva veritate sense just discussed is only one of several main different senses of "intensional." Alfred North Whitehead and Russell admit intensional propositional functions in at least three senses in *Principia*: (1) There are propositional functions that are not truth-functional, e.g., "*A*

believes that *p*" Whitehead 1950: 8). (2) There are propositional functions that lack extensional identities: "the same class of objects will have many determining functions" (Whitehead 1950: 23); such functions are called formally equivalent (Whitehead 1950: 21). (3) There are intensional functions in the sense that their values need not be specified for them to be specified (Whitehead 1950: 39–40). Intensional functions in sense (3) are non-intuitionistic (non-Brouwerian) or are at least recursive. On the face of it, all sense (1) intensional functions are sense (2), and all sense (2) intensional functions are sense (3). The converses do not seem to hold, but we need not be detained by that. All three senses of "intensionality" apply to qualified objects as well. That is, all qualified objects that are intensional in sense (1) are intensional in sense (2), and all qualified objects that are intensional in sense (2) are intensional in sense (3), but the converses do not seem to hold.

The naturalness and ordinariness of phenomenology, not to mention its prelinguistic and even prehuman nature, pervade our solutions of these puzzles, and thus also for prelinguistic and even prehuman informative existence and identity judgments, by means of prelinguistic, prehuman objects of perception or thought.FN1-13

Essential Feature 11

11. Objects of perception or thought are literally non-mental. See the seven reasons why objects of perception or thought are mind-independent in the section on feature (7). Logical mind-independence entails not being literally mental. Thus features (7) and (11) are distinct only in reason.

Also, objects of perception or thought exist in all logically possible worlds, since they are logically possible ways that things can be presented. Thus they are logically necessary. But except for any logically necessary minds such as God, and any logically impossible minds such as the round square mind, minds and their presented (introspected) mental contents are logically contingent.

Objects of perception or thought share feature (11) with Frege's senses and with Russell's descriptive universals.

Essential Feature 12

12. Objects of perception or thought are literally non-physical. For they are logically necessary, while physical objects are logically contingent. Also, all objects of perception or thought have both formal and objective reality, while all physical objects have only formal reality and no objective reality.

Also, at least ordinary physical objects have space-time locations. But objects of perception or thought never do, since they are only objectual ways that things logically can be presented. At most only their presentations can have space-time locations. And most objects of perception or thought are never even presented.

In contrast to objects of perception or thought, *direct presentations* of objects of perception or thought *do* have locations in ordinary space-time, and are also logically contingent. I had a direct presentation of an object of perception when I saw my cat in the kitchen this morning, and a direct presentation of an object of thought when I was thinking of the number two in the living room this afternoon. My mind and presentations were there and then too.

Also, ordinary physical objects are causes and effects in the ordinary sense Aristotle calls efficient cause. But objects of perception or thought logically cannot be ordinary causes or effects, since they are logically necessary and unchangeable, and are nowhere and nowhen. Like Frege's senses, they can act on us only in the indirect sense of being grasped by us, meaning not only that they can change how we view things, but also that this may well lead us to choose a different course of action than we would have chosen (compare Frege 1968 / 1918: 534). Obviously, the way things are presented to us can play a big role in how we choose to act.

At most, objects of perception or thought can be *qualified* causes or *qualified* effects, which may or may not "be" causes or effects in themselves. For all and only objects of perception or thought are qualified objects.

Einstein says that there is no such thing as space or time in physical reality. Classical physics is wrong; there is only relative space or time in frames of reference. See my (2022: §§ 6, 11). And per Heisenberg's uncertainty principle, there is no such thing as a determinate position or speed (momentum) in quantum physics. See my (2022: §§ 7, 9). Also, causation in general relativity theory is more like gliding along a space-time gravity path than it is like classical efficient cause. And causation in quantum physics is more a matter of laws of probability than it is like classical cause. See Heisenberg (2007 / 1958: 23); Hawking (2018: 96). But none of these sorts of relativity and uncertainty in physics is anything like objects of perception or thought. Objects of perception or thought belong to phenomenology, not to natural science. We are presented with objects of perception or thought in classical physics, general relativity theory, quantum physics, and ordinary life alike. Nor can objects of perception or thought glide along a space-time path. Nor can their existence be a matter of scientific law or even lawful probability. For objects of perception or thought are *a priori*. They timelessly, necessarily exist in all logically possible worlds. They

are logically prior to their presentations, and also to all concept formation; and that includes all scientific concepts.

As we saw, objects of perception or thought can neither belong to the mental realm of minds in themselves nor to the physical realm of physical objects in themselves. Thus they must belong to a third realm. But they cannot belong to *Frege's* third realm of nonmental, nonphysical, noncausal, timeless, objective abstract entities, which includes Frege's senses, numbers, classes, and even the axis of the earth (Frege 1974 / 1884: 35). That is because the entities in Frege's third realm are *totally* mind-independent, and objects of perception or thought are not. For the existence and logical possibility of objects of perception or thought logically depend on the logical possibility of minds. And I see no such logical dependence in any of Frege's third realm entities, by textual assertion, implication, or intent. To the contrary, Frege's senses are totally mind-independent, just like Plato's forms; and I think every Frege interpreter from Russell (1903) to Dummett (1981) would agree if asked, except for the Kantian, Sluga (1980).

What can we say about the third realm that objects of perception or thought *do* constitute? Like Frege's realm, it consists of objects that are logically necessary, nonspatial, nontemporal, and noncausal. But our third realm is cognitively prior to Frege's. For his three realms—the mental, the physical, and the abstract—all belong within our realm of objects in themselves. And our third realm consists of the objectual ways all three of Frege's sorts of entities can be presented: qualified mental objects, qualified physical objects, and qualified abstract entities. Thus it should come as no surprise that the objects in our third realm ground and ground and explain how it is possible to make informative existence and identity judgments about all of Frege's entities—indeed, about all objects in the wide sense, including his entities.

Essential Feature 13

13. Objects of perception or thought are mental in a logically indirect sense. They are indirectly mental in that their very existence (not just their logical possibility) logically depends on the logical possibility of minds. Due to this logical dependence, we may say that there is an *indirect* distinction of reason between objects of perception or thought and minds, and in virtue of this, that objects of perception or thought are mental in a logically indirect sense. For on the relevantist whole-part containment theory of entailment, it follows that objects of perception or thought are *indirectly* logically contained in the realm of *actual* minds. Or if you please, objects of perception or thought are *directly* logically

contained in the realm of *logically possible* minds. And since the two containments are logically equivalent, we can define "The realm of actual minds indirectly logically contains the realm of objects of perception or thought" as meaning the same as "The realm of logically possible minds directly logically contains the realm of objects of perception or thought." And that is the most we can preserve from the theory of ideas, including both the via moderna and the via antiqua, which both hold that objects of perception or thought are mental ideas. Namely, there is a *logically indirect logical containment* of objects of perception or thought in minds, in virtue of which objects of perception or thought may be said to be mental in an indirect sense. And on metaphysical ecumenicism, the theory of ideas (both via antiqua and via moderna) is to be admitted as a logical parsing of our theory. It is formally distinct from our theory with a foundation in reality in our phenomenologically more natural and correct theory of objects of perception or thought. Is the Morning Star really a mental idea?

Feature (13) is distinct only in reason from feature (2). Both features bring out a deep asymmetry in the relationship between objects of perception or thought and minds. Namely, while objects of perception or thought logically depend on the logical possibility of minds, minds do not logically depend on either the existence or the logical possibility of objects of perception or thought. For a mind logically can exist as a pure consciousness even if, per impossibile, there were no objects of perception or thought. That is, the mystical state of consciousness without an object is logically possible. And if it is possible for a mind to exist without being presented with *any* object, then the existence of presentable objects is even less necessary to minds than their actual presentation. Note the statement "Mind M exists, but cognizes no objects" is logically contingent both formally and intuitively.

This is not about the actuality of mystical states, but only their logical possibility. For a theory of mind aims to state what a mind essentially is, and therefore must account for every logically possible mind and state. It is the principle of the thing.

This is not even about mysticism. Ordinary states such as a general feeling of joy or anxiety are not about any particular object of perception or thought. While acts of cognition require objects, a general state of consciousness is not an act in the act-object sense in the first place. To be sure, any awareness *of* our joy is an act. And of course, general states of consciousness logically *can* be singled out in introspection or thought, and can be referred to in language. But unless they actually *are* singled out as objects, they are *not* presented as objects, but are simply states of consciousness. And as such, they are not objects of perception or thought because they are not ways of presenting anything. Thus they are objects in

themselves. And when we do single them out, this is via objects of perception or thought which "are" them. There are indefinitely many ways of presenting them, such as 'the state of joy I felt last night'. More deeply, such objects of perception or thought can be illusory or even delusory. It might even be said that nothing is more confusing or harder to identify correctly than our emotions and feelings in themselves. My general feeling of unhappiness might really be anger. I might think I am happy in general when I am really unhappy. Not only are these things hard to discern correctly, but there is also the question of which general states or feelings I am emotionally willing to admit to myself that I have, such as anger or unhappiness. This concerns what psychologists call ego defense mechanisms. Our general states and feelings are just like our specific emotions about specific people and situations in this respect. The only difference is that they have no object that they are about. There can even be illusion or delusion about whether my state or feeling is general or about a specific object. My general feeling of unhappiness might really be anger at a specific person.

Features (1) and (13) bring out a deep asymmetry between minds and bodies. For the existence and logical possibility of objects of perception or thought does not logically depend on the logical possibility of bodies. For mere physical objects as such logically cannot intend anything in the cognitive sense, much less in the agent sense. Thus those who try to blur the distinction between body and mind are simply not tuned in to phenomenology. And this brings us to the next feature.

Essential Feature 14

14. Objects of perception or thought are not physical in a logically indirect sense. That is, their existence and logical possibility do not logically depend on the logical possibility of bodies. They logically depend on the logical possibility of minds because they logically depend on the logical possibility of perception and thought, and that depends on the logical possibility of perceivers and thinkers. But the logical possibility of physical objects is not required, much less their actual existence.

Materialists and physicalists try to give eliminative or at least reductive logical analyses of minds and phenomenology, and could try to do that for objects of perception or thought as well. But all such analyses must fail on the face of it. And even, if per impossibile, they succeeded in providing physicalist statements that are logically equivalent to statements about minds and objects of perception or thought, the containment and dependence arguments for metaphysical ecumenicism show that the logical analysis itself

is positively constructive, and that its eliminative and reductive interpretations are mere abstractions from the positive construction. Thus minds and objects of perception or thought would *still* win. For the most a successful physicalist logical analysis could show is that minds and objects of perception or thought exist as *emergent entities*. That would *establish* them, not eliminate or reduce them.

Essential Feature 15

15. Objects of perception or thought make epistemic mistake logically possible only in general, as opposed to being logically possible in every single case. For objects of perception or thought make cognitive illusion and delusion logically possible in general. And epistemic mistake is possible in general if and only if cognitive illusion and delusion are logically possible in general. If they were possible in *every* case, knowledge would be impossible.

By "epistemic mistake," I mean 'mistake in judging that something is the case on the basis of evidence less than adequate for knowledge'. In our theory, this is mistake in judging that an object of perception or thought "is," "is" not, or "is" not much like a lower-level object, on the basis of evidence less than adequate for knowledge. (If it is adequate, then there can be no mistake.)

Even if we supposed per impossibile that it is logically necessary that all objects of perception or thought are veridical, then of course we still might not *know* that, and we could *still* make the two main kinds of epistemic mistake. Namely, we could still mistakenly judge that an object of perception or thought is *illusory* or *delusory* because of some epistemic mistake. Of course, the supposition is a categorial impossibility to begin with. But purely hypothetical arguments can make things uniquely clear. Likewise for the per impossibile supposition that it is logically necessary that all objects of perception or thought are *illusory* or *delusory*. Even if that were so, we still might not *know* that. Objects of perception or thought explain how the distinction among veridical, illusory, and delusory cognition is logically possible, and thus they explain how epistemic mistake is logically possible in general as well.

Just as objects of perception or thought logically depend on the logical possibility of minds, so too there logically cannot be any epistemic mistakes if there logically cannot be any minds to make them. Thus feature (15) is distinct only in reason from feature (2), which is that objects of perception or thought are logically mind-dependent in the indirect sense that they are logically impossible if minds are logically impossible. In fact, feature (15) is a logical consequence of feature (2).

Again, the logical possibility of epistemic mistake is only a *general* logical possibility. That is, it obtains only for the most part, and is not strictly universal. For it is logically possible that we have *knowledge* in a *particular* case; and knowledge implies the impossibility of epistemic mistake. In fact, it is logically possible for us to have limited *sorts* of knowledge, as in simple arithmetic, or about direct appearances. And trivially, if we knew *everything*, then *no* epistemic mistake would be possible for us.

If we *know* whether an object of perception or thought is veridical, illusory, or delusory, then we cannot be epistemically mistaken about *that*.

Also, we cannot be epistemically mistaken if we suspend judgment.

The distinction between cognitive mistake and epistemic mistake is a one-sided or modal distinction in reason. For all epistemic mistakes are necessarily cognitive mistakes, but not all cognitive mistakes are necessary epistemic. I mean that we can and do sometimes see through a cognitive illusion or delusion, i.e., judge correctly that it is an illusion or delusion on the basis of the evidence we have. Or we may suspend judgment, and avoid epistemic mistake about an illusion or delusion in that way. In fact, we may as well define "cognitive mistake" as 'illusion or delusion'.

I subsume the possibility of purely cognitive mistake under the present feature (15). This happens when we happen to believe wrongly, but not on the basis of evidence. I admit that possibility because for me, belief does not require evidence or any reason to believe. Belief can be totally nonrational! See chapter 4. By cognitive mistake I really mean doxastic mistake, since if we merely cognize, and have no belief (make no judgment), then we cannot be mistaken. And if no minds, then no cognitive mistakes.

Just as knowledge implies the impossibility of epistemic mistake, veridicality implies the impossibility of cognitive mistake. We cannot be cognitively mistaken that *p*, if *p* is true!

More deeply, objects of perception or thought logically cannot exist apart from the logical possibility of either true *or* false (i.e. cognitively mistaken) judgments in which they occur as logical constituent subjects or predicates, and vice versa. For propositions are what we make judgments about, and propositions are qualified facts. And objects of perception or thought are timeless qualified objects that logically can and must occur in timeless qualified facts. There can be no judgment, true or false, that the cat is on the mat if there is no qualified cat, no qualified mat and no qualified relation of being on. And conversely, all qualified objects must be logically capable of being logical constituents of propositions, such as the one expressed by "The cat is on the mat."

Likewise for Frege's senses. Frege holds that all his senses logically can and must occur as logical constituents in his thoughts, which are his propositions. And all his thoughts logically can and must occur as logical constituents in more complex thoughts. For example, thought *p* can and must occur in thought *p and q*, and in thought *p or q*. For thoughts themselves are among his senses; they are the senses expressed by statements. Frege's use of the term "thought" to mean timeless mind-independent propositions is odd; but all his senses are timeless and mind-independent, and his view that thoughts are propositional senses is very clear. All this is the same for me, except that I replace his senses with my qualified objects, and his thoughts with my qualified facts. In fact, on metaphysical ecumenicism, his senses and my qualified facts are formally distinct with a foundation in reality in qualified facts.

Likewise for Wittgenstein's facts and objects. Wittgenstein holds that all his objects logically can and must occur as logical constituents in his facts, which are what his linguistic propositions describe. And all his propositions logically can and must occur as logical constituents in more complex propositions. All facts and objects are timeless and mind-independent. But this is not a dual object theory like Frege's or mine. Wittgenstein holds that in a logically perfect language, the puzzles of factually informative existence and identity statements do not arise. For a logically perfect name cannot be assigned unless the object exists and its identity is perfectly fixed and unique, so that there is exactly one name per object. Here Wittgenstein misses the mark. For Frege and I can agree with that conception of an ideal language, yet we still must explain those puzzles, since they still arise everywhere in perception and thought, and everywhere in ordinary language. The ideal language is just that: only an ideal, and we may never arrive at that ideal. Frege wants his notation to be perfectly determinate just like Wittgenstein, but that only concerns fixing determinate references. For Frege, different names for the same object can still express different senses. Names can even express senses and fail to refer, though not in sentences that are true or false.

Objects of perception or thought, i.e., qualified objects, are the logical constituents of propositions, i.e., qualified facts. And even nonlinguistic judgments are always propositional. Thus objects of perception or thought are also logical constituents of judgments. Thus objects of perception or thought, propositions, and judgments all logically depend on the logical possibility of minds. And surely all that is intuitively correct.

All this more precisely grounds the logical possibility of epistemic mistake. For epistemic mistakes are always propositional. More specifically, they are always judgmental. Even an epistemic mistake about whether an object of perception or thought "is" a

lower-level object (existence), or whether it is "is" the same lower-level object that another same-level object "is" (identity), is judgmental. That is clear from the judgments I just stated (both are prefixed by "whether"). As Descartes says, epistemic mistakes can arise "only when we form judgments about anything insufficiently known to us" (Descartes 1969 / 1642: 232, emphasis removed).

Essential Feature 16

16. Objects of perception or thought make knowledge of objects in themselves logically possible. It is logically possible that in some particular case, an object of perception or thought seems so clearly and distinctly (Descartes' term) to "be" an object in itself, that we positively *know* that it "is" an object in itself, and not merely negatively find it "unthinkable" (Butchvarov's term) that it *not* "be" an object in itself. And we can drop the talk about clearness and distinctness and unthinkability of mistake, and simply say it is logically possible that *some* objects of perception or thought *are* adequate evidence for their being *known* to "be" objects in themselves. It is also logically possible that we have adequate evidence for knowing that an object of perception or thought "is" an object in itself, where the evidence is not limited to the object of perception or thought in question. See chapter 4.

Essential Feature 17

17. Objects of perception or thought make inductive evidence, however strong or weak it may be, about objects in themselves logically possible. This trivially follows from feature (9). And it is really just an instantiation of feature (9). For inductive evidence is just a kind of evidence. If no objects of perception or thought are direct epistemic data, then there is no inductive evidence. For if no objects of perception or thought are direct epistemic data, then there is no evidence at all.

I add feature (17) as a separate feature only because it solves Hume's famous problem of induction. The problem is, How can we know that in the future, the future will continue to resemble the past? My solution has nothing specifically to do with whether the past resembles the future, and is very generally based on what I call the principle of seeming, which is basically due to Chisholm, and ultimately to Carneades. The principle of seeming can be applied to induction as follows. If it objectively epistemically seems to us that the future will continue to resemble the past, then

we have some minimal evidence, that is, some minimal objective reason to believe, that the future will continue to resemble the past.

The principle of seeming does not state, imply, or require that we be able to *describe* our evidence or reason to believe, but only that we *have* it. This is nothing strange or unusual. Even the most experienced and articulate observers often cannot describe their evidence in specific situations, but can only state that they have it: that this is how things epistemically seem to them. In fact, the best observers cannot even describe the sound of a clarinet (Wittgenstein: PI § 78) or the color red. It is beyond them. For even though such things may be discernibly rich and complex (e.g. a shade of red has hue, brightness, and saturation), they are still simple or unique enough that they must be presented in perception or thought in order to be understood. And this includes specific items of evidence (such as a color), even though I offer a general definition of all evidence as objectively, rationally seeming to be the case. And on pain of infinite epistemic regress, evidence must start somewhere. I discuss the principle of seeming in chapter 4.

Essential Feature 18

18. *Objects of perception or thought logically can be directly presented*. This point was made earlier, but not listed as an essential feature. Objects in themselves logically can be indirectly presented via objects of perception or thought. Lower-level objects of perception or thought can be indirectly presented via higher-level objects of perception or thought.

Essential Feature 19

19. *Objects of perception or thought logically can be directly named by logically proper names*. This follows from feature (18). For all and only objects of perception or thought logically can be directly presented, hence directly ostended, so as to be baptized by a name whose connotative meaning is and logically must also be its denotative meaning. That is what Russell means by his term "logically proper name." As Russell says, logically proper names logically cannot fail to denote (be about). And they also logically cannot fail to refer (single out).

We may say that objects in themselves logically can be indirectly named by logically proper names, since they can be indirectly presented or ostended via objects of perception or thought. Lower-level objects of perception or thought can be indirectly named via higher-level objects of perception or thought.

There logically can be no reference or denotation failure in logically direct naming, but there logically can be reference and denotation failure in indirect naming, in virtue of its indirectness.

Essential Feature 20

20. *Objects of perception or thought are logically prior to any conceptualization, that is, they logically can be presented without the medium of any concept or other medium*. This follows from feature (18), that they logically can be directly presented. For that implies they logically need not be presented through the medium of any concept. Feature (19) also implies that they logically need not be named through the medium of any concept. This includes not only mediating concepts, but also any other mediating entities, such as Frege's senses or Russell's descriptions.

Again, as Butchvarov says, we cannot even acquire sortal concepts unless identity is already understood (Butchvarov 1979: 76–81). This is why the domain of his objects is logically prior to the domain of his conceptualized entities (Butchvarov 1979: ch. 2). But the simpler insight is that there can be no conceptualization if nothing is there to be conceptualized. That is, conceptualization cannot be of nothing. And it must be of something that is presented to the conceptualizer. Butchvarov's objects are not my objects of perception or thought (they are deeply different in some ways), and his entities are not my objects in themselves (they are deeply different in some ways too); but the logical priority of singling out to conceptualizing is the same for both of us.

How is concept formation possible? How is it logically possible for a mind to form a concept? All objects of perception or thought are qualified; but a qualification is not a concept we form, and our directly singling out a qualified object does not imply that we have formed a concept. For that we need at least an act of abstraction. At first, we single out at least two objects and find some sameness or similarity of property. This is traditionally called abstraction. Later, once we form the concept of a *concept*, we can form a concept from just one singled out object. And when we form the concept of *definition*, we can form concepts by definition, including contextual definition. All these ways to form a concept may be called logical parsing; abstraction is one kind of parsing.

Thus while it may sound odd, the domain of directly presented qualified objects is prior to the domain of concepts and conceptualized objects. But the oddness is merely terminological. Of course, any qualified object logically can *also* be indirectly presented through the medium of indefinitely many next-higher-level qualified objects, and can even be thereby conceptualized.

More precisely, feature (20) belongs to the formal reality of objects of perception or thought. For objective realities can be conceptualized objects, and can even be concepts. Some objective realities are *defined* concepts! But we cannot be presented with such objective realities if we have not yet formed any concepts to grasp, unless we are just forming a concept of thought for the first time. Note that concepts are normally objective realities of objects of thought, not of objects of perception. Could we see the visible red round square concept? It is a perfectly fine qualified object!

The general distinction between objects of perception or thought and objects in themselves applies to concepts as well as to anything else, so as to explain factually informative existence and identity judgments about concepts. Therefore we must distinguish *concepts of perception or thought* (concepts of perception, e.g. red concepts, are as impossible as round squares) from *concepts in themselves*. And this may sound even more odd, but concepts of perception or thought, or qualified concepts, are logically necessary beings (they are logically possible ways of presenting things), and are mind-independent (they depend only on the *logical possibility* of minds), while the concepts in themselves they may "be" might turn out to be private and mental (and formally identical across minds and times). But this oddness, too, is merely terminological.

Also due to the general distinction, all concepts of thought logically can be directly presented, while concepts in themselves cannot. For concepts in themselves are objects in themselves, and objects in themselves can never be directly presented.

This analysis is logically prior to any psychological study of concepts. It is the logical foundation of any logically possible psychological study of concepts. It is what makes the psychological study possible. For if we were never directly presented with any concepts as *objects* of thought, then we could never indirectly *conceptualize* or form any concepts in themselves to study either.

Essential Feature 21

21. Objects of perception or thought are qualified objects, that is, objectual ways that objects logically can be presented to us. The way is the qualification. Thus it is prior to any conceptualization, even of itself as itself. Again, I define "qualified object" by genus and difference: the genus is 'object in the wide sense', and the difference is 'qualified'. And again, I define an object in itself as an object that is not qualified. Not all ways are qualifications.

It is intuitively satisfying that the first definition is positive and the second definition is negative. For being qualified (being a

way that things can be presented) is a positive feature, and its absence is a negative feature.

Feature (21) explains features (1)–(20), and unifies them into a coherent theory of objects of perception or thought. That is because it is logically necessary that an object is an object of perception or thought *if and only if* it is a qualified object. And more deeply, an object is an object of perception or thought *because* it is a qualified object. That is, this theoretical definition of the ordinary, pre-philosophical, concept of an object of perception or thought best explains or illuminates what it is to be an object of perception or thought. In fact, it is very close to a mere rewording of "way" as "qualification." But it is not. For it ties qualified objects to the Aristotelian tradition of qualified things; and the concept of a way is not the same as the concept of a qualification. All qualifications are ways things can be presented. (For Aristotle, they must be veridical ways.) But the way I tie my shoelaces or brush my teeth is an object in itself, not a qualified object. In general, the ways people do things, and the ways things cause things, are not ways that things *are*. Doing is not the same as *being*. Causing is not the same as *being*. But we can define a *veridical* qualification by genus and species, as a way (genus) things *are* (difference). And I define a qualification by genus and species, as a *way of being* (genus) that things logically can be *presented as being* (difference). Thus a qualification and a way of being are distinct only in reason. Specifically, the distinction is modal (one-sided).

My theory is that an object is an object of perception or thought if and only if it is a qualified object, and that being a qualified object is most deeply and illuminatingly what it is to be an object of perception or thought. But the terms "object of perception or thought" and "qualified object" are not synonymous. If they were, then my theory would be empty, circular, and tautologous. I hold only that those two terms are logically equivalent, in the wide sense of logic that includes the synthetic *a priori*. I hold that "qualified object" is a technical term which theoretically defines the ordinary and pre-philosophical term "object of perception or thought." A theoretical definition, traditionally called a 'real definition', is a definition which states (or purports to state) what a thing is (Copi 1978: 140–141; R. Robinson 1950: ch. 6 poorly criticizes the notion of real definition). The logical equivalence is synthetic *a priori*. It is not a formal stipulation but a discovery. It is not a description but a logical analysis in the sense of substituting one logically equivalent term for another with a different intension (connotation). And on metaphysical ecumenicism, this logical analysis is neither an elimination of objects of perception or thought as logical fictions *á la* Russell, nor a reduction of them to qualified objects *á la* Frege,

but a construction positively establishing their existence and nature as qualified objects. It is a factually informative identity.

We are not circularly giving a theoretical definition *of* theoretical definition. It is a *stipulative* definition that a theoretical definition is a definition that states what something is. We have to start somewhere! But even if it were a theoretical definition by genus and difference, it would simply conform to itself.

We may say that objects in themselves are *indirectly* qualified by any qualified objects which veridically "are" them.

Many of the essential features of objects of perception or thought described here are also essential features of Aristotelian substances, such as having essences, being ultimate subjects of predication, and being capable of public singling out indefinitely many times. However, objects of perception or thought cannot be substances in themselves, or any kind of objects in themselves, since they are indirectly mind-dependent. That was feature (2). And that is because they are qualified, which is feature (21). They are only ways that things logically can be presented, as opposed to things in themselves.

And of course, both qualified objects and Aristotelian substances are dual / hybrid / hylomorphic compounds. Thus one might naturally suggest that the *formal reality* of an object of perception or thought corresponds to the *form* of an Aristotelian substance, and the *objective reality* of an object of perception or thought corresponds to the *matter* of an Aristotelian substance. I shall not explore the degrees or respects of resemblance in detail here. The problem is that *both* the form and the matter of an Aristotelian substance, such as a stone, are objects in themselves. For neither can have or be an objective reality in Descartes' sense.

The real analogy is not the one I just described, but the one between a qualified object and an object in itself on the one hand, and a qualified substance and a substance on the other. In fact, an Aristotelian qualified substance *is* a (veridical) qualified object.

Again, qualified objects are indirectly mind-dependent; their existence and logical possibility depend on the logical possibility, though not on the existence, of minds. But the same cannot be said of Aristotle's qualified substances. At least, I see nothing in the texts suggesting that his qualified substances depend for their existence or their logical possibility on the logical possibility of minds. That would be a very strange interpretation!

And my qualified objects exist in all possible worlds, while Aristotle's qualified substances do not. (Certainly his qualified stones do not.) Thus his qualified substances cannot explain all logically possible informative existence and identity judgments even about all possible substances, much less other objects.

But the main thing is that qualified objects logically can be veridical, illusory, or delusory, but Aristotle's qualified substances are always veridical. Thus they cannot explain illusion or delusion.

My initial point of departure into my theory of qualified objects was Arnauld. Arnauld says, "A substance as determined by a certain manner or mode I call a qualified thing" (Arnauld 1964 / 1662: 39). But then the substance must exist, and the determining makes the manner or mode essentially veridical. That may or may not have been a useful definition for Arnauld. He does not really use the notion of qualified thing to do any philosophical work. It is basically faithful to Aristotle, who does not really use the notion to do any work either, even though it fits perfectly into his philosophy of substances and their qualities.

I shall not discuss the traditional notion of a qualified thing further because this is not a scholarly book, and because for our purposes, Aristotle's and Arnauld's notion is far too limited. That is because their qualified things can only be (1) real things that (2) are veridically qualified. This is why they must rely on something altogether different to explain how illusion and delusion, and more deeply factually informative identity and existence judgments, are possible. In both via antiqua and via moderna theory of ideas, mental ideas are used to do this at least implicitly. But objects of perception or thought are mind-independent for the seven reasons offered in the section on feature (7).

This concludes my list of twenty-one essential features of objects of perception or thought. Of course, there may be more.

The Phenomenological Basis of Cognitive Language

It makes natural sense that phenomenology is the cognitive basis of language. As brief initial guidance, in our theory, qualified objects are the connotations and direct referents / denotations of cognitive terms, and any lower-level objects they may "be" are the indirect referents / denotations of cognitive terms. Thus there may be a cognitive chain (not: Kripkean, Russellian, or other causal chain) of progressively more indirect referents / denotations all the way down to the lowest level, objects in themselves.

Since qualified objects include objects of thought as well as objects of perception, Frege's and Russell's contextually defined terms (see my 2003: ch 2; 1981), and what Quine would regard as holistically understood terms, have cognitive sense after all. For they all connote and directly refer to / denote objects of thought.

Propositions are qualified facts. And theories said to have holistic meaning are long conjunctions of statements that describe long conjunctions of foundationalist qualified facts. Thus the holist

and foundationalist theories of meaning are distinct only in reason. Specifically, they are modally distinct with a foundation in reality in foundational qualified facts. In turn, foundational qualified facts are distinct only in reason from their qualified logical constituents: a qualified property or relation as logical predicate, and at least one logical subject. There is also a distinction in reason in that qualified properties may be regarded as qualified monadic relations, and qualified relations as qualified polyadic properties. Likewise, of course, for the properties in themselves and relations in themselves which qualified properties and qualified relations may "be."

All this may be called *linguistic ecumenicism*.

The foregoing applies to possible cognitive language. In an actual cognitive language that we use, the qualified objects that are the connotations of our terms must be directly presented, and the lower-level objects they may "be" are progressively more indirectly presented all the way down the cognitive chain, with level 0 objects in themselves being the most indirectly presented of all.

Thus there is no "unknowable substratum" at the bottom level of language, any more than there is in cognition.

Qualified objects 'hang together' in a proposition 'like the links of a chain' with no need of a 'metaphysical glue' or nexūs to bind, tie, or glue them together (Wittgenstein: T 2.03). Likewise for theories, which consist of statements that hang together through conjunction. For the connotations of theories and propositions, and their logical constituents, are all qualified objects that merely need to be capable of being conceived or regarded as hanging together. This is like theory of ideas, where ideas merely need to be thought of as combining into a proposition, in order to form a proposition. Also, all qualified objects are necessary beings to begin with.

Even objects in themselves need no metaphysical glue to stick together in facts in themselves. For they are distinct only in reason from those facts in themselves. They are merely different logical parsings of those facts in themselves! And the world in itself logically can be parsed into a conjunction of all its constituent facts in themselves. This is basic to metaphysical ecumenicism.

This solves the problem of Bradley's Regress of relations' always needed higher-level relations to relate them to their relata. If push comes to shove, we can always also adopt a Russellian theory of 'relating relations' and 'instantiating properties'. But in the end, that is distinct only in reason from metaphysical ecumenicism.

This section is a theory only of cognitive language, not of all language use. The later Wittgenstein is right that there are indefinitely many noncognitive uses of language. Which uses are cognitive and which are not, and how to tell the difference, are not topics of this book. It is enough that phenomenology is our guide to cognitive language, and that qualified objects include objects of

thought as well as objects of perception. Here essential feature (3), that objects of perception or thought essentially are as they directly appear to be, may be extended to include, or may even be thought to imply or entail, that anything that directly appears to be an object of perception or thought essentially is an object of perception or thought.

Dennis E. Bradford says that anything we "honestly think" is an object "probably" (!) is an object (lost cite). But how can we tell how honest we are? And how much honesty is enough? He also gets things backwards. The concept of honesty is posterior to that of truth, and singling out objects is prior to any concept formation.

Propositions are Qualified Facts

My theoretical definition is that propositions are qualified facts. I discussed theoretical definitions two sections ago.

I accept the traditional distinction between statements and the propositions they express, for the traditional reason that many different statements can and do express the very same proposition.

Like Russell and the early Wittgenstein, I admit facts as a metaphysical category, and for their reason, which is that a mere list of objects cannot describe how the world is. For the same objects logically can be related into facts in all sorts of ways, so as to constitute a logically possible world other than the actual world. Of course, in addition to such facts in themselves, I also admit qualified facts. A description of the qualified world would include all qualified facts. And a total description of the world in the wide sense would describe all facts in the wide sense, that is, all qualified facts and all facts in themselves.

Our theory actually does allow the world to be described by a list of objects. But that is only because for us, facts *are* objects in the wide sense, so that to list all objects in the wide sense *is* to list all the facts, as well as all other objects in the wide sense. Thus facts are distinct only in reason from objects in the wide sense.

States of affairs do the same job as facts: describing how objects are related. And states of affairs are distinct only in reason from facts. It is a fact that the cat is on the mat if and only if the state of affairs of the cat's being on the mat obtains. And since states of affairs are objects that are not facts, this gives us a second way in which facts are distinct only in reason from objects that are not facts. A third way is that following Wittgenstein and Russell, ('atomic', ground-level) facts are composed of objects that are not facts. All this is or ought to be common scholarly knowledge.

If it is a fact in itself that the cat is on the table, then this fact in itself is what makes "The cat is on the table" true and "The

cat is not on the table" false. The truth-values would be reversed if it were a negative fact in itself that the cat is not on the table. Here I follow Russell in admitting negative facts.

Now, if there are facts in themselves, then there are also qualified facts. For facts in themselves can be presented in indefinitely many ways. There is the fact I thought of last night, and so on. And there are infinitely many levels of qualified facts, since there can be informative existence and identity judgments about all of them. This is no surprise, since all facts are objects in the wide sense. Phenomenological ascent applies to facts as well as to any other objects.

A qualified fact is a *fact of perception or thought*. It is a way of perceiving or conceiving a fact in itself, where there may be no fact in itself there to be (indirectly) perceived or conceived. Qualified facts are qualified objects in the wide sense. And like all other qualified objects, they can be veridical, illusory, or delusory. In fact, for any ostensible pair of facts in themselves F and not-F, only one of them is the case, if the law of excluded middle is true.

On my theory, and phenomenologically on the face of it, qualified facts are the thoughts that statements express. By parity of reason to names that express qualified objects, statements express qualified facts which may or may not "be" facts in themselves.

Qualified facts are much like Frege's thoughts. They are not private or mental. They can be grasped by different people and are timeless. But they are unlike Frege's thoughts in that their existence and logical possibility depend on the logical possibility of thinkers and of ways that thinkers can think differently about the same fact in itself, where there need be no fact in itself. In contrast, Frege locates thoughts in a timeless Platonic "third realm." Thus for him, the existence and possibility of thoughts do not depend even on the logical possibility of thinkers and ways to think. At least, reading Frege, it certainly sounds that way. But perhaps the fairest thing to say is that he did not consider the question.

Qualified facts are unlike Frege's thoughts in that there are facts of *perception* as well as thought. Frege's thoughts can only be grasped by the mind. We cannot see a Fregean thought. That they can only be grasped 'through the perceptible cloak of language' does not make *them* perceptible. If we ask if different people see that the cat is on the mat differently from different angles, this is a phenomenological ascent to higher-level perceptible qualified facts.

Frege's letter to Husserl dated May 24, 1891 contains a famous diagram. Frege says:

> The following schema should make my view clear:
>
> Proposition proper name concept word

↓	↓	↓
sense of the proposition (thought)	sense of the proper name	sense of the concept word
↓	↓	↓
meaning of the proposition (truth value)	meaning of the proper name (object)	meaning of the concept word (concept)

Frege 1980 / 1891: 63; brackets and fourth column omitted)

The first horizontal line is the line of language, the second line is the line of connotations, and the third line is the line of referents ("meanings"). Note that Frege places objects and concepts only on the line of referents. He places no objects or concepts on the line of senses. This shows that for Frege, no objects or concepts are senses. The diagram also shows that concept-names, and by extension function-names in general, have referents in addition to senses. For more, see my (2003: ch. 2) and my (2007) paper in the Dummett anthology. In that anthology, Dummett recants and agrees at last with my view, which I had argued for many times (though Dummett might not have known that), that no senses are objects or functions (my 2007: 81–97; 2003: 65–73; 1981: 36; 1979: 50–51; Dummett 2007: 122–123). Note that in the diagram, Frege uses "proposition" to mean 'sentence' or 'statement', which is its *other* standard meaning, besides meaning what a statement expresses.

Frege's diagram can be rewritten to diagram my theory that true or false sentences express qualified facts. We simply substitute our true or false statements for his propositions, our qualified facts for his thoughts, our qualified objects for his senses, and our objects in themselves, including facts in themselves and properties in themselves, for his referents. (Here I refrain from specifying any metaphysical analysis of properties. Frege's concepts are universals ante rem. They are universals because many objects can fall under the same concept. They are ante rem because some concepts are such that no object falls under them. But on metaphysical ecumenicism, I admit particular properties, universals in re, and universals ante rem as distinct only in reason.) The result is this:

True or false statement	logical subject(s)	logical predicate
↓	↓	↓
qualified fact (proposition)	qualified object(s) in the wide sense	qualified property (or relation)
↓	↓	↓

lower-level fact lower-level object lower-level property

The first line is the line of language, the second is the line of connotations/direct referents, and the third is the line of indirect referents. On this schema, a statement expresses a qualified fact (proposition) which "is" a lower-level fact if and only if the statement is true. And if we divide a statement into a single logical subject and a logical predicate, then the logical subject expresses a qualified object which may or may not "be" a lower-level object, and the logical predicate expresses a qualified property which may or may not "be" a lower-level property.

The diagram is fairly traditional. Where Frege uses senses and I use qualified objects, Descartes would use ideas. Of course, Descartes and Frege reject facts, Descartes' universals exist only in the mind, and there are doubtless other differences as well.

Frege's mature semantic theory is that sentences that are true or false are names of truth-values, respectively the True and the False. This collapses the two main semantic distinctions, reference and truth. (In Frege's ideal language, in which names must always have both a referent and a denotation, reference and denotation are distinct only in reason; they are respectively based on singling out and satisfying a description.) Few accept Frege's theory today. But I admit it into metaphysical ecumenicism. For it is clearly *logically equivalent to,* and thus distinct only in reason from, the theory that sentences are true if and only if they describe the facts, and false if and only if they fail to describe the facts. And we would expect no less from the rigorous Frege.

For us, a statement is true if and only if the qualified fact it expresses "is" the fact on the next lower level which it is a way of presenting and describing. Presenting and describing are distinct only in reason in the case of truth and falsehood. Truth equates to veridicality, and falsehood equates to delusion. In Donnellanian ordinary language cases where the qualified fact a statement expresses succeeds in identifying the next-lower-level fact it "is," but fails to describe it correctly, this equates to illusion. Thus I deepen Donnellan's distinction (1966) between the referential and the attributive (denotative) use of definite descriptions so as to apply also to whole statements.

Frege's mature theory is a great simplification, since it omits facts and retains only propositions (meaning his thoughts) and truth-values. But it is a poster child for when *not* to use Ockham's razor. For his theory fails to explain or even shed light on the key point, *why* a true statement is true. For the truth-value of a statement is not its truth-maker. A true statement is true not because it is true, i.e., not because it refers to and denotes the True, but because the fact it describes is the case. And that is what *makes*

the statement true. Thus, at least in theory of truth, Aristotle is superior to Frege. For even though Aristotle does not have a fact metaphysics, at least he says that to say of what is that it is, or to say of what is not that it is not, is to say what is true. And that equates to describing positive facts and describing negative facts as the truth-grounds of statements of what is and of what is not respectively. And we never use Ockham's razor to shave an entity if the theory is inadequate without it. Of course, Frege's mature theory may not have been intended to explain that. But the fact remains that his theory fails to explain it or even to offer an explanation, and the correspondence theory of truth succeeds in explaining it, or in any case at least offers an explanation. If Frege offers any explanation of why a true statement is true, it is his view that a statement is true because the function that is the referent of its logical predicate maps the True as value onto the referent of its logical subject(s) as argument(s). And that sounds rather circular. If anything saves it from circularity, it is that it is a leap over a narrow ditch from saying *that* to saying that the fact described by the statement is what makes it true. For it is clear that the two theories are distinct only in reason at most. And on metaphysical ecumenism, facts win in that they must be admitted as a metaphysical parsing of truth-grounds that is logically equivalent to parsing truth-grounds as mappings of truth-values onto logical subject-arguments. Ockham's razor is sectarian, not ecumenical. And we do not properly use it to shave what ecumenically exists.

All qualified objects are logically necessary, including all qualified facts. But not all statements are true, i.e., directly express qualified facts that "are" facts in themselves.

The Intentionality of Qualified Objects

All qualified objects logically can be directly grasped in perception or thought. That is their direct intentionality. All qualified objects logically can be indirectly grasped as well, and so can all objects in themselves. That is their indirect intentionality.

To grasp an object is to single it out. Thus there is both direct and indirect singling out.

Singling out is logically prior to referential (as opposed to attributive) describing. For we cannot referentially describe what we have not singled out. And we cannot even attributively describe anything without singling out at least the attribute we use in the attributive description. Thus intentionality is prior to intensionality.

This leads us to distinguish between the direct and indirect cognitive "thisness" of an object. This distinction between direct and indirect thisness is my contribution to the *phenomenology* of

haecceity, i.e. thisness, and grounds the cognitive side of indexical linguistic expressions, including Russell's logically proper names "this" and "that." Direct thisness grounds the theory of "essential indexicals," which has exercised John Perry (2021, 2000, 1979) and many others. The phenomenology overrides any objection based on the ontological principle of the identity of indiscernibles. We cannot directly or indirectly single out or refer to a thing as this thing if it is indiscernible from other things. But the ontological core meaning of Scotus's "haecceity" and Aristotle's "thisness" is precisely that which makes a thing the thing it is as opposed to any other things, even indiscernible ones. How is it possible for direct thisness to show us what makes a thing the thing it is? It is the fact that things essentially are as they directly appear to be. And if they directly appear to be this thing, then they essentially are this thing. But that is limited to directly presented qualified objects. Indirect presentations are essentially indexical if and only if they are based on unique necessary properties of the thing. For example, the number two in itself is indirectly presented as a *this in itself* if it is presented via the *qualified number the only even prime*.

Frege most famously distinguishes 'indexical statements' from 'eternal statements', as they are often called, in "The Thought" (Frege 1968 / 1918). Of course, both he and other thinkers effectively distinguished them earlier. The idea is that an indexical statement is a statement that has an indexical term, or term that makes the statement's truth-value depend on who says it, when it is said, or where it is said. "I am here now" depends on all three factors, as it has the three indexical terms "I," "here," and "now." Frege's theory is that all indexical statements can be analyzed as, or replaced by, eternal statements, on each occasion of their use. For example, "I live in Iowa City" was true of Butchvarov in 1975, but not in 2025. This may be called the forward road from indexicals to eternal sentences. But there is no backward road from eternal sentences to indexicals. In a science written in eternal sentences, purged of all indexicals, it is a familiar criticism that there is no telling where, when, or even who we are. That is, there is no telling which physical object in the history of the world is my body. Quine admits indicator words (indexicals) as the necessary starting ladder we must scramble up into science, but can then discard once we reach the level of eternal sentences (see especially Quine 1975 / 1960: 185 n.5). Now, Quine feels he can safely say, "I am a physical object in a physical world" (Quine 1976: 228), and know which physical object he is. But he can only if he uses "I" indexically. Thus the ladder of indexicality must be kept in science. But it cannot be brought back after we discard it. For there is no backward road from eternal sentences to indexicals. In the same way, it is also a familiar criticism that if I am a Turing

machine, then "I cannot ascertain which Turing machine I am" (Slezak 1984: 28 on Benacerraf 1967), unless, per impossibile, a machine can use indexicals or can otherwise single itself out. To be sure, in Quine's science of eternal sentences about physical objects, we are all in effect Turing machines. But then per Mary, 'we are lost sheep and do not know where to find us'. Or as Russell says, "I think it is extremely difficult, if you get rid of consciousness altogether, to explain what you mean by... 'this' (Russell 1971e / 1918). And that goes all the more for "I." No consciousness, no I.

The theory of qualified objects deepens and widens the theory of essential indexicals to include all expressions in cognitive language, on a certain level of logical analysis. For qualified objects are the connotative meanings of logical subject-terms and predicate-terms in statements. Again, qualified facts are the connotative meanings of statements. And qualified facts are qualified objects in the wide sense. And all qualified objects logically can be both directly and indirectly grasped or singled out. It is in this sense, or on this level of logical analysis, that every cognitive term is an essential indexical. Namely, *every direct presentation of a qualified object is essentially indexical*. This may be called the principle of essential indexicality. Conjoining this with the principle of presentation, we may infer by hypothetical (Barbara) syllogism that to understand the connotative meaning of a statement, we must directly grasp every constituent of the qualified fact it is (on at least one parsing of the qualified fact), and thus also the whole qualified fact, in an essentially indexical way. Note that there are no fallacies of composition or division here.

Direct presentations are essentially directly indexical. Indirect presentations are essentially indirectly indexical if and only if they are via unique necessary properties. This includes any indirect presentations via veridical Donnellanian referential uses of definite descriptions. Such uses are essentially indexical if and only if they are veridically via unique necessary properties.

Did anyone seriously expect that indexicals, not to say essential indexicals, would not be grounded in phenomenology?

Does this mean that 'the world is my world'? Is there a logical limit beyond which our thinking or our language about the world cannot go? Is the real world beyond the veil of appearances or cognitive presentations, and thus inaccessible to our cognitive grasp? Is talk of it cognitively meaningless? Is there an essential element of subjectivity in all possible cognitive thought about the world? Hegel holds that the real is the rational, and the rational is the real. But Wittgenstein says the limits of language and thought are the limits of our world. Does that set limits on intentionality?

In qualified objects theory, there are three worlds: the qualified world, the world in itself. and the world in the wide sense.

The qualified world is logically necessary and unchanging. Thus our thinking about it cannot change it. It is logically mind-independent for the reasons explained earlier. Here intentionality essentially is as it directly appears to be. But the qualified world is not totally mind-independent. For it logically cannot exist if minds logically cannot exist. For it logically can be directly cognized.

The qualified world is not our world, in that it is mind-independent. But it is *indirectly* our world, in that it is *indirectly* mind-dependent. And it is essentially haecceitous to the extent that it is directly presented. When qualified objects are indirectly presented to us via higher-level qualified objects which "are" them, the presentations are essentially haecceitous if and only if they are via uniquely necessary properties. But we might not know that.

The world in itself is totally mind-independent. For its existence and nature do not even depend on the *logical possibility* of minds. Thus our thinking about the world in itself cannot change it. For the world in itself is *totally* not our world. And when objects in themselves are indirectly presented to us qualified objects which "are" them, the presentations are essentially haecceitous if and only if they are via uniquely necessary properties. But here too, and perhaps especially here, we might not know that.

In quantum physics, our visual observations change physical objects, but this is a purely physical matter: photons strike them when we shine a light on them (Hawking 2017 / 1988: 56–57). This does not affect the phenomenology of intentionality.

The world in the wide sense is a mixed bag. For it consists of both the qualified world and the world in itself.

The limits of thought are deeper than the limits of language. For language is of cognitive interest only insofar as it expresses cognitive thought. Wittgenstein (T 5.61) agrees. And at least some writers on linguistic essential indexicals know that the phenomenologico-ontological ground of essential indexical terms is what Scotus calls haecceity and Aristotle calls thisness, that is, in what makes us single out a thing as this thing and not another thing.

Three Intensional Kinds of Qualified Objects

Again, my theory is that all the ordinary intensions, or connotations, of ordinary names and ordinary descriptive terms are qualified objects. But even if that is correct as far as it goes, the matter is not quite that simple. For intension is said in many ways. As we saw, Whitehead and Russell admit intensional propositional functions in at least three different senses in *Principia*: (i) There are propositional functions that are *not truth-functional*, e.g., "*A* believes that *p*" (Whitehead 1950 / 1910: 8). This is the sense that

concerns what Russell calls propositional attitude and Quine calls referential opacity. (ii) There are propositional functions that *lack extensional identities*: "the same class of objects will have many determining functions" (Whitehead 1950 / 1910 23); such functions are called formally equivalent (Whitehead 1950 / 1910 21). (iii) There are intensional functions in the sense that their *values need not be specified* for them to be specified (Whitehead 1950 / 1910 39–40). Functions that are intensional in sense (iii) are non-Brouwerian, or are at least recursive.

On the face of it, all functions that are intensional in sense (i) are also intensional in sense (ii), and all functions that are intensional in sense (ii) are also intensional in sense (iii). It trivially follows that all functions that are intensional in sense (i) are also intensional in sense (iii).

On the face of it, the converse implications do not obtain. That is, it does not seem that all sense (iii) intensions are sense (ii) intensions, nor that all sense (ii) intensions are sense (i). For example, $x = 2 + 2$ and $x = 7 - 3$ are formally equivalent functions, but are not functions that essentially require propositional attitude such as believing or doubting to *obtain*. They merely make different propositional attitudes *possible*. Thus they are not necessarily a case of propositional attitude. But we need not be detained further by the converse implications among the three sorts of intensions. See my (2023 / 2015: 14, 302). The main thing is that sense (i) is the deepest and most general kind of intension, or is at least the primary and most illuminating kind, (ii) is at least a species of (i), and (ii) is at least a species of (ii).

Following Whitehead and Russell, I admit the same three kinds of *qualified*, i.e., intensional, functions: (i) qualified non-truth-functional propositional functions, (ii) qualified formally equivalent but extensionally non-identical qualified propositional functions, and (iii) qualified propositional functions that can be specified without specifying their values. In contrast, functions in themselves are merely extensional mapping functions. If they were intensional in sense (i), they would be qualified functions. For they would be ways of presenting (describing, stipulating) functions. And they cannot be intensional in sense (ii) or (iii) without being intensional in sense (i).

More deeply and generally, I admit the same three kinds of qualified (i.e. intensional) objects. For qualified objects in the wide sense of qualified anything and everything include but are not limited to qualified functions.

All and only qualified objects are essentially intensional in sense (i), since they are essentially ways of presenting things.

Sense (i) is the sense in which an identity statement is factually informative if and only if it is true and its subject-terms

directly refer to different qualified objects. Therefore this is the sense of "intension" in which I explain the possibility of a factually informative identity statement in terms of intensional qualified objects.

Perhaps because Whitehead and Russell do not draw attention to the point, it is little noted (if at all) that there are three corresponding senses of "extension." For "extensional" simply means 'not intensional', and there are three senses of "intension." By parity of reason, all functions that are extensional in sense (i) are also extensional in sense (ii), and all functions that are extensional in sense (ii) are also extensional in sense (iii). And also by parity of reason, it seems that the converse implications do not obtain. All extensional functions are functions in themselves.

No Backward Road from Objects in Themselves to Qualified Objects, Nor More Generally From Level n Objects to Level n + 1 Objects

Russell says in "On Denoting," "[T]here is no backward road from denotations to meanings, because every object can be denoted by an infinite number of different denoting phrases" (Russell 1971b / 1905: 50). I accept that as correct. I think everyone does. And I accept the insight as applying to Frege, to me, and to anyone who has a dual object theory where one object functions as the connotation and the other object functions as the referent or denotation of a logical subject-term. Of course, the threefold connotation-referent-denotation distinction is ordinary and pre-philosophical.

Expressed in terms of Frege's senses and referents, Russell's insight is that no referent determines any one sense as being (or as containing the mode of presentation that is) the way the referent is given. That is, the referent of a name does not determine its sense. Frege would agree that there is no backward road from references to senses. Frege says that a sense "serves to illuminate only a single aspect of the reference," and says that we cannot achieve "[c]omprehensive knowledge of the reference" unless we can already "say... whether any given sense belongs to it. To such knowledge we never attain" (Frege 1970f / 1892: 58). For Frege, this may be called the sensial underdetermination problem. See my two papers on Frege and Dummett (my 2010; 2007).FN1-14

Russell's point applies to my theory of objects in two ways. Specifically, there is no backward road from objects in themselves to qualified objects. And more deeply and generally, there is no backward road from any objects to any higher-level

objects. Recall that all level 1, 2, 3,... n objects are qualified objects that function as connotative meanings of terms that refer to / denote objects of the next lower level. Objects in themselves are level 0.

The no backward road thesis takes us to the next section.

The Order of Cognition and the Order of Being

There are at least two basic orders of logical dependence and in that sense logical priority to discuss: the order of cognition and the order of being.

The order of cognition, or of *cognitive* dependence, is the order of what must be singled out first, in order for something else to be singled out indirectly via it. For Frege, senses must be grasped first, and referents can be grasped only via senses. For me, qualified objects must be grasped first, and objects in themselves can be grasped only via qualified objects.

The order of being, or of *ontological* dependence, is the order of what must be capable of existing first, in order for something else to have an ontological function or reason for being. For Frege, customary referents are the primary beings and comprise what we ordinarily consider the world, and senses function merely to contain their modes of presentation. Frege's *Grundgesetze* vol. 1, § 32 asserts the order of being, namely, that senses *are* nothing but ways of presenting referents of names, and thereby also of helping present truth-conditions of statements.

The no backward road thesis is the order of being. It states that that there is no backward road from the referent / denotation of a term to the sense or connotation of the term.

The forward road thesis is the order of cognition. It states that the road always goes forward from the sense or connotation of a term to the referent / denotation of the term.

The paradox that there are two orders that go in opposite directions is trivial. It is precisely because senses ontologically function as mere modes of presentation that they are both prior in the order of cognition and posterior in the order of being. For the order of cognition takes the forward road from senses to referents, and the order of being takes the backward road from referents to senses. But the point to grasp is that the order of being takes the *ontological* backward road from referent as ground to sense as mere mode of presentation of the ground; it does not take the *cognitive* backward road from referent to sense that Russell was rightly criticizing. In fact, "forward" and "backward" are relative terms here. We might just as well call the ontological order the forward road and the cognitive order the backward road, and with greater justice, if ontology is basic and cognition is secondary. This

is in fact our ordinary picture of things. The universe is huge, and the only cognizers we know of are on just one planet. No universe, no cognizers! For the universe is defined as everything there is.

Senses are logically tied to referents by being ways of presenting referents. Again, this links senses and referents both on the forward road in the cognitive order, and on the backward road in the ontological order. Due to the ontological dependence of modes of presentation on objects and functions as logically possible entities that logically can be presented, senses and referents are not wholly distinct from each other as categories, even though not every name that expresses a sense refers to a referent. For surely a referent is not wholly distinct from the ways in which it logically can be given. And that would be a modal distinction. There is a reason why modes of presentation are called modes! More precisely, Frege's senses are not modes of presentation, but contain them. On the face of it, senses metaphysically function to help explain informative language, while modes of presentation metaphysically function to help explain informative cognition, which is prelinguistic and even prehuman. See my (2010: 121 n.2).

The two orders form an ancient pattern. After we cognitively ascend from Plato's Cave to the Sun, we can look back to see the true place of the Cave in the order of being as ontologically dependent on the existence of Platonic forms. That is, the things we see and hear in the Cave, i.e. the things of the ordinary perceptual world, participate to some limited degree in, and thereby get whatever reality they have from, Platonic forms. And for the very same reason, ordinary sense-perception is a very distorted way of cognizing the real world of forms. On this deep ontological level, Frege does not depart from tradition.

Thus qualified objects and objects in themselves depend on each other, but in different ways or senses. This must not be confused with either ordinary mind-independence or total mind-independence. It can be a fact in itself that objects in themselves logically depend on each other. In fact, that is always the case in distinctions of reason among objects in themselves. Qualified objects can logically depend on each other in the content inclusion sense. And every object is a logical constituent of indefinitely many logically more complex objects. Besides ordinary part-whole relations, there are all the class and set memberships an object has. These too may be called part-whole relations in their respective senses. All these kinds of logical dependence are in general kinds of ontological dependence. By "ontologically depend," of course, I mean 'logically depend for its existence'.

The Context Principle of Meaning

The context principle is the semantic thesis that in some sense, all cognitive terms have meaning (be it content, sense, or reference) only in the context of statements (sentences that are true or false). Stated as a slogan, the context principle says "no sense or reference / denotation without truth or falsehood." To put it another way, the only terms are logical subject-terms and predicate-terms. And that pretty much gives the game away. For logical subjects and predicates must be logically capable of being parts of statements.

The early Frege famously states a context principle. It is controversial just what his principle is and what it implies. See my (2003: 85, 87–92, 97–98, 222–23, 225, 278–87, 299–300). But I think we can agree that for the later Frege, all senses must at least be logically capable of being logical parts of thoughts. This includes thoughts themselves, since they must be parts of more complex thoughts, such as the thought that *A or B*, or the thought that *B and C*. And for Frege, we cannot cognize a referent except via a sense. Thus my slogan fits Frege even for reference.

We may agree that it is not logically possible for something to be a term (word or phrase) that expresses a connotation and refers to a referent, or at least denotes a denotation, unless it is logically possible for the term to occur in at least one logically possible statement. And we would expect a statement to be a logical constituent of infinitely many logically possible more complex statements. This essentially links the two main semantic relations, truth and reference / denotation.

All referents are denotations, but not all denotations are referents. A denoting is about the thing. A referring is not only about the thing, but also singles out the thing before the mind, either directly, or indirectly via some sort of connotative meaning. On my theory, a term directly refers to the qualified object that is its connotative meaning, and indirectly refers, if to anything, to the lower-level object which its connotative meaning may "be."

We may also agree to the converse slogan, "no truth or falsehood without sense or reference / denotation." For all truths and falsehoods must have some connotative meaning, and must also be about something. Even statements about nothing (*das Nicht*) are at least about their direct subject-referent, qualified nothing.

Frege expressly admits the converse slogan. For him, truths and falsehoods must always be about something. For Russell and the early Wittgenstein, even empty tautologies may be said to be in some sense about their logical form.

Thus the two main semantic relations are mutually essential. Thus they are distinct only in reason. On the face of it,

they are formally distinct with a foundation in reality in reference / denotation: compare the logical primacy of singling out over conceptualization. Think also of the ontological order. But we might also compare Russell's view in *Principles of Mathematics* that wholes are prior to parts in one sense, and parts are prior to wholes in another sense (Russell 1964 / 1903: ch. 16). That is, we may have different foundations of reality in different senses here. In any case, these two semantic relations are distinct only in reason.

Dummett says that to reduce Frege to a slogan, "in the order of *explanation* the sense of a sentence is primary, but in the order of *recognition* the sense of a word is primary."[20] This beautifully states the order of being and the order of cognition respectively for Frege's senses. I am merely adding that recognition, or better, singling out (*re*cognizing is singling out again and realizing it is the same thing) is prior to explaining. How can we explain what we cannot even single out? That is precisely the *Meno* problem.

Dummett argues that if senses are removed from thoughts to yield incomplete senses, then we must know thoughts first, and cannot learn new thoughts by "atomically" compounding them out of senses (1981a: 267). I take this to be intended as a reductio ad absurdum of Frege's theory of *incomplete* senses. For of course we can and do learn new thoughts by compounding them out of senses.

The theory of incomplete senses and functions is peculiar to Frege. Russell has a version of it in his view that function-terms, including descriptions, are incomplete terms. But Russell's version is merely nominal. For all of Russell's function-terms logically contain universals as their determinate constituents, and there is no suggestion that *universals* are incomplete. And Russell solves the problem of how things hang together in a fact not by completing a Fregean incomplete entity, nor by a Bergmannian nexūs or tie-entity, not yet by Wittgenstein's view that objects hang together in a fact like links in a chain, but by distinguishing 'relating relations' from 'nonrelating relations'. In metaphysical ecumenicism, all these solutions are distinct only in reason, and all avoid Bradley's regress problem of needing higher-level relations to relate relations to their relata. All these solutions have a foundation in reality in that qualified objects are logically necessary beings that fit together as different logical parsings of qualified facts. There are shades of Frege and Wittgenstein in that. See chapter 3 for more.

We must not confuse the order of cognition with the order of being. But the orders are mutually dependent and simply invert each other, as I explained earlier. In the order of cognition, we can and generally do cognize new thoughts by compounding them out of senses. We can do so precisely because in the order of being, thoughts are parsed in many ways into simpler senses, so that we

can arrive at some simpler senses by removing other simpler senses. But this is in the nature of what may be called logical addition and subtraction of simpler senses. We can simply drop Frege's view that the "remainder" senses (the senses that remain after mentally "subtracting" a simpler sense from a more complex sense, including but not limited to thoughts) are in some sense "incomplete," or to use Frege's metaphorical term borrowed from chemistry, "unsaturated." The simpler senses simply essentially fit or "hang together," to echo Wittgenstein's *Tractatus*. But we can and should retain Frege's view as distinct only in reason from our own. Ockham's razor should not be used to shave either Frege's incomplete entities or Bergmann's nexūs. For us, logical analysis is constructive, not eliminative, nor even reductive. See chapter 3.

The truth is that the difference between decomposing thoughts into senses and composing senses into thoughts is as little as the difference between *immortal* and *lives forever* (Frege 1970d / 1919: 125). For this distinction too is only in reason, *pace* Dummett (1981a: 290–91). Frege says:

> The mental activities leading to the formulation of a definition may be of two kinds: analytic or synthetic. This is similar to the activities of the chemist, who either analyzes a given substance into its elements or lets elements combine to form a new substance. In both cases, we come to know the composition of a substance. (Frege 1971c / 1906): 61)

Indeed, statements are *definable* names of the True or the False for the later Frege, since they are always composed of logical subject- and predicate-names. And the difference between analysis and synthesis for Frege is a distinction only in reason, and very much like the difference between travelling "the road from Thebes to Athens and that from Athens to Thebes" (Aristotle 1968c: 202b).

Language is "Astonishingly Rich and Complex"

The quoted phrase is from W.A. Sinclair's *An Introduction to Philosophy* (Sinclair 1944: 86). Sinclair was describing the real world as a whole. Human life is astonishing rich and complex too, and human uses of language are astonishingly rich and complex as well, even though human life is just a small part of the real world.

The later Wittgenstein shows that language can be used in indefinitely many ways, and is far from limited to the cognitive ways I have been discussing. Language use is a determinable of

which there are indefinitely many logically possible determinates. Wittgenstein's theory of language is modally distinct from mine. The truth language-game is played! All linguistic pursuits of truth are language-games, but not all language-games pursue truth. My interest in language here is only in statements, truth and falsehood, reference / denotation, and what Frege calls forces. Again, there is arguably less conflict between Wittgenstein and phenomenology than one might think (Gier 1981). But Wittgenstein wishes to show that many seeming instances of talk about objects are really other sorts of language use. And here he overlooks the phenomenology of *objects of thought*, which are presented to us on the face of it, and which for us are qualified objects. Wittgenstein thinks that traditional metaphysics is a delusion of language. I merely wish to point out that phenomenologically this is totally wrong.

Again, truth and reference / denotation must be understood in terms of each other, due to the internal relations between new statements, the old words needed to construct them, and the need of even our first genuine words to be able to play a role in sentences (Dummett 1981a: 460–61). But there is also a need to characterize reference cognitively, at least in part. Plainly, singling out and the reference relation are not the same relation. But reference is not wholly distinct from, and ultimately cannot be understood apart from, the more primitive relation of singling out on which it is based, and which Wiggins rightly considers the most basic and direct notion of identification we have. "[O]ne may well refer to *x* in our primary sense without singling out *x* at all. (Though, if there were no singling out of anything by anyone at any time, it seems there could be no referring)" (Wiggins 1980: 5; 1971: 315–17).

Thus when we determine the truth-conditions of a statement from the referents / denotations of its constituent terms, they must be singled out in thought. This is consistent with the context principle and with (what amounts to the same thing) the principle of the logical priority of propositional unity. These principles demand only that cognitive terms have referents /denotations only as *possibly* occurring in statements. They do not demand that the referents of terms be mere 'abstractions of the truth-conditions of the sentences in which they occur'. See my (2003 / 1996: 279–87) for more.

This last point naturally leads us to the next section.

The Principle of Presentation

My principle of presentation is a deeper and more general version of Russell's principle of acquaintance. Russell's principle applies only to sense-data and to universals with which we are

acquainted. My principle applies to all qualified objects which are directly presented.

Again, on my theory, propositions that are either true or false are logically composed of objects of perception or thought. The principle of presentation is that to *understand* the proposition, i.e., the qualified fact, i.e., the connotative meaning of a statement and of the judgment it asserts, we must be *directly presented* with all the objects of perception or thought, i.e., all the qualified objects, that compose it. The principle of presentation is my version of Russell's British empiricist principle of acquaintance, which states: "Every proposition which we can understand must be composed wholly of constituents with which we are acquainted" (Russell 1974 / 1912: 58, Russell's emphasis deleted; see 1976a / 1910–1911: 159–160, 167; compare the two "provisional," "preliminary" definitions in 1971e / 1918: 196).

Where a qualified fact can be parsed in different ways into constituent qualified objects, the direct presentation of those constituents in just one such parsing suffices to grasp the qualified fact. Russell overlooks this in his statement of his principle of acquaintance. That is, he overlooks that even for him, a proposition can be differently parsed into objects of acquaintance, and can be grasped on any one such parsing.

Again, Russell's principle of acquaintance is a limited case of my principle of presentation. For his principle applies only to propositions whose logical subject-terms and predicate-terms denote sense-data and universals with which we are acquainted, while mine applies to propositions whose logical subject-terms and predicate-terms refer to / denote *any* directly presented objects of perception or thought, whether they are (for us qualified) sense-data or (for us qualified) universals or not.

What is the difference between a sense-datum in itself and a qualified sense-datum? Are not both directly presented?

The difference is that a sense-datum in itself is not a way of presenting anything, while a qualified sense-datum is a way of presenting a sense-datum. Similarly for universals in themselves and qualified universals. What was that universal I was thinking of last night? Russell's sense-data and concepts (universals with which we are acquainted) are via moderna. They contain no objective realities that represent anything beyond them.

Being a way of presenting something and being a logical constituent in a logical fiction are not the same thing. Russell can and does say that sense-data are 'aspects' of logically constructed minds and bodies, but that is a merely nominalist way of speaking. For him, logical constructions are eliminative logical analyses, and for him there are literally no minds and bodies there for sense-data to be aspects of. More precisely, he says there *may* be bodies and

minds out there, but we cannot know (or have any evidence) that there are, so we can shave them with Ockham's razor. And *we* can add that if there were bodies or minds out there, sense-data could not be aspects of them anyway! For mere phenomena are not the kind of thing that can constitute a mind or body, or at any rate not fully constitute it. In contrast, qualified sense-data "are" sense-data in themselves, and qualified minds and bodies "are" (or may "be") minds and bodies in themselves. And for us, logical analysis is constructive as opposed to eliminative or reductive. See chapter 3.

In theory of qualified objects, sense-data in themselves and universals in themselves are not directly presented. For like any other objects in themselves, there are indefinitely many ways they can be informatively identified. Here we are very far from Russell.

Frege and Descartes on Linguistic Forces

This is the last section on the phenomenological basis of the cognitive use of language. Our Kantian question is, How is the assertion, question, and command of propositions (qualified facts) possible? Of course, an assertion asserts that a qualified fact "is" a fact in itself, a question asks whether a qualified fact "is" a fact in itself, and a command orders us to make a qualified fact "be" a fact in itself. But how do they do that? What is the metaphysical ground? How is the world different, if we assert, question, or command something, from what the world would be if we did not? This is not a psychological, linguistic, or scientific question, but a categorial one. Frege posits special entities he calls "forces."

"Forces"is Frege's term for things like assertion, question, and command. The term is a little odd, since causal forces are not meant. But we need some term, and this term makes some sense. For forces characterize speech acts which we make happen. An assertion or statement is a true or false sentence we assert. A question is a true or false sentence whose truth or falsehood we ask. And a command is a true or false sentence which we command to be made true. For us, all such sentences express qualified facts.

For Frege, a thought logically can be asserted, questioned, or commanded. Or it can be merely grasped, contemplated, or supposed without a force, which Frege calls "supposition." I agree, and am merely substituting my qualified facts for Frege's thoughts.

I also accept Frege's (and I think implicitly Descartes') argument for admitting forces. Namely, on the correspondence theory of truth, the world must be different if a statement were (perhaps per impossibile) true from what it would be if the statement were (perhaps per impossibile) false. And this directly instantiates to these statements: "Subject S thinks about proposition

P," "S asserts that P," "S questions whether P," and "S commands that P." Now surely the same proposition (qualified fact) occurs in the situations described by all four statements. Therefore the situations can and must differ in some *other* entities in the world that they *also* include, or in the case of supposition, *fail* to include. Now, all four situations include S and S's thinking about P, so these elements cannot be what we are looking for. (At least, we hope S is thinking about the P S supposes, asserts, questions, or commands!) How the situations differ is that the first situation is a supposition, the second includes an assertion, the third a question, and the fourth a command. We may say that the last three are speech acts that include Fregean forces as logical constituents. We may say that propositional speech acts are a genus and that forces are their differentiae. It may sound like pulling a metaphysical rabbit out of the metaphysical hat, but absent any reduction or elimination, there you have it. No flaw in the argument has been detected, and all four of these situations must differ in some way.

Even mere supposition is at least an act of cognition. What else could it be? If we are merely apprehending a thought (qualified fact) that happens to come into our minds, that is mere supposition. Of course, it is a command if we *order* someone, "Suppose for the sake of the argument that P." Such a command may be called 'force bracketing', since we are commanding someone to *disregard*, i.e. in effect bracket, any assertion, question, command, or other force concerning P. Force bracketing is a volitional act. Mere supposition is a merely cognitive act. The former act contains the latter.

Force is a determinable of which assertion, question, and command are determinates. There logically can be indefinitely many sorts of force.

Descartes anticipates Frege on forces, and so does traditional Aristotelian philosophy of mind ('faculty psychology'). In fact, some things seem clearer about forces in Descartes than in Frege. Also, Descartes admits more forces than Frege does. Frege admits only assertion, question, and command, while Descartes admits at least five forces. Of course, Frege would reject Descartes' force of denial, due to his (Frege's) view that denying that a statement is true is really asserting its denial. If we agree with Frege on that, then Descartes has found only four distinct forces. But on metaphysical ecumenicism, assertion and denial are distinct only in reason. Frege thinks his logical analysis of denial is eliminative or at least reductive. (He presents it as eliminative, since he rejects denial as a force; but by parity of reason to his analysis of numbers as classes, it should properly be reductive.) But either way, his interpretation of logical analysis itself is wrong. Logical analysis is positively constructive, and so Ockham's razor does not apply. See chapter 3.

Let us look at assertion in Descartes first. In *The Principles of Philosophy*, part 1, principles 33–35, Descartes says making a judgment requires the use of two faculties, the will and the understanding. For we must not only *understand* the thought (not his term here) in question, but we must also "give our assent to it," if we are to judge that the thought is true (Descartes 1969 / 1644: 233). Descartes goes on to say that a major cause of our errors is being too willing to assent to things that we do not clearly understand.

I have five comments.

First, this makes clear that Descartes anticipates Frege on forces, and that by extension, so does traditional philosophy. I have little doubt that there are roots in Aristotle, if not also in earlier thinkers.

Second, Descartes' theory of assertion is primarily mental. It primarily concerns mental judgments of mental thoughts (again, not his term here). We may gloss mental thoughts as propositional ideas that are true or false. We assent to statements only insofar as they express thoughts we assent to. Assent applies directly to the thought, and indirectly to any sentences that express the thought.

Like Descartes, Frege admits a mental realm and a physical realm. But Frege also admits a third realm, abstract entities. Thus the ontological locus of his forces is unclear. Surely they cannot be physical objects, although we indicate them by physical language (sounds, marks). But are they mental acts or abstract universals? For Descartes, universals exist only in the mind, but are not acts.

Third, traditional philosophy of language, which is based on traditional philosophy of mind, at least implicitly accepts the mental language argument. Again, the argument is that for language to be publicly communicable, private mental ideas must be at least formally identical across minds. Again, this at least implicitly goes back to Aristotle, and anticipates the private language argument as a mere dialectical inversion that is distinct only in reason from it.

Fourth, for Descartes judgment requires two mental acts, one of each of the only two traditional faculties of the soul: willing and understanding. This is where Descartes seems clearer than Frege, and advances the analysis centuries before Frege wrote. Namely, judgment requires both an act of willing to assent, and an act of cognition (understanding) of what is being assented to. We cannot assent to nothing. And both acts are mental. Frege does hold that assent adds assertoric force to supposition, but that does not give us the ontological locus. It does not even tell us if forces are mental or his abstract 'third realm' (noncausal objective) entities. It has been truly remarked that Frege says little, if anything, about what forces are. Are they free acts (Aristotelian final causes)?

Since we cannot perform an act of will on what we do not cognize, acts of cognition (cognitions) are logically prior to acts of will or volition (volitions). At any rate, Aristotle, Aquinas, Kant, Butchvarov, and I agree on that. See Butchvarov (1989: 85–86). Ethical acts too are acts of will; thus they require acts of cognition.

Forces might plausibly even constitute a fourth realm for Frege. But for him, "abstract" only means noncausal. Even the axis of the earth is an abstract object that can move about and cease to exist (Frege 1974 / 1884: 35). Forces cannot move about in space. But if I am in my living room and assert that the cat is on the mat, my assertion is made and thereby located in my living room. Indeed, if my body is in the living room, then so is my embodied mind. And if minds ceased to exist, forces would cease to exist too. For there can be no assertions without asserters, and no questions without questioners. And that is like the fact that there can be no axis of the earth without the earth. Of course, the axis is not caused by an act of will of the earth, but by the earth's rotation. The axis is not even cognized by the earth, since the earth cognizes nothing.

The best answer seems to be Descartes'. Forces are primarily dual mental acts. They are primarily mental acts of will that necessarily involve mental acts of cognition. We also often act to express them in public language as public assertions, questions, commands, and so on. They can be dismissed as ghosts in language if the mind can be dismissed as 'the ghost in the machine' of the body. But for us, logical analysis of minds is positive construction.

Fifth, for us propositions are qualified facts. And like both Descartes' mental thoughts and Frege's timeless abstract thoughts, they are essentially prelinguistic and prehuman. Even Descartes would agree. Descartes holds that animals have no ideas, and are unconscious automata. But he would agree that eternal God is a mind, always had ideas, and needs no language to have them any more than we do. And even if God exists outside of time, no doubt any angels and devils had ideas in time long before God created humans. And that would make ideas at least prehuman. It is not clear whether Descartes believes in angels and devils (his 'evil genius' might be the Devil), or merely conforms to religious belief out of prudence. But surely he would agree that if they do exist, angels and devils had ideas in time long before humans existed.

Descartes says in his "Author's Reply" to the "Third Set of Objections" to his philosophy:

> It is self-evident that seeing a lion and fearing it at the same time is different from merely seeing it. So, too, it is one thing to see a man running, another thing to affirm to oneself that one sees it,

> an act that needs no language. (Descartes 1969 / 16XX: vol. 2: 169)

There can scarcely be a better implicit early modern example of the principle that whether a cognition is affirmed or not must make some entitative difference in the world. Here Descartes posits an act of affirming to explain the difference between merely seeing a thing and affirming that one sees it. Since he says it is "an act that needs no language," it is not a linguistic act as such. But he would certainly hold the act *can* be expressed in language, since here he is expressing it in language himself. Thus this forcial act is linguistic in the secondary sense that it *can* be expressed in language.

In *Principles of Philosophy*, Descartes says:

> PRINCIPLE 32. *That in us there are but two modes of thought, the perception of the understanding and the action of the will....*
>
> Thus sense-perception, imagining, and conceiving things that are purely intelligible, are just different methods of perceiving; but desiring, holding in aversion, affirming, denying, doubting, all these are the different modes of willing. (Descartes: 1969 / 1644: 232, Descartes' emphasis)

The five modes of willing are the five forces Descartes admits. It may seem odd to call desiring a force in Frege's sense, but why not? If we can command that P, why can we not desire that P? In fact, we rarely command what we do not desire to take place. I believe that is part of affirming moral imperative statements, if the desire is good and if we accept the emotive theory of ethics. In any case, supposition ("conceiving") falls on the side of understanding, while forces ("affirming, denying, doubting" fall on the side of will. Principles 33 and 34 make this even clearer. Mere supposition ("conceiving") cannot lead us to mistake, since we have not judged anything to be the case (principle 33). And judgment requires both apprehension ("perceiving") and an act of will, since to affirm is precisely to "[give] our assent to what we have in some manner perceived" (principle 34). We may say that Descartes' distinction between understanding, or perception of ideas in the wide sense of cognition, and will is the traditional mental foundation in reality for Frege's distinction between mere thoughts and forces. And again, this advances Frege's analysis centuries before Frege wrote.

R. M. Hare discusses the logic of imperative sentences and shows its striking similarity to the logic of indicative sentences (Hare 2001 / 1952). Frege *implicitly* does the same thing half a century earlier, and more clearly, when he distinguishes objective

propositional thoughts from imperative forces in general. Frege does not admit a specific force of moral obligation as a kind of imperative force, but does admit objective duty (1968 / 1918: 530).

Deductive logic applies to thoughts regardless of the force with which they are expressed. The same logical deductions obtain even for mere suppositions of thoughts, with no forces at all. If we express thoughts with assertoric force, we have traditional logic. If we express the same thoughts as commands, we have the same deductive relations, but a logic of imperatives. It is not just a very similar logic. It is literally and exactly the same logic of thoughts, but garbed in the cloak of imperative force instead of assertoric force. And since Frege also admits thoughts expressed as questions, we have a third logic—the logic of interrogatives. There logically can be indefinitely many such logics, since force is a determinable that logically can have indefinitely many determinates. The logics qua logics are identical. Only the force, if any, differs.

Suppositional logic is the logic of mere thoughts as such, as opposed to thoughts governed by any linguistic force. Thus it is the real logic, and the others merely cloak it in various forcial garbs. We see here yet another formal distinction, this one between forcial logics and suppositional logic, with a foundation in reality in suppositional logic. There is no doubt that suppositional logic is deeper and more general than forcial logics. For they *add* a force to suppositional logic. Thus suppositional logic is deeper than Frege's judgment-stroke and Russell's thesis assertion sign forcial logics.

Animals like cats and dogs think and communicate their thoughts in some sense or way too. I think they convey judgments, questions, and warnings, if not commands. They teach and learn, and often look puzzled or quizzical, as if to ask, What are you up to now, crazy human? This often happens when I am trying to train my cat. Cats are famous for their warning hiss. Cats can be very clear in expressing approval or disapproval of specific things, as in a disdainful sniff of food. They are neutral or merely curious about other things. I think they can even suspend judgment and merely consider things, since they often investigate things before deciding what, if anything, to do. Here there is at least an analogy to our merely supposing a thought in order to look for a reductio ad absurdum, in that the cats are looking for possible good or bad consequences of their possible actions. Thus Frege's analysis of forces can be extended to cats mutatis mutandis. The forces cats express might not be exactly the same as the ones we express, but they are still forces; and there is overlap. In fact, the latest research says cats are as closely attuned to human emotions as dogs are, though they express it differently. Theory of qualified objects clearly applies to cats. The qualified objects cats are given may not be exactly the same as the ones we are given, but they are still

qualified objects; and again, there is overlap. Cats and humans live together in a largely, if not entirely, common qualified world, and in exactly the same world in itself. Just ask any cat owner!

Contradictions Exist Only in Thought and Language

The puzzle is that contradictions are thinkable, and that we are thinking about something, not nothing when we think of them. We even think about different contradictions which we can identify, distinguish, and count. Yet contradictions logically cannot exist in reality (*contra* the paraconsistent logicians), therefore they cannot be there for us to think about, identify, tell apart, or count.

We can truly say, "There are three different contradictions in this proof," and identify and describe the contradictions. Such contradictions are qualified facts. If the three contradictions are all different, then at most one of them can be literally nothing. For if they were all literally nothing, then they all would be identical with nothing and thus identical with each other. But if two of the three contradictions are not nothing, then by parity of reason, the third is not nothing either. For all three belong to the same category. Thus they have, and can only have, the same ontological status. And if only one were nothing, there is no rational way to tell which one it is. More deeply, there is no reason why one contradiction would be nothing and the other two not nothing.

I agree with everyone, except Meinongians and paraconsistent logicians, that contradictions do not and cannot exist in reality, that we can nonetheless think them and understand them, and that this is precisely how we come to see that they do not and cannot exist in reality.

In qualified objects theory, the answer is that contradictions are qualified facts that logically cannot "be" facts in themselves. They can only "be" lower-level qualified facts at most.

Again, contradictions cannot exist *in reality*. There are no contradictions *in themselves*. Contradictions are not and cannot be part of what is, but rather constitute much of what cannot be. But contradictions *do* exist in *qualified* reality. *Contradictions are qualified facts.* That is, contradictions are propositions. They are necessarily false propositions. They exist in our thoughts (directly presented qualified facts) and in our statements that express such thoughts. We can identify, distinguish, and count them in a piece of writing, and in the thoughts that writings express. And we *want* contradictions to exist in our *indirect* proofs, where we prove that P by deriving a contradiction from the denial of P. But they typically exist unwanted here and there in our thinking in general.

This solution to the puzzle of how contradictions are possible, namely by grounding them in qualified facts, is the phenomenologically most natural and correct solution. And it is fair to say that Frege's grounding contradiction in timeless Fregean thoughts, and Descartes' grounding contradictions in the objective realities of propositional mental ideas, are formally distinct from my theory with a foundation in reality in qualified reality. At the same time, some main theories of contradiction are clearly wrong. For if contradictions exist in qualified reality, then they cannot exist *only* in language, or *only* in thought. Rather, they exist in thought because and because a thought is a direct presentation of a qualified fact. And they exist in language because and only because a statement expresses (connotes and directly refers to) a qualified fact. No qualified facts, no thoughts. No thoughts, no statements.

Theory of qualified objects offers a simple, natural, common-sense solution that explains all of the relevant ordinary, pre-philosophical facts. And no wonder. For the distinction between objects of perception or thought and objects in themselves is itself ordinary and pre-philosophical; and my phenomenology is merely a list of the main logically necessary features of objects of perception or thought. Again, objects in themselves are merely objects that are not objects of perception or thought, and which can be presented only indirectly via objects of perception or thought. My theory is very simple! And it mirrors the ordinary, pre-philosophical distinction perfectly, if my list of necessary features of objects of perception or thought is correct as far as it goes.

Contradictions are just as real as any other qualified facts. Like all qualified facts, they are mind-independently real, though not logically independent of the logical possibility of minds. For this reason, it is very wrong to say they exist "in the mind" or "in reason," if those expressions mean 'in some particular mind or set of minds' or 'in the particular reasoning of some particular mind or set of minds'. For qualified contradictions would continue to exist even if all minds ceased to exist. In fact, as qualified objects, they exist as *logically necessary beings*. For as logically possible ways of presenting something, they exist in all logically possible worlds. They are logically necessary members of the logically necessary category of *logically possible ways to present a thing*. What is logically impossible is only for them to "be" contradictions in themselves. The kernel of truth in the common and ordinary, but strictly incorrect, expression "exist only in the mind" is that *presentations* of all qualified facts, including all contradictions, can and do exist only in the mind as cognitive mental acts. And their *linguistic expressions* "exist only in language."

Normally, contradictions are more specifically only objects of thought, and not objects of perception. We can see that the cat is

on the mat; but normally, we cannot see that the cat is both on and not on the mat. But Russell's metaphysician's nightmare seems to describe perceived, i.e., dreamed, contradictions (Russell 2009 / 1954). Recall that we are using "perceive" widely, so as to include hallucinations, dreams, and introspection, in short, any cognition with any sensory content. And on our widening of Donnellan's distinction to include cognitions as well as linguistic descriptions, confused or fuzzy objects of perception *or* thought need not be descriptively correct in order to '*referentially*' single out the lower-level objects they may "be." Recall that referring / singling out is primary, and describing / attributing is secondary. And an object of perception or thought essentially is as it directly appears to be. Thus if we appear to be directly perceiving a contradiction, we essentially are. Consider Klein bottles and the art of Escher. Klein bottles exist and can be photographed. They are sold on Amazon! They are actual, thus they are possible. But they are only *qualified* impossibilia. And Escher draws only *qualified* impossible objects, His drawings exist and can be photographed. Thus though the drawings are commonly called illusions, they are strictly delusions. Thus anyone who has seen an Escher impossible object has seen a logically impossible *object of perception*. And at least on the logicization of geometry, they are formally self-contradictory.

By finding contradictions mind-independently real, though not totally real in the sense of being independent even of the logical possibility of minds, our theory gives Meinong's theory and paraconsistent logics a far more real grounding in reality than most theories would, certainly in the eliminative analytic tradition. Contradictions exist in qualified reality, though not in reality in itself. And whatever exists in qualified reality also exists in reality in the wide sense. For every qualified object is also an object in the wide sense. And that is a kind of metaphysical ecumenicism. I am admitting logically impossible objects (both contradictories and contraries) in my description of reality in the wide sense. I am admitting them only in qualified reality, not in reality in itself. But our description of reality in the wide sense, and specifically our description of qualified reality, would be incomplete without them.

Contradictions are qualified facts. Thus there are infinitely many phenomenological levels of *qualified contradictions*. For like all objects, contradictions can be factually informatively identified and judged to exist. (Recall that all facts in the wide sense are objects in the wide sense.) *Which* contradiction was Smith thinking of last night? *Was* there any contradiction Smith was thinking of? Like any other qualified object, any contradiction can be grasped directly, and also indirectly via a higher-level qualified object.

This concludes my presentation of my phenomenology, that is, my theory of qualified objects and objects in themselves. I

shall now discuss some objections to the theory. This is not just review to see if the reader has understood the book so far, but also further development of the ideas of the book. Let us put the theory through its paces and test it dialectically.

Objections

Objection 1.

Qualified objects essentially are as they directly appear to be; and in ordinary life, they almost always appear to be ordinary objects in themselves, and not as qualified objects. Therefore they are almost always not qualified objects, but objects in themselves.

Reply. My theory is not a true general description of what is presented, but is a logical analysis of what is presented. What we are directly presented with is analyzed as a qualified object, and a qualified object is analyzed as having both a formal reality and an objective reality. In ordinary life, the *objective reality* is almost always an ordinary object in itself, and not a qualified object. And it is the objective reality that essentially is as it directly appears to be. In virtue of this, we may also say that in a secondary sense, the whole qualified object essentially is as it appears to be.

Objection 2.

If qualified objects are essentially qualified only in their formal reality, or more precisely, if being qualified *is* their formal reality, is it not redundant to add the distinction between qualified objects and objects in themselves to the distinction between formal reality and objective reality? For instead of saying that an object is a qualified object, we can always simply say that the object has both a formal reality and an objective reality, that is, that it has an objective reality in addition to having a formal reality. The two statements would be logically equivalent, so we can eliminate the first by analyzing it away as meaning, or at least as logico-analytically equivalent to, the second.

Reply. The distinctions are different but distinct only in reason. For their relata are not only different, but mutually exclusive. The first distinction is between qualified objects and objects in themselves, and the second is between formal realities and objective realities. All four of these are deeply different.

Also, the objection falsely presupposes that the eliminative interpretation of logical analysis is correct. I shall argue in chapter 3 that the positive construction interpretation of logical analysis is fullest and best, and that the eliminative interpretation is a mere abstraction from the positive construction interpretation.

Also, the objection conflates different levels of ontological structure. On my theory, a qualified object is opposed to an object

in itself; and *within* a qualified object, formal reality is opposed to objective reality. Thus the latter distinction is a sub-distinction within the former. Thus it is not at all redundant to add the distinction between object in itself and qualified object to the distinction between formal reality and objective reality. The two distinctions are on different levels of ontological structure.

Also, the two distinctions have different reasons for being (*raisons d'etre*). The former grounds the ordinary distinction between objects of perception or thought and objects in themselves. The latter explains how in one sense objects of perception or thought always have the essence of objects of perception or thought, which is always the same, yet in another sense have whatever essence they directly appear to have, which can vary greatly.

Objection 3.

There are infinitely many qualified objects that "are" each object in itself. For there are infinitely many ways an object in itself logically can be conceived or regarded. Therefore an object in itself conversely "is," in the converse sense of the word "is," infinitely many qualified objects. And that sounds like a logical analysis on which there is nothing *more* to an object in itself than the infinitely many qualified objects that "are" it. So to speak, where is the kernel of reality of the object in itself, above and beyond the qualified objects that "are" it? And if there is no kernel of reality, then surely we can and must logically analyze the object in itself away (an eliminative analysis) as being nothing more than the class of qualified objects that "are" it.

Reply. The objection confuses my theory with the sort of "bundle theory" Hume offers, or the sort of logical analysis the 1914–1921 Russell offers, of ordinary things as being nothing more than bundles of ideas and impressions (Hume) or bundles of sensed and unsensed sensibilia (Russell). Yes, infinitely many qualified objects "are" an object in itself, and an object in itself conversely "is," in the converse sense of the word "is," infinitely many qualified objects. But it does not follow that an object in itself is *constituted by* the qualified objects it conversely "is," and still less by the ways we conceive or regard it. On my theory, objects in themselves are real in a way that qualified objects cannot be. Namely, an object in itself is not logically dependent on the logical possibility of minds. And that is all the "kernel of reality" it needs. Here the 'kernel of reality' is not some kind of core stuff, material, or other substratum, but the property of being totally real, meaning not only that it is logically possible for the object to exist even if minds do not, but also even if minds were, per impossibile, logically impossible. This is not a kind of stuff, but a modal property. It is a logically emergent property, meaning that none of

the ostensibly 'constituent' qualified objects has it. More deeply, logical analysis is again being wrongly interpreted as negatively eliminative or reductive when it is really positively constructive. See the containment and dependence arguments in chapter 3. Still more deeply, I never offered this as my logical analysis of an object in itself in the first place. I logically analyzed a qualified object as having twenty-one logically necessary features. And then I defined an object in itself as an object that is *not* a qualified object. That is not an analysis of an object in itself as consisting of infinitely many qualified objects. It is a definition by genus and difference. And even if we were able, per impossibile, to state an infinitely long specific logical analysis of a certain object in itself as a certain class of qualified objects, the object in itself would still be distinct in reason from, hence different from, the class and its members. For it would have that emergent modal property and they would not.

Objection 4.

The fact that infinitely many qualified objects "are" an object in itself precludes our ever being able to completely state a logical analysis of an object in itself as a class of qualified objects even if we wanted to. For we could never describe all the qualified objects that "are" it. For we are finite and limited persons. Also, the analysis would be an infinitely long conjunctive sentence, and an infinitely long sentence can have no determinate truth-value.

Reply. Russell saw the parallel problem with his 1914–1918 logical analysis of bodies and of (other) minds as temporal series of classes of sensed and unsensed sensibilia. And that is what led him to abandon that logical analysis. But he gave up too easily. For even if we could never *state* the complete logical analysis of an apple, it might still be *true* that the apple is a temporal series of classes of sensed and unsensed sensibilia, and also true that we could never prove that there is anything more to the apple than that. And in general, there is no logical reason why there logically cannot be facts we cannot state, due to our limitations as language users. For our limitations are a logically contingent fact. In fact, there is no need to dress this up by hypothesizing that God logically could complete an infinitely long statement. For while we cannot state the complete *specific* logical analysis of the apple, we can state the complete *general* logical analysis in just thirteen words: "The apple is a temporal series of classes of sensed and unsensed sensibilia." See my (2003: 177–178). Likewise, if there were nothing more to an object in itself than the qualified objects that "are" it, we could state the complete general analysis in just thirteen words: "An object in itself is the class of qualified objects that 'are' it." And my actual definition of "object in itself" is just as short: "An object in itself is an object that is not a qualified object." That is my actual logical analysis of

"object in itself." It is not infinitely long. It is not even a conjunction of sentences at all. Again, it is a definition by genus and difference. See my reply to objection (3).

Objection 5.

A more subtle objection relies on Jaegwon Kim's concept of supervenience (Kim 1993). Possible worlds that are identical with respect to *presentations* of qualified objects (all qualified objects are *in* all possible worlds, but they are not all *presented* in all possible worlds) surely would also be identical with respect to their objects in themselves. There would be no reason for any object in itself to be different across the possible worlds in themselves, if the qualified worlds are the same. For qualified objects are the cognitive basis of all the evidence, empirical or otherwise, which any conscious being could have for anything. And for Kim, this would imply that there is 'no more to' objects in themselves than the qualified objects that "are" them. And this would be so even if a *logical analysis* of objects in themselves as qualified objects (or, for that matter, as bundles of sense-impressions or of sensed and sensed sensibilia) were impossible for any reason at all, such as that it would be infinitely long and thus could not be completed. Kimian supervenience has appeared to many as an ingenious simplification that eliminates entities as supervening one-way where they cannot be eliminated by a classical logical analysis based on a two-way or mutual logical equivalence. (All logical equivalences are mutual, i.e. symmetric. If P is logically equivalent to Q, then Q is logically equivalent to P.)

Reply. It makes no difference whether we try to eliminate objects in themselves by a full logical analysis per the 1914–1919 Russell or by supervenience per Kim. In fact, a full logical analysis is just two one-way Kimian superveniences, one in each direction, so as to arrive at a mutual logical equivalence. The problem is that Russell and Kim both uncritically assume that the true ontological interpretation of logical analysis is that it is eliminative, as opposed to reductive or positively constructive. In contrast, Frege knows that logically equivalent statements split up / carve up / slice / parse the same propositional content in different ways, that is, into different logical subjects and logical predicates (Frege 1970e / 1892: 49; see 47–50). But even Frege misses the mark when he interprets logical analysis as ontologically reductive. For *all* the ways a propositional content can be parsed must result in referring / denoting logical subjects and logical predicates, if the statement (really the proposition it expresses) is to be true or false. And that is merely to accept the old view that to be true or false, a statement must say something about something. Or to put it as a double negative, to be true or false, a statement cannot say nothing about nothing. That is the basis of the correspondence theory of truth as

well. Thus where Frege rewrites statements of arithmetic as statements of logic and class theory, he is not reducing numbers to logic and class theory as he believes. Instead, he is actually giving a purely logical / class-theoretic proof that *establishes* the existence of numbers as logical subjects in, i.e., as arithmetical parsings of, logical / class-theoretic truths. This is also shown by the truth-ground relevant containment entailment theory of logical validity. It is also shown by my containment and dependence arguments in chapter 3. Note that numbers have emergent properties on the face of it. Classes can be wider or narrower (can have more or fewer members than other classes); numbers cannot. Numbers can be greater or lesser (in number); classes cannot. Of course, if we *judge* that numbers are identical to classes of classes, then due to the principle of the indiscernibility of identicals, we must find some way to *enforce* or *adjudicate* their having the same properties (Butchvarov 1979: 37–38, 66–68, 71, 100, 181, 227). That is, if we judge that numbers are identical to classes of classes, then we must enforce that *both* numbers and classes of classes are wider or narrower (or not), and that *both* numbers and classes of classes are greater or lesser (or not). But that is like Sisyphus hopelessly pushing the dialectical stone uphill. It is even more like pounding square pegs into round holes. For the ontological locus is wrong. It is categorially confused to mistake Butchvarov's perfectly correct point about *our own acts of judgment* with the *objective nature* of numbers and classes of classes *in themselves*. For that is totally mind-independent, hence totally independent of our judgments. The better solution is to admit classes and numbers as different but distinct only in reason. Then they can have incompatible properties, yet still be not really or wholly distinct. Of course, Butchvarov does not admit objects in themselves, so that *for him*, enforcement of our acts of identity judgment is the best and really only solution available. And when twentieth century analytic philosophy threw out the traditional ontological distinctions, they threw out the best and really only solution available for their own logical analyses of numbers as classes of classes, and so on.

Properly interpreted ontologically, a Kimian supervenience is just a traditional modal distinction. A modal distinction is a one-sided distinction only in reason. And entities cannot be distinct only in reason unless they are different. Thus there is no elimination of any entities, but instead the *establishment* of entities that are distinct only in reason from the given entities.

Kim's supervenience may obtain where logical analysis is not possible. But it is close enough to logical analysis (in fact, it is essentially just half of a full logical analysis) that the same three ontological interpretations are possible: elimination, reduction, or positive construction. Thus Kim owes us an argument to prove that

supervenience is eliminative or at least reductive. And here Kim literally faces a brick wall. For a brick wall can be logically analyzed as, i.e., mutually supervened by, its bricks and mortar standing in a certain structural relation. Is anyone going to say the brick wall is any less real than its bricks and mortar?

Kim is not even needed here in the first place. For we do have a full and finitely stated logical equivalence between "an object in itself" and "all the qualified objects that present it or would present it under all possible conditions," such as its being shown in a red light or moved into a closet. And any corresponding statements about them are logically equivalent. In fact, that is our version of the "entity if and only if factual identity" thesis.

Given this logical equivalence, can we infer that an object in itself is *identical with* the class of qualified objects that "are" or may "be" it, and then enforce their indiscernibility? No. If anything, that is even more impossible than assuming that numbers are identical with classes of classes. For an object in itself is *defined* as an object that is not a qualified object. This difference between qualified objects and objects in themselves is so basic that not only can no *single* qualified object be identical with (as opposed to "be") an object in itself, but no *class* of qualified objects can be identical with an object in itself either, even if the class is a class in itself. It is not even proper to say that objects in themselves are emergent entities that *emerge* from the domain of qualified objects. For qualified objects are prior to objects in themselves only in the cognitive order and thereby the epistemic order. In the ontological order, the order with which we are concerned here, objects in themselves are prior to qualified objects. For qualified objects are only ways that things logically can be presented. And if, per impossible, there logically could be no objects in themselves, then there logically could be no ways of presenting them either. As was the case in feature (2) of objects of perception or thought, it is only such a purely hypothetical per impossibile statement that can make such a categorial dependence relationship clear.

Objection 6.

One might object that my definition of factually informative identity as two different qualified objects' "being" the same lower-level object is circular. For it presupposes the factually informative identity of a qualified object's objective reality with the object in itself in veridical and illusory cases. The *concept* of factually informative identity is presupposed even in delusory cases, since there the qualified object's objective reality is factually different from the object in itself, and to be factually different is to be *not factually identical*.

Reply. It is true that qualified objects differ, and can only differ, in having different objective realities. For their formal reality is always the same, namely that of a qualified object. But this is not a factually informative identity because it is not an identity at all. Our ontology admits the four main uses of "is" in modern classical logic: the "is" of identity, the "is" of existence, the "is"of predication, and the "is" of class membership. But our ontology also admits a fifth "is," the "is" of the being relation. And that is the "is" of the being relation, not the "is" of either factually informative identity in particular or identity in general.

In a factually informative identity judgment, two different qualified objects "are" the same lower-level object. And in the being relation, one qualified object "is" a lower-level object. Thus the definition of an informative identity judgment does not circularly presuppose a factually informative identity judgment. Instead, it presupposes two other relations: one occurrence of the identity relation in the term "the same," and two occurrences of the being relation, one for each qualified object. Thus, far from being identical with the factually informative identity relation, the being relation helps ground and explain the possibility of the factually informative identity relation by being a logical constituent of that relation. In fact, it occurs as a logical constituent twice!

I distinguish between factually informative and novelly (newly) informative identity judgments (my 2003 / 1996: 70; 1981: 37). If we already know that the Morning Star is identical with the Evening Star, the judgment remains as factually informative as ever, but is no longer novelly informative for us. Likewise for informative existence judgments. I distinguish between factually informative and novelly informative existence judgments as well, and for the same reason. All novelly informative judgments are factually informative, but not all factually informative judgments are novelly informative. Thus my reply to objection (6) applies to both kinds of informativeness, factual and novel. For my reply concerns the logical analysis of factually informative judgments, and all novelly informative judgment are factually informative judgments. Novel informativeness merely adds the constituent of *being new to someone*. Thus novel informativeness is always relative to a mind to whom the factual information is new, while factual informativeness concerns only the factual content of the judgment, and is therefore never relative to a mind.

Thus an omniscient mind can make no *novelly* informative judgments (identity or existence), since it would already know the truth or falsehood of all *factually* informative judgments. That would include all higher-level factually informative judgments about any level n of qualified objects, in the infinite level-hierarchy

of qualified objects. And that should not be a problem if the mind is truly omniscient.

There is another reason why the identity relation and the being relation must be different relations. Namely, all being-relation judgments must be factually informative, but there are identity judgments that are not factually informative. For identity judgments of the form "a = a" are tautological, hence empty and factually uninformative. They are factually informative only about the purely logical structure of the world, if we admit logical universals as the subject-matter of formal logic, as I do. But that is a different sense of factual informativeness. Formally tautological identities are facts about the logical form of an identity judgment, not facts about its content, since purely formal judgments have no content to be genuinely about, except for their logical form.

Also, no being-relation judgment can be of the form "a = a", or even of the form "a = b". For in the being relation, one object is a qualified object of level n, and the other object is an object of level n - 1. Thus the two objects can never be identical, since they must be objects on different levels in the phenomenological order.

Wittgenstein says in the *Tractatu*s, "Roughly speaking: to say of two things that they are identical is nonsense, and to say of one thing that it is identical with itself is to say nothing" (Wittgenstein: T 5.5303). In qualified objects theory, the factually informative identity relation is logically analyzed as a complex relation between *three* objects, two of which are different qualified objects on the same level n, both of which "are" one and the same third object on level n - 1. This removes Wittgenstein's paradox by explaining in what sense the objects are two and in what sense they are one. Namely, they are two on level n, and one on level n - 1. If a true identity judgment is factually uninformative, then the object is one object on both levels.

Objection 7.

On my "no entity without identity" kind of theory, identity is logically prior to and explains existence. But existence is prior to identity, since something must be there to stand in the identity relation. Even worse, the identity relationship itself must exist in order to explain existence. Thus at the very least, on my 'entity if and only if identity' thesis, there is a dialectical standoff on which explains or grounds which, existence or identity.

Reply. On the 'entity if and only if identity' thesis, the entailment between existence and identity is mutual and logically necessary. But I agree with Butchvarov that it is more illuminating to define, analyze, or explain existence in terms of identity than the other way around. For it is the notion of existence or reality that is comparatively unclear and needs explaining, while the notion of identity is clearer. Compare Butchvarov (1979: 40–41).

Objection 8.

One might object that a qualified object is a qualified object *in itself*. How could it fail to be an object in itself? As Joseph Butler says, "Every thing is what it is, and not another thing" (Butler 1749: preface § 39). Indeed, every object in the wide sense is an object in itself, in what we may call the Butlerian sense of being what it is and not being another thing. Yet I define an object in itself as an object that is *not* a qualified object.

Reply. The objection commits the fallacy of four terms, where "in itself" is the ambiguous term. For the term has at least two senses: my sense, and the Butlerian sense.

Qualified objects cannot be objects in themselves in *my* sense of being totally real, that is, they cannot be totally mind-independent in my sense. But they can and must be objects in themselves in the Butlerian sense that they are what they are and not another thing. For every object in the wide sense is an object in itself in the Butlerian sense that every thing is what it is, and is not another thing. For even a qualified object is what it is and is not another thing, both mind-independently and independently even of the logical possibility of minds. That is, it is a totally real, totally mind-independent fact *about* qualified objects that they cannot *be* totally real, totally mind-independent objects, since they logically depend on the logical possibility of minds. Even *minds* exist mind-independently and independently of the logical possibility of (other) minds! Minds are objects in themselves both in my sense and in the Butlerian sense. The sole exception is that a mind cannot exist independently of *itself* or independently of its *own* logical possibility. For *no* object can exist independently of itself or independently of its own logical possibility. Even the round square is a logically possible *qualified* object. In fact, as a qualified object, it is logically necessary. But it can be an object in itself only in the Butlerian sense, since it cannot "be" an object in itself in mine.

Objection 9.

If qualified objects are objects in themselves in the Butlerian sense, then why are mere logical possibilities not objects in themselves in the Butlerian sense? For every logical possibility is what it is, and not anything else. And all the logical possibilities are different from each other, so that at most one of them could be nothing. Also, the logical possibility that the moon cease to orbit the earth tomorrow is both mind-independent and independent even of the logical possibility of minds. Thus mere possibilities are even objects in themselves in my sense.

Reply. Every contradiction is what it is, yet contradictions cannot exist in reality. The round square is what it is, and is not the red and not red spot. Likewise, every mere possibility is what it is, but there is no such thing as a merely possible object. A thing must

be what it is, but that is not an 'ontological argument' for the thing's existence. If it were, then all things would be necessary beings, since everything necessarily is what it is. All that follows from our admitting objects in themselves in the Butlerian sense is that *if* an object exists, *then* it is an object in itself in the Butlerian sense. That applies to all qualified objects, but we already know that they are all necessary beings. For they are ways that things logically can be presented. And as such, they exist in all logically possible worlds. I wholly grant that if, per impossibile, mere possibilities *did* exist, then they *would* be objects in themselves in the Butlerian sense. Not only that, but at most one of them could be nothing, they would be mind-independent, and they would be independent even of the logical possibility of minds. But they are not there. In contrast, qualified objects are not only actual, i.e., in the actual world, but logically necessary, Thus they are there. Thus talk of merely possible objects is best assayed as talk of qualified objects that "are" not objects in themselves (in my sense of "are"). On that assay, I admit talk of merely possible objects. But on that assay, they are *not* merely possible objects. For qualified objects are actual, and indeed logically necessary, objects. Thus, unlike merely possible objects, they are there, and logically must be there, to perform basic jobs in ontology, metaphysics, and cognition.

Objection 10.

There are truths and even facts about logical possibilities. And if no objective possibilities are there for them to be about, that would violate the correspondence theory of truth.

Reply. I assay such truths and facts as being about qualified objects that "are" not objects in themselves (in my sense).

Objection 11.

I have just admitted that every object is an object in itself in the Butlerian sense. Yet Butler's statement that "Every thing is what it is, and not another thing" is empty and tautological. It looks for all the world like the logical axiom of self identity, "(x)x = x". Thus to say that an object is an object in itself in the Butlerian sense is empty and tautological. Thus the only significant sense of being an object in itself we have so far is mine. And while the term "object in itself" might be a determinable with indefinitely many determinates, we have found only one significant one so far—mine.

Reply. The axiom of self-identity is a truth about logical form. And at least in Fregean and Russellian metaphysics, logical form consists of logical universals that are totally real in my sense. Self-identity is just as good a Fregean mapping function as any other. And all mapping functions are different, hence none is nothing. But Butlerian being in itself is not logical self-identity. It is not a logical universal at all. For the term "what" in the thesis "Every thing is what it is" shows that the two occurrences of "is"

are occurrences not of the "is" of identity, but of the "is" of (essential) predication. That too is as good a mapping function as any other, but it belongs to ontology as opposed to logical form. In fact, it is logically equivalent to the self-identity function. In metaphysical ecumenicism, such functions are different but distinct only in reason. And that is the significant, i.e., factually informative, fact here. For the *qualified* self-identity function x = x and the *qualified* Butlerian function x is what x is and is not another thing "are" both the same extensional mapping function in itself. For both always map the same truth-value (truth) onto the same argument x for any x. The objection also confuses being factually informative with applying a classificatory concept that logically can apply to some but not all objects. For the concept of being an object in itself in my sense is classificatory, but the concept of being an object in itself in the Butlerian sense is not. But it is still factually informative to state that all *self-identical* objects *are what they are*. For the concept of having a nature (being a 'what') is not the concept of being a self-identical object. In fact, *all* logically necessary universal truths are different but distinct only in reason. And thus the equivalence of every pair of them is factually informative, even though they are all nonclassificatory. Is there only one logically necessary universal truth? Which one is it?

Objection 12.

What if I think that you and I are being presented with the same object of perception or thought, and you think that we are not? Is that not impossible to decide even in principle?

Reply. We might not be able to *decide* the question. But that is nothing special; there are many things we may never be able to decide even in principle, in any appropriate sense of the term "in principle." But we can *describe* or *ground* this situation in theory of qualified objects very easily. The very question simply triggers a phenomenological ascent to the next higher-level qualified objects.

This answer was already implied when we said that qualified objects essentially are as they directly appear to be. As long as we *think* we are seeing the same qualified object, that is, directly *appear* to ourselves to be, then we *are* presented with essentially the same qualified object. But as soon as we question that, we are no longer thinking about the object the qualified object was presenting, but about the qualified object itself. And since presentation is always via a qualified object, we are now presented with the original qualified object via a higher-level qualified object.

Again, I call this phenomenological (or cognitive) ascent in honor of Quine's term "semantic ascent." And this is a semantic ascent for us as well. For in our semantics, qualified objects are the intensional (connotative) meanings of terms, and function much the same way Frege's senses or Russell's descriptions do, though more

deeply and generally. And I think that Frege and Russell can and ought to give much the same sort of reply to the same problem. Here we may speak of Fregean sensial ascent and Russellian descriptive ascent. But no ascent can be done with Butchvarov's objects. By definition, they can be singled out only once. And they can never be singled out indirectly, i.e., via a higher-level object. However, I think an ascent can be done with Butchvarov's entities. For he admits sortal concepts and universals as entities, and these can and do function to present entities by describing them.

Objection 13.

As ordinarily understood, objects of perception or thought have two preconditions. First, they do not exist when no one is cognizing them. For example, there is no sound of a tree falling in a forest if no one is there to hear it. Thus objects of perception or thought did not exist before observers did, and they will cease to exist when the last observer passes away. Second, if they are veridical or illusory, they cannot exist if the object in itself they "are" ceases to exist. For example, if the planet in itself Venus is destroyed, then no one will see the Morning Star or the Evening Star. Thus veridical and even illusory objects of perception or thought cannot exist if objects in themselves do not exist.

Reply. I distinguished between qualified objects and our being presented with them. Qualified objects are defined as logically possible objectual ways that things can be presented. Thus they are timeless and logically necessary, thus actual, but logically need not ever be presented. In fact, only a very few are ever actually presented to an observer. And qualified objects ground a perfectly ordinary sense of the term "object of perception or thought." The objector is only pointing out that there is another ordinary sense of "object of perception or thought" which is analyzed in my theory as direct presentation of a qualified object.

Is there a sound in the forest if no one is there to hear it? In our theory of objects, the question is ambiguous in four ways. First, there is a *qualified sound in the forest*. Second, there is a *sound in the forest in itself* which the qualified sound "is." Third, there is no *direct presentation* of a qualified sound in the forest. Fourth, there is no *indirect presentation* of a sound in itself in the forest.

Objection 14.

How can qualified objects exist, i.e. be actual or real, if they are only logically possible ways that things can be presented? As mere objects of perception or thought that logically might never even be presented in perception or thought, how can they be actual or real?

My reply is also my major criticism of Russell's ontology, and of Meinong's as well. Russell holds that there is no such thing as a merely possible object. Meinong says that there are merely

possible objects that, while they are not nothing, have no kind of being. My view is that they both overlook the same thing: not being nothing is itself a kind of being. In fact, it is the most basic and general kind of being (Suárez 1947 / 1597: 31). Indeed, it is Russell's robust sense of reality!

Since Meinong's objects are all different, at most one could be (identical with) nothing. But if all but one have being in the sense of not being nothing, then there is no reason why the one would not have being in that sense too. In fact, by parity of reason it certainly should. Again, *contra* Russell's rejection of Meinong's mere objects, being in the sense of not being nothing is Russell's own robust sense of reality. I discuss this several times elsewhere (my 2023 / 2015: ch. 4; 2003 / 1996: ch. 4; 1988).

And as for Meinong's objects, so for qualified objects. Since qualified objects are all different, at most one could be (identical with) nothing. But if all but one have being in the sense of not being nothing, then there is no reason why the one would not have being in that sense too. And by parity of reason, it should.

Again, all of Moore (1903)'s arguments that sense-data are mind-independently real apply just as well to qualified objects. Thus qualified objects are not only robustly real in the sense of not being nothing, but they are also mind-independently real. In fact, the only sense in which they are not as real as objects in themselves is that it is logically impossible for them to exist if minds are logically impossible.

Perhaps the simplest and best argument for the mind-independence of qualified objects is that they exist whether they are presented or not. In this respect, my presented and unpresented qualified objects are exactly like Russell's sensed and unsensed sensibilia, Hume's sense-impressions, and Butchvarov's objects. Whether those last-mentioned three items are also like my qualified objects in that they logically cannot exist if minds in the ordinary pre-philosophical sense are logically impossible is an interesting and deep question of interpretation that I must leave to others. Russell, Hume, and Butchvarov do not even consider the question.

We must distinguish three points. First, mere possibilia are and cannot be *objects in themselves*. In this sense, I agree with Frege and Russell that there is no such thing as a merely possible object. In fact, a *nonexistent* object that *exists* in the minimal sense of not being nothing (or exists in any other sense) would be self-contradictory; and contradictions cannot exist in reality. And while Meinong does not address the question whether his nonexistent objects have being in the sense of not being nothing, he does say they have no kind of being whatsoever. Second, *qualified objects* are not nonexistent objects. They exist in the minimal sense of not being nothing, and they are mind-independently real as well. Third,

the *objective reality* of a qualified object *can* be a Meinongian object, a nonexistent object, a logically impossible object, or even nothing (*das Nicht*). It can even be a nonexistent existent!

To be a Meinongian nonexistent object is not at all the same as to be a qualified object with a Meinongian nonexistent object as its objective reality. Meinongian objects as such do not have both a formal and an objective reality. Qualified objects with nonexistent objective realities are my substitutes or replacements for mere nonexistent objects. That is, they are my logical analysis of ordinary talk of nonexistent objects. But it would be wrong to call that an eliminative analysis. Quite the opposite, it is a constitutive analysis; it replaces them with things that do exist. My analysis does not *eliminate* nonexistent objects, since they *already* do not and cannot exist. And it replaces them, or more precisely replaces talk of them, with talk of qualified objects which do and must exist, since they are logically necessary. In fact, nonexistent objects are the *objective realities* of qualified nonexistent objects. And qua objective realities, they are all different and cannot be nothing. Qua objective reality, even nothing cannot be nothing! It is a logically necessary logical constituent in a logically necessary qualified object. That is, it is not nothing (in itself), but *qualified* nothing. There logically cannot be a nothing in itself for it to "be."

Qualified worlds are my substitutes for merely possible worlds. We can still discuss merely possible worlds, since they are the objective realities of qualified worlds. It is just that there can be no merely possible worlds *in themselves*, since they would have to exist in the minimal sense of not being nothing, and then they would not be merely possible worlds but existing worlds. Thus we reject merely possible worlds in themselves, and admit qualified worlds, including qualified worlds whose objective realities are merely possible worlds. Qualified merely possible worlds are just qualified merely possible objects. And qua objective realities, they not only exist, but are logically necessary qualified beings.

Theory of qualified objects is my logical grounding of the traditional conception of an intentional object which is neither an object in itself nor nothing at all, but something intermediate: a *qualified* object. Qualified objects logically can be either directly or indirectly intended (singled out in perception or thought). And they are neither objects in themselves nor nothing at all, but intermediate in a very specific sense. Namely, they have two of the three main kinds of being which objects in themselves have. If they were nothing at all, they would have no kind of being at all.

First, qualified objects are not nothing. Thus they have being in the sense of not being nothing. This is the Parmenidean sense of being, and it is Russell's robust sense of reality. Again, Suárez calls it the most general kind of being (Suárez 1947 / 1597:

31). They have it because they are all different, so that at most one of them can be nothing. And there is no reason why any one of them, as opposed to the others, should be the one that is nothing. Hence they all have being in the sense of not being nothing.

Second, they have being in the sense of being logically mind-independent. This is shown by our own phenomenological analysis, by the private language argument, and by the act-object realism argument of Moore. (These are not wholly distinct.)

But third, they lack the full or total reality of objects in themselves. For they are merely mental in the logically indirect sense that their existence and logical possibility depend on the logical possibility of minds.

Another reply to the objection is this. As logically possible ways things can be presented, all qualified objects are in all possible worlds. Thus they are actual objects in the actual world, and are necessary beings; whatever is necessary is actual. They can be necessary beings because minds are necessarily possible.

Objection 15.

Your act theory commits fallacies of composition and division. How can a cognitive act in itself, which is a fully real object in itself, logically contain, as its directly presented object, a qualified object which is not fully real? That is, how can an object in itself, which logically could exist even if minds were logically impossible, contain a constituent which logically could not exist if minds were logically impossible? And that is not even to mention that some qualified objects logically contain in turn objective realities that do not exist, or cannot exist, or in one case, is even nothing (*Das Nicht*)? If I think of nothing (*das Nicht*), how can my fully real cognitive act in itself contain a less than fully real qualified object, which in turn contains an objective reality that is nothing?

Reply. This is not only possible, but necessary and even essential, due to the nature of acts in themselves of cognizing objects. For there essentially can be no presentation of an object without an object that is directly presented, on pain of vicious infinite regress of indirect presentations of indirect presentations of objects, without any object ever being presented. And yet it is equally essential that qualified objects be logically impossible if minds are logically impossible. At least qualified objects are real in the sense of not being nothing, and are mind-independently real. And on the face of it, of the three main kinds of reality, those are the only two that are essential for objects of cognitive acts to have. Of course, qualified objects and their objective realities are objects in themselves in the Butlerian sense that they are what they are and are not another thing, even though they are not objects in

themselves in my sense that their existence and logical possibility do not depend on the logical possibility of minds.

In fact, it is the objection that commits the fallacies. The fallacy of composition is to infer that because x is F and x is a part of y, that y is F. And the fallacy of division is to infer that because y is F and x is a part of y, that x is F. The fallacies do not apply in every case. For example, a building constructed of metal parts is metal. But they do apply to the objection. For as I just explained, there are essential reasons why a cognitive act in itself is fully real even though the directly cognized qualified object cannot be fully real, and some objective realities cannot "be" objects in themselves at all. By "cognitive act" here, I mean not just the cognition of an object by a cognizer, but also the fact in itself that a cognizer in itself has a direct cognition in itself of a qualified object.

Objection 16.

On your theory, an act of judging a factually informative identity to be true is a judgment that two qualified objects "are" the same lower-level object. And even if the *act in itself* logically can contain qualified objects as its constituents, per your reply to the previous objection, the *fact in itself* that two qualified objects "are" the same lower-level object cannot. For that *would* commit the fallacies of composition and division. For facts in themselves are fully real. Thus no fact in itself, can have logical constituents that are not fully real. Also, facts are objects in the wide sense, and no object in itself can have logical constituents that are not fully real.

Reply. This is not only possible, but necessary and even essential, due to the special nature of both qualified objects and facts in themselves about qualified objects. For it is essential to qualified objects that they are logically impossible if minds are logically impossible, and it is equally essential to facts in themselves that they are fully real. Thus it is the objection that commits the fallacies of composition and division, not my theory. See my reply to the previous objection. We may call this an indirect factual sense in which even qualified objects are fully real.

Objection 17.

The Morning Star and the Evening Star are really distinct. Either logically can exist if the other does not. But then they cannot be qualified objects. For qualified objects are logically necessary beings, and none of them can fail to exist. Thus they are distinct only in reason, even though they have different conceptual contents such as appearing in the morning and appearing in the evening. Even worse, on a deeper level, there is overlap of *truth-grounds*. In fact, there is identity of truth-grounds for the statements "The qualified object the Morning Star exists" and "The qualified object the Evening Star exists." Thus their truth-grounds are not really distinct, nor different but distinct only in reason, but really and

completely identical. For statements of the existence of any qualified objects whatsoever have the identical truth-ground, *true in all logically possible worlds*! And that means true on all rows of their truth-tables. For in possible worlds talk, all qualified objects are in all logically possible worlds. You yourself discuss truth-ground containment entailment as the deepest kind of logical relevance (my 2023 / 2015: ch. 9; 2021a / 2012).

Reply. This problem is not just about qualified objects, but is an old general question of what ontological distinction there is between any two conceptually wholly distinct logically necessary beings. The same question arises for any two numbers or ante rem universals, or for God, space, and time as classically understood.

For logically necessary objects, the only appropriate sense of "real distinction" is the per impossibile, purely hypothetical, subjunctive conditional ("were-would") sense that is based on whether their conceptual contents are wholly distinct. And the qualified object the Morning Star and the qualified object the Evening Star are really distinct in this per impossibile sense. For per impossibile, if either logically could fail to exist, then either logically could fail to exist even if the other existed, precisely because their conceptual contents, or better in the case of qualified objects, their *objective realities*, i.e. *cognitive contents*, conceptual or not, are wholly distinct.

Also, we must distinguish qualified objects from their direct or indirect presentations. Except for any logically necessary cognitions of logically necessary objects by logically necessary omniscient cognizers such as God, the presentations of qualified objects or other logically necessary objects are logically contingent and occur in logically contingent acts of cognition. In fact, we must not confuse the qualified object the Morning Star with *any* of its presentations, logically contingent or otherwise.

Objection 18.

If the Morning Star and the Evening Star are both the same planet in itself Venus, then neither can exist if Venus does not. For if Venus is not there to be seen in the morning and the evening, then there can be no Morning Star or Evening Star either. But how can such logically necessary qualified objects depend on the existence of a logically contingent planet?

Reply. Again, we must not confuse qualified objects with their presentations. When we see objects of perception like the Morning Star, our presentations are logically contingent even though the qualified object Morning Star, as a logically possible way that things can be presented, is logically necessary.

Also, it is logically contingent which object in itself, if any, the Morning Star may "be." It might have turned out to "be" Mars in itself, or even "be" an optical illusion or a mass hallucination.

Objection 19.

All this may be very well for logically contingent concrete objects in themselves, such as planets. But what about logically necessary abstract objects in themselves? For example, what about the qualified three-sided figure and the qualified three-angled figure in Euclidean geometry? Surely these qualified objects are distinct only in reason from the triangle in itself which they "are." How could any of these three objects exist if the other two did not? And if this is correct, then how can the logical possibility of the two qualified objects logically depend on the logical possibility of minds, yet the logical possibility of the triangle in itself not depend on the logical possibility of minds? Likewise for the qualified number 3 x 4, the qualified number 7 + 5, and the number twelve in itself.

Reply. This problem too is not about theory of qualified objects as such, but is a general question of what ontological distinction there is between two wholly distinct logically necessary beings. When it comes to logically necessary objects, the only appropriate sense of "real distinction" is the per impossibile, purely hypothetical, subjunctive conditional ("were-would") sense that concerns whether their cognitive contents are wholly distinct. And the qualified three-sided figure and the qualified three-angled figure are really distinct in this per impossibile sense. For we can think of three sides without thinking of three angles, and vice versa. Kant would agree. Kant's famous example in the *Critique of Pure Reason* is that in thinking of 5 + 7 we do not think of 12 (and vice versa) (Kant 1965 / 1787: 52–53, B15–B16). Here Kant was a good phenomenologist. Looking at a visually triangular piece of paper, we can simply see both that it has three sides and three angles. And looking at apples on a desk, we can simply see both that there number is 5 + 7 and 12. But in thinking of the concept of a triangle as a three sided closed plane figure (the word "triangle" is a famous misnomer), we do not think of a three angled closed plan figure, and vice versa. And in thinking of 5 + 7, we do not think of 12, and vice versa. If we are in the realm of thought and not looking at paper triangles or apples on a desk, these are things we have to prove, if our minds are not strong enough to grasp them intuitively. But even if we are looking at paper triangles and apples on a desk, we still have to learn by looking. And that can take children years.

But this is not the full answer in modal logic and relevance logic. A further distinction is needed. The objective realities (or cognitive contents) of the qualified three-sided figure and the qualified three-angled figure are wholly distinct. And on that level, the existence of either qualified object is logically irrelevant to the existence of the other. Thus modally, there is no logically necessary connection between them, no overlap of *cognitive*

contents. But on a deeper level, there is overlap of *truth-grounds*. In fact there is *complete identity* of truth-grounds for the statements "The qualified three-sided figure exists" and "The qualified three-angled figure exists." Thus their truth-grounds are not really distinct, nor different but distinct only in reason, but really and completely identical. In fact (again), statements of the existence of any qualified objects whatsoever have the identical truth-ground, *true in all logically possible worlds*. For in possible worlds talk, all qualified objects are in all logically possible worlds. Again, I discuss truth-ground containment entailment as the deepest kind of logical relevance in my (2023 / 2015: ch. 9; 2021a / 2012). And truth-grounds and truth-tables are extensional in all three *Principia* senses of "extensional." Again, objects in themselves are not the classes of the qualified objects that "are" them. But even if, per impossibile, those classes "were" those objects in themselves, the objects in themselves' being totally real, i.e. real in all three main ways, would be a logically emergent feature of them. And that would be in keeping with their also being totally extensional, i.e. extensional in all three *Principia* ways, though there is no logical one-one correspondence between the members of the two pairs of three main ways each. For the three *Principia* ways narrow in one progressive series, while the three main kinds of reality narrow in another. And here all qualified objects have two of the three main kinds of reality, while all objects in themselves have all three.

Again, we must distinguish qualified objects from their presentations. Qualified numbers and qualified geometric figures are just as logically necessary as numbers and geometric figures in themselves, but their direct or indirect presentations are logically contingent, certainly for us finite and limited logically contingent cognizers. And this is where cognitive illusion and delusion are possible even about such abstract objects. Consider all the mistakes we make in arithmetic and geometry! There may be only two apples on the table if the third fruit is really a persimmon. And we may get geometric figures wrong in a distorting mirror. There are not even any numbers or figures in themselves at all, if nominalism or conceptualism is the true philosophy of mathematics.

This reply is correct even if logicism, i.e. the reduction of mathematical objects to, or elimination of them in favor of, logical objects, is false. For even if arithmetic and geometry are synthetic *a priori*, there will still be basically the same necessary relations of inclusion and exclusion, just as red includes color, while red and green are mutually exclusive. And the cognitive contents will still be wholly distinct as described earlier in this reply.

Kant holds that arithmetic and geometry are both synthetic *a priori* in both of his tests or senses of the term "analytic" in the *Critique of Pure Reason*. (Kant's two tests or senses are logically

equivalent, hence distinct only in reason; see my (2023 / 2015: 281; 2021a / 2012: 123–124). Except at the end of his career, when he went back to Kant, Frege held that arithmetic is analytic, but that geometry is synthetic. Even Russell, who logicizes arithmetic and geometry alike, admits synthetic *a priori* relations outside of mathematics. He admits it is *synthetic a priori* that good is not evil, and that yellow is a color. On metaphysical ecumenicism, all these philosophies of mathematics are distinct only in reason. For the analyses of Kant, Frege, and Russell alike are logically equivalent in that they admit exactly the same mathematical statements as true, such as that 1 + 1 = 2, regardless of their respective analyses. I suggest that their analyses are formally distinct with a foundation in reality in logicism, if logicism succeeds as a viable logical analysis; and on theory of types, it technically does succeed. If so, then Russell is deepest and best on analytic versus synthetic.

Objection 20.

All qualified objects exist in all logically possible worlds, so that they are logically necessary objects. But their existence and even the logical possibility of their existence logically depend on the logical possibility of minds. How can the existence or possibility of logically necessary objects logically depend on the logical possibility of logically contingent minds?

Reply. This objection is similar to and logically related to objections (15)–(19). Essential feature (2) is a purely hypothetical, per impossibile feature of qualified objects: qualified objects *would be* logically impossible if, per impossibile, minds *were* logically impossible. And even though that is a purely hypothetical point, it is a perfectly valid, obvious, and even trivial logical entailment. Of course, it is also essential that minds, certainly in the ordinary, pre-philosophical sense of "mind," *are* logically possible. Only minds like *the non-mind mind* or *the round square mind* are logically impossible. Hence it is also essential that qualified objects *are* logically possible. Even *the nonqualified qualified object* and *the round square qualified object* are perfectly fine qualified objects, by parity of reason with the *red and nonred object* and *the round square*. And since qualified objects are logically possible ways of presenting things, they can and do exist in all logically possible worlds. Precisely because they are such logical possibilities, they are logically necessary objects. In contrast, their presentations are logically contingent and therefore cannot exist in all logically possible worlds, waiving any necessary presentations to God.

Of course minds do not exist in all possible worlds. The one exception might be God. But even if God exists in all possible worlds, it would not be because he is a logical possibility, but because he is a logically necessary being. But aside from God or any other logically necessary minds, it is not *minds* that exist in all

possible worlds, but their *logical possibility* that exists in all possible worlds. That is, there are no possible worlds in which minds are *logically impossible*, because it is logically necessary that minds are logically possible. And *that* is what corresponds to qualified objects's existing in all possible worlds because they are logical possibilities. Again, possible worlds talk is perfectly fine.

Thus it is a perfectly valid per impossibile inference that explains how qualified objects are logically necessary, even though they logically depend on the logical possibility of minds. For they do *not* logically depend on the logical possibility of minds *in fact*, but only *per impossibile*. That was already and independently shown by my Moorean argument that just like Moore's sense-data, qualified objects are logically mind-independent. But the Moorean argument fails to show that qualified objects are logically necessary, any more than they show that sense-data are logically necessary. In fact, *sensed* data logically equate to *presentations* of qualified objects here. But qualified objects are essentially logical possibilities to begin with, and they are not logically dependent on the logical possibility of minds *in fact* (as if minds could, as a matter of fact, be logically impossible), but only per impossibile.

The 'metaphysical mechanics' of this can be made clearer. Sense-data only have a formal reality, while qualified objects have both a formal reality and an objective reality. The formal reality of a sense-datum is to be a sensibile that is in fact sensed. And both sensibilia and acts of sensing them are logically contingent. Thus sense-data are completely logically contingent. But the formal reality of a qualified object is to be a logically possible way of presenting a thing. And the objective reality logically can be anything: a logically impossible object, nothing (*das Nicht*), or even a sense-datum! And it is logically possible for an objective reality to be anything in virtue of the very nature of an objective reality. What is an objective reality? It is the reality the qualified object directly appears to have, and therefore essentially does have, *in perception or thought*. And that is why it logically can be anything that can be perceived or thought of, even an impossibility or nothing. Impossibilities and nothing can be thought of, and arguably are even perceived (dreamed or hallucinated) in Russell's "Metaphysican's Nightmare" (2009 / 1954) or watched in Sartrean plays about existential dread of the approaching Nothingness, as representatively depicted perhaps by a dark shadow or an ominous hooded figure; recall that objects of perception can be illusory or delusory. Qualified objects and their objective realities are in all possible worlds. Thus they are not only actual (in the actual world), but logically necessary. In contrast, mere possibilia are nothing.

There is no *formal* entailment in either direction between the statements "Object O is a logically possible way an object can

be presented" and "Object O logically cannot exist if minds logically cannot exist." But there is mutual relevantist containment entailment nonetheless. There is intuitive synthetic *a priori*, more precisely categorial, mutual containment. Hence there is more deeply also mutual truth-ground containment of the truth-grounds of each statement in the truth-grounds of the other. In fact, all twenty-one essential features of qualified objects entail each other synthetic *a priori* because all and only qualified objects logically can and must have them. Thus they all have the same truth-ground.

Objection 21.

Can or must an object in itself exist independently of any ways it can be conceived or regarded? Can there be an object in itself that logically cannot or at least need not conversely "be" any qualified objects, that is, an object in itself that qualified objects logically cannot or at least need not "be"? Why not?

This goes in part to the conception of an object in itself as something unknowable, perhaps even inconceivable, that lies behind the veil of cognitive appearances. It also goes in part to the concept of a bare or mere entity as such that *has* no properties by which it can be identified. But most ordinarily it goes to our pre-philosophical understanding of bodies and minds as things that can change all their properties but remain the same thing. Descartes' famous piece of wax changes all of its perceptible properties when heated: it changes color, size (it gets larger), shape (it melts), smell, and even taste (Descartes 1969 / 1642: 154–57).

Reply. Objects in themselves are intelligible as, and are intelligible only as, perceived or conceived through qualified objects, just as for Aristotle and Aquinas, substances are intelligible through, and only through, our perception and conception of them. In fact, some of our objects in themselves might even be traditional substances; they would be for Aristotle and Aquinas.

The 'problem of the veil' was not a problem for Aristotle, Aquinas, or even Thomas Reid. For them, things in themselves *are* given, at least to some degree, and are only intelligible to us, *through* our cognitive experience. For them, our experience is not a veil or barrier between us and the world, but is precisely the vehicle by which we learn about the world. Anthony Kenny beautifully explains this:

> [M]any of those who believe in accidents... invite confusion when they speak of accidents as being parts or constituents of the substances to which they belong... [T]he confusion to which it may lead [is] of thinking of accidents as a sort of outer skin or veneer and substance as an internal kernel or marrow....

> Substances themselves, indeed, are perceptible only by perceiving their accidents. [But t]his does not mean that substances are imperceptible, mysterious, invisible and intangible entities beyond the familiar visible and tangible accidents. (Kenny 1980: 34–35, cite omitted)

See also Wiggins (1980: 4–5). We may still speak of accidents as *logical*, and in that sense categorial and even metaphysical, constituents of substances, as long as we avoid the confusion Kenny describes. All this also strongly supports Douglas C. Long (1968)'s view that an ordinary individual simply grounds its own individuation, and that this is not done by some hidden substratum it has. And my theory of evidence as objectively seeming to be the case justifies our belief that there *are* totally mind-independent ordinary real things, presented to us via our mind-dependent acts of perception or thought, as much as it can be or needs to be justified.

In effect, the objection asks whether there are entities that are not identifiable, or identifiable things that are not entities. For in our theory, that amounts to asking whether there are objects in themselves which no qualified objects "are," or qualified objects that "are" not lower-level objects. My reply is that the first possibility cannot be ruled out by a verificationist theory of meaning. For such theories are self-defeating: they cannot even verify themselves. And in the nature of the case, no examples can be given. For we cannot single out or refer to anything except via a qualified object. And the second possibility happens all the time. Unicorns and the round square are objects of perception or thought that "are" not objects in themselves. Even aside from our theory, we cannot identify any entities that are not identifiable; and we can identify all sorts of things in perception or thought that must exist as objects of perception or thought if we perceive or think of them, but that do not and in many cases logically cannot exist in reality.

Russell says that if we are directly presented only with ideas that exist only in the mind, then "ideas become a veil between us and outside things" (Russell 1976a / 1910–1911: 160). No doubt he is thinking of British empiricist / early modern via moderna ideas. For the objective realities of via antiqua ideas are formally identical across minds, times, and outside things, thus allowing us to "attain to the things we are supposed to be knowing about" (Russell 1976a / 1910–1911: 160) via formal identity.

Objection 22.

If Nietzsche is right that the world eternally repeats itself in physically identical recurring cycles, does a new set of *qualified objects* come into being at the start of each cycle, or does the old set eternally repeat itself too? This is a question about the identity

of indiscernible qualified objects, not about their presentations. Here we are counting each world-cycle as including not only either the same or exactly similar physical objects and persons, exactly repeating their history of causal actions, but also either the same or exactly similar mental histories of cognitive acts of perception and thought.

Nietzsche's proof of eternal recurrence is flawed.FN1-15 And on its face, his thesis is not only logically contingent, but in all likelihood false, per entropy theory today.FN1-16 But that does not remove the objection, since we must still answer the objector's question. For Nietzsche's thesis *logically* might happen to be true, and we must have a phenomenological account even of the logical possibility. For otherwise our phenomenology will be inadequate.

Reply. As soon as we ask whether the qualified objects are literally the same or merely indiscernible across world-cycles, then we are in a phenomenological ascent to higher-level qualified objects. But then the problem is merely postponed to whether the higher-level qualified objects are the literally same or merely indiscernible in each world-cycle. And if we raise that question, then we are in a second phenomenological ascent, and so on ad infinitum. But if the question of eternal recurrence never *occurs* to us (and therefore *eternally* never occurs to us, i.e., never occurs to us in any cycle), then there is no phenomenological ascent to, i.e. no direct presentation of, any higher-level qualified objects. And that would surely be the case for most of us outside philosophy.

If the question is *not* raised, then since qualified objects essentially are as they directly appear to be, they are literally the same qualified objects if and only if they directly appear to be. And the way the objection poses the problem, they do directly appear to be the same. And that is not a problem. In fact, it is exactly how things should be. For we must distinguish a qualified object from its direct presentations. It is precisely the literal sameness of the *qualified objects* across different world-cycles which *grounds* the cognitive and epistemic indiscernibility of the world-cycles. And it is the literal difference of their *presentations* in each world-cycle which *grounds* the numerical difference of each world-cycle. And this is nothing strange at all. If I close my eyes, open them, and simply, nonreflectively see the same apple on the table, then I have two different direct presentations of literally and numerically the same qualified apple.

Again, qualified objects exist in all possible worlds. They are timeless and logically necessary. Thus they logically cannot "cease to exist" at the end of each cycle and then "come back into being" in the next cycle, in the first place. It is only their direct presentations that logically can and must differ from cycle to cycle,

just as the direct presentations of the same qualified apple can and must differ over time within a single moment if we blink our eyes.

Recall also that singling out is primary, and describing is secondary. The haecceity or 'thisness' of direct presentation is primary, and the attributive character of description is secondary. But there can be no description unless *qualified* attributes are directly singled out as the direct basis of description (compare Burge 1983: 80). And this is what grounds the very possibility of describing recurrent world-cycles in the first place.

Recall also that there can be no presentation without direct presentation, on pain of vicious regress of indirect presentations.

The big question is instead whether the same *objects in themselves* literally recur from cycle to cycle. And according to Nietzsche, they logically must, given a finite physical world over infinite time. I shall explain Georg Simmel's disproof of that later.

Objection 23.

I can see and photograph The Morning Star. But a qualified object, as opposed to its presentations, is merely a logically possible way that a thing can be presented. How can I see or photograph a mere logical possibility—even an objectual one?

Reply. When I directly see or photograph qualified objects, it is their direct presentations that I directly see or photograph.

Recall there is no such thing as a mere logical possibility. But a qualified object is an objectual way that things logically can be presented. Thus it is actual and even logically necessary. For it is in all possible worlds. It is also an object of perception or thought. Thus a qualified object logically can be perceived or at least thought of. It also exists in the sense of not being nothing. For there are many different qualified objects; thus at most one can be identical with nothing. Thus by parity of reason, all of them are something, since they all belong to the same ontological category. Qualified objects also exist in the sense of being mind-independent, and in the Butlerian sense of being what they are.

One might think that all or much the same things can and must be said of mere logical possibilities. But mere possibilities lack actuality by definition. Thus they are not there to do any jobs, ontological or otherwise. I analyze talk of them as talk of qualified objects that "are" not lower-level objects. More precisely, I analyze talk of them as talk of the objective realities of those qualified objects. And objective realities as such not only *have* objective reality, but *are* objective realities. For an objective reality qua objective reality has the formal reality of being ostensibly representative. And even ostensible representation is not nothing. For there is a difference between its being there or not. In Hans Vaihinger's terms, it is an 'as if'; and even an 'as if' is not nothing. But a mere possibility, qua mere possibility, is nothing. The formal

reality of the objective reality is not the formal reality of the entire qualified object. For *the object with no formal reality* is a perfectly fine objective reality, but all qualified objects have formal reality.

Meinong assigns his nonexistent objects a metaphysical job or function. For him they ground our perceptions and thoughts of things that do not exist. Thus they are not *mere* logical possibilities for him. But Meinong is confused. His nonexistent objects *do* exist in the sense of not being nothing They exist in Butler's sense of being what they are. At least on Moore's act-object theory, they even exist in the sense of being logically mind-independent. And they must exist if they are to perform any jobs or functions!

Again, qualified objects must not be confused with their direct or indirect presentations, which are logically contingent, with the possible exception of necessary presentations of necessary objects to a necessary god. I see and photograph presentations of the Morning Star and the Evening Star, and also of Venus. I see and photograph a direct presentation of the qualified object and an indirect presentation of the object in itself in one and the same photograph. The two presentations are modally distinct. No direct presentation, no indirect presentation.

Objection 24.

Perhaps the best objection in the present series of objections is this. How is it possible for qualified objects to be real at all, even if their logical possibility only *hypothetically* or *per impossibile* depends on the logical possibility of minds? How can a real thing even have *that* much logical dependence on minds? How can a real thing even have an *indirect* logical dependence on minds, meaning a logical dependence on the *logical possibility* of minds? Are not real things *totally* independent of minds, that is, logically independent even of the logical possibility of minds?

Not being nothing, being mind-independent in the ordinary sense, and even having being in the Butlerian sense that every thing is what it is, are not enough for a thing to be real. For all of those kinds of being arguably belong to merely possible objects. Pegasus is not Chiron, hence is not nothing. Moore's act-object argument shows the mind-independence of Pegasus in the ordinary sense. And Pegasus is what he is, and not another thing. Thus *contra* Meinong, Pegasus is not 'beyond being and nonbeing', but has at least three kinds of being! These three kinds of being did not occur to Meinong. But Meinong would still be right that merely possible objects are not real in the sense of being totally real. And to be real is to be totally real. But then likewise for qualified objects. For are they not merely possible objects at bottom too? And they are not totally real. Thus they are not real, or if you please, not "really real." For a genuinely, totally, or really real being logically could exist even if, per impossibile, minds were logically impossible.

Reply. I am very sympathetic to the objection. It is deep and thoughtful. Indeed, if the real order consisted only of objects in themselves, then qualified objects certainly would not belong to it. But the objection is simplistic. For the word "real" is said in many ways. In my theory, it is said in three main ways. First and foremost, to be real is not to be nothing. That is both Parmenidean being and Russell's robust sense of reality. See my (2003: ch.4). It is also Suárez's and Aristotle's most general kind of being. Again, Suárez says, "Fonseca states most truly that [a certain] sort of mode is not properly a thing or an entity, except in the widest and most general sense of the term 'being', as designating whatever is not nothing" (Suárez 1947 / 1597: 31). And Aristotle admits anything as not nothing if it is related to a primary being, which for him is a substance (Aristotle 1968a: 1003b5–15; see Owens 1963: 268–269, 436– 437). Secondly, to be real is to be mind-independent in the ordinary sense. Moore's arguments for realism and Wittgenstein's private language argument are generally understood to be for realism in this second sense. We could try to refute the private language argument by using the mental language argument, but the arguments are distinct only in reason; and I think there is no getting around Moore. And thirdly, to be totally real is to be, in addition, logically independent even of the logical possibility of minds. Of course, no mind can exist independently of *itself*, and no mental object can exist independently of the mind it logically must be *in*. But that is only because it is an empty tautology that *no* object can exist independently of itself, or of *whatever* it logically must be in.

Qualified objects are real in the first two senses. Objects in themselves are real in all three. If we say that only objects in themselves are real, then we are missing everything their reality has in common with the reality of qualified objects. The objection also treats my unique new third sense of "real," total reality, as the *only* sense of "real" there is. And that is absurd both intellectually and historically. It is to change the historical subject entirely! For the first two senses are the historical ones. And at least to my best knowledge, no one ever discussed my third sense of "real" before. This is not to mention that all objects have Butlerian existence.

We cannot even say how much *more* real objects in themselves are than qualified objects. There is no yardstick. We cannot lay down my three senses of "real" side by side and compare them. We can only say that the third sense of "real" applies to objects in themselves but not to qualified objects. There is no "more" except in the sense of "in addition." And the sense in which we add the third kind of reality to the first two is only that of logical addition, that is, logical conjunction, via the conjunction ("and") function.

That qualified objects are real is basic to ontology. It is basic to the whole apparatus of informative identity and existence

judgments, and indeed to the reality of the sense (connotative meaning) and direct reference of everything we say. And it is just as deeply important to theory of evidence and theory of ethics. For our most basic evidence is presented qualified objects that seem to be the case. And our prima facie values and duties are qualified ethical objects. Thus the reality of qualified objects is also the reality of evidence and the reality of prima facie values and duties.

Objection 25.

Qualified objects are logically necessary, timeless, and unchanging. Yet we see The Morning Star moving across the sky, and fading from sight as the sun rises. It will look different to different observers, and at different times to the same observer.

Reply. We can and must distinguish between a qualified object and its direct and indirect presentations at different times to different cognizers. And if the differences call the identity of the qualified object into question, so that we consciously wonder if we are directly presented with the same qualified object across times or cognizers, then this is a phenomenological ascent to higher-level qualified objects. In fact, The Morning Star is a qualified object whose timeless objective reality is precisely that of a body whose presentations logically can and will change in these ways.

Many qualified objects directly appear to be, and therefore essentially are, able to change in their presentations. This includes both qualified minds and qualified bodies. This is not problematic or even surprising, but what is natural and expected. In this, my theory honors both phenomenology and common sense.

My reply makes no use of the concepts of form or essence. I did not say that The Morning Star has a *form* or *essence* that remain the same through changes. But I may as well have. For all qualified objects are logically necessary beings, and the Morning Star essentially has the form of a qualified object whose presentations can and do change. One can admit logical necessity in the wide *a priori* sense in logic and epistemology, and reject forms and essences in ontology and metaphysics. But I can and must admit them. For a thing's form (its nature, or what it is), which is distinct only in reason from its essence (its kind of being) is what remains the same through changes. And the essential nature-accident distinction grounds both phenomenology and common sense as well. For what could be a more ordinary, pre-philosophical direct presentation than that ordinary minds and bodies remain the same through changes? And if a qualified object directly appears to have both an essential nature and accidental features, then it essentially does, since it essentially is as it directly appears to be. I certainly hope that earlier in this chapter, objects of perception or thought directly appeared to the reader as having at least twenty-one essential features! But I do not posit or appeal to essences in this

particular reply. That many things remain the same through changes on the pre-philosophical level, and that they have a form and an essence that remain the same through changes, are different facts that are distinct only in reason, certainly if we admit forms and essences in our philosophy. For then forms metaphysically ground the ordinary phenomenology of many things' remaining the same through changes in a factually informative way.

Objection 26.

Qualified objects are intensions (connotative meanings). Therefore if qualified objects can change even as we perceive or think of them, then intensions (connotative meanings) can change even as we perceive or think of them. And that is absurd. The connotative meaning of the name "The Morning Star" does not move through the sky or fade from sight as the sun rises. In fact, intensions as such cannot change. They can only change in the sense that people assign different intensions to the same term over time. And they certainly cannot move through the sky or fade from sight. For they are not even the kind of thing that can be perceived. They can be grasped only in thought, and in that sense are abstract.

Reply. My reply to the previous objection applies here too, mutatis mutandis / arguendo / by parity of reason. As logically necessary, timeless objects, qualified objects ground the ordinary, pre-philosophical sense in which the connotative meanings of words remain the same across all logically possible speakers and times. In this metaphysical function of theirs, they are grasped only in *thought*, and are not *perceived*. But that is not a problem, since they are objects of perception *or* thought. It is not the qualified object The Morning Star, but its presentations, that change in perception or thought across times and cognizers.

Granted, it is odd to say that connotative meanings even have presentations at all, much less direct presentations that change across speakers and times. One could not say that of Frege's senses or of Russell's descriptions, and certainly not of the timeless universals that are the determinate constituents of Russell's descriptions remain the same. But that is a minor oddity of speech. We do cognize or grasp them. In fact, if my theory is correct, then connotative meanings *do* have changing direct presentations. And Frege and Russell are not so far away from that. Both of them explain informative identities in terms of some sort of different presentations of the thing in question. And both offer accounts of how different observers perceive or think of the same thing differently, and at different times. Where I rely on changing direct presentations, Frege relies on changing mental ideas and Russell relies on changing sense-data (not to mention changing instances of universals). And on metaphysical ecumenicism, all three accounts are distinct only in reason. The only differences are these: I use via

antiqua qualified objects where they use via moderna objects; via antiqua objects have objective reality in addition to their formal reality; and Frege's ideas of sense-qualities, following Descartes and the earlier tradition, are mental, while Russell's sense-data, following Moore, are mind-independent.

The same goes for prelinguistic judgments. But here there are only direct presentations of qualified facts, and no connotative meanings of linguistic terms, in that as no language is involved.

Very strictly, qualified objects, including qualified facts, are distinct only in reason from connotative meanings. For it is a factually informative identity that the former are the latter. In fact, the former *ground* the latter. In fact, very few qualified objects and qualified facts are connotative meanings in language. Qualified objects are infinitely many, logically necessary, and timelessly unchanging, while the connotative meanings we assign in language are none of those things. The distinction is therefore modal. No qualified objects, no connotative meanings.

This all fits together well. A linguistic statement asserts a cognitive judgment that a qualified fact "is" a lower-level fact. And as explained earlier, the principle of presentation is that to *understand* a proposition, i.e., a qualified fact, which logically can be the connotative meaning of a statement, we must be *directly presented* with at least one parsing of all the qualified objects that compose it. For while a qualified fact often can be logically parsed in many different ways into logical subject- and predicate-qualified objects, the direct presentation of its constituents in just *one* such parsing is enough. Russell overlooks this point in his principle of acquaintance, but Frege does not in his slicing up of his thoughts.

Objection 27.

Your thesis is "entity if and only if identity," or in terms of qualified objects theory "object of level n if and only if indefinitely many, or at least sufficiently many, qualified objects of level n + 1 'are' it." (The logically indeterminate term "sufficiently many" is meant to exclude dreamed or hallucinated qualified objects from "being" objects in themselves.) But can there not be entities that are not identifiable, or items that are identifiable but not entities?

Reply. This has been asked and answered by the whole book so far. Qualified objects theory solves the puzzles of factually informative existence *and* identity judgments. Indefinitely many factually informative identity judgments are necessarily logically possible for every existing object on every level. And the mutual dependence (in different senses) of qualified objects and objects in themselves was discussed in the section "The Order of Cognition and the Order of Being."

No counterexample entities *in themselves* that cannot be identified can ever be identified. This is round square territory.

As I explained in the Introduction, identifiability is said in many ways. I identify ten ways in my (2003 / 1996: 13). The objector is confusing cognitive and/or epistemic identifiability with logico-ontological identifiability. Logico-ontological identifiability is the logically necessary and sufficient condition of existence. No logical possibility of identification, no existence. 'Entity if and only if identity' is a biconditional, but the concept of identity is prior in that it illuminates, explains, and grounds the concept of existence. We seek to understand the concept of existence through the concept of identifiability, not the other way around. For the concept of existence is the one that needs illumination or explaining. Again, this point is due to Butchvarov (1979: 41).

Identifiability in principle, that is, the logical possibility of identification, is required for the very intelligibility of existence assertions, and for the very concept of existence. We logically can understand something as existing if and only if we logically can identify it. This is the analytic tradition's version of Hegel's Platonic thesis that the real is the rational, i.e., the intelligible, and the rational is the real (Hegel 1969 / 1821: 10). I discuss Hegel's thesis in chapter 5.

On the linguistic level, Frege holds that in an ideal language, we are not entitled to assert "A exists" unless every identity statement at least one of whose subject-terms is "A" has a determinate truth-value. Frege says, "If we are to use the symbol *a* to signify an object, we must have a criterion for deciding in all cases whether *b* is the same as *a*, even if it is not always in our power to apply this criterion." (Frege 1974 / 1884: 73).

Butchvarov explains this more deeply:

> For something to be an entity, it must exist and be identifiable. But to exist and be identifiable, it must have a character, a content, properties, through which it could be identified and thus acknowledged as an existent. Absolutely bare things are absolutely incapable of identification and thus of existence. (Butchvarov 1979: 122)

Butchvarov adds later that "we have no criteria for the identity of individual things that do not include the identity of at least some of their attributes" (Butchvarov 1979: 183). We may call such properties of a thing the "*basis*" of its existence and identifiability. And if an object in my wide sense *is* a property, then it is its own basis. I shall discuss Bergmann's bare particulars in chapter 3.

This is how objects in themselves are ontologically prior to qualified objects: Their properties in themselves are the basis of their existence in itself, and of their indirectly given identifiability

in itself via their directly given *qualified* identifiability via directly presented qualified objects. Note that just like any other qualified relation which "is" a relation in itself, qualified identifiability "is" identifiability in itself.

Bracketing in Phenomenology

Bracketing is said in many ways. Husserl uses the term in several ways (Koestenbaum 1970: xx–xxi). Husserl's basic idea is "focusing on any part or all of my experience, and then analyzing, abstracting, and describing that experience by removing myself from the immediate and lived engagement in it. I must observe the experience in question from a distance, that is, from a state of reflection..." (Koestenbaum 1970: xx). Thus bracketing presupposes abstraction. Both kinds of acts seem perfectly legitimate, and both seem given in traditional psychology as the rational study of the soul. On this, traditional psychology seems phenomenologically natural and correct. For we are directly presented to ourselves in introspection as having various sensations and passions, and as having two main kinds of acts, cognitive and volitional / performative (throwing a ball, making judgments). But are *presentations*, meaning the acts of cognition, actions or passions? They do seem simply to happen to us. That would make them passions, so called because we are their passive recipient. That is in tune with realism too, in that in presentations we seem to discern what is there to be discovered, and not creating anything. Even judgments, perhaps especially initial and also primitive judgments, often seem to be passive as well, just happening to us. My solution is that *all* acts are what we *do*, whether we passively *happen* to do them or actively *choose* to perform them (my 2021 / 2020: 52–53). I do not claim originality for this solution. It seems so natural, surely it has occurred to others. There is a certain analogy to Richard Taylor's talk of things as *going* to happen, whether we *make* them happen or not. He is talking about fatalism, the theory that things "are going to happen *no matter what*" (R. Taylor 1983: 52, his emphasis, see 60–62). And it seems at least our initial preconceptual judgments are going to happen no matter what we choose to do.

"Removing myself" and observing the object "from a distance" or "from a state of reflection" is just colorful language for my disregarding or abstracting both myself and my cognizing from a cognizer-cognizes-object fact or state of affairs, so that only the object remains regarded. I think we do that very often.

I admit bracketing as a determinable with indefinitely many determinates. I admit ontological, epistemic, causal, and modal bracketing, as suspensions of considering or regarding those

aspects of an object. Recall that objects in the wide sense include facts, situations, statements, and judgments. And there may be other kinds of bracketing too. What distinguishes the different kinds of bracketing is the kind of aspect of the object we are disregarding. More precisely, we are disregarding not just an aspect the object has, but *whether* it has that aspect. Thus in a bracketing, we are setting aside the aspect from the rest of the object.

It would seem that all bracketing is abstracting and all abstracting is bracketing, since they both mean disregarding. But we may say the two terms differ in emphasis. Abstracting means slicing away some cognitive content, and bracketing means then setting the sliced content aside. Thus they are distinct in reason. The distinction is modal. No abstracting, no bracketing. In chapter 3, I shall parse things somewhat differently to make a new point. I can do that, since that is just another conceptual bracketing!

As with anything else, there is both qualified bracketing and bracketing in itself. And actual instances of bracketing, such as Smith's bracketing aspect A from object O, essentially presuppose a bracketer, Smith, and an act of bracketing in which O and its aspect A are two different objects, and Smith is singling out A so as to set A aside, so as to cognitively intend O without cognitively intending A. It is a bit like trying not to think of monkeys, where the very trying essentially involves thinking about monkeys. In fact, the solution to the "Try not to think about monkeys" problem is that we can *bracket* monkeys from the rest of our cognitive objects. This is one place where Hans Vaihinger's term "as if" has a role. We are thinking *as if* we are not thinking about monkeys. Or we are thinking about aspect A *as if* A did not exist. In fact, bracketing *is* a kind of fiction, if object O exists and it really does have aspect A.

Thus bracketing presupposes a logically complex object. Object O and aspect A must be different objects, even if they are distinct only in reason. We cannot bracket an object from itself, nor abstract an object from itself. We could allow that only as a mere logical courtesy. But *qualified* self-bracketing or self-abstracting is perfectly fine. It is exactly as fine as the round square.

I discuss mainly ontological bracketing in this book. It is the goal of this section to explain ontological bracketing in more detail. We can ontologically bracket any object or kind of being from any (other) kind or kinds of being. In qualified objects theory, ontological bracketing includes cognizing a qualified object and disregarding whether or not it "is" a lower-level object.

One might object that if we bracket a thing from its existence, then we are bracketing it from nothing. For Kant says that if we say a thing exists, we add nothing to its concept:

> '*Being*' is obviously not a real predicate, that is, it is not a concept of something that could be added to the concept of a thing. It is merely the positing of a thing.... A hundred thalers do not contain the least coin more than a hundred possible thalers. (Kant 1965 / 1787: 504–505, note omitted)

Or if you please, to say that a thing exists is not to say even in the least part *what* it is, but only *that* it is.

Kant's argument is stated at least twice (B628; B727). It is a reductio ad absurdum: If thinking of a thing's existence added something to its concept, then we cannot be thinking of the same thing when we think of it *as existing*, since the very concept would make it different (more complex) (Kant 1965 / 1787: 505).

But every argument presupposes its own contraposition. Here, if existence *were* a classificatory concept, then it *would* add something to the concept of a thing. It *would* make it different (more complex). It would add informational classificatory content.

Thus Kant's argument fails for two of my four main senses of "exist," since two are classificatory. First, existence in the wide sense is nonclassificatory. For everything is an object in the wide sense. Second, Butlerian existence and the haecceity it grounds are nonclassificatory. For even *the non-haecceitous object that is not what it is and is another thing* is haecceitous, is what it is, and is not another thing. Like the round square, it merely cannot "be" an object in itself. But third, only some objects are qualified objects that have qualified being. And fourth, only some objects are objects in themselves that have being in itself. Thus "being" in those two senses *is* a real predicate. And surely the ontological argument Kant is criticizing here must show that God is an object in himself!

Kant's argument also fares poorly with Russell's three main senses of "exist." It might succeed for Russell's primary, Parmenidean sense that to exist is not to be nothing, which is the same as my own existence in the wide sense. But it fails against Russell's secondary, Berkeleyan-Humean sense that to exist is to be correlated with sufficiently many other lawfully related sense-particulars to count as real, as opposed to a dream or hallucination. And Russell's third, Fregean sense of "exist" is expressly offered as a refutation of Kant. It makes existence a second-level concept precisely in order to make it classificatory, i.e., not apply to every object in Russell's sense of "object," or Frege's sense, or mine. Frege's alternative analysis of "*a* exists" as "'*a*' denotes" (Frege 1970 / 1895: 104) makes existence classificatory as well. And so does my analysis of "*a* exists" as "Qualified object *a* 'is' an object in itself, or more deeply and generally, "Object *a* of level n 'is' an object of level n - 1." All these analyses are distinct only in reason.

For on my theory, the name "*a*" in "'*a*' denotes" expresses qualified object *a* as its connotative meaning, or alternatively refers to a second-level concept (for Frege, all concepts are universal ante rem properties). Of course, I agree with Frege that "We must here keep well apart two wholly different cases that are easily confused, namely when we use "exists" so that it is to be analyzed in terms of "denotes" and when we use it to refer to a second-level concept (property) (Frege 1970 / 1895: 104). Telling which case we have depends on the linguistic context, and it may not always be possible to tell. And not only may the context be unclear, but Frege's two alternative analyses are distinct only in reason as well. For either is logically applicable if and only if the other is. Thus both of his alternative analyses are distinct only in reason from both of mine. And that is metaphysical ecumenicism with respect to existence predications. In fact, our analyses of "exists" as predicating a second-level concept would be identical, but for the fact that his concepts are universals ante rem only, while on metaphysical ecumenicism, I admit universals both in re and ante rem, as well as particular properties, concepts, and logical predicates, all as distinct only in reason from each other. Frege's concepts are universals because more than one object can fall under literally the same concept, even if identity of concepts can only be asserted using his representation function; and they are ante rem because many concepts can have and do have no objects falling under them.

Kant's argument also fares poorly against Meinong. For Meinong admits nonexistent objects, and that makes existence a classificatory concept for Meinong. But since I reject Meinong's theory (except as an ontological bracketing, and/or as really being about qualified objects), I shall not discuss that further, or count it against Kant. We may say Meinong's theory has a limited validity.

Kant's argument is problematic even on one of Kant's own two tests of analyticity. I mean not the test that the denial of an analytic statement is self-contradictory, but the test that in *thinking* the subject we *think* the predicate. For in merely thinking of a hundred thalers (dollars), it is not at all clear whether an ordinary person would consciously think of them *either* as existing or as not existing. And either way would require thinking *of* the predicate of existing, and not just of the logical subject of a hundred thalers. In other words, the ordinary person is being asked to think *only of the subject*, and not of the predicate, and certainly not of a proposition composed of the two. Yet that is just what Kant requires in his second test. And the ordinary person certainly does *not* think of the hundred thalers as existing in the sense of not being nothing, or in the sense of being mind-independently real, or in the sense of being totally real, even though all three of these senses apply to a hundred thalers in themselves. The ordinary person probably would not

even distinguish a hundred thalers as an object in itself from a hundred thalers as an object of perception or thought! It is likely that only an ontologist would distinguish any of these things.

The later Wittgenstein might ask us to imagine a conversation like this. "Think of a hundred thalers." "Okay, I'm doing it." "Did you think of them as existing?" "What? You didn't even ask me to do that. You didn't specify thinking of them either as existing or as imaginary money. In fact, then, no, I didn't really think of them *either* as really existing or merely hypothetical. I thought this might be part of a joke or a reductio ad absurdum. And now *you* are asking *me* whether the hundred thalers exist? Why didn't you ask me to think of them as really existing in the first place?" This might not be what every ordinary person would say, but it is what some people might very plausibly say. At the very least, Kant's test is ambiguous here. The answer depends not only on which concept of existence is used, but also on which concept of a hundred thalers, real or hypothetical, is used. And if we do not specify, then we cannot say. It is not like asking if a red things has color or if bachelors are unmarried. "Think of a red thing." "Okay." "Did you think of it as having color?" "Of course! It's red! What a foolish question!" But that is not like asking if the thing is real.

The concept of existing as not being nothing, which is the only concept of my three on which Kant's argument might succeed, is *logically implicit* in the ordinary person's concept of the money, but ordinarily it is *not actually thought*. We cannot actually think every implication of a judgment. For every judgment has infinitely many implications. That most of them are logically trivial does not detract from this point. We may say that the concept of not being nothing is distinct only in reason from the concept of the money. But things that are distinct, even if only in reason, are not identical. They are different. And so a new concept is being added here.

Why does Kant's second test not work for the predicate of existing? It is because Kant overlooks an ambiguity in the notion of informational content. There is the classificatory sense, and there is also the 'different but distinct only in reason' sense of conceptual content. If everything necessarily exists in the sense of not being nothing, then this concept of existence is nonclassificatory. But it does not follow that nothing is being added to the concept of a hundred thalers. For the two concepts are different but distinct only in reason. And they cannot be distinct in reason unless they are different. This kind of difference in informational or conceptual content concerns per impossibile logical hypotheticals and logical analysis. In fact, it is the twentieth century "paradox of analysis" in its traditional guise of distinctions of reason. How can a logical analysis be informative if the analysans and analysandum are logically equivalent? It is because they are formulated differently.

It is because the concepts are different; and if one is thought of, the other need not be, even if it is logically implicit. On my theory, it is because the qualified objects are different. Thus Kant's second test fails in such cases.

Even if we *consciously* think of a hundred thalers *as totally real*, meaning not nothing, logically mind-independent, *and* logically independent even of the logical possibility of minds, that adds a three-part concept that is different, though distinct only in reason, from the concept of the money. For ordinary people who consciously think of the money do not consciously think of it *as totally real* in our technical philosophical three-part sense.

The concept of *different* informational content that does not and cannot make a *classificatory* difference applies to analytic and synthetic *a priori* statements alike. Kant notes that in thinking the number 12, we do not think 5 + 7, and he holds this shows that 5 + 7 = 12 is synthetic *a priori*. But in thinking proposition P-or-Q, we do not think not-(not-P and not-Q) either. And that logical equivalence is not only analytic, but a formal truth of logic. Here "analytic" is best understood as 'a logical truth or reducible to a logical truth by putting synonyms for synonyms'. Analyticity seems to be a determinable with indefinitely many determinates. I cannot discuss all the main reasonable senses of "analytic" here; Arthur Pap lists twelve main senses (Pap 1966: Appendix A).

Existence seems to be a determinable with indefinitely many determinates too. And arguably, when we conceive or regard an object apart from whether it exists, in any of the senses of "exists," we are not thinking of it any differently with respect to *what* it is. We are merely not conceiving or regarding it with respect to *whether* it exists. And such conceiving or regarding is just what Husserl calls (ontological) bracketing (eidetic reduction) in *Ideas* (Husserl 1972 / 1913: see §§ 76, 97 on bracketing, and §§ 59, 60 on eidetic reduction).

Again, all objects can be bracketed. And since conceiving or regarding requires the logical possibility of a conceiver or regarder, bracketing belongs to the qualified world. This supports my view that ontological bracketing is best understood as singling out a qualified object without regard for whether it "is" a lower-level object, and I should add, without regard for whether it exists in any other sense, such as being mind-independent, or not being nothing.

Again, I suggest this neat definition. Since considering an objective reality or representation of reality (Descartes' two terms for the same thing) as such is essentially the same thing as Husserlian ontological bracketing, i.e. suspending judgment or disregarding whether the thing exists, representation in Descartes' sense can be defined as perceiving or thinking of a thing while

disregarding whether it exists. Or better and conversely, ontological bracketing can be defined as singling out an objective reality (or the qualified object whose objective reality it is) merely as such. Of course, these definitions are different but distinct only in reason.

We may stipulate our terminology as follows. Conceiving or regarding something about an object without conceiving or regarding something else about that object is *parsing*. Parsing has two species, abstracting and ontological bracketing. To abstract is to conceive or regard a thing apart from some logical part of *what* it is. To bracket ontologically is to conceive or regard a thing apart from *whether* it is. In casual writing, we can use these three terms interchangeably in the generic sense I call parsing. And if we admit kinds of existence that are special ontological properties, then bracketing is a special kind of abstracting. In fact, our kinds of existence are Fregean mapping functions, just as much as ordinary properties are. And as to the nonclassificatory concept of not being nothing, Frege already admits self-identity as a function which maps the value of truth onto all objects as arguments. Thus he already admits at least one nonclassificatory function. And our stipulations reflect the traditional use of these terms fairly well too.

Husserl is very aware of his debts to Descartes and Kant. Husserl presents his phenomenology as Cartesian or at least neo-Cartesian, and indicates later that his metaphysics is Kantian transcendental idealism. All three philosophers hold that we are given things not as they are in themselves, but only in the way they are presented to us in sensible experience, and I would say more deeply and generally in consciousness. Again, a qualified object is defined as an objectual way a thing can be presented, and that can only mean presented *to consciousness*.

Bracketing things away from questions of their reality is the first step of Descartes' program of radical doubt. In Kantian terms, bracketing would be the suspension of belief that there is any more to reality than the empirical reality of the phenomena we are presented with. That is, it is the suspension of belief that there is a noumenal world of things in themselves beyond phenomena.

Again, qualified objects are my public, mind-independently real substitutes for Descartes' private mental ideas. Both are via antiqua objects of perception or thought, meaning that both have both formal reality and objective reality. And qualified objects can be parsed as bundles of mental ideas by admitting formal identities of mental ideas across *all logically possible* minds and times.

One might object that Meinong can single out, identify and differentiate his mere objects. Thus he can count them and even quantify over them using Czesław Lejewski's quantifiers, which are interpreted *veridically* instead of existentially. Thus he can say, "There are three golden mountains in this fairy tale" without being

ontologically committed to their existence in any sense. Meinong can even introduce a concept of *veridical* bracketing, where we can single out the nonexistent golden mountains in thought without regard for whether the quoted statement about them is *true*.

My reply is that this objection has been asked and answered. There is no such thing as a merely possible *object in itself*. Merely possible objects can only be (objective realities of) *qualified* objects; and qualified objects are my *existent* substitutes for merely possible objects. Or equivalently, the only nonexistent objects are *ontological bracketings of existent objects*. We can indeed parse an object from its existence. But again, Meinong is mistaken about his own nonexistent objects. He overlooks that *all* objects exist in the sense of not being nothing. In addition, his 'nonexistent objects' are existent objects of thought or perception that "are" not lower-level objects. And as qualified objects, they are not only existent, but are logically necessary beings.

We can do 'logic and arithmetic without ontology' by bracketing them. Quantifying and counting do have ontological commitments. We cannot quantify over or count nothing. (More precisely, we can, but there is exactly and only one objective reality that is nothing.) But we can ontologically bracket logic and arithmetic, thus disregarding their ontological commitments. And there we have 'logic and arithmetic without ontology'. In fact, *any* ontologically bracketed science or theory is considered or regarded as having no ontological commitments by definition of bracketing.

By parity of categorial reason, we can even bracket the one objective reality that *is* nothing (*das Nicht*). Indeed, some have argued that even nothing is not altogether nothing, but is really a very dim something. Heidegger and the 1903 Russell might both be interpreted as holding that. Russell says, "It is plain that there is such a concept as *nothing*, and that in some sense nothing is something" (Russell 1964 / 1903: 73, his emphasis). Of course, Russell came to hold that what nothing is, is 'not anything', that is, is the negation of the universal quantifier, just two years later in "On Denoting." And at least by 1912, Russell assays that as a propositional function whose determinate constituent is an ante rem logical universal. For logic is *a priori*, and *a priori* knowledge is about universals (Russell 1974 / 1912: 76–77, 103; see chs. 7–11). Russell expressly admits "logical universals" (1974 / 1912: 109).

I agree with Heidegger and the 1903 Russell insofar as I admit nothing (*das Nicht*) as an objective reality that essentially is as it directly appears to be. And bracketing that objective reality is not a surd. We would be bracketing it from its being in the sense of being an objective reality! I have already argued several times that even nothing has being in the sense of being an objective reality (pages 54, 112, 123; see also 140). But even if I am wrong, self-

contradictory *qualified* objects, such as the existent and nonexistent cat, and closer to home, the existent and nonexistent nothing, are perfectly fine. Granted, objective reality can be interpreted as a merely conceptual or even merely nominal, either one is a *merely* representational kind of being. But on metaphysical ecumenicism, we do admit conceptualism and nominalism as abstractions from, or should I say bracketings of, and more generally parsings of realism. It is just that they have progressively less validity.

One might then object that ontologically bracketing the objective reality nothing (*das Nicht*), which is not even conceived or regarded as being in any sense in the first place, would still be a surd. For, so to speak, nothing is not there to be bracketed.

My reply is that this is confused. *Nothing in itself* is not and cannot be anything. *Qualified nothing* is a logically necessary object. And its *objective or representational reality nothing*, qua objective or representational reality, is not and cannot be nothing, even though nothing in itself is and must be nothing. In a qualified object, the qualification functions as an ontological bracket. For the being (if any) of the object in itself (if any) that is being qualified is disregarded. But the qualification also bestows qualified reality on the qualified object, and objective reality on its objective reality. And either of them can be ontologically bracketed by higher-level qualifications, and also by formal bracket signs / operators.

Note that nothing (*das Nicht*) is an object of thought that can be easily identified and counted. For there can only be one nothing. Thus we do not even need to identify it on the basis of its supposed property of nihilating (Heidegger 1970 / 1929: 339). This is much like the number two. There can only be one number two.

Existentialists sometimes speak of our anxiety or dread of nothingness, as if we were facing an impending doom. Perhaps if we even just *thought* about nothing, it might swallow us up! Well, that might scare and impress the undergraduates. But if there really were nothing, we would not even be here to be scared or impressed. We might even infer from the principle that "Nothing can come from nothing" (*ex nihil nihilo fit*) that since after all we are here in the world, nothing (nothing in itself) *never* was. For if it had ever been, we could not have come out of it to be here now. But it logically could never be anyway. If that sounds a lot like texts in *Alice in Wonderland*, your intuition is spot on.

In chapter 3, I shall use the brackets "<" and ">" to indicate ontological bracketing. Where "Milo" (Meal-o) directly refers to and connotes my qualified cat, which "is" my cat in itself, "<Milo>" still directly refers to and connotes that qualified object, and that qualified object will still "be" my cat in itself. But the expression now expressly *disregards* the question of the existence of its indirect referent, my cat in itself. If "Milo is in the kitchen" is

true, that is, directly expresses a qualified fact that "is" a fact in itself, that is, indirectly describes that fact in itself, then "<Milo is in the kitchen>" is exactly the same as "Milo is in the kitchen" as far as its direct referent and indirect referent are concerned (recall that all facts are objects in the wide sense). But the bracketed sentence now expressly disregards the existence of the fact in itself.

Ontological brackets are scope brackets, and we can use them anywhere we can use ordinary logical scope brackets in ordinary language or formal notation. However, note that if we bracket an existential quantified statement, we are suspending assertion not only of the existence of the objects the variable ranges over, but we are also suspending the question of the existence of any entity the *quantifier itself* may refer to or denote, such as Frege's second-level concept (property) of existence.

Thus we do not need Lejewski's merely veridical, that is, ontologically noncommittal, individual quantifier after all. For we can simply bracket the ordinary existential quantifier, thereby disregarding its ontological commitment. But since Lejewski's quantifier and our bracketed quantifier are intersubstitutable salva analycitate, we admit them both as distinct only in reason.

On metaphysical ecumenicism, our logical analysis of all merely veridical quantifiers, and more deeply and generally of all ontologically noncommittal quantifiers, as *bracketed* ontologically *committal* quantifiers, is not reductive or eliminative, but positively constructive. In fact, we will be rather ironically showing that ontologically noncommittal quantifiers *themselves* refer to entities. For they too are mapping functions that map truth-values onto arguments. (Hence the "veridical.") Once again I am using the term "function" in Frege's sense, i.e., to refer to a truth-functional (i.e. extensional) property that maps values onto arguments.

Just as with any other scope brackets, we can ontologically bracket over ontological brackets. We can nest or iterate any finite number of ontological brackets in a complete statement. The inner brackets are logically redundant but ontologically real functions.

For convenience, I shall use "bracket" to mean 'ontological bracket' in the rest of this book, unless I indicate otherwise.

Double / Dual Object Theories

My first presentation of qualified objects theory was called "Dual Object Theories of Identity, Existence, and Modality" (my 1987). The very title is paradoxical. For there are no "double" objects of perception or thought. —Or are there? This is not in the sense the drunk sees double. There are two main cases to consider in my phenomenology, and we have largely already done so.

First, are we presented with two objects, the object of perception of thought and its objective reality? No, not in ordinary direct perception. Ordinarily, we are given just one object. We are not directly presented with an object of perception or thought, and in addition, its objective reality as a second object. We are presented only with the object of perception or thought. It is our *theory* or *logical analysis* of the object of perception or thought that it consists of a formal reality and an objective reality. And so we do not cognize them unless we are thinking of the object of perception or thought *in terms of* that theoretical analysis. Thus we are presented with such a double object only if we are thinking of an object of perception or thought *as having* an objective reality. And then we *must* be presented with a double object, since we directly appear to be, and objects of perception or thought essentially are as they directly appear to be. And the two are discernibly different objects because the object of perception or thought has the formal reality of an object of perception or thought, while its objective reality can have any kind of reality or even no reality. An objective reality has the formal reality of an object of perception or thought if and only if it is itself a (lower-level) object of perception or thought. And if we directly think of it as having that formal reality, then it essentially has that formal reality. But we almost never do that, except in via antiqua philosophy.

Formal reality and objective reality are not 'real predicates' in Kant's sense. Objective reality is classificatory, since some but not all objects are objective realities. Recall that qualified objects have objective realities and objects in themselves do not. Formal reality is not classificatory, since some but not all objects are formal realities. All objects have formal realities, but not all objects are formal realities. Note that objective reality and formal reality are kinds of being as opposed to kinds of object. We may say they are special kinds of object which we may call ontological kinds.

Second, are we presented with two objects when we directly cognize qualified objects that "are' indirectly cognized lower-level objects? The answer is the same as before. Ordinarily, we are given just one object. We are not directly presented with a qualified object, and in addition, indirectly presented with a lower-level object. It is our *theory* or *logical analysis* of perception or thought that if it is veridical or illusory, it consists of two such objects. Thus we do not cognize them both as different objects unless we are thinking of perception or thought *in terms of* that theoretical analysis, or in terms of the ordinary distinction between objects of perception or thought and objects in themselves. These kinds of object, too, are really ontological kinds of being.

Thus our two kinds of double object involve four kinds of being. On metaphysical ecumenicism, we can assay them as ante

rem universals, in re universals, particular properties and classes of particular instances. In this respect, ontological kinds are no different from kinds of fruit or kinds of mineral. And of course all ontological kinds are mapping functions in Frege's sense.

Since everything is an object in the wide sense, ontological kinds are objects. They can be singled out in thought, and they are discernibly different from each other. Thus only one ontological kind at most can be nothing. And if any of them were nothing, it would surely be the kind of reality (or ontological status) of *being* nothing. And as *being* nothing (being *das Nicht*) is a kind of being, it cannot be nothing *qua kind*, since kinds of being are not nothing. Thus the *kind* of being, nothing, exists as an ontological object. To be sure, nothing can be *of* that kind, since there can be no nothing (no *das Nicht*) in itself. There can only be qualified nothing; and that is a perfectly fine qualified object. But it is not nothing. It has formal reality, and it is even mind-independent. Likewise, there is the ontological kind of logically impossible things. There is such a kind, but no object in itself can fall under it. In fact, the kind of nothing is a sub-kind of the kind of impossible beings. And there is the ontological kind of logically contingent nonexistents.

If, per impossibile, nothing (*das Nicht*) *were* an object, then it *would* fall under the kind, nothing. But since it is impossible after all, it is not and cannot be there to fall under the kind, nothing. In fact, it is not there to fall under any kind of kind.

Again, ontological kinds are mapping functions in Frege's sense. And those last three kinds, nothing, impossible things, and contingent nonexistents, are extensionally identical functions in the actual world. For they all map the truth-value of falsehood false onto every object. But they all have different intensions. Also, since the four modalities are interdefinable, the three kinds, *necessary* beings, *contingent* beings, and *possible* beings, exist if and only if the kind of *impossible* beings exists. For logical analysis is positively constructive, as we shall see in chapter 3.

In qualified objects theory, we actually have not just a dual object of perception or thought, but a multiple one. For we can discern an object of perception or thought as a whole from both its formal reality and its objective reality, its not being nothing, and its being mind-independent. This multiplicity is almost never directly presented, but is a matter of logical analysis. Still less are we ordinarily presented with an even more multiple object: an object of perception or thought, its formal reality, its objective reality, the object in itself that it "is," and all the many kinds of reality of each object. Perhaps only in my philosophy! And they were all directly presented in thought to you when you read this paragraph.

Butchvarov's rejection of dual or double reference in his theory of objects and entities theory applies equally well to my

theory of qualified objects and objects in themselves. Here I rewrite his view in terms of my theory:

> I have argued that to [indirectly] single out an [object in itself] is necessarily to single out [a qualified object], though the converse is not the case. A statement in which [indirect] reference is made to an [object in itself] is necessarily one in which reference is made to [a qualified object], though the converse is not the case. This does not mean that a referring expression has a double reference. The [object in itself a qualified object] may happen to ["be"] is not something additional to the [qualified object]; it cannot be singled out and referred to separately and contrasted with the [qualified object]. (Butchvarov 1979: 70)

Surely this is meant to apply only in ordinary, pre-philosophical cases of reference. For when he presents his logical analysis, he must differentiate between objects and entities in his thought and discussion, since they are different ontological kinds (he deems his objects 'proto-ontological'). And when he puts them together in his analysis of a *whole* ordinary presentation or reference, then he has and must have a multiplicity of things, much as I do.

In fact, Butchvarov says "There are exceptions" (1979: 70). He says that his distinction between objects and entities sometimes "emerges even in nonphilosophical thought" (1979: 70). His main examples are the main puzzles that give rise to his distinction: thinking about things we believe do not exist, and contexts of propositional attitude (referential opacity), including modal contexts. Here we are as one. But I believe my distinction between qualified objects and objects in themselves is phenomenologically the more natural one. His objects are private, nonrecurrent, and fleeting. They cannot be singled out twice. Thus they are parsings of presentations of my public, timeless qualified objects, which can be directly presented many times to many people at many times. Thus on metaphysical ecumenicism, we can and must admit his objects as distinct only in reason from mine. They are formally distinct from my qualified objects with a foundation in reality in my qualified objects, in that mine are the better foundation.

Likewise, Butchvarov's being relation (where an object is an entity) and my being relation (where a qualified object "is" an object in itself) are relations that are distinct only in reason, with a foundation in reality in my being relation. (He does not admit relations as entities, so for him this is just relations talk. Also, my double quotes do not connote fictionality, but serve only to identify

my term.) They cannot be identical relations because they do not have the same sorts of relata. But we will offer pairs of mutually corresponding logically equivalent interpretations of ordinary statements, such as "The Morning Star and The Evening Star are the same planet." He will interpret that statement in terms of two objects' being the same entity, and I in terms of two qualified objects' "being" the same object in itself. But, so to speak, the ontological assays themselves cannot be logically equivalent. For they are not even co-extensive. This is not *only* because his objects and my qualified objects are mutually exclusive domains. (His objects are contingent, nonrecurrent and cannot be singled out or referred to twice, while my qualified objects are necessary beings and can be singled out and referred to indefinitely many times; his objects are more like *presentations* of my qualified objects.) It is not even *only* because I admit qualified relations and relations in themselves, qualified selves and selves in themselves, qualified causes and causes in themselves, and many other qualified objects and objects in themselves, for which he would not admit any corresponding objects or entities. (That is because I admit many objects of thought that can "be" purely rational / intelligible objects in themselves, for which he would not admit any corresponding objects or entities.) Thus his metaphysics ends up being much like Hume's. (Butchvarov 1979: 255 says, "the Humean theory I have sketched.") It is *also* because qualified objects *themselves* can be indirectly singled out and referred to by phenomenologico-semantic ascent to *higher-level* qualified objects. For there can be no higher levels of Butchvarov's objects that are ways of indirectly singling out lower-level objects. For his objects can only present entities, not other objects. For they can only be singled out directly, and cannot be singled out indirectly via other objects or via any other sort of medium. Thus our being relations are deeply different. But their basic role in explaining informative identity and existence judgments is the same. And the credit for this very new conception of a phenomenological solution to the puzzles of informative identity and existence judgments is entirely due to Butchvarov. If there are any other earlier origins, I am unaware of them.

Hume's and Russell's fictionalist assays of ordinary things as bundles of impressions or as temporal series of classes of sensed and unsensed sensibilia are based on a very different use of "is," the "is" of class membership. Butchvarov's great contribution is to add a fifth basic use of "is," the "is" of being, to the four basic uses in modern classical logic: the "is" of identity, of existence, of predication, and of class membership. In terms of *logical* position, I am merely replacing his objects with my qualified objects, and his entities with my objects in themselves. But in terms of *ontology*, our ontological kinds are deeply different.

Actually, there is a multiplicity of *being relations*. For *our* two respective being relations resemble each other very closely. And as Butchvarov points out, a resemblance is a generic identity. More precisely, he says "there is no relation of resemblance, unless by it we mean numerical identity (partial [i.e. generic] or complete [i.e. specific] of properties" (Butchvarov 1989: 68). And if our respective being relations are not identical, surely they are at least generically identical. Thus there is a *third* being relation, a *generic* being relation, which we implicitly have in common. And this generic being relation is a determinable of which there logically can be indefinitely many determinates in overlapping ontologies. I have only discussed two determinates, Butchvarov's being relation and mine. Of course, he admits only generic *qualitative* identities (Butchvarov 1966: 64), while I admit generic identities *in general*, that is, in every case where there exists a genus of some kind.

We are now in a position to see some remarkable things about Butchvarov's original passage, which is of course about his own theory of objects and entities:

> I have argued that to single out an entity is necessarily to single out an object, though the converse is not the case. A statement in which reference is made to an entity is necessarily one in which reference is made to an object, though the converse is not the case. This does not mean that a referring expression has a double reference. The entity an object may happen to be is not something additional to the object; it cannot be singled out and referred to separately and contrasted with the object. (Butchvarov 1979: 70)

There is both a conflation of things that ought to be kept separate, and an equivocation of things that ought to be distinguished. First, objects ought to be *directly* singled out and referred to, and entities ought to be *indirect*ly singled out and referred to, much like my qualified objects and objects in themselves respectively. But Butchvarov rejects dual reference and thus can make no distinction between direct and indirect reference, nor even between direct and indirect singling out. This puts his objects and entities on the same phenomenological level, like seeing apples and oranges on the same table. That is the conflation. Second, there is also an equivocation. This becomes clear as soon as we bring the traditional distinction between real distinction and distinction in reason to bear. "The entity... is not something additional to the object," and "cannot be singled out... separately and contrasted with the object" in the sense of being really distinct from it. For

Butchvarov's distinction between objects and entities is a poster child for distinction only in reason. It is a paradigm case. If that is not a distinction only in reason, then what is? And things that are distinct in reason are different things, even if they are not really distinct. In fact, Butchvarov's whole theory depends on it. He insists that the distinction is merely conceptual, and that entities are mere conceptual classifications of objects. He insists that objects and entities cannot be the same things. He insists that objects are mind-independent, while entities are mere classifications. More deeply, he insists that objects can only be singled out once, while entities must be capable of being singled out indefinitely many times. In my theory, objects in themselves can only be singled out *via* qualified objects. In that sense, they "cannot be singled out... separately and contrasted with the object." Yet they are very much "something additional" because they are different objects that we can and must distinguish in philosophy. Indeed, a world without objects in themselves would be a delusional world in which no qualified object "is" an object in itself. Butchvarov's entities are not something additional only in the sense that they are merely conceptual, and are therefore not really there. Of course, they are not *merely* conceptual, in the sense that they must be objective and reasonable classifications; but that difference makes no difference. They are still not real things. But his entities are additional to objects in that they are different from his objects. And Butchvarov would be the first to tell us that his objects and entities are not identical even when his objects are his entities in his being relation!

In the ontological order, the being relation as it obtains between the qualified object The Morning Star and the planet in itself Venus is logically contingent. The Morning Star logically could have "been" Jupiter in itself, an optical illusion, or even a mass hallucination (delusion). But in the cognitive order, precisely because this logically contingent being relation *does* happen to obtain between The Morning Star and Venus, it follows that, *in actual presentations* of Venus *via* The Morning Star, Venus is necessarily and even essentially *identifiable* in perception in the morning only through The Morning Star. And that gives us not only direct rigid designation of The Morning Star, but also indirect rigid designation of Venus. And in this sense, which belongs only to the cognitive order, we may say that The Morning Star and Venus *are* distinct only in reason. In fact, they are formally distinct with a foundation in reality in Venus, since objects in themselves are more real than qualified objects. But for Butchvarov, the foundation in reality goes in the opposite direction. It is in his objects, not his entities. For even though he holds that his objects do not exist as such, they exist in the sense of not being nothing, and even in the sense of being mind-independent (Butchvarov (1979: 253–254).

These two senses of "being" are not only fair game and perfectly legitimate, but basic. In fact, his objects are the only things with any substantive content he has. For his entities are conceptual beings that are at best only analogous to real beings. They have no kernels of reality other than, ironically, his objects. In contrast, my objects in themselves are things that exist from no point of view, but nonetheless can be rationally illuminated by weighing and considering all directly presented ways to cognize them. The infamous, oxymoronic "view from nowhere" of objects in themselves is merely indirect. We can and do arrive at it, to the extent possible, by considering all the views from everywhere that we can, that is, via all the presented qualified objects we can.

Essence

Husserl was greatly concerned with essence in his pursuit of phenomenology. And we have discussed twenty-one essential features of objects of perception or thought. But what about the essence of objects in themselves? Can phenomenology help? Yes, but the phenomenology of objects in themselves is indirect, since they can only be presented via qualified objects.

Essence is said in two main ways. It primarily means being (Latin *essentia*, interpreting Greek *ousia* as being). It also came to mean (essential) nature. Following this tradition, I shall use the word primarily to mean being, and secondarily to mean nature. It should be clear when I am using the word in which way. In this section, I shall use it to mean being in contrast to nature. I shall argue that essence (being) and nature are different but distinct only in reason, and for an "essence (being) if and only if nature" thesis.

We discussed some main kinds of being in the preceding section. And a kind of being is a kind of essence. Thus the ontological kind of objects in themselves is the essence of objects in themselves. But surely that does not advance the analysis, but merely repeats the object of inquiry. More precisely, to define an essence as an ontological kind is a valid definition by genus (ontological) and difference (kind). And that does advance the analysis a little.

The essence or being of a thing is not the same as its nature or form. An essence is ontological, and a nature is metaphysical. An essence is the kind or kinds of being a thing has. A nature is the kind of thing a thing is. Ontology concerns whether a thing is. A nature concerns what a thing is on the general level of metaphysics, and is traditionally called a category. A category is the highest genus (summum genus) of what a thing is. In contrast, an essence can be transcategorial, that is, had in common between things of

different categories. If I am right that all things have being in the sense of not being nothing, and also in the sense of being mind-independent, then those two kinds of essence (being) are trans-categorial across all objects in the wide sense.

Qualified objects do not divide into different metaphysical categories. Thus their kind of essence or being, formal reality, is not transcategorial. But their objective realities belong to all kinds of different metaphysical categories, and even include nonexistents, impossibilia, and nothing (*das Nicht*). Thus objective reality is only metaphysically transcategorial across all metaphysical categories, but ontologically transcategorial across all ontological kinds. Higher-level objective realities even include qualified objects and their objective realities! *Totally real* being is transcategorial, but only for objects in themselves. For all the categories of objects in themselves, such as minds in themselves, bodies in themselves, properties and relations in themselves, and so on, are totally real.

It might be thought that being a qualified object and being an object in itself are not natures (categories), but kinds of being. For all qualified objects are essentially not nothing and essentially mind-independent, but essentially not independent of the logical possibility of minds, while all objects in themselves are essentially all three. The answer is that these two basic kinds of object are both natures and essences. For a qualified object is defined not as 'having the first two kinds of being but not the third', but as 'an objectual way that a thing logically can be presented'. And that definition both implies and presupposes that qualified objects have the first two kinds of being but not the third; but that is not what the definition states the thing is. Likewise, an object in itself is defined not as 'an object that has all three main kinds of being', but as 'an object that is not a qualified object'. And that definition both implies and presupposes that objects in themselves have all three kinds of being; but that is not what the definition states the thing is.

Insofar as a thing can have an essence (can have being) if and only if it has a nature, essence and nature are different but distinct only in reason. We may say "no nature, no being," and also "no being, no nature." Thus we may call the twenty-one *essential* features of qualified objects also twenty-one *categorial* features of theirs. For "essential to qualified objects" means both logically necessary to their existence (being), and part of what they are.

Descartes holds that minds and bodies belong to different categories, but have the same kind of being, *substantial* (logically independent) being. Another philosopher might hold that minds and bodies belong to different categories, and *also* have different kinds of being, with bodies having substantial being, and minds being logically dependent on bodies. This shows that ontology and metaphysics are different, though intimately related, enterprises.

Note that "nature if and only essence (being)" is a very general synthetic *a priori* thesis, and does not specify either which kind of nature anything has or which kind of being anything has.

A theoretical definition is a definition that states *what a thing is.* This is as opposed to a stipulative, precising, or other sort of definition (see Copi 1978: ch. 4; R. Robinson 1950). A theoretical definition must be factually informative if it is not to be empty and tautological. Thus the defining and defined terms must express different qualified objects. In *a priori* philosophy and other *a priori* fields, these objects will be different but distinct only in reason. Likewise for a lesser kind of theoretical definition that only states something that the thing is *logically equivalent to.*

My theoretical definition is that the essence of a thing is its nature. It is the lesser kind of theoretical definition. For essence and nature are different objects, but "nature if and only if essence" is an *a priori* truth. To be sure, we can ignore the difference between nature and essence in casual talk, since they are logically equivalent in the wide sense that includes the synthetic *a priori*. And that is why we can theoretically define essence as nature. But the concepts and thereby the objects remain distinct only in reason. And in that sense, the essence (being) of a thing is *not* its nature. It might then be argued that all theoretical definitions are of the lesser kind. But I think we sometimes do state what a thing is.

A non-lesser theoretical definition satisfies all five of Aristotle's rules of definition. Copi (1978: 154–158) states them as rules only for definition by genus and difference, but I think they apply more deeply and generally to all theoretical definitions; definition by genus and difference is only one main kind. I will state the rules in my own way. A non-lesser theoretical definition states what a thing is. And if we successfully (1) state what a thing is, then our definition is (2) neither too broad nor too narrow, (3) neither too vague nor too precise, (4) not ambiguous, and (5) not negative where it could be positive.

As to rule (5), there can be, and can only be, negative theoretical definitions of essentially negative things, such as privations and (other) absences, nonexistents, and impossibilities. That is a trivial tautology. Perhaps rule (5) can be restated: a theoretical definition should be neither too positive nor too negative, but just right, for the subject-matter in question. In fact, rules (2), (3), and (5) are all 'golden mean' or "Goldilocks" rules. If, perhaps impossibile, there were ambiguous things in reality, and not just in thought or language, then rule (4) would be a Goldilocks rule too, namely: theoretical definitions should not be neither too ambiguous nor too univocal, but just right.

So far, I have only explained how the term "essence" is traditionally used. So to speak, I have only explained the nature of

essence. I have explained only what essences are, not whether they are, or if you please, what they would be if there were any. But are there any essences? Are they entities? Or do entities merely have essences in concept or in name only? In our theory of objects, the answer is simple. They are objects in the wide sense at the very least. For they are not nothing. For they are different, so that at most one could be nothing. And there is no reason to pick out one as the one that is nothing. Thus they all exist in the sense of not being nothing. And by our usual argumentation, they are mind-independent. And from there it is easy to argue that at least some are totally real. For if they are essences of objects in themselves, then they can only be essences in themselves, that is, totally real.

In theory of qualified objects, there are qualified essences which may "be" essences in themselves. There is no doubt that there are *qualified* essences. They are directly presented in thought, and sometimes even in perception (the hue of this red color). And qualified essences essentially are as they directly appear to be. In at least some cases, a qualified object and the object in itself it "is" are so virtually the same that to borrow Frege's words, it is "utterly transparent" "to our reason" (Frege 1974 / 1884: 115) that the one veridically "is" the other. In at least some cases, this instantiates to qualified essences and the essences in themselves they "are" as well. And that is how phenomenology applies indirectly to essences in themselves, namely, via qualified essences.

For Butchvarov, the essence of an object is not any kind of being it has, since he holds that his objects are prior to any kind of being. Instead, for him the essence of an object is the entity it is, or if it is not an entity, the entity it would be if it were an entity (Butchvarov 1979: ch. 5). That is a brilliant and ingenious move. And surely it is his best option. But that kind of essence is merely analogous to essence as a kind of being. For his entities are merely reasonable classifications of his objects into classes, and are thus only analogous to real entities. Thus I cannot accept his definition of essence. They are fictions because they are his entities, or the entities his objects would be; and his entities are fictions. His essences are mere reasonable conceptual classifications, since they *are* his entities; and that is what his entities are.

In our theory, the essence of a qualified object is not correspondingly the object in itself it "is" or may "be." Instead, a qualified object's essence is its formal reality conjoined with its objective reality. For those are the two kinds of reality or being that a qualified object has. More deeply, a qualified object's essence is two kinds of being conjoined: not being nothing, and being mind-independent. And most precisely, the essence of a qualified object includes all twenty-one *essential features* of qualified objects. They are not only its essence (being), but its nature as well. Thus its

essence and nature are distinct only in reason, just as they should be.

By parity of reason, I find Butchvarov mistaken about what the essence of his own objects is. The essence of an object of his is not the entity it is or may be, as he claims. Instead, it is what can only be described as the object's *essential features*, such as being private, nonrecurrent, mind-independent, and logically capable of being entities. (I do not include an object's being momentary as an essential feature. For it logically can exist for years, or even throughout temporal eternity, if it is continuously singled out only once.) This states what they are regardless of whether they are entities via his being relation. This is in keeping with Husserl's and Spiegelberg's conception of what phenomenology is: the intuitive, *a priori* description of the essential features of the very phenomena themselves, thus totally *disregarding* and bracketing them *away* from what things in themselves they are or may be. Butchvarov totally violates this conception. For he goes in the opposite direction and makes essences totally a matter of what *entity* an object is or may be. My approach also has two further merits. First, it gives all of Butchvarov's objects the same essence, as opposed to their all having very different essences, namely, the very different categorial sorts of entities they are or may be. And second, it gives all his objects essences they actually have, as opposed to essences which are entities they may or may not be. For example, his objects are essentially nonrecurrent whether they are entities or not.

Another problem is that Butchvarov cannot admit essences of his *entities*. For there are no higher-level entities *they* are or may be. That is, his being relation has no progressive series of levels, but only one. His objects are or may be his entities, and that is it!

Yet another problem is that Butchvarov's being relation has only one relatum: objects. For there are no entities there to be the second relatum. But I still admit his entities into metaphysical ecumenicism. For they are objective, reasonable classifications and thus are not nothing; and his logical analysis of ordinary statements is logically equivalent to mine and to others. But my objects in themselves are totally real entities. And on positive construction, realism wins. See chapter 3 on the ontology of logical analysis.

Butchvarov's objects qua objects are entities in two of *our* senses or kinds of being: they are not nothing, and they are mind-independent. These two kinds of being are what the essence of his objects is, in the sense of essence as being. Butchvarov overlooks this because he holds that existence is classificatory; and all objects in our wide sense have these two kinds of being. They are the only two main kinds of being our qualified objects have. And that makes sense because our qualified objects and Butchvarov's objects play the same role of being the primary and direct objects of cognition,

and thereby of explaining factual existence and identity judgments. Thus when Butchvarov makes essences the entities his objects are or would be if they were entities, he paints himself into a corner that he need not have. But we can easily unpaint him. For his objects implicitly have the very same two main kinds of being our qualified objects have: not being nothing and mind-independence.

Are there any essences in themselves? Are there any essences in themselves that objects in themselves have?

Protagoras, Nāgārjuna, and Sartre say no. They might not even admit essences for qualified objects, much less for objects in themselves. But like radical relativisms in general, their views are self-defeating. If nothing logically can have an essence, then everything is *essentially essenceless*. If there can be nothing that anything is, then *that* is what everything essentially is. If everything is essentially relative, then everything is—essentially relative! Thus to paraphrase Bradley, they are brother metaphysicians with their own rather negative or relativistic essences (kinds of being).

See Lao Tzu (1972: § 14) on "The form of the formless."

If everything is essenceless, relative, and/or illusion or delusion, did that total uniformity happen by chance? Is it merely a very remarkable coincidence? Then might not only *some* ordinary stones (as opposed to dreamed, hallucinated, or imaginary stones) be unreal? —Which stones would they be? And if exactly one stone is an illusion of Maya, would that not be essentially the case? Note that this is not at all the epistemological question of what evidence we have, nor the cognitive question of how we could tell the one illusory stone apart from all the veridical stones.

Is not the contingent *essentially* contingent, and even the accidental *essentially* accidental? And if there were ontologically or metaphysically relative entities, would they not be essentially relative? See my (2016 / 2012: 69).

If there are negative or relativistic essences, is it not a positive fact that negative and relative things essentially have them? And this positive fact is itself essentially the case. And from there it is but a short step to admitting positive essences for ordinary things as usual. All except for essentially negative things, such as privations. Even "the form of the formless" seems positive.

This is not mere semantics. It is the logical self-defeat of radical relativism about essences. And that is just an instance of the deeper, more general self-defeat of all radical relativisms.

Sartre's radical relativism is even more self-defeating than that. He denies that material things have any essence. Yet he says that people (moral agents) are radically free to make choices. He bases this on our lack of essence in the traditional Aristotelian sense. He says this is precisely what makes us radically free. He infers that insofar as we have a nature (!), we (therefore can only)

make it ourselves through the historical cumulation of our choices. (If self-made essence consists of habits of choice we develop, this is very Aristotelian. Aristotle calls habits our "second nature," and says we are responsible for the habits we develop.) In any case, my criticism is that ironically, he makes moral agents essentially free in very much the traditional sense of essential nature. But then he admits *minds with essences* and *bodies with no essences*. And that is absurd. For would not bodies be essentially *choiceless*, i.e., essentially unable to make choices, i.e., essentially not free moral agents, i.e., essentially without any moral responsibility? Minds with essences and bodies with none? —Really? They have *opposite* essences! If this is not exactly Sartre, then call it neo-Sartre.

My conclusion is that every object in itself has an essence in itself. And on my theory, we can easily say many things about their essences in themselves. Objects in themselves are *essentially objects*, and are *essentially not qualified*. Like all objects, they are *essentially not nothing*, and *essentially mind-independently real*. And all and only objects in themselves are *essentially totally real*, that is, independent even of the logical possibility of minds. More specifically, they *essentially have only formal reality and no objective reality*. Finally, objects in themselves are by definition *essentially objects that are not ways that things logically can be presented*. That is the ontological positive genus (objects) and negative difference (not ways) of their essence (kind of being). It is also their nature. I discuss ontology (essence or being) further in chapter 2, and metaphysics (categorial nature) further in chapter 3.

Rigid Designation

It should already be clear that in qualified objects theory, object-names directly refer to and therefore rigidly designate the qualified objects that are also their connotative meanings. It may be less clear whether object-names ever do or can rigidly designate their indirect referents (if any), that is, the lower-level objects their direct referents may "be."

To begin with, I accept the principle of the identity of indiscernibles. And on it, every object in the wide sense has its own unique set of properties, including relational properties. Thus in principle, every object in the wide sense can be rigidly designated, at least by a being who knows all properties of all objects, and who can tell all objects in the wide sense apart and assign them uniquely referring names on that basis. Such a being can rigidly designate all qualified objects via direct reference, and all objects in themselves via indirect reference. Indeed, such an omniscient being would not need to refer to anything in order to learn anything about the world,

and in fact cannot learn anything new about the world. And even we finite and limited cognizers seem able to rigidly designate the number two in itself as the only possible even prime number in itself. But this is not helpful here. For a theory of indirect rigid designation that will work for us finite and limited language users *in general*, and not just for obviously unique objects in themselves like the number two, we need to look at concepts like singling out, presentation, and haecceity (thisness) instead.

I shall discuss Kripke first, then Russell, as stepping-stones to the theory of qualified objects. Then I shall discuss the theory of qualified objects. I shall distinguish between direct and indirect rigid designation, based on my deeper and more general distinction between direct and indirect presentation in perception and thought.

In *Naming and Necessity*, Kripke says:

> Let's call something a [weak] *rigid designator* if in every possible world it designates the same object, a *nonrigid* or *accidental designator* if that is not the case. Of course we don't require that the objects exist in all possible worlds. Certainly Nixon might not have existed [and we rigidly designate Nixon by the name "Nixon"].... A rigid designator of a necessary existent can be called *strongly rigid*. (Kripke 1980 / 1972: 48, Kripke's emphasis)

In light of Kripke's discussion of Donnellan's distinction between referential description (successfully singling out an object as *this* object, regardless of whether it satisfies the definite description that is given) and attributive description (discussing the object that satisfies the definite description, whatever object it may be), it seems to me that we may as well call rigid designators *referential*, and nonrigid designators *attributive* (Kripke 1980 / 1972: 25, 25n.).

Kripke explains that he is discussing names in the sense of ordinary proper names, as opposed to both definite descriptions (Kripke 1980 / 1972: 24) and Russell's logically proper names, which he declines to discuss (Kripke 1980 / 1972: 27 n.). His main thesis is that ordinary names are rigid designators (Kripke 1980 / 1972: 48–49). He explains that for him, merely possible worlds do not exist, but are only ways the actual world might have been (Kripke 1980 / 1972: 18), and that he is not discussing names used by merely possible people in merely possible worlds, but actual names used by actual people in the actual world (Kripke 1980 / 1972: 77). I agree that there are no merely possible objects.

I shall not discuss Kripke's "causal chain" theory of reference except to say that causal chains are logically contingent,

and therefore logically cannot imply even weakly rigid designation of the same object in all possible worlds in which the object exists, and to add that if anything, causal chains are even less able to ground strong rigid designations of necessary objects such as the number two. Kripke also overlooks that Russell has his own rather sophisticated causal theory of names, which plays a valid but limited and secondary role in explaining many ordinary names, in addition to Russell's two main theories of names: acquaintance for logically proper names, and definite description for all ordinary names not under his causal theory. See my (2003 / 1996: 296–297).

Russell and I both tend to take an ecumenical view of the roles of names. As we just saw, Russell admits at least three theories of names as applicable in different cases. And I admit, in addition to Russell's three theories, the later Wittgenstein's theory of indefinitely many sorts of uses of names in language-games (see my 2003 / 1996: 285–286). The question is not which rival theory of names (acquaintance, definite description, cluster of alternative descriptions theory, causal theory, language-game theory) is the 'true' theory, but which theory or set of theories properly or best applies in *each particular case* of a name (my 2003 / 1996: 285. What is the test of which theory of names best applies when? "Here we must look... to things like context and speakers' intentions" (my 2003 / 1996: 286). This may be called *name theory ecumenicism*. But we are concerned only with names that occur as logical subjects or predicates in true or false statements, and specifically with their direct referents and their indirect referents. This too is a use of names, and a very basic one. The game of singling out, naming, describing, and talking about objects is played! It is basic to ordinary life, science, and philosophy alike.

As to any thought of rejecting logically primitive notions like acquaintance (direct cognition) or thisness, we can use Kripke's own words against him, since he says that the admission of logically primitive states in general "may in a sense be irrefutable" (Kripke 1982: 51).

I criticize Kripke's notion of a semantic referent in my (2003 / 1996: 287).

While Russell does not use Kripke's term "rigid," Russell's logically proper names are weak rigid designators. That is, they refer to the same particulars in all possible worlds in which those particulars exist. There are five reasons why this is so, and all of them apply to qualified objects as well as to Russell's sense-data (sense-particulars) and to Russell's concepts, which Russell defines as universals with which we are directly acquainted.

(a) Due to a sort of ontological argument, it is logically impossible, in the wide *a priori* sense of logical impossibility, for a logically proper name to fail to denote. Russell gives at least

twenty-four versions of this sort of argument, which I collectively call Russell's transcendental Parmenideanism, or view that for us to name or think of a thing, the thing must be there to be named or thought of. I list twenty-three of his arguments in my (2023 / 2015: 68–75; 1990: 400–406), and I describe his twenty-fourth argument in my (2003 / 1996: 137–138). On transcendental Parmenideanism, see also my (2023 / 2015: 56, 215, 220, 543–544, 546; 2003 / 1996: 137–139, 141, 249, 250). This sort of argument applies to qualified objects theory as well. For it is logically impossible for a logically proper name to fail to refer to a directly presented qualified object that is its direct referent.

(b) To change the particular is to change the meaning of its name. This semantic fact logically implies that for Russell, logically proper names rigidly designate. David F. Pears saw reason (b) many years before I did (Pears 1972: 37–38, 41). Likewise, in qualified objects theory, a qualified object that is the direct referent of a name is also the connotative meaning of the name.

(c) One knows the meanings of the names of the particulars one is acquainted with (Russell 1971e / 1918: 202–3). And it is logically impossible that one can know *m* if one might be mistaken about *m*'s identity. Those two epistemic facts logically imply that for Russell, logically proper names rigidly designate the particulars we are acquainted with. Pears speculated about reason (c) as well (Pears 1972: 42). Likewise for directly presented qualified objects.

(d) In simpler, deeper, and purely cognitive terms, we are directly acquainted with what logically proper names denote; and acquaintance is direct cognition of a thing exactly and essentially as it appears to be. This is essential feature (3) of qualified objects. Recall that Poincaré's intransitivity of indistinguishability problem was solved by phenomenological ascent earlier in this book.

(e) Russell's logically proper names do not merely denote; they also *refer*. In terms of Donnellan's distinction between referring and attributive uses of expressions, they are certainly not attributive! For Russell, the logically proper name "this" does not mean "the sense-datum now before me, *whatever sense-datum it may be*." Quite the opposite, it singles out *this specific* sense-datum as opposed to any others (see Donnellan 1972). In fact, Russell's logically proper names cannot describe at all, either attributively *or* referentially, but must refer. For they simply have no descriptive content. That Russell's term is "denote" does not detract from this. We must look not to his *term* "denote," but to how he *uses* it in the case of logically proper names as opposed to that of descriptions, and as opposed to ordinary names used as covert descriptions. And in qualified objects theory, a name directly refers to a qualified object, and not via any description. That the qualified object itself

may have descriptive or describable content has nothing to do with it. Direct singling out is immediate, i.e., not mediated by a description, concept, or anything else. And once again, singling out is prior to any concept formation.

Burge argues for reason (e) by appealing to reason (b) as follows: "Genuinely singular expressions could not fail to refer; for their 'meaning'... was their referent" (Burge 1983: 80). Indeed, "The over-arching unstated motive of Russell's approach was to produce a semantical theory purely in terms of reference, dispensing with Frege's notion of sense" (Burge 1983: 80). Again, Burge sees that Russell's descriptions implicitly make "reference... to attributes" that are their constituent universals (Burge 1983: 80).

Thus Russell's logically proper names of sense-data (i.e. sensed sensibilia) are rigid designators in the weak sense. For they are logically contingent. In possible worlds talk, they do not exist in all possible worlds. But Russell's logically proper names of *concept*s, by which he means "universals of which we are aware" (Russell 1974 / 1912: 52), that is, "with which we are acquainted" (Russell 1974 / 1912: 58, 59), are rigid designators in the strong sense. For his universals are timeless (ante rem) and in all possible worlds. For Russell, universals "*have being*" in the "unchangeable" "world of being," even they have no instances in "the world of existence" (Russell 1974 / 1912: 100, his emphasis). And what is logically contingent is not the universal, but its instantiation in the world of existence. The universal is like a logical possibility in that it is logically possible for it to be either instantiated or not. But it is not a *mere* logical possibility. Far from it! Even universals like *unicorn* and *round square* have being in the world of being.

The chief difference between Russell and me is that he holds that names divide into logically proper names and ordinary names, while I hold that all names are logically proper names of qualified objects. The concept of a qualified object is deeper and more general than Russell's concepts of a sense-datum and of a concept (universal with which we are acquainted). For there are qualified particulars and qualified universals alike.

But except for the different relata (sense-data and concepts for Russell, qualified objects for me), Russell's acquaintance relation is the same as my direct presentation relation. For we both simply mean presentation that is not mediated by any concept or description, or more generally by any object in the wide sense.

Again, I accept a Russellian principle of acquaintance, the principle of presentation, on which we understand a statement if and only if we are directly presented with the qualified fact it expresses, including direct presentation of all the qualified objects its logical subject(s) and logical predicate express, on at least one parsing of the qualified fact into qualified objects.

When qualified objects are directly presented, they are directly singled out and directly identified in cognition as the very objects they are. And that is why names and referring descriptions of them are direct rigid designators in the weak sense. In fact, names and referring descriptions of qualified objects, as opposed to their logically contingent presentations, are direct rigid designators in the strong sense as well. For all qualified objects exist in all logically possible worlds. For they are logically possible objectual ways that things can be presented. (Thus qualified objects are not merely possible objects, but are actual objects in the actual world.)

Donnellan applies his terms "referential" and "attributive" only to linguistic descriptions. But surely their deeper and more general application is to phenomenological presentations. For I can *think* attributively about the murderer, whoever s/he may be, and *think* referentially about *this* person as the murderer, without using language. I can even *see* the murderer, whoever s/he may be, if I only catch a glimpse from behind as s/he commits the murder. Compare Eubulides' The Hooded Man. And this phenomenological application of Donnellan's distinction is just what grounds its linguistic application. Qualified objects are phenomenologically either referential or attributive in thought, and in all direct presentation. And that explains how it is possible for descriptions to be referentially or attributively used in language—at least if we are thinking while we are talking!

There is a mix and match matrix of many classifications: direct or indirect / referential or attributive linguistic description; direct or indirect / referential or attributive nonlinguistic cognitive intending via some nonlinguistic property; and direct or indirect singling out an object as an individual without the medium of any linguistic description or nonlinguistic property. This gives us three senses of "direct" and "indirect." In the third sense I described, some objects in themselves (or other lower-level objects) that are *indirectly* presented in our usual sense of being presented via directly presented *qualified objects*, are *directly* presented in the just-described third sense of being presented *without the medium of any linguistic description or nonlinguistic property*. And that is perfectly fine. In fact, it happens every time the directly presented qualified object does not indirectly present the lower-level object via a qualified description or property. Again, singling out (direct *or* indirect) is logically prior to concept formation—which is in turn prior to description or classificatory attribution.

Our mix and match matrix allows us to discern various genera or generic classifications we might otherwise overlook. For there will be genera of singling out and of attribution with mix and match species defined by differentiae such as direct or indirect, cognitive or linguistic. And direct cognitive singling out is logically

prior to all the rest. Note that singling out is prior to description and to classificatory attribution, cognitive is prior to linguistic, and direct is prior to indirect.

Direct presentations of qualified objects are always cognitively referential as opposed to attributive. For I directly single out a qualified object as *this* qualified object, not as a described or attributed object, whatever it may be. And names of directly presented qualified objects are rigid designators. What else could they be? They are *direct* rigid designators, meaning that their rigid designation is not via a higher-level qualified object. They are weakly rigid if they designate the *presentation* of the qualified object, and strongly rigid if they designate the presented *qualified object*. For a *presentation* to us is logically contingent, hence is not in all possible worlds; but a *qualified object*, presented or not, is logically necessary, hence in all possible worlds.

Indirect presentations are always veridical or illusory, since by definition nothing is there to be indirectly presented in a delusion. Indirect presentations are always of the next lower-level objects. They logically can be nonlinguistic, but logically must be *cognitively* either referential or attributive. In fact, I usually use no language. I can referentially think of the very object of perception I dreamed of last night. That is an indirect purely cognitive presentation of a level 1 qualified object via a level 2 qualified object without the medium of a description, concept, or property. I can also attributively think of the scary object of perception, whatever it was, that I dreamed of last night. That is a level 1 qualified object that is indirectly presented via a level 2 qualified object with the nonlinguistic medium of a concept or property. The directly presented object is the *cognitive designator* of the indirectly presented object. It is *rigid* if it is either cognitively referential or veridically based on unique necessary properties.

Cognitive rigid designators can be either weak or strong. They are weak if they rigidly designate the indirect *presentation* of the indirectly presented object as opposed to the indirectly presented *object*. For all presentations to us, direct or indirect, are logically contingent. But if they rigidly designate the indirectly presented object as opposed to its indirect presentation, then whether their designation is weak or strong depends on whether the indirectly presented object is *logically contingent* or *logically necessary*. Now, all *qualified* objects are logically necessary regardless of whether they are presented directly or indirectly, or even presented at all. But some *objects in themselves* are logically contingent, while others are logically necessary, regardless of whether they are presented at all. (They can only be presented indirectly.) Their cognitive rigid designator is weak if they are logically contingent, but strong if they are logically necessary.

Again, all lower-level objects that are not objects in themselves are qualified objects, hence are logically necessary beings.

Kripke emerges as confused, but Russell does not. For Russell can explain how his logically proper names are rigid designators in terms of our direct acquaintance with the objects they name. But Kripke can do that for names of ordinary physical bodies only by assuming a naive phenomenological realism on which we are directly presented with ordinary physical bodies. Or if Kripke thinks that ordinary physical bodies can be indirectly rigidly designated, he owes us an explanation of how, meaning via what mediating entities, we indirectly rigidly single them out. Surely names or descriptions will not suffice, since how it is possible that they can be rigid designators is what we are trying to explain in the first place. And all causal chain descriptions are not only logical contingent, but are attributive on their face. Logically speaking, they can only be attributive descriptions of the object as *the original cause of the use of our name, whatever that cause may be*. For all such original causes logically can be cognitively shrouded by, not to say lost in, the sands of time. Thus Kripke needs my presented qualified objects, or something distinct only in reason from them, such as Russell's sense-data, if Kripke wants his theory of rigid designation to be phenomenologically adequate.

My distinction between direct-indirect rigid designation is very much like Frege's distinction between customary reference to referents (objects or functions) and indirect reference to senses. For Frege's senses are not his objects, nor more generally his referents (his other referents are functions), since he ties metaphysical category so tightly to metaphysical function that for him, ways of presenting entities cannot be customarily presented entities. See my (2007); Dummett (2007) at last agrees with me. But Frege's senses *are* objects in *my* wide sense. They can be singled out, and are not nothing. In fact, they are much like my qualified objects, since they are ways of presenting things. Thus Frege's sense-referent distinction functions very much like my qualified object-object in itself distinction. Just as I admit infinitely many levels of qualified objects, so he logically must admit infinitely many levels of senses, or levels of indirect reference. For just like qualified objects, his senses can be informatively identified (what was the sense I was grasping last night?) and discussed in referentially opaque contexts (I believe I grasped the sense expressed by "the concept *horse*"). In fact, on metaphysical ecumenicism, Frege's senses are distinct only in reason from qualified objects. For they logically must correspond one-one to qualified objects. They are formally distinct from qualified objects with a foundation in reality in qualified objects, that is, with a phenomenologically adequate foundation in qualified reality, that is, in the qualified world.

Fregean indirect reference to *senses* in referentially opaque contexts is indirect *strongly* rigid designation in my sense. For Frege collapses the denotation-reference distinction, in that modes of presentation must always be both attributive (in the ideal formal notation, they are always veridical) and cognitively referential. And that is strong indirect rigid designation because (on the face of it) senses are timeless and in all possible worlds. In this, they are just like qualified objects. Of course, Frege, Kripke, and I all hold that there is no such thing as a merely possible object, and can admit only possible worlds talk at most. Thus we have no problem of trans-world identity, that is, of telling which objects are the same across possible worlds. And Frege's senses are not merely possible objects any more than qualified objects are. They are necessary beings! But merely not having *that* problem does not explain how rigid designation is possible. The only adequate explanation is phenomenological. Namely, rigid designation of either kind, strong or weak, is possible only because we can cognitively single out this or that object (directly or indirectly) as this or that object. That is why Russell implicitly achieves rigid designation: he admits acquaintance. And it is why Kripke cannot, at least not on his causal theory of reference. For causal chains are not only logically contingent, but attributive. They can only describe the *efficient* cause, *whatever it may be*, of the use of the name or description.

Why am I I, and not another person or other kind of object? Why do I look out at the world from these eyes, and not from eyes in some other human or other life form? I can easily imagine that; fictional literature is full of such stories. Is it not logically possible that I might have been someone else? One may as well ask why is this orange this orange? Or why is the number two the number two?" These are all pointless questions. For it is an empty tautology that everything is itself. In fact, that is just the law of identity, A = A. That identity exists as a mapping function does not detract from the law's being an empty tautology. It merely makes the tautology a formal truth. It also trivially and tautologically grounds and explains the haecceity or thisness of all objects, to point out that every object is and can only be the object it is, and is not and cannot be another object. Every object in the wide sense conforms to the law of identity. And that is why every object in the wide sense essentially has haecceity, and is distinct only in reason from its haecceity. Thus haecceity is Butlerian. For to be a this is most deeply for a thing to be what it is, and not another thing. On the face of it, the direct haecceity of a direct referent "is" the indirect haecceity of the indirect referent which the direct referent "is" or may "be." That I logically can look out from the eyes of another body tomorrow is merely proof that I am logically independent of my particular body, if not also of bodies in general.

One might object that this only postpones the problem to the level of haecceity. If I am I because I have this haecceity, why do I have this haecceity and not that haecceity? Well, that is what haecceity is all about. Haecceity is haecceity! If it is further asked why *haecceity* is haecceity and not another thing, the answer is that it just is what it is.

One might object that haecceity grounds why I must be I, but does not explain why I must be this person and not that person. My reply is that it does. Compare: haecceity grounds why 2 + 2 must be 2 + 2, and it also explains why 2 + 2 must be 4 and not 5.

Is there any better explanation of why I am I, and am not another person? Did God choose me to be Jan Dejnožka? But why? Well, he just did! This "deus ex machina" solution does not help.

Kripke's theory is that rigid designation is explained by the fact that merely possible worlds are merely ways the actual world might have been (Kripke 1980 / 1972: 15–20). Thus we are always referring to some actual this, if we are referring as opposed to attributively describing. I too reject merely possible worlds and objects. On this level, my theory of haecceity logically equivalent to and thus distinct only in reason from Kripke's. But mine is prior to Kripke's in the order of explanation. For mine is grounded in an "entity if and only if identity" phenomenology, and ontologically in qualified reality, and his is not. And causal chains will not do.

Phenomenological and Semantic Ecumenicism

This chapter explained the phenomenological basis of semantics. I shall conclude it by discussing both *phenomenological ecumenicism* and *semantic ecumenicism*. The reader can already see a deep ecumenicism in the fact that Frege's and Russell's respective cognitive semantics are distinct only in reason from mine, and have a foundation in reality in mine.

At least on my theoretical definitions of them, a via antiqua idea is just a via moderna idea plus an objective reality. Thus on my definitions, all via antiqua ideas are via moderna ideas, but not all via moderna ideas are via antiqua ideas. This is both a modal (one-sided dependence) distinction and a kind of phenomenological ecumenicism, including sense-data and sensible qualified objects. But there is more to phenomenological ecumenicism than that.

All indirect singling out requires direct singling out, but not all direct singling out need involve indirect singling out. For we can and do on occasion simply attend to phenomena directly. That phenomena (directly presented qualified objects) often have conceptualized (or even concepts as their) objective realities, does not mean that their *singling out* is conceptualized. That is a non

sequitur, and worse, a wrong parsing. For despite their being only modally distinct, there is all the difference between the genus, intending (cognition, being aware or conscious of something), and its two species, conceptual intending and nonconceptual intending. Descartes construes thinking so broadly that it includes perceiving; thus he makes thinking the genus of intending, instead of a species. But his classification and mine are distinct only in reason.

Phenomenological ecumenicism includes at least three modal distinctions. First, indirect singling out logically includes (i.e. logically presupposes) direct singling out. Second, there is a modal distinction between the genus cognition and its proper species, perception and thinking (my classification, not Descartes'). And third, all objects of perception logically can be objects of thought, but not all objects of thought logically can be objects of perception. If I can see a cat, I can also think of it. But I can only think of the number two; I cannot see it.

This solves the problem of whether there are kinds of cognition based on kind of cognized object, such as perceptual or intellectual, or just one kind of cognition that is always the same regardless of the kind of cognized object. Namely, on the level of the genus, intending, there is only one kind of cognition; but on the level of its species (direct, indirect; perceptual, conceptual), there are several kinds. Moore (1903: 41)'s pure consciousness, which he describes as "diaphanous," is the genus, intending (cognition).

In Joseph Conrad's story, a civilian sees a large boat and a sailor sees a far more conceptualized frigate. Not only is the genus, cognition, the same, but the species, perception, is the same. The only difference is the degree of conceptualization of the objective realities of the two directly presented qualified objects in question. Of course, the object in itself both qualified objects "are" is one and the same. It is just conceptualized to different degrees in the objectual way it is indirectly presented to the native and to the sailor. This gives us three more modal distinctions. First, direct perceiving and direct thinking are modally distinct from their genus, direct cognition. Second, indirect perceiving and indirect thinking are modally distinct from their genus, indirect cognition. (An example of indirect thinking would be thinking about the thought I had last night.) And third, all these fall under the same category (summum genus), intending (cognition) in the wide sense.

All of these distinctions of reason constitute phenomenological ecumenicism. And all of them are mirrored in semantic ecumenicism. For they can all be expressed and used in language. In fact, I just did that! But I will state the distinctions a little differently for semantic ecumenicism, mutatis mutandis.

In language, there is no direct referring without direct singling out, and no indirect referring without indirect singling out.

And there is no indirect referring without direct referring, but there is direct referring without indirect referring.

In language, reference via perception and via thought are genera, each having direct and indirect species. Both belong to the summum genus of reference in the wide sense, corresponding to objects in the wide sense. That in turn belongs to semantic relations in the wide sense. For truth and falsehood are semantic relations too, respectively defined as whether qualified facts "are" or "are" not lower-level facts. Again, all facts in the wide sense are objects in the wide sense. For facts in the wide sense are not nothing. They are many, and at most one could be nothing. And they are mind-independent. But not all of them are totally mind-independent. For qualified facts logically depend on the logical possibility of minds.

There is no linguistic referring to (linguistic singling out of) this object without cognitive singling out of this object, and no linguistic denoting (linguistic being about an object, whatever that object may be), without cognitive thinking attributively about some object, whatever that object may be. Again, following Burge (1983: 80), there is no denoting without linguistic reference to a property as the basis of the attribution. I merely add that there no linguistic referring to a property (or to any other object) without cognitively singling it out. All this is on pain of otherwise using language mindlessly. Thus what we may call 'cognitive referring' and 'cognitive denoting' are logically prior to linguistic referring and to linguistic denoting respectively. And no referring without denoting.

Even cats can wonder about the gently rustling object in the next room, whatever it may be. Curiosity can kill the cat!

Any *failure* to refer or to denote in language presupposes a successful linguistic singling out of a qualified object which "is" *not* a lower-level object. And that in turn presupposes a cognitive singling out of that qualified object as the direct referent of the linguistic term. All such linguistic failures are cognitively indirect.

Truths and falsehoods must directly refer to qualified facts which are their connotative meanings. But they cannot do that unless the qualified facts are cognitively singled out. This too is on pain of otherwise using language mindlessly.

All that is semantic ecumenicism. More precisely, it is the phenomenological basis of semantics. Semantic ecumenicism mirrors, is grounded by, and is modally and formally distinct from phenomenological ecumenicism with a foundation in reality in phenomenological realism. Mutatis mutandis, it is the linguistic mirror of phenomenological ecumenicism. Our theses include "no semantic ecumenicism without phenomenological ecumenicism," and more generally, "no semantics without phenomenology." To put the point very simply, if we are talking about anything, can we really be unaware of what we are talking about?

We cannot 'chatter mindlessly' without having mindfully learned the language first. Chatterers are not literally mindless, but just mindless in a casual sense. Surely unconscious 'spontaneous speakers' mindfully learned the language first too. Likewise for 'speakers in tongues', if the tongues are languages at all. If there is any reliable evidence of people who started speaking in languages they never learned, I am unaware of it. But if they do, explanations have been offered. And if they did not mindfully learn *any* language first, surely they at least have minds."If a lion could talk, we could not understand him" (Wittgenstein PI p. 223). This saying supports me despite Wittgenstein's own seeming behaviorism. For the lion is just emitting our *sounds*. But birds who do speak and cats and dogs who do understand some words do have minds.

To sum up the main idea of this chapter: Wolfgang Köhler says "the whole development [of science] must begin with a naïve picture of the world. This origin is necessary because there is no basis from which a science can arise" (Köhler 1970 / 1947: 3). That naive picture is precisely the basis of our phenomenology, which is a logical analysis of it, and is an *a priori* science in a wide sense.

At the beginning of this chapter, I equated phenomenology with cognitive science. More precisely, insofar as cognitive science is *a priori*, just like phenomenology as logical analysis here, and insofar as a science is an organized body of knowledge, also just like phenomenology here, they are distinct only in reason at most. But insofar as cognitive science is an empirical, natural science, then the two are different, and phenomenology is logically prior to, and indeed foundational to, cognitive science, as well as to all other empirical, natural sciences. For what could their evidence be but presented phenomena? The same goes for all the *a priori* sciences as well, insofar as they too are based on presented evidence.

In this chapter, I discussed ontology extensively in order to present my theory of phenomenology. In chapter 2, I present my theory of ontology. Chapter 2 brings the ontological distinctions out of the museum of antiquities and gives them new life in philosophy today, changing them greatly in the process. Mental and linguistic distinctions, as opposed to distinctions in the real order, are abolished as literally false. And all ontological distinctions that do exist in the real order—both real distinctions and distinctions in reason—are admitted as formal distinctions in that they have a foundation in reality. And all that is self-evidently based on the correspondence theory of truth. For all statements, including all statements about any distinctions at all, are true if and only if they correspond to reality, and because they correspond to reality. And distinctions in reason are the heart of metaphysical ecumenicism. But first I discuss deeper and more general topics: kinds of being, kinds of ontological relation, and so on.

2

Ontology

In this chapter, I discuss the main kinds of being and the main kinds of ontological identity and distinction, such as real identity and real distinction. We could speak instead of the different *senses* of the *terms* "being," identity," "distinction," and so on. But recall from chapter 1 that every term directly refers to a qualified object which is also its sense or connotation, and which may or may not "be" a lower-level object which is the term's indirect referent. Thus all the senses expressed by terms for kinds are *qualified kinds* which "are" *kinds in themselves*, since they are all Fregean functions that map values onto arguments (Frege 1967a / 1893: 34). This is so whether Frege would have admitted them or not. So we may as well speak of ontological kinds in themselves, since they do exist.FN2-1

I take "to be," "to exist," "to be real," and "to be actual" to be more or less synonymous in ordinary language. We can certainly assign these terms different technical meanings, and I myself admit several senses of "real." But it is not as if there are four different kinds of ontological status, being, existence, reality, and actuality, merely because those are four different ordinary words. I shall accommodate or play along with the nuances of ordinary language, using different terms for the same kinds of being on different occasions, so that the book will read more naturally. But it is not important which of the terms I use, as long as the reader knows which kind of being they refer to; the kinds are explained below.

Ten Main Kinds of Being

What is it to be? On the face of it, being is a determinable with indefinitely many determinates. In traditional terms, being is said in many ways. In my ontology, there are ten kinds of being. And there very reasonably can be more. The more, the merrier!

There are four main uses of "is" in modern classical (Frege-Russell style) logic: the "is" of existence, the "is" of identity, the "is" of predication, and the "is" of class or set membership. Now, any kind of being is a sense of the "is" of existence. But one kind, the *generic kind* of being relation pioneered by Butchvarov, is on the face of it a fifth *logical use* of "is" in its own right as well. This is not much of a paradox. Logic and ontology are not the same, and as we can already see, the

logical uses of "is" are not the same as the ontological uses of "is." But clearly they are not wholly distinct either.

The four modern classical logic uses of "is" indirectly refer to objects in themselves, specifically, to Fregean or other mapping functions in themselves. Likewise for our fifth logical use of "is," even though Frege does not admit the being relation.

There are at least three being relations: Butchvarov's (x is y), and my own two. I surround one with double quotation marks (x "is" y), and the other with asterisks (x *is* y). All three are species of the generic *kind* of being relation pioneered by Butchvarov. The generic kind is the indirect referent of our fifth logical use of "is."

Here are my ten main kinds of being.

The first kind of being is that to be is not to be nothing. I call this the minimal sense of being. It is the sine qua non of any other kinds of being. It is what Russell calls the "robust sense of reality." It is why there cannot be Meinongian mere objects. If such objects are not nothing, then they are most definitely not 'beyond being and nonbeing', in this first sense of "being." This is a main traditional sense of "being." Christian Wolff, a great summarizer of the substance metaphysics tradition, admits being in this sense. Suárez, the greatest summarizer of that tradition, says, "Fonseca states most truly that [a certain] sort of mode is not properly a thing or an entity, except in the widest and most general sense of the term 'being', as designating whatever is not nothing" (Suárez 1947 / 1597: 31). Even mere modes of things exist in the sense of not being nothing. I call this the Parmenidean sense of "being." For in effect, Parmenides introduced it when he argued that everything is, since we cannot speak or even think about nothing. Hence no logical term and no possible thought can be about nothing. This first kind of being preserves the obvious sense in which Parmenides is right. But it is not the only kind of being properly called a kind of being. And there is also another, equally obvious sense in which Parmenides is wrong. This is the sense in which we *can* say and think that some things, or even if we wish, all things, do not exist.

Second, to be is to be mind-independent. An object exists in this sense if it logically can exist even if no minds exist. This is the ordinary or usual sense of mind-independence in philosophy. It is the sense in which Russell, following Moore, argues than even a phenomenal blue sensation (sense-datum) is real.

Third, to be is to be what I call *totally mind-independent*. An object exists in this sense if, perhaps per impossibile (i.e. hypothetically), it logically could exist even if minds were logically impossible. Objects in themselves are totally mind independent, but objects of perception or thought are not. Following Moore, they logically can exist even if no minds exist. But they logically could not exist if minds were logically impossible. For perceptions and

thoughts cannot be homeless, so to speak floating about on their own outside a mind. (We may say "mind or cognizer" if not every cognizing consciousness is developed enough to be worthy of being called a mind in the ordinary sense.) So, if there are no minds, then there is no perception or thought. If no perception or thought, then no objects of perception or thought. And if no objects of perception or thought, then no qualified objects. For all and only objects of perception or thought are qualified objects; see chapter 1.

Fourth, to be *totally real* is to have all of the first three kinds of being taken together. To show that an object is totally real, it suffices to show that it is totally mind-independent. For any object that is totally mind-dependent is also mind-independent in the ordinary sense, and is also not nothing. It follows from our definitions that all and only objects in themselves are totally real.

One might object that being totally real, and even being real in the sense of ordinary mind-independence, are modal properties. For logical possibilities and logical impossibilities are involved in the very definitions of those properties. But the 1903 Russell says being is "being *simpliciter*" (Russell 1964 / 1938: 449, Russell's emphasis), and says being is presupposed by every term (Russell 1964 / 1938: 43, 451). Thus for him, being cannot be defined or analyzed by means of any other terms, including modal terms, and is thus nonmodal. See my (2023 / 2015: 66–67).

My reply is that this is ontologically confused. There are different kinds of being. The 1903 Russell's (Wolffian, Suárezian, Fonsecan, Aristotelian, and Parmenidean) being is nonmodal, just as the 1903 Russell says, and for the reason the 1903 Russell seems at least implicitly to have in mind. Namely, everything must have this kind of being, including the modalities themselves. For to be in this sense is not to be nothing. Thus this kind of being is logically prior to modality. In contrast, being totally real, being totally mind-independently real, or even just being mind-independently real in the ordinary sense, are more specific kinds of being that can and must be modal. For they are *defined* in terms of the logical possibility of existing even if minds do not exist, and the logical possibility of existing even if minds are logically impossible. This is so even though the *scope* of having Russellian nonmodal being and the *scope* of having logically mind-independent being are the same. They must be intensionally different. For otherwise it would not be factually informative to say that everything that has being in the sense of not being nothing is also mind-independently real in the ordinary sense. That is implicitly shown by, among other things, Moore's synthetic *a priori* argument that any possible object of any possible act of cognition exists independently of the act. That is the widest scope of Moore's argument, if we reject mere possibilia, impossibilia, nothing (*das Nicht*), and so on.

The fifth kind of being is that had by well-ordered, regular, or lawful groupings of beings in the first sense of being (the first sense was that of not being nothing). I call being in this fifth sense the Berkeley-Hume-Russell correlative sense of reality. This is the most ordinary sense of "being" or "reality." For it includes as real the regular or lawful objects we ordinarily call real, and excludes the objects we ordinarily call unreal, notably hallucinated and merely dreamed objects. Although hallucinations and dreams may be well-integrated internally or considered by themselves, they do not integrate or fit in well enough with the waking world to be deemed real, as Descartes says late in the *Meditations*.

Beings in this fifth or correlative sense include: ordinary bodies analyzed as bundles of ideas (Berkeley); ordinary bodies and minds analyzed as bundles of sense-impressions and (in the case of minds) ideas (Hume); and ordinary bodies and minds analyzed as temporal series of classes of sensed and unsensed sensibilia (the 1914–1919 Russell). (Russell nicely calls irregular sensibilia such as phantoms and hallucinations "wild particulars.") Whether being in this fifth, correlative sense is being in a real sense, or is being in a merely conceptual or even nominal sense, depends on how we ontologically interpret logical analysis. If we interpret it as positively constructive per the containment and dependence arguments for metaphysical ecumenicism in chapter 3, then this fifth sense of being is a real kind of being. If we interpret it as reductive, then it is still a real kind of being, but the analyzed objects will not have the kind of being we originally thought. For example, when Frege analyzes numbers as classes of classes, he still admits numbers as entities, but not as having any special arithmetical nature, but only a class nature. But Russell, on essentially the same logical analysis of numbers as Frege's, eliminates numbers as logical fictions. For while Frege admits classes as entities, Russell rejects classes as logical fictions. But on any of these three ontological interpretations of logical analysis, being in this fifth sense has the logical role or function of capturing the main ordinary sense of "real," in which dreams and hallucinations are not sufficiently well-ordered or well-integrated with the rest of what we deem to be real to be classified as real.

Logical analysis can be done of dreamed or hallucinated objects too, if they are well-integrated into a dreamed world or hallucinated world, or even if they are just internally well-integrated. But such objects will still not fit in with the waking world well enough to be deemed real in the fifth, correlative sense.

Sixth, I also admit being as a second-level property of properties, namely the property of being instantiated or 'realized'. The reasons for admitting being in this sense are well-known; see my (2003 / 1996: 75–76; 1979: 9–18). I call this the Frege-Russell

or modern classical logic quantificational sense of "being." Frege admits existence as a second-level concept (function). Even though being in this sixth sense is for Russell a propositional function, and even though Russell holds that propositional functions are nothing, he does hold that propositional functions have ante rem universals as their determinate constituents, and he does hold that ante rem universals exist. This includes second-level propositional functions by parity of reason. All such functions would be logical universals; and again, Russell (1974 / 1912: 109) admits logical universals.

Seventh, I admit being in the sense in which a veridical or illusory qualified object "is" a lower-level object. I discussed this intuitive, logically primitive sense of "is" in chapter 1. It refers to what I call the being relation. I credit Butchvarov with the insight that there is such a major sense of "being." But my being relation differs deeply from his because it obtains between deeply different relata. For my being relation obtains between qualified objects and the next lower level of objects, with objects in themselves as the lowest level; but his being relation obtains between his objects and entities. To be sure, to change the relata is not always to change the relation. One apple is larger than another in exactly the same sense that one planet is larger than another. But in the case of Butchvarov's being relation and mine, the relata are categorially different. His objects are private, nonrecurrent, and according to him, nonexistent. His entities are not real either, in that they are mere conceptual classifications of objects. My qualified objects are public, timeless, necessary, and have two main kinds of reality. And my objects in themselves are public and have three main kinds of reality. And two relations cannot be identical if they relate *categorially* different relata. For that would *categorially* violate the principle of the indiscernibility of identicals. That Butchvarov rejects relations does not matter to this point. For he uses relation-*talk*, relational *statements*, all the time, and without them he cannot describe his theory at all. He rejects relations only in metaphysics.

In fact, the being relation is fundamental to Butchvarov's theory of objects and entities. And it might be implicit in Hume and Russell as well. But for them and for Butchvarov, this seventh sense reduces to the fifth, or regularly correlative, sense of being. That is, for them, the being relation amounts to the "is" of class or set membership in a "bundle" of sensible impressions (Hume), sensibilia (Russell), or sensible objects (Butchvarov). But my being relation is far more than that. In fact, it is not class membership at all. For my objects in themselves are not at all mere classes, sets, or bundles of qualified objects. For they are totally real. They are logically independent even of the logical possibility of minds. Thus they logically cannot be logically composed of qualified objects, which *are* logically dependent on the logical possibility of minds.

We might attempt two alternative equivalent definitions of the being relation. First, we might say that a qualified object "is" a lower-level object if and only if it *qualifies* that lower-level object sufficiently adequately for the lower-level object to count as being veridical or illusory. It must be either veridical or illusory, since if it is delusory, then the lower-level object "is" *not* there. Second and alternatively, we might say that a qualified object "is" a lower-level object just in case its *objective reality* sufficiently represents or corresponds to a lower-level object to count as not delusory, that is, as either illusory or veridical. The two definitions are logically equivalent. For it is the objective reality that is primarily what logically can qualify a thing, that is, is an objectual way a thing logically can be presented (Descartes: represented).

The term "sufficiently" appears in both definitions because there are degrees of illusion bounded by what we may call the asymptote of veridicality at one end, and the asymptote of delusion at the other end. And more generally, the concepts of veridicality, illusion, and delusion are all matters of adequacy and degree. Just as people can swim so badly that they are really not swimming at all, so an object of perception or thought can be so little illusory that basically it is not an illusion at all, but veridical; and it can be so extremely illusory that basically it is not an illusion at all, but a delusion. But in any case, the main idea behind both definitions is that a qualified object counts as "being" a lower-level object if and only if the objective reality of the object of perception or thought sufficiently represents or corresponds to a lower-level object to count as not delusory. And this main idea is logically primitive.

Eighth, qualified objects have qualified being. This kind of being is modal, since by definition such objects logically can present things.

Ninth, objects in themselves have being in itself. This kind of being is modal, since by definition such objects logically cannot present things.

Tenth, objective realities as such have ostensible cognitive being. This kind of being is modal, since ostensibility is modal.

On the face of it, the total reality of objects in themselves cannot be an emergent property, that is, a property a whole has even if its parts or constituents do not. Emergent properties also include properties a class or set has that its members do not have, and even properties an object has that a higher-level qualified objects that "is" it does not have. Total reality is simply not that kind of property. For an object cannot be totally real unless all of its ontological parts or constituents are totally real as well. So to speak, we cannot squeeze the blood of total reality out of the turnip of less than totally real qualified objects.

For physicalists, to be real is to be physical. For idealists, to be real is to be mental. But that is too low-level to interest us.

Five Main Kinds of Ontological Relation

Not only are there at least ten main kinds of being, but there are also at least five main kinds of ontological relations. They are the main ontological relations among qualified objects, objects in themselves, classes or sets and members, and parts and wholes.

First, qualified objects cannot be identical with the objects in themselves they "are," neither any of the individual qualified objects nor the whole group of infinitely many qualified objects that "are" a certain object in itself. For again, objects in themselves are totally real and qualified objects are not. Even all the infinitely many qualified objects that "are" a certain object in itself, taken together, cannot ontologically compose a totally real object. For if we cannot squeeze the blood of total reality out of a qualified turnip, we cannot squeeze it out of infinitely many qualified turnips either. Thus no fallacy of composition or division, and no emergent property of total reality, is possible here. For there is no ontological composition of objects in themselves out of qualified objects in the first place, and no ontological division of objects in themselves into constituent qualified objects. This is no surprise. For we *defined* an object in itself as any object that is *not* a qualified object. That is, objects in themselves are not qualified objects *by definition*. And objects in themselves are *essentially* totally real, while qualified objects are essentially *not* totally real. See chapter 1 for the definition of a qualified object, for the definition of an object in itself as any object that is not a qualified object, and for the essential features of qualified objects.

Second, for exactly the same reasons, objects in themselves cannot be identical with the qualified objects they conversely "are." Note also that if A is not identical with B, then B is not identical with A. That is, the relation of identity and the relation of non-identity are symmetrical relations. Note further that the being relation and the converse being relation are as little different as the active tense and the past tense. Frege says that "The Greeks defeated the Persians at Plataea" and "The Persians were defeated by the Greeks at Plataea" have "the *same... conceptual content*" (Frege 1967 / 1879: 12, Frege's emphasis). Even closer, our two relations are as little different as Aristotle's road from Athens to Thebes and road from Thebes to Athens, which are the same road and differ only in formula (Aristotle 1968c: 202b). For "Qualified object Q 'is' object in itself O" and "O 'conversely is' Q" directly refer to two different qualified relations, qualified being and

qualified converse being, that "are" the same being relation in itself. Or if the being and converse being relations in themselves are not identical, certainly they are distinct only in reason, since the two statements are logically equivalent. The same can be said of the fallacies of composition and division. If those two fallacies in themselves are not identical, then they are distinct only in reason. For we cannot commit either of them without committing the other in the reverse direction. Compare the road from Athens to Thebes!

Third, a *class* or *set* can be totally real even if any or all of its members are not totally real. Here we *do* have total reality as an emergent property, since classes and sets can have it even if their members do not. And to suppose that a class or set must lack total reality because one or more of its members lack that property *is* to commit the fallacies of composition and division. For we must admit totally real classes and sets for all possible memberships. (This is perfectly admissible possible worlds talk.) The reason for admitting classes and sets in themselves is that class theory and set theory are not only supremely general, that is, not only apply to all classes and sets, as well as to all possible memberships, and to all objects as members of classes and sets, but they are also totally mind-independent *true* theories. And this implies that classes and sets in themselves would exist even if minds were, per impossible, logically impossible. It also implies that this is the case regardless of what the members of classes and sets are.

Fourth, an object in itself cannot be identical with the *class or set* in itself of qualified objects that "are" it, even though both the object in itself and *the class or set* in itself are totally real. Here the reason is that a particular is categorially one, while a class or set is categorially many. To be sure, even a class or set in itself conversely "is" infinitely many *qualified* classes or sets, such as the class I was thinking about last night. And even a class or set in itself is categorially one *qua class or set of its members*, which are or categorially can be many. For a class or set is a single, particular class or set as opposed to any other class or set. And that explains Russell's talk of classes as one and classes as many, as Russell is well aware, though he might use slightly different language.

Fifth, on the face of it, a whole can be totally real if and only if all of its ontological parts are totally real. Thus there is no emergent property of total reality for wholes, and no fallacies of composition or division. It also follows that the whole-part relation is not the same as the class- or set-member relation. But that should be self-evident too. It also follows that the whole-part relation is not the same as the being relation; and that too should be self-evident. And it goes without saying that ontological composition and ontological division are whole-part relations that are distinct

only in reason from each other, if not identical under different qualifications (and in language, under different descriptions).

I shall now discuss these five kinds of ontological relation more fully.

Even if qualified objects, which cannot be totally real, can and must be members of totally real classes or sets in themselves, it does not follow that they are or can ontologically constitute totally real bodies, minds, or by parity of reason even totally real numbers. For totally real bodies and minds are not totally real classes or sets, but are simply totally real bodies and minds. On the face of it, bodies and minds are not classes or sets, and do not and cannot have members the way a class or set does. This is why, *contra* Hume and the 1914–1919 Russell, bodies and minds cannot be logically reduced to or eliminated in favor of *any* classes or sets, but can be at most distinct only in reason from classes or sets. This includes Quine's undetached body parts and temporal slices. The ontological parts of bodies and minds are not *members* of them, as if bodies and minds were *classes or sets*. Instead, they are *parts*. The whole-part relation is not a group-member relation. And while infinitely many qualified objects "are" bodies in themselves and minds in themselves, the being relation is not a class or set membership relation either, any more than the predication relation or the whole-part relation is a class or set membership relation. All these relations are different, and the closest they can be to each other is distinct only in reason, together with any analogies or similarities, i.e., *generic* identities, we might find.

Infinitely many qualified objects "are" an object in itself, and an object in itself conversely "is," in the converse sense of the word "is," infinitely many qualified objects. But it does not follow that an object in itself is ontologically *constituted by* the qualified objects it conversely "is," and still less by the ways we conceive or regard it. For objects in themselves are real in a fundamental way that qualified objects cannot be. Namely, an object in itself is not logically dependent even on the logical possibility of minds. And that total independence from minds is all the 'kernel of reality' it needs. Here the so-called 'kernel of reality' is not some kind of part, stuff, material, or substratum, but instead an *ontological kind of being*. That is not a part, stuff, material, or substratum. Indeed, just like a universal ante rem property, a universal ante rem kind of being exists prior to the existence of any concrete object, such as the earth, and prior even to any temporal abstract (noncausal) object, such as the axis of the earth (Frege 1974 / 1884: 35).

If, definitely per impossibile, objects in themselves *were* ontologically constituted by qualified objects, then the property (really ontological kind) of being totally real *would* be a logically emergent property, since none of the qualified objects that "are" an

object in itself has or ontologically can have that property. And even if we *were* able, per impossibile, to state an infinitely long specific logical analysis of a certain object in itself in terms of the qualified objects that "are" it, the object in itself would still be distinct in reason from them, and from the whole mere collection of them. For it would have that emergent modal property of total reality and they would not. And even if all classes and sets are totally real, an object in itself would be distinct only in reason from the class or set of qualified objects that "are" it. For it would be one and they would be infinitely many; and an object that is one can scarcely be identical with an object (in the wide sense) that is many. Talk of violating the indiscernibility of identicals!

One might object as follows. Russell distinguishes classes as one from classes as many (Russell 1964 / 1938: 68, 76, 103, 104, 106, 132, 139, 513, 523). Namely, a class is one class, but categorially (if not always logically) can have many members. The class of objects identical to the number one, and the null class (the class that has no members), *categorially* can have many members, meaning they belong to the category of classes, but *logically* cannot have many members, per their member-defining descriptions. The former logically can have only one member, and the latter logically cannot have any. And by parity of reason, if any object in itself, or indeed any object in the wide sense, is ontologically composed of any other objects, we can distinguish the composed object as one from the same composed object as many.

My reply is that this is categorially confused. A class or set is not the same object as its membership, and is at most distinct only in reason from it. This is so even if we admit infinitely many classes and sets that are members of themselves. (I regard that admission as logically innocent, per my 'local self-defeat' solution of Russell's paradox.) For a class or set categorially must always be one, while its membership categorially (i.e. per category) must be many, even if it sometimes logically (i.e. per logic) must be one, as in the class of objects identical to the number one, or even none, as in the null class, or the class of round squares. By parity of reason, an object as one that is ontologically composed of other objects is at most intersubstitutable salva analycitate with the class as one of its composing objects, and a composed object as many is at most intersubstitutable salva analycitate with the class or set as many of its composing objects. That is, they are different objects that are at most distinct only in reason. Also, a particular object, such as a body, a mind, or even the number two, cannot be a class or set on the face of it. (Note that some particular objects are concrete (causal), while others, including classes and sets, are abstract (noncausal).) To be sure, if we *judge* that there is an identity, we can and must *enforce* indiscernibility per the principle

of the indiscernibility of identicals (Butchvarov 1979: 37–38, 66–68, 71, 100, 181, 227). Thus if we judge that a body is *identical with*, say, a class of sense-impressions, then we must enforce either that the body is abstract or that the class is concrete. But surely this is putting the cart before the horse, or pushing the car uphill. For if we judge that bodies are concrete and that classes are not concrete, then we would never judge that any body is identical with a class in the first place, on pain of contradicting ourselves. And even though the number two is just as abstract as the class of dyads, it is still categorially one while the class is categorially many.

One might also object as follows. Metaphysical ecumenicism depends on there being a plurality of logically equivalent logical analyses of a given kind of object, such as bodies, minds, or numbers. Thus to reject the logical analyses on the grounds that the analysans and analysandum cannot be identical, since an object cannot be identical with any class of objects it is analyzed as being, is to reject metaphysical ecumenicism.

My reply is that this objection, too, is confused. It is sufficient for metaphysical ecumenicism that the analysans and analysandum be distinct only in reason. For that is all the containment and dependence arguments in chapter 3 aim to show in the first place. Indeed, if they were identical, then we would not have an analysis, but an empty tautological identity. Recall that the paradox of analysis is that in some sense the analysans and analysandum must be the same, in order to be an analysis at all; and yet in some sense must also be different, if the analysis is to be informative. On the infinitely many levels of qualified objects, the resolution is that the different higher-level analyzing qualified objects "are" and logically must "be" the same lower-level analyzed qualified object. And on level 0, objects in themselves, the resolution is that the analysans in itself and the analysandum in itself are different objects in themselves that are distinct only in reason. In that case, I use asterisks to say they *are* the same.

There are two kinds of so-called 'theoretical identification' that can be asserted (successfully or not), and neither one is an instance of the identity relation. The first kind is this. If we judge that The Morning Star and The Evening Star are one and the same planet Venus, we are really judging that two qualified objects, each defined as a way a thing can be presented (namely in the morning sky or in the evening sky), "are" the same planet Venus. That is not to judge that The Morning Star is identical with The Evening Star. For they remain different qualified objects. I call it a factual identity, but my terminology is misleading. The factual identity relation is not 'an identity relation that is factual'. For the form of the factual identity relation is "A 'is' C and B 'is' C", where A and B are different qualified objects of level n and C is an object of

level n - 1. And even if the statement is true, A is not identical with B, and A and B have different properties. But the form of the identity relation is "A= B", where A and B are objects of the same level. And if the statement is true, then A and B are identical, and have all the same properties. The second kind of 'theoretical identification' is this. A body or mind is logically analyzed as a certain class or set of other objects, such as sense-impressions (Hume), sensed and unsensed sensibilia (Russell), qualified objects (*not* me), or monads (Leibniz), and so on. That is not the identity relation either, but a conjunction of infinitely many pairs of logically equivalent corresponding statements. The body or mind is not identical with the class or set, even if both are totally real. For they are different objects (in the wide sense) that are distinct only in reason. The form of this second kind of 'theoretical identification' is even further away from the form of the identity relation than is the form of a factual identity. For the form of a logical analysis is an infinitely long conjunction of corresponding pairs of logically equivalent statements. Thus it cannot even be stated in a finite sentence! Only the general thesis can be stated in a brief sentence. Thus metaphysical ecumenicism establishes not identities, but only distinctions in reason. See chapter 3 for more.

Again, the objects in themselves that are bodies, minds, and numbers are not classes or sets of qualified objects, even though all classes or sets in themselves are totally real too. Bodies, minds, and numbers are not identical with any classes or sets; they are different objects that can be at most distinct only in reason from them. And still less are they ontologically composed of the *members* of classes or sets of qualified objects. For objects in themselves are totally real, and qualified objects are not. Objects in themselves are logically independent even of the logical possibility of minds. How then could they be ontologically composed of qualified objects, which *are* logically dependent on the logical possibility of minds? An object in itself that is ontologically composed of qualified objects would be a surd, much like nothing (*das Nicht*) or the round square. Again, we cannot squeeze the blood of total reality out of turnips that are not totally real. A totally real whole is not like life emerging from a pool of chemicals, but like a steel machine composed of steel parts. Thus the fallacies of composition and division do not apply here. Of course, a *qualified* object can be composed of qualified objects. For example, the qualified round square is the qualified circle conjoined with the qualified square into a single object of thought with a conjunctive objective reality. But its being qualified is not an emergent property for that very reason.

In fact, totally real bodies, minds, and numbers are not *any* kind of classes or sets, totally real or otherwise. They are not

identical with classes or sets in the wide sense, with classes or sets in themselves, or with qualified classes or sets. At most, they can be distinct only in reason from any classes or sets that are intersubstitutable salva analycitate with them. For an infinitely long conjunction of logical equivalences is not an identity. And it does not matter what the class's or set's members are. Also, if every object were a class or set, then there could be no lowest-level classes or sets whose members were *not* classes or sets. Instead, on the face of it, there would be a vicious infinite regress of classes or sets all of whose members were classes or sets, and no lowest-level 'starting' classes or sets whose members were not classes or sets.

Again, there must be totally real classes and sets of less than totally real objects, if class and set theory, as well as logic and mathematics as logically analyzed by class or set theory, are to be totally real sciences that are totally general for all objects in the wide sense, and that are timelessly true and logically necessary. To be sure, qualified objects are necessary beings; and relations among them are timelessly true and logically necessary too. In fact, their counterparts in Descartes are (via antiqua) ideas, and Descartes's theory is that necessary truths describe relations among ideas. We can do that just as easily with qualified objects. But on that theory, logically necessary facts would not be totally real. That is why I go beyond that sort of theory and hold that all *a priori* sciences are about totally real logically necessary facts. For logically necessary facts should not depend even on the logical possibility of minds.

The total reality of a *class or set* in itself whose *members* are not totally real (i.e. are qualified objects) *is* an emergent property. But a totally real *body or mind* categorially cannot be *ontologically composed* of any less than totally real *parts* (i.e. qualified objects). For then it would be *in part* less than totally real. Thus the total reality of a body or mind is not and cannot be an emergent property. But it is perfectly fine for a totally real class or set to have members that are not totally real. Indeed, a totally real class or set need not have any members at all! How then could its total reality depend on whether its members have total reality?

Besides admitting classes and sets in themselves all of whose members are qualified objects, I can think of only three other options, and all of them are bad. In contrast, admitting totally real classes and sets of qualified objects is not only not bad, but is good and even necessary to ensure that class theory and set theory are supremely general necessarily true theories that apply to all objects in the wide sense, including qualified objects.

The qualified round square exists in the sense of not being nothing, is mind-independent, and is even a logically necessary being. It logically can be a member of totally real classes and sets in themselves, even though it itself cannot be totally real. The only

implication is that the total reality of any classes and sets that include the qualified round square as a member is a logically emergent property (ontological kind). Truths about a class or set need not be truths about its members, nor even about their mere collection as such. For more on classes and sets, see chapter 3.

We can discuss the first two bad options together. The first bad option is that we could reject all classes and sets in themselves across the board. That would leave us with only qualified classes and sets. The second is that we could more moderately reject only classes and sets in themselves *of qualified objects*. Either way, this would get rid of the problem of logical emergence of the property of total reality of the class or set from members that are less than totally real. On the second bad option, we might hold that any 'mixed' class or set, meaning class or set at least one of whose members is totally real, and at least one of whose members is not totally real, is itself totally real, so to speak ontologically acquiring its total reality from its totally real member(s) in a non-emergent way. But by definition, a mixed class has at least one member that is a turnip (qualified object). And these are bad options in any case. My view is that mixed classes and sets must be totally real even if some members are not. For class theory and set theory logically must be true of the totally real order, as I am about to explain.

The problem with the first two bad options is that we need to admit classes and sets in themselves for every membership, regardless of what the members are. Frege agrees with Locke and Leibniz that *number* is supremely general (Frege 1974 / 1884: 31). And if anything, that supreme generality is even more true of *classes and sets*. For Frege and Russell show that classes and sets are, if anything, logically more primitive than numbers. And even if Frege and Russell are wrong because classes and sets can be *numbered*, so that the analyses can and must be mutual, what cannot be a member of a class or set? Also, even if the analyses are mutual, classes and sets are still prior to numbers in the sense that it is more illuminating to analyze arithmetic in terms of logic and classes or sets than the other way around (with all due respect to George Boole, who basically goes in the opposite direction).

Of course, if *everything* is a member of a class or set, this commits us to infinitely many levels of classes and sets of *lower-level* classes and sets. But we are committed to that anyway. For classes and sets are not nothing, and are mind-independent in the ordinary sense. And class and set theory are logically necessary. Therefore classes and sets must be totally real.

The third bad option is to reject classes and sets in themselves, if all of their members are qualified objects, as self-defeating surds, much as I reject Russell's class of classes that are not members of themselves as a self-defeating surd. See chapter 3

on Russell's paradox. In effect, the 1914–1919 Russell takes this third option. For he rejects classes and sets as incomplete.

One might argue for this third bad option as follows. Class theory and set theory seem logically well-formed in general, but some specific classes and sets are self-defeating. Russell's paradox is an example. Therefore class theory and set theory are not logically well-formed after all. And totally real classes or sets cannot be *ontologically* composed of any less than totally real members. For then they would not be totally real. Therefore such classes are self-defeating surds. Therefore class theory and set theory are not totally real after all. This is an argument by analogy.

My reply is that Russell's paradoxical class is a surd, but these classes or sets are not. For the class or set membership relation is not the same as the whole-part ontological composition relation. And on the face of it, class theory and set theory *are* both supremely general and totally real. For they are logically necessary.

One might also argue for the third bad option as follows. Now, a *particular* object in itself, such as a body, mind, or number, cannot be a class or set of qualified objects. In fact, it cannot be a class or set at all. Nor can it be ontologically composed of qualified objects. But how can a *class or set* of qualified objects, which are not totally real, *itself* be totally real? It is essentially the same as the problem of how an object in itself's property of being totally real can emerge from the qualified objects which might be thought to ontologically compose it, where the object in itself conversely "is" those qualified objects. Here it is a mistake to suppose that the only other alternative is that the class or set in question is a qualified class or set, or even that all classes and sets are qualified. For the supreme generality and total reality of class theory and set theory precludes that. (Those were the first two bad options.) For there is a third alternative, and it seems to be correct. Namely, such a class or set is a surd, much like nothing (*das Nicht*), the round square, or closer to home, Russell's class (or set) of classes (or sets) that are not members of themselves. For neither an object in itself nor a class in itself can be ontologically composed of qualified objects. In the former case, the logical composition would be via the being relation. In the latter case, the logical composition would be via the membership relation. But the difference makes no difference. Either way, we cannot squeeze the blood of reality in itself out of the turnip of qualified reality.

My reply is that this second argument for the third bad option is essentially the same as the first argument for it, and has the same problem. Namely, the class or set membership relation is not the same as the whole-part ontological composition relation; and on the face of it, class theory and set theory are both supremely general and totally real, since they are logically necessary.

It is categorially confused to think that a particular thing can be identical with a class. Again, a one cannot be identical with a many. For as Frege says, we cannot assign different numbers to the same thing viewed under the same concept. A flower can be one and its petals many. A foliage can be one and its leaves many. A card deck can be one and its cards many. But a flower, foliage, or card deck cannot itself be both one and many. See Frege (1974 / 1884: 28–29, 34 et passim). Indeed, thinking that a class or set can be both one and many, i.e. identical with its members if it has many members, violates the principle of the indiscernibility of identicals. Nor can we take the 1903 Russell's way out by distinguishing a class 'as one' from the same class 'as many'. For the former is the class, and the latter is not the class but its members. And a class or set cannot be identical with its members even if it has only one member (and still less if it has no members). So to speak, it cannot be identical with its sole member, not even if that member is itself! For that truly is a surd. No class or set can be a member of itself. 'The class or set that is its own sole member' robs itself of any referent because its definition is circular. It fails to specify a class or set because it refers to itself in the very attempt to specify itself. Thus it is no better than a round square. The truth is that a class or set and its members are different but distinct only in reason. This is categorially so for classes. For every member of a class logically must have the property that defines the class. And it is categorially so for sets as well. For even though sets are defined by enumerating their members, a set that is defined by enumeration as being its own sole member is circularly defined.

Of course, *mereology* is supremely general and totally real as well, if every object is either a whole or a part of a whole. And mereology even applies to pure logic and arithmetic, if they can be logically analyzed in terms of parts and holes. But a mereological part-whole analysis of a totally real whole, even of the totally real wholes of logic and arithmetic in the totally real order of things, can and must consist not only of totally real parts, but also, in the case of logic and arithmetic, logically necessary parts. And at least on my positive construction ontological interpretation of logical analysis, the Frege-Russell logical analysis of quantification *is* done in terms of totally real *second-level* logical universals. But mereology is different from and distinct only in reason from class and set theory. And the logical analysis of logic and arithmetic in terms of parts and wholes is different from and distinct only in reason from the logical analysis of logic and arithmetic in terms of classes or sets. For all the parts that ontologically compose a totally real whole must be totally real. Once again, we cannot squeeze the blood of total reality out of the turnip of qualified objects, which are less than totally real. Thus qualified objects logically cannot

ontologically compose an object in itself. But a totally real class or set whose members are qualified objects is perfectly fine, and is even required by the supreme generality and total reality of class theory and set theory. It follows that the whole-part relation and the class- or set-member relation(s) are not the same. And surely that is no surprise. Who ever thought those relations are identical? Yes, the ontological parts of a whole form a class or set, namely the class or set of ontological parts of a certain whole. But a whole is different from and distinct only in reason from its ontological parts, and is also different from and distinct only in reason from the class or set of its ontological parts, as I just explained.

The being relation is more *like* the ontological whole-part relation than it is like the ontologically less intimate relation of a class or set to its members. But even these two relations cannot be the same. For while a totally real whole must be ontologically composed of totally real parts, a qualified object that "is" an object in itself, i.e., that stands in the being relation to that object in itself, logically cannot be an ontological part of the object in itself, since a qualified object ontologically cannot be totally real. At any rate, that is the case for *my* being relation. Concerning *Butchvarov's* being relation, where his objects are his entities, I shall argue in chapter 3 that his objects give his entities all the kernel of reality they have. For his entities are not totally real. Far from it! They are merely reasonable, lawful or regular conceptual classifications, and are at most analogous to real things. They are far more like Hume's bundles, and even more like Russell's logical fictions, than they are like totally real objects in themselves. Such are the woes of British empiricism—and this includes Butchvarov's theory of objects and entities on the face of it.

One might object that the, or at any rate my, being relation is a species of the genus whole-part relation. The argument might go as follows: Where whole-part is the genus, it has three main species in my theory of objects. (1) the whole and its parts are all qualified objects, such as the qualified round square and its parts the qualified circle and the qualified square. This is properly called ontological composition. (2) The whole and its parts are all objects in themselves, such as a clock and its springs and cogwheels. This too is properly called, and indeed is ordinary, pre-philosophical paradigmatic ontological composition. (3) Qualified objects "are" a lower-level object, such as The Morning Star's and The Evening Star's "being" the planet in itself Venus. This too is properly called ontological composition—or so the objection claims.

My reply is that (3) is not ontological composition, as I already explained in this section.

The objector might rejoin that objects in themselves 'conversely "are"' qualified objects, and surely that is ontological composition. I introduced the converse being relation in chapter 1.

My reply is once again that totally real objects cannot be ontologically composed of parts that are not totally real. And conversely, neither can qualified objects be entirely composed of objects in themselves, or have objects in themselves as their only ontological parts. For then they would be totally real objects in themselves. In fact, their only ontological parts are their formal reality and their objective reality, as explained in chapter 1. And their formal reality is not total reality, since they cannot exist if minds are logically impossible. Even worse, their objective reality can be any kind of reality or unreality, including even nothing (*das Nicht*). Once again, objective reality *qua* objective reality is not nothing. For it is cognitive representational reality. But that is not total reality. If it were, then the objective reality qua objective reality even of nothing (*das Nicht*) would be totally real, which is absurd. For the objective reality of (level 1) qualified objects can only *ostensibly represent* or *ostensibly correspond to* total reality. This is so even though it is a totally real fact *that* there are such objective realities. Totally real facts are ontologically *composed of* totally real logical subject- and predicate-objects, but they can and often must be facts *about* less than totally real things. Or might their kind of ontological composition be different from that for particular objects, and allow for less than real parts? No, since for us, a fact *is* an object, and a totally real fact *is* a totally real object.

It is a nice question whether the higher-level qualified objects that "are" a certain *qualified* object on the next lower level are its ontological parts. For *no* qualified object is totally real; thus there can be no logical emergence of total reality in any of them. I hold that by parity of reason, the answer is no. For the being relation and the ontological whole-part composition relation do not change merely because the phenomenological levels of the objects change. They are still the being relation and the ontological whole-part relation. And the level 1 qualified objects that "are" objects in themselves cannot be their ontological parts. For totally real objects cannot have less than totally real ontological parts.

The class or set membership relation is far less ontologically intimate than either the being relation or the ontological composition relation. For classes and sets in themselves are abstract (noncausal and nonspatiotemporal) objects, but their members can be concrete (causal and spatiotemporal) objects, such as bodies or (temporal agent) minds. And while classes and sets in themselves are totally real, their members need not be. They can have anything as their members, though of course all the members of a class must have the property that defines the class. In contrast,

the being relation is far more intimate. For higher-level qualified objects can only "be" lower-level qualified objects, and level 1 qualified objects can only "be" level 0 objects in themselves. The being relation is not the identity relation. But it is so close that it explains the possibility of a *factually informative* identity. And the ontological relation is far more intimate too. For unlike classes or sets "composed" by their members, totally real wholes must be ontologically composed of totally real parts. Also unlike classes or sets "composed" by members, wholes can only have categorially possible ontological parts. For example, bodies cannot be ontologically composed of numbers as ontological parts. Sorry, Pythagoras! Nor can they be composed of minds, ideas, or mental monads. Sorry, Berkeley and Leibniz! Nor can they be composed of sense-impressions, sense-data, or sense-objects. Sorry, Hume, Russell, and Butchvarov!

Butchvarov on Being

In his first book, *Resemblance and Identity* Butchvarov seems to argue for real universals, and against conceptualism and nominalism. But in his later book, *Being Qua Being*, he holds that all entities, including even universals, are mere conceptual beings, or more precisely, mere objectively reasonable classifications or groupings ("bundles") of objects into entities. The two books are logically consistent, but the reason is subtle. He admits universals as real. But for him, that can only mean or amount to their being the most objective and reasonable classification (or metaphysical assay) of ordinary properties.

Butchvarov says:

> [M]y position is only analogous to realism, as Dejnožka acutely points out. This is true of any position I have defended that might be called realist, i.e., as asserting the reality or existence of certain items. *Resemblance and Identity* was taken by most readers to be a defense of realism with respect to universals, i.e., a defense of the existence of universals, Gustav Bergmann and David Armstrong warmly congratulating me for being on their side. But the central theme of the book was that there is no fact of the matter about whether, say, the color of a and the color of b are identical or distinct but resembling each other, even exactly. This is why I did not deny the existence of what Dejnožka, following Bergmann,

> calls perfect particulars and others today call tropes. (Butchvarov 2004)

Thus Butchvarov's entities are mere conceptual beings. They are not beings in themselves, but at most conceived *as if* they were. (Shades of Vaihinger!) Thus they can only have a certain analogy to real beings. They do have the same functional role in grounding ordinary, pre-philosophical entities. But my objects in themselves are totally real. Even my qualified objects are real in the senses that they are not nothing and that they are mind-independent. Butchvarov's entities are entities in the sense of not being nothing. For they are different from each other. But they are not even mind-independent in the ordinary, pre-philosophical sense of "mind." For concepts and classifications require minds to conceive and classify.

Butchvarov says that just like Meinong's objects, his own objects are beyond being and nonbeing. But they have being in *three* senses that my qualified objects do: they are not nothing, they are *not* mind-*de*pendent (!), and also they are the objects they are. Butchvarov argues that his objects are *not* mind-*de*pendent (1979: 62–63, 253–54). These three kinds of ontological being, which Butchvarov and Meinong do not admit, apply to Meinong's objects as well. For more, see my (2003 / 1996: ch. 4; 1988).

The ontology of qualified objects and objects in themselves applies to all the *kinds* of being, as well as to the objects that *have* those kinds of being. For all the kinds of being are at least logically possible objects of thought, and can be informatively identified. Thus there are at least *qualified* kinds of being. And they may "be" kinds of being *in themselves*. An ontological theory of kinds of being is true if and only if its qualified kinds of being "are" kinds of being in themselves. This includes any theories of kinds of analogical being or kinds of pros hen being.FN2-2

My theory of ten kinds of being answers the old question whether being is univocal or multivocal on two different levels. First, if there are ten different kinds of being, then being is clearly multivocal! But on a second level, these two seemingly rival views are distinct only in reason. For all ten kinds of being univocally have being in the deepest and most general sense of not being nothing. This includes any kinds of analogical being or pros hen being. For even those kinds of being cannot fail to have being in the sense of not being nothing. For otherwise they would not be kinds of being at all. For they would have no being at all. I admit all these kinds of being, since they are themselves all beings in the sense of not being nothing. This reflexively includes being in the sense of not being nothing, along with all the other kinds of being. What is more, all the kinds of being exist as properties in the sense of Fregean mapping functions (Frege 1967a / 1893: 34). They are

functions that map *kinds* of being as values (or not) onto objects in the wide sense as arguments. The mapping is also in the reverse direction. Mapping functions are both extensional and totally real. They differ from each other, hence are not nothing. They are mind-independent, and independent even of the possibility of minds.

Thus being in the sense of not being nothing, being in the sense of ordinary mind-independence, and being in the sense of total mind-independence, themselves all have being in the sense of total mind-independence. For they are all extensional mapping functions. Thus they all also have being the sense of not being nothing and being in the sense of ordinary mind-independence. For being in the sense of total mind-independence logically includes or implies both being in the sense of ordinary mind-independence and, in logical turn, being in the sense of not being nothing. Thus these three kinds of being are distinct only in reason in a progressive series of modal distinctions (one-sided logical dependences). And all these kinds of being are totally real. For by definition of our fourth kind of being, to be totally real is to have all of those first three kinds of being taken together. Indeed, total reality is only very slightly distinct in reason from total mind-independence.

One might suggest that there is a supremely generic kind of being, a determinable which has all ten of our kinds of being and any others as species or determinates. But surely not being nothing already *is* generic being. What could be a deeper or more general kind of being than that? Could this suggested supremely general kind of being, which is alleged to have three species, be *nothing*? Perhaps it cannot be nothing, but is nonetheless *distinct in reason from* its not being nothing. But even then it would be exactly as general as 'not being nothing' in its scope of application, if we are right that everything is not nothing. If there were a *species* that had this suggested supreme generic being as its *genus*, then what would be its *difference*? Could not being nothing really be a difference that defines a species of the suggested genus? What could *fail* to belong to this species? Only nothing (*das Nicht*) could fail to belong! But nothing could belong neither to the suggested genus nor to the suggested species. For both would be kinds of being. And nothing (*das Nicht*) is not there either to have a kind of being or not. For it is nothing. It is not an object at all. There is only qualified nothing. Or could we admit the opposite species, with the suggested supreme genus and the difference of *being* nothing? That logically could not have a member, much like the species round square. For the species 'supremely generic being that is nothing' would be self-contradictory or at least self-contrary, like 'square that is round', which is only a thinkable *qualified* species. Thus I reject the species in itself 'supremely generic being that is nothing'. But it would make a perfectly fine *qualified* species! But surely we

must admit the suggested supremely generic being. For surely all of our ten kinds of being, *including* not being nothing, *have something in common*, even if not being nothing *cannot differentiate a species* of supreme generic being, for the reason that all beings are not nothing. On the face of it, 'supremely generic being' and 'not being nothing' are different but distinct only in reason. That is, those two terms directly refer to different qualified kinds of being which seem to "be" different kinds of being in themselves. In fact, our main kinds of being are a series of progressively more specific kinds of being. Total mind-independence is a species of ordinary mind-independence, which is a species of not being nothing.

Six Main Senses of "Is" in Logic

Again, the seventh main kind of being in ontology, the being relation, is also our fifth main sense of "is" in logic.

Again, in modern classical (i.e. Frege-Russell style) logic, there are four main senses of "is." They are the "is" of existence, the "is" of identity, the "is" of predication, and the "is" of class or set membership. Examples are: "There are electrons" (existence), "The Morning Star is the Evening Star" (identity), "Grass is green" (predication), and "Moby Dick is a whale" (class membership). Predications, of course, include predications of relations as well as of properties. Relations are sometimes called polyadic properties, and relations are sometimes called monadic relations. Such terms bring out that properties and relations have a common predicative nature, yet do not eliminate any metaphysical differences between properties and relations. And that is fine, since for the third logical use of "is" is after all a merely logical use, namely predicative use.

I add to these four main senses a fifth one, the "is" of the being relation. I mean the *generic* being relation. Butchvarov's being relation and my "is" relation are two species. I also admit a third species of the generic being relation, my *is* relation. The generic being relation is a determinable having at least those three determinates. May others add more.

The fourth sense of "is," the class or set membership sense, is used by conceptualists and nominalists like Berkeley, Hume, and the 1914–1919 Russell to assay ordinary bodies and minds. But Butchvarov and I would use the new fifth sense, the being relation, to assay them. Butchvarov would use it to assay them as analogous to traditional real entities, and I would use it to assay them as totally real entities. Of course, where a higher-level qualified object "is" a lower-level *qualified* object, the lower-level qualified object is not totally real. I shall use double quotes to mark only my own main being relation; Butchvarov does not use quotes for his.

Sixth, two different objects on the *same* phenomenological type-level can *be* (and conversely *be*) each other. This is ordinarily asserted on level 0, the level of objects in themselves. Here too the *being* relation is a determinable with determinates. Thus an ordinary self-conscious living body may *be* a quantum structure in one sense, and *be* in another sense an embodied mind. I use asterisks to mark this sixth sense of "is." Names for the two objects must be at least intersubstitutable salva veritate. This includes theoretical identifications in natural science. If the names are also intersubstitutable salva analycitate, then the two objects are distinct only in reason. One of the objects can be a group; groups are objects. Thus Hume could hold that an ordinary body *is* a bundle of sense-impressions, if both were objects for him.

The fifth sense and the sixth sense of "is" can never jointly apply. For the fifth sense can only apply to two objects, one of type-level n and the other of type-level n - 1, while the sixth sense can only apply to two objects of the same type-level. Butchvarov's being relation is at least analogous to the former in that it can only apply between one of his objects and one of his entities, and never between two of his objects or two of his entities.

The sixth sense of "is" has so many antecedents or anticipations in the literature that I am not sure to whom to give credit. For traditional distinctions in reason and theoretical identifications in science are its two main species, and it is even quite ordinary. How many physicists have told us laypersons that ordinary bodies are really quantum structures? How many philosophers have told us that in our present state of life, we are really embodied souls?

One might wish to use these six logical senses of "is" to develop six corresponding ontological senses of "being." And one might argue that we should, since "is" and "being" are different forms of the same verb: "is" is the verb, and "being" is its gerund. The six senses would be: to be is to exist, to be is to be identical with something (two sub-kinds would be factually informative and factually uninformative identity), to be is to have a property, to be is to belong to a class or set, to be is to "be" an object in itself or at least a lower-level object, and to be is to *be* a certain other object of the same level (thus this always *implies* a factually informative identity). Of course, the first sense, existence, is in effect the genus of which the ten kinds of being already listed in this chapter are species. And "is" and *is* are already kinds of ontological relation.

This is both a new list of six kinds of being and a list of six tests or criteria of being in the sense of not being nothing. For if a thing is identical with something, or has a property or stands in a relation, or is a member of a class or set, or "is" an object in itself (or "is" at least a lower-level object), then that thing cannot be nothing. And anything and everything is an object in that minimal

Parmenidean-Suárezian-Russellian sense of robust reality. This also fits nicely with the correspondence theory of truth, where truths and falsehoods must be about something. For statements of identity, predication, class or set membership, and the being relation are all truths or falsehoods, and cannot be about nothing.

Is the being relation definable? The argument would be that it is too fundamental to our conceptual scheme to define. But I offered two logically equivalent definitions of the being relation earlier in this chapter.

Are any of the six main logical uses of "is" definable? The same argument can be made, that they are all too fundamental to be defined. This depends at least in part on the kind of definition we have in mind. But we really have only theoretical definition in mind, the kind of definition that states what a thing is, that is, states its nature. And we have not even looked yet! One is often surprised by the definitions one can find. Thus our duty is to take at least a brief look, and see what we can find. And even if I fail, the reader can keep trying. An adequate definition can always be just around the corner. My working principle is that there is always a better argument or definition, and anyone can come up with it. For as the saying goes, logic is not a respecter of persons.

Frege argues that identity is indefinable because every definition is an identity, so that the very concept of definition presupposes the concept of identity (Frege 1970c / 1894: 80). Nonetheless, he 'explains' identity as being indiscernibility, and says the *only* reason this is not a definition is that definition presupposes identity (Frege 1970c / 1894: 80–81). For us, Frege's explanation of identity is an *is* salva analycitate.

As a deeper and more general point, the four main uses of "is" in modern classical logic are all logically intertwined. Russell says, "The whole theory of definition, of identity, of classes, of symbolism, and of the variable is wrapped up in the theory of denoting" (Russell 1964 / 1903: 54). Quine says, "The whole apparatus [of "objective reference: our articles and pronouns, our singular and plural, our copula, our identity predicate"] is interdependent" (Quine 1975 / 1960: 53). And these definitions of existence are logically equivalent in modern classical logic: to exist is: to exist, to be self-identical, to have a property, and to be a member or a class or set. For all of them imply that the thing exists. See my (2003 / 1996: 8) for additional logically equivalent modern classical definitions of the existential quantifier. But if all the four main modern classical senses of "is" are indeed interdefinable, which should be defined in terms of which? And which is the best definition of the existential quantifier in modern classical logic?

I agree with Butchvarov that the choice devolves to the definition that is the most illuminating, that is, explains things the

best. And if we are using identity as the concept explaining and illuminating the concept of existence in our 'entity if and only if identity' ontology, then identity is prior to all the other uses of "is" as well. For like every other object, no kind of being, that is, no logical property referred to / denoted by an occurrence of "is," can exist unless it has an identity. This applies to the being relation and the *being* relation as well. It applies to all ten kinds of being, all five kinds of ontological relation, and all six senses of "is" in logic. Where identity is already the key concept, it applies reflexively. That is, even the identity relation exists because it has an identity.

It should be clear that neither of our two being relations, "is" and *is*, is the modern classical "is" of existence, identity, predication, or class or set membership. But if it is not clear, allow me to spell it out.

Frege and Russell basically define existence as the second level property of having at least one instance, or to use a vanishing double negation, as the property of *not* having *no* instance. Frege says, "Affirmation of existence is in fact nothing but denial of the number nought" (Frege 1974 / 1884: 65). This seems to me more like a regimentation, or like a regimentative definition, than like a theoretical definition. That is, it seems to be a mere specification of the locus (logical place or classification) of existence as a second-level property, instead of as the first-level property it grammatically seems to be. And the regimentation is very useful in logic. But we sometimes forget that modern classical logic is, after all, only the best logic we have, and a better logic might always be just around the corner (many logicians have thought they found it!), just as Frege and Russell were just around the corner from Aristotle. Still, Frege and Russell did not find Aristotle's logic wrong but limited, and incorporated it into theirs. But to return to our topic, the definition of existence as a second-level property does not tell us what the dough of existence consists of, so much as merely shape it into a second-level cookie. It is the other three kinds of modern classical "is" that are kinds of dough that existence can consist of. And in that respect, our third kind of being, Frege-Russell being, is not really a kind of being at all. It merely *has* being. It has being of any and all three of the 'other' modern classical kinds. Likewise for the being relation and the *being* relation. They are ontological dough, not mere logical locus cookie cutters. Now, they do have levels. But while Frege and Russell move *up* one *logical* type-level to the existential quantifier, the being relation moves *down* one *phenomenological* level to the next lower-level object, and the *being* relation always has relata on the *same* level, so there is no moving up or down. Thus even the directionality is different!

The "is" of the being relation is not the "is" of existence, at any rate not simpliciter. Besides what I have already said to show

this, even if, per impossibile, *no* object "were" a lower-level object, all objects would *still* exist in the sense of not being nothing, and in the sense of being mind-independent. All qualified objects would merely be delusional (again, per impossibile.) The sense of the existential quantifier would not be affected, but at most its scope.

The "is" of the being relation is not the "is" of identity. For a qualified object cannot be identical with any lower-level object that it "is." For one thing, they are of different levels. For another, on the lowest level, level 1 qualified objects cannot be identical with any level 0 objects in themselves they "are," because objects in themselves are totally real and are *defined* as not qualified.

The "is" of the being relation may seem to be an "is" of relational ontological predication. But a predication is always of a property (including relations as properties), while the being relation concerns ontological status as opposed to a property. A property concerns what the thing is. An ontological status concerns whether the thing is. To be sure, ontological kinds are Fregean functions, and Fregean functions are essentially predicative. But even then there is a modal distinction. All predications of the being relation are predications, but not all predications are of the being relation.

Again, the "is" of the being relation is not the "is" of class or set membership. On Hume's 'bundle theory' of ordinary minds and bodies as bundles of impressions and/or ideas, a bundle is a class or a set, or perhaps a mereological group or collection. For Russell in 1914–1918, an ordinary mind (other than his own) or an ordinary body is a temporal series of classes of sensed and unsensed sensibilia (Russell 1960 / 1914: chs. 3–4; 1976d / 1914: 114–127; 1971e / 1918: 274). And that is just a logically more sophisticated bundle theory. But the being relation is not a class or set membership relation, nor is it a mereological part-whole relation. If a qualified apple "is" an apple in itself, it is not a *member* of the apple in itself, nor is the apple in itself a class or set. Only a qualified *class or set* can "be" a class or set in itself. Likewise, a qualified apple is not a part of any apple in itself that it "is," not is the apple in itself a whole that has qualified apples as its parts. Only a qualified *part* can "be" a part in itself of a whole in itself, and only a qualified *whole* can "be" a whole in itself that has parts in themselves. Note that apples and classes or sets are all level 0 particular objects; certainly they are for Frege. For they are all ultimate logical subjects of predication. Thus an apple "is" not a bundle of impressions. If anything, it *is* a bundle of impressions.

We may say that the "is" of the being relation is *closer to* the "is" of identity than it is to the "is" of class or set membership, but it is neither of those uses. For the "is" of identity is the logical basis of the "is" of existence, certainly in "no entity without identity" theory. And similarly, the "is" of the being relation is so

close to the "is" of existence that the golden mountain exists if and only if the qualified golden mountain "is" a mountain in itself. In fact, the latter proposition logically analyzes the former. This is in deep contrast to Hume's bundle membership theory of impressions and ideas, and to Russell's logical analysis of ordinary things as temporal series of classes of sensed and unsensed sensibilia. For far from asserting the existence of ordinary things, they are *denying* the existence of ordinary things, and rejecting them as fictions!

Again, my being relation is deeply different even from Butchvarov being relation. For his being relation maps his entities onto his objects. And his objects are private, usually momentary, nonrecurrent sense-data, and his entities are mere classifications of objects into groups that are merely analogous to real things. In contrast, my being relation maps objects in themselves onto qualified objects. And my qualified objects are public, logically necessary ways that things logically can be presented, and my objects in themselves are totally real beings. But though they are deeply different, our two being relations are distinct only in reason. For his objects are parsings that can be abstracted from my objects of perception or thought, and his entities are parsings that can be abstracted from my objects in themselves. They are parsings of lesser validity (reality), but they are logical parsings nonetheless.

Ontology and Metaphysics

Ontology, the theory of being, is intimately related to metaphysics, the theory of ultimate categories of things. In simplest negative terms, an item cannot be a "that" if it is not a "what," and cannot be a "what" if it is not a "that." More deeply in positive terms, "thatness" *is* in some sense a "what," and "whatness" *is* in some sense a "that." On both levels of depth, nature (whatness) and essence (thatness) are distinct only in reason.

But some reject either ontology, metaphysics, or both. They often propose to explain how we can work in the natural and mathematical sciences without using ontology or metaphysics. Rather oddly, they often find that ontological or metaphysical 'commitments' of theories are far more acceptable than ontology or metaphysics theories as such. Sartre denies that ordinary things have either essences (ontology) or natures (metaphysics), and so does Quine, if they even distinguish the two questions. To be sure, we can simply bracket all the sciences with Husserlian ontological brackets, so as to disregard any ontological commitments. Others accept both ontology and metaphysics, but debate which one is logically prior to, or logically more fundamental than, which.

Andronicus of Rhodes, or perhaps someone earlier, coined the Greek term *meta-ta-physica* to mean the writings coming "after the physics" in the library collation of Aristotle's works. But the term really refers to the study with which those writings deal, the study of the categories. Centuries later, the term "metaphysics" also came to be used in a very different sense to mean the study of the noumenal world, if any, that hides behind the phenomenal world. The two senses are very different in that the categories are taken to be intelligible to the reason, but the noumenal world is taken to hide behind the phenomenal world that is presented to us. To be sure, phenomena are themselves a presented category, and a kind of being. For us, phenomena are presented qualified objects.

I shall use the term "metaphysics" only in the sense of the study of the categories. I reject the other sense insofar as it implies that phenomena form an impenetrable barrier between us and the noumenal world. (It is usually taken to imply that even if we *are* noumenal selves, phenomena are still a barrier to our *knowing* or even *understanding* any noumenal beings, *including* ourselves.) I reject that view because I hold that it is precisely through phenomena that we do cognize the noumenal world, and also that phenomena are precisely our evidence for the noumenal world. I also hold that phenomena include not just objects of perception, but also objects of thought. I shall discuss whether my view implies whether there can or cannot be any unknowable or unintelligible objects in themselves. But I clearly can and must admit *qualified* unknowable and unintelligible objects as knowable and intelligible, much on a par with qualified nothing (*das Nicht*) and the qualified round square. For qualified objects essentially are as they directly appear to be. And admitting that is no problem. For the concepts *unknown* and *unintelligible* are plainly intelligible. Certainly they are if the concepts *negation*, *known*, and *intelligible* are intelligible. For they are simply the concepts *not known* and *not intelligible*.

Rudolph Goclenius, or perhaps someone earlier, coined the Latin term *onto-logia* to mean the "rational study of being." *Logos* is often taken to mean the rational structure of the world. But its meaning in the term "ontology" is that simply that the *study* of being must be rational, i.e. that we must give reasons for our views.

We might try to distinguish metaphysics from ontology by saying that the categories are ultimate differentiations of kinds of being, and that ontology is the study of undifferentiated being. Thus matter would have material being, minds would have mental being, numbers would have arithmetical being, and so on. But the transcategorial kinds of being, such as not being nothing, are far deeper and more general, and they remain the same across all categories of objects. Compare awareness. Direct awareness is the same regardless of the kind of object of perception or thought

directly presented. Likewise for indirect awareness, and for generic awareness. That is how Moore's act-object theory applies to us.

Since metaphysics is the study of the ultimate categories of things, ontology is a branch of metaphysics by logical courtesy. It is the logically most prior branch. For it deals with the kinds of being. Here we consider kinds of being as properties by courtesy.

But ontology is really transcategorial, and is thus really not metaphysics. It transcends all the usual metaphysical categories. For two examples, minds, bodies, and numbers are all not nothing, and are all mind-independent. Granted, a mind cannot be logically independent of itself. It is logically independent only of all *other* minds and all *other* (wholly distinct) objects in themselves. But this is nothing special. For *no* object is logically independent of *itself*. A body or a number cannot be logically independent of itself either.

If we are materialists and say, "To be is to be material," we equate being with the category of matter. But this positive equation is negatively transcategorial in that it eliminates all categories *other than* matter.

Even if every metaphysical category is its own kind of being, the terms "metaphysical category" and "ontological kind" are far from synonymous. They are not even co-extensive. For there are *also* transcategorial kinds of being, such as not being nothing, and being mind-independent. Even being totally mind-independent is transcendental of all categories of objects in themselves, such as minds, bodies, and numbers in themselves.

Again, like metaphysical categories, ontological kinds are Fregean functions that map values onto arguments. They map kinds of being onto objects. They are all different, so they cannot be nothing. They are also mind-independent. And if Frege were asked, surely he would say that they are independent even of the logical possibility of minds. For Frege, functions are not senses (for us, qualified objects), but referents (for us, objects in themselves). And in our theory, ontological kinds are objects in themselves.

The relation of ontology to metaphysics is such that two philosophers logically can admit the same metaphysical categories but differ in ontology by assigning a different kind of being to each category. For example, both might admit bodies and minds, but one might deem bodies more real than minds while the other deems minds more real than bodies, or deems them equally real.

Even if we admit only one category and one kind of being, say minds as the only category and Aristotelian substantial reality as the only kind of being, these are two very different admissions, that is, very different kinds of admission.

But while ontology and metaphysics are different, they are distinct only in reason. To deny any kind of being to things of a certain category is to reject that category. And to admit things of a

certain category is to require of them the minimal ontological status of not being nothing. Even though their ontological status might be much more than that, it cannot be less.

Kinds of Ontological Realism and Relativity

I accept Butchvarov's basic definition of realism:

> Very roughly, I shall mean by... realism with respect to *x* the view that (1) *x* exists and has certain properties, a nature, and (2) that its existence and nature are independent of our awareness of it, (3) of the manner in which we think of (conceptualize) it, and (4) of the manner in which we speak of it. (Butchvarov 1989: 3)

Again, I admit both ordinary mind-independent and total realism, the difference being that total realism is independence even of the logical possibility of minds. Neither kind of realism would apply to Butchvarov's entities. For they are only analogous to real entities. They are objectively reasonable classifications of his objects into conceptual beings. And while his objects are clearly mind-independent in the ordinary sense, it is not clear to me whether they are totally mind-independent, that is, logically independent even of the logical possibility of ordinary minds. I believe they are not. For their function is precisely to be objects of perception or thought. Thus they are impossible if perceivers and thinkers are impossible. But Butchvarov does not address the question. In fact, he rejects minds in his *metaphysics*, though he accepts minds in the ordinary, pre-philosophical sense. Also, he rejects the view that his objects exist or are real, even though he holds that they are mind-independent. For he holds that his objects are prior to his domain of entities. He overlooks that his objects exist in the sense of not being nothing, and exist in the sense of being mind-independent. (His objects are mind-independent even though they must be singled out before we can form any *concept* of that.) He overlooks these two kinds of being because he considers the concept of existence to be classificatory. And not being nothing, and being mind-independent, are kinds of being that are nonclassificatory, certainly in my theory of objects in the wide sense.

Before stating the three main kinds of realism and relativity (relativism), I must state three distinctions.

The first distinction is between ordinary, pre-philosophical conceptual relativity and ontological relativity, i.e. an ontological theory of *conceptual identity*. Ordinary conceptual relativity is very

common indeed. Frege's examples include the fact that one card deck is also fifty-two cards and the fact that one pair of boots is two boots. Ordinary conceptual relativity exists even if card decks, cards, pairs of boots, and boots are all totally real physical objects. It is another thing to admit an ontological theory of conceptual identity on which some items have merely conceptual identities, perhaps card decks and pairs of boots considered as mere groups.

The second distinction is between the ordinary, pre-philosophical view that there are some objectual identities "out there" in the world independently of our minds and our concepts, for instance the identities of lions, and an ontological theory of *real identity.* Note that "Poor dear Common-sense" (Broad 1968 / 1925: 180) conflicts with itself in ontology as much as elsewhere. Which things have real identities? Both cards and card decks ordinarily seem to have real identities. But both cards and decks are subject to ordinary conceptual relativity as well.

The third distinction is between the ordinary, pre-philosophical view that some identities are merely linguistic, as in Arnauld's examples of Augustus's finding Rome brick and leaving it marble, and the church that burned down ten years ago and is completely rebuilt in another place, and an ontological theory of *linguistic identity*.

I shall now define the three main kinds of realism and relativism.

First, there is the theory of *radical relativity*, or radical relativism, on which all identities are conceptual. Protagoras and Carnap are or at least resemble radical relativists.

Second, there is *radical realism,* on which some identities are real and the rest are unreal or fictitious. Parmenides is a radical realist, if his One is real and his Many are unreal.

Third, there is *modified realism,* on which some identities are real and other identities are less real. Logically speaking, modified realism is a sort of golden mean. Logically, it is a hybrid, an ecumenical halfway house. But ontologically, the difference in degrees of reality can be very lopsided. The Aristotelian substance tradition is full of modified realists. But the reality of substances outweighs the reality of everything else. The most paltry substance, even a grain of sand, is incomparably more real than everything in all the other categories put together, as someone once nicely put it.

I am a modified realist. But in my theory, there is no yardstick to measure, no balancing scale to weigh, the reality of qualified objects against the reality of objects in themselves. Both are equally real in not being nothing, and also in being mind-independent. Beyond that, we can only say that qualified objects are logically dependent on the logical possibility of minds, and objects in themselves are not, and are in that sense more real than

qualified objects. But there is no yardstick or balancing scale to measure or weigh the difference. What could such a yardstick be?

Those are the three main kinds of realism and relativism. We can also admit more finely grained kinds. For example, some might admit real beings, conceptual beings as real in a lesser sense, and linguistic beings as logical fictions, i.e. as merely nominal beings, called beings as a purely logical courtesy. For me, anything and everything is an object that has being in the sense of not being nothing, and has being in the sense of being mind-independent. My only basic gradation is that all and only objects in themselves are totally real, and that qualified objects are less than totally real. Again, we too can admit more finely grained kinds if we wish to.

What are the beings that are less real in modified realism in general? The answer would be more familiar if, instead of real identity, I spoke of real distinction. Then the less real cases would be understood to include entities that are distinct only in reason from another entity, including entities that are only modally distinct from another entity, or only formally distinct. That is, they would be entities that have *identities only in reason*, including *modal identities* and *formal identities*. Traditionally they are overlapping kinds of conceptual identity. At least they were traditionally neither real nor merely nominal identities. They may be archaic, but if we can define them well enough, we can use them. Note that formal identities traditionally have a 'foundation in reality', so they are really a halfway house or hybrid kind of real-conceptual identity.

There are other kinds of basic theory. *Extreme realism* is the view that all identities are real identities. Perhaps some New Realists held such a view. *Extreme linguisticism* is the view that all identities are linguistic. Perhaps Carnap held such a view. *Common sense realism* is the view that there are some real, some conceptual, and some merely linguistic or perhaps mental identities, more or less corresponding to the pre-philosophical data. I accept common sense realism, but I reject mental *identities*. I admit mental *entities* that have *real* identities. See my (2021 / 2020). If Arnauld's Rome and church are valid examples of linguistic identities, then even linguistic beings exist in the sense of not being nothing. For Rome and the church are different. I question these examples because they seem more conceptual than linguistic. But if there really were different linguistic identities, then there would be linguistic beings. Cities and churches are also mind-independent on the face of it. Common sense realism is compatible with, and is in fact a kind of, modified realism, which (again) I also accept.

I see Quine as a common-sense realist. For he admits both real physical objects and less real abstract classes, and he eliminatively analyzes numbers, at least from his 1960 *Word and Object* (1975 / 1960) to *Theories and Things* (1981). But Quine's

ontological relativity resembles radical relativity in a very basic respect. Any medieval philosopher could have told you that Quine's rabbits are distinct in reason from their temporal stages and undetached rabbit parts. More precisely, if Quine were a radical relativist, then he would be an extreme linguist. He deals with words, not concepts, in "Ontological Relativity." But he is no radical relativist. He admits what he calls a "robust realism" that includes both overlapping and non-overlapping physical objects.

Real Distinction

I shall now examine real distinction in more detail.

We may say that two entities are really distinct from each other if and only if (1) either logically can exist independently of the other and (2) each has the ontological status of a real being. Many philosophers may think that requiring both conjuncts is needless. In a sense they are right. In traditional philosophy, the conjuncts would seem to imply each other. I emphasize conjunct (2) as a separate condition because without it the position of many earlier philosophers will be misunderstood. For them, many items which can exist independently of each other are not really distinct because they are not real things with real identities, but are mere parts or mere collections of real things that can exist independently of each other. Their individuation consists merely of the concept we choose to "slice up" the real things before us. For instance, card decks can exist independently of each other as easily as individual cards can. But if cards are real things and card decks are mere collections, then many would hold that card decks are not really distinct from each other. Compare as theoretically susceptible to this kind of ontological analysis: Spinoza's water as one of extension's many modes, extension being in turn one of God's infinitely many aspects; Leibniz's body composed of many mental monads; Berkeley's city of many houses, and house of many walls and windows, all of which are mental ideas; Bolzano's, Reid's, and Hobbes's ship of many timbers (the rebuilt ship of Theseus); Hegel's book of many chapters and pages; Bradley's silk stockings reknitted with worsted; Bolzano's and Husserl's melody of many tones; Heidegger's collection of many coins; Sartre's group of three men conversing; Frege's card deck; Russell's army of many regiments, and Russell's and Reid's regiment of many soldiers; Wittgenstein's composite broom and chessboard; Quine's rabbits, undetached rabbit parts, and temporal rabbit-stages; Butchvarov's complex bicycle and amoeba; and my qualified objects, which have both formal realities and objective realities—and also my qualified objects which "are" a single lower-level object.

Many real beings logically can occur as real parts of a mere conceptual being. This would occur, for example, if cards were real beings and card decks were conceptual beings. And conceptual beings can occur as merely conceptual parts of a real being. For instance, *the round thing* and *the hard thing* would be conceptually distinct but really one stone, if stones were real beings and round things and hard things were conceptual beings. This may be called the combinatorial interpenetrability of the real and the less real, or of the real and the conceptual.

Real things with conceptual parts can still be ontologically simple in the sense of *real* indivisibility, i.e. having no real parts. Real things can also ontologically compose complex real things. For example, bricks and mortar can compose a wall. A wall is not like a mere collection of cards, unless the cards are stuck together with glue. I am not concerned now with fine details or fully convincing examples, but only with the basic concepts. Perhaps with a few exceptions, there are as many kinds of metaphysical part-whole relation as there are kinds of logically contained objects and of logically overlapping or not wholly distinct objects.

There are at least four further senses of "real distinction."

Sense (2) of real distinction. Conjunct (1) may be used alone, and held not to imply conjunct (2). In this sense, really distinct things can have conceptual identities. Sense (2) is more contemporary than sense (1). Frege's card deck and flower of many petals would be really distinct even if they had only conceptual identities.

Sense (3) of real distinction. Conjunct (2) may be used alone. This has the merit of allowing logically necessary beings, which logically cannot cease to exist, to be really distinct things. Conjunct (1) can even be reintroduced in a per impossibile sense. Things are really distinct in sense (a) if they could, per impossibile, cease to exist, then if either could exist without the other, then they are really distinct. This can be intuited directly and simpliciter, or it can be validated by an intensional test of whether each is thinkable independently of, i.e., without thinking of, the other. Call that 'the independent conceptual (intelligible) content test'. Thus things are really distinct in sense (3b) if the conceptual content of each can be thought without thinking the other. Note that this is also Kant's second test of whether a proposition is synthetic, at least in that in thinking the subject, we do not think the predicate. But really distinct things are *mutually* independently thinkable. Thus Kant should have made his test mutual too, so that in a synthetic proposition, in thinking the predicate, we do not think the subject *either*. Descartes (1969 / 1642: 243–244) uses the mutually independent thinkability test to show whether substances are really distinct, including even logically contingent minds and bodies.

The per impossibile sense (3) of "real distinction" is a valuable extension of the concept of real distinction. For example, the timeless Platonic forms *horse* and *dog* are, per impossibile, really distinct. Neither can exist independently of the other, but only because neither can fail to exist in the first place. And their conceptual contents are thinkable independently. Hence they are wholly distinct, hence really distinct. Another adequate explication, which is logically equivalent to the one just given, is that forms are really distinct in sense (3) if any *instances* of them are really distinct in sense (1) or (2). For example, the forms *horse* and *dog* are really distinct if any horses and dogs are really distinct.

Sense (4) of real distinction. One might add to conjunct (2) the proviso that a thing is real if and only if it can exist even if *nothing* else exists. I find this fourth sense of "real distinction" hard to apply to cases. For the sense of "else" is too unclear. As John Stuart Mill notes in his *System of Logic*, a thing cannot exist without its properties; and an in re property cannot exist without belonging to a thing. Likewise for in re relations among things. Russell gives the clearest statement of the fourth sense I know of: Each particular "does not in any way logically depend upon any other particular. Each one might happen to be the whole universe; it is a merely empirical fact that this is not the case" (Russell 1971e / 1918: 202). But his statement applies only to particulars. And his particulars logically depend on properties, since they are not bare particulars. At least, I have argued that Russell's sense-particulars are instances of sensible universals (my 2003 / 1996: 159). This troubling fourth sense seems best applied to God (Descartes: 1969 / 1642: 239–240 applies it that way), or to a Parmenidean One.

Concerning sense (4) of real distinction, many distinguish 'primary' real things from 'secondary' real things. Descartes holds that only God can truly exist even if nothing else exists, and that ordinary minds and bodies are real, and are really distinct from each other (and I suppose from God), only in a secondary sense. For their existence depends on God's creation of them, and on his continually maintaining them in existence, quite literally as if he constantly needs to keep them from fading into nonexistence. This gives us *three* senses of reality and of real distinction, the 'primary' and two kinds of 'secondary', if we distinguish the 'created and needing to be maintained' sense from the 'created but not needing to be maintained' sense. But I agree with some earlier critics of Descartes that it is a sorry lot of creations that constantly need to be kept from fading into nonexistence. Could not God do a better job? Could he not create objects in themselves that do not need constant propping up? Are not all things possible to God, except for creating impossibilia? What is logically impossible about God's creating an

object that will not fade from existence as soon as he leaves it on its own, or if perhaps per impossibile, he stops existing?

Sense (5) of real distinction. Many hold that only simple things, in some sense of "simple," are real. Leibniz is a good example. Sense (5) is actually a modification of conjunct (2) of sense (1). To be sure, the word simple is said in many ways. In fact, the term "simple" is a determinable of which there logically can be indefinitely many reasonable determinates. Thus sense (5) can have indefinitely many sub-senses.

No doubt there are more senses of "real" and of "real distinction" in the literature. And there logically can be indefinitely many different reasonable senses of those terms. Thus the terms "real" and "real distinction" are determinables of which there can be indefinitely many determinates.

If certain traditional terms, such as "independent," "self-subsisting," "substantial," and so on, express different senses of "real," then be the differences ever so slight, we have just as many different senses of "real." The term "substance" really gives the game away, since almost every major substance metaphysician has a different conception of substance. But I think we described the five main senses of real distinction well enough. And these five kinds of real distinction imply five kinds of real identity.

On the other kinds of ontological distinction, it may help to begin with the last great medieval philosopher, Francisco Suárez.

Suárez on the Ontological Distinctions

Suárez, in his *Disputationes Metaphysicae,* admits real distinction, modal distinction, and mental distinction, but seems to reject formal distinction. He speaks expressly of "real identity" as the complement of real distinction. He also says that a real distinction can be made only between real entities, between thing and thing. This is conjunct (2) of our first kind of real distinction.

Suárez follows Aristotle, *Posterior Analytics,* book 2, chapter 14 in making distinction (and identity) prior to grasping essence, since essence is determined by a process of division of features into genera and differences. Suárez follows Aristotle, *Metaphysics*, book 4, text 4 and text 5, and book 10, text 11 in finding that "whatever beings exist in the actual order prior to mental activity are either really identical or are really diverse, as otherwise there would be a middle ground between 'the same' and 'other'..." (Suárez 1947 / 1597: 22). This kills radical relativity and, it seems, formal identity, based on the law of excluded middle.

Suárez is a modified realist. He admits both real identities and identities in modal and mental respects (Suárez 1947 / 1597:

16–17, 20, 22, 31, 35). But others admit formal distinction as precisely the sort of middle ground that Suárez seems to reject: a halfway house between real distinction and mental distinction, or perhaps better, a distinction in reason with a foundation in reality.

Mental distinctions are often called distinctions in reason, but that can lead to confusion. Mental distinctions exist only in the mind. They are generally understood to be created by the mind, as opposed to distinctions discerned by the reason in reality, including even in real minds. Thus mental distinctions are the opposite of distinctions in reason. For distinctions in reason are intellectually discernible *nonmental* differences among things, including even among mental things. Not everything about a mind is created by that mind. Distinctions in reason are discovered, not created. They are called distinctions in reason only because they are not real distinctions. They are not real distinctions because while the entities are different, at least one logically cannot exist without the other. On the whole-part relevantist containment theory of logical inference, that is in turn because one entity logically contains the other, or because the entities overlap (are not wholly distinct). Thus I hold that all distinctions in reason are formal distinctions. For they are all discerned in real things, and are in that sense founded in reality. And that is my main criticism of Suárez. Note that distinctions in reason are either mutual or modal (one-sided). Thus all modal distinctions are formal distinctions too.

How Is Formal Distinction Possible?

Formal identity is intended to be intermediate between real identity and merely mental identity. But we saw that Suárez argues, based on Aristotle, that this is precisely what is wrong with the very idea of formal identity. The argument is based on the law of excluded middle. I will state the argument in my own way. (1) Either an identity is real or it is not. There is no third option, due to the law of excluded middle. (2) But if an identity is not real, then it can only exist in the mind. (3) Therefore either an identity is real or it is mental; tertium non datur. There is no halfway house between real distinction and mental distinction. Suárez says:

> There are no classes of being besides real and mental entities, as we gather from Aristotle, *Metaphysics*, Book 5 [1017a22–b9] and Book 6 [1027a19–26]. For, since these two imply a direct contradiction, no medium between them can be excogitated.

> Secondly, whatever beings exist in the actual order prior to mental activity are either really identified or really diverse, as otherwise there would be a middle ground between "the same" and "other," which is contrary to Aristotle....
>
> Accordingly all objects which we conceive as two entities are either really the same or are really other. If they are really other they are really distinct. If they are really the same they cannot be distinct in the real order antecedently to intellectual advertence, as it is impossible for a thing to be simultaneously the same and other in the real order. (Suárez 1947 / 1597: 22, see 32)

The distinction between real and mental entities in the first paragraph equates to my distinction between objects in themselves and qualified objects, since I replace theory of ideas with theory of qualified objects. The second and third paragraphs quoted argue that there can only be real identity or real distinction in the real world, and no other kind of distinction. By implication, either this includes overlapping real objects as really distinct, or else banishes them into mental distinction. Sense (5) of real distinction, on which only simple entities are real, implies the option of banishment, if all distinctions are either real or mental. For simple entities cannot overlap each other, unless perhaps red and color are both simple.

Unfortunately and ironically, Suárez's argument mistakes a merely psychological (i.e. merely mental!) opposite for a logical opposite. Thus even if we accept the law of excluded middle, its application is wrong here. For real identity and merely mental identity are not logical opposites, that is, the logical denials of each other, as typically shown by prefixing a negation sign to the term in question, such as "not," "non," or "un." For while they are mutually exclusive, they are not jointly exhaustive kinds of identity. They are only psychological opposites, like white and black, or love and hate. The logical opposite of white is not black, but nonwhite. It includes not just black, but many other things, like red, green, colorless, and invisible. The logical opposite of love is not hate, but nonlove. It includes not just hate, but many other things, like fear, anger, and emotionlesness. And the logical opposite of real distinction is not mental distinction, but nonreal distinction. And nonreal distinction includes not just mental identity, but on the face of it distinction in reason understood as discerned in and therefore founded in reality, that is, understood as formal distinction, and its two species, mutual distinction in reason and modal (one-sided) distinction.

Thus Suárez's argument begs the question. Mental identity can be the logical opposite of real identity only if it is already assumed that there are and can be no other sorts of identity.

Suárez's argument is even worse than that. For it is also too broad. It rejects not only modal identity, but its genus, identity in reason, which for me implies and is therefore distinct only in reason from formal identity. Are we seriously going to reject *distinctions in reason*? What is wrong with distinctions in reason? Or are we going to count distinctions in reason as a sub-class of real distinctions? —Or as a sub-class of mental distinctions? Alice in Wonderland would say, "Curiouser and curiouser."

If distinctions in reason are admitted, why would they not be formal distinctions, discerned in and thus founded in reality? Is the definition "Two objects are distinct in reason if at least one is logically dependent on the other" not clear enough to use?

To carry the warfare into the enemy camp, why should we not abolish mental distinctions and replace them with distinctions in reason? Then they would not be created or made up by us. They would not be merely imagined and hence imaginary, but discerned in reality. That is, in via antiqua ideas, they would not be discerned only in the objective realities of ideas, but also in the real things to which the objective realities of ideas correspond. In fact, the objective realities of the ideas of dog and cat are wholly distinct if and only if real dogs and cats are wholly distinct.

Suárez misunderstands the whole role, function, and scope of the law of excluded middle. To use the words of Butler, that law only says, "Every thing is what it is, and not another thing" (Butler 1749: preface § 39). That applies to all objects across the board, not just to really distinct ones. Even objects that are distinct only in reason are what they are, and are not other than the objects they are. All objects are identical with themselves and different from all other objects. And that concerns identity as such or simpliciter, not species such as real identity, identity in reason, formal identity, or modal identity. The law of excluded middle asserts that for any object in itself and any property (nominalists: description, conceptualists: concept) in itself, either the object has the property or it does not. Even *the qualified object that violates the law of excluded middle and is not what it is* conforms to that law, and is exactly what it is, and is not another object. And that is precisely the sense in which even qualified objects are part of how the world is in itself. Namely, it is a fact in itself *that* qualified objects exist.

The proper application of excluded middle is that every distinction is either real or not, is either mental or not, is either in reason or not, is either formal or not, and is either modal or not. And of course every object in the wide sense is either a distinction or not. And any two objects are either formally distinct or not!

Suárez even overlooks that Aristotle himself admits formal distinction, and sees no conflict with the law of excluded middle. Again, Aristotle uses formulae ('little forms')to solve the problem of informative identity. Coriscus in the Agora and Coriscus in the Lyceum are one in substance but distinct in formula (Aristotle 1968c: 219b). Likewise for teaching and learning, and for "the road from Thebes to Athens and that from Athens to Thebes" (Aristotle 1968c: 202b). The best Suárez could claim is that Aristotle overlooks the conflict between his (Aristotle's) admission of the law of excluded middle and his admission of formal distinctions. But Aristotle is one of the greatest logicians, I daresay greater than Suárez. And in fact there is no conflict, since excluded middle applies to everything, *including* whether any objects are formally distinct or not, as I explained in my previous paragraph.

Why did anyone think the excluded middle argument against formal distinction was even plausible? I suspect the reason is this. In a logical opposition, one concept is the logical negation of the other. Thus one concept is positive and the other is negative. Again, I am assuming that here a double negation is a positive. Again, we can have trouble saying which is which. Again, Frege gives the example of "immortal" and "lives forever" (Frege 1970d / 1919: 125). "Immortal" means not mortal, which is negative. But its synonym, or at least its logical equivalent, "lives forever," sounds positive. But we can also say that the logical opposite of immortal is not immortal, and the logical opposite of lives forever is does not live forever. Now, in the case of real identity and mental identity, it may seem that "mental" simply *means* 'not real', so that whatever is not real can only be in the mind, since there are no other options, or at least none we can think of. But this is wrong. "Mental" does not mean 'not real'. In fact, it does not have a negative meaning at all, much less mean the negation of being real. "Mental" has the positive (if somewhat circular) meaning of 'is a mind or exists only in a mind'. In fact, at least on my theory, minds in themselves are as real as any other objects in themselves. And the logical opposite of mental is nonmental, not nonreal.

Suárez might try to turn the tables. He might grant that the concept of mental identity is positive, but argue that it is the concept of real identity that is negative, and is the logical opposite of mental identity. My reply may be found in the standard definition of "realism" that is stated by Butchvarov. Again:

> Very roughly, I shall mean by... realism with respect to *x* the view that (1) *x* exists and has certain properties, a nature, and (2) that its existence and nature are independent of our awareness of it, (3) of the manner in which we

> think of (conceptualize) it, and (4) of the manner in which we speak of it. (Butchvarov 1989: 3)

Now, clauses (2)–(4) are all negative, since "independent" means the negative 'not dependent'. But clause (1), which is surely the primary clause of the definition, is positive. And all four clauses are logical constituents of the definition. Thus Suárez would be opposing the wholly positive concept of mental identity to the not wholly negative concept of real identity. And such concepts cannot be logical opposites. They are not even psychological opposites!

How could the concept of being real be ultimately or fundamentally negative? Surely asserting that a thing is real is positive, and it is denying that a thing is real that is negative. Is there anything essentially negative about existing, having properties, or having a nature? Even in a real thing's "being able to exist even if other things do not," "being able to exist" is positive and is the primary feature, and the modifying clause "even if other things do not," which does contain a "not," is secondary.

The reason that the concept of real identity is primarily positive is that all the paradigms of real things are primarily positive. Ordinary bodies are conceived as composed of some sort of positive stuff, for us, sub-atomic events. Electrons may have a negative electrical *charge*, but they have a positive ontological *reality*. Bodies positively occupy space-time. They have positive relations to other bodies, including causal relations. Minds have positive features and positive relations to other minds and to (via) bodies, including agent relations. And any logical analysis of minds and bodies that reduces them to simpler entities, or that even eliminates them as logical fictions, will be such that at least the simpler entities, the logical building blocks, are positive. Consider Hume's neutral monism of impressions and ideas, or Russell's 1919 neutral monism of noticed and unnoticed events.

My conclusion is that real identity and mental identity are both primarily positive concepts, and therefore cannot be logical opposites. Thus there is logical room for identities intermediate between, and more deeply and generally other than, real identity and mental identity.

Aquinas and Scotus on Formal Distinction

There are two main scholastic characterizations of formal distinction. Aquinas says that a formal distinction "has a foundation in the thing (*fundamentum in re*)," and Scotus says that "a formal distinction (*distinctio formalis a parte rei*)... holds between entities which are inseparable and indistinct in reality, but

whose definitions are not identical" (Anonymous 2018). Here "indistinct" does not mean 'vague' or 'unclear', but means 'not really distinct in the sense of real distinction'. These formulations seem logically equivalent. I sense no tension between them. In fact, Scotus's formulation seems to be a logical analysis of, or at least a more complete statement of, Aquinas's.

Allan B. Wolter explains Scotus's reason for admitting formal distinction as follows:

> Scotus... argued that if something has the native ability to produce different conceptions of itself in the mind, each concept reflecting a partial but incomplete insight into the thing's nature, then the distinction must be in some sense actual. Put in another way, there must be some "formalities" in the thing (where form is understood as the objective basis for a concept and "little form" or formality [*formalitas*] as an intelligible feature or aspect of a thing that is less than the total intelligible content of a thing).... If a thing is virtually two things inasmuch as it is able to be grasped in two mutually exclusive ways, this nonidentity of intelligible content must be prior to our actually thinking about the thing, and to that extent it exists as a reality (realitas) or in other words, objectively. (Wolter 1967: 431)

I accept Scotus's argument as explained by Wolter. I also accept but omit Wolter's account of Scotus's second argument for admitting formal distinction (Wolter 1967: 431). For more on formal distinction, see Wolter (1965) and the excellent Grajewski (1944).

Scotus's logical analysis of formal distinction is complex, having several logical constituents. But I feel that its constituent concept of "foundation in a thing," even though it can be logically divided into 'foundation', 'in', and 'a thing', is logically simple in the sense that its sense can be really conveyed only by examples, such as that identity is formally distinct from existence with a foundation in reality in identity, since we are explaining existence in terms of identity. This fundamental example in ontology itself may sound awkward, as though identity does not exist because it is prior to existence. And that is the route Butchvarov took with his material identity. But both identity and existence exist—both are Fregean mapping functions—and the only issue is which is best used to explain the other. In fact, the identity function is explaining its own existence as well as the existence of the existence function.

I have argued that a distinction is a distinction in reason (intellectually discerned in reality) if and only if it is a formal distinction (founded in reality). Since these two concepts, or better, qualified objects, are different, this distinction is itself both a distinction in reason and a formal distinction with a foundation in reality in formal distinction. For that foundation in reality explains how the distinction in reason is possible. But while all modal distinctions are both distinctions in reason and formal distinctions, the converse is false. For some distinctions in reason are mutual in their logical dependence, but all modal distinctions are one-sided in theirs. Thus modal distinctions are modally distinct from distinctions in reason. For example, red is modally distinct from color. Red is also formally distinct from color with a foundation in reality in red, since a thing has color because it is red, and is not red because it has color. For if it has color, nothing follows about what specific color it is. In general, a species is formally distinct from its genus (and also from its difference) with a foundation in reality in the species. And it is easy to see why. So to speak, it is closer to the real things that belong to it than the genus is. For a species has more reality, in the sense of having more conceptual content, than either its genus or its difference. For it is the logical conjunction of the two, and they are mere logical constituents of it. Another way to put it is that the genus and difference are logical abstractions from the species, and abstractions are less real than what they are abstracted from. Of course, all three are equally real qua universals, qua particular properties, and qua whatever else they are in metaphysical ecumenicism; but that is another topic. A third way to put it is that a thing belongs to a genus *because* it belongs to a species, and does not belong to a species because it belongs to a genus. For if it belongs to a genus, nothing follows about what species it belongs to (recall our example of red and color), unless the genus logically *can* have only the one species, which is classificatorily inappropriate to say the least. Should we say that the genus even prime number logically can have only one species, objects identical with the number two? It sounds like a put-up job. And what about the species objects identical with three minus one? Then there will be infinitely many species of the genus even prime number, all with logically equivalent memberships with each other—and with the genus. How absurd! The truth is that we require different species of the same genus to have different members, and require it to be at least logically possible for a genus to have more than one species. Homo sapiens is the only species in the hominid family, but only because the rest went extinct.

Sometimes objects are distinct only in reason, but it is unclear which is the foundation of which, or even whether either is the foundation of the other. Frege uses the universals *immortal* and

lives forever to illustrate the difficulty of our always being able to tell what has positive content from what has negative; but they also and relatedly illustrate the difficulty of our always being able to tell which universal is the foundation in reality of which. More deeply and generally, it is hard to tell which universal, *finite* or *infinite*, is positive or negative, and which (if either) is the foundation in reality of the other. Descartes may be interpreted as implying that the infinite is prior to the finite, since he argues that we ought "to reserve to God alone the name of infinite," and for him, God is supremely real and prior to everything else, and he argues that everything else that we might consider infinite should instead be considered indefinite, so as to avoid puzzles about "whether the half of an infinite line is infinite, or whether an infinite number is even or odd and so on" (Descartes 1969 / 1642: 229–230). (The same puzzles arise for the term indefinite.) But not everyone would accept Descartes' arguments; I myself am agnostic. Many modern logicians would say that *either* term, finite or infinite, can be defined as the negation of the other, and would, following Cantor, analyze infinite numbers as a higher logical order of numbers to which concepts like half, even, and odd do not apply. In any case, arguably the two difficulties are related, since if anything, what is positive should be the foundation in reality of what is negative. We might even venture that what is negative is positively negative! (And indeed for Frege, negation is a mapping function just like any other.) For we feel that reality should ultimately *be* positive, even if Butchvarov's and our *definition* of it contains some negations. Compare nonred. It is negatively defined as not red; but all the colors that are different from red, such as green and blue, are positive universals. And electrons, the axis of the earth, and the number two, not to mention green grass and the blue sky, are positive objects that are in the nonred portion of reality. Of course, transparency and invisibility are different from red too, and they are negative universals; so it is a mixed bag. But be that as it may, there is a general solution for any specific difficulty of telling which object, if any, is the foundation in reality of the other. Namely, *both* of the problematic objects have a foundation in reality in a *third* object: the *portion of reality* which they both logically occupy. Thus both *immortal* and *lives forever* have a foundation in reality in the portion of reality they both occupy, regardless of whether either is the foundation of the other; and likewise for finite and infinite. Nor need we specify the portion of reality any more than to say it is the portion of reality they both logically occupy. As to different portions of reality that are distinct only in reason, we may say that the larger portion contains and therefore is the foundation in reality of the other; that will be the case for modal distinctions. And if the portions overlap only in

part, then they are both contained and founded in the larger portion which is the sum of their portions. Of course, if they are the same portion, then neither can properly contain the other, since they are identical. But it will not be a problem for that portion's being the foundation in reality of all the more specific rationally distinct objects that fully and exactly occupy it.

This 'portion of reality' solution is mutually supported by the correspondence theory of truth. For insofar as truths about objects that are distinct only in reason are intersubstitutable salva analycitate, their extensional truth-grounds will be identical. And the one portion of reality they both describe will be the extensional truth-maker. Thus this truth-maker, or maker of the truth of the every pair of one-one corresponding logically equivalent statements about them, *is precisely its foundation in reality*. For a simple, clear, and trivial example from arithmetic, "one plus one" and "five minus three" are intersubstitutable salva analycitate in all arithmetical equations containing them, and they clearly describe the same portion of arithmetical reality. We might even call that portion of reality the number two. There is no better term for it!

If mutual logical dependence is based on and explained by logical whole-part relations, specifically by mutual logical overlap of parts, the question devolves to whether a whole is more real than its parts or vice versa. Just above, I suggested in effect that a whole is more real than its parts when I suggested that a whole portion of reality is the foundation in reality of any portions of reality it logically contains, for example that a species is more real than its genus. But Russell admits different senses in which wholes are logically prior to their parts and vice versa in *Principles* (Russell 1964 / 1903: ch. 16). And there are at least six views to consider.

(1) We might argue that a whole is more real than its parts simply because it contains them. For it contains all their portions of reality, hence it contains more reality than any single part. This is the view I was suggesting just above.

(2) Or we might argue that insofar as parts are logically prior to (simpler than, and in that sense more independent than) the whole, the parts are more real than the whole.

(3) Or we might follow the adage that when faced with an apparent contradiction, draw a distinction. Thus we might hold ecumenically that a whole is more real than its parts in the sense of being a greater portion of reality than any one of them, and perhaps also in having emergent properties, that is, properties that its parts do not have; and *also* hold that its parts are more real in the sense of being simpler, more independent, and logically constitutive of the whole. (Emergent properties are themselves logical constituents of the whole, but that does not violate their emergent status. A building may have the property of being cubical without any of its

parts' being cubical. And that includes even its property of being cubical as one of its logical parts, since the property of being cubical is not itself cubical.) On this ecumenical approach, we find whole and part each to be the foundation in reality of the other, each in a different sense. That is very ecumenical—and Russellian!

(4) Or one might find the question indeterminate because both views fail Moore's open question test. "It is greater, but is it more real?" "It is simpler, but is it more real?" Either answer, "yes" or "no," to either question seems to be a non sequitur on its face.

(5) At this point, we may wish to fall back on the 'portion of reality' solution. Namely, both a whole and its parts have their foundation in reality in the portion of reality that they both occupy. It might be objected that view (5) is just view (1) again, since the whole *is* the portion of reality they both occupy. The reader probably already knows my reply, since I already noted that the concept of a portion of reality is highly generic. Namely, views (1) and (5) are different but distinct only in reason. For example, the concept of a *whole building*, whose parts are bricks and mortar, is far more specific than the concept of a *portion of reality*. In fact, the two concepts are modally distinct, on the general principle that a genus (portion of reality) is modally distinct from its species (building). All buildings are portions of reality, but not all portions of reality are buildings. That the building is more real than the portion of reality in the sense of being more specific (recall red and color, and species and genus) is an opposed sense of "more real."

Arguably, Frege anticipates view (5) when he says that one pair of boots and two boots "may be the same visible and tangible *phenomenon*" (Frege 1974 / 1884: 33, my emphasis). Frege anticipates it even more in a longer passage about marking off the North Sea from the rest of *the earth's water* (Frege 1974 / 1884: 34; compare 28–30, 32–33, 41–43, my emphasis). But my own view is deeper and more general than Frege's. For the concept of a portion of reality is deeper and more general than the concept of a visible and tangible phenomenon or of a physical object, not to mention deeper than the concept of a pair of boots or of a body of water.

(6) There are *three* senses in which a whole is more real than its parts or vice versa. First, per view (1), a whole is more real than its parts in the sense that it contains a greater portion of reality. Second, per view (2), the parts are more real than the whole in the sense that simpler objects are more real than complex objects. And third, per view (5), regardless of whether a whole is the foundation in reality for its parts or vice versa, both have their foundation in reality in the portion of reality which contains them all. Thus view (6) is even more ecumenical than view (3), since view (3) admits only the first two of these three senses.

Furthermore, these three kinds of foundation in reality are themselves formally distinct with a foundation in reality in the portion of reality. More specifically, they are modally distinct. For if there were no portion of reality, there would be no whole *or* parts either. Thus there would be no whole there to contain more reality than any of its parts, and likewise there would be no parts there to constitute the whole. Thus portion of reality is the sine qua non.

It seems to me that view (6) is the best and most considered view. For it ecumenically incorporates views (1)–(3) and (5); and therefore it seems to answer the view (4) Moorean open question tests as well as they can be answered. And because all the views except view (4) are only formally distinct, my initial suggestion of what I later called view (1) is correct and included.

View (6) can explain the immortal-lives forever dispute, and the deeper and more general finite-infinite dispute (living forever is just temporal infinity). Consider an infinite line in a Euclidean plane. It can be divided into infinitely many finite line segments. The line cannot exist if the segments do not. Nor can the segments be segments of the line if the line does not exist. But both occupy the same two-dimensional linear *portion* of the plane.

On the correspondence theory of truth, truth is formally distinct from reality. That is, truths are formally distinct from the facts they assert, with a foundation in reality in the facts. Truths are also modally distinct from facts, since there is a very obvious one-way dependence of truths on facts. Truths are true *because* they describe facts; facts do not exist *because* the truths that describe them are true. That said, there is a *mere* mutual logical equivalence between truths and the facts they describe. And that is the metaphysical truth that grounds Alfred Tarski's disquotation theory of truth. This metaphysical basis is how the disquotation theory is possible. We may say this metaphysical basis is the 'truth-maker' of the disquotation theory of truth in essentially the same way that any fact is the truth-maker of the truth that describes it. In fact, the disquotation theory of truth is formally distinct from the correspondence theory of truth with a foundation in reality in the correspondence theory of truth. More deeply, qualified objects theory founds the correspondence theory of truth. For the statement "The cat is on the mat" is true only because the qualified fact it expresses "is" a fact in itself. Thus the correspondence theory of truth is formally distinct from qualified objects theory with a foundation in reality in qualified objects theory. This shows that foundations in reality can themselves have deeper (lower-level) foundations in reality. And general theory of objects is deepest of all. For both facts and qualified objects are kinds of objects.

Descartes on the Ontological Distinctions

There are many interpretations of Descartes' ontological distinctions. Paul Hoffman lists five rival interpretations of real distinction alone (Hoffman 2002). I am simply going to state the distinctions in my own way, and call them neo-Cartesian. This is not a scholarly book, and for our purposes this will do. Hoffman confirms my view that the Cartesian distinctions are about what logically *can* exist without what, and that our *conceiving* what can exist without what is only the *test* or *criterion* of that (Hoffman 2002).

I define neo-Cartesian real distinction as real distinction in our sense (1). That is, two things are really distinct if either logically can exist even if the other does not, and both things are real. I define neo-Cartesian distinction in reason as a distinction between two things that is not a real distinction.

Descartes distinguishes two sorts of modal distinctions. Descartes says:

> There are two sorts of *modal distinctions*, i.e. the one between the mode properly speaking, and the substance of which it is the mode, and the other between two modes of the same substance. (Descartes 1969 / 1644: 244–45, principle 61, Descartes' emphasis)

Modes are logically dependent on substances, but not the other way around. A mode is a particular property of a particular substance, such as this walking or this talking by Socrates, or this green color of this apple. The mode logically cannot exist if the thing does not. Socrates cannot walk or talk if he does not exist, and the apple cannot be green if it does not exist. But the existing Socrates logically can be not walking or talking at all, and this apple logically can be not green at all. Thus a mode is a logically contingent ('accidental') particular property of a substance.

Attributes of substances are distinct only in reason from substances, but the logical dependence is mutual, not modal. For attributes are essential properties of substances. An attribute is a particular essential property of a particular substance, such as this spatial extension of this body, or this thinking of this mind. A body cannot exist without being extended. A mind cannot exist without thinking. And this extension can only exist as the extension of this body. And this thinking can only exist as the thinking of this mind. See Descartes (1969 / 1642: 245, principle 62).

For Descartes, there are two sorts of mutual distinction in reason. The first is between a thing and its essential attribute as just

described. Implicitly, the second is between two essential attributes of the same thing. This corresponds exactly to his two sorts of modal distinction. All four sorts (two mutual, two one-sided or modal) are distinctions in reason. For they are all logical dependence relations that are discerned by reason. And all four are formal distinctions in that they are not created by the mind, but discerned in and therefore founded in reality.

Descartes confirms my view that his modal distinctions are formal distinctions. Johannes Caterus says that Descartes rejects Scotus's "formal and objective distinction, which is intermediate between a real distinction and a distinction of reason [!]" (Caterus 1970 / 1642: 8). Descartes replies that "the formal distinction which the learned Theologian claims to draw from Scotus [!!]... *in no way differs* from a modal one, and applies only to incomplete [i.e. logically dependent] entities.... Thus, for example, *there is a formal distinction* between the motion and the figure of the same body...." (Descartes 1970 / 1642: 22, my emphasis, see 23). Surely this applies to Descartes' and Suárez's modal distinctions alike. Descartes read Suárez, citing *Metaphysical Disputations* on another point (Descartes 1970 / 1642: 107). John P. Doyle says, "More than likely, Suárezian metaphysics was that first learned by Descartes from his Jesuit teachers at La Flèche" (Doyle 1995: 13). And it ought to apply to mutual distinctions in reason as well. Descartes can use terminology any way he wants, and he can restrict "formal distinction" to modal distinctions, that is, to 'incomplete entities'. But he overlooks that *all* true statements about *all* the ontological distinctions are objectively true, that they are objectively true *because* they state what we discern in the real order of things, and that therefore *all* their truth-makers are their *foundations in reality*. Thus *all distinctions in reason are formal distinctions*. It seems to me that he and Suárez should have known that. They did not have the early Wittgenstein's conception of truth-grounds. But they did understand and accept the correspondence theory of truth. Again, I reject mental distinctions because they are literally false fictions created by the mind. There is no such thing as a mental distinction. It is basically a contradiction in terms. There are only qualified mental distinctions, on a par with the round square.

Does Suárez Admit Formal Distinction After All?

It may be said that Suárez does not reject formal distinction so much as find it both redundant and equivocal in the writers before him (Suárez 1947 / 1597: 21, 27, 32). Of course, all the distinctions are more or less equivocal across the medieval writers. And Suárez's redundancy criticism makes superficial sense. I

myself already showed that all modal distinctions are formal distinctions. But I reject Suárez's redundancy criticism for modal distinctions and formal distinctions because those distinctions are defined differently by him, and differ in scope of application. For us, formal distinction is a deeper and more general classification than modal distinction. For all modal distinctions are formal distinctions, but not all formal distinctions are modal distinctions.

We may even say that Suárez admits formal distinction, though only "virtually or fundamentally" (Suárez 1947 / 1597: 26). We may somewhat humorously say that he formally rejects formal distinctions, but actually accepts virtual or fundamental distinctions which are formal distinctions as Scotus, Wolter, and I understand the term. Has the Subtle Doctor outsubtled himself into a corner?

Suárez virtually or fundamentally admits as much when he says:

> *Solution of the Question*
>
> 16. Notwithstanding, I think it is true without qualification that there is among created things a certain actual distinction which is found in nature prior to any activity of the mind, and that such distinction is not so great as the distinction between two altogether separate things or entities. This distinction, to be sure, could be designated by the general term "real," inasmuch as it is truly verified in reality, and is not merely an extrinsic denomination issuing from the intellect. However, to differentiate it from the other, namely the major real distinction, we can call it either a "distinction from the nature of the case," thus applying to this imperfect distinction a term that is in common use, or more properly a "modal distinction." For, as I shall explain, this distinction is invariably found to intervene between a thing and its mode.
>
> The term "formal distinction" is not much to my liking, as it is excessively equivocal. It is frequently applied to things really distinct, inasmuch as they are essentially distinct if they differ specifically; such objects have different formal unities, and hence differ formally. Even individuals of the same species may be said to be formally distinct, inasmuch as their individual formal unities are distinct, as we said above. Indeed, even in the Trinity paternity and filiation, which are really, though not essentially or numerically distinct, can be said to be formally

> distinct in the objective notions of their relations—a kind of distinction not found outside this mystery.
>
> Thus a formal distinction is of wider extension, and can be greater than the distinction from the nature of the case, of which we are speaking. From another point of view it can be a lesser distinction, and this is the more common acceptation, for it is frequently applied to formalities as conceived in a state of precision by our minds. In this latter case the distinction does not exceed the level of a mental distinction. (Suárez 1947 / 1597: 26, his section heading emphasis, note omitted)

I have trouble seeing any difference between Suárez's 'distinction from the nature of the case' and Scotus's 'distinction having a foundation in reality', except that Suárez is restricting his term for historical reasons of terminology. Suárez holds that all *and only* modal distinctions are distinctions from the nature of the case. He holds that formal distinctions, as understood in various writers, are in one sense wider and greater than distinctions from the nature of the case, and in another sense lesser (he does not say narrower). He finds formal distinctions wider in that the term is used equivocally in ways in addition to describing modal distinctions, and greater in the way that applies to the divine Trinity. He finds them lesser in that the term is applied to formalities as precisely conceived by us, that is, in precisely formulated mental distinctions. I can understand and accept that he dislikes the equivocal use of the term "formal distinction" across the many writers he has read. But going by core understandings, it seems to me that formal distinctions as Wolter's Scotus understands them are precisely Suárez's distinctions from the nature of the case. And as Scotus's core understanding goes, in logic if not also in Scotus, formal distinctions are wider than modal distinctions, since formal distinctions also include real distinctions and mutual distinctions in reason. For all are objectively founded in reality. And of course all are intuited synthetic *a priori*.

All the ontological distinctions I am concerned with have now been defined or explained, I think well enough to use, and as well as they can be. But even if they are all defined, their categorial applications are synthetic *a priori*, and are therefore completely intuitive. This is not the case if, for example, our metaphysics is that only physics is real, and our epistemology is that only science can tell us what is real. For then all our categories will be synthetic *a posteriori*. In my view, such metaphysics and epistemology miss almost everything of philosophical importance. But some major

philosophers do hold such views, and we ought to try to see how and to what extent our theory of ontological distinctions would apply to them. Our theory applies in that the categories of even *a posteriori* sciences can overlap *a priori*. For they may be *arrived at* empirically; but if they are *defined* in the theory, then there will be a distinction in reason between the defined object and the logical constituents of the logically complex defining object. That the definitions can and will be abandoned if the theory is rejected in the light of ongoing empirical research does not detract from this.

The Ontological Distinctions in Qualified Objects Theory

How does qualified objects theory apply to the ontological distinctions? To begin with, all the terms for all the ontological distinctions directly refer to and connote qualified ontological distinctions which "are" ontological distinctions in themselves.

All the ontological distinctions are distinctions in reason in that they are discerned by the reason. And all of them are ultimately grounded in how portions of reality can be differently conceived or regarded, so as to be parsed into different objects which stand or do not stand in relations of one-sided or mutual logical dependence. Now, a qualified object is an objectual way of conceiving or regarding things, so as to do just such parsings. Thus all the ontological distinctions (and more deeply and generally all distinctions in reason, including all the more specific distinctions, such as that between red and color) are cognitively primarily (i.e. directly) distinctions between qualified objects, and cognitively secondarily (i.e. indirectly) also between any objects in themselves or other lower-level objects they *veridically* may "be." Distinctions in reason can also obtain between objects in themselves that qualified objects *illusorily* "are." For example, two apples that are mistakenly perceived as two oranges are still really distinct. And all that makes perfect sense historically, since theory of ideas was used to do the same thing. Truths of reason were understood as necessary relations among ideas, and applied to the real order insofar as ideas correspond with reality. But qualified objects are real in the sense of not being nothing, and are also real in the sense of being mind-independent. Thus all ontological distinctions in themselves are cognized via qualified objects that are real in those two senses. And qualified distinctions are qualified objects that are real in those two senses. Thus the ontological distinctions are discerned, not created or invented us, not only in the real world, but even in the qualified real world. But there is no such thing as merely mental distinctions in themselves, since they are *delusory*.

To be sure, there can be a distinction in reason, or even a real distinction, between the objective realities of two via antiqua ideas whose formal realities *are* mental, such as Descartes'. It would simply be the same distinction as the one between any real things in the world that the objective realities correspond to. Nor would the distinction be mental in the sense of a fictitious, merely mental distinction that we create or make up. Objective realities can have any kind of reality! They can correspond to really distinct rocks. And even if the objective realities are those of two minds, or of two mental ideas, there can be two really distinct minds in themselves or ideas in themselves that those objective realities correspond to. Again, all objects in themselves are totally real.

A qualified object is distinct only in reason from all of its twenty-one essential features. This includes being distinct only in reason from its formal reality and its objective reality, and also from its being real in the senses of not being nothing and of being mind-independent. It is also distinct only in reason from its negative property of not being real in the sense of being able to exist even if, per impossibile, minds were logically impossible. Recall that all properties, including negative properties and indeed the logical negation function itself, exist as Fregean functions.

Qualified objects are wholly and really distinct from objects in themselves. The qualified world and the world in itself are mutually exclusive and jointly exhaustive. All objects in themselves are totally real. No qualified objects are totally real, and that includes their objective realities qua objective realities. I even defined an object in itself as an object that is not qualified!

One might object that the qualified number two is distinct only in reason from number two in itself. For both are logically necessary objects, and their intellectual content is identical. My reply is that they are nonetheless really distinct, as I just explained, in the order of being. Objects in themselves are totally real and qualified objects are not. The objector is confusing the order of being with the order of cognition, and the being relation with the identity relation. In the order of cognition, if the qualified number two is "utterly transparent" "to our reason" (Frege 1974 / 1884: 115), then so is the number two in itself that it "is" (compare Descartes 1969 / 1642: 146). The qualified number two is really distinct from the number two in itself because it belongs to a wholly distinct ontological realm. Their 'intellectual contents' are distinct only in reason, and do not stand in the identity relation, but in the being relation, or in theory of ideas, the formal identity relation. This is the case in logic, mathematics, and *a priori* truths in general, in the order of clear and distinct ("transparent") cognition of objects in themselves via qualified objects.

One might object that there ought to be a kind of "ontological argument" from the qualified number two to the number two in itself. For both are logically necessary, and where would the intellectual content of the number two in itself be logically deducible from, if not from the qualified number two?

My reply is that I just explained why such an *argument* must fail in the order of being: the two objects are really distinct. But in the order of cognition, we can transparently *see* (cognize) the necessary being of the number two in itself via the qualified number two. And there is an "ontological argument," but it is from ordinary existents in themselves, such as the ordinary fact that there are two cats on the mat, to the number two in itself, parsed from the fact as a timeless object. Then we can simply see it is the *kind* of timeless object that can only be a necessary being. See chapter 3.

The logical opposites of real distinction, distinction in reason, modal distinction, and formal distinction would of course be their negations, not-real distinction, not-distinction in reason, not-modal distinction, and not-formal distinction. But these simple logical denials are not what we would normally want to call real identity, rational identity (identity in reason), modal identity, and formal identity. Therefore I offer these definitions instead: Things are really identical just in case they are logically (literally and numerically) identical. Things are identical in reason (rationally identical) just in case they are both logically identical and not even distinct in reason. That is, not only are the lower-level objects logically identical with each other, but even the qualified objects through which they are presented are logically identical with each other. Things are modally identical if they are modes, are logically identical, and are rationally identical. Things are formally identical if they have logically (literally) identical forms (natures), or at least exactly resembling forms (natures). This last definition aims to conform to the traditional literature. All things are formally identical with themselves; but really distinct things logically can be formally identical too, such as two horses in the real world, and your idea of a horse and my idea of a horse, or more precisely the objective realities of our two ideas. If you remember the horse you saw last night and I see a horse today, the two horses and our two perceptual ideas are all formally identical, even though the horses are level 0, my idea is level 1, and yours is level 2.

All rational identities, including all modal identities, are formal identities. For they have a foundation in reality in the forms of things. But not all formal identities are rational identities. For horses and our mental ideas of them are formally identical but really distinct. Also, formal identities can be factually informative; but all rational identities must be factually uninformative, since even the directly presented qualified object is the same.

One might offer other definitions of the ontological kinds of identity. I claim only that mine are reasonable conceptually and historically. On metaphysical ecumenicism, the more definitions (or should I say kinds) of ontological kinds of identity, the merrier!

How can there be different kinds of identity? Frege says that "identity is a relation given to us in so specific a form that it is inconceivable that various kinds of it should occur" (Frege 1967a / 1903: 129; 1970b / 1903: 235). And of course Frege means literal and numerical identity, regardless of whether the things are real in any traditional sense, such as that of substance metaphysics. We may call that logical identity, and its sense is best expressed in the law of identity, A = A. The answer is that the ontological kinds of identity are not logically identical with logical identity (identity in Frege's sense), but are distinct only in reason from it, since we defined them all in terms of it. Indeed, qualified objects theory and its essential ontological distinctions ground and explain the logical possibility of a factually informative identity in terms of Frege's logical sense of identity. Again, Fregean logical (literal) identity is a logical constituent in the definition of every ontological kind of identity. I allow exact resemblance as an alternative in the case of formal identity; but even then logical identity remains a disjunctive logical constituent in the definition.

The Matrix for Ontological Distinctions

The mix and match matrix for logical dependence, and thereby for the ontological distinctions, is very simple. For any two different objects in our wide sense of "object," *a* and *b*, either:

(1) *a* and *b* logically depend on (imply) each other, or
(2) *a* depends on *b*, but *b* does not depend on *a*, or
(3) *b* depends on *a*, but *a* does not depend on *b*, or
(4) neither *a* nor *b* depends on the other.

The cases are mutually exclusive and jointly exhaustive. Cases (1)–(3) are kinds of distinction in reason. Case (4) is real distinction in the wide sense in which *a* and *b* need not be totally real things, but can be any two different objects in the wide sense.

The mix and match matrix for logical containment is the same, and therefore logically equivalent to the dependence matrix, mutatis mutandis. For any two different objects in the wide sense *a* and *b*, either:

(1) *a* and *b* logically contain (imply) each other, or
(2) *a* contains *b*, but *b* does not contain *a*, or

(3) *b* contains *a*, but *a* does not contain *b*, or
(4) Neither *a* nor *b* contains the other.

The cases are mutually exclusive and jointly exhaustive. Cases (1)–(3) are kinds of distinction in reason. Case (4) is real distinction in the wide sense in which *a* and *b* need not be totally real things, but can be any two different objects in the wide sense.

Trivially, if the existence of X logically implies the existence of Y, then the existence of X logically depends on the existence of Y. For if no Y, then no X. And if the relevantist whole-part containment theory of logical implication is true, then if X logically implies Y, then X logically contains Y. Thus logical dependence and logical containment are distinct only in reason. Specifically, they are formally distinct with a foundation in reality in the containment matrix. For the containment matrix is logically deeper than the dependence matrix in virtue of being its theoretical explanation. Since I accept the relevantist containment theory of logical implication, I accept all the implications just described. But I am not an Anderson-Belnap sort of relevantist *as opposed to* a Frege-Russell sort of modern classical logician. For I hold that modern classical logical is relevantist in the deepest and most general sense of logical containment of truth-grounds. I argue for that in my (2023 / 2015: ch. 9; 2021a / 2012). We can already see it in Wittgenstein's *Tractatus*, and in logic diagrams (including truth-tables) that visibly represent logical validity as logical containment.

The Limited Validity of Relative Identity

I shall now briefly discuss Peter T. Geach (1973)'s theory of relative identity. The main thing for us is that on metaphysical ecumenicism, a Geachian identity that is relative to some property *F*, and the corresponding Fregean / traditional 'absolute' identity that is not, but is conjoined with the mere use of *F* to characterize objects *a* and *b* instead of to relativize identity, are distinct only in reason. For all the corresponding identity statements are logically equivalent. In fact, they are formally distinct with a foundation in reality in *a*, *b*, *F*, and absolute identity. For "is the same *F* as" is clearly a logical construction out of *F* and identity, even if Geach treats it as if it were primitive. More precisely, he can treat it as primitive if he wants; but it is less illuminating that way, since the absolute analysis yields two logical constituents of *the same F*, namely identity and *F*, while he has just a single relation. And the absolute analysis is more illuminating simply on the face of it.

But this does not mean that absolute identity theory is right and relative identity theory is wrong. Again, the two theories are

logically equivalent in their applications. Thus on my logical containment and dependence arguments, both theories are right in that both absolute identity and the indefinitely many kinds or instances of relative identity exist, and both are wrong only in that their adherents regard each other's theories as false. Absolute identity wins in that it provides the foundation in reality for relative identity.

Admitting both absolute identity and relative identity as distinct only in reason is an example of metaphysical ecumenicism, which is the main topic of chapter 3. Metaphysical ecumenicism is far more generous to relative identity theory than mere absolute identity theory considered as a rival theory. For I admit relative identity as distinct only in reason from absolute identity. For me, relative identities are perfectly valid logical parsings of identity judgments, even if they are not the most illuminating ones. And it is at least illuminating that absolute identity and relative identity are factually distinct only in reason. Geach deserves credit for at least that much.

John Perry (1978) notes that the paradoxes that lead to Geach's theory merely mean that the objects in question have not been sufficiently specified. Geach exports their specifications to the relativization of identity, while Perry keeps them in the objects themselves. As Russell says in *Principles*:

> [T]he same set of objects may have different numbers assigned to them (Gl. p. 29); for example, one army is so many regiments and such another number of soldiers. This view seems to me to involve too physical a view of objects: I do not consider the army to be the same object as the regiments. (Russell 1964 / 1903: 519)

This follows Frege (Russell cites Frege's *Grundlagen* as "Gl."), and basically the whole tradition all the way back to Coriscus in the Agora and Coriscus in the Lyceum, and the identity puzzle of Theseus' completely rebuilt ship of many timbers (is it the same ship or not?), if not earlier. For more on relative identity, see my (2003 / 1996: 31–38). For more on the ontological distinctions, see my (2021 / 2020). I discuss this Russell text again in chapter 3.

Ontological Distinctions in Themselves Among Objects in Themselves

I reject merely mental or conceptual distinctions, and also merely nominal or linguistic distinctions, as not genuine. For they

are not distinctions between objects that are different in reality. They are not even distinctions in reason, that is, between objects that are different in reality but distinct only in reason. This leaves room only for ontological distinctions among objects in the real order, meaning objects in the wide sense. And there are only two kinds of objects in the wide sense: qualified objects, and objects in themselves. In this section, I shall discuss ontological distinctions in themselves between objects in themselves.

Here there is no change of definition of the ontological distinctions. There is no change in meaning for "real distinction," "distinction in reason," "modal distinction," or "formal distinction." There is only a restriction of scope of application to objects in themselves. Indeed, that was always the main intended scope for the ontological distinctions.

One must not be confused by distinctions in reason. There are both qualified distinctions in reason and distinctions in reason in themselves. In this section, we are discussing the latter.

Since all ontological distinctions are genuine distinctions (all horses are genuine horses), and all genuine distinctions are in the real order, all ontological distinctions are in the real order. And it follows that all ontological distinctions are formal distinctions in that they all have a foundation in reality. But the foundation varies depending on the kind of ontological distinction.

In the case of real distinction, the foundation in reality is the two really distinct objects and their being really distinct. In the case of modal (one-sided) distinction, the foundation in reality is the object that is logically independent of the other object. For example, the shape of a stone is formally distinct from the stone with a foundation in reality in the stone. In the case of distinctions in reason that are not modal (one-sided), the foundation in reality is the object that the two rationally distinct objects more deeply are (not: "are," but *are*), or at least the portion of reality they both occupy. And formal distinctions are already formal distinctions!

A final thought as we move on to metaphysics. Materialists can say that to be is to be material. But could such a fact be matter? Idealists can say that to be is to be mental. But could such a fact exist merely in the mind and not in reality? Platonists can say that to be truly real is to be a form, and that would be a formal fact. But if flux theorists say that to be real is to change, could such a fact ever change? "The more things change, the more they remain the same." —What a way for fluxists to weasel out of self-defeat!

And what if bodies, minds, forms, and changing things all exist? Then all these 'metaphysical ontologies' stand in need of an ontology that is deeper and more general than any of them. For each of them would be of limited, parochial validity at best. I have already explained that twice before, but perhaps this time is best.

3

Metaphysics

In this chapter, I argue for my theory of metaphysical ecumenicism. In the course of doing so, I discuss all the main categories of metaphysics, beginning with the problem of universals. I present two arguments for universals, the containment argument and the dependence argument. The arguments conclude that universals exist in the minimal sense of not being nothing. And that is just Russell's robust sense of reality. The arguments will also conclude to the existence of universals in the sense of mind-independence, and even to their existence in the sense of total mind-independence (independence even of the logical possibility of minds), if we start the arguments from such entities. That is, if no fallacies of composition or division are committed, we can use the containment and dependence arguments to prove those last two kinds of being as well. For mind-independent beings can contain and depend on only mind-independent beings, and totally mind-independent beings can contain and depend on only totally mind-independent beings.

The two arguments are very simple. If X logically contains Y, or if X logically depends on Y, then if either X or Y exists in the sense of not being nothing, then the other of X or Y exists in the same sense. For nothing can contain or depend on nothing. The arguments can be expanded to include any other sense of existence or kind of being, if no fallacies of composition or division are committed, and to include any relation R. For nothing can stand in relation R to nothing. But it will take much work to elaborate the two arguments, show that and how they apply in all the main areas of metaphysics, and discuss at least the main dialectical objections.

The notions of logical containment and logical dependence are very simple. Indeed, both are distinct only in reason from, and can be explained in terms of, logical implication in the wide *a priori* sense. If P implies Q, then the truth-grounds of P logically contain the truth-grounds of Q, and the truth of P logically depends on the truth of Q. And the logical dependence and containment extend to any entities that P and Q are ontologically committed to. Needless to say, the commitments are especially clear if P and Q are existence assertions made by using existential quantifiers.

While talk of logical containment is not ordinary talk of parts and wholes, it has developed an intelligible logical use in its own right (compare Price 1969: 11–12; Descartes 1970 / 1642: 76). And since the arguments work for any relation R, they work for

logical containment and dependence relations as well as they work for ordinary talk of containment and dependence relations.

Again, on the face of it, a logical whole has being / existence / reality of any ontological kind K if and only if all of its logical parts do too. Thus there will be no fallacies of composition or division with respect to ontological kinds. There are only three exceptions I can think of. First, acts in themselves logically must contain qualified objects as their direct objects. Second, some classes / sets / groups in themselves must include less than fully real objects as members, if all logically possible classes / sets / groups are to be logically necessary objects in themselves. Third, facts *that* qualified objects exist must be facts in themselves. To be sure, they cannot be *propositions*, since all and only qualified facts are propositions. But their thatness, too, is compositional. These three kinds of objects in themselves can and must have qualified constituent objects.

The arguments establish metaphysical ecumenicism not only for universals and for all other metaphysical categories of objects that are in containment or dependence relations with given entities, but also for any genus-species levels L1 and L2 on which objects on level L1 are logically contained by or logically depend on given entities of level L2. Thus in the case of universals, the arguments establish an ecumenical revision of our understanding of the many ostensibly rival theories of universals and particulars. Namely, they show that *all* the entities which *all* the various theories posit exist in the sense of not being nothing, *if* the theories are intelligible and logically possible as logical parsings or analyses of ordinary things and properties that are given as existing in an ordinary sense, and yield logically equivalent analyses of the ordinary things and properties. This can be done by an explicit theoretical definition if the two terms, the defining term and the defined term, are intersubstitutable salva analycitate. It can also be done by a contextual definition if the two statements are logically equivalent, and the analyzing statement does not include the term that is being analyzed in the analyzed statement. Either way, pairs of logically equivalent statements will result.FN3-1

Thus if the containment and dependence arguments are sound, then they reconcile realism, conceptualism, and nominalism, and also theories of individuation as far apart as Bergmann's bare particulars and Butchvarov's mere objects, as all being true regarding the items they admit, and therefore as being logically consistent with each other, and as all being false only insofar as they reject the items their rivals admit. At least our two arguments will do that if the theories provide intelligible, logically possible, and logically equivalent ways of parsing the same portions of ordinary, pre-philosophical reality, that is, of "saving the same

ordinary appearances" (grounding or analyzing the same ordinary phenomena) by means of statements that are logically equivalent to the corresponding statements about the ordinary phenomena, and that are therefore logically equivalent to the corresponding statements in each other, that is, in all the other "rival" theories. For every logical parsing logically implies logical containment and dependence relations; and parsings cannot be of nothing into nothing. And on the correspondence theory of truth, true statements about parsings correspond to parsings in the real order.FN3-2

Metaphysical ecumenicism applies to topics as far apart as minds and bodies, space and time, free will and determinism, epistemology, and ethics, if the theories are intelligible, logically possible, and provide logically equivalent analyses of the ordinary appearances. This universal applicability of the containment and dependence arguments should not be surprising. For the notions of logically simple and complex entities, that is, the notions of logical parts and wholes, and the notions of logical dependence and independence, are among the deepest and most general notions in ontology. And they are the rather simple logical basis of the containment and dependence arguments respectively.FN3-3

Metaphysical ecumenicism will even reconcile the later Wittgenstein with traditional metaphysics to an extent many might find unthinkable. For language rules and language-games cannot be nothing. Indeed, on Wittgenstein's own private language argument, they are mind-independent as well. And if he is nominalist or conceptualist on some topics, that is included in metaphysical ecumenicism as well. For names and concepts cannot be nothing either. Indeed, they are simply more conservative logical parsings.

Of course, even a single metaphysical theory can have overlapping categories of entities. There are many such theories from Plato and Aristotle on. William George de Burgh says:

> That is what Aristotle had asserted of being in the... Categories (substance, quality, relation, and the rest); they were not ten species of a common genus, 'being', nor were they wholly different from one another in their 'being'; there was identity amid the difference and differences amid the identity. (Burgh 1967: 462)

Burgh's point about Aristotle is obvious and needs no argument.

I am arguing that all logically equivalent 'rival' theories which reject each other's *entities* do in fact all have overlapping entities which exist in the sense of not being nothing. Thus my theory is not just another theory with overlapping entities, such as those of Aristotle, Aquinas, Hegel, or Russell, but is an ecumenical

meta-theory about theories of metaphysics in general. In contrast to my metaphysical ecumenicism, theories which reject other theories as false rivals are sectarian meta-theories about the 'rival' theories.

All this supports and is supported by the correspondence theory of truth. If metaphysical ecumenicism is correct, then all theories which are intelligible and logically possible, and provide logically equivalent analyses of ordinary things, yield equally valid ontological parsings of the ordinary things. Thus all the entities that any of them asserts exist in the sense of not being nothing, and all the theories are true! If one theory is more intellectually illuminating than the rest, then we may say that in that sense its entities are the foundation in reality of the entities of the other theories. Or if one theory has simpler entities than the rest, then we may say that in that sense its entities are the foundation in reality of the entities of the other theories. And so on. Thus metaphysical ecumenicism ecumenically admits even different kinds of foundations in reality.

Note that logical equivalence is a sufficient condition of logico-metaphysical parsing, but not a necessary one. For one-sided modal distinctions are distinctions only in reason too, even though their logical containments and dependences are only one-way. Logical equivalence is a necessary condition only of *mutual* containment and dependence. However since the containment and dependence arguments work for any relation R, they work for one-sided (modal) relations too. Supervenience theorists take note!

One might take logical equivalence and more generally logical implication (either mutual *or* one-way) to imply and contain intelligibility and logical possibility. For what logical implication could fail to be intelligible if it is true, or fail to be possible if it is an actual implication? That may be thought to reduce our three conditions of metaphysical ecumenicism to one. But it does not eliminate the distinctions between intelligibility, logical possibility, and implication. It merely makes them distinctions in reason. For the concepts of intelligibility, logical possibility, and implication are all very different on their face. In fact, we see a progressive series of greater abstractions going from implication to possibility to intelligibility, much like going from red to color to property.

I borrow the terms "ecumenical" and "sectarian" from Quine, but I use them differently. For I accept the correspondence theory of truth, while he accepts holistic truth. I discuss whether those two theories of truth are distinct only in reason later. But we may say even now about our 'rival' theories of truth: ecumenicism about truth holds that both theories can be true, and sectarianism holds that at most one theory can be true. On Quine's observational ecumenicism and holist sectarianism, see my (2006; 1995).

In what follows, I shall assume that all the main theories of metaphysics are intelligible and logically possible. The assumption

is a big one. For theorists often argue that theories other than their own are logically impossible or even unintelligible. But we may safely assume that all metaphysicians think *their own* theory is intelligible and logically possible, or else they would not offer it. Thus every metaphysical theory has at least one supporter who finds that theory intelligible and possible. Also, all the theorists aim to offer an ontological analysis of the same ordinary things. They all aim to parse the same things, and they all do it in different ways. Of course, admitting these two things is scarcely to examine each theory in detail. In fact, that is beyond the scope of this book. But the containment and dependence arguments in this chapter may help illustrate, illuminate, and thereby support my big assumption.

After an initial discussion, I shall describe the containment and dependence arguments for universals. Then I discuss: the arguments' application to bare particulars, particular properties, and mere objects; the assimilation of nominalism and conceptualism as having limited validity within realism; minds, bodies, space, and time; facts and states of affairs; classes and sets; holes, privations, and other empty or negative items; the implications of metaphysical ecumenicism for the ontological nature of logical analysis; and last, my conclusions. But first, a general map of metaphysics.

Metaphysics as a Classificatory Science

Science in the wide sense is any rationally organized body of knowledge. There are two main kinds: the purely rational (*a priori*) and the empirical (*a posteriori*). The difference lies not in how the concepts are acquired, but in how the statements are justified, or better, need to be justified. The empirical sciences need to be justified by empirical evidence at least in part, and the purely rational sciences do not. Science and its two main kinds are determinables which logically can have many determinates. The rational sciences include logic, class and set theory, mathematics, and *a priori* philosophy, but not any *a posteriori* philosophy, such as science-based realism or applied philosophy.

Again, metaphysics is the rational study of the categories, which are the summa genera, that is, the most general kinds or natures of things. We may include the ontological kinds of being, and not just out of logical courtesy. For while metaphysics is the study of what things are, and ontology is the study of whether they are, they are different but distinct only in reason. See chapter 2.

What objects does the world include? Common-sensically, it includes many sorts of objects: the Sun, the Moon, stars, trees, people, and so on. We also speak and think about thoughts, smiles, and numbers. There are many levels of similarity and difference

among all these things, and this makes hierarchies of classifications possible. Leo the lion and Felix the cat are felines; Leo, Felix, and Fido the dog are mammals, and so on. When we get up to the level of bodies, minds, and numbers, this is the level of metaphysics.

Insofar as our classificatory purposes may vary, the genera of one system may be the differentia of another. Humans compared to cats are generically animal and differentially rational; humans compared to angels are generically rational and differentially animal. This leads Butchvarov to deny that there are any "true" classifications, but merely objectively reasonable ones (Butchvarov 1970: 6–11; 1989: 75–79, 99–100, 118–19). But on metaphysical ecumenicism, all classifications are valid (if not equally so) if they are intelligible, logically possible, and logically equivalent logical analyses. But if there is only one logically possible objectively reasonable classification, then we may as well call it alone true.

In a classificatory hierarchy, the normal sort of theoretical definition is definition of a species by its genus and difference. On pain of otherwise admitting a vicious infinite regress of genera, any series of classifications defined by genus and difference must end with a summum genus, that is, with a metaphysical category.

There are traditionally two kinds of change. First, things can come into or pass way from being. Here one thing can cease to be, and be replaced by a different thing that comes to be. Second, a thing can change while continuing to exist and remaining the same thing through the change. Neither sort of change can affect the metaphysical category of a thing. For the first kind of change is ontological. It concerns whether a thing is, not what it is. And the second kind of change cannot be of the essential nature of a thing, since it would become a different thing in virtue of becoming an essentially different kind of thing.

Thus a thing logically cannot change its metaphysical category. Socrates logically can fall asleep or learn things. His body logically can even change into a rock or tree. But Socrates logically cannot can change into time or into a number. We are not able to describe or conceive such changes because we can think of nothing generically underlying them to persist through or undergo the change. Perhaps that is only because such metaphysical substrata have not been found or thought of yet, at least not in any plausible classificatory system. But I suspect the real reason is that our most fundamental classifications are, at least in part, correct. Note that while Socrates' body can change into a rock, his mind cannot. Thus Socrates is essentially different from his body, even if he is always embodied. Thus minds and bodies belong to different categories because they logically cannot change in the same ways. Of course, that two categories are different does not imply that anything falls under either of them. Thus materialists can deny that

there are minds, idealists can deny that there are bodies, and neutral monists can deny that there are either minds or bodies. Of course, metaphysical ecumenicism goes in the opposite direction and admits all these theories; but my point here is that all of these theories are logically *self*-consistent.

If nothing logically can change its metaphysical category, then metaphysics is an *a priori* science, synthetic on the face of it, that is logically unaffected by any empirical observations or results of natural science. Even if only physical things are real and physics is our only guide to physical classifications, physical realism itself is a metaphysical theory that logically cannot be confirmed by any logically possible empirical observation. Indeed, it makes no sense even to perform an experiment to determine the nature of scientific experiment! But only empirical observation and natural science can be relevant to determining lower-level *a posteriori* classifications such as those of biology, botany, chemistry, and physics.

My ontologico-metaphysical classifications are very briefly as follows. The first and deepest ones come from chapter 1.

Objects in the wide sense are anything and everything. Objects divide into qualified objects and objects in themselves. All qualified objects are ontologically complex, since they have both formal reality and objective reality; but on the face of it, objects in themselves divide into simple objects and complex objects. (Of course, "simple" is said in many ways; but here I mean "simple" in the sense of being indefinable.) Thus we logically might instead make the primary classification of objects into simple and complex, and hold that the secondary classification is of complex objects into qualified objects and complex objects in themselves. Qualified objects would then be a sub-category of complex objects. But the qualified object-object in itself distinction is ontologically prior, since it explains the puzzles of existence and identity, and joins those two concepts together into the 'entity if and only if identity' thesis. In contrast, our preference to compare humans to cats as generically animal, and not to angels as generically rational, is merely a preference for science over faith.

Since all qualified objects have the same formal reality, they can differ only in their objective reality. Thus we can classify qualified objects into sub-kinds only in terms of their objective realities. And the first division of qualified objects is into simple and complex objective realities; but there is more to it than that.

There are three main kinds of qualified objects to which no kinds of objects in themselves can correspond. In decreasing order of generality, they are qualified *nonexistent* objects, qualified *impossible* objects, and qualified objects that are *nothing.* But even qualified objects that are nothing are infinitely many. For there is not just qualified nothing (*das Nicht*) simpliciter. For there are

qualified red nothing, qualified round nothing, and so on, on a par with the round square. But these are not truly nothing. For waiving "*Das Nicht nichtet*," nothing has no properties by which different qualified nothings could be distinguished. But there is still a sense in which at least two qualified nothings exist: qualified *nothing* and qualified *not anything*. For they are conceptually (intensionally) different, and that is precisely what makes them different qualified objects that are distinct only in reason. For qualified objects are the connotations (as well as direct referents) of terms. Many have argued that there can be no object nothing (*das Nicht*) precisely *because* "nothing" can be defined or analyzed as 'not anything'. The argument succeeds in showing that these concepts are different, since the analysis is factually informative. The analysis was even novelly informative, since it did not occur to anyone before the advent of modern classical quantificational logic. But the argument eliminates nothing (*das Nicht*) if and only if the eliminative interpretation of logical analysis is correct. And on metaphysical ecumenicism, the positive construction interpretation of logical analysis is correct; the reductive and the eliminative interpretations are of progressively descending limited validity. Thus the argument really *establishes* the existence of qualified object nothing (*das Nicht*) as a positive construction of qualified *not anything*. That qualified *not anything* "is" a complex universal in itself does not detract from this point. For there is and can be no nothing (*das Nicht*) in itself there to be positively constructed out of that universal in itself by a kind of negative, not to say nihilating, ontological argument. The logical analysis argument is also phenomenologically incorrect on its face. For again, nothing and not anything are intensionally different, and therefore can only be different objects of thought. Phenomenological ascent, anyone?

Thus qualified nothing is a kind of qualified impossible object, qualified impossible objects are a kind of qualified nonexistent objects, and qualified nonexistent objects are a kind of qualified objects. And only this last kind, qualified objects, is general enough to include qualified objects that logically can "be" objects in themselves.

From here on in our classification of objects, I shall discuss only kinds of objects in themselves.

The most general metaphysical categories are Fregean: objects (particulars), functions (universals), senses, and tones, plus the Wittgenstein-Russell category of facts. I shall summarize these categories and my corrections of or substitutes for them. These are summa genera. Even if Frege's objects can be defined by genus and difference as referents that are not his functions, and alternatively his functions can be defined as referents that are not his objects, Frege holds that these two categories are really indefinable, and I

think rightly so, since such definitions do not positively specify their content. We might as well define tones as entities that are not referents, senses, or forces! That does not positively tell us what tones are. Compare defining red as the color that is not green, blue, or purple. Not only does that not tell us what red is, but the list of logically possible colors that red is not cannot be completed. For there logically can be infinitely many colors that we do not know. Likewise, *metaphysical category* is a determinable of which there logically can be indefinitely many determinates, and we can never be sure we know them all. Also, tones are positive in nature and should not be negatively defined. Likewise, surely, for Frege's objects and functions, regardless of what Frege may have thought.

Frege divides *referents* of names from: *senses*, which are connotations of names; *forces*, which include assertion, question, and command; and emotive *tones*, which we may express when we use language to communicate. He then divides referents into objects and functions. At any rate, that is my own classification of Frege's entities. Others have classified Frege's senses, forces, and/or at least some tones as kinds of his objects. I classify forces and tones instead as kinds of acts, as opposed to objects of acts. Forces are deliberate acts when we choose to assert, ask, or command; but they can be spontaneous and natural, especially in casual gossiping. We can deliberately choose to express tones too, as in acting on the stage or in life ("all the world's a stage"). But more often they are spontaneous natural acts. I replace Frege's senses with qualified objects, and I replace his thoughts with qualified facts, which are qualified objects in the wide sense. But on metaphysical ecumenicism, I admit Frege's senses and thoughts as distinct only in reason from qualified objects and from qualified facts respectively. I admit Frege's objects and functions as distinct only in reason from mine. (His objects are my particulars, and his functions are 'incomplete'.) I also admit facts, which he does not.

Thus I admit several categories of objects in themselves. I think the first main division should be between acts and objects of acts. We have discussed two main kinds of acts: acts of cognition, and acts of volition (will). Cognitive acts have two main kinds of objects: directly presented objects (always qualified objects), and indirectly presented objects (either lower-level qualified objects or objects in themselves). Volitional acts can be either deliberate or spontaneous, and there is a gray area in between. I shall discuss two main kinds of volitional acts here: forces and tones. They appear to be sui generis (indefinable) categories whose objects are linguistic or at least communicational. They are far from being the only kinds of volitional acts. I can raise my hand, howl in pain, look around, smile or frown, and so on. Assertion, question, and command are volitional. But a mere thought of something is, as such, cognitive.

Frege admits assertion, question, and command as forces that can govern thoughts. I replace his thoughts with qualified facts, but I agree that there must be entities that ground the differences among asserting, questioning, commanding, and supposing. For the world is different if I assert something from what it would be if I had questioned or commanded it. Supposing is what Frege calls merely thinking a thought (qualified fact) without expressing any force, as in supposing something for the sake of the argument.

Tones are expressions of emotions, attitudes, or the like. They are not emotions or attitudes themselves, but their expression. In fact, in stage acting, the emotions or attitudes are not even there, except perhaps in the sense of being worked up as part of the stage act. In perfunctory acting, they are merely suggested. I agree with Frege's implicit view that there must be entities that ground the differences among expressive tones, and also 'toneless' or "flat" communication, which is a bit like supposition. Again, the world is different if I express joy instead of horror, and also if I express no emotion or attitude.

Frege is missing a generic term. For forces and tones have more in common than just being volitional acts. Today the generic term is a common one: at least for their expression in language, they are both speech acts. In the lexicon of J. L. Austin, Frege's forces are illocutionary speech acts and his tones are perlocutionary speech acts. Thus the origin of Austin's distinction is implicitly Frege, if not Descartes or someone even earlier.

Acts are distinct only in reason from facts. If I cognize or do something (and cognition is doing something in a wide sense), it is a fact that I do it. These may be called action facts. Among action facts, volitional facts are like causal facts in that both explain why something happened. Thus both are instances of the principle of sufficient reason. But mere cognition of a thing does not explain why the thing happened, at least in veridical cognition. Perhaps our very dreaming or hallucinating explains why there is the dreamed or hallucinated thing, meaning not the qualified object but its direct presentation. Of course, even in what we would ordinarily call veridical cognition, our very observations change the observed object in quantum physics, since we must shine a light on it to see it, making photons strike it (Hawking 2017 / 1988: 56–57). But it is not the phenomenological presentation that changes the observed object, but the physical photons that have to strike the object, so that it becomes visible enough for us to see it.

All facts are distinct only in reason from states of affairs. It is a fact that the cat is on the mat if and only if the state of affairs of the cat's being on the mat obtains. States of affairs are complex particulars. Like facts, they can be described, since they have the same constituents in similar relationships. And the sense in which

they can be described is distinct only in reason from the sense in which facts can be described. The essential difference is reflected in the fact that facts are described by statements, that is, sentences that are true or false, while states of affairs are described by object-names which are neither true nor false.

Following Frege, there are three kinds of functions: properties, relations, and what we may call "descriptives." In the statement "Prague is the capital of the Czech Republic," the predicate "x is the capital of the Czech Republic" refers to a property, "x is the capital of y" refers to a relation, the expression "the capital of x" refers to a descriptive, and the whole statement describes and asserts a fact, namely the fact that there is a certain relation between Prague and the Czech Republic. Thus properties, relations, and descriptives are clearly distinct only in reason from facts, since they are the logical constituents of facts. Properties are distinct only in reason from descriptives, since descriptives are logical constituents of properties, as shown above. Note that if we replace the implicit variable "x" in the predicate with a constant, which we do with "Prague" in the quoted statement, the result is a sentence that is true or false; but if we replace the implicit variable "x" only in the descriptive phrase, "the capital of x" taken by itself, with the very same constant, the result is an object-name that is neither true or false. Properties and relations are also distinct only in reason in the sense in which properties are often called monadic relations, and relations are often called polyadic properties. The essential difference is reflected in the fact that in predicates that refer to properties, there is only one occurrence of one variable, while in predicates that refer to relations, there are at least two occurrences of variables, whether of the same variable or not.

Forces and facts are not predicative any more than particulars are. That is not their metaphysical job or function. But they are higher levels of classification than particulars are, at least in my classificatory scheme. Forces and facts are not predicative because they do not function as referents at all, except insofar as they are objects in the wide sense. Particulars are not predicative because they are referents that do not function predicatively. They are ultimate logical subjects of predication.

I accept Frege's division of particulars into physical, mental, and abstract (he means noncausal) particulars.

The word "object" is said in many ways. It is a determinable with indefinitely many reasonable determinates. My own seven main uses of "object" are these: (1) Objects are anything and everything. (2) Objects are objects in themselves. (3) Objects are objects of perception or thought (cognitive objects). (4) Objects are objects as opposed to acts. (5) Objects are non-facts as opposed to facts. (6) Objects are referents as opposed to senses. (7) Objects are

ultimate subjects of predication (particulars). Frege's objects are objects in senses (2), (4), (5), (6), and (7). But they are not objects in sense (3), which function like his senses; and (1) is far wider than his objects. His tones are objects in senses (2), (4), and (5).

These classifications are good enough for this book. But better classifications may always be just around the corner. And in metaphysical ecumenicism, we must always keep an open mind.

Introduction to the Arguments for Metaphysical Ecumenicism

The containment and dependence arguments were already very briefly described, and may be initially sketched as follows.

The *first premiss* of both arguments is that ordinary things and ordinary properties exist in the sense of not being nothing. This premiss can be described and expanded as follows.

Per ordinary, pre-philosophical, common-sense belief, I assume that ordinary things (stones, trees, cats) exist in the ordinary, pre-philosophical sense of "exists." Certainly they are not nothing; and on the face of it, they are mind-independent, and even totally mind-independent. In fact, ordinary things are our paradigms of ordinary language existence talk. I also assume the same of the ordinary properties (red, round, soluble) that ordinary things are ordinarily said to have. They too are not nothing; and on the face of it, they are mind-independent, and even totally mind-independent. And they too are paradigms of ordinary language existence talk.

To be sure, the distinction between ordinary mind-independence and total mind-independence does not belong to ordinary, pre-philosophical thought. For the latter concept is only implicit there at best. But the distinction does belong to phenomenology, that is, to theory. And the containment and dependence arguments, though they start from ordinary thought, belong to philosophy.

Again, we wish to expand the containment and dependence arguments to conclude for both mind-independence and total-mind-independence. For showing only that universals are not nothing is consistent with their being concepts or even just names. For concepts and even names are not nothing. The expansion can be done simply by adding that the ordinary things and their ordinary properties that the arguments start from are objects in themselves. (They are ordinarily understood to be ordinarily mind-independent, and are implicitly totally mind-independent.) Then all parsings of them would have those kinds of being too, with the exception of acts, classes and sets, and facts about qualified objects, as we saw.

Next, I note that all the ostensible entities asserted by all the rival metaphysical theories of properties are different ways of

logically parsing (conceiving, regarding) ordinary properties. This includes particular properties, classes of particular properties, universals in re, universals ante rem, the *concept* of a property, and even the *name* "property," perhaps understood as expressing the ordinary concept as its connotative meaning or sense. These last two ostensible entities are the candidates of conceptualism and of nominalism respectively. Recall Russell's view that a concept is a universal with which we are acquainted. Whether universals exist or not, his view logically links the concept of a universal with the concept of a concept, and in turn with the concept of a name that expresses a concept. Thus all these ostensible entities are logical parsings of each other. Also note that ordinary descriptive names imply classification (Butchvarov 1970: 6), or at least a sortal (individuating) concept, whether it is classificatory or not.

Then I ontologically bracket all the ostensible entities of the theories, so as to suspend or disregard the question whether they exist. Thus at this point we are regarding only ordinary things and their ordinary properties as existing in the sense of not being nothing, and as both ordinarily mind-independent and totally mind-independent; and we regard them as capable of parsing into all the ostensible entities in a merely logical, ontologically neutral sense.

Then we just look for containment or dependence relations between ordinary things and their ordinary properties on the one hand, and their logical parsings into all the ontologically bracketed ostensible entities of the various rival metaphysics of properties on the other hand. Such relations are easy to find, since the parsings are, after all, parsings of ordinary properties of ordinary things.

The *second premiss* of the arguments is just that there are such containment and dependence relations respectively.

The *third premiss* is that if there are any containment or dependence relations between ordinary things and their ordinary properties on the one hand, and their logical parsings on the other, then the logical parsings cannot be nothing, and must exist in the sense of not being nothing. For ordinary things and their ordinary properties exist in the sense of not being nothing, and nothing can contain or depend on nothing.

The containment and dependence arguments conclude that all the ontologically bracketed parsings, that is, all the ostensible entities, must be entities in the minimal sense of not being nothing. For ordinary things and their ordinary properties are entities, and nothing can contain or depend on nothing.

Thus all the rival metaphysics of properties are validated in this minimal sense, as long as their parsings are intelligible and possible. Thus we admit universals, particular properties, and all the rest as entities. For ordinary things and their properties can be parsed as all of them, and we can find containment and dependence

relations between them and all their parsings.

Then once the arguments are completed, the ontological brackets on the ostensible entities can be removed. Their only function or purpose was to prevent the circularity of assuming that the ostensible entities exist in the course of giving the arguments, that is, before the arguments prove they exist. Indeed, the very term "ostensible" already functioned as an ontological bracket.

Once again, we can restate the arguments using "is mind-independent" or even "totally mind-independent" in place of "is not nothing," with no fear of fallacies of composition or division, with the exception of acts, classes and sets, and facts about qualified objects, since those things logically can contain qualified objects as their intended objects, members, or subject-matter respectively. But even these excepted objects and their parsings cannot be nothing.

Note that we ordinarily speak and think of ordinary things and ordinary properties without regard for their metaphysical analysis, and in particular without asserting or even implying any theory of universals. For the ordinary use of the word "property" allows ordinary properties to be said to be either "the same" or "exactly resembling" across the same sets of ordinary things, and is thus totally indifferent to the metaphysical dispute between theory of universals and resemblance theory. This is very well known in the literature (Landesman 1971: 3–4, 6–7; see Loux 1970: 3–4). And likewise for all the other rival metaphysics of properties.

Note also that for the two arguments to succeed as I stated them, the rival theories need not be logically equivalent to each other. They only need each be parsings of the ordinary properties of ordinary things. But waiving supervenience theory, all *adequate* metaphysics of properties must provide statements that logically analyze, and that are therefore logically equivalent to, the one-one corresponding statements about ordinary things and their ordinary properties. Thus all adequate metaphysics must provide statements that are logically equivalent to the one-one corresponding statements of each other. For they all must provide statements that are logically equivalent to the very same statements about ordinary things and their ordinary properties. And if two statements are logically equivalent, then the entities each statement refers to are distinct only in reason from the entities the other statement refers to. This includes not only the ordinary entities that are the ordinary things and ordinary properties of the ordinary statements, but also all the entities of all the one-one corresponding statements of all the rival metaphysics.

This concludes my initial sketch of the arguments. For some, this may already be enough to show that universals ante rem, universals in re, particular properties (perfect particulars or tropes), instances of universals (said to *instantiate* universals), and bare

particulars (said to *exemplify* universals without being instances of them) all exist in the sense of not being nothing, and to show that all of these entities are distinct only in reason from each other. And that is metaphysical ecumenicism with respect to the problem of universals. Since all the entities are logical parsings of each other, far from being rivals, they logically must stand or fall together. But I shall give a more complete and precise statement of the arguments in the next section.

One might object that metaphysical ecumenicism is just a kaleidoscope of distinctions in reason. For each ostensible rival philosophy is just another turn of the same old philosophical kaleidoscope. Perhaps this might be the best logical justification of the Persian poet Omar Khayyam's remark that he left philosophy by the same door he went in. My reply is that all the ostensibly rival views advance the analysis for the very same reason: namely, distinctions in reason are and must always be factually informative.

One might object that logical containment and dependence are at best merely analogical to ordinary containment and dependence. My reply is that this is irrelevant, since any relation will do. If X exists and is related to Y, then Y cannot be nothing. And for that matter, the logical senses of those terms are well established and intelligible in their own right. In fact, since they are *logical* senses, they are arguably *more* intelligible than the ordinary senses! See my discussion of Price and Descartes on the next page.

Metaphysical ecumenicism underwrites Hegel's conception of philosophy as J. N. Findlay and Walter Kaufmann commonsensically understand it, namely, as progressively better syntheses of the best points in earlier views, where all the views aim to capture the same ordinary data (Findlay 1962 / 1958; Kaufmann 1966 / 1965). And in this connection, recall that we ordinarily take ordinary things and ordinary properties to exist in a perfectly ordinary sense of the word "exists." Thus all the progressively better theories Hegel has in mind always parse the same old existing ordinary data. To be sure, they do not save the appearances equally well, if they progressively improve.FN3-4

In any case, I agree with Butchvarov that ordinary sensible qualities exist. Butchvarov says:

> [T]o deny that there are qualities at all would be metaphysical madness. The shape of an individual is at least as obviously in the world as the individual thing itself, indeed more obviously so, if our critique of the metaphysics of material substances has been adequate. Its observability is quite unquestionable, and absolutely necessary for the observability of the individual thing. (Butch-

varov 1979: 184– 85)

I would only add that the ordinary word "property" is said in many ways. Besides sensible qualities such as red and round, there are many other things we ordinarily call properties, such as being a quantum event or being an even number, both of which are as imperceptible as quantum events and numbers are themselves. And while their existence is more questionable than the existence of sensible qualities, denying that there are any such properties at all would be awkward to say the least, if not intellectual madness.

One might object that talk of metaphysical composition is suspect in a way that talk of ordinary and scientific composition is not, simply because it is too far away from the ordinary and therefore paradigmatic meanings of words like "whole," "part," and "compose." My reply has three parts.

First, distance from a paradigm is hard to measure in a case like this. It is not like the distance of a certain shade of pink from a paradigm of red such as crimson or scarlet on the color spectrum. Thus the "too far away" objection is inconclusive.

Second, we usually accept applying a term in new cases if we can see *why* the term is, *ought* to be, or even just that it *can* be reasonably applied. I call this the "can see why" criterion. And I think we can all see why philosophers speak of logical wholes, parts, composition, and analysis in ontology and metaphysics.

Third, Butchvarov is right that logico-ontological talk of part and whole is not ordinary or literal, but analogical (Butchvarov 1974: 26–31). But H. H. Price is just as right that terms can acquire new uses that are both similar (analogical) to the old uses and perfectly valid (intelligible) in their own right. We can give examples that define them ostensively, or even just explain the new meaning (Price 1969: 11–12). After all, how do we introduce any new words in the first place? And Descartes says, "It does not at all matter whether [a] term... is proper..., so long as it is serviceable" (Descartes 1970 / 1642: 76). And in point of fact, the terms "logical containment" and "logical dependence" are very easily explained in terms of the notion of logical implication, can be defined in terms of truth-ground dependence and containment by means of truth-tables, and can be made exceptionally visible to the intellect by any kind of logic diagram, including truth-tables and the Venn diagrams ("Vennis balls") for modern classical logic. Namely, we have both *truth-ground* containment of P in Q, and *truth-ground* dependence of Q on P, if Q logically implies P.

Butchvarov himself admits that we can and ought to depart from ordinary word uses and ordinary classifications in science. And if that is acceptable in science, then why not in philosophy? In fact, he even says as much. He says that a strict adherence to

ordinary language is not always desirable, and that all we need to do to depart from it is to explain how we are departing from it (Butchvarov 1970: 5–12). Thus his tale is just a cautionary one. He believes we need to depart from ordinary language and ordinary concepts in science and philosophy alike. He agrees with Wittgenstein that "ordinary language is all right" as far as it goes, and is even necessary as a starting place (Wittgenstein 1965 / 1933–1935: 28; Butchvarov 1970: 11). And he agrees that if we explain our departures from it, then that is all right too, precisely *because* ordinary language is all right as a starting place. In fact, ordinary language is the *only* language that is already "a filled conceptual space" (Butchvarov 1970: 11). And ad hominem, who introduces more radically new uses for old words than Butchvarov? Just look at his theory of "objects" and "entities!" His "objects" can never be singled out twice, and his "entities" are conceptual classifications that are merely analogous to real things. How close is that to the ordinary use of those words? Butchvarov is very right that such new uses are not analyses of the meanings of the old uses, but are replacements, or perhaps simply different uses, *if and only if* the new uses neither imply nor are implied by the old uses. And if I may put the point linguistically, the whole point of his own theory is that his new uses of "object" and "entity" are essentially involved every time we talk about objects and entities in the old ordinary way, precisely because they theoretically explain them, or at least explain puzzles about them. Thus his new uses both imply and are implied by the old ones, and are therefore not replacements but analyses. And explaining his departures from our ordinary concepts of objects and entities is far more difficult than explaining our own fairly simple and clear departures from the ordinary concepts of containment and dependence, i.e., logical containment and logical dependence. And our own new uses neither imply nor are implied by the old uses. For the containment of water in a jar, and my car's causal dependence on gas, are logically contingent. In contrast, our analysis of ordinary objects of perception or thought as qualified objects having twenty-one essential features is indeed a logical analysis, and not a replacement. Better, ordinary objects of perception or thought are not *distinct only in reason* from qualified objects, they *are* qualified objects. Being qualified objects is their twenty-first essential feature! Thus *qualified objects* have all those twenty-one essential features. It is not as if there were two kinds of objects, objects of perception or thought and qualified objects.

I conclude that the objection has been refuted. I proceed to give a more complete and precise statement of the containment and dependence arguments. It is a logical analysis, not a replacement, of the initial sketch given in this section.

Full Statement of the Arguments for Metaphysical Ecumenicism on Properties

To indicate what I take to be ontologically neutral, and to avoid long expressions such as "ordinary property neutrally parsed as if it were a universal," I shall use a bracketing notation. Thus I shall use the bracketed expression "<universal>" to refer to the logical parsing of ordinary properties as universals, where we suspend or disregard the question whether universals exist. And I shall use the unbracketed expression "universal" to refer to universals with ontological commitment. Thus the aim of the two arguments is to show that <universals> are indeed universals.

We may say that objects are bracketed in an ontologically primary, though semantically secondary, sense. For we may say that any object O is bracketed just in case its name or description is bracketed. Likewise, categories, classes, or sets of objects are bracketed just in case their names or descriptions are bracketed. In fact, categories, classes, and sets *are* objects in the wide sense anyway.

The bracketed-unbracketed distinction is not the same as the qualified object-object in itself distinction. In fact, there is a mix-and-match matrix of four options: bracketed qualified objects, unbracketed qualified objects, bracketed objects in themselves, and unbracketed objects in themselves. The reason is simple. Suspending or disregarding the question of whether a thing exists is not at all the same as being a way a thing can be presented. And not only are the two concepts very different, but they also have very different extensions. For all objects in the wide sense can be (primarily) bracketed by (secondarily) bracketing their names or descriptions, but only qualified objects can be qualified objects.

Our brackets are based on Husserl's notion of bracketing things, of considering them as mere ideas or phenomena without regard for whether they are real, that is, for whether they correspond to anything in reality. Of course, this scarcely commits us to every detail of Husserl's theory. In fact, Husserl emerges as somewhat confused. For in effect he is confusing qualifying with bracketing, unless we combine the two so as to say that to bracket is to disregard whether a qualified object "is" a lower-level object. And that works for all objects in the wide sense. For they all have qualified objects, that is, ways they logically can be presented. In fact, these are the very qualified objects that are the direct referents and the connotative meanings of the names or descriptions we are bracketing in language. Even qualified objects have higher-level qualified objects that are ways they can be presented. Thus we can say that to bracket an object is to present it via a qualified object while suspending the question whether the qualified object "is" a

lower-level object. And this shows the priority of qualifying over bracketing. For we cannot bracket what we cannot even cognize via a qualified object, that is, what we cannot even understand. This goes for categories, classes, and sets as well; we cannot bracket them if we cannot even cognize them via a qualified object. And this is another reason why qualifying and bracketing are not the same. For qualified objects are prior to bracketing, on pain of the bracketed expression's otherwise expressing no sense.

Also, bracketing and qualifying are not the same is that an object has only one (emptily iterable) bracketing, that is, only one suspending or disregarding of whether it exists in any sense of "exists." But there are infinitely many very different ways a thing logically can be presented via qualified objects.

One might object that we logically can be directly presented with any qualified object, then directly name ("baptize") it by a kind of cognitive ostension, and then bracket the name, that is, disregard whether the qualified object "is" a lower-level object. And that would be bracketing without presentation via a *higher*-level qualified object. My reply is that this disregards qualified objects theory as an explanation of the puzzles of factually informative existence and identity judgments. For on that theory, any qualified object logically can be directly presented, and logically can be the direct referent and connotative meaning of a name. But that does not make the qualified object the referent of the name in the sense in which bracketing is concerned. We are not suspending the question whether the *direct* referent, which in ordinary language is called the *connotation* or *sense* of the name, exists, but the question whether the *indirect* referent, which in ordinary language is simply called the *referent* of the name, exists.

Of course, we can bracket ordinary things and their ordinary properties. But I will not do so in the course of these arguments, since they are the existential starting point. Their names and descriptions are ordinarily understood to have existential import, and they are to be understood as having that import in the arguments. For ordinary things and their ordinary properties exist in an ordinary, pre-philosophical sense that is the paradigm and the conceptual point of departure for any other senses of "exist."

Again, the ordinary word "object" has two main ordinary meanings: 'object of perception or thought', and 'object in itself'. Thus both of these kinds of objects can be said to exist in the ordinary sense. And by starting from ordinary things and their ordinary properties, I am really starting from ordinary things and their ordinary properties *in themselves*. For I wish to show that universals in themselves exist. But my arguments logically could start from any ordinary objects in the wide sense, including ordinary objects of perception or thought, since they all exist in the

ordinary sense of "exist."

Ordinary objects in the wide sense not only have ordinary existence, but they also exist in the sense of not being nothing. And on the strength of Moore's argument, any object of either direct or indirect cognition exists in the sense of being mind-independent. Ordinary objects in the ordinary sense of objects in themselves (again, this is one of the two main ordinary senses of "object") are *implicitly* understood to be totally mind-independent (that is, to be independent even of the logical possibility of minds) only in the subjunctive conditional sense that they *would* be understood that way if the question *were* raised. For that very specific question is almost never raised. Perhaps it is only raised in this book! We use the ordinary sense of "objects" that *refers* to objects in themselves (in the ordinary *sense* of the expression "objects in themselves," and there is such an ordinary sense) all the time; but its implication that ordinary objects in themselves are logically independent even of the logical possibility of minds is never or almost never noticed, and is perhaps expressly stated only in this book.

Again, I shall not apply ontological brackets to ordinary things or ordinary properties, since I *start from* their (ordinary) existence in the containment and dependence arguments. I apply the brackets only to their parsings into ostensible metaphysical entities such as "<universals>," as well as to "<parsings>," "<containment relations>," and "<dependence relations>," and so on. Then we may remove the brackets at the conclusion of the arguments, since they conclude that universals and so on exist.

Granted, "parsing," "relation," "contain," and "depend" are ordinary words too, and we can ordinarily say that there exist, in the ordinary sense of "exist," many relations of containment and dependence in, say, a pocket watch. Thus ordinary existence does apply to such relations, and we can ordinarily say that they exist. But my arguments would beg the question if I presupposed *their* existence. I would be smuggling in the very existence I seek to prove for universals and so on. For my arguments apply to all the many different metaphysical parsings, and are based on containment and dependence relations. All the parsed objects will be shown to exist, but only in the conclusions of the arguments that use them without supposing their existence. In the premisses, we must ontologically bracket the terms in question. In the premisses, the terms directly refer to qualified objects. We affirm that the qualified objects "are" objects in themselves, and "are" not just some lower-level objects, only in the conclusion. FN3-5

One might object, How can I use such relations in my arguments if I am not supposing that they exist? For if I am not supposing that they exist, then I am not supposing that they are there to be used. My reply is simple. I am supposing only that all

the premisses of my arguments are *true* (and of course that the arguments are logically *valid*). I am merely disregarding the *ontological commitments* of those truths. The only ontological commitment in my arguments is to ordinary things' and their ordinary properties' existing in the ordinary, pre-philosophical sense of "exists." If there are several ordinary senses of "exists," any and all of them can be used to assert the ordinary existence of ordinary things and their ordinary properties in my arguments. But I only need there to be at least one such sense on which the premisses of my arguments are true, for the premisses to be true.

Granted, we could admit a different kind of ontological bracketing corresponding one-one to each kind of existence so as to disregard them individually. I myself admit at least ten kinds of being. But I intend my brackets to indicate the disregarding of *all logically possible* kinds of existence. That is, we *could* introduce as many kinds of brackets as there are kinds of existence; but that would be otiose. For we can simply use a single kind of ontological bracket for supremely generic being, which we found different from but distinct only in reason from not being nothing (page 186).

Bracketing and qualification are similar in at least one respect. Namely, both are iterable. Just as there are higher levels of qualified objects, so it is well-formed to bracket already bracketed terms. These may be called higher-level bracketings. Thus "<<apple>>" is the bracketing of the already bracketed term, "<apple>". However, higher-level qualified objects serve basic ontological functions. They explain how informative existence and identity judgments about any level of qualified objects are possible. In contrast, higher-level bracketings serve no philosophical purpose I can think of. How could that further disregard the existence of something whose existence we are already disregarding? We may borrow a term from modal logic and say that all iterations of ontological brackets emptily collapse. The most we *might* say is that by bracketing an already bracketed term, we are suspending existence claims about the linguistic *term* ontological commitment to whose *referent* we have already suspended. And we certainly can suspend ontological claims about the existence of linguistic terms. And *that* could serve a philosophical purpose. Indeed, on full metaphysical ecumenicism, we need to suspend ontological commitment to referring and denoting terms. For they are the nominalistic logical parsings of ordinary things and their ordinary properties. Thus we need to argue for their existence too, so as to admit nominalism into metaphysical ecumenicism. But why iterate our brackets as ascending to the linguistic *terms*? How could that further disregard the existence of an object whose existence we are already disregarding? And iterating the brackets would have no impact on the containment and dependence arguments in any case.

Ontological brackets are not the same as logical scope brackets. Ontological brackets preclude ontological commitment, but it is at least arguable that scope brackets in logic have positive ontological commitments to logical structure. For that is precisely what they indicate. But do scope brackets indicate anything—any kind of logical structure—in the real order? They are unnecessary in logic. Polish notation does away with their use. And that can be interpreted as an eliminative logical analysis, in Russell's sense, that does away with any need for them to indicate logical structure in itself. But the natural dialectical response would be that Polish notation indicates the same logical structure in the real order that scope brackets do, but in a different way: as it were, "showing" it instead of "naming" it. And on the containment and dependence arguments, we must admit realism, conceptualism, and nominalism alike as valid ontological interpretations of the logical analysis of talk of logical structure. But realism wins in that its parsing is valid. Different logical scope bracketings are always distinct in reason. Some logical scope changes even change truth-values.

Ontological brackets indicate the logical scope of what they bracket by their very placement in a statement. But they cannot be replaced by mere logical scope brackets without losing their primary function: suspending ontological commitment. We can ontologically bracket anything we can logically bracket. We can ontologically bracket apples primarily and the term "apples" secondarily by using "<apples>," but that is not mere logical scope bracketing. For the function of logical scope brackets is not to suspend ontological commitment. To the contrary, their function is to parse statements in different ways that can affect the truth-value. And at least on the correspondence theory of truth, a statement is true or false because of what entities there are or are not in the world. Thus in order to suspend ontological commitment, we need something more than mere logical scope brackets. We need brackets that actively suspend ontological commitments. Thus in function, ontological brackets are modally distinct from logical scope brackets. For all ontological brackets are logical scope brackets, but not all logical scope brackets are ontological brackets.

I cannot think of a single logic notation that uses mere logical scope brackets to indicate that ontological commitment is being suspended as such. Even 'noneist' notations, such as Czesław Lejewski's, do not do that. Lejewski uses his nonexistential, merely veridical individual quantifier to quantify without ontological commitment. Thus the scope bracket of his individual quantifier is not a mere logical bracket. It is an ontological bracket. It is only concerned about truth-value, and suspends or disregards whether a statement is true because what entities there are or are not. See Lejewski (1968 / 1955) using modern classical scope notation.

One might object that even if ontological bracketing and qualification via qualified objects are not the same, why not use qualified objects *instead of* ontological brackets in my containment and dependence arguments, and say that what we are suspending or disregarding is whether the qualified objects in question "are" lower-level objects, in this case objects in themselves? Note that the objective realities of qualified objects are already understood as not necessarily corresponding to reality, except in the case of some sort of sound 'ontological argument' that, say, qualified God must "be" God in himself, or that qualified numbers must "be" numbers in themselves (both of which I reject as invalid arguments).

My reply is that we *can* do that. In fact, on metaphysical ecumenicism we can and must admit that option as distinct only in reason from bracketing. But to be distinct in reason is to be different. And for the sake of the purity and completeness of the suspension of ontological commitment from our arguments, we should then really begin with *bracketed* qualified objects. For only then are we suspending ontological commitment to *all* objects in the wide sense that are either the direct or the indirect referents of the bracketed expressions. And that includes qualified objects as the direct referents (and connotative meanings) of the bracketed expressions. And in the containment and dependence arguments, we wish to avoid even the appearance of ontological commitment in the bracketed expressions. And the qualified objects that are the direct referents of those expressions are precisely the phenomenological appearance of that. And that is just what we wish to avoid.

And if ontological brackets already show the suspension of ontological commitment, then why do we also need to disregard whether the direct referents of terms "are" lower-level objects? What could that *add* to the suspension? Could that suspend ontological commitment *better* than brackets, or at least be a valid alternative to using brackets? Indeed, how is it even *possible* for qualification to show suspension of all ontological commitment? For we would have to admit qualified objects in the very act of suspending ontological commitment to the objects they "are." For the qualified objects that terms directly refer to are also their connotative meaning. No qualified objects, no meaning. Thus if we wish to avoid all ontological commitment, then we need to suspend it even for qualified objects that are the direct referents of terms. Again, qualified objects differ from each other. Thus they are not nothing. They are mind-independent as well. Thus we can avoid all ontological commitment only by using ontological brackets.

Also, negatively *not* asserting that qualified objects "are" lower-level objects is not the same as positively *adding* brackets to indicate the suspension of ontological commitment in a statement or term that would otherwise have it. We can refrain from asking if

a qualified object "is" a lower-level object. But that is very different from actively suspending an ontological commitment that would otherwise be there. For a term's mere direct reference to a qualified object, without indicating the linguistic force of assertion for a statement in which the term occurs is suppositional. Unless we assert or imply in an assertion that a qualified object "is" a lower-level object, then the term's direct reference to it simply *has* no ontological commitment (to the lower-level object it may "be") to *be* suspended. No assertion, no ontological commitment.

If we tried to use qualifications instead of brackets, then the containment and dependence arguments would go as follows: Instead of starting from the ordinary existence of ordinary things and their ordinary properties, we would start either from qualified objects or their objective realities. And if we start from objective realities, we would start from them either as the objective realities they are, or as objective realities qua objective realities. (Recall that while the objective reality nothing is nothing, qua objective reality it is not nothing and is mind-independent.) Now, qualified objects and their objective realities can be logically parsed just as well as ordinary objects and properties. In fact, many of them veridically "are" ordinary objects or properties, and their parsing would be exactly the same. That is not the problem. The problem is that we cannot squeeze the blood of objects in themselves out of the turnips of qualified objects and their objective realities. Therefore we cannot start from them and conclude to the existence of, say, universals in themselves, but at most only to qualified universals or to universals that are objective realities. And if we try to start from the ordinary objects and properties in themselves that many qualified objects and their objective realities "are," then we will need ontological brackets for them after all.

One might object that containment and dependence relations can and do obtain among dreamed, hallucinated, and fictional things and properties—and can be dreamed, hallucinated, or fictional themselves. Thus they do not presuppose the existence of their relata as objects in themselves, but only as qualified objects. For example, winged Pegasus logically contains wings. And logically impossible objects logically contain properties too. The round square logically contains the conjunctive property of being round-and-square, which logically cannot exist in the sense of being instantiated (as well as the properties of being round and square, which do exist in the sense of being instantiated).FN3-6

My reply is that the containment and dependence arguments aim to show the existence of objects in themselves. And to do that, they must start from at least ordinary objects and properties in themselves. Then they must show that the further objects are parsings of the starting objects. But the first of those

two requirements is not met if we start from impossible or even just nonexistent objects in themselves. For there are no such objects in themselves. And the second requirement is therefore not met either, since no such objects in themselves are there to contain or be contained by, or to depend on or be depended on by, any ostensible other object in itself, in the realm of objects in themselves.

On qualified objects theory, 'mere nonexistent objects' are assayed as qualified objects that do exist, but "are" not lower-level qualified objects. Qualified winged Pegasus does not have wings in themselves. It has qualified wings. Nor is the qualified round square round or square, much less round-and-square. It has qualified roundness, qualified squareness, and qualified roundness-and-squaredness. To be sure, some qualified birds "are" birds in themselves, and their qualified wings and shapes "are" wings and shapes in themselves. But wings and shapes in themselves are not logically contained in, not to say depended on by, qualified birds.

One might conversely object that sometimes real objects in themselves appear in dreams, hallucinations, and works of fiction, and stand in containment and dependence relations with dreamed, hallucinated, or fictional objects. For example, I may dream that my real laptop is in a dreamed office. Thus the dreamed office contains my real laptop. Thus on the containment argument, the dreamed office is a real object in itself too, or at least exists. But the office is only dreamed. Neo-Pegasus can even have real wings.

My reply is basically the same as before. The dreamed house is not there in the world in itself to contain my real laptop. While the dreamed house exists as a qualified object, and as such exists in all possible worlds, categorially it can contain only a qualified laptop. No blood in turnips! Of course, it can contain my real laptop or even a round square in its objective reality. Weird and wonderful are the ways of objective reality!

One might more subtly object as follows. Aristotle admits containment and dependence relations between *actual* and *potential* things, where a potential thing is not a *mere* nonexistent, but a nonexistent that has a '*real possibility*' of coming into existence. For example, an actual block of stone contains a potential statue of Hermes. For there is a real possibility that a sculptor will sculpt a statue of Hermes from the block, at least if the sculptor has the skills, the tools, the block, the idea, and the interest. There is also a dependence relation, since if there is no block of stone, then there is no possible statue, let alone potential statue, that can be carved from it. For there would be no block there to be carved. And all of this is true in the real world, as opposed to dreams, hallucinations, or works of fiction. Or so Aristotle holds, and the view is plausible. The view is subtle because a potential being is not nothing, but a real possibility in the world in itself. Specifically, this one is based

on the real relation between this block of stone and this sculptor. Aristotle admits relations as a category of beings. They are not as real as substances like stones and sculptors, but they do have a derivative kind of being called pros hen being, which means they have being in virtue of being related (!) to substances, which for Aristotle are primary beings. That is, Aristotle admits a deep and general kind of argument we may call the relationship argument. It is the genus of which my containment and dependence arguments are species. For nothing can be related to nothing. Recall that Aristotle admits anything as a being if it is related in any way to a primary being, which is (again) for him a substance (Aristotle 1968a: 1003b5–15; see Owens 1963: 268–269, 436–437). And recall that this is precisely his pros hen theory of being.

Aristotle's relationship argument applies to all of his categories other than substance. It shows that all of them have pros hen being in virtue of their relationships to substances. For substances have properties, stand in relations, exist in space and time, and so on. Substances are real, therefore these other things cannot be nothing. Aristotle does not consider them to be *as* real as substances, but he does hold that they have *some* reality. And we can drop the pros hen aspect and simply go with the relationships. For nothing can be related to nothing. But whether we keep the pros hen aspect or not, Aristotle's relation argument is a deeper and more general argument than the containment and dependence arguments. For it is their genus. And ordinary things, though not their ordinary properties, are just what Aristotle would consider to be substances. I admit Aristotle's relation argument as sound, both with and without its pros hen aspect. I offer my two more specific arguments because they illuminate specific ontological concerns with containment and dependence. All three arguments are sound and are logically compatible.

The objection is that Aristotle's relation argument implies that merely potential objects exist, and so do my containment and dependence arguments.

My reply is that Aristotle's relation argument successfully applies not only to all his categories other than substance, but to potential beings as well. For the statue of Hermes is a potential substance; and if it were carved, it would become an actual substance. Again, Aristotle admits anything as a pros hen being if it is related to a substance (primary being) (Aristotle 1968a: 1003b5–15, see Owens 1963: 268–269, 436–437). For a potential statue, the substance would be the block of stone or piece of clay it is made from. Thus potential beings are real possibilities that belong to the real order, as opposed to mere logical possibilities, which as such logically can be totally arbitrary, whimsical, and capricious. For example, a block of stone has no realistic likelihood

of being sculpted into a paper cup or a steel ball bearing.

Thus a potential entity is not a *merely* logically possible object, but a logically possible object *that has a realistic, likely, or plausible chance of becoming actual*. And there is a clear sense in which some blocks of stone contain statues that realistically can be sculpted from them. But there is no such thing as a *merely* logically possible object, and therefore no such thing as a *merely logically possible* potential object either. Talk of merely possible objects is to be eliminatively analyzed as (i.e. replaced by) talk of qualified objects. Here the containment and dependence arguments are overruled by the fact that there can be no such thing as a *merely* possible object there to contain or be contained, to depend on or be depended on. One might then think that talk of potential objects can be eliminatively analyzed as (i.e. replaced by) talk of qualified objects too. But here the overruling goes in the opposite direction. For potential objects are not merely possible objects, and they are not mere nonexistents.

The ontological status I assign to potential being is far greater than the status Aristotle assigns. For Aristotle, a potential being is merely a realistic (likely, plausible) possibility. In the case of the potential statue, it is an idea in the mind of Phidias that he is realistically able to make the stone conform to, by sculpting the idea's likeness out of the stone. The idea of the statue is the teleological or final cause of the statue, if Phidias sculpts it based on that idea. But for me, the potential statue is far more than a mere mental idea in the mind with a realistic chance of being realized. It is not a mind-dependent idea, but a mind-independent qualified object. It is a necessary being that exists in all possible worlds. And just as Aristotle can deem Phidias' idea of the statue the final cause, so we can deem the *direct presentation* of the qualified statue to Phidias the final cause of the stone statue. Thus I have a far more robust theory of final cause than Aristotle does. For my final causes are far more real than his. But for both Aristotle and me, it is the block of stone, an actual substance, that has a realistic chance of being sculpted by Phidias into a statue. To be sure, there is no realistic chance if there are no sculptors; but Phidias existed.

Thus some qualified potential statues "are" potential beings in themselves: low-grade real beings that have a real potential to become real statues. They are probable beings, however low the probability. And probabilities are probabilities in themselves. This is so for all four kinds of probability we discuss in chapter 4. Even 'subjective' probability is a subject's objective willingness to bet.

All this is bad news for John Stuart Mill's theory that bodies are 'permanent possibilities of sensation'. For if there are no mere possibilities, then there are no *permanent* mere possibilities either. If anything, they are even less to be admitted! Mill would be

better off saying that bodies are more or less permanent *real potentialities* of sensation. And perhaps that is what he meant. And on metaphysical ecumenicism, we can admit the *real potentiality* theory of bodies if it is intelligible, logically possible, and logically analyzes statements about ordinary bodies into logically equivalent statements. Note that "potential being" means potentially in re.

In addition to the containment and dependence arguments and their genus, Aristotle's relation argument (with or without its pros hen aspect), there are two further arguments which are distinct only in reason from them. This gives us a total of five arguments.

Fourth, then, there is an argument from logical relevance. For the theory of logical relevance is that the logical validity of an argument, and thereby the logical dependence of the truth of its premisses on the truth of its conclusion, obtains if and only if, and is grounded in and thereby explained by, the logical containment of its conclusion in its premisses. On the deepest and most general level, that is the logical containment of truth-grounds. And this includes logically valid inferences from statements about parts to statements about wholes and vice versa, and indeed any statements about relations. This unites my containment and dependence arguments by explaining and justifying logical dependence in terms of logical containment. And the logical relevance argument makes the containment argument deeper than and prior to the dependence argument. For logical containment grounds and explains logical dependence.

The logical relevance argument is that if an item <I> is *logically relevant to* an existing ordinary object O in the sense that statements about O logically imply or are implied by statements about <I>, then I exists. Since logical relevance is a relation, this is a third species of the relation argument. Since logical relevance implies logical containment and dependence, it is formally distinct from them with a foundation in reality in logical relevance.

And fifth, there is an argument from whole-part ontological realism. It may be called the ontological containment argument. For example, Suárez holds that genus-species distinctions are in the real order of nature (Suárez 1947 / 1597: 32). And his implicit ontological containment argument is this. A genus consists of a species plus a difference. Therefore, he says, "This distinction is [in the] real [order], because the whole [species] includes something [i.e. either the genus or the difference] which the part [i.e. the other of the genus or the difference] does not" (Suárez 1947 / 1597: 35). The general form of the argument is that if a whole object contains a part that is not the whole itself because the whole contains at least one other part, then the distinction between the whole and its part is real. And that can be the case only if both are real. Neither the whole nor the part need be a primary being

(substance). In fact, in this example, neither a species nor its genus is a substance. It is enough if both belong to the real order. Thus the ontological containment argument is that if an item <I> is an ontological part of an ordinary object O (or the other way around), then I exists in the real order because O exists in the real order.

Arguments (4) and (5) are clearly different from arguments (1) and (2). But they are just as clearly only intensionally different from them, and are thus logically equivalent to them. For with the three exceptions we noted on page 224, there is logical containment if and only if there is ontological containment, and with the same exceptions, there is ontological dependence if and only if there is logical relevance. Thus these two new arguments are distinct only in reason from mine. Thus I admit these two new arguments. Actually, they are ancient, or at least implicit in ancient thought. Aristotle makes much of whole and part, and is Anderson and Belnap's relevantist hero. I cannot explore arguments (4) and (5) in any scholarly detail. But they too are sound arguments for metaphysical ecumenicism, at least if and only if my arguments are. Arguments (1), (2), (4), and (5) are all species of argument (3).

Of course, in the world of objective realities, there is logical containment without ontological containment. The qualified object *round square nothing (das Nicht)* logically contains the round square and nothing (*das Nicht*), but it is not there to contain them ontologically, nor are they are there to be ontologically contained. For there is no such thing as an impossible object. Even the round square alone logically contains the properties round and square! But while round and square are there to be ontologically contained by objects in themselves, the round square is not there to contain them ontologically. This too shows the difference between logical containment and ontological containment.

I shall present the containment and dependence arguments for universals first, and proceed to other metaphysical topics later.

The Containment Argument for Universals

The theory of universals is that an ordinary property, such as being red or round, is literally and numerically one entity across the many things that are said to have it. Butchvarov rightly calls it the Identity Theory of properties, since it holds they are identical across different instantiations (Butchvarov 1966: chapters 2, 4).

Those who admit universals hold either that they are in re or that they are ante rem. As the Latin suggests, an in re universal exists only in reality, that is, only as an instantiated property of something, while an ante rem universal can exist before reality, that is, without being an instantiated property of anything. For example,

Frege admits ante rem universals. For his properties ("concepts") are universals by definition, since different objects logically can fall under literally and numerically the same concept. We know that because the referent of "is red" does not change when we say truly that this apple is red and that apple is red. Even the *sense* of "is red" does not change! And this is so even though he holds that functions (including properties) literally cannot even stand in the identity relation. For they stand in it representationally via his representation function (my 2003 / 1996: ch. 3; 1982). And "the square circle and wooden iron" are obviously ante rem universals, since there cannot be "anything which falls under them" (Frege (1974 / 1884: 87). But the main thing for us is that the containment argument establish the existence of in re and ante rem universals alike as only formally distinct parsings of ordinary properties.

The containment argument for the existence of universals is this. (1) Nothing, so to speak, can <contain or be contained by> nothing; only something can <contain or be contained by> something. (2) Therefore, whatever <contains or is contained> by an entity is itself an entity at least in the minimal sense of not being nothing. (3) Thus if <x> <contains> <y>, then if either <x> or <y> is an entity, then the other is an entity too, at least in the minimal sense of not being nothing. (4) Ordinary things (or their ordinary properties, or both if you prefer) are (paradigmatic) entities (in the paradigmatic ordinary sense of "exists"). (5) Ordinary things (and also ordinary properties) <logically contain> <universals>. (6) Therefore universals are entities at least in the minimal sense of not being nothing. Note that in the premisses, "universals" is always surrounded by brackets, while in the conclusion, the brackets are gone because they are no longer needed. Also note the universals include both in re and ante rem universals. For the argument works the same for both.

We may further conclude that universals are objects in themselves. For we began with ordinary things and ordinary properties in themselves. If we had begun with qualified ordinary things or properties, we could have concluded only to qualified universals. For again, we cannot squeeze the blood of being totally real out of turnips that are less than totally real. And again, this is with the exception of acts in themselves, classes / sets / groups in themselves, and facts *that*. Totally real acts have qualified objects as direct objects, totally real groups can have qualified objects as members, and there are totally real facts about qualified objects.

After showing that universals are not nothing, we could also use Moore's argument to show they are mind-independent. We could then further conclude that they are totally mind-independent, since they are extensional mapping functions.

The containment argument also shows that particular

properties, and classes or sets of particular properties, exist at least in the sense of not being nothing. For all are <logical parsings> of ordinary things and their ordinary properties. Thus they are distinct only in reason from each other, from universals in re and ante rem, and from ordinary things and ordinary properties. The rival theories of properties emerge as something of a metaphysical hall of mirrors in which all the different images are really of the same thing.

But the best way to put it is more specific than just a hall of mirrors, and is more literal too. Namely, these are progressively more abstract logical parsings of ordinary things. And waiving our three exceptions, no logical parsing of an entity can be nothing. From most concrete to most abstract, one series is: ordinary thing, ordinary property, perfect particular, universal in re (abstracting from place), universal ante rem (abstracting from time). The other series is: ordinary thing, ordinary property, particular property, class of particular properties, set of them, group of them.

Actually, we avoid the exception that totally real classes and sets can have less than totally real members. For here the totally real classes and sets do have totally real particular properties as their members. And the other two exceptions, totally real acts, whose direct objects must always be qualified, and facts *that*, cannot kill the containment argument for universals in themselves.

The Dependence Argument for Universals

The dependence argument for the existence of universals is basically the same, but uses dependence instead of containment. (1) Nothing, so to speak, can <logically depend on> or <be logically depended on by> nothing; only something can <depend on> or <be depended on by> something. (2) Therefore, whatever <depends on or is depended on> by an entity is itself an entity, at least in the minimal sense of not being nothing. (3) Thus if <x> <depends on> <y>, then if either <x> or <y> is an entity, then the other is an entity too, at least in the minimal sense of not being nothing. (4) Ordinary things and ordinary properties are ordinary entities. (5) Ordinary things and also their ordinary properties <logically depend on> <universals>, in the sense that they are identifiable only if the <universals> they can be <parsed> in terms of are identifiable. Or if you please, an ordinary thing or property can be the ordinary thing or property it is only if the <universals> it can be <parsed> as having or being are what <they> are. (6) Therefore universals are entities in the minimal sense of not being nothing. Note that in the premisses, "universals" is always surrounded by brackets, and that in the conclusion, the brackets are gone. And again, both in re and ante rem universals are shown to exist, as well

as particular properties and classes and sets of particular properties.

Again, since logical containment and logical dependence are distinct only in reason, the logical containment and dependence arguments are distinct only in reason. They are also distinct only in reason from Aristotle's relation argument, the logical relevance argument, and the ontological containment argument. We may also add a sixth argument, the ontological dependence argument to the list. The more arguments, the merrier! The list is very ecumenical.

Objections

There are some plausible objections to the containment and dependence arguments.

Objection 1.

Talk of universals as "parts" which are "contained" in individuals is merely analogical, and is therefore ultimately misguided (Butchvarov 1974: 26–31). The traditional general view of analogy is *omnis analogia claudicat* (every analogy limps). Talk of logical dependence is merely analogical too. For ordinary talk of dependence is usually causal, financial, or emotional. My earlier reply suffices, that talk of logical containment and dependence is intelligible in its own right, and can be defined in terms of logical implication and truth-grounds. But I wish to reply more fully now.

Reply.

One reply would be to drop talk of logical parts, and talk only of logical containment. A bottle can *contain* water which is in no sense a *part* of the bottle. But the reply does nothing for talk of *logical* containment. That talk would still be analogical. And the redness of an apple is more like a cogwheel in a clock or an organ in an organism than like red water in a bottle. That is, it is more like a part of the apple than like something the apple contains, but not as a part. For if we pour out the red water, the bottle is unchanged; but if an apple loses its redness, the apple is changed in color. That is a merely accidental change, but it is still a change. Note that a bottle and the water it contains are not logically or even causally dependent on each other, except that the bottle would causally prevent or at least slow down evaporation of the water.

The best reply is my earlier one, that talk of logical parts, logical containment, and logical dependence may historically and conceptually *originate* from ordinary uses of "part," "contain," and "depend;" but the talk has developed an intelligible logical new use in its own right (compare Price 1969: 11–12; Descartes 1970 / 1642: 76). And to think that merely because a notion originated by analogy to another notion, the notion is still analogical at bottom, perhaps in some hidden way, is to commit what C. D. Broad calls

the genetic fallacy (Broad 1968 / 1925: 11–14).

I myself find it very easy to understand talk of logical and even of ontological parts, holes, containments, and dependences. I think I know what it means well enough, even if the meanings are indefinable and sui generis. An opponent could claim that I am wrong, and even that I beg the question on the intelligibility of such ontological talk. But I can always reply that the admission of such simple, indefinable notions, and the apparent direct intuition of their application, "may in a sense be irrefutable"(Kripke 1982: 51). And I have far more going for my view than that. Let us discuss dependence first, and then containment.

Millions of people have taken a logic course and developed sufficiently clear intuitions of logical *implication* to understand talk of logical *dependence* as intelligible in its own right, *regardless* of whether it is analogical to ordinary talk, for example talk of causal dependence. And while talk of logical dependence may never be as common as talk of causal dependence, it is still clear and common enough to be deemed quite intelligible, since millions of people teach and learn it. And it is very intelligible indeed when we look to truth-tables and geometric logic diagrams such as Venn diagrams. For logical dependence is merely shared truth-grounds. It can be defined very simply in terms of truth-ground inclusion.

Arguably, talk of logical dependence is *more* intelligible than ordinary talk of causal dependence. Just look at Hume's critique that we never observe causes, and therefore have no idea of what a cause is. In contrast, just look at a Venn diagram of logical dependence. Logicians may dispute over the best formal definition of logical containment and dependence, and may despair of ever attaining it, since that would require having the ideal logic; but few if any hold they have *no idea* of what it is. And if they do not, they can always be shown a truth-table or Venn diagram to get the idea.

Ontological dependence is simply logical dependence plus ontological commitment. This too is a very simple positive logical definition.

Likewise for talk of logical containment. The very same millions of logic students can learn talk of logical containment from the very same truth-tables and other logic diagrams from which they can learn talk of logical dependence. This talk too is clear and common enough to count as intelligible talk in its own right, regardless of whether it is only analogical to ordinary talk of containment, notably including talk of physical containment. And the reason is that logical containment and logical dependence are distinct only in reason. They are two sides of the same coin—the coin of truth-grounds. Logical containment and logical dependence are formally distinct with a foundation in reality in truth-grounds.

Sun-Joo Shin (1994: ch. 3) shows that even geometrical

logic diagrams can be formalized as well-formed formulas at least as well as linguistic sentences can be, and I would say more easily, since geometrical diagrams are already *geometrically* formal.

Thus the burden is completely on the objector to show that talk of logical containment is unintelligible or merely analogical to talk of physical containment. To the contrary, logic diagrams make logic relations crystal clear. And in a clear sense which I think we can all understand, they make them visible. They visually represent them. They visually diagram them!

If anything, it is the objection that is unintelligible. For it is hard to see what the objection is even about. Is talk of logical containment and dependence unclear? —Is it unclear *because* it differs from ordinary talk of physical containment and dependence? It is precisely its logically well-defined departure from the ordinary physical talk that *makes* it clear! Is talk of logical containment and dependence *unintelligible*? We may as well say that logic itself is unintelligible! —Are *truth-grounds* unintelligible?

Logic diagrams have a long history that evidently goes back to Aristotle (my 2023 / 2015: 280–89; 2021a / 2012: 15–16, 20–25, 121–23). Looking at his syllogistic, it is easy to see why.

Again, talk of logical containment is *more* intelligible than talk of physical containment. Quine notes that at the atomic level, we have no criterion at all for the boundary of an ordinary medium-sized physical object. At the atomic level, an apple has a very fuzzy boundary! Exactly when does an atom or molecule move far enough away from an apple to no longer count as part of the apple? We have no idea. Such boundaries are "indeterminate" in principle (Quine 1981: 34, 100–101). In contrast, logicians may dispute over the exact definition of logical containment, and may despair of ever attaining it; but few hold that they have no idea of what it is. Even first-year students get the basic idea. We all get the basic idea of where the apple ends and the air around it begins too; but just as Quine says, any molecular-level resolution is hopelessly arbitrary.

Analogy and representation must not be confused. All analogies can be used as representations if they correspond one-one to what they represent by analogy; but not all representations are analogical. The machine parts in a small working model train can represent the machine parts in a full-sized train perfectly, and there is nothing analogical about it. The only difference is physical size.

The analogy of ordinary physical parts to logical parts may be a poor one. But analogies are not just analogies; they can also be representations, if they represent one-one. In fact, poor analogies can be used as excellent one-one representations. We may rightly disdain *analogizing* two apples' having the universal red in common to two clocks' physically containing a red cogwheel in common, or in the case of an essential property, to the two clocks'

both causally depending on the same shared red cogwheel to exist as functioning clocks. But the clock example is still viable as a *representation* of the logical validity of the containment argument for universals. Certainly it is no worse than geometric logic diagrams. And whether the analogy of ordinary physical parts to logical parts is a good one largely depends on the example. Using the machine parts in a miniature model to represent machine parts in a full-sized machine is in fact much like using a Venn diagram to diagram a syllogistic argument. And we come very close indeed if we construct the Venn diagram using metal hoops or rings for the circles, and place nuts and bolts inside or outside the rings to represent the objects that fall or do not fall under the descriptive classifications the rings represent.

There is nothing spatial about propositional content. Yet logicians have used geometrical diagrams to represent logical validity for millennia. And does not a logic diagram function just like clockwork? The one shows the hour, the other shows validity.

A *functioning* red cogwheel can represent red in re, since the cogwheel can exist as a *functioning* cogwheel only if it is in a clock. The red cogwheel *as such* can represent red ante rem, since it will continue to exist even if we remove it from the clock. And since a functioning cogwheel is only modally distinct from the cogwheel as such, perhaps we can begin to see representatively (and ecumenically) how red in re and red ante rem are distinct only in reason, with a foundation in reality in red ante rem (represented by the cogwheel as such). For there can be no functioning cogwheel if there is no cogwheel; but a cogwheel just lying idly on a store shelf is clearly not an actively functioning cogwheel.

Or consider icicles composed of water, where "water" is a mass term. Water exists even if particular icicles melt. The icicles can be used to represent ordinary things, and water to represent an ordinary property they have in common. Again, poor analogies can make good representations. The intelligibility and possibility of a one-one correspondence are all we need. For just as it is for logic diagrams, and for representations of statements in general, so the test of intelligibility and possibility for analogical representations is simply one-one correspondence of the represented and representing components, so as to preserve truth-value. That is what really counts for representation, not any analogy. That is why an analogy can be poor, bad, or even positively misleading, and yet succeed as a logical representation. We can even make literal ice diagrams!

Speaking of analogies, analogize what I just said to this:

> Two theories may have radically different intended subject matter and yet, as formal systems, one may be interpretable in another. (As an illustration: a

> simple theory of ancestors may be, taken as a formal system, interpreted in arithmetic; obviously this does not mean that grandmothers and such are really numbers). (Raatikainen 2020 / 2013)

To sum up, the first objection was that my arguments are based on poor analogies. But my arguments do not concern analogy at all. Physical containment of pieces of ice within circles of ice in a ice Venn diagram need not be literally *like* logical containment. It merely needs to *represent* logical containment. And it can scarcely fail at that. These relations only have two relata. How could "x physically contains y" fail to represent "x logically contains y"? Both relations are asymmetrical and transitive. And if we allow self-containment as a logical courtesy, both relations are reflexive.

Since representations do not logically concern analogy even when their historical origin is in an analogy, they do not concern paradigm cases either. For paradigms are just cases that are *so* analogous that they actually *are* the kind of thing in question (see my 2003 / 1996: 235). This concerns my arguments' beginning with the premiss that ordinary things exist. For ordinary things need not be paradigmatic entities for my arguments to succeed. They merely need to be entities. But of course it scarcely *hurts* my arguments that ordinary things *are* paradigmatic entities, virtually by definition. For entity talk gets its meaning from talk of them.

Objection 2.

It might be objected that if an ordinary bottle exists and <contains> <sand>, it follows only that the sand *exists*, not that it is an *entity*. At least, it is very reasonable and common to hold that not everything that exists is an entity. For it is very arguable that classes, sets, or groups of entities are not themselves entities, since they are many, while an entity is one. For example, if there are ten rocks in a pile, are there not just ten entities there, not eleven? Do we wish to say there are ten rocks there, and in addition there is an eleventh entity, the pile? Yet we do wish to say that groups of entities *exist*. Just look at that group of rocks over there!

Pursuing the objection more deeply, the grains of sand in the bottle are many, and they have no unity as a single entity in its own right, since only the bottle is holding them together. Now, a natural sand dune at the beach is a large pile of grains of sand. The sand grains are ordinary entities, and the dune is naturally held together by gravity and friction. And it can be <logically parsed> as one <heap> of sand. But many philosophers would infer not that the dune or heap is an *entity*, but only that it *exists*. They might even hold that it *clearly* exists, since it is held together by natural frictional and gravitational forces. But they would still hold that the dune is really or at bottom *many* grains of sand, while an entity is

one. They would ask, What kind of entity is it that is only a heap held together only by friction and gravity? I hold that this is weak but sufficient causal unity for physical entity status. But they would reply that this is just my judgment call, and their judgment seems more reasonable to them. For a heap of sand will just blow away in the wind. I could reply that at least planets of sand (think of *Dune*) are entities; they would not blow away in the wind. But then *degree* of strength or durability of gravitational and frictional unity would be the issue. There would be a problem of the heap here—literally!

Likewise for the dependence argument. Even if a <sand dune> <logically depends on> the existence of the ordinary sand grains that compose it, one might object that the most that follows is only that the dune exists, not that it is an entity. For again, it is really or at bottom many, not one. And *ens et unum convertuntur*.

Therefore, objection (2) concludes, my arguments do not establish that universals are entities. For in the arguments, universals equate to heaps of sand. For even if ordinary things both <logically contain and depend on> <universals>, their ordinary properties can still be reasonably held to be really or at bottom only many particular properties, and not one universal entity. For the particular properties stand in the logical place of the sand grains, and the universal stands in the logical place of the heap. And a universal is not even held together by gravity or friction! Thus the objector can reasonably say that a universal is held together only in the mind (conceptualism), or only in language (nominalism). And if that is true, then there would not be sufficient unity for its being an entity. There would only be a class or set of exactly similar particular properties.

Reply. I add a lemma to my arguments. (A lemma is a thesis added as a premiss.) I will concede that strictly speaking, my arguments show only that universals exist, not that they are entities. But unlike heaps of sand, if *universals* exist, how can *they* fail to be entities? Some things are simply such that if they exist, then they can scarcely fail to be entities as well. And my lemma is that universals are just this sort of thing, even if heaps of sand are not. Thus if my arguments show that universals exist, then they also show that universals are entities. And this is so even if the same cannot be said of heaps of sand. And the objection does not deny my arguments show that universals *exist*.

In fact, the lemma only states what we already know. For objection (2) is seen to be absurd when we rewrite it as: "My arguments do not establish that universals are entities, but only that universals exist." —Really? If you admit that universals exist, how can you fail to admit they are entities? If a heap of sand exists, it might be a reasonable judgment call that it is not an entity. But if universals exist, how can they fail to be entities?

The lemma seems self-evidently true *a priori* for categorial reasons. For if a universal genuinely exists, then it is not held together by gravity and friction, nor even by the mind or language. If we admit they exist, then on the face of it, we admit they are entities. For if we admit they exist, we admit they are *not* held together only by the mind or by language. That is exactly what the shouting is all about. And they are not "held together" by anything except the individuality (not particularity, but distinctness) of their own natures, or more precisely by their unity *as* distinct natures. In fact, they *are* natures, and by definition they are literally and numerically identical across any instances they have. And on the face of it, they are not only mind-independent, but totally real. For a ball to be round, minds need not even be logically possible. So too for a ball to exemplify the in re *or* ante rem universal *round*.

On the face of it, the lemma can be widened to include all metaphysical categories. For how can *anything* exist, yet not be an entity? As Kant might say, that is a leap over a narrow ditch. If something exists, what more is required for it to be an entity?

Anything and everything that exists is an object in the wide sense. For it is not nothing, and is mind-independently real. And if it is totally mind-independent, then it is an object in itself. Now, the containment and dependence arguments can start either from the ordinary existence of ordinary things and/or ordinary properties, as I did above, or from any objects with any kind of being. Either way, the arguments will minimally conclude that the <items> in question have being in the minimal sense of not being nothing. And with the noted exceptions of acts, classes / sets / groups, and facts *that* (page 224), the arguments will conclude to whatever kind of being we started with, for example from qualified being to qualified being.

A determined objector might rejoin that having a kind of being is not the same as being an entity, and that a heap of sand in itself is totally real, yet is not an entity. But in the end, this sounds absurd. Totally real, yet not an entity? —Really? Also, we can admit different kinds of entity as easily as we can admit different kinds of being. And in the end, the difference seems to make no real difference. This looks like a distinction only in reason at best.

I conclude that at bottom, objection (2) is mere semantics. We can even rewrite the famous song, "Let's Call the Whole Thing Off," as, "You say exists, I say entity, let's call the whole thing off!" We may say that existence and entityhood are distinct only in reason, if they are even that far apart. Perhaps this is that long-sought Holy Grail, a distinction that exists only in the mind! But I jest. There is no such thing as a merely mental distinction. How can a genuine distinction be only a fabrication, a mere contrivance of the mind? How can it be objectively, mind-independently true that there is any such distinction? By definition, it cannot. That would

be a *formal* contradiction. For the distinction would be both mind-dependent and not mind-independent. See my (2021 / 2020: ch. 1) for more.

Thus I agree with Frege, Russell, and Quine that there is no distinction between existence and entityhood, except in language. Thus my containment and dependence arguments show that heaps are entities if and only if heaps exist. And just what does being an entity add to being an existent anyway? Does it add being one? But a heap of sand *is* one heap! Even Quine's scattered objects are entities. For a scattered object, such as water, is one scattered object. And why would water merely exist and not be an entity?

Objection 3.

Descartes gives the example of a piece of wax that changes all its perceptible properties when heated, including its size, shape, color, smell, and even its location (it expands into a larger location when it melts into a puddle), while remaining the same piece of wax (Descartes 1969 / 1642: 154–57). Thus all of its perceptible properties are accidental (logically contingent). Thus it might be objected that since all ordinary properties are accidental, ordinary things do *not* logically <depend on> any ordinary properties, much less on any specific <parsings> of ordinary properties, nor do they logically <contain> any such properties. For ordinary things logically can remain the same even if all their ordinary properties change. For Descartes, only some modicum of extension and duration is essential to being a material substance. That is, only being in space and time is essential. Thus the containment and dependence arguments can show at most that space and time, or more precisely the properties of being in space and in time, are universals, particular properties and so on, if ordinary physical things exist. They cannot show that any other sort of properties are universals. I shall discuss several plausible replies.

Reply 1. We might reply with Aristotle that at least some of the properties of an ordinary thing are essential to it, even if most of its properties are accidental. For there must be something that it is, on pain of its otherwise not being anything, hence not being at all. Or we might reply more ambitiously with Leibniz that all the properties of an ordinary thing define it as the very thing it is. Even for Descartes, being spatially extended is an (in fact, the) essential attribute of a material thing. We might then argue that if essential properties are universals, then so are accidental properties by parity of reason. However, any essentialism is highly controversial.

Reply 2. We might reply that the physically *natural* (as opposed to logical or metaphysical) essence of physical things consists of sub-atomic structural properties which are imperceptible for theoretical reasons, and includes no perceptible properties themselves. This is the standard version of scientific or physical

realism. We may add the familiar point that what is perceptible to a scientist or trained observer might not be perceptible to a lay person. We may also admit natural genera and species as *naturally* essential, and as known via perception, in biology and botany. But the basic thing is sub-atomic structure. Thus the piece of wax has a *natural* essence on the sub-atomic level. When it changes all its perceptible properties, this is lawful and predictable based on its sub-atomic structure, which is inferred from the very changes in its perceptible properties when the wax is heated. Even Descartes would basically agree, even though he rejects atomism and admits the infinite divisibility of matter and extension, and knows nothing of quarks or quanta.

The problem with this reply is that it concerns only causal containments and dependences, while my arguments concern logical containments and dependences. Of course, my arguments will work for *any* sort of containment or dependence, or for that matter, any sort of relation, as Aristotle's relation argument shows. Thus the reply is good as far as it goes. But its *scope* is limited to causal containments and dependences. And I am aiming my arguments primarily at logical containments and dependences, and more widely at any sort of containments and dependences, so as to admit things like universals and particular properties as entities.

Reply 3. We might reply that an ordinary thing logically must contain and logically depends on having *some* ordinary properties, regardless of which properties they may be, and even if they are accidental, on pain of its otherwise being featureless. The wax can change, but it must always have *some* ordinary properties at all times, even if they all change at once. Again, Butchvarov says "Absolutely bare things are absolutely incapable of identification and thus of existence" (Butchvarov 1979: 122). More precisely, on the principle of the identity of indiscernibles, there can be only one absolutely bare thing at most, perhaps a mystical or Parmenidean One. Yet we would need to admit indefinitely many Bergmannian bare particulars, if we were to admit Bergmann's metaphysics as a valid logical parsing of ordinary things via the containment and dependence arguments. And we would have to admit them as not being *absolutely* featureless, but as having *some* sort of properties.

The problem with this reply is that my arguments apply not just to *some* ordinary properties, but to *all* ordinary properties, of an ordinary thing, at all times and accidental or not. Every single ordinary property must contain and depend on (or vice versa) all the same metaphysical parsings, if my arguments succeed.

Reply 4. Even if all ordinary properties are accidental, an ordinary thing cannot be *identified* unless at least some of its ordinary properties are identified. Thus it essentially depends for its identity on their identity. We may call this an indirect logical tie

between an ordinary thing and its ordinary properties. Reply (4) supports reply (3). Butchvarov might call the properties of a thing the only possible 'basis' for identifying the thing (Butchvarov 1979: 122). And we may expand his point to include all logical containments of and dependences on contentual identifiabilities by contentual identifiabilities, resulting in metaphysical ecumenicism.

I accept reply (4), but have further replies to discuss. Note that reply (4) is intimately related to and supports my original sufficient reply, that talk of logical containment and dependence is intelligible and clear in its own right, regardless of whether it historically or even conceptually originates from its analogy to physical containment and dependence. For my original reply was about the intelligibility of containment of and dependence on truth-grounds by truth-grounds. And reply (4) concerns the identifiability precisely of the truth-grounds, and of *their* containments and dependences. This is a very deep "entity if and only if identity."

Reply 5. Objection (3) does not affect the containment argument, but only the dependence argument, insofar as those arguments are conceived or regarded independently of each other. For an ordinary thing does <*contain*> ordinary properties at all times, regardless of whether those properties are essential or accidental, that is, regardless of whether it logically <*depends*> on the properties it has at any given time. Thus it also logically <contains> all the <*parsings*> of those ordinary properties. And ironically, the piece of wax is an excellent illustration of this point.

This reply is good as far as it goes. But it only saves the containment argument, and not the dependence argument.

Reply 6. We can start the containment and dependence arguments from ordinary *properties*! We logically can start them from ordinary things, ordinary properties (including ordinary relations), or both. And there is no doubt that *ordinary properties* both logically contain and depend on their own logical parsings into universals, particular properties, and so on. And ordinary properties exist in an ordinary, pre-philosophical sense just as much as ordinary things do. This rescues reply (5) from its limited scope.

This reply rescues both the containment and dependence arguments for universals. But we should be able to do that starting the arguments from ordinary things alone just as well, in virtue of the indirect logical tie between ordinary things and their ordinary properties that was described in reply (4), namely, identifiability.

Reply 7. As we saw in reply (4), the objection does not affect the containment argument. And on the logical relevance containment theory of logical entailment, the containment and dependence arguments are distinct only in reason. For logical containment and logical dependence are logically equivalent terms,

meaning they are intersubstitutable salva analycitate. This rescues the dependence argument via reply (5)'s rescue of the containment argument.

I accept my original reply, and I also accept replies (4)–(7), with the caveat that replies (5)–(6) are limited in scope.

Objection 4.

It might be objected more deeply that neither argument applies to Bergmann's bare particulars, since by definition, bare particulars are featureless (propertyless). Thus they cannot *contain* features, much less *depend* on them. And conversely, neither can ordinary things or ordinary features contain or depend on any featureless items such as bare particulars.

Reply 1. One reply might be that there *are* no bare particulars, since without features they would be unidentifiable. Thus they are not there to stand in containment or dependence relations with anything else. More precisely, there could only be one identifiable bare particular at most, which could be identified as 'the only featureless entity'. For without any features, any two or more bare particulars would be indiscernible, and therefore would be not identifiable as different entities. At most, there could be a single bare particular which is indiscernible from everything else in virtue of its uniquely being featureless. Perhaps it exemplifies the whole universe, or is at least a mystical One Bare Thing.

This reply can be made on the basis of the principle of the identity of indiscernibles. For two featureless objects would be indiscernible. But even if we reject that general principle, we could still reject the particular case of a plurality of featureless objects.

I reject this reply for two reasons. First, the containment and dependence arguments show that there *are* indefinitely many bare particulars, since bare particular analysis *is* a valid parsing of ordinary things. Thus, on the strength of those arguments, bare particulars cannot be nothing. Second, bare particulars are not *absolutely* featureless. Bergmann argues that two bare particulars *are* presented and *are* identified as different entities, in the very act of individuating, say, two red round spots of the same shade and size. Bare particulars are identifiable, but never *directly* in terms of their own features, since they have none. Instead, they are always identified *indirectly* through identifying ordinary things and their ordinary properties. They are identifiable as the grounds of the numerical individuality of individual things; and that is all they are or can be. Not only that, but while they *are* not features and *have* no features, they *exemplify* features which are *external* to them, and through which they are indirectly identified. For "Bare particulars neither are nor have natures. Any two of them, therefore, are not intrinsically different but only numerically different. That is their bareness" (Bergmann 1967: 24). By "neither are... natures," he

means they are not *particular properties* (which he calls "perfect particulars"). By "nor have natures," he means they are not *particular instances of universals*. Thus a bare "particular and a universal it exemplifies are *wholly external* to each other" (Bergmann 1967: 47, his emphasis). Yet despite that externality, bare particulars are and must be identified by the universals they exemplify. The externality is why I call their identification indirect. The externality is also why they can and must differ solo numero.

Bare particulars are also indirectly identified as the spatiotemporal locators of ordinary things. Thus they stand in (wholly external and therefore indirect) spatiotemporal relations to each other. For Bergmann, they are primarily grounds of the identity of phenomenal spots, sounds, and so on, and secondarily grounds of the spatiotemporal identity of ordinary things, since he analyzes ordinary things as logical bundles of phenomenal spots, sounds, and so on. For us here, qualified bare particulars would primarily ground the numerical difference of qualified sensible objects, and secondarily ground qualified spatiotemporal locations of qualified ordinary individuals; and many of these kinds of qualified objects would "be" the corresponding kinds of objects in themselves.

Since bare particulars must be indirectly identifiable via the wholly external sensible universals they exemplify, they are not *absolutely* bare, but have the intrinsic *metaphysical* and *modal* property of indirect identifiability. "No entity without identity."

Reply 2. Bare particulars are not and do not have *sensible* qualities, and exemplify them only externally. But as we saw in my rejection of reply (1), they do have internal, essential *metaphysical* features. They are essentially bare. That is, they have the essential feature of not being or having features. We may call this the second-level negative metaphysical property of not being or having features. Thus here too, Bergmann's bare particulars are not the absolutely bare things that Butchvarov rejects.

In fact, Butchvarov agrees that Bergmann's bare particulars are not "absolutely bare" (Butchvarov 1979: 122). A bare particular "is described as bare in order to signify that it is not a [sensible] quality ("has no nature"), and as a particular in order to signify that no two things can share it" (Butchvarov 1979: 209). But even this much implies that a bare particular has at least two essential properties: it is not a sensible quality, and it is a particular.

We can and must distinguish between *saying* that a thing has no features, and the thing's *having* the paradoxical feature of having no features (Benardete 1973). And, Benardete claims, saying that is precisely how we describe its having no features—including its not even having the feature of having no features! But Benardete overlooks that the feature of having no features is a Fregean mapping function as real as any other Fregean function.

Thus Benardete's claim is self-defeating. For even though nothing can have the feature of having no features, neither can anything be a round square; and *round square* is a perfectly fine Fregean mapping function. Benardete also overlooks that bare particulars do have at least essential metaphysical properties that are different but distinct only in reason: the property of bareness; the property of indirect identifiability; the property of exemplifying external sensible qualities; and the property of indirectly exemplifying external spatiotemporal relations. No exemplification, no indirect identifiability. And no indirect identifiability, no bare particulars. For no identity, no entity; and indirect identifiability is the only kind of identity they can have. Note that bare particulars cannot be identified or distinguished by their metaphysical properties, since they all have exactly the same metaphysical properties.

Reply 3. On the face of it, parsing ordinary things into phenomena, and parsing phenomena into bare particulars and the properties they exemplify without being or instantiating them, is intelligible, is logically possible, and is a logical analysis that results in statements that are logically equivalent to statements about ordinary things, or at least about ordinary phenomena. (Recall that *specific* phenomenal logical analyses of ordinary things such as Hume or Russell might attempt would be infinitely long; but *general* statements simply *that* ordinary things are bundles of phenomena are quite short. This applies to Bergmann as well.) And if those three conditions are met, then the containment and dependence arguments show that there are bare particulars in the sense of not being nothing. And given that much, they are mind-independent per Moore, and on the face of it, totally real. Note that Moore would find Bergmann's phenomenal red round spots precisely the sort of objects that are mind-independent in act-object theory.

To sum up, I reject reply (1), but accept replies (2) and (3). The post-Bergmann literature on bare particulars is beyond the scope of this book.

Objection 5.

It might be objected that the containment argument can only show that universals exist *in re*, that is, exist only in things, since the whole idea is that they are <*contained in*> ordinary things. And if universals <depend on> ordinary things, how can they be ante rem, that is, exist independently of things?

Reply 1. It might be that this is not a bad thing. For ever since Aristotle's critique of Plato, universals ante rem have been considered more problematic than universals in re. So perhaps we *should* admit only universals in re. But this reply implies rejecting metaphysical ecumenicism and admitting a sectarian view.

Reply 2. The objection gets each argument's premiss (5)

backward. See pages 252, 253. Thus the objection can succeed only if each premiss (5) implies its converse, and the converse is false.

As to premiss (5) of the containment argument, <universals ante rem> *are* <logically contained> in ordinary things as <logical parsings>. They are merely a further abstraction from universals in re. They abstract from being instantiated. And that is why they also abstract from being in time in the case of ordinary temporal things. Let me put it another way, as a hypothetical point instead of using brackets. If red *were* a universal ante rem and an ordinary apple *were* red, then the apple *would* contain a universal ante rem. And then a universal ante rem *would* be a logical part of a valid parsing of the apple.FN3-7 And that *is* a valid, i.e., intelligible and logically possible, parsing of the apple. Thus the apple *does* <logically contain> a <universal ante rem>. Thus the brackets are correctly applied in premiss (5)—and correctly removed in the conclusion. And premiss (5) does not imply its false converse. <Universals ante rem> do not and cannot logically contain ordinary in re things.

As to premiss (5) of the dependence argument, ordinary things *do* logically <depend> on <universals ante rem> as <logical parsings>. And that is just what we should expect. For containment is distinct only in reason from dependence. Here too premiss (5) does not imply its false converse. <Universals ante> rem do not and cannot logically depend on the existence of ordinary in re things.

Ante rem universals, insofar as they are properties that things logically can have, do not depend on the *existence* of things that can have them; but they do depend on the *logical possibility* of things which can have them. For they are not even identifiable as properties which ordinary things can have, if ordinary things are not identifiable. Of course, some universals cannot be instantiated, such as *round square*. But even they are composed of universals that logically can be instantiated, such as *round* and *square*.

Reply 3. More deeply, the objection misunderstands the containment and dependence arguments because it misunderstands the nature of logical containment and dependence.FN3-8

Again, logical containment and dependence are intelligible relations in their own right. And they resemble ordinary space-time containment and dependence to the extent that one can see why they are so named. But the resemblance is less than the objection makes out. Specifically, the resemblance is not so great that universals in re are logically contained in ordinary things, but universals ante rem are not. For if two logical analyses are logically equivalent to an ordinary statement, then they are also logically equivalent to each other. And then the entities they are about are distinct only in reason, regardless of how the containments or dependences fall out. And that is just what we have here. “Apple *a* is red” is logically equivalent to both “Apple a has universal in re

red" and "Apple *a* has universal ante rem red." I mean that an in re realist would assert the in re statement if and only if an ante rem realist would assert the corresponding ante rem statement. Thus the two analyses that the two realists offer are logically equivalent to each other, and universal in re red is distinct only in reason from universal ante rem red. Thus both universals must be admitted as being in the apple if either is admitted as being in the apple. Indeed, the ante rem universal is a mere logical abstraction from the in re.

Reply (3) has a problem. What about the universal *round square*? It is a universal ante rem, but it cannot be a universal in re, since nothing can be a round square. Hence the ante rem realist would assert "The universal *round square* exists," and the in re realist would deny that very same statement. Thus, far from asserting logically equivalent statements, they would contradict each other.

There are three fairly easy solutions, and I accept all of them. First, universals that cannot be instantiated are logically composed of universals that can be instantiated, such as *round* and *square*. Second, such universals can be admitted by parity of reason to those ante rem universals which *can* be instantiated. For they all belong to the category of ante rem universals. Third, the distinction in reason between in re and ante rem is a per impossibile one. Per impossibile, if there *were* a universal in re *round square*, it *would* be distinct only in reason from the universal ante rem *round square*. And this hypothetical point is quite intelligible and clear.

The second and third solutions have an advantage over the first. Namely, if we ever happen to find an ante rem universal that cannot be instantiated, and is not logically composed of universals that can be instantiated, the first solution cannot apply; but the second and third solutions still apply.

Of course a universal ante rem can exist even if its in re counterpart does not! But this only shows that their distinction in reason is a modal distinction, that is, a one-sided dependence. That is, the ante rem universal is logically contained in the in re. And that makes all the sense in the world, since the ante rem is a logical abstraction from the in re. And that is because a universal in re is logically complex. It is (1) a universal (2) conceived or regarded *as actually occurring* in a thing, i.e., as having instances. We abstract the universal ante rem simply by keeping logical component (1) and dropping logical component (2), that is, simply by *not* conceiving or regarding the universal as having instances, but still regarding it as a universal. Thus universals ante rem are logically prior to universals in re because they are definitionally prior. They are universals simpliciter, and universals in re add the extra logical component that they have instances.

Frege gives a wonderful example of a progressive series of

abstractions (Frege: 1970c / 1894: 85). If we abstract "a black and a white cat sitting side by side before us" far enough, first from their color, then also from their sitting, and so on, we eventually end up with different variable expressions x and y. (This is what used to be called the 'unknowable substratum' in early modern philosophy.) Frege suggests in effect that the objects themselves become progressively more abstract objects, and therefore distinct only in reason in a progressive series. He says, "...here, objects are essentially altered by abstraction...." (Frege, 1970c / 1894: 85). I am merely noting that the same can be said of the progressively more abstract series particular property, in re universal, ante rem universal, object in itself, as well as of the progressively more abstract series red, color, visible quality, sensible quality, perceptible property, property, object in itself. All of these are progressive series of logical containments and dependences. But there is a major difference between Frege's progressive series of abstractions and mine, and rightly so. For Frege is right to reject the view that variable expressions are names of 'variable entities', while I am right to admit bare particulars. Frege says, "Since we cannot conceive of each variable in its individual being [i.e. since there is nothing to distinguish a 'variable entity' x from a 'variable entity' y], we cannot attach any proper names to variables [i.e. cannot regard variables as names of entities]" (Frege 1970h / 1904: 109). But bare particulars are named by logically proper names, not by variable expressions. For we *can* 'conceive of them in their individual being' in virtue of their being located at different places and times. Recall that variables abstract even from space and time.

Again, I accept all three replies to objection (5), but reply (1) has a hypothetical limitation that replies (2) and (3) do not.

Objection 6.

It might be objected that the relevant containment theory of entailment, i.e. the theory that all and only logically valid formal deductive inferences are such that the conclusion is in some sense logically contained in the premisses, has never been proved. Logical containment is not always easy to show by a logic diagram, and a new valid inference which falsifies the theory might always be just around the corner. Thus it has not been proved that the containment and dependence arguments are distinct only in reason, or even that their premisses are logically equivalent.

One reply is that the theory has never been falsified either. A logic diagram that shows logical containment in a previously undiagrammed valid argument might always be just around the corner too. Thus we can only show confirmation. We can never show disconfirmation. And as far as I know, no inference generally accepted as valid has ever failed to be diagrammable.FN3-9

Relevant entailment is an intuitively plausible theory that

all or nearly all of us accept in practice. And my (2023 / 2015 ch. 9; 2021a / 2012) show that truth-ground containment is the deepest form of relevant containment entailment. Thus it shows that all of modern classical (Frege-Russell style) logic is relevant on the deepest level. Likewise for all of Aristotelian syllogistic.

A deeper reply is that if the relevant containment theory of logical validity were false, then, assuming that the containment and dependence arguments are logically equivalent with respect to the one-one correspondence of their premisses and their conclusions, the only consequence would be that the corresponding premisses and conclusions (and we may as well say the two arguments) do not relevantly *contain* each other. They would still be *distinct only in reason*. For that can be based not on their mutual logical containment, but instead on their mutual logical *dependence*.

Third, the *soundness* of each argument is totally unaffected by objection (6). And their proving that all the entities in question exist is all that matters. Even if *just one* of the two arguments proves that particular properties, universals in re, and universals ante rem all exist, that proves metaphysical ecumenicism for properties. Thus objection (6) is a multiple red herring (distractor).

I accept all three replies to this objection.

Objection 7.

It might be objected that one philosopher's modus ponens is another philosopher's modus tollens. That is, I am arguing that ordinary things exist and <contain> and <depend on> <universals>, therefore universals exist. But others might argue contrapositively that universals do not exist, therefore ordinary things do not ontologically contain or depend on them, even if they do <contain> or <depend on> <universals> in a merely logical, ontologically noncommittal sense. For they are not there to be contained or depended on. And that seems to be a standoff. The objection is really that I am begging the question against the contraposited arguments. In traditional terms, the objection has two versions: conceptualism and nominalism.

Reply. No flaw has been detected in my arguments. My basic assumptions are that (1) ordinary things exist, (2) nothing can contain nothing, and (3) nothing can depend on nothing. These assumptions are individually and jointly neutral with respect to the existence of universals. And they are far more certain and uncontroversial than any of the rival metaphysical theories of universals—including conceptualism and nominalism. My premisses that ordinary things <contain> and <depend on> all the various <parsings> are neutral with respect to the existence of universals as well, and are more certain than any of the rival theories as well. Thus my arguments do not beg the question of universals. Far from it! But the objection begs the question by

merely assuming that universals do not exist. And if the objector argues that universals are strange entities compared to particulars, one might as well reject quanta because they are strange entities compared to the atoms of classical physics.

Also, we cannot accept contrapositions as true unless we accept the original statements as true in the first place. And that is death to these contrapositions as objections to my arguments.

In formal logic, "P implies Q" is true if and only if its contraposition, "Not-Q implies not-P," is true. And if P is true, then if P implies Q, then Q is true, and the truth of the contraposition does not affect the truth of Q in the least. And that is just what is going on in the containment and dependence arguments. P is the conjunction of my three basic assumptions on page 270, and Q is the thesis that universals exist. Not-Q is the thesis that universals do not exist. Now, my basic assumptions are far more plausible than any of the rival theories about properties. And Q is one of those rival theories. But Not-Q is one of those rival theories too. Thus my arguments are far more plausible than the objector's. For the objector begs the question by beginning with what was to be proved or disproved, and ending by rejecting at least one of three widely accepted, fairly uncontroversial basic assumptions. In total contrast, I am beginning with the widely accepted, fairly uncontroversial basic assumptions, and ending with what was to be proved.

The relevant containment theory of entailment is neutral with respect to the existence of universals too. It logically connects the containment argument with the dependence argument as distinct only in reason, but it has nothing to say about their validity. They stand or fall on their merits even if the relevant containment theory is false. And just like my basic assumptions, the relevant containment theory is more plausible than any of the rival metaphysical theories of realism, conceptualism, or nominalism. And like them, it does not beg the question of universals. Thus my three basic assumptions, my arguments' premisses, and even my relevantist view that my two arguments logically contain each other, do not even appear to beg the question of the existence of universals. But the objector begs the question of the problem of universals from the start by simply assuming that universals do not exist. Thus there is no simple standoff here. For the objector owes us an argument for the nonexistence of universals. The burden of proof, and even the burden of production of any evidence at all, lie on the objector. And to win, the objector's argument must be *better* than the containment and dependence arguments for universals. And the objector should be pointing out flaws in my arguments, that is, should show where they go wrong, but utterly fails to do so.

The objector could argue that on the relevant containment theory of logical validity, if my containment and dependence

arguments are valid, then their premisses relevantly contain their conclusions, and in that sense beg the question. My reply is that on the relevantist theory, every valid argument does that. There is nothing special about my two arguments in this. Does every valid argument then beg the question? Some skeptics about reason have thought so, even in ancient times. But then why ever give a valid argument? My deeper reply is that any such question-begging only concerns *extensional* truth-ground containment; and there is no begging of the question about what we can *intensionally* see or understand in the premisses *before* the conclusions are derived. This concerns propositional attitude, that is, referential opacity. Granted, we can see the conclusion already contained in a truth-table or a Venn diagram of the premisses of a valid argument. But in a verbal argument, we still must *look* for and *see* the extensional containment via a prior act of cognition of the intensional meaning of the premisses and conclusion. Indeed, propositions, which for us are qualified facts, are cognitively prior to any extensional facts.

The objector might appeal to common sense and argue that common sense does not *admit* universals in any case, regardless of whether they are strange entities; therefore the burden of proof is on realism. But common sense does not *deny* universals either. For the very notion of a universal does not *belong* to common sense; and ordinary language *equally* permits us to say of two apples either that they exactly resemble in color or that their color is the same. This is widely accepted among writers on universals (Loux: 1970: 3; see Landesman 1971: 3–4). Thus, to use that phrase from C. D. Broad, "Poor dear Common-sense" is of no use here. And our two arguments start from the ordinary, pre-philosophical sense in which we can indifferently say either "This color is the same as that" or "This color is exactly like that." For they start by asserting the existence of things in the ordinary, pre-philosophical sense, and then parse their ordinary properties into <universals> without ontological commitment to universals. And only then do they infer the existence of universals from <universals'> <containment and dependence relations> to ordinary things. We can also start more simply just from ordinary properties, with exactly the same result.

The objector could also deny that the objection is or implies a positive or even specific metaphysical theory, but instead simply denies that there are universals. But "simply denying" that there are universals *is* a metaphysical theory, even if the theory is so simple and general that it is not specifically conceptualism or nominalism. F. H. Bradley says, "The man who is ready to prove that metaphysical knowledge is wholly impossible... is a brother metaphysician with a rival theory of first principles" (Bradley 1969 / 1893: 1). And the objector is a poster child for that.

Summary of Metaphysical Ecumenicism on Theory of Properties

On metaphysical ecumenicism, all the main metaphysical theories of properties are valid parsings of ordinary properties. They are all correct in what they assert, but wrong in what they deny about their "rivals." This includes even conceptualism and nominalism, as well as particular properties, universals in re, universals ante rem, and Platonic forms. (Platonic forms may be particulars, but then so are particular properties. And participating in a Platonic form is definitely a parsing of an ordinary property.) My theory is clearly a metaphysical theory. It is also new and unique, as far as I know, in ecumenically admitting all the main "rival" metaphysics of properties, by subsuming them into itself. Talk of Hegelian syntheses! We will be doing the same thing for the main theories of ordinary particulars in the next section.

The containment and dependence arguments show that particular properties (perfect particulars, tropes), universals in re, and universals ante rem all exist in the sense of not being nothing, and if we start from ordinary things or ordinary properties in themselves (recall that 'object in itself' is one of the two main ordinary, pre-philosophical meanings of "object"), also in the sense of being totally real, i.e., of being objects in themselves.

The logical fallacies of composition and of division do not even appear to apply. For all the changes in parsing are simply changes in abstraction; and changes in abstraction are simply changes in conceiving or regarding. Even if we analyze an ordinary property as a *class of set* of particular properties, or as an *act* of the abstracting mind, the fallacies would not apply. For these would have to be objects in themselves in order to correspond one-one to ordinary properties in themselves salva analycitate.

Qualified objects are my logical analysis of ordinary objects of perception or thought as having at least twenty-one essential features. They are not a starting point for argument here. They are the end analysis I arrived at for phenomenology, which can only start from ordinary objects of perception or thought. And my further logical analysis in effect was that qualified objects are via antiqua objects, and that via moderna objects are via antiqua objects minus their objective realities, or if you please, via antiqua objects are via moderna objects plus objective realities. In exactly the same way, particular properties, universals in re, and universals ante rem are among my alternative logical analyses of ordinary properties. They are not the starting point, but are the end analyses I arrived at in theory of universals, which can only start from ordinary properties or ordinary things. And my further logical analyses was that they are a progressive series of abstractions.

The move from particular properties to universals in re is achieved by abstracting from (i.e. disregarding) differences in spatial location, i.e., by abstracting from any particular location. The further move from universals in re to universals ante rem is achieved by abstracting from (i.e. disregarding) differences in temporal location, i.e., by abstracting from any particular location in time, as well. I mean disregarding or suspending the question whether the property is instantiated at all times, at some times, or at no time. A third move would be to abstract from (disregard) also any imperfections, so as to arrive at ideal Platonic forms. Plato's forms are particulars; but they function as universals in the meaning of common names, and also in the genus-species hierarchy; see Cornford (1957: 9, 186, 259, 269). Each of these three moves is a progressively greater abstraction from particular properties. And surely this is the most natural view of these moves.

Conceptualism and nominalism are valid logical parsings of ordinary properties too. Metaphysical ecumenicism admits them too. Just as Berkeley parses an ordinary house into so many mental ideas across minds and times, so conceptualists parse ordinary properties into so many particular conceptual ideas across minds and times, and nominalists parse them into so many particular occurrences of predicates across languages. The statements that conceptualism and nominalism offer as logical analyses of ordinary statements about ordinary properties are logically equivalent to each other, and also to the statements that theories of particular properties, universals in re, universals ante rem, and Platonic forms offer. For they all logically correspond one-one with the ordinary statements about ordinary properties. If they did not, they would fail to be satisfactory logical analyses of the ordinary statements in the first place. They fail to correspond only insofar as they deny the existence of each other's entities. On metaphysical ecumenicism, that is a mistake, and their only mistake.

While concepts (qua mental ideas) and descriptions are less real than universals qua *solutions* to the problem of universals, they are just as much *objects in themselves* as universals are. They are just as much valid parsings of ordinary talk of properties. Nor is there any suggestion that *real universals* are nothing but concepts or descriptions. Quite the opposite, conceptualism and nominalism differ from realism precisely because concepts and descriptions are *not* real universals. Indeed, conceptualists and nominalists *deny* there are universals! Granted, if all three theories offer valid logical analyses of ordinary talk of properties, they are logically equivalent to and analyze each other. But there is nothing reductive or eliminative in that. For that only shows that concepts, descriptions, and universals are *distinct only in reason*. For on the containment and dependence arguments, *all* the parsings admitted by these three

theories are equally real entities. And that is why realism wins. For universals are just as totally real as concepts and descriptions are, and just as totally real as the minds that conceptualize and describe things. Recall that minds, concepts, and descriptions in themselves are all part of the totally real order of things. For it is a totally mind-independent fact *that* minds, concepts, and descriptions exist. (I do not mean the qualified facts that are the propositions that statements express, but the facts in themselves that propositions "are" if they are true, such as the fact that minds have ideas.) People really exist, and really conceptualize and describe things! Being an object in itself must not be confused with being nonmental; Descartes admits minds and bodies alike as substances. Granted, minds are logically dependent on themselves, and mental acts of conceiving and describing logically depend on the minds that logically contain them. But then every object logically depends on its own existence, and every part qua part logically depends on the whole that contains it. Even bodies are like that! Furthermore, universals are *logical emergents* not reducible to concepts or the conceptual content of descriptions, if all the logical analyses are valid. That there are concepts and descriptions in themselves, as well as universals in themselves, does not detract from this point.

If the traditional whole-part relevant containment theory of logical validity is correct, on which an argument is logically valid if and only if the premisses logically contain the conclusion, then the containment and dependence arguments are versions of each other. For a logical implication is a logical dependence. Thus the two arguments are distinct only in reason. They are formally distinct with a foundation in reality in logical containment of truth-grounds. For logical containment is the core notion of logical relevance that illuminates and explains the notion of logical dependence.

However, for our purposes here, the containment theory of logical validity need not *define* or *explain* logical validity.FN3-10 It need only hold that an inference is logically valid *if and only if* premisses of a valid argument logically contain the conclusion. For our purposes here, that biconditional thesis can even be a mere synthetic *a priori* truth. Of course, if the diagram of a conclusion is already drawn in the diagram of the premisses, that clearly *is* a logical containment entailment. We may call it the diagrammatic sense of "logical containment."FN3-11 But this is taking us afield; see my (2023 / 2015: ch. 9; 2021a / 2012). For our purposes, truth-tables or other logic diagrams need only *represent* logical containment by corresponding one-one with it. They need not define or explain it. They can simply illuminate it by visually representing it. Indeed, logical containment need not even be *like* logical validity or logical dependence. It need only be *distinct in reason* from them, for the containment and dependence arguments

to be distinct only in reason from each other, and from the logical relevance argument and Aristotle's relation argument.

Bare, Perfect, and Mere Particulars

I now apply the containment and dependence arguments to ordinary things that have properties, but are not themselves properties of other ordinary things, that is, on the propositional level, to ultimate logical subjects as opposed to logical predicates. We may call such ordinary things "ordinary individuals."

Ordinary individuals have ordinary properties. Thus all the ways of parsing ordinary properties are also partial parsings of ordinary individuals, namely, parsings of their ordinary properties.

A traditional mark of ordinary individuals is that they can be logically analyzed in a way ordinary properties are not, namely, as containing bare particulars, or more traditionally "Aristotle's matter, or... Thomas' *materia signata*" (Bergmann 1967: 25). At least as far as I know, no one has ever analyzed *ordinary properties* as containing bare particulars. But we must not be confused here. For ordinary properties can be parsed as classes of particular properties, as we saw. And particular properties can be parsed in turn as logically containing bare particulars, much as red logically contains color. For while particular properties are not *ordinary* individuals, they are particulars.

One might object that this is redundant. For the function of bare particulars is to ground numerical individuation, and particular properties are already their own grounds of numerical individuation. My reply is that distinctions in reason can, are, and must be functionally redundant. And on metaphysical ecumenicism, bare particulars *must* be admitted as distinct only in reason from particular properties. For we can easily abstract this particular red's *numerical individuality* from its being a *particular red*. Thus there will be containment and dependence relations. And while it may not make initial sense that a particular property can be parsed as logically containing a bare particular, that is because we are still thinking of these theories as rivals such that at most one of them can be true. And that sort of rivalry is just what we are eliminating.

Thus for us, the mark of ordinary individuals and any other particulars, including particular properties, is simply that on the propositional level, they are ultimate logical subjects. And that follows from their definition as things that have properties, but that are not themselves properties of other things.

One might object that then a bare particular contains a bare particular, since after all it is a particular; and that implies a vicious regress of bare particulars' containing bare particulars. My reply is

that a bare particular cannot be a logical part of another bare particular unless the former spatiotemporally exemplifies less than the latter. For example, the bare particular that exemplifies the universals in a red spot is a proper sub-part of the bare particular that exemplifies the universals in a complex plaid spot of which the red spot is a part. That is, a bare particular cannot *merely* contain a different bare particular. For there would be no ground of identity or individuation of the contained bare particular. Thus it would violate the "entity if and only identity" thesis to admit such a bare particular. To be sure, we can *divide in reason* the red spot into up to infinitely many red sub-regions (Frege 1974 /1884: 66), so that each sub-region's universals were exemplified by a different sub-bare particular. Perhaps that could be done via spatiotemporal relations of the sub-regions to adjacent or nearby nonred spots. But let us leave the details to others, and return to the big picture.

The containment argument for the existence of all the various sorts of metaphysical particulars is this. (1) Nothing, so to speak, can <logically contain> or <be logically contained by> nothing; only something can <contain> or <be contained by> something. (2) Therefore, whatever <contains> or <is contained by> an entity is itself an entity, at least in the minimal sense of not being nothing. (3) Therefore if <x> <contains> <y>, then if either <x> or <y> is an entity, then the other is an entity too, at least in the minimal sense of not being nothing. (4) Ordinary individuals are entities. (5) Ordinary individuals <logically contain> <bare particulars>, <particular properties>, and also <objects> like Aristotle's <prime matter> and Scotus's <haecceities>. (6) Therefore bare particulars, particular properties, prime matter, and haecceities are all entities, at least in the minimal sense of not being nothing. Note that in the premisses, the terms for the various sorts of metaphysical particulars are surrounded by brackets, and that in the conclusion, the brackets are gone, as existence is proved.

The dependence argument for the existence of all the various sorts of metaphysical particulars is this. (1) Nothing, so to speak, can <logically depend on> or <be logically depended on by> nothing; only something can <depend on> or <be depended on by> something. (2) Therefore, whatever <depends on> or <is depended on> by an entity is itself an entity, at least in the minimal sense of not being nothing. (3) Therefore, if <x> <depends on> <y>, then if either <x> or <y> is an entity, then the other is an entity too, at least in the minimal sense of not being nothing. (4) Ordinary individuals are entities. (5) Ordinary individuals <logically depend on> <bare particulars>, <particular properties>, and so on, in the sense that their individuation depends on their having the <bare particulars>, <particular properties>, and so on, that they can be <parsed> as having. Or if you please, an ordinary individual can be

the ordinary individual it is if and only if the <bare particulars>, <particular properties>, and so on, it can be <parsed> as having are what they are. (6) Therefore <bare particulars>, <particular properties>, and so on, are entities in the minimal sense of not being nothing. Note that in the premisses, the terms for the various sorts of metaphysical particulars are surrounded by brackets, and that in the conclusion, the brackets are gone, as existence is proved.

Objections

Objection 1.

All the containment and dependence arguments do is take two traditional forms of argument which many today would reject, and widen their scope. Thus they are at least as suspect as their traditional forms, if not more so.

Reply. No flaw has been detected in the arguments. And yes, my aim is to widen them to the greatest extent possible, so as to arrive at a comprehensive metaphysical ecumenicism. May others widen them more. But even those who reject the arguments should credit me with expanding them to general completion. Of course, I cannot discuss every possible expansion in this book.

Objection 2.

The containment and dependence arguments validate all sorts of logically contrary or even contradictory rival metaphysical analyses of ordinary individuals, and they cannot all be true. Particulars cannot be both bare and particular properties (instances of properties). Likewise for the rival analyses of ordinary properties. Universals cannot be both in re and ante rem. Nor can properties be both particulars and universals.

Reply. I never said the objects are the same. Quite the opposite! I said they are all different objects, but distinct only in reason. Metaphysical ecumenicism does not come to abolish any of the distinctions, but to fulfill them all as distinct only in reason. It does not hold that any of these categories are identical. Far from it! The objector misses the whole point of metaphysical ecumenicism. The only abolished distinction is mental distinction, since it is a fabrication of the mind. Even nominalism and conceptualism are admitted, where descriptions directly express qualified concepts that "are" concepts in themselves. As qualified objects, qualified concepts exist in all possible worlds. Concepts in themselves are properties in themselves of which we are indirectly aware.

A more ecumenical reply is that the objection is right in the sectarian's own limited sense, but wrong in our ecumenical sense.

Objection (2) is right insofar as no one metaphysical analysis can be the *sole ground* of an ordinary individual's entity or

identity. Of course, one analysis may be more intellectually illuminating than the others, and in that sense be the foundation in reality of the others. But the ground or foundation in reality of all the analyses is in a deeper sense the portion of reality which they all parse. For example, the ground of an ordinary individual's individuality, or indeed, of any individual's individuality, is simply that individual itself. For all the various analyses of the ground simply single out uniquely individuative features of the ground, features that are different but distinct only in reason from each other. And all of those features logically depend, for their ability to individuate the ordinary individual, on the fact that the ordinary individual is an individual in the first place. For there can be no analysans (analysis) without an analysandum (thing that is analyzed). And there can be no individuative analysis of a thing that is not already an individual. And an analysis cannot be of nothing. But then *no one analysis is the ground*. For statements of all of them are *equally* logically equivalent to the ordinary statement of the ground and to each other, and are different from but distinct only in reason from each other and from the ordinary ground. And that is the sense in which the objection is wrong. Note that if an analysis were identical with that which it analyzes, it would not be a factually informative analysis. And the ordinary individual *is* the portion of reality that all the analyses parse!

I credit Douglas C. Long (1968) with the insight that an individual grounds its own individuation. And I extend Long's insight to properties. For every logical parsing of an ordinary property is grounded in the property in itself as a portion of reality, however many ways the logical analyses may parse it. In fact, there is a sense in which every object in the wide sense is an individual. Namely, it is one object. My extension of Long is simply that every object grounds its own individuation as the portion of reality that it is, be it qualified or in itself. This is even an informative analysis in that "the apple" and "the portion of reality that the apple is" express intensionally different descriptions, i.e., different qualified objects. But the analysis is uninformative in another, equally clear, sense. This is the sense of uninformative identity which the later Wittgenstein derides by comparing it to tracing the shape of a thing with one's finger and saying this is the identical thing (PI § 216). (I am describing his point in my own way.) The tracing and the saying are deeply different acts; but clearly and trivially, it is just the same thing indicated again. The resolution of the conflict is that even though the identity is factually informative because the two qualified objects are different, they are so virtually the same that to borrow Frege's words, it is "utterly transparent" "to our reason" (Frege 1974 / 1884: 115) that they "are" the same object in itself.

Objection (2) is wrong insofar as the bare particular

analysis and the particular property analysis are equally valid ways that one can parse ordinary individuals. I mean not only that they are equally *intelligible* and equally *logically possible* parsings, which are the first two basic requirements of my containment and dependence arguments, but also that the arguments show that both bare particulars and particular properties equally *exist* in the minimal sense of not being nothing. That is all my arguments are intended to show, at least initially. In fact, bare particulars and particular properties are just different levels of abstraction from the ordinary individual. For bare particulars are greater abstractions than particular properties are. They are particular properties minus their specific (and even generic) qualitative content. This particular red of this spot minus its being red, a color, a visible quality, and a sensible quality equals this bare particular, meaning the one that grounds the numerical individuality of this particular red. And that bare particular is different but distinct only in reason from the bare particular grounding the individuality of this particular *shape* of this same spot. And those two bare particulars are formally distinct with a foundation in reality in the bare particular that grounds the individuality of the (whole) spot. We are far beyond Bergmann. For he is a sectarian who admits universals but rejects particular properties, which he calls perfect particulars. Thus for him they are not there to have any numerical individuality that needs grounding.

My arguments are only concerned to show the *existence* of bare particulars, particular properties, and so on. The question which entity is the *ground* of the individuation of an ordinary individual is a deeply different though of course intimately related question. The relationship is that the question of existence is prior. An ordinary thing must exist before it can be individuated. For otherwise it will not be there to be individuated. But an ordinary individual can only exist as an individual. It cannot be an *ordinary* individual without being an *individual*. This is doubtless why the bare particular analysis and the particular property analysis look informative, why they look like they are "adding to the analysis." But they are valid analyses precisely because they are abstracting and thus *subtracting* conceptual content from ordinary individuals.

Compare our distinctions in reason ironically to the 1914–1918 Russell. Russell says that he analyzes ordinary individuals into logical fictions that are nothing. But he also admits complex real facts, assertions of which are logically equivalent to assertions of his one-one corresponding eliminative analyses of individuals into logical fictions (Russell1971e / 1918: 178–202, 269–279). For every eliminative analysis of an ordinary thing into a temporal series of classes of sensed and unsensed sensibilia that Russell makes, thus eliminating the ordinary thing as a *logical fiction*, he also admits the one-one corresponding complex *real fact* that this

series *obtains,* i.e., *is the case*. Thus on his own showing, his logical analyses are not of nothing after all. He distinguishes his logical analyses from his complex real facts, but he can admit neither without admitting the other. And thus realism wins. For he admits the *real facts*, and his one-one corresponding eliminative analyses cannot eliminate *them*, but only the corresponding *series*. Talk of eating your cake and having it too!

That ordinary individuals cannot be *both* logical fictions that are *nothing*, and complex real facts that are *real*, is the sense in which objection (2) is *right*. But that statements of each assay are logically equivalent to each other, in virtue of their both being logically equivalent to the statement that the ordinary individual exists, and are thus, though totally different metaphysically, distinct only in reason, is the sense in which objection (2) is *wrong.* And here the foundation in reality can only be the complex real fact. For the temporal series of classes of classes is a logical fiction; it is literally nothing for Russell. But it is not nothing for us. For us, it is a valid logical parsing. For us, classes and series are not nothing. For they are all different. In fact, again, classes are totally real.

In his "The Philosophy of Logical Atomism," Russell is very well aware of his own distinction between his 'definition' of a thing as a logical fiction and his 'analysis' of a thing as a complex real fact. He is very explicit about both (Russell 1971e / 1918: 194, 196; see 178–202, 269–279). If he failed to notice that the two combine to form a metaphysical ecumenism in which realism wins, that is his deepest mistake in that work. That his logical analysis of an apple would be infinitely long, and thus cannot even be stated as a grammatically complete sentence with a determinate truth-value, is a logical mistake which he noticed later on. And he still can and does *completely* state his brief definition *that* an apple is a temporal series of infinitely many classes of infinitely many sensed and sensed sensibilia. Now, *that* brief statement has a determinate truth-value! See my (2003 / 1996: 177.) And Russell has the merit of not considering his 'definition' and his 'analysis' of an ordinary object to be rival theories only one of which at most can be true.

The many metaphysical theories of ordinary individuals are mutually exclusive only if considered as rival candidates for ground of the individuality of ordinary individuals. Again, the question of the *existence* of such items must not be confused with the question which of them (if any) *ground or explain* the individuality of ordinary individuals. Granted that they are all overlapping entities, the most that a critic might venture is that at most *one* of them can *truly* ground the individuality of an ordinary individual, and all the rest merely overlap it. (Of course, the known theories could all fail to be the ground, and the true ground not discovered yet.) And by parity of reason, this very redundancy

suggests which account really grounds the individuality of ordinary individuals and which accounts are superfluous. Namely, if an ordinary individual is already a sufficient ground of its own individuality, then *all* of its ontological constituents, even if they all exist as entities, are superfluous as groundings. For here "to ground" is normally taken to mean or imply 'to be the sole ground'. Thus if a thing grounds its own individuation, then none of its constituents can ground that as well, except insofar as they are not rival grounds, but overlapping grounds, i.e., if they are distinct only in reason qua grounds from the thing itself qua ground. And that would be an example of metaphysical ecumenicism.FN3-12

Likewise for the many metaphysical theories of *properties*. They are rivals only insofar as each is considered the sole ground, foundation in reality, or explanation of the ordinary exact similarity or universality of ordinary properties. But ordinary properties are the ground of their own individuality. The two main theories, that exactly similar ordinary properties are exactly similar particular properties, or are literally and numerically identical universals, are distinct only in reason. In fact, particular properties and universal properties are just different levels of abstraction from the original ordinary property. For universals are just particular properties minus their particularity. Again, these theories do not "add to the analysis" of the ordinary thing, but instead subtract content from it. That is precisely why they are rightly called logical parsings.

Objection 3.

One might object that it is meaningless, or at least empty and tautological, to say that an entity grounds its own individuality. Aristotle says in Book 7 of the *Metaphysics*:

> Now "why a thing is itself" is a meaningless inquiry (for [to give meaning to the question "why"] the fact or the existence of the thing must already be evident—e.g. that the moon is eclipsed—but the fact that a thing is itself is the single reason and the single cause to be given in answer to all such questions as "why the man is man, or the musician musical," unless one were to answer "because each thing is inseparable from itself, and its being one just meant this;" this, however, is common to all things and is a short and easy way with the question). (Aristotle 1968a: 1041*a*10–20)

But Aristotle says earlier in Book 7:

> Since the term "unity" is used like the term

> "being," and the substance of that which is one is one, and things whose substance is numerically one are numerically one, evidently neither unity nor being can be the substance of things.... (Aristotle 1968a: 1040*b*15–20)

These two texts are, I think, quite consistent. In the first text, he says that the question, Why is a thing itself?, is not meaningful (or informative) because it is already evident (known, given) that the thing is itself. But we can say that the sole reason or cause of why I am I, or you are you, or why this tree is this tree, is that trivially, *every* thing is itself. For Aristotle, the most general explanation is the true explanation and this looks like it. It is also what we called the Butlerian sense of "being." A thing is itself precisely because it is a tautology that every thing is what it is, and is not another thing. But Aristotle then says we could say that a thing is itself "because each thing is inseparable from itself." On the face of it, that too ought to be "meaningless" for him, since that too is already evident (known, given). For how could we possibly or even intelligibly separate any thing from itself? And he says this is "a short and easy way with the question." And it would be the most general answer. But for us, a thing is inseparable from itself because it *is* itself. Adding that converse in, we get the biconditional, 'self-identity if and only if self-inseparability'. And that is factually informative. For the two subject-terms express different qualified objects.

In the second text, Aristotle says "the term 'unity' is used like the term 'being'." In fact, the terms are intersubstitutable salva analycitate: this is the famous thesis *ens et unum convertuntur*. He then says that if a *thing* (a substance) is one, then its *substance* is one; and he says that conversely, if a thing's *substance* is one, then the *thing* is one. It seems, then, that a substance and *its substance* convertuntur as well. He then infers from these facts that the unity and being of a thing cannot be its substance. Another way to put it is that it is meaningless, or at least uninformative, to say that a thing has unity and being when we already know that, since a thing is always already given as having unity and being. But that a thing is a substance—substance metaphysics—is a factually informative analysis. For an ordinary Aristotelian substance is a compound of form and matter. That is not only factually informative, but was novelly informative at the time. For earlier philosophy consisted of other theories about what bodies are. Thales thought everything is water; and after Thales, many rival theories were put forward. Everything is fire, everything is composed of four elements, and so on. Thus when Aristotle offered his own theory, he was saying something new. And in any case, it is factually informative to parse an ordinary apple as a substance that consists of form and matter.

What does this mean for metaphysical ecumenicism? The analogy is this. Aristotle would say it is meaningless (or at least uninformative) to say that an object in the wide sense is an object in the wide sense, that a qualified object is a qualified object, or that an object in itself is an object in itself. For it is already evident (known, given) that an object, in any of these senses of "object," is an object in that sense. And the unity and being of an object, in any of these senses of "object," is not its substance. For us, the substance of a *qualified* object is its formal and objective reality, roughly corresponding to the form and matter of an Aristotelian substance. And the substance of a nonqualified object is its content and form, perhaps with Aristotelian exceptions of a highest level of form which has no content, and a lowest level of content which has no form. For an object in itself is merely defined as not qualified.

More deeply and generally, as well as traditionally, a substance is what has independent existence, or what logically can exist even if nothing else does. Or if you please, substances are what are really distinct in some sense of real distinction. Descartes admits two kinds of substance. God is his primary substance, and finite bodies and minds are his secondary substances. For God can exist even if nothing else does, while finite bodies and minds can exist independently of each other, though not independently of God. We admit two kinds of substance too, but differently. All our objects have independent existence in the sense of ordinary mind-independence. But only our objects in themselves are totally mind-independent. Note that our two kinds of substance in the sense of independence are two of our three main kinds of ontological being. For more, see the section on real distinction in chapter 2.

Objection 4.

There is and can be no one "true ground" of individuation. For both the thing itself and all of its individuating parsings are equally valid grounds of its individuality, and so is the portion of reality they all occupy. For a thing tautologically grounds its own individuality, all the logical parsings are, well, logical parsings; and there is a clear sense in which it is uninformative to say they all occupy a certain portion of reality. And all that clearly belongs to metaphysical ecumenicism. There are indefinitely many equally valid ways to ground the individuality of a thing, much as there are indefinitely many ways to parse the number one: as 2 - 1, as 0 + 1, as 1 x 1, and so on. And that reveals the triviality of metaphysical ecumenicism. At bottom, it is as trivial as 2 - 1 = 1. And 2 - 1 = 1 does not really say what the number one is. It is not a metaphysical theory of the nature of the number one, even if we agree with Frege that the equals sign refers to Fregean literal and numerical identity.

Reply. Metaphysical ecumenicism is metaphysics, and not arithmetic. The proper comparison is not to arithmetical equations,

but to metaphysical parsings of the number one, such as that it is a class of classes, or a class of private particular mental ideas that are formally identical across minds and times. These are metaphysical theories, not arithmetical equations. There is no one arithmetical equation that best illuminates what the number one is; and portions of reality are not among the logical subjects of equations. But there may be a single logico-metaphysical parsing of the number one that best illuminates its nature, such as the class of singleton classes, or at least the portion of reality which it and its parsings occupy as the foundation in reality of all of them. That may sound like it begs the question against conceptualism and nominalism, since it sounds like if either of them is correct, then there is no portion of reality there for numbers or their parsings to occupy. But that is wrong. For as explained earlier, concepts and descriptions are totally real parsings of the things they so minimally analyze. And concepts or descriptions of numbers belong to the numbers portion of reality as logical constituents. If they are logically contingent, that suits the number of oranges on the table. And while there are infinitely many timeless numbers, they are conceiv*able* and describ*able*.

Objection 5.

This is an argument against admitting Bergmann's theory of bare particulars into metaphysical ecumenicism. Recall that a logical analysis must be logically possible. Also recall that for Bergmann, a bare "particular and a universal it exemplifies are *wholly external* to each other" (Bergmann 1967: 47, his emphasis), For "Bare particulars neither are nor have natures" (Bergmann 1967: 24). Nonetheless, they logically depend for their existence on the existence of sensible qualities. For they cannot be identified apart from the sensible qualities they exemplify. But then on the relevantist theory of validity as logical containment entailment, bare particulars logically contain sensible qualities after all. For it is a valid inference that if bare particulars, then sensible qualities. And if bare particulars logically contain the sensible qualities they exemplify, that contradicts not only their featureless nature, but even the externality of the exemplification relation. And a contradiction is a logical impossibility. Thus Bergmann's logical analysis fails to meet the condition of being logically possible.

The objector might add that if it comes to a choice between either rejecting bare particulars or rejecting relevant containment, surely it would be better to reject bare particulars, which are mysterious and obscure to many, than to reject the theory of relevant containment, which is obvious on the face of it to many. For we can literally see the representation of logical validity as logical containment in indefinitely many logic diagrams. I shall discuss three replies to objection (5).

Reply 1. This is Bergmann's biggest mistake in his theory

of bare particulars. For he implicitly contradicts himself, at least on the relevant containment entailment theory of logical validity. But the containment and dependence arguments for metaphysical ecumenicism are perfectly fine. No flaw has been detected in them. Instead, Bergmann's logical analysis is being rejected for failing to meet one of the three conditions of metaphysical ecumenicism. It is intelligible and provides logically equivalent *candidates* for the corresponding ordinary statements, but it is not logically possible.

Reply 2. On the face of it, Bergmann has done enough to show at least that <bare particulars> are as intelligible and possible as <particular properties> are, and are therefore an equally valid way to parse red round spots and the ordinary individuals that are logically analyzed as logically containing them.

Reply 3. When faced with an apparent contradiction, draw a distinction. There are two kinds of containment here that are different but distinct only in reason. We saw earlier that while all *a priori* ontological containments are logical containments, not all logical containments are ontological containments. For the round square logically contains the property round, but is not there to ontologically contain anything. Thus the two kinds of containment are modally distinct. Likewise, that bare particulars neither *are* nor *have* sensible qualities is a denial of ontological containment. But that they are not *identifiable* independently of identifying the sensible qualities they externally exemplify affirms only logical (specifically, relevantist) containment of qualities. This logical containment cannot imply ontologically *being* or *having* qualities, since qualities are not there in bare particulars to be ontologically contained. It consists instead in being identifiable *only in terms of* qualities. For qualities are ontologically external to bare particulars, but are logically internal to bare particulars in the sense of being their identifiability condition. To be sure, there is ontological containment of *identifiability conditions*. Identifiability conditions differ and are not nothing. Thus they are objects in the wide sense. Thus they are there to contain or be contained. But on the face of it, bare particulars can contain the sensible qualities by which they are identified only in a merely logical sense.

Reply (3) rescues Bergmann from reply (1) and validates reply (2).

One must not be confused here. The containment argument works fine using logical containment, and need not use ontological containment. For nothing can logically contain nothing, just as nothing can ontologically contain nothing. For in any containment, there must be something there to contain and to be contained. In fact, for any relation, nothing can be related to nothing. That is the basis of Aristotle's relation argument. And Bergmann's wholly external relation of exemplification is a paradigm example.FN3-13

Objection 6.

Nothing could be more wrong than your previous paragraph. For the round square is nothing, and it logically contains the existing property round. This destroys the containment argument. Likewise, the round square logically depends on the property round for its very definition, And that destroys the dependence argument.

My reply is that the arguments work in objective reality, but can only conclude to objective realities. Objective reality is the content of the qualified world, and can at most only represent or correspond to the world in itself, veridically in veridical cases and illusorily in illusory cases. More precisely, objective reality qua objective reality is a kind of being, as explained earlier. Qua objective reality, there is the round square qua objective reality. There is such an objective reality that we can think of! The arguments fail to work only when we consider the round square as an object in itself. For there is and can be no such thing as a round square. And there we would *expect* the arguments to fail. It would be *proper* for them to fail. And all the uses I put the arguments to conform to this restriction. I do not use the arguments to prove the existence of a round square or even of winged Pegasus as objects in themselves, but only as objective realities qua objective realities. And that *is* a kind of ontological containment. To be sure, for that very reason we would have to use brackets on objective realities qua objective realities during the arguments until we arrive at the conclusions of the arguments, e.g. "<objective reality qua objective reality>". But that is business as usual for these arguments.

I discuss a seventh and last objection to the containment and dependence arguments in the next section.

The Metaphysical 'Function' or 'Job' Objection

Objection 7.

It is widely held that in ontology and metaphysics, entities are as entities do. I agree with Dummett that Frege is very strict on basing categories of entities on their logico-linguistic function. And Bergmann is explicit on the point. In rival metaphysical theories of individuals and their properties, the whole function of the various proposed entities is to ground individuality and commonality. If the theories are really rivals, then if one proposed sort of entity is the true ground, then the other sorts of entities do not exist; and if none is the true ground, then none of the proposed sorts of entities exists. This goes beyond pragmatic theory of truth and pragmatic theory of meaning to what may be called pragmatic theory of *being*. For example, Bergmann says, "A bare particular is a mere individuator. Structurally that is its only job. It does nothing else" (Bergmann

1967: 25). This seems to be economic and even elegant, and can be based on Ockham's razor in this functional sense. More deeply, ontological entities are arguably *identifiable* only in terms of their function. This is as opposed to ordinary individuals which can have as many functions, such as a Swiss Army knife. Even an ordinary knife with one blade has at least five functions. It can stab, slice, and be used as a paperweight, doorstopper, or visual place marker. The objection, then, is that the rival theories really are rivals, since their proposed entities all compete to serve the same functions; and if one kind of entity performs the function, the others do not. All this not only shows that and why metaphysical ecumenicism is wrong, but also shows a basic difference between ordinary things, which can be multi-functional, and logical analysis fully carried out, i.e., assigning exactly one function to each simple analysans.

Reply 1. Many metaphysical entities *are* posited to serve several functions. Frege's senses and Aristotle's universals quickly come to mind. Frege's senses perform at least five different but closely related functions. They explain informative identity and existence judgments, they serve as public connotative meanings in language, they are what we grasp in thought, and they contain modes of cognition that allow us to single out things. And ironically, the fact that senses serve five functions itself serves the deeper and more general functions of economy and even elegance, in the sense of doing more things with fewer kinds of entities, and of greater depth and generality. And that too can be supported by Ockham's razor, which emerges as rather ambiguous. Do we want fewer kinds of functions performed by each kind of entity, where the ideal is one function per kind of entity, or do we want fewer kinds of entity performing more functions, where the ideal is the more functions served, the fewer, deeper, and more basic the kind of entity? Metaphysical ecumenicism solves the problem by admitting many kinds of entity as different but distinct only in reason, so that several kinds of entity can serve the same function in ways that are different but distinct only in reason. Ockham's razor is better suited to science than to philosophy, certainly if the containment and dependence arguments for general metaphysical ecumenicism are sound. And even in science, the razor must yield to adequacy of explanation. If one theory is simpler than another, yet fails to explain things, then the more complex theory that does explain them is preferred even in science. And metaphysical ecumenicism aims precisely to give a full and adequate description of the world. No one "rival" theory can do that, since by definition it will deny all the "competing" entities of its "rivals." And the more "rival" entities it denies, the less full and adequate a theory will be in describing the world and all its complexity.

Even Bergmann's bare particulars serve at least three basic

functions. They individuate ordinary phenomena in space, they individuate them in time, and they are particulars (logical subjects) that exemplify universals. And the fact that bare particulars serve at least three functions implies that they also serve the deeper and more general functions of economy and even elegance, in the sense of doing more jobs with fewer kinds of entities, achieving greater depth and generality. And that is what we wish to see in a theory.

The ontologico-metaphysical functions (jobs) themselves can be parsed as one or many. Spatiotemporal individuation seems a merely conjunctive parsing of spatial individuation and temporal individuation. But in my metaphysics, following Frege, even mere conjunction ("&") exists as an identifiable, determinate function that maps truth-values onto propositions. More seriously, senses serve both linguistic and cognitive functions, and their linguistic functions logically depend on their cognitive functions. Even the very puzzles of informative identity and existence statements and judgments are both linguistic and more deeply cognitive, and are thus only modally distinct in the job-solutions they need. So many things are different but distinct only in reason from each other!

Reply 2. Butchvarov offers a deeper version of reply (1): a merely pragmatic theory of being is better suited to science than to metaphysics.FN3-14 Of course, all of his entities, scientific or otherwise, are merely objectively reasonable classifications, and are therefore merely analogous to the real things of traditional metaphysics; but we may say his scientific entities are even less analogous. For in science, the function of simplicity, and I might add all the other factors in scientific theory formulation (I list 34 factors in my 2023a), is a key pragmatic desideratum in a way that it is not in metaphysics, certainly if we do not import pragmatism into metaphysics, as if the useful were, as such, the true or real. For in philosophy, we seek the truth, not the simplest or most useful theory. In fact the factor of simplicity is limited even in science. See "The Multiply Limited Validity of Ockham's Razor" below.

Reply 3. The best and decisive reply to objection (7) is that of logical priority. Since only entities can ground the individuality or commonality of other entities, or even of themselves, the question whether <x> is an entity is logically prior to the question whether <x> grounds the individuality or commonality of anything. That is, ontological *being* is prior to metaphysical *doing*. A thing has to be there if it is to do anything! An ontologico-metaphysical or even a logico-linguistic job or function cannot be performed by nothing. Thus the correct order of argument is first <parsings>, then parsings, and only then (if at all) groundings. My arguments strictly follow this order, and they make the difference between the first two stages clear by using bracket signs to mark <parsings>.

A main apparent exception is causes, actions, and changes.

For their being essentially *is* their doing. But even here there is a distinction in reason. A cause, action, or change qua being is logically prior to the same cause, action, or change qua doing. For if it were nothing, then it could not be doing anything either. There is a dialectical rejoinder: if it were not doing anything, then it could not exist as a doing-entity either. My response is that, following Aristotle, the deeper and more general explanation gives the why. And being is deeper and more general than doing. For infinitely many beings are not doings, such as numbers, classes, universals, and classical space-time. Such beings cannot be actions or changes, and can be causes only in the sense of grounding things.

My dismissal of this exception as merely apparent is not related to the old debate whether the will or the understanding is prior in God or creatures. Being is not the same as understanding. Physical causes have neither will nor understanding, though of course voluntary actions are willed. To be sure, one main theory is that God is pure act, and that everything else has its being in God, and has whatever function or purpose God assigns it to. But I cannot subscribe to that theory, since I am agnostic. The main thing for us is that the logico-linguistic functions of bare particulars and their "rivals" are not acts of either will or understanding. Bare particulars are not even conscious. They essentially cannot have that feature! Nor are they artifacts of ours, serving our purposes. Metaphysical theories are artifacts; entities as such are just there.

Again, it has been said for millennia that nothing can come out of nothing (nihil fit ex nihilo, or ex nihilo nihil fit; the word order does not matter in Latin), and that for change (as opposed to temporal succession of one entity by another) to be possible, there must be some underlying subject there to undergo the change. To this I add that *no* functionality is possible unless some entity is there to perform the function. Out of nothing, no *function* can come—logico-linguistic, ontologico-metaphysical, or otherwise.

Again, being is prior to function. This raises the possibility that some entities do not do anything. They might be called lazy, superfluous, or redundant entities. But this is not the same as metaphysical ecumenicism, where different but overlapping entities *do* serve the same functions in ways that are distinct only in reason. Such entities (all but the one "true" entity) are redundant only if considered as rivals. Granted, there might be no *positive* reason to admit lazy entities, precisely because they serve no function. (This is not the same as negatively shaving them away with Ockham's razor, at least insofar as we use the razor to shave items that *ostensibly* but do not really have positive functions. For there never even appears to be a positive reason to admit lazy items in the first place.) But the *logical possibility* of lazy entities is there, even if we do not know what a functionless entity would be like. Perhaps it

would be like some bureaucracies I know! But it is at least logically possible that as Shakespeare says, "There are more things in heaven and earth... Than are dreamt of in your [functional] philosophy" (Shakespeare 2024: *Hamlet* 1.5.187–188)). For the statement "Entity E serves a function" is logically contingent on the face of it. Perhaps mystical states are beyond function and just are.

Some actions are even *defined* by their function, such as murders and promises. But other actions are not, such as a whirring sound when we use a food blender. Salt normally dissolves in water. But dissolving in water is not its function. That is just something it does. Outside of living bodies, salt has no function. It just is. What then of the "to be is to do" thesis? We cannot modify it to "to be is to have a *disposition* to do." For the number two cannot even have a disposition to do anything, and neither can the axis of the earth. For they *logically cannot* do anything. They are not that kind of entity. This is why Frege calls them abstract.

We may draw a threefold distinction among being, doing or acting, and having a function or purpose. Being is prior to doing or acting. For there must be something there to do or act. And doing or acting is prior to having a function or purpose. For there must be some doing or acting there to have a function or purpose. That is yet another series of one-sided modal distinctions. They are formal distinctions with a foundation in reality in being, since it is prior.

More on Bergmann and Butchvarov

I shall discuss Bergmann very briefly, then Butchvarov at some length.

Again, my view admits Bergmann's bare particulars (1967: 24–25), but also makes a criticism of Bergmann. I have argued that Bergmann's bare particulars are entities in the minimal sense of not being nothing, since they are logical constituents of ordinary individuals. Thus he is right that bare particulars exist. But he is wrong to think that therefore particular properties and instances of universals do not exist (Bergmann 1967: 25). And he is wrong to think that bare particulars ground the individuality of individuals. Indeed, he is wrong to think that the individuality of ordinary individuals or of any other individuals needs grounding by any sort of logical constituents, whether they are bare particulars, particular properties, instances, or anything else. For individuals ground their individuality themselves per Long, and are more deeply grounded in the portion of reality they and their constituents all occupy.

Likewise for particular property theorists. They are right that particular properties exist, but are wrong to deny that bare particulars exist, and wrong to think that particular properties alone

ground the individuality of individuals. Likewise too for realists who admit universals in re or ante rem, and who reject particular properties because of that. In fact, some who admit universals in re reject even universals ante rem, and vice versa. Just look at Plato and Aristotle!

Likewise for Butchvarov. His theory of objects and entities is as deep and sophisticated as any sectarian ontology can be, but the same ecumenical points can be made in the end. Butchvarov holds that there is no one "true" classification of things in philosophy or science. For things never force us to classify them in any one way. But some classifications are objective and reasonable than others. He has his own classifications, which he obviously finds more objective and reasonable than any others. His broadest classification is of things into what he calls "objects" and "entities." It is a deep articulation on the ontological level of his theory that there is no one "true" classification of things. And ironically, his theory of objects and entities *is* his true classification! For his entities are essentially objective and reasonable classifications of objects. And his objects are essentially mind-independent and nonrecurrent. I will briefly describe his ontology further in a moment. But I can make three criticisms even now.

First, the view that there is no one true classification of things has its limits. Socrates logically can change into a tree or stone, with some physical continuant structure underlying the change. But he logically cannot change into time or the number two. For what continuant could possibly underlie such changes? Even the rebuilt ship of Theseus must retain some continuity.

Second, all radical relativisms are self-defeating, and this one is no exception. For Butchvarov's view that there is and can be no one true classificatory theory implies that there is one true classificatory theory after all, namely his negative theory that things do not and logically cannot force us to classify them in any one way! That must be a higher-level logically necessary and essential nature of things for him. For if it were an accidental truth, then things logically *could* force us to classify them in one true way. If it were a logically contingent matter, then there would be infinitely many logically possible worlds in which there *is* one true and logically necessary (in the wide *a priori* sense of logic) classification. But then why not just these worlds, and not all of them? By parity of reason, if even one possible world has essential classifications, then they all do. For to say something is essentially the case is to imply that it is the case in all possible worlds, or would be if the things in question were in those worlds. For example, if bodies essentially have spatial extension in one possible world, then they essentially have spatial extension in all possible worlds in which they exist.

Third, the containment and dependence arguments for metaphysical ecumenicism imply that there are indefinitely many ways to parse ontology as well as metaphysics. For they apply to kinds of being as well as to categories of things. Butchvarov's theory of objects and entities is not the only possible parsing of the ontological order. In fact, he would be the first to admit that things never force us to classify them in any one true way in ontology any more than in metaphysics. Of course, he clearly thinks his ontology of objects and entities is the best one, or else he would not offer it as his theory, and likewise for his admission of universal properties and denial of relations in his metaphysics. But my point is not just that. He basically tells us all that himself. My point is that all the different logical parsings of the world into different kinds of being are equally correct if they are intelligible, logically possible, and logically equivalent in the statements they respectively make about the being or existence of things, which they must be if they are all logically equivalent to the one-one corresponding ordinary, pre-philosophical statements about the being or existence of things, on pain of otherwise being inadequate logical analyses of the ordinary statements. Thus it is *essentially true* that there is no one true classification of things, not because there is no *one* true classification, but because they are *all* true classifications. For they are all distinct only in reason from each other, with a foundation in reality in the portion of reality they all parse in different ways. In this case, the portion of reality is kinds of being.

This concludes my three initial criticisms of Butchvarov's ontology. I shall now describe his ontology in more detail.

Butchvarov defines objects as whatever we can single out or refer to, meaning prior to conceptualization. For him they are essentially (!) private, nonrecurrent particular properties. He argues they are prior to classification, and "particular property" is a classification; but based on his own description of them as nonrecurrent and capable of being singled out in perception or thought, and based on his rejection of bare particulars, there is nothing else they can be. Also, an object can be referred to only if it is singled out; hence singling out is prior to referring. This modal distinction is yet another essential feature of his objects.

Butchvarov argues that his objects, as such, do not exist. They are neo-Meinongian in that respect. This seems to be still another essential feature of his objects.

Again, Butchvarov analyzes every entity, including both individuals and universals, into indefinitely many objects. Entities are lawful, regular, or at least objectively reasonable conceptual collections or classes of objects. It is we, in the ordinary, pre-philosophical sense of "we" (Butchvarov rejects metaphysical selves), who choose how to classify objects into entities; the

objects themselves never force us to classify them in any particular way. Entities have no "kernel" of reality of their own, except for the objects of which they are logically or conceptually composed. In fact, for Butchvarov, there are essentially (!) indefinitely many different objectively reasonable possible classifications of objects into entities. But each entity essentially (!) must consist of at least two objects. For a single object as such logically cannot be an entity (nor can a singleton class). Objects as such are essentially private, nonrecurrent, and unreal, while entities as such are essentially public, recurrent, and real (at least in the ordinary, pre-philosophical sense). In fact, an entity essentially must consist of indefinitely many objects. For if it consisted of only a very few, it would be a hallucination, dream, or something of that sort. There is no determinate point at which we have "enough" objects to constitute an entity. Thus there is something of a problem of the heap. But as Grice and Strawson note, a valid distinction can have a gray border (Grice 1956). And there is a huge gap between ten or twenty objects' constituting a drunkard's pink rat and the millions of singlings out of the Eiffel Tower via objects over public history.

This includes: "material" identifications of two objects which 'appear as distinct objects appear' as the same individual entity; "specific" identities of objects as specific quality-universals; and "generic" identities of objects as generic universals. All individuals and universals are called entities, but they are really just conceptual classes of objects. They are reasonably classified as entities if they are regularly and informatively identifiable in indefinitely many ways. Each "entity" consists of indefinitely many objects, and each object is a (private, non-recurrent) objectual way of singling out the "entity" in perception or thought. Again, single objects, and collections of objects that are too few or too unlawlike to be considered real, are classified (!) as dreams, hallucinations, and so on. That is, dreams, hallucinations, and the like are insufficiently numerous or lawlike classes of objects to count as "entities." But even dreams and hallucinations exist in the world; we have them. As I see it, they must consist of at least two objects, at least if we are to be able to single them out again in memory or thought, or to tell others about them. Again, no doubt there is a gray or vague area in between the real and the dreamed or hallucinated. In fact, there are two problems of vagueness here. Just how many objects must an entity have, and just how well-integrated or lawful must it be, in order to count as an entity? I think Butchvarov would accept both problems as just coming with the territory of his theory, and as only to be expected, due to his view of entities as no more than objectively reasonable classifications of objects. He could even cite Aristotle's remark that it is a mark of lack of education to expect more precision than a

subject-matter permits. In fact, these two problems of vagueness are not at all specific to Butchvarov. All theories of what is real have these problems. For the problems' true locus is our ordinary perceptions and thoughts; and all any theory does is offer an analysis of that. Sometimes we really cannot tell if we are dreaming, hallucinating, or awake! And a good theory actually ought to reflect or account for that. Thus these problems of vagueness are not at all criticisms of Butchvarov. His theory actually reflects and accounts for them as well as any theory can.

I have two more criticisms of Butchvarov, which will be our fourth and fifth. Consistently with metaphysical ecumenicism, they will not be criticisms of any of his parsings as invalid. Indeed, metaphysical ecumenicism demands that we admit his objects and entities, and his classifications of entities into individuals, specific universals, and generic universals. Of course, we have to admit the kinds of entities of all other theories as well, if they are intelligible, logically possible, and logically equivalent to the ordinary picture.

My fourth criticism of Butchvarov is that in a very clear sense, it is his objects that are real, and his entities that are not real. That is, he gets it backwards. Many readers will already see why, but let me explain.

Butchvarov is right to say that his single objects, as such, do not and cannot exist in, his *classificatory* sense of "exist," on which an entity is classified as indefinitely many objects. But his single objects do exist in the minimal sense of not being nothing, which is Russell's Parmenidean, *non*-classificatory robust sense of reality, in which *everything* exists. For if Butchvarov's objects were truly nothing, then there could be at most one of them, namely, nothing (*das Nicht*). And it would not be an object we could single out even once. For it would not be there to be singled out at all. Indeed, Butchvarov himself holds that his objects are not nothing, but comprise a domain prior to his domain of entities. But he does not and cannot admit Russell's (and Parmenides') robust sense of reality, since it is nonclassificatory, and for him all concepts of existence must be classificatory. Here he overlooks that a non-classificatory property of existence is just as valid and real a Fregean mapping function as any other function. That is, a property that maps the truth-value of truth onto all objects is just as valid and real as a property that maps truth onto some but not all objects. For more on Russell, Meinong, and Butchvarov on whether the concept of existence is classificatory, see my (2003 / 1996: ch. 4, updating my 1988).

Surely it is obvious that for Butchvarov, it is his objects that are real. They are the only kernels of reality that his entities have, or can have. Indeed, for Butchvarov, there is literally nothing *to* an entity except the objects that logically compose it into a

sufficiently large and regular (lawlike) classification of objects. And only his objects are real in Parmenides' and Russell's robust sense of "real." For his entities are literally nothing. Also, only his objects are mind-independent. For his entities are classifications, and actual classifications require a mind to classify things, in the ordinary, pre-philosophical sense of "mind."

This supports the containment and dependence arguments as correctly concluding that Butchvarov's objects do exist after all, since they are parsings of ordinary things. Obviously, he would disagree. But that is only because he is using a very different sense of "exist." He is quite correct, on his own usage of "exist." But the Parmenidean usage is deeper and more basic. For classifiable or not, private or not, recurrent or not, lawful or well-integrated or not, only nothing can be nothing. And his objects are not nothing. Far from it! Again, they are mind-independently real on his own admission. For they logically need not be singled out. But they are not totally real in our sense. For their essential feature of being logically capable of being singled out logically requires the logical possibility of minds in the ordinary, pre-philosophical sense. For nothing can be singled out if it is logically impossible for there to be any minds in the ordinary sense to single anything out.

My fifth criticism of Butchvarov is phenomenological. Butchvarov praises Continental phenomenology, but is a British empiricist at bottom, at least as far as his *sensible* objects go. And British empiricism is worse than Continental phenomenology, even though we must admit both as parsings in what I called the second type of phenomenological ecumenicism. I gave the argument in chapter 1. The gist of the argument is that the world is ordinarily and naturally presented to us as consisting of ordinary things, and almost never as British sense-data, or what is basically the same, as Butchvarov's objects. The latter are almost never the phenomena we single out. British phenomena are not the phenomena we normally have, but *logical parsings* of the phenomena we normally have. The phenomena we normally have are our ordinary objects of perception or thought.

Except for private, nonrecurrent images or other objects we never single out again, we are almost never presented with British sense-data or with Butchvarov's objects as such. That is because we must *abstract* them *from* ordinary public objects of perception or thought. Ironically, *contra* Butchvarov, we must abstract his objects from his entities! For in ordinary experience, I single out a *house*, not a private, momentary, nonrecurrent object which is a rather extreme *parsing* of a house. Thus we ordinarily must abstract Butchvarov's "nonexistent" objects from far more than their existence as not being nothing. If they are to be regarded as nonexistent, we must ontologically bracket them from every kind of

existence they have. And normally we must abstract them from directly presented ordinary objects of perception or thought, which implies, on the containment argument, that they are parsed entities.

Butchvarov's objects are far closer to British sense-data, and his theory of entities is far closer to Hume's "bundle theory" of ordinary things as lawlike collections of sense-impressions, than to Continental phenomenology. Ironically, Russell himself explains this point, which applies to Butchvarov's objects just as much as it does to Russell's sense-data, even though it implies a rejection of his (Russell's) own equally via moderna phenomenology:

> [I]f several people are looking at the same table at the same moment, no two of them will see exactly the same distribution of colours, because no two can see it from exactly the same point of view....
>
> For most practical purposes these differences are unimportant, but to the painter they are all-important: the painter has to unlearn the habit of thinking that things seem to have the colour which common sense says they "really" have, and to learn the habit of seeing things as they appear. (Russell 1974 / 1912: 8–9)

That is to say, a *painter* is often presented with Russell's sense-data or with Butchvarov's objects (these are distinct only in reason). But *most of us* normally are not, and almost never are. Even the painter is usually presented with them *only when painting*, and only in virtue of *special training*. For the painter has to *unlearn* the habit of seeing a table the way all of us *ordinarily, normally* do.

Here is another point about this Russell text. The painter can teach or train others how to see things in this way. There is teaching and learning here—a whole school of art, which we might call Logical Impressionism. But then this way of seeing things is public; and therefore *even what the painter sees is public*. Thus my theory of public qualified objects is far better for explaining even the artist's experience than either Russell's theory of private, nonrecurrent sense-data or Butchvarov's theory of private, nonrecurrent objects.

In fact, I see no difference between Russell's sense-data and Butchvarov's *sensible* objects at all. The only difference is that they use the word "exist" or "real" in different ways. Namely, Russell says sense-data *exist* because he uses the nonclassificatory sense of existence as not being nothing, while Butchvarov says his objects do *not* exist because he uses only the classificatory sense of existence. Note that the concept of *sense-datum* is classificatory; not everything is or need be a sense-datum. The 1914–1918 Russell

admits entities that are not sense-data, including logical universals and his own mind. Even the 1919 Russell admits logical universals!

The painter example is good because it is so plain and ordinary. A more exotic and doubtful example would be "cleansing the doors of perception," a phrase based on William Blake, through psychedelic drugs with Aldous Huxley, or more safely and less distortedly through traditional meditation techniques. Perhaps we cognize sense-data or Butchvarov's objects in such odd situations.

Continental phenomenology admits ordinary objects of perception or thought such as rocks and trees as the ordinary public phenomena they are. But British empiricism describes them as consisting of the sense-data or Butchvarovian objects they can be *logically analyzed* as being logically composed of. Thus ordinary objects of perception or thought, that is, Continental phenomena, are *phenomenologically prior* to sense-data and to Butchvarov's objects. I would say that even sense-data are phenomenologically prior to Butchvarov's objects, if they were not so much the same.

Thus in phenomenology, Russell and Butchvarov have things backwards. But their parsings are not wrong. In fact, both of their kinds of parsing are completely valid per the containment and dependence arguments. But they must be seen for what they are, namely, parsings of the ordinarily given, and almost never what is given. They *can* be given, but only when we *unlearn* the habit of seeing the table in the ordinary way, or are in an odd situation, such as seeing an image, or cleansing perception of conceptualization.

Thus despite my criticisms, I admit Butchvarov's objects and entities wholeheartedly, and Bergmann's bare particulars as well. Metaphysical ecumenicism demands it. Not only are these parsings intelligible, logically possible, and logically equivalent in the sense that statements of their logical analyses of things are logically equivalent to the corresponding ordinary statements, but these theories are beautiful, deep, and inspirational. Metaphysical ecumenicism welcomes these theories, and many more.

The Limited Validity of Nominalism and Conceptualism

Let us call nominalism the view that metaphysically, what two spots of the same shade of red have in common is the linguistic name or description "red." And let us call conceptualism the view that metaphysically, what the spots have in common is (that they both fall under) the concept red. This is as opposed to universals in re and ante rem. And to keep it general, it is without specification of what it is to be a name, description, or concept.

The containment and dependence arguments show that

names, descriptions, and concepts exist. To that extent, they show that nominalism and conceptualism are correct. But they show only that nominalism and conceptualism are right in what they affirm, namely, that names, descriptions and concepts exist. For my arguments also show that nominalism and conceptualism are wrong in what they deny. For they show that particular properties, universals in re, and universals ante rem all exist too. Thus my arguments show that names, descriptions, concepts, particular properties, universals in re, and universals ante rem all exist as different metaphysical parsings of the same things. And in that sense, realism wins. Not only that, but all these parsed entities, though different, are distinct only in reason. Thus nominalism and conceptualism are shown to be of limited validity in that sense.

The containment and dependence arguments for the existence of names, descriptions, and concepts begin with ordinary things and properties, <names>, <descriptions>, and <concepts>.

Ordinary things and properties exist in the ordinary sense of existence. Neither can be what they are apart from what the others are. <Names of properties>,<descriptions>, and <concepts> cannot be what they are apart from what ordinary properties are. For they cannot even be identified as, say, <the name "red,"> <the description "is red,"> or <the concept red> without identifying the ordinary property red. Thus <names of properties>, <descriptions> and <concepts> all logically depend on ordinary properties. Therefore they cannot be nothing. For nothing can depend on nothing. Therefore names of properties, descriptions, and concepts exist in the sense of not being nothing. And logical dependence is distinct only in reason from logical containment. Thus there is a containment argument as well, which I leave to the able reader.

Proving the existence of names, descriptions, and concepts may seem like flying a kite to prove the existence of wind. But the containment and dependence arguments establish metaphysical ecumenicism properly. And when we look more closely at them, names, descriptions, and concepts are as subject to philosophical puzzlement as anything else. A radical skeptic would deny them all.

Such containment and dependence relations are distinct only in reason from relations of identifiability and identity. The name "red," the description "is red," and the concept of red cannot be understood or even identified without first understanding and identifying the ordinary property of red. Thus they all depend on the ordinary property of red for whatever content or sense they have. And this dependence they have is precisely that they logically contain the sensible *quality* of red as their content, even though in another sense that ordinary property logically contains *them* as parsings. How else could "red," "is red," or the concept of red be any different or distinguishable from "green," "is green," or the

concept of green? A blind or color-blind person cannot understand or identify red in the ordinary, pre-philosophical sense, which is phenomenological on its face. Our thesis is self-evident: no direct presentation of phenomenological red (more precisely, of qualified red), no understanding of "red," "is red," or the concept of red.

It is even more trivial than that. When we ordinarily, pre-philosophically name a property, we name it as an ordinary, pre-philosophical property. When we ordinarily describe a thing, we describe it as having an ordinary property. When we ordinarily conceive of a property, we conceive of it as an ordinary property. The dependence and containment can scarcely be any clearer.

Ordinary individuals can be parsed into entities in many ways, and so can ordinary properties. Ordinary properties can be parsed as particular properties, universals in re, and universals ante rem, in progressive order of greater abstraction. They can also be parsed as the direct and indirect referents (qualified properties and the properties in themselves they "are") of names and descriptions of ordinary properties, and as concepts—and also as the cognitive components of linguistic rules for naming and describing, and as classes or sets of formally identical private mental ideas across minds and times. An ordinary description can be parsed as a type or as a set of tokens, or as a family of rules of use. An ordinary public concept can be parsed into indefinitely many formally identical private mental ideas.FN3-15 These parsings are much like the ones we saw earlier for ordinary individuals. In fact, in some cases they are the same. We can parse an ordinary individual and its ordinary properties as overlapping classes of particular properties. An ordinary individual can be parsed as lawful classes of its particular properties. Ordinary properties can be parsed as classes of particular properties that are specifically or generically similar. And since ordinary individuals have (contain) ordinary properties, their parsings have (contain) at least some of the parsings of their ordinary properties as well.

Thus by the containment and dependence arguments, I admit names descriptions, public concepts, and private concepts (mental conceptual ideas that are formally identical across minds and times) as entities, as well as bare particulars, particular properties, classes of particular properties, universals in re, and universals ante rem. This deepens our metaphysical ecumenicism.

All ordinary things, including ordinary individuals, ordinary properties, ordinary names, ordinary descriptions, and ordinary concepts, ground their own individuality, even if they can all be parsed in many different ways into logical constituent entities that logically can be used to individuate them. For all the parsed groundings are distinct only in reason from the ordinary thing, and can be used individuate it if and only if it is already an individual.

For what they parse is precisely the ordinary thing's ordinary individuality. Indeed, they *are* the ordinary individuality of the ordinary thing, parsed in different ways. And that is why they are all logically posterior to its ordinary individuality. Since this ontological dependence is always one-sided, this is always a modal distinction.

In metaphysical ecumenicism, realism always wins, in that *all* the entities affirmed by all of the logically equivalent theories exist, and that includes the entities affirmed by the realist option. For all the theories are right in what they affirm, and wrong only in denying the entities the other theories affirm.

All this recalls Hegel's "extraordinary fusion between nominalism, conceptualism and realism" (Findlay 1962 / 1958: 307). See Hegel (2015 / 1830: §§ 18–19, 23–25, 163–165; 1969 / 1821: 10–11); Stace (1955 / 1924: 212–215); Maybee 2009: 323–427; Inwood (1992: 302–5; 1983: 27–28, 47–49, 311–17, 366–80); and Brinkmann (2010: xi–xiii). And this is in turn a, if not the, logical basis of Hegel's thesis that the real is the rational and the rational is the real (Hegel 1969 / 1821: 10; see 2015 / 1830: §§ 23–25; 1969a / 1812–1813, 1816: 755–760). Certainly it is the clearest logical basis. For where all things have properties, the thesis is really the thesis that things have properties that are the contents of concepts. Thus the property is the content of the concept, and the content of the concept is the property. At the very least, properties and concepts are distinct only in reason. Thus the 1912 Russell is at his most Hegelian when he says, "Awareness of universals is called *conceiving*, and a universal of which we are aware is called a *concept*" (Russell 1974 / 1912: 52, his emphasis; see 1976a / 1910–1911: 154–155). Thus for Russell, concepts and universals are formally distinct with a foundation in reality in universals. And universals are very fairly said to be the contents of his concepts. They are all there is to his concepts, except for our awareness of them. And insofar as we can conceive of things only via universals, i.e., their properties, that would be Russell's real-rational identity thesis. And for Russell, such 'knowledge by description' is *all* we can have of the external real world.FN3-16

Even aside from his metaphysical analysis of concepts, Russell's modern classical logic allows existential quantification only via a predicate F, as in $(\exists x)(Fx)$. In that sense, the *quantified* real is the *predicative* rational. Thus in that sense, all the arguments that existence is a second-level predicate support Hegel's thesis. See my (2003 / 1996: 75–76) on Frege's six main arguments for that, and my (1979: 10–24) on all eleven of Frege's arguments.

Hegel says, "*What is rational is actual and what is actual is rational.* On this conviction the plain man like the philosopher takes his stand...." (Hegel 1969 / 1821: 10, Hegel's emphasis).

Hegel's "fusion" of conceptualism and realism suffices to explain this thesis. And his appeal to the plain man and the philosopher go hand in hand, insofar as Aristotle is a common sense philosopher.

Hegel is an objective idealist. We may say that objective idealism is the view that ideas (concepts) are real and objective, and that they are prior to any presentation of real things. Thus ideas (concepts) are like a real, objective pair of glasses that we logically cannot take off to view anything that is real and objective directly, arguably including even ideas themselves, if we try to attend to them directly. We can see how this, too, is a version or grounding of the real-rational identity thesis, if ideas are rational (intelligible).

Our own version of objective idealism is the theory of qualified objects. Qualified objects are mind-independent and in that sense real and objective, but depend on the logical possibility of minds and are in that sense indirectly mental. Compare Hegel (2015 / 1830: 90). But we also admit total realism in our theory of objects in themselves. Thus our version of objective idealism is that qualified objects are like a real, objective pair of glasses that we logically cannot take off to view objects in themselves directly in themselves. For an object in itself can only be indirectly presented via a directly presented qualified object, perhaps at the start of a series of qualified objects. And if the presentation is veridical, then we indirectly correctly grasp the object in itself. All qualified objects are objects of thought, if not also of perception.

Klaus Brinkmann and Daniel O. Dahlstrom say of Hegel's identification of the rational with the real, "The thought behind this is that concrete reality always has the form of a particularized universality instantiated in individuals...." (Brinkmann 2010: xiii). Stace says "this is *the* essential determination of the universal philosophy,... that *the real is the universal*. This is the central and distinctive doctrine of all [objective] idealism" (Stace 1955 / 1924: 11, Stace's emphasis). Stace's only mistake is that this is traditional realism, not objective idealism. I scarcely need to add that the distinction between a universal and its instances is a distinction in reason if there ever was one. In fact, this is an 'extraordinary fusion' of objective idealism with traditional realism. For they both normally admit both concepts and properties, and differ only on their logical priority. And on qualified objects theory, my positive construction theory of logical analysis, and Russell's definition of concepts alike, properties are prior to concepts. Thus objective idealism and traditional realism are formally distinct with a foundation in reality in real properties. And that is intuitively satisfying in ordinary, pre-philosophical terms. For the ordinary view is that we live in a real world of real things that have real properties, which would continue existing even if we did not (say, if we made our planet uninhabitable), and from our cognition of

which we develop our concepts. Indeed, where else could we get our concepts from? What would our concepts be of? Nothing comes from nothing.

Brinkmann and Dahlstrom add that Hegel "likes to appeal to Aristotle's belief that the world is governed by *nous* or reason" Brinkmann 2010: xi n.12, Brinkmann's and Dahlstrom's emphasis, citation omitted). T. M. Knox goes even further and says, "Hegel's... identification of rationality with actuality and vice versa... depends ultimately on his faith in God's Providence, his conviction that history is the [ongoing progressive] working out of His rational purpose" (Knox 1969 / 1952: 302 n. 27). And indeed Hegel says that "God alone is the true agreement of the concept with reality" (Hegel 2015 / 1830: 62). Knox may be right about Hegel, and right that Hegel's identification of rationality with reason was by no means an attempt to justify the conservative Prussian state of Hegel's day as rational merely because it was actual. Quite the opposite, for Hegel the divine identification of the rational and the real in history is developmental, a work still in progress. But the present author is agnostic, and therefore must make do only with Findlay's "fusion" of conceptualism and realism. And again, the fusion thesis will logically suffice to explain the rational-real thesis, if indeed it is not distinct only in reason from it. Thus we are really looking at the thesis that all and only real things have an intelligible nature. I might add that the principle of sufficient reason, that everything has a reason for being, is doubtless implicit in this identification too. And we might add that unreal things are not there to have a rational nature. This is so even if all things between heaven and earth need not be rational or intelligible, or even dreamt of, in our own limited philosophy.

The simplest argument one might make is that what we count or admit as real must be intelligible to us *as* real, and vice versa. There must be something that a thing is, and what it is must be sufficiently intelligible to us, for the thing to sufficiently count as real. And what a thing is, is said to be its form or nature. Thus a thing is real to us if and only if it has an intelligible nature or form for us. And a theoretical or '*real*' definition of a thing states what it is, that is, *intelligibly* states its form or nature for us.FN3-17

If so, the concepts of being real and of being intelligible are essentially linked, and thus are distinct only in reason. And of course both concepts must be themselves intelligible, and both of their realizations (instantiations) must be logically possible, if they are to be logically equivalent in this way. But false statements of realizations (instantiations) of concepts must be as intelligible as true ones, since they differ only by a negation.FN3-18

The obvious objection is that all this shows only that what is real *to us* is what is intelligible *to us*. What is real to us is only

what *we* can understand as real. And as Shakespeare says, "There are more things in heaven and earth... Than are dreamt of in your philosophy" (Shakespeare 2024: *Hamlet* 1.5.187–188). Even Hegel says that from the standpoint of the given, "we have to accept the given as it is, and we have no right to ask whether and in what respect it is rational in and of itself" (Hegel 2015 / 1830: 81).

My reply is just as obvious. Whenever we talk or think about the world, we can only use our own words or concepts. But they are the very vehicles by which we do understand things in themselves, including reality and intelligibility in themselves. This is a main message of my (2003 / 1996: ch. 1). Far from being impenetrable barriers between us and things in themselves, Frege's senses, Russell's descriptions, Wittgenstein's language-games, and my own qualified objects are precisely the vehicles by which we understand what we can of things in themselves. See also my rejection of the false thesis of "language as a universal medium," that we can never get beyond our language to understand things as they are (my 2003 / 1996: 81–86). The very thesis is self-defeating. For it aims to tell us precisely how things really are! Likewise for all its variants: we can never get beyond our ideas, concepts, and so on. They too aim to tell us precisely how things really are.

Even if "real" can only *mean* 'real *to us*', this includes objects in themselves. *They* are what being real really means to us!

Here I admire Stace's understanding of and argument for Hegel's *thesis* that "The real is the rational and the rational is the real," regardless of how well Stace *interprets* Hegel. Very briefly and stated my way, even "unreal," "irrational," "nonexistent," and so on, merely conjoin intelligible terms: "not real," not rational," "not existent," and so on. Compare "unthinkable," "unintelligible," "beyond the limit of thinkability" (Wittgenstein) and "unknowable thing in itself" (Kant). They are all very thinkable! Instead of "terms," Stace says "concepts." And 'thinkable' or 'intelligible' is just 'rational'. See Stace (1955 / 1924: 45–49, compare 72–75). But Stace's argument has its limits in the larger dialectic; it does not get us to the concrete thing in its totality as rational, but only to its abstractum 'thinkable and existing thing'. Thus Stace commits the fallacy of composition, since a concrete thing is composed of far more than its abstractum. See Hegel (2015 / 1830) generally on concrete things and abstractions of the understanding.

Stace (1955 / 1924: 10–18, 211–215) finds that Plato and Aristotle are or ought to be objective idealists like Hegel. But I agree with W. D. Ross and Joseph Owens that Aristotle is a realist. Ross says Aristotle admits an "extreme realism, allowing for no modification, still less construction, of the object by mind" (Ross 1960: 131, see 26–28, 155; see Owens 1963: 131–132). And Plato makes his forms both supremely real and supremely intelligible.

On the strength of Russell's vicious infinite regress of resemblances argument for universals, I take it that both Plato's and Aristotle's forms are universals, regardless of how Plato and Aristotle themselves may viewed their respective forms.FN3-19

On metaphysical ecumenicism, I admit both Plato's forms and Aristotle's forms. Aristotle's forms abstract from specific place but not from specific time, while Plato's forms abstract from both. Thus Plato's forms are more abstract, hence simpler than and logically prior to Aristotle's. Likewise, ante rem universals are simpler than and prior to in re universals, since they do not require instantiation. The only differences between ante rem universals and Plato's forms are that Plato holds that his forms are particulars, and that he holds that they are all perfect ideals.FN3-20

If the *concepts* of being real and of being intelligible are essentially linked, and if concepts are universals of which we are aware; then if anything, the two *universals* are *more* fundamentally linked. And that is part and parcel of the priority of universals to concepts, and thereby of realism to objective idealism.FN3-21

Recall that objects in themselves are *ontologically* prior to qualified objects. For qualified objects are ways things logically can be presented. Thus qualified objects are defined in terms of things (objects) in the wide sense. And level 0 things are things in themselves. Thus if level 0 things are not logically possible, then level 1 qualified objects are not logically possible either. And so on up the infinitely many levels of qualified objects. If no logically possible level n qualified objects, then no logically possible n + 1 qualified objects. Thus the total realism of objects in themselves is ontologically prior to qualified objects. But qualified objects are cognitively prior to objects in themselves, and that is why I call theory of qualified objects our version of objective idealism.

If any version of objective idealism is intelligible, logically possible, and can provide logical analyses of ordinary things that are logically equivalent to the realist, idealist, neutral monist, and other logical analyses, then we can and must admit it into our metaphysical ecumenicism as different but distinct only in reason from all the other "rival" metaphysics of the rational and the real.

The Multiply Limited Validity of Ockham's Razor

One might object to the preceding section that Ockham's razor refutes metaphysical ecumenicism and justifies nominalism, or at least conceptualism, as alone true. For example, the razor is Russell's main justification for interpreting his logical analyses as eliminative (Russell 1971e /1918: 270–274). The present section supports the preceding section by showing the multiply limited

validity of Ockham's razor.

The objection could be treated as a mere contraposition: if the razor is right, then metaphysical ecumenicism is wrong; but if metaphysical ecumenism is right, then the razor is wrong. But that would merely be a dialectical standoff. Therefore I shall offer a account of the limits of the razor that is independent of the question whether the correct ontological interpretation of logical analysis is eliminative, reductive, or positively constructive.

William of Ockham's famous razor is very widely used in science and philosophy, and rightly so. Many state it as "Entia non sunt multiplicanda praeter necessitatem," or "Do not multiply entities beyond necessity." Some explain it as meaning, "Do not admit entities there is no need to admit, in order to describe or explain something." But many simply refer to it without even quoting it. And almost no one actually examines it. Most simply accept it and apply it automatically with no further ado, as if "bean counting" entities were a purely mechanical decision procedure with no other factors to weigh and consider. Some qualify it with "caeteris paribus," or "other things being equal." But while that general "blanket" qualification is a great improvement, it is not an examination of what other factors there might be.

The task of this section is to provide a brief critical examination of the razor, both in itself and in light of the other main factors that must be considered in theory assessment. This is basic not only for science, but also for the two main modern philosophical traditions. For the razor is the heart of deconstruction in Continental philosophy, and is the heart of eliminative logical analysis in Russell and indeed the whole Anglo-American analytic tradition.

We should note at the outset that the razor is an imperative sentence, not an indicative one. It is not a true or false statement. It is advice. And by the term 'validity' in the section title, I mean its advisable scope. Granted, "Other things being equal, it is advisable to use the razor" is a true or false statement. But it is true if and only if other things being equal, the razor is in fact good advice.

While Ockham's razor is very helpful in science, and often indispensable as a practical matter, it is not the last word on what there is, either in philosophy or in science.

At least three questions arise. (1) What is the proper role or function of the razor, or does it have more than one? (2) Are there limits to its advisability or helpfulness? (3) Is it or should it be the sole factor by which we decide how many entities to admit? My answers to these questions are respectively: (1) merely pragmatic, (2) yes, at least 33 other factors limit it, and (3) therefore no, clearly not. I shall discuss these three questions in order.

My answer to the first question is that the razor's proper

function is merely pragmatic. This seems obvious on the face of it. But for those who do not already find it obvious, I shall now argue for that.

The razor's function is not ontological in any direct or straightforward sense. For the job of ontology (really metaphysics) is to describe 'the metaphysical furniture of the world'. Thus it ought to describe exactly as many entities as there are. And the simplest theory is not logically guaranteed to do that. In fact, the simplest theory is often wrong. Things are often more complicated than we think. Thus the concepts of simplest theory and of how many things actually exist are not only different, but are logically unrelated. Thus the razor logically cannot simply decide or determine what there is. The most it can do is provide limited guidance on what ontological commitments a theory should make.

The razor logically can have no ontological function because simplicity and ontology are really and wholly distinct. They are not even distinct only in reason. If the simplest theory happens to be the theory that truly describes which things exist, that is a logically contingent fact. From the logical point of view, it is a mere coincidence. In fact, the most complicated theory logically might be the one that truly describes which things exist.

Nor is the razor's function epistemic. For we use it to help decide between empirically equivalent theories. And there evidence logically cannot be the deciding issue by definition. Thus the concepts of simplicity and of evidence are not only different, but are logically unrelated.

The razor logically can have no epistemic function because simplicity and evidence are really and wholly distinct. They are not even distinct only in reason. If the simplest theory happens to be the theory that is best supported by the evidence, that is a logically contingent fact. From the logical point of view, it is a mere coincidence. In fact, the most complicated theory logically might be the one that is best supported by the evidence.

Thus, if the only three options are that the razor's role is ontological (better, metaphysical), epistemic, or pragmatic, then its function is pragmatic. Any mix and match combinations of pragmatism with the other two options are also ruled out by the arguments I just gave.

The razor is often said to be heuristic in function (Baker 2022). But that depends partly on what is meant by "heuristic," and partly on whether the razor is actually helpful for a given theory. If it is heuristic if and only if it is helpful, this does not advance the analysis. Obviously, the razor is not individually heuristic in the sense that it cannot predict or discover, or in that sense explain anything, by itself. It is holistically heuristic in that it is one factor in the overall scientific procedure of assessing theories that can and

do predict, discover, and explain things, including whether certain entities are there. But for that very reason, it can be outweighed.

Can we say that the razor is pragmatic *as opposed to* normative (evaluative)? Or can we conversely say that the function of the razor is normative *as opposed to* pragmatic? On the face of it, there are many norms that are not pragmatic. Ethics is full of them. But there is no such thing as being pragmatic but not normative. *Norms* are opposed not to *pragmatic norms*, which are in fact a species of that genus, but to *descriptions*. Recall Hume (1973 / 1739: 456–469) on the impossibility of deriving "ought" from "is," or value (norm) from fact (description).

Are not pragmatism and prudence distinct only in reason? And is not prudence a virtue? How then can pragmatism fail to be a value or a norm? And what about the Roman general Publius Gaius Cornelius Tacitus, who said, "Discretion (prudence, pragmatism) is the *better* part of valor?" Prudential ethics belongs to ethics. And while pragmatically looking out for number one is egoistic, egoism belongs to ethics too. But the pragmatic factors in scientific theory assessment are, as a general rule, of public value to everyone. For example, as a general rule, a simpler theory is simpler for everyone. As a general rule, when we assess a scientific theory, we are not looking out for number one! We are seeking to help everyone.

To say that the razor or any of the other factors in theory assessment is pragmatically helpful, convenient, useful, or of utility, *is* to say they have pragmatic value. Every single factor is a caeteris paribus norm: "Other things being equal, a theory *ought* to admit as few entities as necessary." "Other things being equal, a theory *ought* to be consistent with as much existing theory as possible." And to say that the factors can pragmatically outweigh each other is to say that in *pragmatic ethics*, they can *normatively*, that is, *ethically*, defease each other. See chapter 5 on defeasement.

Quine and Ullian expressly call simplicity, and all of their other factors in theory assessment, whether they are pragmatic or not, "virtues" (Quine 1978 / 1970: 66–79). Surely all virtues are normative!

The razor is clearly limited in its helpfulness or advisability. For in many perfectly ordinary cases, Ockham's razor clearly gives the wrong results. Suppose there are two empirically equivalent theories that predict equally well how an elevator behaves or works, but one gives a simpler description of its internal mechanism. The razor counsels us to pick the simpler theory. And we might give a very simple and effective explanation indeed of how an elevator works. But if we actually take the elevator apart and inspect the mechanism, we may find that it is more complicated than we thought, and that the more complex theory is the true one. While the evidence (the external behavior of the

elevator) is identical for both theories, the actual parts inside the elevator confirm the more complex theory, and disconfirm the simpler theory. Thus the example shows that simplicity and evidence are logically independent concepts. It also shows that the simplicity of the theory and the ontology (really metaphysics) of the elevator are logically independent.

One might object that the razor is correct for the *full* theory of the elevator, which would include *all* the evidence, including *both* its external behavior and its internal mechanism. My reply is that science has always been a work in progress. We have never had a full theory of *anything*, and the razor's function is to help us decide among the theories we actually have. If we had the true theory of *everything*, including all the evidence, both external and internal, we would be omniscient. If we attained the true theory of everything, we would know exactly how many entities there are, and we would no longer need the razor for any function at all—ontological, epistemic, *or* pragmatic. To vary the famous metaphor of Wittgenstein's *Tractatus*, the razor is like a ladder which we use to help climb up to the true theory, and can then discard, along with any the other ladders (factors) we used (T 6.54). And if the razor cannot help with the actual theories we have, like two theories about an elevator, then what good is it?

In ordinary life, science, and philosophy alike, things are sometimes simpler than we think, but they usually are far more complicated than we think. Thus in a historically progressive sense, the razor almost always turns out to be wrong. Ordinary life, science, and philosophy are all more complicated than we thought just twenty years ago, let alone a hundred or a thousand years ago. And that is a frequency probability argument against using the razor. Of course, that is only a very general argument, and specific circumstances can greatly favor the razor. There are brief periods of great simplification in theory when a Newton or Einstein comes along. But then we are back to discovering greater complexities as usual. And as T. H. Huxley (1870 / 1893–1894) is famously paraphrased, "There is nothing like a sordid fact to slay a beautiful [or for that matter a simple] theory."

In pure physics, the case against the reliability of the razor is the worst of all. For our theories have never been complex enough. Stephen Hawking says, "A lot of prizes have been awarded for showing that the universe is not as simple as we might have thought!" (Hawking 2017 / 1988: 80).

No actual physical objects are constituted as simply as they *logically* could be. Or are we living in the physically simplest of all logically possible worlds? Indeed, it is logically possible for physical objects to contain no sub-atomic events at all. Likewise, it is logically possible for life forms to have no organs at all, and for

elevators to have no interior mechanisms at all. That is the razor's logical asymptote.

There is also a vicious infinite regress of interiors argument. Suppose we have two theories of an elevator that are empirically equivalent with respect to its exterior properties and behavior, but one posits a simpler interior mechanism than the other. We then examine the interior mechanism, and it turns out theory (1) describes it accurately and theory (2) does not, so that theory (1) predicts our observations of the *interior* accurately and theory (2) does not. Thus the two theories are *not* empirically equivalent with respect to the *interior*. But even if we *had* looked at the elevator's interior, its interior *still* might turn out to be more complicated than we thought at the *atomic* level. Indeed, at the atomic level, even its *exterior* might turn out to be more complicated than we thought! For we could have two more theories that agree on the elevator's macro-exterior and macro-interior, but theory (3) posits a simpler atomic theory than theory (4), and another two theories about the sub-atomic level, another two about the sub-sub atomic level, and so on ad infinitum. (This does presuppose infinite scientific analyzability with no stopping point at some absolutely primitive events.) And while all levels of events below the macro-level are unobservable *to us* for theoretical reasons, it is logically possible that each micro-level has its own micro-observers who *can* observe that level's events for theoretical reasons. And it is logically possible that the razor is wrong on every single level. In fact it *will* always be wrong, if things are always more complicated than we think. This also shows that the razor is not a logically necessary truth. For it is not true in all logically possible worlds. In fact, it is not true or false in any possible world, if it is an imperative that is neither true nor false.

To sum up this section so far, the razor is very limited in its helpfulness. It cannot help us with ontological or even epistemic issues. Its function is not to tell us how many objects exist, nor even to provide evidence for how many objects there are. Thus, in the absence of any other options, all it can do is serve the pragmatic function of counseling the selection of theories on the basis of simplicity, if there is no other reason to choose among them. And that *is* of huge importance in the practical world. In fact, we often have and can have no other reason to choose between two empirically equivalent theories. But we are only just getting started in this section. For there are other major factors to be weighed in theory assessment, and the razor is only one of them. And there is no principled way to decide among the factors. Also, they should all be weighed and balanced together. For all of them, both individually and in combinations, logically can and often do limit / override / defease each other.

Quine admits two other major factors. These are the maxim of conservatism (preserving the bulk of existing theory) and the principle of sufficient reason. Conservatism counsels minimizing changes to theory, and maximizing explaining the unfamiliar in terms of the familiar. The principle of sufficient reason states that every thing has a cause or reason. It counsels that a theory needs to account for every object that falls within its scope (Quine 1995: 49; 1976: essays 24–25; 1975 / 1960: 20–21, see 158, 188; 1974: 134–137; 1971 / 1953: 1–2, 70). Quine says that the principle of sufficient reason "is a rejection of the gratuitous," i.e., of things that exist for no reason, i.e. without explanation (1975 / 1960: 21).

Are these last two factors kinds of simplicity? That is, can they be subsumed within the general program of simplicity?

Quine gets it wrong concerning the principle of sufficient reason. He thinks the principle "may be plausibly subsumed under the demand for simplicity, thanks to the looseness of the latter idea" (Quine 1975 / 1960: 21). But the idea of simplicity is nowhere near that loose. The idea of entity count or kind-of-entity account is quite clear, and so are the other kinds of simplicity, such as axiom count or rules of inference count. They are all just counting the number of things! And the principle of sufficient reason is not about counting numbers of things at all. It states that every thing has *one* sufficient cause or reason, no more and no less. Thus there cannot be a simpler count, nor a more complex one. That a thing or kind of thing can have different sufficient causes does not detract from this point. Fires can be started in many different ways, but each particular fire has its own unique sufficient cause. And if a sufficient reason is always the one and only sufficient reason, then it is both the simplest *and* the most complex sufficient reason, in the same way that the one and only apple on the plate is both the best apple and the worst apple on the plate. Thus Quine is pounding a square peg into a round hole. And that is always the result when we try to impose simplicity on complex things. Again, "gratuitous" means unexplained, not superfluous.

Sufficient reason is not at all the same thing as *simplest* reason. Indeed, a sufficient reason logically can be quite the opposite! A sufficient reason logically might be the most complex reason on offer. Look, there is a fire! But it is only an oily rag, so the simplest theory is spontaneous combustion. But if we had been there, we would have seen ten children lighting the rag with ten matches for collectively sufficient combustion. And even a small rag is a complex set of micro-events. This is not to mention background factors as part of the sufficient cause. The rag would not burn on the airless moon.

Simplest sufficient reason is indeed a kind of simplicity. But that very statement is circular and begs the question. It is an

empty tautology that says nothing. Thus it can only offer empty counsel. And as we just saw, the simplest sufficient reason on offer logically need not be the actual sufficient reason.

The principle that every entity has a cause or a reason for being is logically unrelated to the concept of simplicity. That an entity has a cause or reason implies nothing whatsoever as to whether either it, or its cause or reason, or anything at all, is simple or complex. Some causes and some effects are very simple, and others are very complex. Conversely, whether an entity is simple or complex implies nothing whatsoever as to whether it is a cause or an effect, or whether anything at all has a cause or a reason for being. This is especially obvious in the case of natural science. For natural causes are logically contingent, and that includes their simplicity or complexity.

In contrast, conservatism is very definitely a kind of simplicity. For it counsels precisely making the simplest change to theory. Quine says that conservatism is "a maxim of *minimum* mutilation" (Quine 1995: 49, my emphasis). Thus conflicts between conservatism and (any other kind of) simplicity are really conflicts between two kinds of simplicity. Quine admits that different kinds of simplicity can conflict; he gives the example of "economy in the roots of theory" and "brevity of paraphrase" (Quine 1975 / 1960: 188). Here Quine's only mistake is one of presentation, insofar as he presents conservatism as a factor *in addition to* his general program of simplicity.

Quine gets something else wrong as well. On the one hand, he says that both simplicity and conservatism are epistemic. He says, "A normative domain within epistemology survives the conversion to naturalism.... The most general of its norms are perhaps conservatism... and simplicity"(Quine 1995: 49). But on the face of it, there is nothing epistemic about either simplicity or conservatism. On the face of it, both are merely pragmatic counsel, except insofar as existing theory is supported by evidence. But a theory cannot be identified with the evidence that supports it, unless it is a self-evident theory, such as in logic or arithmetic.

Quine does not say the principle of sufficient reason is epistemic. Yet that is the only maxim that even appears to be epistemic. For to give a reason *is* to give evidence. Evidence is precisely something that makes a statement either more likely or less likely than we would *otherwise* find. And that is called its *logical relevance*. Evidence is defined as logical relevance both in John Maynard Keynes' (1962 / 1921) probability theory and in standard evidence law today. See my (2023 / 2015: ch. 10; 2019).

Evidence is logically relevant regardless of whether its making a statement more or less likely than it would otherwise be rises to the level of reason to *believe* or *disbelieve*. For evidence

can be too slight for that, and still be evidence. Of course, (our knowing) the sufficient cause or reason of the existence of a thing would be sufficient evidence to believe that the thing exists; but there can be other sufficient reasons to believe as well. If I see Smith murder Jones, I have sufficient reason to believe it; but my seeing it is not the cause of or the reason for the murder. It is merely the cause of and the reason for my belief. Here I mean an objectively, not psychologically, sufficient reason to believe.

If I am right that conservatism is a kind of simplicity, and if Quine *were* right that simplicity is a kind of evidence, then conservatism *would* be a kind of evidence by implication. For that would follow by hypothetical syllogism (if A is B, and if B is C, then A is C). And the syllogism would be sound if both its premisses were true; but one of its premisses is false. For while conservatism is a kind of simplicity, simplicity is not a kind of evidence. Thus the fact that Quine fails to notice this syllogism is merely an in-house criticism. For the syllogism is in fact unsound, and it is merely the case that Quine is logically committed to admitting it as sound.

Quine overlooks something else too. He says that we know of no principled way to decide conflicts between simplicity and conservatism, and that here science is an art. For, so to speak, we know of no yardstick that could measure such incommensurables. Quine says:

> No general calibration of either conservatism or simplicity is known, much less any comparative scale of the one against the other. [Thus] there is no hope of a mechanical [decision] procedure.... [Thus theory formulation, as well as assessing which theory is best,] is an imaginative art. It is the art of science. (Quine 1995: 49)

I think Quine is right. But that is only one conflict—and between only two factors. Quine overlooks that the very same thing can also be said of any two factors or conflicting combinations of factors in assessing a theory. There is no yardstick, no principled way, to decide *any* conflicts among *any* combinations of factors. And that is quite a large number of kinds of possible conflict! For in my (2023a) paper on the razor, I show that there are at least 34 factors to be weighed. I cannot discuss them all here.

There is at least one factor that Quine does not mention, even though it was published fifteen years before *Word and Object*. It is a maxim Quine might well reject; and in fairness, that might be why he does not mention it. It can scarcely be called a kind of simplicity, since it counsels the opposite of the razor. Yet neither is

it a maxim that is logically unrelated to the razor. For it is the logical counterbalance to the razor. Kenneth Burke says, "Entities should not be *reduced* beyond necessity," any more than they should not be *multiplied* beyond necessity (Burke 1945: 324, my emphasis). We may call this Burke's maxim, or the anti-razor.

Ockham's razor and Burke's maxim are equally valid, in that the real world logically can be *either* simpler *or* more complicated than we think. Each maxim is logically equal in its validity (advisability), and the validity of each is equally limited by the other.

The proper function of Burke's maxim is pragmatic if and only if that is the proper function of the razor. For they are logical counterparts. Note that in the logic of imperative sentences, they are *a priori* logical counterparts ("do this," "do the contrary"). And on the face of it, there is nothing intrinsically epistemic about either of them. And if things are usually more complicated than we think, then Burke's maxim is better advice than the razor, based on simple frequency probability. We might even run a probability test to see which maxim, Ockham's or Burke's, is likelier to apply in a given case. If things are usually more complicated than we think (how often have we heard that?), then Burke's maxim would be likelier to apply to the next case than Ockham's. But neither maxim, considered in itself, is epistemic.

Good scientists know that theories sometimes go too far in Ockham's direction. In fact, as a purely practical matter, sometimes they must. For example, Andrew Robinson says "any model [in solid-state physics] contains many unavoidable over-simplifications (in contrast, it is worth adding, to a theory like special relativity)" (Andrew Robinson 2015: 87).

Arthur C. Clarke says there is a "well-known quotation supposedly from Einstein, 'Things should be made as simple as possible *but not any simpler*'" (A. Clarke 2015: 226, his emphasis). Alice Caraprice, editor of *The Ultimate Quotable Einstein*, has not found this saying in Einstein's writings (Caraprice 2011: 475). Caraprice concludes, "Most likely, the quotation is a paraphrase of some of Einstein's other statements of simplicity, many of which can be found in this book" (Caraprice 2011: 475). Stephen Hawking and Leonard Mlodinow expressly state that the saying is a paraphrase of Einstein. They say, "To paraphrase Einstein, a theory should be a simple as possible, but not simpler" (Hawking 2010: 52). They make it plain they agree with Einstein completely on this. And clearly, they implicitly agree equally with Burke.

Thus we need to distinguish the ostensible quotation from the view it expresses. For regardless of whether the quotation is ever confirmed, Einstein does hold that view. Thus we may call the logical conjunction of Ockham's maxim and Burke's maxim

"Einstein's maxim."

Einstein's maxim is merely pragmatic, if I am right that its two conjuncts are. For if the two conjuncts are merely pragmatic, then there can be no emergent ontological or epistemic property arising out of their merely logical conjunction. And I shall not count Einstein's maxim as a separately enumerated factor, since it is a mere conjunction of two factors that we have already listed.

Einstein's maxim is really a "Goldilocks" or "golden mean" maxim. Namely, accept the theory that is neither too complex nor too simple, but just right. And ideally that would be the theory that posits the true number of entities. But if a theory did that, then it would satisfy the correspondence theory of truth. And if the theory not only truly described the facts, but also exactly corresponded to the facts in its logical complexity, then in the analytic tradition, such a theory would be called an ideal language, or a logically perfect language. That may be a practically impossible ideal. It may even be a theoretically impossible ideal in various senses of the term "theoretically," such as 'in the present state of theory', or 'for human researchers like us'. But the correspondence theory is both intelligible and logically possible. And it is the theoretical ideal of science and philosophy alike in that logical sense. In any case, neither the razor nor Burke's maxim can *invalidate* the correspondence theory of truth concerning statements of how many entities there are. For their function is not to decide ontological (metaphysical) questions, nor even to provide evidence. Their sole function is pragmatic. They are not even true!

If we wish to describe the 'metaphysical furniture of the world', surely we wish to admit neither more nor fewer entities than there actually are, and to describe the world as truly as we can. And even if Laplace is right that there is no need to postulate God to explain the world scientifically, God logically might still exist. Just like an elevator, the universe might be more complicated than Laplace thinks.

One might object to the correspondence theory of truth that we can never get beyond the limits of our perception or thought to say how the world is in itself. I have two replies. First (and again), if that is true, then that *is* how the world is in itself. And second, all the factors in theory assessment will have exactly the same weights regardless of whether the objection is true, so the objection is really irrelevant.

Sufficient reason suggests the most important factor of all, adequate explanation. For if theories A and B are empirically equivalent, and if A is simpler than B, but B provides an adequate explanation of the thing and A does not, then B is incomparably preferable. For what does it matter if A is simpler, if A does not adequately explain the thing? And to explain a thing is to explain it

adequately / sufficiently / successfully / satisfactorily, as opposed to a partial or incomplete explanation.

Adequate explanation logically includes sufficient reason. And sufficient reason is sufficient evidence for the thing to exist, and therefore also to believe it exists. Thus adequate explanation logically includes both sufficient evidence for the thing to exist and sufficient evidence to believe. And that makes sense. For how can an adequate explanation fail to provide either of those things?

It is really if and only if two empirically equivalent theories *also* equally adequately explain things that, other factors being equal, the simpler theory is preferable. But then we may as well say that the razor is to be used if and only if *all other factors* are equal. And that is just the caeteris paribus clause specified in detail, with adequate explanation being the chief part of it.

Just what is adequate explanation? The general concept may seem indefinable, since different kinds of theory admit of very different kinds of explanation; and the two main kinds, scientific and philosophical explanation, arguably have never been adequate. Also, there have been rival theories of explanation in both science and philosophy And it would seem circular to give an explanation of explanation. But we have a fairly good idea of what explanation is. We have plenty of examples of both good explanations and bad ones. Thus we have a good idea of how to assess theories on how adequately they explain things, even though we have no adequate explanation of adequate explanation. In all these respects, explanation is much like definition. Can definition be defined? Can we give an adequate definition of adequate definition?

In any case, the single most important factor in theory assessment is adequate explanation. It is the sine qua non of all theory, scientific or not. For without it, all the other factors are useless and even irrelevant. For what do they matter if a theory does not adequately explain things?

Adequate explanation is distinct only in reason at most from the principle of sufficient reason. For what is the difference between an adequate explanation and a sufficient reason? Surely all adequate explanations are sufficient reasons, and the only question is whether all sufficient reasons are adequate explanations. And, perhaps as a purely hypothetical or per impossibile statement, if a sufficient reason were *not* identical with an adequate explanation, we would prefer the adequate explanation. For it would contain the sufficient reason, plus something more. In fact, this seems to occur if and only if we have sufficient reason to admit *that* a thing exists, but do not yet understand *why* it exists. Thus stating the "why" seems to be the "something more" we want. And that amounts to giving the logically deepest, i.e. the most general, reason for the thing's existence. I shall now explain that using philosophy of

mathematics, which often makes things clearer.

Aristotle argues that the true explanation is the one that states the *most general* true description. (Aristotle's term is the description of "commensurate universality," meaning the most general description that applies.) For example, two lines are parallel not because a third line intersects them both at right angles, but because it intersects them at the same angle (Aristotle 1968: 118, *Posterior Analytics* 74b10–20; see bk. 1, ch. 1 §§ 5, 24, 27; compare 1968a: 96, *Prior Analytics* 66a 10–15). For we can eliminate the third line's intersecting the first two specifically at right angles, and the first two lines will still be parallel, if the third line still intersects them at the same angle. Aristotle also gives the example of an isosceles triangle the sum of whose angles is equal to two right angles, not because the triangle is isosceles, but because it is a triangle. For if we eliminate the property of specifically being an isosceles triangle, the sum will remain the same, if the figure is still a triangle. For we can eliminate the property of being specifically isosceles, and the sum will still be the same.

Unsurprisingly, the "something more" that adequate explanation logically contains in addition to sufficient reason, namely the *why*, is often called adequation. The concept of adequation is accepted by Aquinas, Scotus, and Ockham alike, and by Robert Grosseteste, Walter Burley (Burleigh), and others. Descartes says an adequate concept is one that completely and perfectly represents the object (Descartes 1970 / 1642: 22–23, 97–99). *The Oxford English Dictionary* lists the third meaning of "adequate" as 'fully answering to, or [fully] representing'; the first example says, more ambitiously, 'perfectly represent'. By parity of reason, an adequate explanation is a full and complete, or more ambitiously, perfect explanation of why something is the case. And following Aristotle, that would seem to *be* the most general description that is logically possible. If so, then we already have two examples of adequate explanation that describe their adequation: Aristotle's examples of two lines that are parallel to a third because they intersect it at the same angle, and of the isosceles triangle the sum of whose angles is equal to two right angles because it is a triangle. Even if the logical foundations of geometry may be deeper and more general, as they are in Whitehead and Russell, we may say that these adequations are sufficiently adequate at the least!

Adequate explanation is formally distinct from sufficient reason with a foundation in reality in sufficient reason, which is its main element. For adequate explanation merely adds adequation to sufficient reason. And adequation is a species of true explanation, i.e., of the most general true description. That is adequation's even deeper foundation in reality. For not every sufficient reason (right

angles) is the most general one (equal angles).

Thus it would seem that there cannot be two adequate explanations of the same thing, for the same reason that there cannot be two sufficient reasons for the same thing's existence, and for the same reason that there cannot be two complete and perfect explanations of the same thing. Talk of correspondence theory!

On the face of it, the other main epistemic principle, conservatism, is always outweighed by an adequate explanation as well. What does the evidence for the bulk of existing theory matter if we do not have an adequate explanation?

The razor and Burke's maxim have at least four things in common. First, they are merely counterpart pragmatic guides. Second, they both have exactly the same caeteris paribus clause, "other things being equal." Third, the chief part of that clause for both maxims is the adequate explanation factor. For if a theory fails to explain things, it does not matter whether it posits too many entities *or* too few. We cannot even say the *reason* it fails is that it posits too many entities or too few, since the reason might be something else altogether. Indeed, the theory may even fail to predict. Fourth, the razor and Burke's maxim have in common that *all* the other factors belong to the caeteris paribus clause. The adequate explanation factor just weighs more than all the rest put together. For it is the sine qua non of theory assessment.

Since Einstein's maxim is the mere conjunction of Ockham's razor and Burke's maxim, it has these four things in common with them too. It is merely pragmatic. It has the same caeteris paribus clause. And that clause contains all the other factors, with adequate explanation outweighing all the other factors put together, much as the power of Jupiter outweighed all the other gods' power at once. Thus we may say that the caeteris paribus clause's primary content is, "Use no more entities than are necessary for an adequate explanation, and no fewer."

For our purposes in this book, the main thing is that adequate explanation always outweighs the razor. At any rate, adequate explanation is the ideal. In its absence, sufficient reason remains sufficient explanation. And even sufficient reason always outweighs the razor. If theory A is simpler than theory B, but B provides sufficient reason for the thing's existence and A does not, which theory would you prefer?

It follows from the foregoing that an adequate explanation of metaphysical ecumenicism, could only be by the most general possible argument for it. And that is not the containment or the dependence argument. For Aristotle's relation argument is deeper and more general. For containments and dependences are only two species of relation. But the deepest and most general possible argument might be called the property argument. For relations are

only one kind of property, the polyadic kind. Here the idea is that no instantiated property, i.e., no property in re, can be instantiated by nothing. Or better, no true predication can be predicated of nothing. Thus the property argument is better called the true predication argument. This is better because it is metaphysically neutral; it corresponds to using ontological brackets, so as not to presuppose the existence of any properties beyond any ordinary properties the argument starts from. But then we are at the level of the correspondence theory of truth. Thus it seems that metaphysical ecumenicism and the correspondence theory of truth stand or fall together. But there is a difference, even if it is only a distinction in reason. For we can consistently deny the correspondence theory of truth, yet affirm that a certain predication is true of an ordinary thing or ordinary property, either on some other theory of truth or on no theory of truth, i.e. on the ordinary, pre-philosophical use of the word "true." Thus this is a modal (one-sided) distinction. If the correspondence theory of truth is true, then metaphysical ecumenicism follows from the predication argument. But if the correspondence theory of truth is false, metaphysical ecumenicism can still be shown to be true by the containment, dependence, pros hen, relation, and predication arguments, on some other theory of truth or on no theory of truth. Compare Michael Devitt (1984) on distinguishing realism from theory of truth.

The containment, dependence, pros hen, and relation arguments remain overlapping logically sufficient explanations of why all the "rival" entities exist in cases of logically equivalent logical analyses of ordinary things or properties. Therefore all these arguments always overrule the razor. For the positive construction ontological interpretation of logical analysis always overrules the eliminative interpretation and the reductive interpretation. For the eliminative and the reductive interpretations of logical analysis have only the limited validity of positing mere logical parsings of the entities admitted on the positive construction interpretation.

Just as being at the same angle or being a triangle is the adequate explanation and sine qua non of the parallel postulate and the sum of the angles of a triangle in Euclidean geometry, so true predications are the adequate explanation and sine qua non of metaphysical ecumenicism. For in all these cases, it is not possible to find a deeper or more general explanation, at least waiving logicism in geometry for Aristotle's two geometrical examples.

If any argument adequately explains or at least sufficiently proves the existence of God then the razor is obviously overruled. In that case, we cannot use the razor to shave God.

Ockham does not use his razor to shave God. In fact, he would doubtless regard it as the height of absurdity to eliminate, as an unnecessary entity, the one being whose existence *is* necessary,

and on whom the existence of all other entities necessarily depends. For he accepts a form of the ontological argument for the existence of God. And for him, that trumps any attempt to shave God. For him it is proof of a being, and even proof of a necessary being.

Here are three universal rules: We cannot correctly use the razor to shave (1) *necessary* beings, (2) beings we *know* exist, or (3) even just beings of which it is *true* to say that they exist, on pain of otherwise falsifying our theory. These are the three greatest and most decisive limits on the razor. True predication is the deepest and most general limit, since necessity and knowledge are species of predicate. And knowledge is in turn a species of necessity. It is epistemic necessity. For what we know must be true.

For my full discussion of the razor, including a total of 34 factors to be weighed in theory assessment, see my (2023a).

Consequences of the Preceding Two Sections for the Ontological Interpretation of Logical Analysis

There are three main different ontological interpretations of logical analysis. First, I interpret logical analysis as positive ontological construction. Second, Russell and Quine interpret it as negative ontological elimination. And third, Frege interprets it as a *metaphysical* reduction of entities that are *ontologically* admitted as entities, but are reduced from one metaphysical category, that of the analysans, to another, logically more primitive category, that of the analysandum. It is hard to see how there could be a fourth alternative. For these three options seem mutually exclusive and jointly exhaustive.

For example, suppose that the logical analysis of numbers as classes as classes is correct. I interpret the analysis as proving that numbers are entities that have an essentially arithmetical character, and that are therefore different from, but distinct only in reason from, classes of classes. The mature Frege interprets the analysis as showing that numbers are objects, but only have a class-character, since they are really just classes of classes, which are abstract objects (in his sense) for him. And Russell would interpret the analysis as showing that numbers do not exist, since they are classes of classes, and classes do not exist for him.

One must not be confused by terminology. Notably, when Russell speaks of "logical construction," he really means what I call logical elimination. In fact, he soon comes to call his logical constructions logical fictions. Elimination is more properly called *de*construction than construction. Thus I must explain how I use the terms, since my use is basically the opposite of Russell's famous use. But nothing should be strange or unfamiliar about the basic

concepts. If it helps, what I call logical construction might be called positive ontological construction, or emergent construction. But there are problems with each of these terminological suggestions. "Positive" is bad because the positivists, especially the logical positivists, are eliminationists. And "emergent" is bad because the constructed entity is not always an emergent entity in the technical sense. If we construct a big mud heap out of small mud bits, we just have the same kind of entity, only larger. But that said, my interpretation of the analysis is that numbers are positively entities and positively numbers, and that numbers are logically emergent entities that logically emerge from classes of classes. An emergent entity is by definition a logical whole which has at least one property that none of its logical constituents has. For example, we can logically analyze the number two as the class of classes having two members. (To prevent circularity, the "two" in "two members" is analyzed away using logic and class theory.) But even if talk of the number two is logically equivalent to talk of that class of classes, at least on the face of it, the number two is even, while no class is even or odd. And at least on the face of it, the number two neither wide nor narrow, while all classes are wide or narrow. For all classes have memberships, even if they have no members, i.e. even if their membership is null. Having no members is the narrowest membership, and having all objects as members is the widest membership.FN3-22

I shall now explain the ontological interpretations in a little more detail, and the main reasons for holding each of them.

On positive logical constructionism, numbers exist *because* classes exist; and the analysis shows that numbers are constructed out of classes, much as a real wall is built or constructed out of real bricks. For only something can come out of something. And of course, metaphysical ecumenism entails positive constructionism for this very reason. For numbers parse, hence contain and depend on, the same intellectual content that classes of classes do.

The distinctive feature of constructionism is that analyzed entities have emergent properties. Numbers retain an arithmetical character. Numbers are even or odd, even though classes are not. Or alternatively, enforcing the identity of numbers with classes of classes, the classes in question really are even or odd, if they are identical with numbers that are even or odd, and numbers really do have wide or narrow memberships, if they are identical with those classes. This is except for things like mud heaps of bits of mud.

The main case for constructionism is all the arguments we have been discussing for metaphysical ecumenism: the containment and dependence arguments, the relation argument, and so on.

On logical reductionism, numbers exist, but have no special arithmetical character, that is, no emergent properties such

as being even or odd. Numbers exist as classes, since classes exist, but they exist *only* as classes. And properties such as being even or odd are analyzed as merely logical as well, and have no special arithmetical character either.

The most natural case for reductionism I can think of is what may be called the kind-version of Ockham's razor, which may be called the kind-razor, plus the thesis that only something can come from something. The kind-razor is "Do not multiply *kinds* of entities beyond necessity." That would be the reason for demoting numbers to classes, since numbers are being rejected as a kind. At the same time, numbers are not rejected altogether for the reason that only something can come from something. Thus if classes exist and if numbers are analyzed as being classes of classes, then numbers exist, but only as classes of classes. If I am right so far, then the most natural reason to *reject* reductionism would be that the "beyond necessity" part of the kind-razor is not satisfied, that is, that reductionism fails to provide an adequate explanation or even a sufficient reason for numbers, or otherwise violates the caeteris paribus clause of the kind-razor. This presents a dilemma. For on the one hand, if logicism is correct, then terms for numbers are intersubstitutable salva analycitate with terms for classes of classes, and all the truth-values of statements containing such terms are preserved, at least outside of contexts involving what Russell calls propositional attitude and Quine calls referential opacity, such as "I believe that...." But on the other hand, numbers are not adequately or even sufficiently explained as even or odd, except by logicist definitions of "even" and "odd" which are not intensionally satisfactory. That is, reductionism preserves numbers extensionally, but not intensionally.

Metaphysical ecumenicism solves the dilemma. For it admits reductionism as having limited validity as an abstraction from constructionism. Namely, classes of classes are an abstraction from numbers. For reductionists reject precisely the intensional features of numbers and admit only their extensional features. But constructionism admits both features. Thus numbers are even or odd and classes are neither, and classes are wide or narrow and numbers are neither, on the full and proper realist ontological interpretation of logical analysis as positive construction. And these true differences are abstracted from, i.e. vanish from sight, on the more limited reductionist interpretation. Thus constructionism and reductionism are distinct only in reason. One might hold they are modally distinct, since numbers are classes of classes plus intensional arithmetical properties. But if there are no numbers, then they are not there to reduce to classes either. Numbers and classes are formally distinct with a foundation in reality in classes in that classes are deeper and more general. For all numbers are

distinct only in reason from classes, but not all classes are distinct only in reason from numbers. But for that very reason of greater depth and generality, the foundation in reality is in numbers in the sense that they logically contain more specific reality than classes do. For numbers logically contain arithmetical properties, such as being even or odd. That is, numbers qua numbers are there for reductionists to parse classes of classes out of. Thus metaphysical ecumenicism may ironically be the best reason for affirming reductionism, though only as a limited parsing of the full real order of numbers, which only positive construction can describe.

The difference between constructionism and reductionism is not merely that the former admits numbers and the latter rejects them, but also in that the former admits them as emergent entities with emergent properties (such as being even or odd), and the latter does not. To be sure, in qualified objects theory, a reductionist can hold that the *qualified* properties are emergent, but the properties *in themselves* are not. For a reductionist can hold that the qualified number two has the qualified property of being even, but that the qualified number two "is" the class of dyads in itself, which is *not* even in itself. So to speak, the reductionist removes the intensional (i.e. arithmetical) properties of numbers from the world of things in themselves and exports them to the qualified world. In contrast, metaphysical ecumenism admits intensional objects and properties in themselves, including positive integers as even or odd.

Which is right, construction or reduction? This devolves to the soundness of the arguments for metaphysical ecumenicism. And with Ockham's razor out of the picture, the reductionist has yet to detect any flaw in those arguments. Again, on metaphysical ecumenicism, both views are right as valid parsings of the numbers portion of reality; but construction wins in that the containment, dependence, and other arguments prove that numbers in themselves exist, and reductionism wrongly rejects them. For reductionism is a limited sectarian view.

On eliminationism, numbers are eliminated as 'logical fictions', and are literally nothing. Here the reasons for holding the view are more complex and varied.

First, one might use what may be called the thing-version of Ockham's razor, which may be called the thing-razor, plus the thesis that nothing can come from nothing. The thing-razor is "Do not multiply the *number* of entities beyond necessity." This might also be described as using the kind-razor in a more fully destructive way, so as to reject even substitutes for numbers. And the deeper reason might be that classes are nothing, and nothing comes from nothing. Thus if we analyze number-talk as class-talk, then the former is talk about nothing because the latter is. This is Russell's reason. He rejects classes as logical fictions, therefore he rejects

numbers as logical fictions too, since they are classes of classes. As noted in the preceding section on the razor, Russell expressly uses the razor in conjunction with logical analysis, for the negative epistemic reason that (in this case) we do not know that numbers exist over and above classes of classes, so it is simpler just to get rid of them. For the analysis shows there is no necessity to admit numbers in order to sufficiently explain how arithmetic works. For we can (more simply) just use classes of classes in their place. He then eliminates classes, and admits only logical universals as the determinate constituents of purely logical descriptions.

Thus for Russell, the matter devolves to the rejection of classes. Russell argues for this on the ground that class-expressions are 'logically incomplete' and hence cannot name or describe entities. This is an odd variation of Frege's odd view that predicate-expressions are 'incomplete' or 'unsaturated', especially since Frege holds that predicates nonetheless refer to entities. For Frege they refer to functions, which are incomplete entities. Frege would also disagree with Russell's variation because Frege holds that class-expressions *are* complete names of classes, which *are* complete objects. Thus Frege denies that class-expressions are predicate-expressions. One very natural measure of the difference is that Frege's sort of incompleteness is in effect his solution of the metaphysical problem of Bradley's Regress, also known as the problem of the metaphysical unity of complexes; while Russell's sort of incompleteness is evidently not a solution of that problem, since for him classes are not there to complete anything, nor to be completed. For more on Bradley's Regress, see the section below, "The Problem of the Unity of Complexes."

Second, another reason for eliminationism might be the thesis that only logically simple things are real. For if numbers are analyzed as classes of classes, then numbers are logically complex. And then on this thesis, numbers are not real. But metaphysical ecumenicism assigns this thesis only a limited validity as well. In terms of our brick wall analogy, if the bricks are simple and the wall is complex, would we say that only the bricks are real, and the wall is not? But the main thing is that nothing comes from nothing, and only something can come from something. Indeed, by parity of reason we ought to eliminate classes too, if only simple things are real. For all classes are definable in terms of their class property, and that makes them logically complex by definition. (And perhaps that is a deep reason for Russell's rejecting classes, besides their incompleteness.) Now, we *also* tend to think of the class of red things as logically simple, since its defining property is logically simple. But even if its defining property is simple, the class defined in terms of it is not. For a class is defined as (1) 'containing' as (2) 'members' (3) 'all' and (4) 'only' the (5) 'things' that (6) 'have' a

certain (7) 'property'. Thus even if the defining property is logically simple, it is only one logical constituent out of seven. Thus on eliminationism, classes should be eliminated too; and for Whitehead and Russell in *Principia*, they are. But I reject the thesis that all and only simple things are real. For look at our three main kinds of reality. First, to be real is to be not nothing. Second, to be real is to be mind-independent. And third, to be totally real is to be independent even of the logical possibility of minds. Those are the three main kinds of reality, and taken either individually or in combination, they do not even appear to imply that real things must be logically simple. Think again of a brick wall. And neither does Butlerian reality, that for a thing to be real is for it to be what it is and not another thing, imply that real things must be logically simple . For a complex thing is what it is, namely, complex. Thus even if there is a kind of reality on which only simple things are real, it is in fifth place as a kind of reality at best. That is not even close to being the deepest and most general sense of reality, which is the primary Parmenidean-Suárezian-Russellian-Quinean sense of not being nothing. In fact, all four of the main kinds of reality I just described are deeper and more general than being simple. And that is precisely because they include both simple and complex things as real. To top it off, even Russell says analysis might be endless!

Metaphysical ecumenicism resolves the tension about whether only simple things are real. For it admits the eliminationist metaphysic that eliminates complex things, but only as having a limited validity. For it is an abstraction from positive construction that is even further from positive construction than reductionism is. For while reductionism suspends, disregards, brackets, abstracts, or parses numbers away from their arithmetical character by reducing them to (simpler but not simple) classes, any kind of elimination-ism brackets numbers away from their existence altogether.

Arguments like the containment and dependence arguments admit reductionism and eliminationism alike as having the validity of limited parsings of the real order. For they are right in what, if anything, they affirm as entities, and wrong only in denying the entities that positive construction affirms. For all those entities stand in containment and dependence relations to entities that we ordinarily admit. Thus realism always wins; but conceptualism and nominalism always retain a progressively more limited validity. And the positive construction ontological interpretation of logical analysis itself always wins; but reductionism and eliminationism retain a progressively more limited validity as they always do.

In the problem of universals, we can see that the ordinary things all around us have ordinary properties. These properties can be parsed as particular properties that are as particular in space-time location as the ordinary individuals that have them. Universals

in re abstract ordinary properties from their particular space-time locations, but keep them in space-time. And universals ante rem further abstract them from being in space-time altogether. And none of these parsed abstractions can be nothing. For they are all logical constituents of the original content of ordinary properties.

Thus the containment and dependence arguments have two implications for the ontological interpretation of logical analysis.

The first implication is that *logical analysis is ontological construction*, as opposed to ontological elimination and ontological reduction. The second implication is that *logical analysis is metaphysically ecumenical*. The two implications are logically consistent, and are in fact distinct only in reason. For all three kinds of logical analysis are right in the entities, if any, they affirm. And all three are wrong about the entities, if any, they deny in each other's admissions of entities. All three ontological interpretations of logical of analysis are intelligible, logically possible, and logically equivalent as logical analyses of arithmetic. For except for the differences in ontology (really metaphysics), the logical analysis of numbers as classes of classes is *identical* in all three cases. Constructionism wins in that numbers exist and are equal or odd; and the other two kinds of analysis are wrong to deny it. But all three are admitted as equally valid metaphysical parsings of arithmetic. They are distinct only in reason. They are formally distinct with a foundation in reality in numbers as the full portion of reality in question. Here I assume that the logical analysis of numbers as classes as classes is intelligible, logically possible, and shows that statements about numbers are logically equivalent to the corresponding statements about classes of classes. Thus the *only* question is its ontological interpretation. Russell's paradox can be got around; see my (2007: 103–104), and elsewhere in this book.

Frege's brilliant and devastating critique of psychologism and of formalism is likewise only of limited validity. His critique of psychologism, the theory that numbers are mental ideas, is correct only against via moderna ideas. He seems to have no conception of via antiqua ideas whose objective realities are formally identical across times and minds. And accordingly, he seems to have no idea that his private language arguments (I counted twelve in my 2003 / 1996: 109, 289 n.1, but I later counted more; and he nonetheless strangely admits via moderna private mental ideas anyway, saying they can be 'taken as' public objects, Frege 1970f / 1892: 60) have a counterpart in the traditional mental language argument that grounds public language and thought in formally identical via antiqua ideas. Per the containment and dependence arguments, the logical analysis that numbers are formally identical *via antiqua* ideas can and must be admitted into metaphysical ecumenicism as a valid but limited conceptualist theory of numbers; and only the

theory that numbers *are* via moderna ideas is liable to his critique of psychologism. And Frege's critique of formalism, the view that numbers consist of certain formal features or uses, shows only that formalism is not a *full* account of number, and has only a limited validity as an ontological (really metaphysical) interpretation of numbers. Here I assume that both mental language number theory and formalist number theory can provide statements logically equivalent to the corresponding ordinary statements about numbers, as well as to the corresponding statements in the three ontological interpretations of the logical analysis of number as classes: positive constructionism, reductionism, and eliminationism.

Recall that there are two kinds of parsing: abstracting and bracketing. They coalesce and are distinct only in reason insofar as the kinds of existence are themselves existing properties (they are Fregean mapping functions), so that to disregard or suspend them is both ontological bracketing and categorial abstraction. And the kinds of existence that are implicit in ordinary existence can be parsed as particular properties, universals in re, universals ante rem, concepts, or names just as well as any other properties can be. For the containment and dependence arguments apply to them all.

Whenever I hear titles like *Science Without Numbers* (Field 1980) or "Logic Without Ontology" (Nagel 1944), I know they presuppose the eliminative or at least the reductive ontological interpretation of logical analysis. Their Pyrrhic victory is that even if their analyses are successful, their ontological interpretation of those analyses is of limited validity at best, since the containment and dependence arguments show that numbers exist. Either that, or we give up our most basic ontological conceptions of containment and dependence, as articulated by the containment and dependence arguments. But it is not really an either-or dilemma. For we admit all three ontological interpretations of logical analysis as having progressively less validity, ranging from positive constructionism through reductionism to eliminationism. Thus far from being wrong, these authors are right in what they affirm, and wrong only in what they deny. We can simply readjust their limited ontological interpretation to the full validity of positive constructionism. To be sure, that does stand their views on their heads.

Perhaps the best objection to the positive construction interpretation of logical analysis is this. Butchvarov says:

> Eli Hirsch has argued that what he calls the scheme of persistent objects and the scheme of (certain kinds of) sequences of momentary objects are equivalent, that whatever can be said in one can be said in the other, that there can be no empirical evidence in favor of one rather than the other. This

> is an application to a new subject of a metaphysical view that used to be in some vogue. (We may recall Ayer's [and Carnap's] view of realism and of the sense-datum theory as alternative languages.) As in its other applications, it ignores the sense, indeed, the only sense, in which competing philosophical theories, which by hypothesis are not scientific, may not be equivalent. They convey different pictures of the world, suggest different analogies, enforce different ways of seeing the same subject matter. And one such picture, or analogy, or way of seeing, may be more adequate to the nature of the subject matter than any of the alternatives. But Hirsch also seems to suggest that what we *mean* by "the same object" in a diachronic context is the same as what we mean by "the same sequence of momentary objects." If so, he is surely mistaken. (Butchvarov 1979: 181, his emphasis)

My reply is that this overlooks the nature of distinctions in reason. If objects are distinct in reason, then they are different objects. And our names for them are not synonymous. Thus Butchvarov is right that 'rival' metaphysics do not mean the same, and "convey different pictures of the world." But Hirsch is right that "whatever can be said in one [metaphysic] can be said in the other," in the sense that they all produce statements that are logically equivalent to each other, since the statements are logically equivalent to the corresponding ordinary, pre-philosophical statements in question. For the relation of logical equivalence is transitive. If statement A is logically equivalent to B, and B is to C, then A is to C. And all logical equivalences are *mutual* logical containment and mutual logical dependence relations. In other words, Butchvarov overlooks the distinction between intension and extension. All the 'rival' metaphysics are indeed intensionally different, both in their object-names and in their statements. But logically equivalent statements merely parse the same truth-*ground*, and thereby the same truth-*maker*, differently. And if one theory is more adequate than the others, that is, states a better and more illuminating explanation or ground, then the other theories are formally distinct from it with a foundation in reality in it. I mean their objects in themselves. But for us, the *direct* intensions of all statements and object-names are *qualified* objects. And if logically equivalent statements are *true*, then the different qualified facts they connotatively express and directly refer to "are" the same fact in itself, differently parsed. Compare Frege's famous conception of a propositional content as something that can be conceptually carved up in different ways.

Taxonomy of Theories of Properties

I shall list ten theories of properties whose metaphysical parsings of ordinary properties are all validated as entities by the containment and dependence arguments, if the parsings satisfy the three conditions of (1) intelligibility, (2) logical possibility, and (3) logical equivalence to the corresponding ordinary statements about ordinary properties. May others add to the list.

There logically can be indefinitely many metaphysical theories of properties, much as there logically can be indefinitely many colors that we have never seen. That is, 'metaphysical theory of properties' is a determinable that logically can have indefinitely many determinates. The ones I list are just some main types that mix and match the alternatives we have discussed.

Many if not all of the sorts of objects listed can be and have been argued to be logically impossible or even unintelligible. That sort of issue is beyond the scope of this book. I simply assume that all the objects I list are intelligible and logically possible, unless someone decisively shows otherwise. Thus I provisionally admit them all into metaphysical ecumenicism. Sometimes it is also argued that the logical analysis in question even fails the logical equivalence test. I shall simply assume logical equivalence too.

1. *Simple Conceptualism*. Ordinary properties are concepts, in some reasonable sense of "concept." There will be indefinitely many sub-types, depending on what concepts are taken to be. That is, the term "concept" is a determinable.

2. *Simple Nominalism*. Ordinary properties are names, descriptions, linguistic uses, or some other linguistic items. There will be indefinitely many sub-types, depending on what names and the other linguistic items are reasonably taken to be.

3. *Simple Class Theory*. Ordinary properties are classes of particular properties (also called tropes or perfect particulars).

4. *Complex Conceptualism*. Ordinary properties are concepts qua concepts that define classes of particular properties.

5. *Complex Nominalism*. Ordinary properties are descriptions or linguistic rules qua descriptions or rules that define classes of particular properties.

6. *Conceptual Nominalism*. Ordinary properties are concepts that are expressed or expressible by descriptions or other linguistic items.

7. *Complex Conceptual Nominalism*. Ordinary properties are concepts that are expressed or expressible by descriptions or other linguistic items that define classes of particular properties.

8. *In Re Realism*. Ordinary properties are universals in re. Two main sub-types are: *neo*-Platonic ideal universals in re, in which ordinary individuals participate to various degrees; and non-

ideal universals in re, which ordinary things instantiate and/or the bare particulars in them exemplify. I say "neo-Platonic" because Plato's own forms are particulars, and also because they are ante rem. More on that in theory (9).

9. *Ante Rem Realism*. Ordinary properties are universals ante rem. Two main sub-types are: neo-Platonic ideal universals ante rem, in which ordinary things can participate to various degrees; and non-ideal universals ante rem, which ordinary things can instantiate and/or the bare particulars in them can exemplify.

Some hold that Plato's forms are ideal *universals* ante rem, while others hold that they are ideal *particulars* ante rem. On metaphysical ecumenicism, this is a false rivalry; both sorts of form are admitted as distinct only in reason. But in Plato scholarship, I agree with Francis Cornford that Plato's forms are particulars, yet function as universals in the meaning of common names, and also in the genus-species hierarchy (Cornford 1957: 9, 186, 259, 269).

10. *Metaphysical Ecumenicism*. Ordinary properties are all of the above entities (1)–(9), which are distinct only in reason, and which have a foundation in reality in the ordinary property in question, and more deeply and generally in the portion of reality that is ontologically occupied by the ordinary property.

As noted earlier, an individual is by definition one thing, i.e., a single thing. Thus all particulars are individuals, but not all individuals are particulars. Universals cannot be particulars, but they must be individuals, even if they are logically complex universals such as *red and round*. Even classes are individuals, though their memberships are not, if they have many members. Likewise for a heap of sand, or a merely enumerated set. For we must distinguish a class or set from its membership. It is the property-defined class or the merely enumerated set that has the unity of an individual, not its many members, if it has many members. We must also distinguish a heap of sand from its constituent grains of sand. See the section below on theories of groups, including classes and sets.

The terms "individual" and "object" are not synonymous. The term "object" is wider. For an object is anything that is not nothing. And that includes memberships that have many members, and the many grains of sand in a heap. But an individual is one thing, a single thing. Of course, we can say that a membership is one membership even if it has many members; but that is mere semantics. The term "individual" would lose its bite.

Taxonomy of Theories of Particulars

I list only some main theories of particulars. May others

add to the list. Again, a particular property is particular to the thing that has it, and is an instance of the universal of corresponding specificity, and of any more generic universals that are abstractions from that one. But bare particulars exemplify universals without being instances of them.

1. *Substance Theory* (Aristotle). It is commonly held that Aristotle's substances have eight essential features. (1) They are mind-independent. (2) They have essential forms or natures (and also have accidental properties). (3) They are logically ultimate subjects of predication. (4) Their existence is logically independent of the existence of everything else, including each other; they are those things which logically can exist even if nothing else exists. (Of course, they include their own parts and features.) (5) They are the primary objects of cognition; they are what we primarily grasp or understand in ordinary perception or thought, and everything else is abstracted from and understood in terms of them. (6) They persist or can persist (retain their identity) through changes. (7) They have unity or oneness. (This feature is transcategorial.) (8) They are bodies are composed of matter. Aristotle holds them to be compounds of form and matter. Features (1)–(8) are very close to our ordinary, pre-philosophical understanding of bodies in many ways. But I do not see a very long duration in time as essential even to our ordinary understanding. For many perfectly ordinary bodies can be destroyed just moments after they come into being. A coin can be formed in one moment and melted in the next. There need not even be a power or tendency to endure long. Some things are ephemeral, for example soap bubbles. But we can agree with Descartes that bodies logically require a minimal duration in time.

2. *Sense-Impressions* (Hume). Hume analyzes ordinary bodies as bundles of indefinitely many sensed and unsensed sense-impressions. The existence of unsensed sense-impressions shows that sense-impressions are logically mind-independent. In fact, Hume is a neutral monist who analyzes both bodies and minds as different sorts of bundles of sense-impressions (mind-bundles also contain ideas). This makes sense-impressions a domain prior to the domain of minds and bodies. For Hume, sense-impressions are real, ideas are less real, and bundles are in the nature of logical fictions. Hume denies that minds and bodies are substances underlying sense-impressions. He does not even find traditional substances intelligible. For he holds we can only have ideas that derive from sense-impressions; and we have no sense-impression of either a body or a mind that underlies sense-impressions as a physical or a mental substratum. But sense-impressions may be said to be Hume's substance substitutes. For features (1)–(5) and (7) of Aristotle's substances apply to them. Only features (6) and (8) do not.

3. *Objects* (Frege). Frege holds that his notion of an object is strictly indefinable. But for him, an object is any public, objective, logically ultimate subject of predication. Thus his objects are a far wider category than Aristotle's substances. They include both concrete objects and abstract objects, and also classes. I omit Frege's other types of particulars, such as minds and mental ideas. These cannot be objects, since they are private and incommunicable, though Frege suggests that ideas can be 'taken as' objects. For more on Frege's objects, see my (2003, chs. 2–3; 2010; 2007; 1982; 1981; 1979).

4. *Sensibilia* (Russell). The 1914–18 Russell analyzes ordinary bodies and minds as 'temporal series of classes of sensed and unsensed sensibilia'. Except for Russell's admission of his own mind as a 'pin-point particular' (Russell 1985a / 1959: 120), this is neutral monism. Thus when Russell rejects his own mind in 1919, he becomes a neutral monist. A sensed sensibile is also called a sense-datum. Russell's sensibilia have exactly the same basic features of Aristotelian substance as do Hume's sense-impressions. I argue that Russell's sensibilia are particular properties and not bare particulars in my (2003: 159–60), thus agreeing with Urmson (1966: 17, 57), Sellars (1974: 60, 66), and Jager (1972: 76–77), and disagreeing with Bergmann (1964: 93).

6. *Bare Particulars* (Bergmann). Bare particulars are mere individuators. Bergmann's stock example is of two red, round phenomenal spots in a visual field. We assume that the spots have identical color, size, and shape, and that there is nothing else in or concerning the visual field that can indicate where or when the spots are. For Bergmann, the color, shape, and size are universals and thus literally identical in the spots. And yet they are two spots, not one. They differ only "solo numero," that is, in being two spots in number. Bergmann then asks what is the ontological (I would say metaphysical) ground of the numerical difference. This is based on the thesis that there must be something in the world that is different if a statement is true, from how the world would be if the statement were false. (This follows from the correspondence theory of truth.) Thus there must be something in the world that is different if "There are two spots" is true, from how the world would be if, say, there were only one spot. One might elegantly conclude that what is different is that there would simply be two spots, not one. That would certainly satisfy the correspondence theory of truth. But Bergmann is concerned to identify what is the "ground" of the numerical difference; and his answer is that though the two spots have exactly the same universal qualities, they logically contain different bare particulars that exemplify those properties.

Thus Bergmann faces at least two rival accounts. The

ground of the numerical difference could be the spots themselves, as Douglas C. Long holds. Or different particular properties in each spot could instantiate the universals, as I think the 1914–18 Russell holds. (Again, Bergmann 1964: 93 holds that the 1914–18 Russell admits bare particulars, not particular properties. And I argue that this is quite mistaken in my 2003: 159–60.) On metaphysical ecumenicism, I admit all three 'rival' entities, and find the spot they variously parse to be its own ground of individuality. (More deeply, the ground is the portion of reality the spot occupies and is distinct only in reason from.) Long wins in that his theory correctly finds the spot its own ground of individuality. But Long is wrong to reject perfect particulars and bare particulars as rivals. For they exist as progressively more abstract parsings of the spot, logically contained in the spot. In fact, the spot is their foundation in reality.

7. *Objects (sensible particular properties)* (Butchvarov). Butchvarov's objects can be singled out only once. Thus their identity is phenomenologically understood and phenomenologically given. They are private and therefore incommunicable. They are nonrecurrent. The slightest phenomenological change implies that a different object is being singled out. Insofar as to be real is to be identifiable, i.e., logically capable of being singled out indefinitely many times in some lawful or regular manner, objects are not real, but are logically prior to the domain of entities. But even though objects are not real in that correlative sense, they are mind-independent, since they logically need not be singled out.

If we can single out and refer to an object only once, how can we even *say* "There are objects that are not singled out?" Butchvarov says we can say that using Lejewski's ontologically noncommittal, merely veridical quantifiers. Butchvarov's objects seem to have the same features of Aristotle's substances as do Hume's sense-impressions and Russell's sensibilia.

8. *Particulars as bundles of properties*. This theory might be out of historical order, since it is not clear who was the first to hold it. Assuming the principle of the identity of indiscernibles, the idea is that particulars can only be identified and individuated (differentiated from each other) in virtue of their being unique bundles of properties. This theory has at least three logically possible versions. For properties logically can be taken to be particular properties, universals in re, or universals ante rem. Metaphysical ecumenicism admits all three.

9. *Mixed theories* (e.g. the 1940 Russell). At least as I interpret him, the 1940 Russell holds that *sensible qualities* are particular properties, and that *abstract properties* are universals (my 2003: 161–62). In metaphysical ecumenicism, *both* sensible qualities and abstract properties are *both* particular properties and universals—and are both in re and ante rem universals to boot.

10. *Qualified Objects and Objects in Themselves* (my theory). Objects are anything that is not nothing. Qualified objects are objects that are ways things logically can be presented. Objects in themselves are objects that are not qualified objects. All objects are logically mind-independent, though only objects in themselves are totally mind-independent.

Objects in themselves include Aristotle's substances, if there are any. But my category of objects in themselves is wider. It is even wider than Frege's category of objects, since it includes his functions, senses, minds, and ideas as well. Qualified objects include but are not limited to Aristotle's qualified substances. That is for two reasons. First, just as my category of objects in themselves is wider than Aristotle's category of substances, so too my category of qualified objects is wider than his category of qualified substances (see page 20). Second, Aristotle limits his qualifications to veridical qualifications. That is, the substance must both exist and have the quality in question. But my qualified objects can be veridical, illusory, or delusory. They are illusory if they "are" objects in themselves, but the objects in themselves do not have the properties they are perceived or thought of as having. And they are delusory if they "are" not objects in themselves at all. Qualified objects are uniquely able to preserve the virtues of and avoid the limitations of all the main earlier accounts (1)–(8). They ground informative identity and informative existence judgments, and they also ground the difference between veridical, illusory, and delusory judgments. See chapter 1 for their essential features and more.

10. *Metaphysical Ecumenicism* (my theory too). Ordinary particulars are all of the above entities in accounts (1)–(9), which are distinct only in reason (except as explained for qualified objects and objects in themselves), and which have a foundation in reality the ordinary particular in question, and more deeply and generally in the portion of reality that is ontologically occupied by the ordinary particular.

All the entities described in the two taxonomies just described are admitted on metaphysical ecumenicism, if and only if they are intelligible, logically possible, and statements about them are logically equivalent to the corresponding statements about the ordinary properties or particulars in question, that is, the ordinary statements that their metaphysical statements logically analyze.

Problem of the Unity of Complex Objects

How is it possible for things to hang together in a single complex thing? The problem is to explain the difference between things that are unified into a single thing and the same things that

are not unified. Bergmann has a very clear way of stating the problem for a mere phenomenal field: What is the difference in the world between the universals red and round coming together to form a red round phenomenal spot in my visual field, and their not forming that spot, but merely existing as universals? Or conversely, if we remove all the universals from a spot, what would remain (or not) that had been holding them all together into a spot? Note that complex objects in the wide sense include all facts.

The problem of (F. H.) Bradley's Regress is a limited version of the problem of unity of complex objects, since it concerns only relations. How are relations related to their relata (the things they relate)? If relation R2 is the relation that relates relation R1 (say being larger than) and two apples, then is not a third relation R3 need to relate R1, R2, and the two apples? And would this not lead to a vicious infinite regress of relations of relations (Bradley 1969 / 1893: 18)?

Plato raised or could have raised in turn a limited version of the problem of Bradley's Regress. What relates the *participation* of a thing in its form to the thing and its form? Is it not a second-level participation P2 that relates an apple, its participation P1 in the form of an apple, and that form? This problem or one like it led the later Plato to abandon his own middle period theory of forms. In fact, if participations *are* relations, then this *is* a limited version of Bradley's Regress. Also do not participations participate in the form of participation? That seems to start a second, related regress.

Here is a list of proposed solutions in historical order. I have already discussed much of this in chapter 1.

1. Plato abandons his theory of forms. This option is not open to us on metaphysical ecumenicism, due to the containment and dependence arguments for forms and participations.

2. Bradley solves his regress by making relations unreal (Bradley 1968 / 1893: 18; see chs. 1–3 generally). This leads him to hold monism, i.e., hold that only the world as a whole is real. This option is not open to us either, and for the same reason. For us, relations in themselves are totally real. Even qualified relations are almost totally real, since they are not nothing and are mind-independent.

3. Frege argues that his functions are metaphysically "unsaturated" or "incomplete" (Frege's metaphors), and can be completed either by objects or by higher-level functions, the latter being his quantifier-functions. Thus the function 'x is an apple' maps the truth-value truth onto an apple, and maps falsehood onto a bird. And the statement "There exists an x such that x is an apple" is true if and only if at least one apple exists. Frege's express reason lies in his conceiving of function-names as what remains when, say, the object-name "a" is removed from the statement "a is

red," and is replaced by the variable x. Then when we put the object-name "a" back in, this completes the function-name into a statement. Even though Frege does not admit facts the way Wittgenstein and Russell do, I charitably assume that Frege's deeper implicit reason is to solve the problem of the unity of complex objects. For us, the red apple, the fact that the apple is red, and the state of affairs of the apple's being red, are all complex unities, and are distinct only in reason from each other, with a foundation in reality in the red apple and in its portion of reality. But while Frege would not admit the fact or the state of affairs as entities, he does admit the red apple as one of his concrete objects.

On metaphysical ecumenicism, we admit both Fregean incomplete functions, and the complete functions that everyone else admits if they admit functions at all, as different but distinct only in reason. The distinction is so slight that the only difference is that instead of forming function-names by *subtracting* names from statements the way Frege does, today we simply *add* function-names to other names to form statements.

Frege's theory that functions are incomplete seems very obviously not required by his context principle of meaning, which is that every expression has meaning only in the context of a sentence. For the context principle logically applies to complete function-names just as much as it does to incomplete function-names. The completeness or incompleteness of a function-name has nothing to do with it. All names logically must be capable of being *used in statements*, and that is all there is to the context principle.

This leads us to a further distinction between saturational variables, which are logical constituents of incomplete function-names, and merely pronominal variables, which are used with complete function-names without being considered or regarded as logical constituents of them. These two kinds of variable are modally distinct. For all saturational variables are pronominal, but not all pronominal variables are saturational. Thus pronominal variables are prior, and saturational variables are posterior. For merely pronominal variables are merely logical, while saturational variables add Frege's metaphysical saturation theory onto them.

The point can be made as two ways to form a language L. On the first or Fregean way, we introduce into the vocabulary object-names and whole statements, and introduce into the rules for forming new names a rule that says we can form a function-name by subtracting a logical constituent name from a statement and replacing it with a variable. This is not what Frege actually does; he just admits some primitive function-names that have embedded variable-places; but it comports with his views more strictly than what he actually does. On the second, more usual and more modern (if not also older) way, we introduce into the vocabulary of L

object-names, function-names, variable expressions, and rules for forming statements. The result is two languages L1 and L2 that are identical except for whether variables are logically embedded in function-names. Thus L1 and L2 are distinct only in reason.

If we reject Frege's saturation theory, then Frege *can* use the definite description "the concept *horse*" to speak directly about the concept (property) *horse*, contra Frege (1970e / 1892: 46), and not just representationally via its course-of-values (*Grundgesetze* vol. 1, §§ 3, 10–11, 35). I admit courses-of-values as entities in any case: they are a logical parsing of functions, unsaturated or not.

If we already admit pronominal variables into our notation, then why admit saturational variables at all? Their ostensible function is to solve the problem of the unity of complexes by stopping a Bradleyan vicious infinite regress of functions that relate functions to their relata (which Frege calls arguments and values), on pain of nothing's otherwise ever being related to anything. But we need not admit them to solve the problem, since there is a simpler way described as solution (4) just below. The answer is that we must admit saturational values because they are distinct only in reason from pronominal values, and also because Frege's solution is distinct only in reason from Russell's. For they are logically equivalent solutions. Thus the containment and dependence arguments require accepting Frege's solution if and only if we accept Russell's.

4. Russell admits a distinction between a "relating relation" and "a relation in itself" (Russell (1964 / 1903: 49, 100). I suppose we could identify relating relations with Fregean incomplete relations, and even ground their relating in their incompleteness. And we could identify a relation in itself with a complete relation, and likewise ground its being in itself in its being complete. But on the face of it, Russell's idea is quite different. It is the difference between actively relating relations and merely existing relations. This is not the same as the difference between the 1912 Russell's world of actual existents and world of timeless being. For even universals in the world of timeless being stand in actively relating relations to each other, so as to form timeless *a priori* facts. That is precisely how the 1912 Russell grounds all *a priori* truth. And complete relations can actively relate things as well as Frege's incomplete relations can. And there is no more difference between a relating relation and an actively relating relation than there is between a horse and a genuine horse.

Relations as such are modally distinct from and logically prior to relating relations. For a relation must be there before it can do any relating. Relating relations merely add relating to being a relation as such. For example, if two things are the same size, then neither the in re nor the ante rem relation *larger than* relates them.

5. The early Wittgenstein says, "In a state of affairs objects fit into one another like the links of a chain" (Wittgenstein: T 2.03). And for Wittgenstein, this is part of the world's form, which is unalterable and logically necessary (Wittgenstein: T 2.027–2.0271). Thus there is no need for a 'metaphysical glue' to hold objects together. So to speak, they have no choice but to hang together the way they do. This argument can be applied to facts, states of affairs, and situations alike; see pages 386–387 on that distinction. The argument is simple, elegant, and eliminationist.

6. The later Wittgenstein would undoubtedly view the whole problem of the unity of complexes as a 'bewitchment of grammar'. But many have sufficiently explained why metaphysics is alive and well. And on metaphysical ecumenicism, we can admit language-games, and add that the metaphysical language-game is played. And a metaphysical language-game is distinct only in reason from a metaphysical theory, with a foundation in reality in the theory. We might say that Wittgenstein is bewitched by his own limited picture of philosophy as 'ordinary language on holiday'.

7. Bergmann admits an entity he calls a 'nexūs' to do the work of actively relating things into a complex unity. In Latin, "nexūs" means 'binding together'. Bergmann says:

> Qualities... need nexūs to connect or tie them into ordinary things. A nexūs does not need a further entity to tie it to what it ties, otherwise we would have entered upon an infinite regress. That is Bradley's famous argument, which I take to be familiar. (Bergmann 1967: 9, my Latin plural)

Butchvarov agrees that "The notion of a cluster of qualities... must be [distinguished] from the notion of a mere collection or set of qualities" (Butchvarov 1979: 182). He then says, "Clusters of universal qualities would be quite different from clusters of particular qualities" (Butchvarov 1979: 182). And if these two kinds of clusters are held together by nexūs; their nexūs are quite different too. But though their nexūs are quite different, they are distinct only in reason. For universals and particular properties are themselves distinct only in reason. We can even give containment and dependence arguments to show all these things.

Likewise, the nexūs that hold together facts and the nexūs that hold together the corresponding states of affairs and situations are different but distinct only in reason. For they bind the same things together in different ways into different complex objects that are distinct only in reason. For example, the fact that the apple is red is distinct only in reason from the state of affairs of the apple's being red. And by logical parsing, there exists a generic kind of

nexūs of which all three more specific kinds of nexūs are species.

Bergmann says that Nelson Goodman has three nexūs (Bergmann 1967: 17–19). Butchvarov notes that Bergmann has at least two (Butchvarov 1979: 214). It seems that besides several intermediate generic kinds of nexūs, there is also a single ultimate category, nexūs. It seems that this ultimate nexūs is a determinable which logically can have indefinitely many determinates. Look at all the different kinds of nexūs we would need to bind together different pairs of Aristotle's ten categories! On the containment and dependence arguments, we must admit all of these nexūs as valid parsings of all categorially complex unities. Not only that, but there will also be particular property nexūs, universal in re nexūs, universal ante rem nexūs, Platonic nexūs forms, and so on. In metaphysical ecumenicism, the fun never ends!

9. Butchvarov rejects facts. But his objects hang together in clusters (Butchvarov 1979: 157, 158, 172, 181–182, 184, 207, 210–212, 216–236, 239–240) basically as Wittgenstein's objects hang together in states of affairs. Indeed, waiving Butchvarov's view that his objects do not exist, his clusters *are* a kind of states of affairs. And for us, states of affairs are distinct only in reason from facts.

Butchvarov says all the earlier solutions (1)–(8) (Frege, Russell, Wittgenstein, Bergmann, Goodman) are really the same at bottom and really explain nothing (Butchvarov 1979: 212–215). He is right that the *problem* is always the same; it is the problem of the unity of complexes. But he overlooks that the *solutions* are different but distinct only in reason, and that therefore all the entities they involve are not nothing.

Ultimately, the unity of complexes may be simple and indefinable. Indeed, that is exactly what we would expect at the categorial level of nexūs, or of incompleteness, or of relating relations; and indeed of any other category. Certainly a category is a summum genus, so there will be no definition by genus and difference in any case. And the admission of simple, indefinable notions "may in a sense be irrefutable" (Kripke 1982: 51).

Butchvarov offers his 'hanging together' solution in more detail, using his theory of objects that can be singled out only once and entities that we ordinarily consider real but are the mere results of classifications of objects into entities:

> There is nothing about the color white as such that requires it to be the color of this page and thus to be together with the shape rectangularity as such....
>
> But the qualities of individual things are not mere entities. They are also objects.... The togetherness of the qualities of an individual thing considered as entities is indeed contingent, and in

> need not of a philosophical but of a causal account. However, their togetherness as objects is necessary, in the very strong sense that each is the object it is only because the others are the objects they are, that the formal identity of each is a function of the formal identities of the others. Such a togetherness requires neither a causal account nor a philosophical account in terms of additional constituents, but philosophical understanding. It is like the togetherness of the numbers 9 and 2 and the relation of being-greater-than..., and unlike it only in that it is a togetherness of objects qua objects, while the latter is also a togetherness of objects qua entities. But it is entirely unlike the togetherness of the parts of a clock or of the bricks in a wall. Individual things are not clusters of quality-entities, i.e., universals, as such; they are clusters of quality-objects, even though these are also entities. (Butchvarov 1979: 218–219)

This is a new kind of formal identity. Butchvarov continues:

> A quality-entity, i.e., a universal,... need not be together with the other qualities of the individual thing. But a quality-object must. It is the object it is only because it is in the individual thing in which it is. [T]his individual thing... is a cluster of quality-*objects* and the object is a constituent of that cluster. Nothing holds, or is needed for holding, the constituents of the cluster together, for it is essential to each that it be together with the others in the same cluster....
>
> [Qua objects,] the color is logically inseparable from the shape, even if one could be singled out when the other is not. For to say that one object is logically inseparable from another, that the formal identity of the one depends on the formal identity of the other, is not to say that to single out the one we must single out the other, that to notice the one also requires that we notice the other, although this is often the case. It is to say that we could not single out or notice both and yet understand what it would be for them not to be together. In Fregean terminology, though not meaning, each is an unsaturated thing in itself and is saturated by the other. In Wittgenstein's Tractar-

> ian terminology, the two hang one in another like the links of a chain, with no intermediary needed or possible. But, contrary [sic] to both Frege and Wittgenstein, they hang together necessarily. (Butchvarov 1979: 219–220, his emphasis)

We may say Butchvarov bases his solution on the formal identities of objects qua objects' being distinct only in reason in a cluster. But surely it is more deeply based on the thisness or haecceity of his objects, as opposed to the non-thisness or non-haecceity of his entities. For *this* white can only be the white that fills out *this* rectangle, and *this* rectangle can only be the rectangle that *this* white fills out. Take away either thisness, and the other thisness is gone. Also, I cannot understand why Butchvarov thinks that Wittgenstein's objects do not "hang together necessarily." I thought that was Wittgenstein's whole idea, as expressed by his simile that his objects hang together 'like links in a chain'. Likewise for Frege, at least for objects' saturating their own essential properties.

Due to metaphysical ecumenicism, I accept Butchvarov's theory of the unity of quality-object complexes. But while he is right in what he affirms, he is wrong to reject the other theories. For they are distinct only in reason from his. He does not see this because he starts from the wrong end of the phenomenological telescope. He starts from a parsing of the ordinary given, and not from the ordinary given that he parses. This is the same old story of British empiricism versus Continental phenomenology that I told in chapter 1, and with very radical parsings (a compliment) at that. At least Bergmann starts with an ordinary phenomenal visual spot!

What is given *can* be Butchvarov's objects, but almost never is. What is given is almost always ordinary things, and among these, almost always ordinary individuals. Just as Russell's painter must *learn* to see sense-data as such, so Butchvarov's painter must learn to single out Butchvarov's objects as such—and can never single out the same one again. This is a radical school of nonrecurrent Impressionist paintings indeed! But Russell's painter paints series of nonrecurrent sense-datum paintings as well.

10. In chapter 1, I analyzed ordinary objects of perception or thought as qualified objects having twenty-one essential features. The feature of importance here is that all qualified objects logically can be directly given. That is, they all have direct thisness or haecceity. And objects in themselves all have indirect thisness or haecceity. We are directly given this white, this rectangular shape, and indeed this white rectangular phenomenal spot, all of which "are" objects in themselves that we are indirectly given. The qualified phenomenal spot, e.g., the spot I saw last night, "is" the phenomenal spot in itself. Butchvarov parses it so radically that I

cannot even remember it! But even that is a valid parsing at least of the qualified spot, since his objects do exist in the sense of not being nothing and in the sense of being mind-independent, though evidently not in the sense of being totally mind-independent.

The ordinary statement "I see this phenomenal white rectangle" can be validly parsed in Frege's way, Russell's way, Wittgenstein's way, Bergmann's way, Butchvarov's way, my way, and doubtless in indefinitely many other ways. On the containment and dependence arguments, all the parsings exist if and only if they are intelligible, logically possible, and their statements are logically equivalent to the ordinary statement in question. This includes Bergmann's nexūs as parsings, and any other nexūs, including one for particular qualities as such, and others for particular properties qua instances of universals in rem, qua instances of universals ante rem, and qua members of classes. Ockham's razor is overruled. For all of these entities validly carve up the propositional content of the ordinary statement. In one sense, the phenomenal spot itself is the foundation in reality of all the entities. More deeply, the portion of reality that the spot occupies is the foundation. In a third sense, my objects are the foundation in reality. For as Aristotle says, the most general true description is the one that explains; and my theory of objects is the most general theory. For it includes all the other theories, both via metaphysical ecumenicism and directly. It does reject nonexistents and impossibilia as such. But it admits even these as objective realities qua objective realities.

Just as for the 1914–1918 Russell the space-time world is full of infinitely many sensed and unsensed sensibilia, almost all of them unsensed, so for Butchvarov the ordinary space-time world is full of infinitely many phenomenal objects and indeed phenomenal clusters, almost all of them not singled out. My qualified objects exist in every possible world, almost all of them not presented in the actual world. I want to say that surely Russell's sensibilia and Butchvarov's objects qua objects are in similar case. But if they existed in all possible worlds, they would be logically necessary.

My theory of objects follows in the footsteps of the early Wittgenstein and of Butchvarov. Qualified objects 'hang together' in qualified facts and qualified states of affairs 'like the links of a chain' with no need of a 'metaphysical glue' or nexūs to tie or bind them together. They hang together because each is what it is in virtue of what the others are. *And that is simply because they are different parsings of the same complex qualified object*. When one is singled out, the other or others are precisely what is disregarded, just as when a pie is sliced into pieces and one is removed from the pan, the other slice or slices are precisely those that remain in the pan. How can such pieces fail to fit together when they are all still together in the pan, completing each other into the whole pie?

What about the logically contingent relations Russell calls external? If "Apple a is larger than apple b" expresses a true proposition, then it describes a fact in itself. And that fact in itself can be parsed as two apples in themselves plus a relation in itself, even if the relation is logically contingent. We cannot *see* this relation in itself indirectly via the qualified relation the way we can see the apples in themselves indirectly via the qualified apples. But we can grasp the relation in itself *in thought* indirectly via directly grasping the qualified relation in thought. And if the statement is true, the relation exists; it cannot be nothing.

Butchvarov denies the existence of relations. This includes not only nexūs, but all relations. And he is right that we cannot single out relations as *his* objects, or indeed as particulars at all (Butchvarov 1979: 241). But that is only because all his objects are, for all intents and purposes, particulars. But my objects are objects of perception *or thought,* and thus their scope is far greater. Qualified relations are objects of *thought*. On the face of it, we can *think of* the relation of being-larger-than and reason about it, even if it is not, and we cannot perceive it as, a third particular object on the table, in addition to the large apple and the small apple. This also explains why we cannot assign locations to relations in themselves (Butchvarov 1979: 241). For except for particular relations (polyadic particular properties) in themselves, they are not particulars. And even the particular in itself *larger than* is located neither in the large apple nor the small nor in both, certainly not as a third particular particular, if I may be allowed such an expression. For there are only two particular particulars, the apples. Abstract (noncausal) objects in themselves are not in space or time, except for particular abstract objects like the axis of the earth (Frege 1974 / 1884: 35). That said, if the two apples are on the table, we may say the particular relation *larger than* between them is on the table too, much as when my body is in a certain room, so is my mind.

I cannot discuss all of Butchvarov (1979: Appendix A)'s arguments against relations here. For me, relations are logical parsings in containment and dependence arguments. Thus they cannot be nothing. And we ordinarily think of them all the time.

Butchvarov is right that among his *entities*, nine and two essentially hang together, and nine is essentially greater than two, while this apple and the color red do not essentially hang together, and this apple is not essentially or necessarily red. And that is just common sense. But there is a deeper level, or sense, in which this apple and the color red do essentially hang together. And that is the level of *logical capacity* to hang together as this red apple, i.e., categorial compatibility. And the *fact* that this apple is red, though contingent, is just as essentially related to this apple and the color red as nine is to two. And I suggest that this is the level of Frege's

incompleteness, Russell's relating relation, Wittgenstein's logically contingent proposition nonetheless composed of objects that hang together like links in a chain, and Bergmann's nexūs. For surely all of those accounts apply to all propositions, logically contingent or not. They would be rather sorry accounts if they did not! If so, then Butchvarov's notion of hanging together is on a very different level from theirs, and is far more limited in scope. It is limited to clusters of his own objects and to other logically necessary relations among things, such as numbers. But perhaps that limitation, though it exists, is not as great as it appears.

It may come as a surprise to interpreters of Butchvarov, but Butchvarov says, "Even the particles the physicist tells us about would be clusters of qualities" (Butchvarov 1979: 236). And most philosophers would say that such particles can have no *phenomenal* qualities. For they are unobservable by us for theoretical reasons of physics. Of course, physical particles can be cashed out in terms of their *links* to phenomena. The 1914–1919 Russell analyzes physical particles as logical fictions that are nothing but series of sensed and unsensed sensibilia. Surely Hume would analyze them as bundles of sense-impressions. And for everyone, physics is an empirical science, and all its terms must have meanings that are somehow related to experience. But it is not clear to me that Butchvarov analyzes physical particles as Russell or Hume would, even though his entities are nothing more than classifications of objects. For he does not expressly say what he *means* by a quality that is a quality of a theoretical particle, and he gives no example. The sentence I quoted is all he says! And we do ordinarily speak of the physical qualities of a metal ball, and of the moral qualities of a soul. Thus it is possible he would say that physical particle-entities are clusters of *physical* quality-entities, which indefinitely many clusters of physical quality-*objects* are, where the quality-objects are not phenomenal, but physical, or perhaps intellectual. For he does not define "object" as anything we can single out *phenomenally*. He defines "object" as anything we can single out or refer to, *period*. He does not limit singlings out to phenomenal singlings out.

—Or does he?

This may come as even more of a surprise, but Butchvarov has a radically wide notion of phenomena, and he admits objects of pure thought as well. He says, "By *phenomenal* individual things and qualities I mean those that can be objects of *consciousness*, whether of perception, or of imagination, *or of pure thought*" (Butchvarov 1979: 237, my emphasis). Thus if I single out an electron-object in thought (to be sure, I can only do that once), then it would seem that I single out, as an object of consciousness, a Butchvarovian object which is phenomenal in *his* sense, even though I cannot *see* it because it is not a visual (sensible) object.

I may be the first interpreter of Butchvarov to distinguish between his *phenomenal* objects and his *sensible* objects. All his sensible objects are phenomenal, but not all his phenomenal objects are sensible. Of course, all his objects are phenomenal in his wide sense that I just quoted. Object-numbers and object-classes ought to be phenomenal in this wide sense too, if not also object-relations.

At any rate that is the best sense I can make of Butchvarov's just-quoted remarks. He does not expressly say what he means by a quality in a quality-cluster of objects of *pure consciousness*, unless *all* his objects are pure, including sensible objects, in the Moorean sense that consciousness itself is pure; and he gives no example. (Butchvarov denies conscious selves, but I just quoted him as admitting consciousness and even pure thought.) Thus it seems to me that his singlings out of the number nine as the number of planets, as the number of apples on the table, and as the sum of seven and two, can only be singlings out of objects of pure consciousness for him. Not only that, but he can even say that being an odd number is a phenomenal quality in his wide sense!

It would very odd to say properties of physical particles or of numbers are 'phenomenal qualities'. But it is very fair to say that of Butchvarov's objects, since they are phenomenal in the wide sense of being objects of consciousness. But his physical particle-entities and number-entities, if any, are not even objects at all.

I suggest that we can say four things that help clarify what Butchvarov means by a quality. First, he means a property. For he says, "The term 'quality' is an obvious traditional substitute [for the term 'property'] (Butchvarov 1979: 147). Second, not every open sentence (sentence with at least one constant replaced by a variable) refers to a property (Butchvarov 1979: 64–65, 156–157). For a property is *what* is "predicated," and not the "predication" itself (Butchvarov 1979: 156). Third, a property is a "respect, of whatever sort, in which two things may differ" (Butchvarov 1979: 64). To give my own example, the open sentence, or predication, "x is either red or not," is empty and tautologous, and therefore cannot refer to a property, since two things cannot differ in whether they have it. And fourth, "an object may be conceived or imagined or thought of only as having positive properties" (Butchvarov 1979: 102). And there lies a criticism of Butchvarov. For on his fourth claim, we cannot even *think in pure thought* of a privation-object or other absence-object. Yet we can and must think of them as *essentially* having negative properties. And we think of them all the time. Thus they are a counterexample to Butchvarov's fourth claim.

These are only four suggestions of mine to help clarify what Butchvarov means by a quality. All four are directly based on what he says. But his wide notion of phenomena seems wider.

Butchvarov does not say whether his *entities* can have

negative properties. But if he holds that their properties, too, can only be positive, then he is in deep disagreement with Aristotle and many others. For Aristotle admits essentially negative things, such as privations or other absences, due to his pros hen and relation arguments for his own sort of multi-categorial ecumenicism.

Butchvarov rejects Russell's negative facts. But then he rejects all facts. It is fundamental to Butchvarov's ontology that he admits nonexistent objects. And their non-existence is not a negative property they have. For at least on his account, his domain of objects is simply prior to his domain of entities. Thus for him, the question of the existence or non-existence of objects qua objects logically cannot arise. Note that existence is transcategorial for him, and is therefore not a quality or property that even entities can have. But surely we can think about existence! Thus it looks like an object of pure consciousness to me, and phenomenal in his wide sense. Are not such existence-objects an entity-property?

These matters are of great interest for the interpretation of Butchvarov. But for our purposes, they are mere details, and the main thing is that his objects and entities are to be admitted as valid parsings due to our containment and dependence arguments.

In my own theory of objects, objects in themselves need no glue to hang together *in a fact in itself*, whether that fact is logically contingent or not. For they are distinct only in reason from that fact in itself. They logically fit together in the fact simply because they are complementary logical parsings of it, logical constituents of it.

Frege's, Russell's, Wittgenstein's, and Bergmann's ways of grounding the unity of a complex thing are just different ways of slicing the same propositional pie. Thus they are all logically equivalent logical analyses. Thus they all belong to metaphysical ecumenicism.

On metaphysical ecumenicism, solutions (1)–10) of the problem of the unity of complexes are all distinct only in reason from each other, in virtue of their very logical equivalence to each other, via their all being logically equivalent to the corresponding ordinary statements that this thing has this property or stands in that relation. Again, logical equivalence is a transitive relation. If A is logically equivalent to B and B is logically equivalent to C, then A is logically equivalent to C. And on the containment and dependence arguments, all logical equivalences are *mutual* logical containment and logical dependence relations.

One would think that Butchvarov's entities, which are mere conceptual classifications that have no kernel of reality of their own beyond the objects they classify together as being the same entity, would be especially congenial to metaphysical ecumenicism. For such mere classifications cannot conflict, but can only overlap. But for the very same reason that they cannot really conflict, they

cannot really overlap either. For Butchvarov's entities are merely analogous to real things, i.e., to objects in themselves, at best. Thus they are not really there *either* to conflict *or* to overlap. But we still can and must admit them as a kind of conceptualism. For we can and must admit conceptualism as having a limited kind of validity.

So to speak, as a nexūs would understand itself, that is, on the level of Bergmann's understanding, it is needed to tie things together. But on the deeper level of metaphysical ecumenicism, it is not needed. For distinctions in reason in themselves need no nexūs or other ties. For they are merely different logical parsings of the same thing in the first place. And that includes all solutions (1)–10) of the problem of the metaphysical unity of complex objects.

Causal Unity of Complex Physical Objects

We move now to a very different topic. How much internal *causal* unity is needed for physical objects to hang together as parts of a single *physical* object? And again, Quine finds an unresolvable problem of vague boundaries for any medium-sized object at the molecular level (Quine 1981: 34, 100–101). Thus there seems no determinate degree of causal unity below which physical objects are not strongly united enough to count as parts of a single physical object, and above which they are strongly united enough to count as parts of a whole physical object. In what follows, I shall use ordinary language terms like "cause," "strong," and "force." I hope to justify admitting those uses into metaphysics later in the chapter.

Let us begin with a brief mention of Aristotle's theory of four kinds of cause. These are formal cause, material cause, final (teleological) cause, and efficient (inanimate) cause. Briefly, an ordinary physical object would be expected to have its own form, such as the form of a horse or a stone. Its parts could have their own forms and be composed of different kinds of matter, such as the bones and heart of a horse, going in stages all the way down to pure formless matter. Final cause, or mature future form of a thing, would be expected to apply to life forms and to designed artifacts. These two kinds of final cause can blend in the design of new life forms, as in genetic editing using CRISPR. The parts of a life form, such as the bones and heart, can also be understood as having their own teleological functions that contribute to the growth and life of the life form as a whole. In fact, that is the only way they *can* be understood per Hegel (2015 / 1830: 194). And there is no doubt that there are *qualified* causes of all four of Aristotle's kinds; they are certainly objects of our perception or thought. But for now we will be mainly interested in efficient cause.

Here we can quickly distinguish physics from chemistry,

and macro-objects from micro-objects. Here artificial unities can be stronger than natural ones. If we build a model airplane out of balsa wood and superglue, and smash it with a hammer, the wood will break up more easily than the superglue. Broad says:

> [A] chair can be broken up by many means, including an axe. A molecule cannot be split up by mechanical means, but it can be by heat or chemical reagents. The ordinary atoms are so stable that only heroic methods will break them up. I should say that, at the stages of molecules, atoms, and electrons, we come across genuine natural units each of which may fairly claim a high degree of substantiality. (Broad 1968 / 1923: 34)

That is the basic idea, but it was already out of date. Einstein developed general relativity theory from 1907 to 1915, years before Broad wrote. Quantum physics was being developed before he wrote as well. Those theories were very new at the time, and we cannot judge Broad for these omissions. But we can briefly add two more kinds of efficient cause to the list. General relativity gravity is not so much a causal attraction of bodies per se, but is more like gliding along a space-time curve. For not only bodies are involved in gravity, but space and time as well. And quantum laws are probability laws. The *probability laws* are physically deterministic and cannot be altered; but *physical objects* only have probabilities. These two new kinds of cause overlap with physical and chemical cause. In fact, the two new theories are intended to describe them more accurately, if not to replace them. That should be no surprise, since chemical cause is already based on and somehow emerges from physical cause. In fact, Hawking says:

> Since the structure of molecules and their reactions with each other underlie all chemistry and biology, quantum physics allows us in principle to predict nearly everything we see around us, within the limits set by the uncertainty principle. (Hawking 2017 / 1988: 63)

It might be objected that quanta are mind-dependent, or at least observation-dependent. But their observation-dependence is actually purely physical, since it comes down to photons hitting the physical object we see, thus physically changing the velocity of its surface particles "in a way that cannot be predicted" (Hawking 2017 / 1988: 56–57). And on general relativity theory, space, time, location, motion, and size are said to be relative to the observer.

But this is true only within frameworks of reference, and not in objective physical reality, which is both spaceless and timeless (my 2022: 6–9). Thus the laws of quantum theory and general relativity theory are purely physical, and can help unify physical objects into larger whole physical objects in a purely physical way.

More precisely, the current view of physical cause is this. There are four kinds of efficient cause of the physical unity of a thing. In order from strongest to weakest, they are the strong nuclear force, the weak nuclear force, electro-magnetic force, and gravity. Hawking gives an excellent overview of the four forces (Hawking 2017 / 1988: ch. 5; see pp. 70–75 in particular). "Today we believe that all forces are transmitted by fields..." (Hawking 2012 / 2010: 89).

Physicists hope to find a 'unified' theory which explains all four forces at once. They have not found it yet. And even if they do, it will be subject to the limits of the uncertainty principle, just like all scientific theories.

Since we are looking for the level where single physical wholes with parts end and groups of many physical objects begin, we will naturally be looking at the weakest unifying force, gravity. For example, is our solar system a single physical object? Or is the galaxy The Milky Way a single physical object?

My theory of objects gives a quick and easy "additive" answer. They are physical objects. For on the face of it, they have being in all three main senses (or four, if we count the Butlerian sense) of "being" in my ontology. They are not nothing. They are mind-independent. They are independent even of the logical possibility of minds. And they are what they are, and not another thing. Thus they are objects. And they are physical! Thus they are physical objects. And we found that whatever exists is an entity.

This answer may seem too quick and easy. Is any arbitrary group of physical objects a single physical object? For all the same things are true of any group of physical objects. It is not nothing. It is physical. And so on. Discussing this objection will occupy the rest of this section, and continue into the next. The quick reply is that there must also be some minimal degree of causal unity, which implies at least gravity. But this reply may be thought to be too quick and easy as well. At the least, there is Quine's problem of vague boundaries. Perhaps the best solution to Quine's problem is Aristotle's: it is a mark of lack of education to expect more precision that a subject-matter permits. But before coming to that last and probably best resort, we can give it the old college try. The discussion in this section will largely consist of borderline cases that might be better assayed not as entities, but as groups of related entities. I shall discuss the solar system, heaps of sand, and corporate entities such as business corporations and cities. From

there, readers can analogize to other cases. But first I shall briefly discuss Quine's own admission of "scattered objects" (Quine 1975 / 1960: 98–99), a sort of halfway house between things and groups.

The stock example of a scattered object is that the mass term "water" denotes all the scattered oceans, lakes, puddles, and other bodies of water in the universe as a single 'stuff'. Of course, water is an object in my wide sense, and even an object in itself. For water is not nothing, is mind-independent, and is totally mind-independent. And even arbitrary collections of physical objects are among my objects in themselves for the same reasons. But there is a big difference, at least in traditional theory. The difference between water and its scattered objects can be easily explained in terms of Aristotle's distinction between material cause and formal cause. For each lake and puddle has its own particular matter and its own particular form, which are different but distinct only in reason from the universals matter and form. (An Aristotelian form is not the same as a physical shape. Particular puddles each have their own particular form, and *also* their own particular shape.) Or more simply, lakes and puddles are unified by causal forces such as gravity and cohesion, but water as a scattered stuff is not.

In rejoinder, Quine is the one who says all objects exist, anything that exists is an entity, therefore all objects are entities! On that argument, the solar system, scattered objects, and (perhaps going beyond Quine) any random group of physical objects are entities. But this begs the question of *causal* unity of complex physical objects before us now.

It is very reasonable to hold that even on my wide theory of objects, a heap of sand *exists*, but is not an *entity*. It is not nothing. It is mind-independent. It is even totally mind-independent. And the world would be different if the heap were blown away, and its grains of sand were scattered and dispersed. A heap of sand consists of many sand grains that exist in the ordinary sense. Thus the containment and dependence arguments show that the heap *exists*. But taken by themselves, the arguments do not imply it is an *entity*. —Or do they?

It might be argued that the containment and dependence arguments do not imply that a heap of sand is an entity, but only that it exists, based on either the existence or the entityhood of its grains, because a heap is many, not one. For even mere random collections exist. They are not nothing, are mind-independent, and are totally mind-independent. Yet (so this argument goes) they are not entities because they are many, and any entity is one (*quodlibet ens est unum*). That seems to be pre-philosophical common sense.

Thus some may hold that a heap of sand exists, but is not an entity, simply because a heap is many, not one. But I hold that a heap of sand is an entity, since it is held together by the physical

causes of gravity and friction. It has a weak sort of causal unity that even the wind can blow away. But even that is a causal unity that is categorially beyond the unity of a random collection

A heap of sand has physical unity in the sense of Aristotelian efficient cause. In contrast, a complex idea, or several ideas held together by the mind as a complex idea in the mind's thinking, such as the idea of a unicorn or centaur, has unity in the sense of Aristotelian agent choice. If the mind stops holding the ideas together, then the complex idea ceases to exist in the mind. That is at least analogous to the concept of God's continuous causation of the world. Is mental unity is weaker than physical unity, since it is merely in the mind, and in a word, imaginary? —If God is the mental agent cause of the world, then is the world merely imaginary in God's imagination? Not according to classical theism! But as an agnostic, the serious question for me here is this. Does the mental unity of being held together in my thought go beyond the unity of any arbitrary set as such? One would think not, since the mental unity is only in my mind. But there is a difference in the world between my *thinking* of things as a group and the things' *being* members of a group as such. For they would be members of the group whether I was thinking of them or not. Thus a mental grouping might seem to be a very weak sort of entity after all—a mental entity. But this sort of mental unity or identity is the logical counterpart of mental distinction, which we rejected as false fiction in chapter 2. Thus we must reject it too. For there is a difference in the world, but it is only in whether I correctly think of the group as a group or not. The group remains the same either way. Thus if it is many, not one, when I do not think of it, it is many, not one, when I do think of it, even if I think of it as one group. We will find a certain parallel to this on the side of physical cause when we discuss Arnold Geulincx's counterexample to Hume's theory of physical cause.

The solar system consists of the sun, the planets and any lesser physical objects, such as asteroids, dust, or gases, that are held within the system by gravity. In classical physics, the region is almost all empty space. Thus the solar system is not held together by friction and gravity, but by gravity alone. For friction can exist only between bodies that are touching each other. But while heaps of sand are held together by both of those forces, they are far more ephemeral than the solar system. No wind can blow apart the solar system! Thus the issue of causal unity cannot be decided by mere "body count" of kinds of causal forces. And even though the solar system is far more spatially discontinuous than a heap of sand, it is also far more self-integrated and resistant to disintegration than any heap of sand could be. It has held together for billions of years, and will hold together for billions more. That is due to the sheer degree

of gravitational force.

On the face of it, it is better to count the solar system as an entity than not. And on what ground could we say that among the four physical unities, gravitational unity alone cannot hold things together into entities? —Spatial discontinuity? The atom has that too. I read once that if the nucleus were a basketball and the electrons were baseballs going around it, then if the nucleus were in New York City, the baseballs would be as far away as San Francisco. And yet an atom is held together as an entity by a force far more powerful than gravity: the weak nuclear force. Or perhaps the solar system is not an entity because of its spatial discontinuity *plus* the weakness of the force of gravity? This begins to sound like mere quibbling over details. Even if there are borderline cases of things that exist but might not be best judged to be entities, is something as causally stable as the solar system really a borderline case? Perhaps people who think so should open their minds on what counts as a physical entity. Even a cloud of gas is an entity! And recall Aristotle's remark that it is a mark of lack of education to expect more precision that a subject-matter permits.

What about hybrid causal unities, meaning complex objects held together by a blend of efficient causes and final causes?

In discussing corporations, we should recall that artificial unities, such as things held together by welding, nuts and bolts, or superglue, are often stronger than natural ones. For corporations are artifacts, meaning they are created by agent acts. That their founders (artificers) are often also among their *constituents* (presidents, proprietors) ("our people are our greatest asset") is just a logically contingent fact, not a logical necessity.

I discuss corporate entities at length in my (2007), so here I offer just a brief overview. As a general rule, corporate entities are in between heaps of sand and the solar system in their power to hold together. They are often more durable than a brick wall, which can be quickly smashed up by a demolition crew. They are not held together by an act of cognition, but by acts of agent causation, both legal (de jure corporations) and physical (de facto corporations). They are like the solar system and the atom in that their constituent employees, buildings, and equipment are discontinuous in space. The constituents of multinational corporations can be on different continents! Their constituents are also often discontinuous over time. Some corporations hold together for centuries, and *all* their constituents are replaced over time, while they themselves remain the same. Recall that corporations include not just businesses, but cities and nations. Augustus boasted that he "found Rome brick and left it marble," and we may agree that many of its buildings were replaced. We even talk of the disincorporation and reincorporation of corporations, for example the desanctifying and resanctifying of

a church, temple, or mosque (religious corporate entity). This is not literal death or rebirth; corporations are not literally minds or persons. But as agent artifacts held together by agent choices, they are bound to be different from merely physical unities in their criteria of identity and difference. And corporations are scarcely mere arbitrary sets of things. Even if the officers pick employees and physical assets by tossing a coin, that is still an agent choice. But creating and maintaining a corporation is not like creating a statue of Athena. The statue logically can continue to exist even if all agents or minds cease to exist. Not so for corporations. But there are corporations in themselves which qualified corporations "are." For there are minds in themselves to create them. Minds and corporations are in the totally real order! They merely cannot exist independently of themselves or their mental constituents (minds).

Corporations are held together by final cause. For agent cause is final cause. Like Topsy in Harriet Beecher Stowe's famous novel, some businesses and cities "just grow" without any specific or even very conscious planning. Others start with a single act of formal legal incorporation. But all are held together by the unifying actions of agents. Note that laws are themselves artifacts. There can be no laws, including corporation laws, if there are no minds that create them. This too is final cause.

Two more points about mentally caused entity unities.

First, mentally caused unity is a genus with two species. For there are two kinds of mental acts, cognitive and agent cause. Complex ideas are held together by the mere act of thinking them. But for a corporation or other hybrid or physical artifact to exist, it is not enough merely to think of it. Phidias had to think of the statue of Athena, but he also had to sculpt it.

Second, there can be much interplay and even ambiguity between spontaneous and controlled acts in artistic creativity. I saw a video of an aleatory jazz performance where the saxophonist painted a musical staff on the side of a goldfish bowl, and played the swimming goldfish as the note. Clearly, the music was an artifact. But was it designed or not? I would say it was deliberately nondeliberate, with two levels of agent action, or more precisely, two agents with different agendas: the goldfish swimming where it wished, and the saxophonist choosing to play it. And that is like tossing a coin to choose employees, where the coin stands in for the goldfish. The only difference is that the coin is lifeless and makes no choices, while the goldfish has a mind of its own. I lay no special stress on "agenda." Corporate officers often use an aleatory agenda called management by wandering around (MBWA). And it is surprising how much you can find out if you do that.

Metaphysical Unity of Complex Abstract Objects: Classes, Sets, Collections, and Mereological Wholes

This section is about the metaphysical unities of abstract particulars such as classes, sets, memberships, collections, and mereological wholes.

Here too the question is whether these objects are single entities or many, and more deeply whether they exist at all or are nothing. Whitehead and Russell say in *Principia*:

> In the case of descriptions, it was possible to prove that they are incomplete symbols. In the case of classes, we do not know of any equally definite proof, though arguments of more or less cogency can be elicited from the ancient problem of the One and the Many.*
> *Briefly, these arguments reduce to the following: If there is such an object as a class, it must be in some sense one object. Yet it is... of classes that many can be predicated. Hence, if we admit classes as objects, we must suppose that the same object can be both one and many, which seems impossible. (Whitehead 1950 / 1910: 72)

Surely the best solution is to distinguish a class from its members. The class can and must be one, even though its members can be many. But some may feel that this solution is too quick and easy.

There is no doubt that there are *qualified* classes, sets, memberships, collections, and mereological wholes. They are certainly objects of perception or thought. Even if the concept of, say, a class that is both one entity (or one existent) and many entities (or existents) is internally inconsistent, because nothing can be both one and many, we have already admitted the round square as a perfectly fine qualified object (chapter 1). But based on the containment and dependence arguments, we must ecumenically admit both classes as many and classes as one, just as Russell does in *Principles* (1964 / 1903: 68, 76, 103, 104, 106, 132 513, 523), but expressly as overlapping and distinct only in reason. But the deeper ecumenicism is that it is more insightful and illuminating to simply speak of *classes* as one and their *members* as (often) many.

It is very easy to distinguish classes from sets.

A class is a collection defined by a *property*. That is a definition by genus (collection) and difference (property). An object is a member of a class if and only if it has the property that defines the class. The objects that have the property are called the members or the extension of the class. Thus a class's membership

is defined by the class property. It is commonly accepted that a class can be empty, that is, have no members. There are infinitely many different empty classes, such as the class of unicorns and the class of round squares. They have the same membership, namely no members. But they are different classes, since the properties that define them are different. I can wrongly *believe* that the class of unicorns has members. But this is not just a matter of qualified properties. For the defining properties are properties in themselves. Thus they obviously have content and are not *mere* mapping functions. And that is just what we would naturally expect.

A set is a collection defined by *enumeration*. This too is a definition by genus (collection) and difference (enumeration). The objects that are enumerated are called the members or extension of the set. Thus there is and can be only *one* empty set. For there is and can be only one enumeration of no objects. But there can be *no* empty set in the sense that an enumeration that enumerates nothing is not an enumeration at all. This is clearly an ambiguity in the term "enumeration." And in general, logico-ontological ambiguities can be resolved by a distinction in reason. The old adage is, when faced by an apparent contradiction, draw a distinction. Here we can distinguish *positive* enumeration from *formal* (official / default / negative / logical courtesy) enumeration. Positive enumeration is by the positive integers. Formal enumeration is by the positive integers plus zero. Recall here that zero is a number just like any other, certainly for Frege and Russell.

Positive sets and formal sets are distinct only in reason. All positive sets are formal sets, but not all formal sets are positive sets. For there is one formal set, the null set, that is not a positive set, since it has zero members. The null formal set is the only empty set, since there is only one enumeration of zero members. Thus formal sets are logically prior to positive sets in that they are logically more general. For again, all positive sets are formal sets, but not all formal sets are positive sets. But positive sets are prior to formal sets in that their definition is simpler. For formal sets are enumerated by the positive integers *plus zero*.

Both kinds of sets are distinct only in reason from classes. For as is well known, any set logically can be disjunctively defined as a class. For example, the set enumerated as objects *a* and *b* can be defined as the class of objects identical to *a* or *b*. More precisely, since by definition sets are not classes, at least one class that has *the same members* as the set logically can be disjunctively defined for each set. This includes not only all positive sets and all formal sets with members, but also the formal null class for the formal null set. Certainly this is so if we assume the principle of the identity of indiscernibles. For then every object has at least one unique property which distinguishes it from all other objects. But

we need not assume that principle. For every object *a* has the unique property of being identical to *a*. Thus a class equivalent to a set logically can always be disjunctively defined using 'is identical to' properties. Such corresponding classes and sets may be called logically equivalent, or extensionally identical. But we will need to refine that last statement in a moment. Note that the formal null set is extensionally identical to all of the infinitely many null classes. Thus there are infinitely many ways to define a class that is equivalent to the formal null set, such as the class of round squares.

The extensional identity of logically equivalent classes and sets does not abolish the distinction between classes and sets, since that distinction is definitional. And like all logical equivalences except self-equivalences (P ≅ P), the distinction is in reason; and distinctions in reason are always between different objects.

In theory of qualified objects, we do have an *intensional enumeration* of the members in themselves of sets in themselves. For objects in themselves can only be grasped via qualified objects; and qualified objects, including qualified sets and members, are intensional. But this does not require that a qualified disjunctive property is involved, or even a qualified property at all. For as we saw in chapter 1, qualified objects can be either referential or attributive, and are primarily referential. For singling out is prior to conceptualization and classification.

Classes are more like formal sets than they are like positive sets, in that there are infinitely many empty classes, including the null class (which is defined by the property of having no members), and one empty formal set, called the null set (which is *enumerated* as having no members). For there is no empty *or* null positive set.

The terms "null" and "empty" could be used as synonyms. But it is more apt / correct / insightful / illuminating to distinguish many empty classes, only one of which is the null class. The class of unicorns is contingently empty. The class of round squares is necessarily empty. The class defined as having no members is the null class, and it is necessarily empty too. All empty classes are extensionally identical, but they are all intensionally different due to their different defining properties; and the null class is no exception to that, since it has its own defining property. In contrast, the only empty set is the null formal set. Like the null class, it is necessarily empty. For it is defined by an enumeration of zero members. Again, this zero enumeration is admitted as a default enumeration only in formal set theory. All empty classes and sets (there is only the one null formal set) exist in the sense of not being nothing, since they are all different from each other.

There is an ambiguity in the term "member" across classes, positive sets, and formal sets. For these three kinds of members are all defined differently. Class membership is defined by a property.

Positive set membership is defined by enumeration of at least one member. Formal set membership is defined by enumerating the members, where the number of members can be zero or any positive integer. But these differences are intensional; and classes, positive sets, and formal sets can be extensionally identical. I call what is extensionally identical across logically equivalent classes, positive sets, and formal sets their *mere* membership, extension, or collection. And this fourfold distinction between three intensional kinds of collections and mere collections is the refinement I spoke of a moment ago. Of course, classes can have contingently identical extensions, both class and mere. Quine's example is chordates (animals with a heart) and renates (animals with a liver).

Suppose I name three oranges Biff, Bob, and Sue. I put them on my table at time t. This gives us the class of oranges on my table at time t, the positive set Biff, Bob, and Sue, the formal set Biff, Bob, and Sue, and the mere collection Biff, Bob, and Sue. It might be thought that the positive set or at least the formal set is identical with the mere collection. But not so. For the terms "class," "positive set," "formal set," and "mere collection" are all defined differently. Thus they are intensionally different. Thus they belong to different categories that are distinct only in reason.

This fourfold categorial distinction is one that to my knowledge no one else has made. We have distinguished classes, positive sets, formal sets, and mere collections. And we have correspondingly distinguished class memberships, positive set memberships, and formal set memberships. For they are three intensionally different kinds of memberships or collections. But they logically can be extensionally identical. Therefore we also distinguished these three intensional kinds of collections from *mere* collections, which are defined as what any of the three kinds of intensional collections have in common if they are extensionally identical. Even though mere collections are intensionally defined (I just gave the definition again; the first time was two paragraphs ago), mere collections do not *have* memberships. They *are* ('core') memberships. And this is so in virtue of the very definition I gave.

The disjunctively defined *Biff-or-Bob-or-Sue* class, the corresponding two sets, and mere collection (if any) are distinct only in reason. For the mere collection (if any) is the membership of all three. That is the order of things in the ontological order. But in the order of cognition, the order is reversed. This is the same as for qualified objects and objects in themselves. The only difference is that classes in themselves are not qualified objects, but are intensional objects in themselves. Class intensionality is totally (in my technical sense) real! Why would it not be? How could it not be? For class theory is logically necessary if it is true at all. Unlike qualified classes, classes in themselves are necessary beings that

are logically independent even of the logical possibility of minds. And their defining properties in themselves can only be ante rem.

There is a progressive series of abstractions here. The concept of a positive set removes from classes the requirement that they be defined by a property. The concept of a formal set removes from positive sets the requirement that a set have at least one member (though it does that by adding a zero member set). And the concept of a mere collection removes from formal sets the requirement that they be enumerated. This series supports our view that mere collections are the sine qua non, the foundation in reality, of the rest. The series is also a series of logical containments and dependences. And that allows the containment and dependence arguments to apply. Here the arguments would start from ordinary talk of ordinary classes and sets, which exist in an ordinary sense.

Mere collections might be so understood that the number of their members can be zero. In that way, null classes and the null formal set can have mere collections, or more precisely the same mere collection. Or alternatively, we might say that null classes and the null formal set *have no* mere collection, since like positive sets, mere collections always have at least one member. We may call the first kind *formal* mere collections, and the second kind *positive* mere collections. This is a distinction in reason just like the distinction in reason between positive sets and formal sets. Or is it merely an extensional scope decision, i.e., a mere regimentation in Quine's sense? In any case, there must be purely extensional mere collections of *some* sort, on pain of vicious infinite regress of kinds of intensional collections that have no extensional membership, Indeed, the *term* "mere collection" is intensionally defined, but that does not make any *mere collection* intensional. The term "cat" defines an intensional class, but cats and mere collections of them are extensional. We can define positive mere collections as mere collections that have at least one member, and formal mere collections as adding a mere collection that has zero members. Just like the definition of the genus mere collection, the definitions of these two kinds are intensional; but just like mere collections in the genus, mere collections in these two kinds are purely extensional. In fact, the mere collection of these two cats is identical in all three.

We can multiply our intensional *definitions* of kinds of groups—classes, positive sets, formal sets, their respective three kinds of memberships, positive mere collections, and formal mere collections—by at least three senses of "intension," for a total of at least 24 kinds of intensional *definition*. For there are at least three senses of "intension" in *Principia Mathematica* alone (my 2023 / 2015: 14, 302; 2021a / 2012: 84, 100, 111; 2007: 60–62). Thus the terms "intension" and "extension" are determinables with indefinitely many determinates. And extension is said in exactly as many

ways as intension is. For to be extensional is to be not intensional. Thus there are at least three implicit senses of "extension" in *Principia*, since there are at least three senses of "intension" there.

The admission of mere collections is basically the same as the widely accepted view that a class or set is not identical with its members. For every class or set must be one, but the members of a class or set are often many. Also, a class or set is always an abstract object, but its members may or may not be abstract. By parity of reason, even a class or set whose sole member is itself is different from itself qua member of itself. Of course, on this simplistic view, the members of a class or set are a mere collection simpliciter. The view overlooks all the subtly different membership categories I defined. For class memberships, positive set memberships, formal set memberships, positive mere collections, and formal mere collections are all different categories of entities that are distinct only in reason. The only exception is that since the two kinds of mere collection are purely extensional, all positive mere collections are necessarily identical with formal mere collections. The only formal mere collection that is not and cannot be identical with a positive mere collection is the null formal mere collection.

Can the members of a class or set always be many? A membership can *necessarily* have one member, but not *categorially* so. The class of even prime numbers necessarily has one member, the number two. But the necessity is due to the nature of the prime numbers, not to the nature of classes as such. Thus it is *categorially* possible even for that class, *qua class*, to have many members.

But we have not yet answered all our initial questions. Even if we admit that classes, positive sets, formal sets, their respective kinds of collections, and mere collections of both kinds *exist*, per the containment and dependence arguments, are they *entities*? Again, the question arises because many of these things are many, not one. And it has long been held that to be is to be one. (*Ens et unum convertuntur* literally means that those two terms are logically convertible terms, i.e., intersubstitutable *a priori*.)

The questions of one entity or many, of entity or existent, are especially intense for mere collections of either sort. Is not even a mere collection one collection? And if it is one, is it not therefore an entity? But the questions can be raised for memberships of classes, positive sets, and formal as well. Perhaps these questions are most intense, in order of increasing intensity, for the null class, the null formal set (there is no null positive set), and the null mere collection, which sounds virtually self-contradictory. For must not a mere collection have at least one member? And the questions are not necessarily limited to these items. For our generic term for all of them is "group." And just as genus is logically prior to species, so group is logically prior to its kinds: it is formally distinct from

them and is their logically simple and prior foundation in reality. Thus our questions might be best raised at the level of groups.

One way to approach to our questions would be to argue by analogy to paradigm ordinary, pre-philosophical examples of things we deem entities. It is widely held that analogical arguments are inconclusive practically by definition, since if things really were of the same kind, they would not be merely analogous. But this puts the cart before the horse. Whether things are of the same kind is just what we are trying to establish. Also, as I argue elsewhere, analogical arguments can be logically conclusive (my 2003 / 1996: 235). For example, if crimson and scarlet are paradigms of red, then a shade in between them is a paradigm too. And closer to philosophical home, all the major substance metaphysicians had their own conceptions of substance, which are surely all paradigms of substance because they are so much the same, and only slightly different. The later Wittgenstein can give a linguistic explanation of that: the substance metaphysicians' different uses of "substance" have such strong 'family resemblances' to Aristotle's original use that all their uses count as paradigms. On the face of it, this can be explained even better in terms of sufficiently strong resemblances of all their concepts or descriptions of substance to Aristotle's. *"This language-game [of sufficient resemblance to count as the same kind of thing] is played"* (PI § 654, Wittgenstein's emphasis).

Thus we could try to argue that, say, a mere collection is sufficiently like a heap of sand, the solar system, or a corporation to count as an entity too. But I think the argument must fail. For the chief respect of resemblance ought to be that that something is holding or binding the mere collection together, much as gravity or agent actions bind sand heaps, the solar system, and corporations together into single entities. And no causal or metaphysical 'glue' seems to be there to bind mere collections together into single entities. What could the glue be? The most we could hope for would be that a *class* membership is bound together into a single entity by the property that defines the class. But even though a class has and can have only one class membership, it still (often) has many members (objects); and the one entity is only the class membership, not the members themselves. Take the class of apples. Are millions of apples really one entity? Can having the property of being an apple really bind all apples into a single complex entity? Are all the grains of sand in the world a single entity? Sand is not really a stuff, and "apple" is not really a mass term. Not like water or mud! Even "sand" seems more of a count noun. Sets are even worse. How could enumerating the members of a set possibly bind them into a single entity? We are only counting them! And mere collections are worst of all. They are logically prior even to mere enumerating! They are what is there to be classified or enumerated.

The analogical approach seems more illuminating of the problem than of its solution. I shall take a different approach which I think will be more successful. It has progressively stronger options, and it is much like an approach we have used before.

The first option is that we can simply concede that the containment and dependence arguments show only that classes, positive sets, formal sets, their respective kinds of memberships, and mere collections exist, and do not show that they are entities. And that is not so bad. For the main thing we wanted to show was that these things exist. Showing that they are entities, if that is anything different from existing, would be the icing on the cake. Either way, realism wins in that conceptualism and nominalism have only limited validity as progressively more meager parsings.

The second option is to accept the first option, and then go on to argue that whatever exists *is* an entity, or at least to argue that if *these* sorts of things exist, *they* must be entities. We took this approach with universals. We argued that if universals exist, then on the face of it, they cannot fail to be entities. How could a *universal* exist and fail to be an entity? For a universal is *defined* as literally the same, i.e., as literally and numerically one, across any instances it may have. Here Quine's casual equation of existence with entityhood looks like a blur, or even pulling a fast one. But I think he simply has no interest in the actual subtleties.

The question, then, is this. Given that classes, positive sets, formal sets, their respective kinds of memberships, and mere collections all exist in the sense of not being nothing, in the sense of being mind-independently real, and in the sense being totally real (i.e. able to exist even if minds are logically impossible), how can *they* fail to be entities? What more could be needed?

The answer would be that *being one* is precisely what is needed. For to be an entity is to be one entity. Perhaps classes, sets, and memberships must be admitted as entities. For a class or set is one class or set, and a membership is one membership. But members and mere collections are prior even to enumeration. Only members that are entities, and mere collections *as such* which are single members that are entities, would be entities. (An apple qua class member is distinct in reason from the apple qua mere collection, i.e., the apple as such or simpliciter; but both are entities because each is one thing. They are formally distinct with a foundation in reality in the apple simpliciter, which is the sine qua non of the apple qua class member.) The three members of the class of apples on the table exist, but they are not an entity. For they are three entities, not one entity. They are Biff, Bob, and Sue. And if there were no apples on the table, the *class membership* would be an entity, but not have any members. And the *class* of apples on the table would always exist as a timeless abstract entity.

and so would its *membership*. But its *members* and any *positive mere collection of a single apple* can come into entityhood and pass away from entityhood, since they are logically contingent apples.

I accept both options, and I also accept the objection as a restriction on the scope of the second option. That is, I concede that the containment and dependence arguments only show that groups exist, not that they are entities. But I also hold that we can go on from there to argue that groups are entities, with the restriction that we can *always* do this if the group has a single member and that member is an entity, by parity of reason to that member as, so to speak, the entitative content of the group. For groups are distinct only in reason from their members. Thus the containment and dependence arguments show that *all* groups are entities if they have a single member and that member is an entity. Of course, many kinds of groups are entities in any case, and even with no members.

Thus I hold that all groups (classes, positive sets, formal sets, their memberships, and positive and formal mere collections) *exist* in all three of our main senses of "exist," due to the containment and dependence arguments. (It might be best to hold that there is no such thing as a set or a mere collection with no members; but I do admit just such a formal set and just such a formal mere collection.) I admit classes and sets of both kinds as entities, since a class or set is one class or set. I also admit class- and set-memberships as entities *in virtue of* each class's and set's being one thing. And I hold that a mere collection as such is an entity if it has one member and that member is an entity. For such a mere collection is only formally distinct from its entity-member.

One might object to the null formal set and the null formal mere collection as follows. Biff, Bob, and Sue are on the table. The class of apples on the table, the positive set, and the formal set each having Biff, Bob, and Sue as their sole members, and their three respective memberships, all exist and all are entities. For each is one thing, and each is different and distinct only in reason from the rest. The positive and the formal mere collections of Biff, Bob, and Sue exist but are not entities, since they are many. We take Biff and Bob off the table, leaving Sue. The mere collection of Sue exists, and is an entity in virtue of Sue's being an entity simpliciter. It is only formally distinct from Sue simpliciter. Each is one thing. We then take Sue off the table too. Now there is no mere collection at all. Not only is it not an entity, but it *does not even exist*.

My reply is that it does exist, though it is not an object in itself. Recall that Nothing (*das Nicht*) does not exist in itself, but it does exist as an objective reality. For objective reality is not nothing, but is a kind of being. Likewise, the null formal set and the null formal mere collection do not exist as objects in themselves, but they do exist as objective realities, *and also as formal sets and*

mere collections. For just like objective reality, sets and collections are not nothing, but are kinds of being. Note that this argument is analogical. And the analogy does not limp, but is conclusive. For just as our phenomenology would be incomplete if we could not ground thinking of nothing, so set theory would be incomplete if we could not ground thinking of the null set, with the null formal mere collection as a precondition the null set. No null formal mere collection, no null set. No null set, no set-theoretical definition of the number zero. No zero, no arithmetic as we know it.

Our admission of all these entities and/or existents to solve the problem of the one and the many is our second paradigm case of metaphysical ecumenicism. (Our first paradigm case was our admission of all the particulars and properties we admitted to solve the problem of universals.) Our solution here is ecumenical as well. Mere collections as such exist per the containment and dependent arguments. (They are also entities if they have a single member that is an entity.) Even the null formal mere collection exists as a mere collection, though not as an object in itself. And that makes sense. For just as objective reality is a kind of being that is not nothing, to be a mere collection is to have a kind of being that is not nothing. And just as nothing (*das Nicht*) cannot be an object in itself, so a *positive* mere collection cannot have no members. Here too, when faced with an apparent contradiction, draw a distinction. Note that nothing in itself cannot be a member of the null formal mere collection because it is nothing; and nothing qua objective reality cannot be a member for the opposite reason: it is something.

Thus quantification is always over existents, if not always over entities. Thus the meaning of our existential quantifier is "There *exists* an x such that," not "There *is an entity* x such that." Thus Quine was wrong to blur the two together so casually.

Is a class of qualified objects, or a class of objects that include both qualified objects and objects in themselves (there is no third kind of object), a qualified class or a class in itself? Again, a class in itself logically can have qualified objects as members. For ordinary classes with ordinary existence can be parsed as classes in themselves. Thus classes in themselves exist. And if class theory is logically necessary, or even just true, then on the correspondence theory of truth, all qualified classes that are direct referents of subject-terms of statements of or implied by class theory *veridically* "are" classes in themselves, i.e. with no change in membership. And unlike class *memberships*, class *members* as such are not even logical constituents of classes. For the class of cats will exist even if no cats exist. Even the class of numbers will exist even if, per impossibile, no numbers exist. In fact, the class member relation is not *any* kind of whole-part relation. Thus the fallacies of composition and division do not apply to begin with.

Some argue that only logically simple (indefinable) entities ("simples") are really one (have real unity). Russell says:

> "Where there are only beings by aggregation," Leibniz says, "there are not even real beings. For every being by aggregation presupposes beings endowed with a true unity, since it only derives its reality from that of those of which it is composed, so that it will have none at all if every component is again a being by aggregation." ....What is not truly *one* being, is not truly a *being* [for Leibniz]. (Russell 1937 / 1900: 103–104, his emphasis)

Russell later came to think that logical analysis logically might go on forever, never ending in simples (see my 2023 / 2015: 257–267). If so, then nothing would exist for Leibniz! But either way, I reject the view that complex objects, as such, cannot be real. I feel some sympathy for Leibniz, since simples would be the logical building blocks for everything that is complex. But I also feel the 'simplist' view is too narrow-minded. There is far more to the concepts of entity and unity, not to mention the concept of existence, than that. And the simplist view is very far from metaphysical ecumenicism. I have argued in this book that the concepts of entity and unity are rich and complex. I argued that there are at least three main kinds or senses of "being" or "real." If you like, we can call the simplist view a 'thin' or 'desert' view, and my view a 'thick' or 'jungle' view. Simplists are 'sectarian' about existence; I am 'ecumenical'. But colorful metaphors like these do not affect the arguments. The simplists and I agree only that the topic of existence is deep. And of course I can (and do) ecumenically include the simplist view into my own, simply by admitting there is a sense of "exist" in which only simples exist. But simplists cannot include my view into theirs without destroying their view. Thus, just like so many other theories in metaphysics, simplism is right in what it affirms (simple entities), but wrong to deny the entities affirmed by "rival" views (complex entities).

The most direct arguments for admitting complex existents are the containment and dependence arguments. If simple objects are real, and if complex objects are logically composed of and dependent on simples, then complex objects exist too. The relation argument, the predication argument, and the pros hen argument all prove that conclusion as well.

On the face of it, complex objects are real in all three of our main senses. They are not nothing, are mind-independent, and are independent even of the logical possibility of minds.

And if complex objects exist and are real in all three of our

main senses, then why would they not be entities? The truth is that a complex object is one object, and *ens et unum convertuntur*. Thus all complex objects are entities. And all classes are logically complex objects (see pages 324–325 for their seven logical constituents). Thus all classes are one, and are thus entities, unlike mere collections that are many, and thus exist without being entities.

It might be objected that the concept of a class can be *taken as* primitive and used in definitions of its logical constituents, or it can be *taken as* defined in terms of its logical constituents (as on pages 324–325). And it is logically arbitrary which way we go, just as we can either define 'and' using 'or' and 'not', or define 'or' using 'and' and 'not'. And the class of red objects can also be taken as simple in the sense that red is indefinable.

My reply is that the class is not the color. And if classes have seven logical constituents, then they *are* complex, regardless of whether we *take them* as simple. And 'and' and 'or' logically contain each other, so both are logically complex. Recall that logical containment is not ordinary whole-part containment.

Sets are not even defined by a simple property like red. They are merely enumerated! The concept of a set seems primitive, at least as a genus whose species are positive sets and formal sets. But 'set' and 'set membership' seem interdefinable. Every set is one set, and every set membership is one membership, even though the members are often many, and the formal null set has none!

Whether classes or sets are complex or simple is not a great problem in metaphysical ecumenicism. For all these views are just different logical parsings of ordinary talk of classes and sets.

Frege notes that the number of red objects cannot be counted because the concept *red* is not a sortal concept; there is no principle for counting red objects as the same or different (Frege 1974 / 1884: 66). There is a class of *red objects*, but it is a special sort of nondenumerable class. The class of *real numbers* is nondenumerable because its members cannot be placed in one-one correspondence with the positive integers. But at least the concept *real number* is sortal. The concept *red* is not even that. As Frege saw, the class of red objects cannot be put in one-one correspondence with *any* class of numbers. How many ways is a red surface divisible into smaller surfaces for ever-smaller observers? Are there any simple, infinitesimal red points? Are infinitesimals simple? Is "a finite number divided by infinity" a simple definition of them?

It has been noted that if *nothing* is red, then there are zero red objects; but if *anything* is red, then there are infinitely many red objects. For we can divide any finite red area in infinitely many ways, with subdivisions. At least smaller and smaller observers ad infinitum could. Thus the infinitely many red objects could even be collectively counted by infinitely many progressively smaller

people. That is not a problem for Frege, who is careful to say, "To a concept of this kind no *finite number* [i.e. no positive integer] will belong" (Frege 1974 /1884: 66, my emphasis). And that makes all the sense in the world. For zero and the infinite numbers (there are infinitely many infinite numbers) are not positive integers.

In simpler and more traditional terms, it is arguable that the class of red objects is denumerable by a logically possible infinite mind. We could not count them all, but in principle an infinite mind could. And an omniscient mind would already know them all, in virtue of knowing all the logically possible spatial subdivisions of any possible red area. In fact, the average human mind easily grasps the *general* truth *that there are* infinitely many such subdivisions. For that matter, an infinite mind could enumerate the infinitely many members of any infinite set. But what about arithmetical divisions of red surfaces involving real numbers? Are they denumerable, say by an infinite mind?

We ought to widen the concept of denumerability, so as to include one kind of denumerability for each kind of number. For denumerability is just one-one correspondence of a collection with numbers, and there are many kinds of numbers. There logically can be (and in that sense there are) not only positive integer (positive set) denumerability and natural number (positive integers plus zero) (formal set) denumerability, but also real number denumerability, imaginary number denumerability, infinite number denumerability, and so on. All these concepts are as logically valid as the usual one. All they require is the logical capacity of things to be put in one-one correspondence with the kind of number in question. Thus the class of real-numbers-plus-one is denumerable by the real numbers. All we need to do is add the number one to each real number, like adding a new guest to Hilbert's hotel with infinitely many rooms!

If we take the 'class-set-mere collection' portion of reality as the foundation in reality of all these things, then is that not the whole of reality? For what does not belong to any class, set, or mere collection? What is not a member of any of them? But that concerns only what *belongs* to them *as a member*. If we ask what *is* a class, set, or mere collection, then many things are *not* them, on pain of vicious infinite regress of classes / sets / mere collections' being members of classes / sets / mere collections, with nothing ever being a level 0 ultimate non-group. And that goes hand in hand with the fact that not everything can be a property, on pain of vicious regress of properties' being predicated of properties, with no property ever belonging to anything that is a level 0 ultimate logical subject. For properties are distinct only in reason from classes. In fact, every class is defined by a property.

Nothing in itself (*das Nicht*) is not there to be related to any beings. But per the pros hen argument, a null class or set and

its null membership have secondary pros hen being in virtue of their relation to the existing properties of being a class or a set. These nullities are, if not traditional privations or other absences, very much like them, and enough like them to count as objects in themselves on the face of it. And the containment and dependence arguments will validate them as logical parsings of statements like "There are no unicorns." Thus we need not reach our fallback option of admitting the null class and null set only as qualified objects and as objective realities. That was the option we used when we admitted nothing (*das Nicht*) as a qualified object and its objective reality. The class of unicorns, the class of round squares, and the class that has no members exist and are different classes with different definitions. But no sets exist that have unicorns or round squares as enumerated members; and there is only one set that has no members, the null formal set.

If empty classes, such as the class of unicorns and the class of round squares, *were* nothing, then so to speak, they would all be identical with each other, and there would be only one of them. And there can be only one null formal set, since there can be only one enumeration of no objects. Likewise, there can be only one null formal mere collection, by parity of reason.

The problem of the one and the many is far deeper and more general than the problem of Russell's paradox. The former problem applies to every class / set / mere collection that has more than one member. And the solution is in ontology: *ens et unum convertuntur*. But Russell's problem applies only to classes / sets / mere collections that are not members of themselves. And the solution, as I see it, is merely local. Even Russell's type-hierarchy solution of his paradox is more local than the *convertuntur* solution of the one and the many. For the former precludes only groups that are not members of themselves, while the latter precludes every mere collection of many things whatsoever from being an entity.

Again, the problem of the one and the many arises most deeply and acutely for mere collections. For are not Biff, Bob, and Sue at logical bottom not one enumerated positive set, or even just one enumerated formal set, but one mere collection that is prior to enumeration because it is what is being enumerated? Again, my solution is that a mere collection *exists*, but is not an *entity*. And the idea is simple. A mere collection of many things is a mere collection that exists; but it is not an entity, since it is not one. Only a mere collection of one entity is an entity in virtue of being only formally distinct from that entity. A mere collection of one cannot be *enumerated as* having one member, since then it would be a set; but it *has* only one. And surely that is the point that counts.

But should a mere collection even *have* members? Well, yes. What else would we call its members? —Zembers? Is not a

mere collection *the same as* its members? Is that not what being a mere collection is all about? Well, no. The distinction between a mere collection of one thing and its only member seems one of the most intimate of distinctions in reason, and perhaps too intimate to be a distinction in reason. But it *is* a distinction in reason, since the thing is conceived differently when we conceive it as a member of the mere collection consisting of itself, from when we conceive it simpliciter. In fact that is a formal distinction with a foundation in reality in the thing simpliciter. What makes the distinction so intimate is that (1) the *portion of reality*, (2) the thing simpliciter, and (3) the mere collection of that one thing extensionally coincide as formally identical, since the objects are intensionally conceived in different ways. (Recall that mere collections have extensional identities.) If you please, a thing's being the only member of the mere collection whose only member is itself, is one of the *merest* of logical containments. It is about as diaphanous as a thing's having the property of being identical with itself. If that seems to be empty clanking machinery, recall that for Frege, many function-names that express intensionally different senses refer to the very same extensional function. And our three objects are formally distinct.

Mereology is the logic of part and whole. The difference between mereology and class or set theory is this. The class of states in the U.S.A. and the class of counties (including county equivalents, such as Louisiana's parishes) in the U.S.A. are completely different classes in that they have completely different memberships (no members in common), and likewise for the corresponding sets and mere collections; but the states and counties are all mereological parts of the same whole, namely, the U.S.A. (Benardete 1989: 93).

Mereological wholes (often called sums) are like positive sets and positive mere collections, and are unlike classes, formal sets, and formal mere collections, in that they *must* have parts in order to count as wholes. Just as 'no members, no positive set', and 'no members, no positive mere collection', so 'no parts, no whole'. Thus mereological wholes are positive in essentially the same sense that positive sets and positive mere collections are positive. To be sure, we can define the null formal mereological whole as the mereological whole that has no parts, much as we defined the null formal set and the null formal mere collection. We may call it the null formal whole. And we can argue for it the way we argued for those other two nullities. We can then distinguish positive wholes from formal wholes on the grounds that the latter include the null formal whole. But aside from the null formal whole, it seems that there cannot be wholes without parts by definition. The only space-time objects that do not have space-time parts are infinitesimal space-time points. And they are not wholes for that very reason.

For our metaphysical purposes, mereological wholes (hence wholes) add little to the discussion. For wholes are distinct only in reason from classes. For the parts of whole W are logically equivalent to (that is, intersubstitutable salva analycitate with) the members of the class of parts of whole W. This does not mean that wholes, as such, are classes, or that parts of wholes, as such, are members of classes. It merely means that the objects that are parts of W are also the members of the class of parts of W. If the parts of W can be enumerated, they are also members of a positive set, and also of a formal set. They will also be (formally distinct from) a positive mere collection, and also from a formal mere collection.

Classes, sets, and wholes are all conceptual dress-ups of mere collections. Even the null class and the null formal set are conceptual dress-ups of the null formal mere collection. But this does not mean that classes, sets, and wholes are qualified objects and that mere collections are the objects in themselves they "are." Far from it! That is a different distinction. For qualified objects are not defined as conceptual entities or as conceptualizations. In fact, they logically can be singled out pre-conceptually regardless of whatever conceptual content they may have. For singling out objects is prior to any concept formation. Qualified objects are not defined as conceptual or descriptive dress-ups. They are defined as logically possible ways that things can be presented. And those ways can be either referential (direct singlings out) or attributive (conceptual). Again, direct singlings out of qualified objects are prior to any conceptualization, pages 67–68, essential feature (20).

Mereological wholes are wholes in a logical sense, not in the ordinary sense. This is certainly the case if we accept what is called the pairing axiom: For any two objects x and y, there exists some object z such that x and y are parts of z (Benardete 1989: 94). For the axiom implies that any two arbitrarily chosen objects, say an apple and the Eiffel tower, are parts of some whole. And that is not the case in the ordinary sense of "part" and "whole." We may say that mereological parts and wholes are logical parts and wholes. And there is no need for logical parts to behave (have properties and relations) like ordinary parts. This is simply a different, technical use of the term "part" which is valid in its own right. In fact, it can be more sharply and clearly defined than the ordinary use, in virtue of the pairing axiom. Of course, the presence of either logical or ordinary parts allows the containment and dependence arguments to apply. But the arguments already applied when we accepted 'no parts, no whole'. The difference between logical parts and *ontological* parts is made clear in the case of the round square. For there is no round square in itself there to have any ontological parts in themselves. But the qualified round square has logical parts that have qualified being. (They are not nothing.)

The pairing axiom applies much more easily to sets. For it is easy to accept that any two objects belong to some arbitrary set. The objects themselves can be sets. Of course, since there is no null positive set, it is not there to belong to any sets. The pairing axiom applies to classes as well. For any two objects *a* and *b* are the members of the class of objects identical to *a* or *b*. Likewise for mere collections. The mere collection of *a* and *b* exists logically prior to enumeration; thus it cannot be *defined* by enumeration. But it *has* those two objects as its only members. Thus the pairing axiom applies to mere collections as well. How could it not? They are mere collections! Here I simply waive our formal distinctions.

Even without the principle of the identity of indiscernibles, and waiving all distinctions of reason for a simpler exposition, the members of any set S are members of the corresponding class C of *objects that are identical to members of S*. Likewise for parts of a whole W. They are members of the class of parts of W. They can also be enumerated as the members of the corresponding set. Recall that we widely defined enumerability as being logically capable of being put in one-one correspondence with some kind of numbers.

Thus we admit a metaphysical ecumenicism of groups as follows. Groups are the categorial determinable with at least seven determinates: classes, positive sets, formal sets, positive wholes, formal wholes, positive mere collections, and formal mere collections. Groups are the logical top as the highest classification, and mere collections are the logical bottom as the sine qua non.

We can distinguish classes into positive and formal classes as well. And we must, by parity of reason. Thus we admit both kinds of class. I did not mention it before because almost everyone admits the null class. This gives groups at least eight determinates.

If set theory and mereology are not distinct in reason in the mutual sense that all pairs of corresponding statements are logically equivalent, they are not wholly distinct either. For one thing, they both affirm the pairing axiom. And of course their being distinct in reason implies that they are different. Thus for example we can ask how best to formalize the ontology of the *Tractatus*, more like set theory or more like mereology. Giorgio Lando (2007) argues that set theory is the better formalization. The scholarly question is beyond the scope of this book. The main thing for us is that Lando's two "rival" interpretations are not wholly distinct.

The main objections are less impressive than usual.

In light of the containment and dependence arguments, denying that all these groups exist simply begs the question against those arguments. No flaw has been detected in the arguments.

It might be objected that we are committed to admitting infinitely many groups, if we admit infinitely many objects that can be members of groups. But we were already committed to that

when we admitted that groups are members of larger groups. In fact, we even admitted that groups can be members of themselves, although *self-defeating* groups, such as the class that gives rise to Russell's paradox, defeat themselves out of existence. And that is not to mention that we admit infinitely many numbers of various kinds, and infinitely many universals, including those that apply to each number uniquely. Every one of these would be a member of infinitely many groups. We also admit infinitely many properties of properties and relations of relations, including conjunctive and disjunctive properties and relations. We also admit infinitely many levels of qualified objects, Russellian descriptions, and Fregean senses. All these too are members of infinitely many groups.

It might be objected that we cannot enumerate infinitely members of a group. But they are enumerable in principle, that is, they logically can be enumerated. Thus there is no need to describe this in terms of, say, the god Apollo, who can enumerate all the natural numbers in a minute by counting the first number in half a minute, the second in a quarter of a minute, and so on ad infinitum. See my (2003 / 1996: 86–89; 1989: 71, 76–77, 79). We need not admit some super-being who can count infinitely many objects. We need only admit *logical* enumerations via one-one correspondence of the infinitely objects to some sort of infinitely many numbers.

It might be objected that the U.S.A. Constitution can be legally amended to abolish all the states and counties but keep the whole, so that there is only a national government. This seems be a counterexample to 'no parts, no whole', namely, a political whole that continues to exist even if its political parts cease to exist. My reply is that it would no longer be a *mereological whole* if that happened; but the national *entity* would remain the same. In fact. except by null formal courtesy, *any* object that has no parts is not a whole. For the terms "part" and "whole" are logically correlative.

It might be objected that the identity conditions of classes and sets are too different for classes and sets necessarily to correlate one-one in their memberships in the way we have been discussing. For example, the class of apples on table T can vary over time as we place apples on the table or remove them. The class can even be empty if no apples are on T. Thus though the class remains the same over time, its membership can change. And the reason is easy to see: a class is defined by the *property* its members have; and the property cannot change. An apple can change from green to red, but the color green cannot change into the color red, any more than it can change into a tree. But the set defined (enumerated) as Biff, Bob, and Sue cannot change over time. Nothing else can be added to the set without changing the definition of the set. And if Biff, Bob, or Sue ceases to exist, then by the set's very definition, the set ceases to exist too. For if we

enumerate a set differently, then it is a different set. It is a bit like Leibniz's possible worlds. If we change an object in the slightest, then it is in a different possible world. Thus classes logically cannot change and logically must always exist; but their members can change, if the members are logically contingent. Sets logically cannot change, but they can come into existence and cease to exist, if even one of their members is logically contingent.

My reply is that these points are correct, but do not affect the distinctions in reason I described, except to limit their scope of application to cases where the class and set do have the same members. These points do not affect the distinction in reason between classes and sets in the least. Compare the universal ante rem red and the universal in re red. If nothing is red, then there is no universal in re red there to be distinct in reason from the ante rem universal red. But if anything *is* red, then the two universals both exist and are distinct only in reason as explained earlier. In fact, the class of red objects is like the universal ante rem red in that neither can fail to exist even if no red objects exist. And the positive set enumerating all red objects (this logically can be done, *contra* Frege, due to our wide concept of enumerability; it is only that red is not a sortal property, so the objects must be sorted in some other way) is like the universal in re red in that both must fail to exist if no red objects exist. Of course, if even just one red object ceases to exist, this changes the enumeration and the set fails to exist, while if even just one red object remains existing, the universal in re will still exist. But even this much shows that sets resemble universals in re more or less in the way classes resemble universals ante rem. In fact, in the inclusive sense of disjunction in which "A or B" means A, B, or both A and B, if we *disjunctively* enumerate a set as including red object *a*, or red object *b*,... or red object *n*, for any *n*, then we do have a set of red objects that logically must exist if and only if the universal in re exists.

It might be objected that sets (and mere collections) can be perceived, while classes can only be grasped by the intellect. For when I see Biff, Bob, and Sue on the table, I see the set defined as Biff, Bob, and Sue, and the mere collection. There is no doubt that I can see groups of apples, and that groups of apples can be on a table. But the class of apples on table T would exist and remain the same if we removed all three apples from the table, and even if all apples (and tables) ceased to exist. Hence the class has no location in space or time. Thus it is not there on the table to be seen. Thus if there are apples on T, what we see is only the current membership of the class, not the class itself.

My reply is that these points do not affect the distinctions in reason in the least either. The difference in modes of cognition does not affect them, and neither does the space-time location or

lack thereof. All that matters is the definitions of the classes and sets in question. Universals ante rem do not exist in space or time either. Yet they are distinct only in reason from the particular properties that do exist in space and time.

In fact, while classes as such cannot stand in perceptual or causal relations, since they are not in space or time, I propose pros hen theories of perception and of causation, much like Aristotle's pros hen theory of being, such that in descending order of logically close relationship, classes, sets, and mere collections all can be perceived and can stand in causal relations in virtue of the fact that, and if and only if, their members can. These pros hen theories of perception and of causation are related in that perception involves causation. For example, I see things when photons strike my retina. On the face of it, all these are just so many ways of dressing things up. Even the concept of a mere collection is formally distinct dress-up of the mere collection in itself. For a mere collection as such is prior to its own conceptualization and even to its enumeration.

Here is an example of these pros hen relations in the case of perception. I see the oranges on the table. Thereby I can also see their positive and formal mere collections, the positive and formal sets of Biff, Bob, and Sue, and even the positive and formal classes of oranges on the table. All that is in virtue of and via my seeing the oranges on the table. Again, there is no doubt that we can see groups. All these kinds of group seeing are kinds of indirect perception via the direct perception of the qualified oranges that "are" all of them. Even the class, which is not in space or time, may be said to be indirectly seen in virtue of its members' being seen. And since seeing oranges involves photon causation, these are also cases of causation that are different but distinct only in reason.

There is a strong analogy here to the indirect cognition of objects in themselves via the direct presentation of qualified objects. In fact, all these kinds of indirectly perceived objects *are* in the realm of objects in themselves. For we, our perceptions, the oranges, and all the kinds of groups are all objects in themselves. This is real perception by real people in the real world. And the distinctions in reason are objects in themselves as well. Of course, our qualified minds have qualified perceptions of qualified oranges and qualified groups, and so on. But these qualified objects, if they are veridical or even illusory, "are" the objects in themselves.

The containment and dependence arguments work just as well for complex objects unified by agent / teleological cause as they do for complex objects unified by efficient cause. And that is the logical basis of the existence of collective decisions and collective responsibility of corporations, and even their entityhood.

It may be anticlimactic at this point, but the containment and dependence arguments for the existence of groups are as

follows. The arguments start with ordinary existing things and with <groups>. Groups now include both formal and positive classes, sets, mere collections, and mereological wholes; and both kinds of causally unified groups: efficient and teleological.

The containment argument for the existence of groups is this. (1) Nothing, so to speak, can <logically contain> or <be logically contained by> nothing; only something can <contain> or <be contained by> something. (2) Therefore, whatever <contains > or <is contained by> an existent is itself an existent, at least in the minimal sense of not being nothing. (3) Therefore, if <x> <contains> <y>, then if either <x> or <y> is an existent, then the other is an existent too, at least in the minimal sense of not being nothing. (4) Ordinary individuals are existents. (5) Ordinary individuals are <logically contained by> <groups> that include them as <members>. (6) Therefore groups that contain ordinary individuals exist at least in the minimal sense of not being nothing. (7) And by parity of reason, all groups exist in this sense. Note that groups cannot be what they are apart from their categorial capacity to have members. Even groups that logically cannot have members due to the specific nature of the would-be members, such as the group of round squares, have a deeper and more general categorial capacity as groups qua groups. And that includes all null groups.

The dependence argument for the existence of groups is this. (1) Nothing, so to speak, can <logically depend on> or <be logically depended on by> nothing; only something can <depend on> or <be depended on by> something. (2) Therefore, whatever <depends on or is depended on> by an existent is itself an existent, at least in the minimal sense of not being nothing. (3) Therefore, if <x> <depends on> <y>, then if either <x> or <y> is an existent, then the other is an existent too, at least in the minimal sense of not being nothing. (4) Ordinary individuals are existents. (5) Some <groups) <logically depend on> ordinary individuals that are their <members>, and also in the sense that their <extensional identity> depends on the identity of these ordinary individuals. If you please, a <group> can be the <group> it is if and only if it has the ordinary individuals it has as its <members>. (6) Therefore groups exist in the minimal sense of not being nothing.

Note how I watered down our usual talk of entities to talk of existents. All entities are existents, but not all existents are entities. For *quodlibet ens est unum* (whatever is an entity is one). And groups that are many but not one are existents but not entities. By "existent" I mean not 'entity', but 'object that exists'.

On the face of it, for all groups, if all of a group's members are totally real, then so is the group qua group. And trivially by definition, all groups in themselves are totally real, whether any of their members is totally real or not. But conversely, totally real

classes, sets, and wholes can have members that are not totally real. For class theory, set theory, and mereology are fully general, necessarily true, and about the totally real world. But on the face of it, mere collections are totally real if and only if all their members are.

Just like universals, how can groups other than mere collections exist, yet fail to be entities? For any such group is categorially one group whether it has many (or any) members or not. And a universal is one universal whether it has many instances (particular properties) or exemplifications (by bare particulars) or not. For to be an entity is just to exist and to be one thing. Even a mere collection of one entity is an entity. For waiving the formal distinction, such a mere collection simply is that entity.

The *property* of being a mere collection exists as a Fregean function. But it can neither specify a class nor enumerate the members of the collection. For then the mere collection would not be a mere collection, but a class or a set, which is posterior.

To review: Sets are an abstraction from classes. They are classes minus their defining property. For the members of any class are logically enumerable using one kind of numbers or another. Conversely, every set can be converted into a class at least by adding a disjunctive defining property, if every member of the set has at least one unique property. (The null formal set is convertible into the null class by adding the defining property of having no members.) Mere collections are in turn an abstraction from sets. They are sets minus enumeration. That is, they are sets that are not conceived or regarded as enumerable. Disregarding enumerability is so deep an abstraction that it implies disregarding entityhood, leaving only existence for mere collections to have, except for mere collections of one entity. For again, *ens et unum convertuntur*. And more to the point, *quodlibet ens est unum*. (The other conjunct of *ens et unum convertuntur* is *quodlibet unum est ens.*)

Are not the null class, null formal set, and null formal mere collection much like privations and other absences? —*Are* they not privations or absences of members? If so, then the most natural argument for them is Aristotle's pros hen argument for privations. But any of the arguments for metaphysical ecumenicism will do, since the group portion of reality logically contains all the nulls.

Our account of classes, sets, and mereological wholes provides three progressively simpler and more abstract logical analyses of arithmetic. I mean mereology as the logic of logical parts and logical wholes, not of geometrical parts and geometrical wholes. Thus the use of mereology to analyze arithmetic does not smuggle in any synthetic *a priori* geometrical concepts. For more subtle distinctions between logic and its diagrammatic and even geometric representations, see my (2023 / 2015, ch. 9; 2021a / 2012). This includes purely logical mereological representations.

Hegel takes things a step further by distinguishing quantity as continuous from quantity as discrete magnitude. Whether space, time, and matter are infinitely divisible or end with indivisible atoms depends on whether we conceive or regard quantity as continuous or discrete. This is Hegel's way of resolving Kant's antinomy, or really all four of his antinomies; and it is perhaps not so far from Kant's own resolution. See Hegel (2015 / 1830: 159–163). Even in the freedom-versus-necessity antinomy, freedom "cannot be measured and calculated" (Hegel 2015 / 1830: 158), while surely physical necessity can be, at least for Kant, who wrote centuries before Heisenberg's uncertainty principle.

Classes and sets of discrete magnitudes fall on the discrete magnitude side of Hegel's divide; but there can also be classes and sets of continuous changes. Thus we have a four part mix and match matrix of groups versus nongroups with continuous versus discrete quantities. (A quantity as such is not a group, any more than an apple as such is. Even a mere collection of one apple is formally distinct from the apple. "Mere collection" is not just a different description, but a different category. Minimally different, but different nonetheless.) For Hegel there seems to be a genus of quantity, with continuous quantity and discrete magnitude quantity as its mutually exclusive and jointly exhaustive species.

Of course, infinitesimal spatial, temporal, and material points are not dimensionless, but have infinitesimal dimensions. The numerator is any finite number, and the denominator is any infinite number. Thus each such point contains infinitely many smaller ones, as well as dimensionless points. Are they round? Perhaps Cantor, with his infinitely many transfinite numbers, could allow it! It is at least as plausible as Hilbert's hotel with infinitely many rooms. We can positively construct continuous change as distinct only in reason from the infinitesimal progressions of the calculus and of Robinson arithmetic. Dimensionless points can only belong to the discrete quantity side of Hegel's divide. For they are indivisible. But infinitesimal points belong to the continuous side. For they are infinitely divisible into smaller points, each of diameter infinity-divided-by-a-smaller-number, if they are round.

In any case, logical analyses of infinitesimals, such as Weierstrass's limits or Abraham Robinson's logicist infinitesimals, no matter which side of the divide they are on, positively construct Hegel's continuous changes as totally real changes. And if they are intelligible, logically possible, and logically equivalent in their respective analyses of statements about ordinary infinitesimals, then they are distinct only in reason from each other. Thus far from being rivals, limits and logicist infinitesimals logically contain each other. This too is part of metaphysical ecumenicism.

Order is a Logically Primitive Generic Relation

Ante rem universals are formally distinct from classes of their instances (the classes can be empty), as well as from their instances themselves (if any), with a foundation in reality in the universals, since they are the propertial content abstracted in its purity, if not Platonic perfection. In re universals are the same way, except that they are not abstracted from location in space and time.

Relations are polyadic universals both ante rem and in re, and are also particular relations. All these exist per the containment and dependence arguments. Statements that universal relations obtain are logically equivalent to statements that the classes of their instances (particular relations) obtain (the classes can be empty). Universal relations in re are also logically equivalent to statements that their instances (particular relations) obtain.

In this section, it will not matter if the universal relations are ante rem or in re. I shall discuss ordered universal relations, their ordered particular relation-instances, and their ordered relata. The ordered relata of dyadic (binary, two-term) relations are called ordered pairs. Ordered relations are better known as asymmetric relations. An asymmetric relation is a relation such that if *a* stands in that relation to *b*, then *b* does not stand in that relation to *a*. We can generalize our findings about ordered pairs to any ordered polyadic relation's ordered polyadic relata. Ordered pairs are just simpler and easier for purposes of exposition.

Any particular relation-instances of an ordered universal relation must be ordered in the same way, or as we say, direction, as the universal. For example, if *a* is larger than *b*, then the instance of the universal relation *larger than* is the particular *larger than* relation obtaining between *a* and *b*. Ordered pairs are the ordered relata of ordered particular relations. Here it is the ordered pair <*a*,*b*>. It is essential that the relation, its instance, and the ordered pair all have the same order direction. For if *a* is larger than *b*, then *b* is neither larger than *a* nor the same size as *a*. This order must be the same in the universal relation, the particular relation, and the ordered pair alike. For otherwise the instance and/or ordered pair will be the wrong ones.

By parity of reason to ordered dyadic universal relations and their corresponding classes of ordered instances (particular relations), and their corresponding classes of ordered pairs, there are corresponding sets and mere collections of the same ordered instances, and of the same ordered pairs, as well. For these are just progressive abstractions from the classes.

I admit ordered pairs because they cannot be nothing. They are all different from each other, so at most one could be nothing. They also exist on the containment and dependence arguments. For

we already admitted universals, and ordered pairs are distinct only in reason from asymmetric dyadic relations. The main thing to note is that on the containment and dependence arguments, and on the more general arguments, asymmetric dyadic universal relations are not reduced to, nor eliminated and replaced by, ordered pairs. Quite the opposite, their existence is established by positive construction out of ordered pairs. This is just another example of metaphysical ecumenicism. Reduction and elimination are just progressive abstractions from positive construction. They are valid parsings, but are too limited in what they assert to tell the full story. This is so much so that we went in the opposite direction and argued for the existence of ordered pairs based on the existence of relations!

Ordered pairs are among the many sorts of things such that if they are not nothing, they cannot help being mind-independent and independent of the logical possibility of minds as well. For all the truths about ordered pairs have those features, and many of the truths are logically necessary as well.

In *Principia*, Whitehead and Russell call pairs with no order "cardinal couples,", and ordered pairs "ordinal couples" (Whitehead 1950 / 1910: 357). "Ordered" and "ordinal" are mere grammatical variants of the word "order."

Russell has two objections to analyzing asymmetric dyadic relations as ordered pairs. First, he says, such an analysis can never be completed. That is, it cannot be stated in a finite sentence that has a determinate truth-value. For there are infinitely many ordered pairs for at least some such relations (Russell 1985a / 1959: 67). Of course, this argument also applies to analyzing away any relation in terms of its relata, and any property in terms of its instances. In fact, this is at least implicitly also why Russell abandons his 1914–1918 logical analysis of bodies and minds as temporal series of classes of sensed and unsensed sensibilia. For there are infinitely many such series, classes, and members, since there are infinitely many logically possible histories an ordinary mind or body could have; and a logical analysis must provide one-one corresponding statements that are logically equivalent to the infinitely many ordinary statements of how a body or mind logically might have been. Thus no such analysis of bodies or minds can ever be stated in a finite sentence that is true or false. I believe this is why Russell later says, "I soon... became persuaded that this is an impossible programme" (Russell 1985a / 1959: 79). But as I note in my first ontology book, Russell's objection is a bad one. For it merely rules out the finite, determinate statement of any *specific* analysis of a *specific* body or mind; and the *general* logical analysis that "Bodies and minds are nothing but temporal series of classes of sensed and unsensed sensibilia," which is short, complete, and determinate in truth-value, might still be true (my 2003 / 1996: 177–178). In fact,

any universal statement logically can be true even if we are not in a position to state all of its instances, or even any of its instances. For a universal statement is not *about* its instances, even though they are its truth-maker (Frege 1974 / 1884: 60–61; Butchvarov 1979: 253–254). And my criticism of Russell's first objection instantiates to the reductive and the eliminative analyses of ordered dyadic relations as ordered pairs as well. That is, the *general* thesis that such relations are nothing more than classes of ordered pairs logically might be true, even if no *specific* analysis of a *specific* such relation can be ever stated in a finite sentence. One must not be confused here. I am only criticizing Russell's objection. On the containment and dependence arguments, I admit relations as totally real, i.e. real in all three of our main senses: not nothing, and so on.

Russell's second objection is in effect that no such analysis can explain or even distinguish the order of an ordered pair without presupposing the order of the relation of which the ordered pair is an instance. I think this objection is successful against reduction or elimination, though not against positive construction. For all the objection shows is that ordered dyadic universal relations, their ordered pair-instances (particular relations), and their ordered relata (ordered pairs) are formally distinct with a foundation in reality in the ordered relations, exactly as Russell says:

> There is, however, a further argument against the view of relations as classes of couples: the couples have to be *ordered* couples, that is to say, we must be able to distinguish the couple x, y from the couple y, x. This cannot be done except by means of some relation in intension. So long as we confine ourselves to classes and predicates, it remains impossible to interpret order or to distinguish an ordered couple from a class of two terms without order. (Russell 1985a / 1959: 67, his emphasis)

I agree with Russell completely. Ordered dyadic relations cannot be *reduced to* or *eliminated by* ordered pairs, since the very order of ordered pairs presupposes the existence of the ordered relations they are instances of. But the positive construction option is open. In fact, it is proved! The case is interesting because here reduction and elimination are *not* to be admitted as logical analyses that have limited validity. For Russell's second objection shows that they fail to meet the *second* condition of metaphysical ecumenicism. That is, he shows they are not logically possible logical analyses. For they beg the question of the existence of the relations.

Astonishingly, in "The Ordered Pair as Philosophical Para-

digm," § 53 in *Word and Object*, Quine totally ignores Russell's point and argues for eliminating ordered dyadic relations and replacing them with ordered pairs. The argument is curious: "A defective noun [is a noun that is] not at home in all the questions and answers in which we are accustomed to embed terms at their full-fledged best" (Quine 1975 / 1960: 258). This premiss belongs to the "ideal language" (logically perfect formal language) school of analytic philosophy. For Frege, the founder of this school, making nouns logically non-defective means regimenting object-names so that all statements in which they occur conform to the law of excluded middle, and thus have determinate truth-values. Thus all objects must have a logically determinate identity. For all identity statements in which object-names occur are among the statements that must conform to the law of excluded middle. Such an ideal language theory is as familiar, intelligible, and plausible as the ancient law of excluded middle on which it is based. What is curious is that Quine does not say here that *relation-terms* are defective nouns, or that *relation*s are defective ostensible entities. Instead, he says that "'ordered pair' is (pending added conventions) a defective noun" (Quine 1975 / 1960: 258). That is, he says his proposed *replacement* for relations is what is defective! But he plans to bring ordered pairs up to logical speed by regimenting them artificially. And this too is familiar, intelligible, and plausible. It is basically what ideal language theorists do for all the names they admit for entities. In fact, this is essentially what Copi calls giving them a "precising definition" (Copi 1978: 139–140). And surely this is an unproblematic conception. It merely amounts to replacing a vague term with a more determinate one. The problem is that regimenting ordered pairs implies *regimenting ordered relations too*, precisely by regimenting the ordered pairs that are their instances. It does not amount to *reducing* or *eliminating* the relations at all, but to establishing them as logically determinate. What was Quine thinking, to give such a misdirected argument?

For Frege, relations exist, but are not objects (particulars). For he considers relation-names to be "incomplete." That is, for him they include variables that need to be completed (filled in) by names so as to form a statement. Thus relations cannot stand in the identity relation. For their incomplete names cannot complete identity statements. But he admits relations as logically determinate universals that can be quantified over. For not only are statements about relations logically determinate, but relations also correspond one-one with their courses-of-values, which are Frege's version of classes of ordered polyadic relata. All properties, including relations, have courses-of-values. Frege calls their one-one correspondence mutual "representation." A property and its course-of-values logically represent each other. And names of courses-of-

values *can* stand in the identity relation, and thus *can* be logically determinate names. For courses-of-values are complete (Frege also calls them "saturated") objects. Thus Frege's universals (relations and properties) have what I call *representative identities*, due to the identities of the courses-of-values that represent them one-one. It is only that we cannot directly *say* that relations are identical (or not), since for Frege relation-names include variables, and thus cannot complete (fill in) the variables in the identity relation-name (see my 2003 / 1996: 113–114; 1982: 9–10). Thus *all* relations, *ordered or not*, have logically determinate representative identities because the courses-of-values that represent them have logically determinate identities. Frege's courses-of-values of ordered dyadic relations are logically equivalent to Quine's classes of ordered pairs.

Quine says "There are many" ways to regiment names of ordered pairs, so as to regiment names of classes of ordered pairs (Quine 1975 / 1960: 258). He cites two ways: his own simplification of Norbert Wiener's way, and Kazimierz Kuratowski's way. On the first way, the ordered pair ⟨x, y⟩ is replaced with the class {{x}, {y, Λ}}, where Λ is the empty class. On the second way, the ordered pair ⟨x, y⟩ is simply replaced with the class {{x, {x, y}}, doing away with the empty class (Quine 1975 / 1960: 258–259).

I have seven criticisms of Quine's regimentation.

First, there is Russell's critique of ordered pairs, discussed a few paragraphs ago. We shot down Russell's first objection. But we accepted Russell's second objection, and it is fatal to Quine. This is the problem of preserving the right order in the replacing term. It might seem nonexistent, and probably did to Quine. For does not "{x}" in the expression "{{x}, {y, Λ}}" (Quine 1975 / 1960: 258), simply, directly and *intuitively* replace the x in the expression "⟨x, y⟩"? The very question throws formal logic out the window. For as Frege says, all intuition must be banished from formal logic, that is, from the ideal language. We cannot rely on intuitive appearances. And there is no way to tell, from the Wiener-Quine formal notation, which replacement class is replacing which variable in the ordered pair ⟨x, y⟩, unless we *stipulate* that the commas order in both the replaced and the replacing expressions order things *in the same direction*. For it is perfectly possible to interpret {x} as replacing y, and {y, Λ} as replacing x, with logically equivalent success in replacing "⟨x, y⟩" with "{{x}, {y, Λ}}". Likewise, obviously, for the Kuratowski replacement. In fact, we can interpret "is larger than" as meaning 'is smaller than' just as well. Lo, a systematic reference order inversion / referential inscrutability / translational indeterminacy! Thus Quine begs the question of interpreting the order direction of the members of the replacement classes. He merely *assumes* that the ordering of the

expressions and commas always goes in the same direction. But, the reader may ask, why cannot Quine just stipulate this? Is he not stipulating everything anyway? My reply is that this is just like Quine's banishing indexical terms from natural science. The result is that he cannot tell when or where anything is, nor even which physical object he is. So too, if we banish intuitive order, we cannot tell which apple is larger than which in the Wiener-Quine and Kuratowski replacement expressions. Thus the real problem is that Quine is having his systematic inversion cake and stipulating the order direction too, as if it could not be systematically inverted.

The best solution is in phenomenology. We too stipulate that the same variables take the same values. But unlike Quine, we have no problem of systematic inversions of commas, variables, or order any more than we do for names. We are directly presented with public qualified: ordered pairs, order directions, and even formal stipulations of logic. All these qualified objects essentially are as they directly appear to be. And if our logic is true, they "are" veridical objects in themselves. Thus there is no comma, variable, or order inscrutability. And qualified relations satisfy Russell's demand for "relation[s] in intension" (Russell 1985a / 1959: 67).

Quine claims, "Relations as they concern us here are 'relations-in-extension'" (Quine 1975 / 1960: 257 n.1). But Russell says, "This [ordering] cannot be done except by means of some relation in intension" (Russell 1985a / 1959: 67). Thus Quine's "Flight from Intension" (the title of chapter 6 of *Word and Object*) not only means he cannot tell when, where, or which physical object he is, but it also means he cannot even order an ordered pair!

Clearly, Russell is well aware that ordered pairs are just one kind of order, and that the concept of order is deeper and more general. See Russell (1964 / 1938: part 4; 1919: ch. 4). No ordered relations, no ordered pairs. Quine seems unaware of this, or else he thinks the ordered relations he is trying to eliminate are extensional relations. To be sure, the order *affects* the extensional truth-value. But we cannot tell what the order is without a flight *to* intension. For order direction needs an intensional interpretation.

Second, Quine claims that the ordered pair is a paradigm of eliminative analysis. And we have arrived at a paradigm of detailed criticism of his analysis, since everything depends on a comma! And unlike Quine, we are positive constructionists who admit all the entities in question. Ordering relations are not eliminated by or reduced to ordered pairs, but are positively constructed from them.

Third, Quine's regimented replacements for ordered pairs cannot be wholly distinct from the ostensively defective pre-regimented ordered pairs they replace. Quine virtuously says:

> [Wiener's formal] construction [of the expression

> "ordered pair"] is paradigmatic of what we are most typically up to when in a philosophical spirit we offer an "analysis" or "explication" of some hitherto inadequately formulated "idea" or expression. We do not claim synonymy. We do not claim to make clear and explicit what the users of the unclear expression had unconsciously in mind all along. We do not expose hidden meanings...; we supply lacks. [That is, we impose determinacy on the sentential contexts that had previously been indeterminate]. (Quine 1975 / 1960: 258)

Quine cites as examples not only Wiener's formal explication of ordered pair, but also Russell's theory of descriptions and Frege's definition of number (Quine 1975 / 1960: 258). The problem arises when he immediately continues:

> We fix on the *particular functions* of the unclear expression that *make it worth troubling about*, and then devise a substitute, clear and couched in terms to our liking, that *fills those functions*. Beyond those *conditions of partial agreement*, dictated by our interests and purposes, any [other] traits of the explicans come under the head of "don't-cares" (§ 38).... Our example [Wiener's explication] is atypical in just one respect: *the demands of partial agreement* are preternaturally succinct and explicit.... (Quine 1975 / 1960: 258–259, my emphasis)

Thus the explicans (explicating term) and explicandum (explicated term) are distinct only in reason, since they are *not wholly distinct*. And surely Quine would be the first to tell us that if there were no "partial agreement"—a term he uses twice—there would be no explication at all, but instead the stipulation of a logically unrelated term. Not only that, but Wiener's explication of "ordered pair" is not the only one that is "preternaturally succinct and explicit." Quite the opposite! E*very* logical explicans must be succinctly and explicitly intersubstitutable salva analycitate with the explicandum in "the particular functions of the unclear expression that make it worth troubling about." If the explicans cannot "fill those functions," then it is not an explicans at all. That is, *in the area of partial agreement*, the sentences in which the terms occur must correspond one-one and be logically equivalent. Thus on the relevant containment entailment theory of logical implication, the explicans and explicandum refer to the same referent *in the area of partial agreement*. Thus Wiener's explication of "ordered pair" is

an example of metaphysical ecumenicism as well as of explication. For the referential overlap cannot be of nothing.

Russell's contextual theory of definite descriptions and Frege's implicitly contextual definition of number in terms of its identity conditions are paradigms of the same ecumenical point in contextual definition. For they would not be explications at all if they did not achieve logical equivalence in the areas of partial agreement. On Frege's definition, see my (2003 / 1996: 86–101).

Fourth, Quine overlooks that a totally successful reduction or elimination of relations using ordered pairs, meaning that the area of agreement is not partial but complete, presupposes the reductive or in his case eliminative ontological interpretation of logical analysis. And we saw that those two interpretations are of progressively limited validity. For they are progressive abstractions from the positive construction interpretation, which is established by the containment and dependence arguments, as well as by the deeper arguments. Thus in logical analysis, realism always wins.

Fifth, there is Strawson's distinction between descriptive metaphysics and revisionary metaphysics (Strawson 1963 / 1959: xiii–xv, see 256–257). On the face of it, Quine admits descriptive metaphysics merely as a starting point to be discarded, and admits only revisionary metaphysics in his finished system. In contrast, I admit descriptive metaphysics as an essential part of my finished system. My descriptive metaphysics is my phenomenology. It is my theory of qualified objects. My revisionary metaphysics is, if anything, my theory of objects in themselves. Certainly the world in itself is different from and in that sense "revises" the qualified world in many ways. But the only difference in kind of reality is that qualified objects cannot exist apart from the logical possibility of minds, while objects in themselves can. And the qualified world itself is not revised at all. It remains what it is. Also, my world in itself is much like the way it is presented via qualified objects.

Sixth, Quine's theory of explication also faces a problem of vagueness. Just how much "partial agreement" does there need to be for an explicans to count as an explication of the term in question? This problem is not necessarily fatal to Quine. In fact, Quine can simply say that his regimentation program is precisely what removes the vagueness. But this is a higher-level vagueness. There is the vagueness of the term we wish to explicate, and there is the higher-level vagueness on how much of the term's vagueness we can dismiss as "don't-cares" and still have enough area of agreement for our explication to count as an explication of the term in question. Swim poorly enough, and you are not swimming at all.

Quine finds vagueness "of the essence of the first phase of language learning," and useful in various ways (Quine 1975 / 1960: 85, 125–128; see 1981: 13, 32–36, 100–101). And then he uses

regimentation to remove vagueness later on. But I do not think that the higher-level vagueness I just described can be removed. And I agree with Russell that Quine uses too much artificiality (Russell 1985a / 1959: 61). Quine's regimentations are very artificial! In contrast, Russell declines to admit overly artificial analyses. But this is only a difference of degree. Both say they are *replacing* vague ordinary terms (see Russell 1967 /1959: 131). And both can appeal to Aristotle's point that we should not expect more precision than a subject-matter permits. But if they go too far, they are Alice in Wonderland playing "Let's change the subject." Many criticize even Russell for that. See especially Strawson (1967 / 1950).

Seventh, Quine never wholeheartedly endorses the law of excluded middle in the first place. He merely admits the law and its first cousin, bivalence (the thesis that every statement is either true or false), as pragmatically convenient "for the simplicity of theory it affords" (Quine 1981: 32). His views conform to the law and are very determinate. But for him the law itself is just a deeper level of pragmatic convenience. Indeed, on the deepest and most general level, he regards his entire canonical logic notation as a matter of pragmatic convenience. Thus he is building on pragmatic sand. Our phenomenology of directly presented qualified logical objects that often transparently "are" logical objects in themselves would help.

The huge literature on Quine's pragmatism is beyond the scope of this book. But we can say that Quine's explications are very pragmatically convenient indeed, including his two alternative explications of ordered pairs. He may as well say (and has said) that talk of truth itself is only pragmatically convenient, and can explicated away. But the pragmatic theory of truth is self-defeating. For it is either true, or false and merely a pragmatic convenience.

Order presupposes relations, which presuppose complexity, which presupposes plurality. Curiously, the first three notions may be primitive, while the deepest and most general fourth notion, plurality, is definable in arithmetic as 'more than one'. Likewise, red presupposes color, which presupposes visible property, which presupposes property. It may be that red, color, and visible property are phenomenologically primitive, while property is definable as 'referent that is not an ultimate subject of predication'.

Russell defines structure in terms of relations and their fields (Russell 1976 / 1948: 254–255, see 250–256), but "doubt[s] whether complexity... is definable at all" (Russell 1971e / 1918: 196–197). But even if he is right on both counts, it would not change that first progressive series of one-sided modal distinctions. All series of definitions are series of modal dependences, with each defined object depending on at least one defining term; but not all series of modal dependences are series of definitions, since not all logically (modally) dependent or independent objects are definable.

In the present case, the order in the universal *is larger than* seems logically indefinable. We can define the size of a thing in terms of the size of the region it occupies, and define a larger region as one that has a *higher number* of some standard units of area. But the definition presupposes the larger than relation. For standard units of area imply and presuppose that no unit is larger (or smaller) than any other.

Again, the order in an ordered pair logically depends on the order in the ordered universal relation of which it is an instance.

Facts, States of Affairs, and Situations

We discussed the phenomenology of facts in chapter 1. We shall now discuss their metaphysics in light of the containment and dependence arguments and four more arguments. The arguments prove that facts are entities, or at least exist. Again, for us statements connote and directly refer to qualified facts (propositions), which "are" facts in themselves if the statements are true.

I follow Wittgenstein in admitting facts as a metaphysical category, as well as his argument for doing so. His argument is that if we do not admit facts, then we only have lists of objects as our description of the world, and no account of how those entities are related. We would be unable to distinguish the actual world from infinitely many other possible worlds having the same objects, but related in different ways. Thus a complete description of the world must not merely list the objects, but state how they are related. The argument is best thought of as implicit in the *Tractatus* as a whole. Two relevant texts are: "A proposition is not a medley of words," and "Only facts can express a sense, a set of names cannot" (Wittgenstein: T 3.141–3.142).

Again, on my use of "object" in the wide sense as meaning anything and everything, facts are objects. Thus in my wide sense, a complete list of objects *would* include how they are related, but only because objects in the wide sense *already* include facts. In any case, Wittgenstein's argument is decisive.

We can add four of our own arguments to Wittgenstein's: the containment argument, the dependence argument, Aristotle's pros hen argument, and Aristotle's relation argument. See the earlier sections in this chapter. These four arguments would start from the ordinary entityhood or at least existence of the ordinary objects that are the logical subject- and predicate-constituents of the <fact>, and conclude that the fact is an entity or at least exists.

We can also add a fifth argument of our own: All facts are different, and thus cannot be nothing. For at most, only one fact could be nothing, since the rest are different from it. And there is

no reason to choose any fact as the one that is nothing. And they all belong to the same category. Thus by parity of categorial reason, all facts exist. And on the face of it, if facts exist in the sense of not being nothing, then they are also totally real. For they are all describable by statements that are objectively true.

We may call these arguments the battery of six (our five arguments plus Wittgenstein's).

By parity of reason, this battery of six arguments applies to Wittgenstein's facts (*Tatsachen*), states of affairs (*Sachverhalten*), and situations (*Sachlagen*) alike. On the main rival interpretations of these, see Jimmy Plourde (2016). Plourde's own view is that "States of affairs are to be understood as Russellian complexes, facts as the subsistence and non-subsistence of states of affairs[,] and situations as possibilities of the subsistence and possibilities of the non-subsistence of states of affairs" (Plourde 2016: 181). I cannot discuss the scholarly details here. But whatever the best interpretation is, it seems clear that Plourde's three notions, if not also Wittgenstein's, are different but distinct only in reason. And that is our main interest here. I shall rely on my own perhaps simplistic interpretation of these notions. This is not primarily a scholarly book. Thus whether my notions are Wittgenstein's, Plourde's, or only my own does not really matter here. But I think my interpretation comes at least reasonably close to Wittgenstein.

Wittgenstein says, "We also call the existence of states of affairs a positive fact, and the nonexistence of states of affairs a negative fact" (Wittgenstein: T 2.06). And "We picture facts to ourselves.... A picture presents a situation in logical space, the existence and non-existence of states of affairs" (Wittgenstein: T 2.1–2.11). Both statements confirm Plourde's interpretation of facts if we equate existence with subsistence, and non-existence with non-subsistence, of states of affairs. The first statement also says that the former are positive facts, and the latter are negative facts.

Our battery of six arguments applies to Wittgenstein's positive facts and negative facts alike. By parity of reason, they apply to negative states of affairs and negative situations as well.

Per the law of excluded middle, either a state of affairs is existent or it is not. Thus for every state of affairs, either there is a positive fact that it exists, or a negative fact that it does not. Thus it is logically contingent that a state of affairs exists if and only if it is logically contingent that the corresponding fact is positive. And it is logically necessary that a state of affairs exists if and only if it is logically necessary that the corresponding fact is positive. Likewise for non-existent states of affairs and negative facts. However, due to Wittgenstein's view that logical truths are empty tautologies that say nothing about the world, it would seem that positive facts and negative facts are always logically contingent. But Wittgenstein's

talk of logical truths as true in virtue of their logical form suggests that there are also positive facts and negative facts about logical form; and such facts would be logically necessary. This problem of interpretation is beyond the scope of this book. But whether or not there are any logically necessary facts, we can understand why he says, "The totality of existing states of affairs also determines which states of affairs do not exist" (Wittgenstein: T 2.05). And I believe the converse is also true: the totality of non-existing states of affairs determines which states of affairs do exist. It might seem that we can also say the same of Russell's positive facts and negative facts, namely, that their totalities determine each other. But that is not exactly the case, as we shall see in a moment.

There is another problem of interpreting Wittgenstein. We saw a moment ago that the existence of many, if not all, states of affairs is logically contingent. For they analyze logically contingent statements about the logically contingent world. But then states of affairs logically can either exist or not. For that is what it means for their existence to be logically contingent. But then states of affairs as such are beyond both existence and nonexistence. Thus *they* are logically necessary, even if their *existence* or *non-existence* is logically contingent. Wittgenstein says they "subsist independently of what is the case" (Wittgenstein: T 2.024). Thus the *subsistence* of states of affairs seems to be logically necessary, even if their *existence* or *non-existence* is logically contingent.

Thus it seems that when Wittgenstein says, "States of affairs are independent of one another" (Wittgenstein: T 2.061), he really means that their *existence* or *nonexistence* is independent of the *existence* or *nonexistence* of each other. But if they are all logically necessary in their *subsistence*, then none of them can fail to *subsist*. Thus we cannot define their independence as meaning that any of them can *subsist* even if the others do not. We could only interpret their independence as meaning that any of them can *exist* even though the others do not. And that would commit us to the view that the existence or non-existence of states of affairs is always logically contingent. And that would imply that there are no logically necessary facts about logical form. And that could be the correct interpretation. But we can still define their independence as meaning that *per impossibile*, any of them can subsist even if the others do not, and/or if we mean that they are really distinct in the sense that their *conceptual/intelligible contents are wholly distinct*. Those were senses (3a) and (3b) of "really distinct" on page 198. I shall leave such options for the Wittgenstein scholars to explore.

Russell's facts are very different from Wittgenstein's. Here there is no one-one correspondence between positive facts and negative facts. Instead, there is a one-many correspondence. To every positive fact, there correspond indefinitely many negative

facts. For example, if it is a positive fact that the Eiffel Tower is iron, then it is a negative fact that it is not wood, a negative fact that it is not plastic, a negative fact that it is not clay, and so on ad indefinitum (Russell 1971e / 1918: 211–216; 1985 / 1940 81–83; 1976 / 1948: 120–126, 493). It seems clear that the positive fact *determines* all the indefinitely many negative facts, and that even if we cannot state them all, the indefinitely many negative facts also determine the one positive fact as the one remaining alternative. If there are infinitely many logically possible materials that the Eiffel Tower could be made of, then the positive fact that it is made of iron determines infinitely many negative facts about what it is not made of, and vice versa. However, the negative facts cannot *define* the positive fact as the one remaining alternative, any more than the positive color blue can be defined as not red, not green, and not any other logically possible color. For the word "other" implies a tacit reference to blue that would make such a definition circular. For it means "other than blue." Also, the definition would violate Aristotle's requirement that a definition should be positive if it can be positive. For saying all the materials that the tower is *not* made of, and saying all the colors this color is n*ot*, do not positively tell us what the tower *is* made of, nor what this color positively *is*. See my (2003 / 1996: 143) for more on negative facts.

I shall now discuss my own facts and states of affairs. This too will be largely familiar, but I must state it for the record.

Facts and states of affairs can be either logically necessary or logically contingent. The fact that this apple is red is logically contingent. The fact that red is a color is logically necessary. Likewise for the states of affairs corresponding to those two facts, respectively the apple's being red and red's being a color.

A fact is described by a true statement. A state of affairs is described or referred to by a logical subject-term that can be converted into a true statement by adding the predicate "obtains" or Wittgenstein's "exists." For us, all facts and states of affairs exist. They are objects in the wide sense, and since they are all different, they are not nothing. Even Wittgenstein's nonexistent states of affairs *subsist*, so they do have a kind of being. For our part, we analyze talk of nonexistent facts or states of affairs as talk of qualified facts or states of affairs that "are" not facts or states of affairs in themselves. Normally, of course, when we talk of facts or states of affairs, we mean facts or states of affairs in themselves; and that is what I mean in what follows.

Facts and states of affairs are different, logically equivalent ways of parsing the same thing. It is a fact *that the cat is on the mat* if only if *the cat's being on the mat* is a state of affairs. It may seem redundant to admit both facts and states of affairs, but metaphysical ecumenicism demands it. Since facts and states of affairs are

different, but statements expressing them are logically equivalent, they are distinct only in reason. Every fact and every state of affairs is a logically complex entity, since each one is, well, one.

States of affairs are complex particulars. They can be named or described, but cannot be asserted by a statement, since they are not propositions. "The cat's being on the mat" is a logical subject only. Statements function to assert facts. "The cat is on the mat," connotes and directly refers to a qualified fact (proposition), which "is" a fact in itself if and only if the statement is true.

The containment and dependence arguments for facts and for states of affairs may be stated as follows.

The <fact> asserted by "The Eiffel Tower is iron," and the <state of affairs> described by "the Eiffel Tower's being iron," logically contain the ordinary existent the Eiffel Tower; and their identities logically depend on its identity. They would not be the <fact> and the <state of affairs> they are if the Eiffel Tower were not the entity it is. Therefore they exist in the minimal sense of not being nothing. For anything that contains or is contained by something that exists, and anything that depends on or is depended on by something that exists, cannot be nothing. The containment and dependence arguments can also start from the ordinary existence of the ordinary material, iron.

The containment and dependence arguments also establish the existence of negative facts, such as the fact that the Eiffel Tower is not wood, and the existence of other molecular facts, such as the fact that either the Eiffel Tower is iron or it is wood. The arguments also show the existence of existential facts, such as the fact that there exists something that is iron. They also show the existence of universal facts, such as the fact that if anything is the Eiffel Tower, then it is iron. The arguments also show the existence of the corresponding states of affairs and situations, including negative, other molecular, existential, and universal states of affairs and situations. But this does not include merely possible facts, states of affairs or situations. For there is no such thing as a merely possible object, and that includes merely possible facts, states of affairs, and situations. Merely possible things are not there to contain or be contained, or to depend on or be depended on.

In what follows, I shall discuss only facts; but the discussion applies to states of affairs and to situations as well.

The fact described by"The Eiffel Tower is iron" may be called an atomic fact, meaning it does not logically include any simpler facts. In fact, the statement does not even include logical operators such as "not," "or," "and," and "if-then." Facts which do include simpler facts may be called molecular facts, and their articulate statement includes logical operators. If a true statement is prefixed by the negation sign, it describes a negative fact. If a true

statement is prefixed by the existential quantifier, it describes a general (i.e. existential) fact. And if a true statement is prefixed by the universal quantifier, it describes a universal fact. If a true statement is prefixed by a modal operator, such as "It is logically necessary that" or "It is causally possible that," it describes a modal fact. Likewise for any other sorts of operators or prefixes.

The <negative fact that the Eiffel Tower is not wood> logically contains and identitatively depends on the ordinary individual the Eiffel Tower, not to mention the ordinary property of being wood. Likewise for the <disjunctive fact that either the Eiffel Tower is iron or it is wood>, the <general fact that there exists something that is iron and that is (identical with) the Eiffel Tower>, and the <universal (any) fact> that if anything is (identical with) the Eiffel Tower, then it is iron. All of these logically contain and identitatively depend on the same ordinary individual, the Eiffel Tower, and also on the ordinary materials iron and/or wood. Thus all these sorts of facts exist. For nothing can contain or depend on nothing.

Likewise for <negative facts>, other <molecular facts>, <general facts>, and <universal facts> about any other sorts of ordinary objects, such as materials and properties. For all such facts logically contain and depend on such ordinary existents.

Having concluded that all these sorts of facts exist, then likewise for the <logical operators> and <modal operators> they logically contain and depend on. This is a sort of logical "domino effect" of the containment and dependence arguments. I simply mean that these arguments are logically transitive. That is, if A logically contains or is contained by B, or logically depends on or is depended on by B, and if B logically contains or is contained by C, or logically depends on or is depended on by C, then if A exists, then not only does B exist, but so does C. The universal principle is that nothing can contain or depend on nothing. And containment and dependence are themselves transitive relations.

Russell says, "It does not look plausible that in the actual objective world there are facts going about which you could describe as '*p* or q'" (Russell 1971e / 1918: 209; see 1985 / 1940: 83–88; 1976 / 1948: 126–128). My reply is that this detects no flaw in the containment or dependence arguments. Also, disjunction is a perfectly fine Fregean function, and is different from all other functions. Thus only one function at most can be nothing. Thus by parity of reason, they all exist. Also, the phrase "going about" is disingenuous advocacy. Logical operators are abstract entities. They do not go about on legs, nor are wafted by the wind. They are motionless and indeed are changeless. For they have no location in space or time. And logical containment and dependence need not be space-time containment, nor even ontological containment or

dependence at all. They can be merely logical. *Any* relation will do.

One might object likewise about hypothetical (if-then) facts, and about molecular facts and logical operators in general (Russell 1971e / 1918: 211), as well as about general and universal facts (see Russell 1985 / 1940: 88–93). All sound strange. My reply remains the same. No flaw has been detected in my arguments.

It has been objected that the conjunction operator does not exist because there is no difference in the world between "*p*" and "*q*" on the one hand, and "*p* and *q*" on the other. My reply is the same here too. Conjunction is an entity. It is a Fregean mapping function. Thus the two separate facts *p* and *q* on the one hand, and the one conjoined fact *p and q* on the other, are different but distinct only in reason. Asserting "*p*" and "*q*" separately is logically equivalent to but different from asserting "*p* and *q*" conjointly.

The later Russell suggests eliminating negation because at bottom, it is the positive inhibition of positive things (Russell 1985 / 1940: 211–214; 1976 / 1948 121–125). My reply is that negation is an entity. It is a Fregean mapping function. The most Russell could hope for is to show that negation and the positive inhibition of positive things are logical analysandum and analysans. But on the positive construction interpretation of logical analysis, even if that logical analysis succeeds, negation is positively constructed, not eliminated. Even worse, positive inhibition implies negation. For inhibiting means positively *not* allowing something to happen.

One might object that at least the logical copula, the "is" of predication, is rejected in modern classical logic. Certainly Frege and Russell both reject it. My reply is that this rejection is a classic case of the reductive (Frege) or eliminative (Russell) interpretation of logical analysis. This too is shot down by the containment and dependence arguments, as they show that the positive construction interpretation of logical analysis is correct. For there is an entitative difference in the world between the Eiffel Tower's being iron and its not being iron. The "is" of predication is in fact a mapping function. It maps the ordered pair <the Eiffel Tower, iron> onto the truth-value of truth. Frege and Russell self-defeatingly dismiss it as built into logical predicates because they unduly follow Ockham and overlook positive construction and our distinctions in reason.

There is a further argument for the existence of copulative or predicative being. Namely, it is a genus. For there are at least two kinds of predicative being which are different but distinct only in reason. They are instantiation and exemplification. It will be recalled that particular properties of red instantiate red, while bare particulars exemplify red. Since instantiation and exemplification are different, at most one of them can be nothing. Thus at least one of them exists in the sense of not being nothing. But there is no reason to prefer either of them as existing over the other. Thus by

parity of reason, both exist. But then the genus predicative being exists as well. For it logically contains both instantiation and exemplification, and they logically depend on it as their logical constituent genus. This is another domino effect. For the fact that the Eiffel Tower is iron logically includes instantiation and exemplification as logical constituents that are different but distinct only in reason, and both of them in turn include their genus, generic predicative being, as a logical constituent. And the existence of the fact that the Eiffel Tower is iron was established by the existence of the Eiffel Tower, and also by the existence of iron. Talk of objects hanging together in facts! These are far deeper and wider senses of "object" and of "fact" than anything envisioned in Wittgenstein's *Tractatus*. For their application is far more general. Yet once we get the hang of the containment and dependence arguments, they are also far easier to understand and apply than Wittgenstein's notoriously enigmatic book. At least that is my view! Being easier to understand does not imply truth, but it helps.

One might object that the Eiffel Tower is not a single giant perfect particular, still less a giant bare particular. My reply is that it is a complex perfect particular, and that Bergmann would assay it by means of a logical analysis logically containing many bare particulars. My even simpler reply is that if the Eiffel Tower is a bad example, a red phenomenal spot is a paradigm of instantiation and exemplification as different but distinct only in reason. And we only need one successful example to show a distinction in reason.

Last, I shall discuss what Russell calls *fully* general statements. These are statements that describe only purely logical relations among quantified variables. The quantifiers can be either general or universal. But unless we assume, as Russell does, that there exists at least one individual, *true* fully general statements will all be universal, for example, "If anything is F, then it is either F or G." For a general statement prefixed by an existential (not: veridical) quantifier cannot be true if no individuals exist.

True fully general statements describe fully general facts, due to further domino effect series of containment and dependence arguments. For the truth-grounds of such statements logically contain and depend on individuals and/or properties, and we have already shown the existence of those objects. Of course, *false* fully general statements do not describe nonexistent fully general facts, since there is no such thing as a merely possible fact. Instead, such statements connotatively mean and directly refer to qualified fully general facts that "are" not fully general facts in themselves.

There is a further argument by domino effect. Namely, if we showed, *contra* Frege, that predication exists as a mapping function, then fully general facts exist. For they all, and indeed all facts, logically contain and depend on the predication function.

Russell thought at first that all fully general truths are purely general *logical* truths. But then he found infinitely many examples of true fully general truths that are not logical truths. These are the statements, "There exists at least one individual," There exist at least two individuals," and so on. Where the existence of individuals is logically contingent, all such fully general statements are logically contingent as well. Russell gives these examples as counterexamples to his own earlier theory that to be a logical truth is to be a fully general truth. And that is why he came to hold that logical truths are not only fully general, but are also true in virtue of logical form. I discuss this in my (2023 / 2015: 6–10, 15, 16–23, 92–105). Fully general truths and fully general logical truths are modally distinct. For all fully general logical truths are fully general truths, but as Russell shows, not all fully general truths are fully general logical truths. And the containment and dependence arguments apply to them both, or more precisely to the facts they assert. This includes formal facts about logical form.

This brings us back full circle to the question whether there are purely formal facts about logical form. As we just saw, on the containment and dependence arguments, the answer is yes.

Contradictions and Tautologies

In chapter 1, I argued that since contradictions describe impossibilities, they can exist only in language and thought, and perhaps even in distorted dreams and perceptions, as in Russell's "Metaphysician's Nightmare," but not in reality in itself. They are qualified objects that "are" not and logically cannot "be" objects in themselves. Recall here that qualified facts include not just objects of thought, but also objects of perception. As such, contradictions can be and are the connotative meanings and direct referents of contradictory terms and contradictory statements. Recall here that objects / referents in the wide sense include qualified facts.

One might argue that tautologies express qualified facts that "are" not and logically cannot "be' facts in themselves as well, but for the opposite reason: they are not logically impossible, but logically necessary in a way that makes it impossible for them to be or assert anything about the world in itself. But that will take some showing. Are there not purely logical facts in themselves? Are they not about logical form? Why cannot a formal tautology be about a formal fact in itself? We have already argued several times that logically necessary truths must be about facts in themselves, since such truths must be mind-independent and independent even of the logical possibility of minds. Indeed, do not both contradictions and tautologies belong to the logical form of the world? And does not

logical form exist in itself? Is not logical form an object in itself, in the wide sense of "object"? Even if there is a distinction between qualified logical form and logical form in itself, would that not be precisely how a tautology can directly express a qualified formal fact that "is" a formal fact in itself? And even if contradictions can exist only in language, thought, and distorted perceptions, do not language, thought, and perceptions themselves exist in themselves? Are they not in the real world, meaning the world in itself?

It would seem that any tautological facts would be logically necessary objects in the wide sense, hence necessary beings. But it would seem that there is no such thing as a self-contradictory fact, since there is no such thing as a logically impossible being. There are only qualified self-contradictory facts that cannot "be" objects in themselves. And that could be the basis of a very plausible objection to the containment and dependence arguments, and not only because the round square logically contains *round* and *square*.

It might be objected to the containment argument that a contradiction implies and thus logically contains everything. Thus the containment argument shows that contradictions exist after all, since they contain existing facts. In fact, they contain *every* existing fact! Likewise, it might be objected to the dependence argument that a contradiction would logically depend on everything in the sense that the truth of *any* statement (in this case the contradiction) logically depends on the truth of all the statements it implies. For if a contradiction implies everything, then if any *other* statement is false, then the contradiction must be false. Of course it already must false, simply considered by itself and without regard to its implications; but that is not the logical point being made here.

My reply is that a contradiction implies every statement, and the implication is *valid*, but no argument whose premiss is a contradiction is *sound*. For a sound argument is a valid argument all of whose premisses are *true*. And a contradiction is necessarily *false*. Thus a contradiction's implication of every statement is per impossibile, i.e., merely hypothetical. Thus its logical containments are not ontological containments. For there are no contradictions there to ontologically contain anything. Likewise, they are not there to ontologically depend on nothing. Thus the containment and dependence arguments do not and cannot apply to contradictions, Only *qualified* contradictions exist, and they are necessarily false propositions that cannot "be" contradictions in themselves.

This must not be confused with the fact that *distinctions in reason* based on purely hypothetical (per impossibile) implications are *always* the case in reality. For contradictions are *never* the case in reality. I mean distinctions in reason *in themselves*, and these *include* distinctions in reason based on hypothetical implications. There is all the difference between our *really discerning* different

objects of thought, based on their having different hypothetical (per impossibile) properties, and our validly drawing false conclusions about *objects in themselves* from necessarily false premisses in unsound arguments. Granted, there are both qualified distinctions in reason and distinctions in reason in themselves. But the distinction between objects of thought and objects in themselves is itself a distinction in itself. For we saw in chapter 1 that objects of perception or thought would be logically impossible if, per impossibile, minds (perceivers and thinkers) were logically impossible. And that is a purely hypothetical property because minds *are* logically possible. But it makes objects of perception or thought distinct only in reason in an *indirect* sense from minds. For while they logically can exist if minds do not exist, they logically could not exist if, per impossibile, minds logically could not exist. And that indirect distinction in reason between minds and objects of perception or thought is a distinction in itself that is part of the totally real order, even though it is based on a purely hypothetical property. For the statements "Minds logically can exist" and "Objects of perception or thought cannot exist if minds cannot exist" are logically (categorially) necessary truths. Nor can those two statements contradict each other, since both are true. The right parallel is to "Contradictions logically cannot exist" and "If contradictions did exist, they would ontologically contain everything." For those are necessary truths about the totally real order too. Thus the distinction between merely logical containment and ontological containment is a distinction in itself that is part of the totally real order too.

Thus contradictions are not there to ontologically contain anything. All contradictions can do is *logically* contain things. For example, the round square logically contains *round* and *square*. But it cannot ontologically contain them because it is not there. For in ontological containment, nothing can contain nothing.

If tautologies *were* nothing in reality, the same *would* apply to them. They would be implied by and thus *logically* contained by everything, but they would not be there to be *ontologically* contained by anything. For a familiar example, we say "Either it is raining or it is not" cannot tell us anything about the weather. But tautologies *are* about logical form in itself. Thus everything in itself *does* ontologically contain them. And that is correct. For everything in itself does have, i.e. contain, logical form in itself.

But just like contradictions, if tautologies *were* nothing in reality in itself, they would not be *completely* nothing. For they would describe qualified facts in the qualified world. They would describe qualified facts that cannot "be" facts in themselves. Qualified contradictions imply, and therefore logically contain and logically depend on, every qualified fact. And qualified tautologies

are implied by and therefore logically contained by and depended on by every qualified fact. Thus the containment and dependence arguments would succeed for both contradictions and tautologies after all, but only to show their qualified existence, not their existence in itself. They would show that not only via logical containments and dependences, but also *qualified* ontological containments or dependences. We would not be squeezing the blood of total reality out of the turnip of qualified reality. We would be safely squeezing turnips out of turnips. This conforms to Descartes' principle, stated in scholastic terminology:

> [T]here must be at least as much reality in the... total cause as in its effects.... And from this it follows, not only that something cannot proceed from nothing, but likewise that what is more perfect—that is to say, which has more reality within itself—cannot proceed from the less perfect. (Descartes 1969 / 1642: 162)

But tautologies *are* about the world. They are about logical form. Thus tautologies and contradictions part ontological company. For contradictions cannot be about the world. In fact, that *negative* fact *is* part of logical form. Likewise, synthetic *a priori* statements, in fact *any* statements, are about the world if and only if they are true.

One might object that contradictions and tautologies are not about the world *because* their truth-grounds are in logical form alone. Replying to it will take us into modern classical logic (Frege-Russell style logic) and its theory of logical deduction. In simplest terms, the reply is that the world has *both* content and logical form. Neither contradictions nor tautologies are about the world's content. But tautologies state truths about the world's form and thus they are about the world's form. But contradictions state falsehoods about the world's form, and thus they are not about the world's form. Thus they are not about *anything* in reality in itself.

Russell's most famous express endorsement of deductive inference as 'following from', and as truth-ground containment, is in his introduction to Wittgenstein's *Tractatus* (Russell 1969 / 1921). Russell says:

> [W]e arrive at an amazing simplification of the theory of inference.... Wittgenstein is enabled to assert that... if p **follows from** *q* the meaning of *p* is **contained in** the meaning of *q*, from which of course it results that nothing can be deduced from an atomic proposition [except itself]. All the propositions of logic, he maintains, are **tautolo-**

> **gies**, such as '*p* or not-*p*'. (Russell 1969 / 1921: xvi, my bold emphasis)

Russell is clearly aware that truth-tables are diagrams that logically analyze *following from* as tautological truth-ground containment. See Wittgenstein (T 5.101, 5.12, 5.121. 5.122. 5.132). All that is missing is our *term* for this today, "logical relevance."

For Wittgenstein, truth-functional deducibility is both truth-ground containment and the logical relevance relation he calls 'following from'. Wittgenstein says:

> T 5.101 ....I will give the name *truth-grounds* of a proposition to those truth-possibilities of its truth-arguments that make it true.
> T 5.11 If all the truth-grounds that are **common** to a number of propositions are at the same time truth-grounds of a certain proposition, then we say that the truth of that proposition **follows from** the truth of the others.
> T 5.12 In particular, the truth of a proposition '*p*' **follows from** the truth of another proposition '*q*' if all the truth-grounds of the latter are truth-grounds of the former.
> T 5.121 The truth-grounds of the one are **contained in** those of the other: *p* **follows from** *q*.
> T 5.122 If *p* **follows from** *q*, the sense of '*p*' is **contained in** the sense of '*q*'.
> T 5.132 If *p* **follows from** *q*, I can make an inference **from** *q* **to** *p*, **deduce** *p* **from** *q*.
> T 5.133 All **deductions** are made *a priori*. (Wittgenstein's italic emphasis, my bold emphasis)

All this is a revealing gloss on Russell as well, since this is just the view he is endorsing in his Introduction to the *Tractatus*. It also confirms to Descartes' scholastic containment principle, or we may as well say ontological relevance containment entailment principle.

Wittgenstein's treatment of deducibility suggests a way to embrace the paradoxes of strict implication. Namely, in terms of truth-functional containment, impossible antecedents may be said to contain everything and necessary consequents contain nothing. As Irving M. Copi says, "So the correct answer to the question, 'What happens when an irresistible force meets an immovable object?' is 'Everything!'" (Copi 1978: 335).[4] Prior adds:

> E. J. Nelson argues that 'entailment', i.e. the converse of 'following from', must consist in a

> definite inner connexion between antecedent and consequent, and cannot be present through some peculiarity (necessity, impossibility, truth, falsehood) attaching to either proposition alone. (For some reason he does not consider the possibility that what [C. I.] Lewis's paradoxes show is precisely that necessary and impossible propositions as such *have* a definite inner connexion with all propositions whatever.) (Prior 1955: 196)

Wittgenstein argues that the "definite inner connexion" described by Prior actually exists:

> T 5.142 A tautology follows from **all** propositions: it says **nothing**.
> T 5.143 Contradiction is that **common factor** of propositions which ***no*** proposition has in common with another. Tautology is the **common factor** of all propositions that have **nothing** in common with one another.
>
> Contradiction, one might say, vanishes **outside** all propositions: tautology vanishes **inside** them.
>
> Contradiction is the **outer limit** of propositions: tautology is the unsubstantial point at their **centre**. (Wittgenstein's italic emphasis, my bold emphasis)

The inner connection in either case is just the "common factor,"or logical containment. It is common knowledge that a tautology says nothing about the world's *content*. Again, we do not need to look out the window to see whether "Either it is raining or it is not" is true. And a person who is *willing* to affirm a contradiction is willing to affirm anything and everything.

Thus I agree with Richard M. McDonough that Wittgenstein "anticipates" the relevantists even while remaining a modern classical logician (McDonough 1986: 89; 264–65 n.5). McDonough speaks of ex falso (McDonough 1986: 264 n.5), but his argument is really about ex contradictione quodlibet:

> Wittgenstein is making a point about the nature, not challenging the existence, of the "proof." [H]e is only saying that this "proof" must be conceived differently from the proof of a genuine proposition by means of logic.

> Strictly speaking, nothing is proved in the "proof" that anything follows from a contradiction .... One has only, in a mechanical manipulation of signs, shown that '(P & not-P) ⊃ Q' is a tautology. (McDonough 1986: 93)

Thus there are two levels to interpreting Wittgenstein here. On the shallower level, Wittgenstein would agree that $P \,\&\, \neg P$, therefore Q, is valid for any old Q, and in this sense would admit that a contradiction entails *everything*. But on the deeper level, he would say that a contradiction entails *nothing*, since $(P \,\&\, \neg P) \supset Q$ is a mere play of symbols, an empty tautology that says nothing about the world. That is, in tautologies and contradictions alike, the logical symbols are not playing the role they play in logically contingent statements. They are not functioning to help formulate contingent statements about the world, but are emptily interacting only with each other. Thus on the deeper level, ex contradictione nihil sequitur (nothing follows from a contradiction) precisely because a contradiction is nothing, and de nihilo nihil fit (nothing follows from nothing). McDonough has an excellent and extensive scholarly argument which I cannot describe here (McDonough 1986: ch. 2–4; see especially ch. 3; compare Frank Ramsey 1954 / 1931: 12).

Gregory Landini beautifully adds:

> Wittgenstein writes that "tautologies and contradictions show that they say nothing"; they "lack sense" but are "part of the symbolism" (TLP 4.461). Venn's propositional diagrams nicely illustrate Wittgenstein's ideas. In a logically perfect language the status of an expression as tautologous, contradictory, or contingent is built into (shown by) the syntactic conditions for the representation of genuine assertions. A propositional tautology shades nothing, and contingencies shade some but not all areas. In Venn diagrams, tautologies and contradictions are not genuine statements. A genuine statement is made by shading some, but not all, areas of the diagram. All tautologies have nothing shaded; they are just the overlapping circles—the scaffolding. [And all contradictions shade everything, since "$P \,\&\, \neg P$" shades both the *P*-area and the not-*P* area.] Indeed, in Venn's propositional diagrams, [all] formulas that are logically equivalent have exactly one and the same representation. (Landini 2007: 123; see

ch. 4 generally)

Landini explains how everything follows from a contradiction, and how a tautology follows from everything, via visible representation of the truth-ground containments in Venn diagrams. This ties modern classical logic in general, and the early Wittgenstein in particular, with the geometrical diagram tradition.

In fact, truth-tables are just another sort of logic diagram in which to diagram the premisses is already to diagram the conclusion of a valid argument. Indeed, we could just as easily use visible shading and non-shading in place of the letters "T" and "F". Venn diagrams can be and have been used to rewrite truth-tables as expressly geometrical diagrams, so as to show containment of the conclusion (Copi 1978: 207–8; Gardner 1968: 49–50; Prior 1955: 171–72). See especially Shin (1994).

My only remark is that impossibilities are nothing, so their containment of everything is merely logical, while tautologies are about logical form, so their being contained by everything is ontological. This should be no surprise. For there is no content in the world that fails to have and thereby to conform to logical form. Hegel goes even further and argues that content and (not just logical) form are in a way identical (2015 / 1830: 200–202, see 233, 282). But I think Hegel's argument shows only that they are distinct only in reason. Certainly the intensions of "content" and "form" are different. In fact, I think Hegel would agree that their identity is what he calls an identity-in-difference. Nor need we accept Hegel's argument for that, though I am sympathetic to it.

Russell defines a purely formal statement as that which remains when all the constants in a statement are replaced by bound variables, so that only variables and logical expressions remain (Russell 1971 / 1919: 198–199). Russell defines logical constants in much the same way. See Russell (1971 / 1919: 196–205) on logical form, variables, logical constants, tautology, and contradiction. Russell declines to say that logical forms exist, or at any rate declines to say that they are constituents of logical propositions. That can be left to our containment and dependence arguments to show. For statements assert facts, and ordinary facts that enjoy ordinary existence logically contain and depend on their logical forms, in order to be the ordinary facts they are.

Russell says, "For the moment, I do not know how to define 'tautology'.... in spite of feeling thoroughly familiar with the characteristic" (Russell 1971 / 1919: 205). But the definition is obvious: a *formal* tautology is a statement that is formal, i.e. consists only of variables and logical constants (genus), and is true in virtue of its logical form (difference). And if tautology is a 'felt' characteristic, then the definiens (formal statement that is true in

virtue of its logical form) and definiendum ('felt' formal tautology) of that definition are different but distinct only in reason. And that is good, since we want such a theoretical definition to be factually informative. I agree with Wittgenstein that a formal tautology, or formal statement that is true in virtue of its logical form, is a statement that is true on every row of its truth-table (Wittgenstein: T 4.31–4.46). And that defines truth in virtue of logical form.

Holes, Privations, and Other Absences

There is no doubt that all absences are objects of thought. Holes are even objects of perception; we see them. The question is whether any such qualified objects "are" objects in themselves.

The containment and dependence arguments show the existence or entityhood of all absences that are logical parsings of true statements like "There is a hole in the ground" or "Jones is blind." And on the face of it, absences such as holes and blindnesses are distinct only in reason from the corresponding negative facts and states of affairs that the statements imply. Many have discussed holes, privations, and other absences, and many have discussed negative facts and states of affairs. But I may be the first to note that absences are distinct only in reason from negative facts and states of affairs. For example, a hole is not identical with the negative state of affairs of its location's not being filled with dirt. They are formally distinct with a foundation in reality in the ground. No ground, no hole, and no such negative state of affairs. This is not just a matter of intensionally different qualified objects. For the hole could have been filled with cement.

If absences are distinct only in reason from negative facts and states of affairs, then we can show that absences exist, based on the existence of the corresponding negative facts and states of affairs. For there are logical containment and dependence relations between them. There are even logical dependence and containment relations between a hole and the ground it is in. No ground, no hole. Now, it might be doubted whether negative facts and states of affairs are ordinary things that exist in the ordinary sense. It might be doubted whether they exist at all, despite our battery of six arguments, including Wittgenstein's. But it cannot be doubted that my front lawn is an ordinary object that exists in the most ordinary of senses. And I dig holes in it to plant things. If there is any doubt about the ordinariness of front lawns and even their holes, consider the famous old folk song, "There's a hole in my bucket!" Thus the containment and dependence arguments here are business as usual.

Holes, gaps, privations vacuums, silences, omissions, and even empty space must be something, and cannot be nothing. For if

they were all nothing, then they would be, so to speak, identical with each other, and there would be only one of them. For, so to speak, there could be at most only one nothing. But there can be many holes in a lawn or piece of Swiss cheese, many gaps in a wall, many cases of deafness and blindness, many vacuums in glass bottles, many moments of silence in a conversation, and so on.

The containment and dependence arguments apply very straightforwardly to <holes> and <privations> that are in ordinary individuals and that cannot be identified apart from the ordinary individuals they are in. A <hole> is in my front lawn. It cannot be identified independently of the lawn that contains it. It depends on the lawn for any being it may have. No lawn, no hole in the lawn. Likewise for privations. A privation is an absence of a property that a living thing would normally have. For example, people can normally see a wide variety of colors and hear a wide variety of tones. But some people are red-green color blind, others are color blind, and still others are completely blind. Like holes, privations cannot be identified apart from the things that have them. But unlike holes, they logically include the concept of normalcy, meaning normal organic function. While holes frequently occur in ground, it is not an organic function of ground to be fully filled. For ground is not even an organism. Thus holes are not privations.

Aristotle's relation argument works just as well. It is the genus of which my containment and dependence arguments are species. For nothing can be related to nothing. The argument applies to all absences. <Holes> are always in something. And not just logically, but spatially! Hypothetically (per impossibile), if the whole universe were nothing, that would not be an absence. Absent from what? There is nothing larger! Similarly for privations.

Aristotle applies his pros hen argument to establish the being of things in all of his categories other than primary being. For he admits anything as a being if it is related in any way to a primary being, which is for him a substance (Aristotle 1968a: 1003b5–15; Owens 1963: 268–269, 436–437). This is the basis of his whole pros hen theory of being. But he also applies the argument to show that privations that are related to a primary being have being. And it logically applies to all absences that are related to a primary being. Indeed, absences are or ought to be one of his categories of being for this reason, with privations as a genus.

Aristotle clearly admits privations and even items we call nonbeings as existing in the sense of not being nothing, in virtue of their 'reference' to, or relation to, the beings that have them (Aristotle 1968a: 1003b5–15; Owens 1963: 268–269, 436–437). Aristotle argues that since being is pros hen:

> So, too, there are many senses in which a thing is

> said to be, but all refer to one starting-point [viz. substances]: some things are said to be because they are substances, others because they are... *destructions* or *privations*... of substances,... or of things which are relative [Apostle translates this as "whatever is *related*"] to substance, or *negations* of one of those things or of substance itself. It is for this reason that we say even of *non-being* that it **is** non-being. (Aristotle 1968a: 1003b5–15, his bold emphasis, my italic emphasis)

That is Aristotle's pros hen argument for pros hen being. And it is implicitly both a containment argument and even a dependence argument. It applies to privations logically contained in substances, such as blindness in Homer, and even to absences in substances, such as a vacuum in a bottle, or to take an example from the *Tao Te Ching*, the empty spaces between the spokes of a wheel. And there is always a logical dependence. No Homer, no blindness in Homer. No bottle, no vacuum in the bottle. No wheel, no empty spaces between its spokes. Aristotle's pros hen argument is very close to his relation argument. They are modally distinct. For all pros hen relations are relations, but not all relations are pros hen. Perhaps his relation argument occurs only within his pros hen argument!

Even though Aristotle has a multivocal pros hen theory of being, he also admits being in the univocal sense of belonging to the real order of nature, that is, of *being in re* (Ross 1960: 155). And Aristotle would also admit that everything in the real order has Parmenidean being in the univocal sense of *not being nothing*. His thinking on Parmenides is complex, but this is part of it. As we saw earlier, Aristotle is in fact an extreme realist (Ross 1960: 26–28, 131, 155; Owens 1963: 131–132).

Aristotle is also a relevant containment entailment logician whom the relevantists Alan Ross Anderson and Nuel D. Belnap regard as their hero (my 2023 / 2015: 280, 284–85; 2021a / 2012: 26–28, 121–23). Any logical dependence argument of Aristotle's is implicitly also a relevantist logical containment argument. Aristotle emerges as an all but explicit progenitor of my containment and dependence arguments. But he does not carry his metaphysical ecumenicism so far as to admit ante rem universals or Plato's forms (ante rem ideal particulars). Perhaps that is partly because he is unaware of the full implications of his relation and pros hen arguments. Aristotle does not speak of containment or dependence in the block-indented text I just quoted, but only of referring to (Ross's translation) or relating to (Apostle's translation) a thing. Thus containment and dependence are at best implicit in that text.

By parity of reason, Aristotle ought to assay holes and all

absences the same way he assays privations. The only difference is that a privation is an absence of a *normal* condition. And normality is not a relevant factor in our battery of arguments. Normal, functional, organic, and even just usual are not factors at all! What count are containment, dependence, and relation. Our arguments apply to all absences both as referring to a thing and as relating to a thing. For absences are negative relations, negative containments, and negative dependences. No Homer, no blindness of Homer.

We have already admitted final cause as a kind of cause that is complementary to efficient (purely physical) cause. In this, we follow both Aristotle and those quantum physicists who call final cause a complementary description of the causal reality of organisms, by analogy to the complementary descriptions within quantum physics of quantum events as both particles and waves. Some quantum physicists even extend the analogy to God as final cause of the world in complementary religious descriptions of the world. See Werner Heisenberg (2007 / 1958: 76–82, and especially P.S. (post script) 23–24; 1972 / 1971: ch. 9, especially pp. 91–92).

The concept of complementary description is basic to quantum physics. By parity of reason, organic normality is a complementary description of organisms as well. Normality may be defined as typical function relative to final cause. We may speak of normality with respect to final cause not only in natural organisms, for example, normal vision or appetite, but also with respect to agent cause of artifacts. For example, we *normally* put handles on hot coffee mugs. We may also speak of the normal or characteristic styles of Renoir, Monet, or other painters. Conversely, not being faster than a speeding locomotive or able to leap tall buildings at a single bound might be privations for Superman, but they are not privations for me, since such abilities are not normal for ordinary human beings. Nor is my inability to paint like Renoir a privation, for the same reason. We may call all extensions of complementarity beyond quantum physics *complementary ecumenicism*. But I am agnostic about any complementary religious dimension.

For more on holes, see Casati (1994).

The Objects of Mathematics: Arithmetic and Geometry

Here it will be convenient to assume that logicism, the thesis that all mathematics is definable as, and hence logically equivalent to and rewritable as, statements of logic plus class or set theory, is true. For then we can easily see how the containment and dependence arguments, far from eliminating mathematics or reducing it to logic plus class or set theory, positively construct it.

Many reject logicism because of Russell's paradox. I shall argue that Russell's paradox is merely a local case of self-destruction. In any case, I admit logicism into metaphysical ecumenicism as valid.

Whitehead and Russell's *Principia Mathematica* consists of two basic analyses. First, they analyze arithmetic as logic plus class theory, following and crediting Frege. Then they analyze geometry in turn as arithmetic, following and crediting Descartes on analytic geometry. Thus what is original about Whitehead and Russell is not their two basic analyses, but the way they unify them into a single comprehensive logical analysis of mathematics. We may say they really put one and one together! For by hypothetical syllogism (if A is B and if B is C, then A is C), it follows that they analyze geometry as logic. And on their eliminative ontological interpretation of logical analysis, they have a second hypothetical syllogism based on the first: classes are logical fictions; hence numbers are logical fictions, since for them numbers are classes of classes, hence analytic geometry is a logical fiction, since analytic geometry bases geometry on numbers. Thus for Whitehead and Russell, classes are a fiction, arithmetic is a doubly a fiction, and geometry is triply a fiction. Here they put three things together!

In *Principles of Mathematics*, Russell deems a vector of motion "doubly a fiction" because motions are fictions (he admits the static changeless world of Zeno), and vectors of motion are not even motions, but mere 'creatures of analysis' (Russell 1964 / 1903: 474). Thus a vector is quadruply a fiction in *Principia Mathematica*. For classes are fictions, hence numbers are fictions, hence geometric motions are fictions—and vectors are not even motions, but only fictional logical components of motions.

The containment and dependence arguments go in the opposite direction. Classes exist (see previous section), therefore numbers exist, therefore geometric objects exist, therefore vectors exist (when things in geometric space move about). For each new level of objects logically contains and depends on the previous level of objects as their logical constituents. Numbers logically contain and depend on classes. Geometry logically contains and depends on numbers. And vectors logically contain and depend on motions of spatial objects, and vice versa. No motions, no vectors of motion. No vectors of motion, no motions. Thus even though we accept the whole series of their analyses as valid, we hold that Whitehead and Russell get the ontology wrong at every stage.

We can use containment and dependence arguments to show the existence of the objects on any one level considered by itself even without going through the *Principia* series of analyses in order. If it is an ordinary fact that two oranges are rolling off the table, then this fact exists and logically contains and depends on a class, a number, geometric shapes, motions, and vectors of motion.

One might object to the *Principia* analysis of arithmetic and geometry that everything depends on classes, and that classes are problematic due to Russell's paradox. The paradox is that the class (or set) of classes (or sets) that are not members of themselves is a member of itself if it is not a member of itself, and is not a member of itself if it is a member of itself. These are the only two options, and on either option, it both is and is not a member of itself. Thus strictly it is not a paradox, or seeming contradiction, but an actual contradiction. In our theory of objects, the *qualified* class exists, but it cannot "be" a class in itself.

Many hold that Russell's paradox strikes at the foundation of class and set theory. And there are various systematic solutions that remove it. The most famous ones are Whitehead and Russell's own theory of types, and Zermelo-Fraenkel set theory (ZF). These are in effect precising definitions (Copi 1978: 139–140) of class or set. As the name "precising" suggests, they remove the vague, ordinary, pre-philosophical concept of a class or set, and replace it with a more precise and consistent one. In fact, the whole business of logic largely consists of using our better logical intuitions to replace our poorer ones (Brown 1972); and these are just instances of that. This is a place where Quine's regimentation can shine!

On metaphysical ecumenicism, it does not matter which solution we use, as long as the solution is logically effective. For on metaphysical ecumenicism, the various technical resolutions of Russell's paradox are distinct only in reason, insofar as they are intelligible, logically possible, and are logically equivalent, that is, save the logical appearances by eliminating self-referential classes equally well. If so, then they are formally distinct with a foundation in reality in the logical portion (or logical form) of the real order.

But we do not need to offer a systematic solution. For the offending class or set is simply a self-destructive surd in a logical structure of class theory that is basically all right. Compare the class of round squares. If a member is round, then it is not square. And if a member is square, then it is not round. Such a class is self-destructive. But no one would say that there is something fundamentally confused about our concept of class simply because a class like that can be described. In fact, there are infinitely many such classes that logically cannot have members. Round and square is just one example. And there would be something wrong with our notation if such classes could *not* be described in it. Why should Russell's paradox be any different? Why should its self-reference be the distinctive problem? There are infinitely many self-referring classes that are innocent of paradox, such as the class of classes that *are* members of themselves. It is simply a member of itself! Thus self-reference, as such, is innocent of paradox. How then is Russell's paradoxical class significantly different from the class of

round squares? Each class simply self-destructs into an empty class solely due to its own individual definition. We feel no need to regiment classes in the one case, so why should we in the other?

My view that Russell's paradox is merely a local surd has the merit of making the offending class only logically impossible (well-formed), as it seems to be on its face, and not categorially impossible (ill-formed), as it would be on Whitehead and Russell's ramified theory of types. My view also has the merit of solving the problem at the lowest possible level and without rejecting infinitely many self-referential classes that are perfectly innocent of paradox, yet are condemned as ill-formed by the theory of types. It is well known that the theory of types takes a shotgun approach, and throws out infinitely many babies (innocent self-referential classes) along with the bath water (Russell's paradoxical class). Theory of types is ill-fitting, inappropriately wide, and like a shoe that is the wrong size for the foot. Thus, if anything, it is the theory of types that is logically ill-formed, and not Russell's paradox. I believe that my solution is well known too. I suspect that logicians do not like it because there is nothing for them to do—no need to invent theories of types or axiomatic approaches like ZF. There is nothing like using a needlessly big logic cannon to kill a tiny self-destructive mouse of a class. But Ockham does not rule here. On metaphysical ecumenicism, all *logically valid* solutions are not wholly distinct.

Thus I find Russell's paradox of little interest. And his explanation of why the paradox exists is not even a true general description of the problem, since it is infinitely too wide. By way of comparison, irrational numbers did not destroy the foundations of mathematics, but only deepened our understanding of numbers. For more on Russell's paradox, see my (2007: 103–104).FN3-23

On the containment and dependence arguments, arithmetic and geometry retain their distinctive arithmetical and geometrical characters. For their statements intensionally express and directly refer to qualified arithmetical and geometrical facts as propositions. And those qualified facts parse into qualified arithmetical and geometrical objects that "are" arithmetical and geometrical objects in themselves. On the positive construction interpretation of logical analysis, based on the containment and dependence arguments, if logicism is true, these arithmetical and geometrical objects in themselves are not eliminated, nor reduced to objects in themselves of logic and class or set theory. Instead, they are different but distinct only in reason from those objects. For they are different parsings of the same facts in themselves. For example, the number two is different from but distinct only in reason from the class of dyadic classes. And the equations of arithmetic describe both arithmetical facts in themselves and logical class and set facts in themselves, where the corresponding facts are different but distinct

only in reason. And this even includes their cognitive status as *a priori*. For the arithmetical and geometrical facts, both qualified and in themselves, are synthetic *a priori*, as Kant understands arithmetic and geometry, and as even Frege understands geometry, and as each of them understands what it is to be synthetic *a priori*. For us the qualified facts are directly cognized as synthetic *a priori*, and the facts in themselves are indirectly cognized as synthetic *a priori*. In contrast, the corresponding qualified facts and facts in themselves described by the logicist analysis are analytic *a priori*, as the logicists understand what it is to be analytic *a priori*. And if logicism is true, then the synthetic *a priori* statements of arithmetic and geometry are *logically equivalent* to the analytic *a priori* statements of logic and class or set theory. Hence all the one-one corresponding statements are distinct only in reason—*even though one is synthetic a priori and the other is analytic a priori*. And that is perfectly fine. For their truth-grounds are distinct only in reason.

Thus we are treated to the spectacle of two *a priori* sciences, arithmetic and geometry, which are synthetic *a priori* considered in themselves, but which are distinct only in reason from their respective logical analyses as analytic *a priori* logic plus class or theory. Thus one and the same thesis in arithmetic or geometry can be regarded as synthetic, and also as analytic. Again, this is not a problem on metaphysical ecumenicism. In fact, objects logically *cannot* be distinct only in reason unless they *are* different. And these two synthetic-analytic differences (between arithmetic and its logical analysis, and between geometry and its logical analysis) are merely examples of different objects that are distinct only in reason. And their mode of cognition, synthetic or analytic, merely goes with the metaphysical territory of each of them. And that is the best explanation of why classes or sets can be wider or narrower (have more or fewer members) but numbers and shapes cannot, why numbers can be even or odd but classes and sets cannot, and why shapes can have sides and be round or square but classes and sets cannot. Namely, they are metaphysically different objects that are distinct only in reason! This is unexpected only to those who considered them to be rival theories. But there was a big tip-off. Namely, the analytic analyses of these two synthetic *a priori* mathematical fields must be both logically equivalent to *and different from* those fields, if they are to be factually informative.

Likewise, in Cartesian analytic geometry, for the numbers of arithmetic and the shapes of geometry. Numbers can be even or odd, but shapes cannot. And shapes can have sides and be round or square, but numbers cannot. Clearly, these are metaphysically very different kinds of objects. But on Cartesian analytic geometry, geometry is distinct only in reason from arithmetic. And even if both are synthetic *a priori* sciences, certainly on Kant's under-

standing of what it is to be synthetic *a priori*, they are still very different synthetic *a priori* sciences about very different objects.

All this is especially easy to understand and accept in the qualified world of direct presentations of qualified numbers, geometrical figures, classes, sets, and so on. For all qualified objects are intensional in nature. That is how they ground the possibility of informative existence and identity judgments, as we saw in chapter 1. But it is a leap over a narrow ditch to admitting also intensional differences in themselves among the corresponding objects in themselves. For the corresponding objects in themselves are intensionally different precisely because they are different but distinct only in reason. And it is "utterly transparent" "to our reason" (Frege 1974 / 1884: 115) that mathematical and logical objects in themselves are the way they are *because* of the qualified objects that veridically "are" those objects in themselves. At least in fairly simple mathematics, the qualified objects are directly transparent to our reason, and that makes the objects in themselves they veridically "are" indirectly transparent. And following Kant, their synthetic *a priori* cognitive status is transparent too!

Why Frege overlooks the Cartesian analysis of geometry in terms of arithmetic, I do not know. But if Frege succeeds in logicizing arithmetic, then he implicitly also succeeds in logicizing geometry via Cartesian analytic geometry. Thus there easily could have been a Fregean *Principia* with both a logicized arithmetic and a logicized geometry! I suspect he did not see that because he was devastated by Russell's paradox and driven back to synthetic *a priori* arithmetic. But surely Frege could have seen it long before he learned of the paradox. Surely he must have known of Cartesian analytic geometry. He was, after all, a professor of mathematics.

It is well known that there are different understandings of the analytic-synthetic distinction. Again, Pap lists twelve main senses of "analytic" (Pap 1966: Appendix A). No doubt many of those senses are not wholly distinct, i.e. are distinct only in reason; but they are still different. And some have very different extensions indeed. Just look at Kant and Frege's senses of "analytic." Kant finds arithmetic synthetic, while Frege finds it analytic! But their two senses must partly overlap, since both find geometry synthetic.

As for numbers in general, so for infinitesimals in particular. Some readers may wish to stop reading this section here, and simply instantiate the above conclusions to infinitesimals. But infinitesimals seem especially paradoxical, so I will discuss them.

Infinitesimals and change have been a problem ever since Zeno's paradoxes. I shall briefly describe the main problem in my own way. Due to the infinite divisibility of any finite line segment, to get from one end to the other we would have to travel infinitely many ever-shorter intervals, the first being the first half of the line

segment, and each interval after the first one being half as long as the previous interval. And at a finite rate of speed, each of the infinitely many finite intervals would take a finite amount of time to traverse. Since the total time of travel is infinite, the end point of the line segment can never be arrived at. For a technical flaw in this vicious infinite regress argument against motion, see my (1989).

Since ancient times, mathematicians and philosophers have discussed infinitesimals. I can only briefly describe the main history in my own way. Leibniz and Newton invent calculus independently of each other, but do not solve Zeno's puzzles. Thus they mathematically explain how to generate continuous functions from infinitesimal points, but leave the foundational infinitesimal points logically paradoxical. Thus for them, the whole calculus might as well be a useful fiction based on the fiction of infinitesimals. Then Bolzano gives the basic idea of the epsilon-delta limit definition of continuity in 1817 or earlier, but it remains unknown for many years. Then Augustin-Louis Cauchy gives the same basic idea more formally in 1821. Then Karl Weierstrass formally replaces infinitesimals with mathematical limits, which are a kind of sets. Weierstrass's formal mathematical definition of the epsilon-delta function is basically the one we use today. Then Russell admits and praises Weierstrass's limits in *Principles* (Russell 1964 / 1938: 347), and goes on to logicize mathematics in the same work. The logicization implicitly includes limits, since Russell understands them to be sets (or classes). But Russell suggests that Weierstrass was focused only on mathematics, and "probably never dreamed of any connection between himself and Zeno" (Russell 1964 / 1938: 347). Then Whitehead and Russell replace infinitesimal points with classes or sets of events in *Principia* vol. 2, **230–234. And of course they eliminate sets (or classes) in turn.

After *Principia*, Russell admits Zeno's static world in *Our Knowledge of the External World* (Russell 1960 / 1914: chs. 5–7). Russell then says in his *Introduction to Mathematical Philosophy*:

> The whole of the differential and integral calculus, and practically everything in higher mathematics, depends upon limits. Formerly, it was supposed that infinitesimals were involved in the foundations of these subjects, but Weierstrass showed that this is an error: wherever infinitesimals were thought to occur, what really occurs is a *set* of finite quantities having zero for their lower limit... (Russell 1971 / 1919: 97, my emphasis)

Russell then replaces Weierstrass's sets of quantities with deeper

and more general sets of "purely ordinal" magnitudes that "apply to series in general" (Russell 1971 / 1919: 97, 107; see 1964 / 1938: ch. 19, especially pp. 158–159). Then Abraham Robinson gives a logically consistent formal logicist definition of infinitesimals using Skolem sets, which are sets with infinitely many members (Abraham Robinson 1996; 1979; 1979a / 1961).

These definitions or analyses of infinitesimals are intended as eliminative, or at least reductive. But on the containment and dependence arguments, the reductive and eliminative ontological interpretations of any logical analysis are of limited validity. They are mere abstractions from the positive ontological construction interpretation, on which all logically valid parsings are real.

For us, appearances of motion are direct presentations of *qualified* motions. The only question is whether they "are" or can "be" motions in themselves. And there is nothing wrong with *qualified* infinitesimals. They are directly presented in thought. The only question is whether they "are" or can "be" infinitesimals in themselves. (Compare the perfectly fine qualified object, the round square.) But this merely sets the stage. Based on the containment and dependence arguments for metaphysical ecumenicism, the solution of Zeno's puzzles first by Whitehead and Russell, and then by Robinson, far from eliminating infinitesimals or reducing them to sets, positively construct them as mathematical emergents, and thereby also establish the existence of continuous motions across points of space and time in physics. And if these two solutions are different at all, they are distinct only in reason. For different but logically equivalent statements assert facts that are different but distinct only in reason. Of course, Whitehead and Russell would be the first to deny that this is what they did, since they are eliminationists. But based on the containment and dependence arguments, not to mention the relevant containment entailment theory of logical validity, this is exactly what they did, if their analyses provide statements that are logically equivalent to the corresponding ordinary statements about ordinary motions.

If it helps, recall that mathematicians used to debate whether space was "really" a continuous whole, or consisted of infinitely many flat planes, or infinitely many more lines, or infinitely many or line segments, or infinitely many more points. For us, all of these theories, which logically overlap on the face of it, are formally distinct with a foundation in reality in the spatial portion of the real order. Likewise for time, except that insofar as time is only one-dimensional, the only options for analysis in classical physics are one temporal line, infinitely many finite temporal line segments, or infinitely many more temporal points. I shall discuss post-classical physics theories of space and time later.

Once again, all the "rival" theories are right to admit the

entities they do, but wrong to deny the entities the other theories admit. Zeno is right to admit infinitesimals, but wrong to reject motion. "Process" metaphysicians are right to admit motion, but wrong if they reject infinitesimals. Ironically, Robinson at least implicitly shows that Zeno was more right to admit infinitesimals than Zeno could have known, but wrong to reject motion because of that. Certainly this is so on metaphysical ecumenicism. To be sure, Zeno had no idea of calculus, much less of any later work.

Frege implicitly can define an infinitesimal too, simply as the number one divided by Cantor's number aleph null. He has logicist definitions of the number one, division, and aleph null. So all he has to do is put the three definitions together! In fact, Frege implicitly can define infinitely many infinitesimals by putting some natural number in the numerator and some Cantorian infinite ("transfinite") number in the denominator. For Frege admits all the natural numbers, the division function, and all Cantor's infinite numbers. In fact, Frege states as early as 1884 that his work, and specifically his context principle of meaning "is destined, I believe, to throw light on... the infinitesimal" (Frege 1974 / 1884: 72). Cantor, too, implicitly can define infinitesimals using finite numbers as numerators and infinite numbers as denominators. But instead he strangely offers a proof of their impossibility. Also note that Cantor is not a logicist. Surely Frege is well aware of all this.

Sets with infinitely many members are called nonstandard sets. Thus Robinson infinitesimal arithmetic is called nonstandard. And a Fregean infinitesimal, such as 1/aleph null, would be nonstandard too. For Frege defines aleph null as the number of positive integers; and the class of positive integers has infinitely many members. Fregean infinitesimals are distinct only in reason from Weierstrass's limits, Whitehead and Russell's eliminated infinitesimals, and Robinson's infinitesimals, if they are different at all. On the face of it, all these analyses are intelligible, logically possible, and save the infinitesimal appearances, not to mention the ordinary appearances of motion, equally well via statements that are logically equivalent to statements about ordinary motions.

I cannot imagine why logicizing infinitesimals was ever thought to be a problem, once Frege logicized finite numbers (the numerators), infinite numbers (the denominators), and the division function. But Frege was not well understood until Dummett started explaining him in the 1950s. Indeed, Russell says Cantor already solved the problem (Russell 1960 / 1914: 130). Cantor was not a logicist, but did not need to be a logicist in order to define an infinitesimal as a finite number divided by an infinite number. Robinson was the first to logicize infinitesimals formally, using Skolem sets. I think we could see that train coming if we looked.

In his last book, *From Stimulus to Science*, Quine seeks to

eliminate (not: reduce) the very distinction between reduction and elimination itself. He says:

> The reduction of the mental to the physical, or indeed of arithmetic to set theory, can be characterized in either of two ways: as *explaining* or as explaining *away*. There is no difference, but the first phrasing has a gentler ring. To have *repudiated* the life of the mind seems harsher than to have *explained* it in physical terms.
>
> For Frege, twelve was (nearly enough) the class of all dozens; for von Neumann it was the class of the first twelve natural numbers, from zero through eleven. It cannot be both. We can resolve the dilemma by not identifying twelve with either. We can do without the natural numbers; their work can be done with Frege's classes or, equally, by von Neumann's.... We have solved the puzzle by speaking of *alternative eliminations* rather than *conflicting explanations*. But there is no real difference between the two characterizations. (Quine 86–87, Quine's emphasis)

I have two criticisms. In both, "no real difference" is disingenuous.

First, there is all the difference in metaphysics between Frege's admitting numbers as objects that do not have a special arithmetical character, but only a purely logical character, and Russell's rejecting numbers and classes as not objects at all, but logical fictions of logical language. This is a *distinction in reason*.

Second, Quine overlooks the solution that numbers, Frege's classes of classes, and Neumann's classes of classes are different but *distinct only in reason*. And that is because Quine sees all these solutions as sectarian rivals, instead of ecumenically being solutions that are distinct only in reason. Quine's eliminationism prevents him from seeing that. Only positive constructionism lets us see it. Venn diagrams of all the overlapping solutions, anyone?

The idea that a logical analysis is an ontological reduction or even an ontological elimination makes sense if and only if we explain the paradox of informative analysis in terms of a difference in descriptions or concepts, as Frege, Russell, and Quine do. Then we can say the same object is described or conceived differently as analysans and analysandum. Then the analysandum is reduced to the analysans (Frege), or simply eliminated in favor of it (Quine), or is reduced to it and then the analysandum is eliminated, thus eliminating the analysans as well (Russell, nearly enough). But on a correct phenomenology, analysand and analysandum are both

qualified objects. Neither can be nothing, and each essentially is what it directly appears to be. Hence *every successful logical analysis is a distinction in reason between different qualified objects*. Even if they "are" not or logically cannot "be" objects in themselves, and "are" in that sense nothing, that has nothing to do with the success of the logical analysis, which remains valid on the level of qualified objects. Compare the traditional interpretation of necessary truths as relations among ideas, whether or not the ideas correspond with anything in reality. Indeed, qualified objects, via antiqua ideas, and even via moderna ideas are distinct only in reason; see chapter 1. But I find qualified mathematical objects to be transparent enough to veridically "be" objects in themselves. Recall also that mathematical truths are logically necessary. And recall it in light of the correspondence theory of truth.

There is a dialectic here. Frege, Whitehead and Russell, and Quine can insist on their basic insights. But my insights are phenomenologically correct, including the correspondence theory of truth as *presented* as correct. And I think my containment and dependence arguments are sound too. In fact, as a metaphysical ecumenicist, I can and do incorporate all their metaphysics as distinct only in reason from mine. For example, I admit Quine's eliminative interpretation of logical analysis as an interpretation of limited validity. But Quine is constrained to view my theory as a sectarian rival. For he rejects the positive construction ontological interpretation of logical analysis, and thereby many of my kinds of entity. He also rejects phenomenology. Those who profess to find phenomenology in Quine are working uphill, like Sisyphus. But I like and admire Quine. I have learned much from him. And despite my criticisms, I consider his work to be of permanent value. Likewise for all the philosophers I criticize here. In fact, I include them all in my metaphysical ecumenicism! That is more than they would or even could do for me. What rock group said, "We can jam with them, but they can't jam with us"? They could play the other group's music, but the other group could not play theirs.

Causation

In the earlier section on the causal unity of complex physical things, we admitted Aristotle's theory of four kinds of cause: formal cause, material cause, final (teleological) cause, and efficient cause. We noted that final cause is said both of life forms that grow into a mature state, and of consciously designed artifacts, and that these blend if we design new life forms. We also noted several kinds of efficient cause. We distinguished chemical cause from physical cause, and then we distinguished five kinds of

physical cause: the strong nuclear force, the weak nuclear force, electro-magnetic force, gravity, which for Einstein is more like gliding along a space-time path than like a force, and deterministic quantum probability. These six kinds of efficient cause may be reduced to one in a unified theory someday, but it has not happened yet. In fact, there is a problem with that. Relativity cause and quantum cause, if I may call them that, are not kinds of traditional or even Newtonian efficient cause in any simple or straightforward sense. For they essentially involve other notions that are absent from the traditional concept of efficient cause. Relativity cause is primarily geometrical, and is best described as gliding along paths in lawful ways. And quantum cause is lawful determination of probabilities, not of events. Thus it seems that traditional efficient cause, relativity cause, and quantum cause are different but distinct in reason. Specifically, they are modally distinct in virtue of being different kinds of physical determinism. For they are all species of the genus lawful determinism.

I also admit a new kind of ecumenicism, "assimilative (approximative) ecumenicism." Here more advanced and accurate physical theories assimilate the measurements and predictions, if not also the theoretical models or descriptions, of good but less advanced, more approximate theories. And any good physical theory also assimilates the even more approximate measurements and predictions, if not also the ordinary models or descriptions, of ordinary, pre-scientific thinking. For example, classical physics approximates general relativity and quantum physics very closely in local space-time, and is easier to use. Thus we often use classical physics in practice, even though strictly it is no longer our theory. Metaphysical ecumenicism does not apply here. For far from being logically equivalent, the one-one corresponding statements of classical physics and of physics today do not even agree in truth-value. Hawking says:

> For example, very accurate observations of the planet Mercury revealed a small difference between its motion and the predictions of Newton's theory of gravity... The fact that Einstein's predictions matched what was seen, while Newton's did not, was one of the crucial confirmations of the new theory. However, we still use Newton's theory for all practical purposes because the difference between its predictions and those of general relativity is very small in the situations that we normally deal with. (Newton's theory also has the great advantage that it is much simpler to work with than Einstein's!) (Hawking

2017 / 1988: 11, see 31)

Hawking says "we still consider Newton's laws to be laws because they hold, at least to a very good approximation, for the conditions of the everyday world...." (Hawking 2012 / 2010: 28–29).

Hawking gives another example:

> [I]n M-theory space has ten dimensions (as well as the theory having one dimension of time), but it is thought that seven of the ten dimensions are curled up very small, leaving three dimensions that are large and nearly flat. [Those are the] dimensions that we notice. (Hawking 2018: 57)

Thus our best theory today admits ten dimensions of space, and Newton omits seven of them! Yet Newton is still good enough to use in local space-time, i.e., in our solar system. And it is easy to see why. We do not even notice the dimensions Newton omits!

It is hard to avoid thinking that there is a generic concept of cause of which all these kinds of cause are species. If there is even the faintest resemblance, then there is a generic universal. For generic resemblances are generic universals (Butchvarov 1979: 205; see 1966: 128–172). The generic universal for the six kinds of efficient cause is, trivially, *efficient cause*. We may add organic final cause for organisms to arrive at a more generic universal we may call, again trivially, *natural cause*. We may add conscious agent final cause, i.e., choice, to arrive at a still more generic universal we may call *making happen*. That may or may not be trivial, but it is easily understandable. For all eight kinds of making happen are logically contingent kinds of necessity. To use a stock example, if I will to lift my finger but my finger fails to go up, that is not a making happen, because I did not in fact make it happen.

Of course, Hume would reject all eight kinds of making happen as unintelligible. Hume would say of all eight kinds: No impression, no idea. But arguably he would not frown altogether on formal cause and material cause. After all, his sense-impressions and ideas arguably have the respective general metaphysical forms of being impressions and ideas, and also specific contents like red or round.

Can formal cause and material cause be brought under a common universal along with making happen? What could they have in common with making happen? They seem metaphysical as opposed to causal. They seem part of existing structures as opposed to making things happen. They seem synthetic *a priori*, not logically contingent. If so, then what could they have in common with making happen? Indeed, can they be brought under a common

universal with *each other*? What could *they* have in common? Note that for Aristotle, form informs *formed* matter, but there is no matter in *pure* form, and no form in *pure* matter. Thus they seem wholly distinct in their pure state. But we may trivially say that insofar as biologists, botanists, mineralogists, and other scientists empirically investigate the form and matter of natural things and their parts, formal cause, material cause, and making happen *all belong to natural science*, with the sole possible exception of conscious agent cause, if or insofar as it is free choice.

But regardless of whether formal cause and material cause belong to natural science or to metaphysics, what formal cause, material cause, and making happen minimally have in common is that they are all kinds of *reason* or *basis* for something's being the way it is, where the something is either the thing in question or its effect. That is, they all fall under the principle of sufficient reason as *kinds of sufficient reason*. Thus we may call the generic universal that all ten kinds of cause (the eight kinds of making happen, plus formal cause and material cause) fall in different ways under *raisons d'être*. Indeed, three of the kinds of cause, formal cause, material cause, and agent cause (insofar as it is free choice) seem better called reasons or bases than causes. And organic final cause might be somehow between agent cause and efficient cause.

Efficient cause in the ordinary pre-philosophical and pre-scientific sense exists in a perfectly ordinary sense, and is even perceptible in a perfectly ordinary sense, while theoretical kinds of efficient cause may not be perceptible for theoretical reasons, and therefore their existence and intelligibility can be and have often been questioned, typically along Humean or other skeptical lines. For example, I agree with Curt John Ducasse that we can see a brick smash a window (Ducasse 1968: 6, 11; see 26). And that is a directly presented via antiqua object of perception or thought at the very least. But we cannot see photons strike the brick or window.

Of course, Hume himself rejects efficient cause even in the ordinary sense, due to his deeper and more general rejection of via antiqua ideas in favor of via moderna ideas. He rejects final cause for the same reason as well. For there are no merely phenomenal impressions of either of them. He concludes there are no such things, while we conclude they are not that *kind* of thing. If he had admitted via antiqua ideas and their objective realities to begin with, surely he would never have held "No impression, no idea." For then he would have admitted via antiqua *objectual perceptions* of bricks smashing windows. And his thesis would have been, "No via antiqua objectual perception, no via antiqua objectual idea."

The traditional notion of efficient cause has two logical constituents: power or force, and constant conjunction (uniform pattern or sequence). Since Hume has no idea of power or force, he

analyzes efficient cause as having these two logical constituents: constant conjunction, and as his substitute for power or force, a habit of expectation. In effect he replaces the traditional element of physical power or force with a mental expectation that something will happen. But if habits are caused, and if Hume applies his analysis of cause, then the causation of habits of expectation must be analyzed in the same way, namely as consisting only of constant conjunction and a habit of expectation. And this leads to a vicious infinite regress of habits of expectation. Thus Hume's analysis of efficient cause is reduced to absurdity. Or else Hume will have to hold that habits are uncaused even in his sense, even if Smith's habits are completely regular and expected!

Another problem is that Hume is replacing totally mind-independent traditional cause with a mind-dependent kind of cause, insofar as expectations, if not also habits, are mental. That Hume rejects minds and the mental only makes the problem worse, since for him habits and expectations are only fictions, if they are mental. For he analyzes minds as bundles of neutral monist impressions and ideas that are neither mental nor physical in themselves. Well, perhaps he can analyze fictional causes in terms of fictional habits and expectations! Russell does the same with numbers, classes, motions, and vectors. But all such analysis are of limited validity on the containment and dependence arguments.

Nonetheless, Humean cause is not wholly distinct from traditional efficient cause, and is thus distinct only in reason from it. For they share the logical constituent of constant conjunction.

Humean cause is a logical constituent of traditional and ordinary cause. More precisely, regular / uniform / universal "constant conjunction" of events is. Hume includes a 'habit of expectation' in his analysis of cause as well, but that is not part of traditional efficient cause, nor of our ordinary notion of cause. Efficient causes happen, and in some sense must happen, regardless of whether anyone expects them to happen or not. This is a bad part of Hume's analysis. For if we include a habit of expectation in our analysis of cause, then the analysis will be too narrow. For it will exclude all causes that we do not expect to happen from being causes at all. And that excludes nearly all the causes in the universe, since we can observe only a very small number of them. We can only have general expectations of the universe at best. And they are diminished by how little we know of how things work.

Traditional efficient cause and ordinary cause alike are Humean regularity plus a perhaps indefinable sort of synthetic *a posteriori* necessity. But even if the necessity is indefinable, it is certainly an object of everyday perception or thought, if not also an object in itself. For we can see a brick smash a window (Ducasse 1968: 6, 11; see 26). And that perceived causation is a directly

presented object of perception or thought. Are we really going to say that this qualified cause "is" not a cause in itself *at all*?

Causal necessity, or power, may be indefinable. But as Kripke says, the admission of simple, indefinable notions "may in a sense be irrefutable" (Kripke 1982: 51). And this would seem to include causal necessity or power. But this is not quite right. If efficient cause has two logical constituents, power and regular occurrence, then we can define efficient cause as power plus regularity, or define power as efficient cause minus regularity, or even define regularity as efficient cause minus power. Of course, it is more natural and illuminating to define efficient cause as power plus regularity, with power as the or a more primitive notion. And intuitively, this is unlike the genuine arbitrariness in logic of either defining "and" in terms of "or" and "not," or defining "or" in terms of "and" and "not." And phenomenologically, we are ordinarily presented with efficient cause first, and discern its two constituents as abstractions later. But the main thing is that power and efficient cause are modally distinct: efficient cause must have power, but agent cause, if not also other kinds of cause, must have power too.

David Hume's eliminative theory of efficient cause would be of limited validity, and at least modally distinct from efficient cause, if it were a logically equivalent analysis; but it is not. For there are counterexamples, namely cases of constant conjunction plus a habit of expectation, but no causation.

Arnold Geulincx, Leibniz, and others give the counter-example of two physically identical clocks that are wound up independently and show the same time. Thus their motions are in constant conjunction. We can even develop a habit of expectation of what either clock will do based on what the other does. But neither clock is the cause nor the effect of the other's motions, since they operate independently of each other. See Geulincx (2006 / 1667: xxv, 356–357, 242, 250).

Geulincx's actual aim was to illustrate by analogy how God, for Geulincx the only causal power, synchronizes mind and body to work together because neither can causally affect the other. He speaks of "the clock of my will and the clock of the world" (Geulincx 2006 / 1667: 242; see 2014 / 1691: 215, see 82). But Geulincx's actual aim does not matter to us here.

José María Sánchez de León Serrano says "scholars have unsuccessfully attempted to establish a link between Geulincx and Leibniz, mainly due to Leibniz's simile of the two clocks, which also appears in Geulincx, despite the fact that Eduard Zeller conclusively demonstrated in 1884 that there is no such influence" (León Serrano 2020: 126 n.5 citing Zeller 1884). But historical influence does not matter to us here either.

What matters is that the example of the two clocks shows

that what we need for a correct analysis of efficient cause is the very power / force / causal necessity that Hume rejects. And we can drop habit of expectation from the analysis. For most causes and effects in the universe are unknown, much less expected, and still less habitually expected. Even supposing we knew all the laws, we still know almost none of the specific events.

If our analysis of efficient cause as power plus universal regularity ('constant conjunction') is correct, then the containment and dependence arguments apply to show the existence of power. For ordinary efficient cause exists in a perfectly ordinary sense. Per Ducasse, it is even a perfectly ordinary perception (via antiqua). And it logically contains and depends on <power>.

It might be thought that relative to Hume's world of sense-impressions and of cause as mere constant conjunction plus a habit of expectation, efficient cause can only belong to what quantum physicists would call a complementary dimension of the real world (Heisenberg 2007 / 1958: 76–82, P.S. 23–24; 1972 / 1971: ch. 9, especially 91–92). But on my view, this inverts the real order of things. For on my view, the real world includes causal power, and Hume's world is a mere abstraction that results from disregarding it. In fact, on his own "no impression, no idea" thesis, Hume would have no idea even of a complementary realm of real efficient causes, since he has no impression of causal power.

That quantum physics admits only quantum probabilities does not detract from this point. For the probability function of quantum physics is itself determined. *It* is the causal power and the universal regularity, and therefore the efficient cause, of quantum physics. For "the probability function... is completely determined" (Heisenberg 2007 / 1958: 23). In fact, if there were only waves and no particles, then the physical world itself *would* be completely determined by the probability function. Hawking says:

> [P]articles don't have well-defined positions and velocities but are represented by a wave. These quantum theories are deterministic in the sense that they give laws for the evolution of the wave with time. Thus if one knows the wave at one time, one can calculate it at any other time. The unpredictable, random element comes in only when we try to interpret the wave in terms of the positions and velocities of particles. But maybe that is our mistake: maybe there are no particle positions and velocities, but only waves. It is just that we try to fit the waves to our preconceived idea of positions and velocities. The resulting mismatch is the cause of the apparent unpredict-

> ability. (Hawking 2017 / 1988: 188–189)

Why are the waves deterministic? "The size of the wave function gives the probability that the particle will be found in that position. The rate at which the wave function varies from point to point gives the speed of the particle" (Hawking 2018: 95). But we cannot predict *both* its position and speed; "all we can predict is the wave function. [Thus] we can predict just half of what we could according to the classical... views" (Hawking 2018: 96). But waves alone do not give the full picture. We need the particles-view too. And that is the complementary or dual nature of quantum physics. Heisenberg says:

> The two pictures are of course mutually exclusive, because a certain thing cannot at the same time be a particle (i.e. substance confined to a very small volume) and a wave (i.e. a field spread out over a large space), but the two complement each other. By playing with both pictures, by going from the one picture to the other and back again, we finally get the right impression of the strange kind of reality behind our atomic experiments. (Heisenberg 2007 / 1958: 23, see ch. 3 as a whole)

More precisely, Hawking says:

> Although light is made up of waves, Planck's quantum hypothesis tells us that in some ways it behaves as if it were composed of particles: it can be emitted or absorbed only in packets, or quanta. Equally, Heisenberg's uncertainty principle implies that particles behave in some respects like waves: they do not have a definite position but are "smeared out" with a certain probability distribution. The theory of quantum mechanics is based on an entirely new type of mathematics that no longer describes the real world in terms of particles and waves; it is only the observations of the world that may be described in those terms. There is thus a duality between waves and particles in quantum mechanics: for some purposes it is helpful to think of particles as waves and for other purposes it is better to think of waves as particles. (Hawking 2017 / 1988: 58–59)

Probabilistic determinism or causation is not a *metaphysical* issue

on theory of qualified objects. There are only physical questions: whether or to what extent qualified deterministic *waves* "are" particles in themselves; and whether or to what extent qualified *particles* "are" waves in themselves.

Recall that qualified objects are objects of perception *or thought*. And they essentially are as they directly appear to be. Thus we do "have an idea" of quantum efficient cause.

Hume is categorially confused. Cause is not and cannot *be* a sense-impression, nor can we have a sense-impression *of* it. He infers from this not only that there is no such thing as cause, but we can have no idea of cause. But cause is not that kind of thing to begin with. Hume paints himself into a corner on this and many other issues by his British empiricist phenomenology and its via moderna theory of ideas. Hume holds that all perception is the presentation of sense-impressions. Then when he can find no sense-impression of the thing in question, he is trapped by his own theory into concluding that we cannot perceive it. Then he is further trapped by his thesis that all ideas are copies of or derived from sense-impressions into concluding that we do not even have any idea of what the thing is.

On the face of it, Hume is just wrong. On the face of it, bodies, minds, and causes are all ordinary objects of perception or thought. Thus not every object of perception or thought is a sense-impression. And for us, objects of perception or thought are qualified objects. And on my theory of epistemic seeming (chapter 4), all these seem to "be" objects in themselves, to some degree of epistemic likelihood. And I would say that normally the degree seems to be very strong. Normally we do not question it at all.

Again, I agree with Ducasse that we perceive causation. For us, this is directly as a qualified cause, and very probably also indirectly as an cause in itself. Causation is a relation, and objects in the wide sense include relations. For example, we can see a brick smash a window (Ducasse 1968: 6, 11; see 26). And that is normally judged to be no illusion or delusion, but veridical. It normally happens in broad daylight when we are wide awake, and we normally do not question it at all. To be sure, in quantum physics, the qualified cause we see when the qualified brick qualifiedly smashes the qualified window "is" the probability function. But then things are not always the way they are directly presented. Here the directly presented cause is an illusion, since a brick smashing a window does not look like a probability function. But it is no delusion, if there is a probability function in itself.

For me, this is just Continental phenomenology. My sole improvement on Ducasse is that we are directly presented with a qualified smashing, an object of perception or thought, which seems to "be" a smashing in itself, but really "is" the probability

function in itself. See the general phenomenology in chapter 1.

If smashings are not strictly universally causally necessary but only overwhelmingly probable in quantum physics, then this is a case of what I called assimilative ecumenicism. I mean that we assimilate classical physics as more or less correct into quantum physics as far more precise. And there must be something there to be assimilated. We cannot assimilate nothing. Heisenberg and Bohr could even speak of ordinary cause in ordinary life and in classical physics as a complementary reality relative to the quantum world. I do not know if they would speak that way, but I do not see why they could not. And if they did, surely they would mean far more than that ordinary and classical causes are mere illusory qualified causes and the quantum probability function is the sole efficient physical cause in itself. For surely they mean that complementary realities are on more of an equal footing than that. They are complementary realities! And metaphysical ecumenicism can admit them as distinct in logically contingent theoretical reason. We can admit both different qualified complementary realities and different complementary realities in themselves. The quantum world would be basic or primary from a deeper and more precise scientific point of view. But the world of ordinary causes would be real in its own shallower and less precise way too. Real enough for daily life!

This is not to deny the existence of Hume's via moderna sense-impressions and ideas, or Russell's sensed and unsensed sensibilia. Quite the opposite! On metaphysical ecumenicism, I embrace them. For they are logical constituents of ordinary sense-perception too. Thus the containment and dependence arguments show their existence in themselves just as fully as they show the existence of causal power in itself. It is just that they are not the *only* logical constituents of perception, nor of cause. Far from it! When we perceive a cause, a sense-datum or sense-impression is a logical constituent of the perception, but is not the whole perception. For, on analysis, the perception also has what we may call a conceptual or intelligible constituent. We see a brick, we see a window, and we see the brick smash the window. Not one of these three qualified objects is a mere sense-datum as such. The sense-data are mere abstractions from them. The objective reality is what Hume misses. And the objective reality of the third qualified object is what includes the qualified causal power, the qualified intelligible relation, that is directly presented to us.

Efficient cause is logically contingent. This includes both relativity cause and quantum cause, which are physical. But there is a categorial constraint on this. Some things logically cannot be efficient causes or effects. Numbers cannot. Classes cannot. Ante rem universals cannot. Of course, these sorts of entities are not in space or time, and efficient cause logically must occur in space-

time. But that is not enough. The axis of the earth moves about in space and time, and it cannot be a cause either, though it is an effect of the rotation of the earth. For it is a one-dimensional line. Frege calls it an abstract, meaning noncausal, object (Frege 1974 / 1884: 35). Coming to the point, sense-impressions or sense-data are categorially incapable of being efficient causes too. For they are merely phenomenal, and exist in merely phenomenal space-time. In this, they are very unlike qualified objects. For qualified causes are very plainly among qualified objects. That is the *hidden* reason why Hume has to come up with a notion of cause that leaves out causal power. Hume says we have no idea of cause because we have no impression of cause. But the truth is that even if he *did* have an idea of cause, it could not apply to mere phenomena like his impressions *anyway*, nor even to his bundles of impressions. A mere phenomenon can cause me to be happy or afraid, but it cannot smash a window. It is not that kind of thing. In sharp contrast, qualified window smashings *are* qualified causes.

Causation is more deeply and generally a relation. And for Hume, we have no idea of relations either, since we have no sense-impression of any relation. He treats a relation as if it should be itself a sense-impression relating two or more sense-impressions. For he has taken the objective reality out of all our perceptions. Our Continental phenomenology includes objective realities. Thus it admits all the relations that we directly perceive, or can even directly think of, as qualified objects that we are directly given; and causation is one of them. Causes are not presented as particulars, and especially not as sense-particulars. They are presented as relata in relations! And relations are one of the most ordinary kinds of presentation. We see and hear relations all the time. Whenever we see an orange on a table or hear a brick smash a window, we are seeing or hearing a relation. We perceive relations in themselves indirectly via directly presented qualified relations. The locus of a directly presented relation is the objective reality of the presented qualified relation. We cannot perceive a relation without a sense-impression, but it is not a sense-impression.

Thus Ducasse understands the phenomenology of cause better than Hume. And on my theory of epistemic seeming, which I discuss in chapter 4, qualified causes probably "are" causes in themselves. They "are" instances in themselves of the probability function in itself, if quantum physics is correct.FN3-24

On the face of it, all eight of our kinds of reasons for being (*raisons d'être*) are intelligible. Even if they are logically primitive, their intelligibility cannot be simply ruled out. And omitting God as a necessary agent-being, on the face of it all eight are logically contingent. That is, each kind of reason for being exists in some logically possible worlds and not in others. Thus the question arises

as to their compossibility. In particular, many hold that efficient cause is logically incompatible with free agent choice. And this brings us to our next topics: minds and bodies, and free will versus determinism. How is metaphysical ecumenicism possible here?

Introduction to Minds and Bodies

I shall describe some main "rival" metaphysical theories of mind and body, and discuss whether metaphysical ecumenicism applies to them.

The following four theories seem not only distinct in reason from each other, but virtually identical. (1) Strawson's theory is that persons are logically prior to the minds and bodies they have (Strawson 1963 / 1959: 97–100). (2) The dual or double aspect theory is that minds and bodies are aspects of, well, we may as well say persons. The theory "goes back to Spinoza" and is considered a version of psycho-physical parallelism (P. Edwards 1965 / 1957: 182). But I shall discuss it as a version of the logical analysis on which (embodied) persons are logically prior to their minds and bodies. (3) Neutral monism logically constructs minds and bodies out of neutral "building blocks" such as Hume's impressions and ideas, or Russell's sensibilia. Hume and Russell do this on their eliminative interpretation of logical analysis, making minds and bodies fictions. But the containment and dependence arguments entail the positive construction interpretation, making minds and bodies complex real entities. Theory (2) is widely held to be a first cousin of, if not version of, theory (3). But I disagree. Logically primitive persons are not only not bundles of merely phenomenal sensibilia, but they are not even neutral. For persons logically must have minds, but logically need not have bodies, much as red objects logically must have color, but logically need not have sound, taste, or smell. (4) Heidegger's theory is that *Dasein*, the ordinary, pre-philosophical "there-being" of, well, an ordinary person, exists prior to the person's artificial division into the intellectual abstractions called mind and body (Heidegger 1962 / 1927). On the face of it, all four of these well-known theories are distinct only in reason from each other, if not identical or virtually identical to each other.

Trivially, "person as logical blend of mind and body" theories are modally distinct from the theory that minds exist and the theory that bodies exist. For while there logically can be disembodied minds and unconscious, inanimate bodies, there logically cannot be logical *combinations or blends* of minds and bodies without minds and bodies. Any blindness to that is surely due to the usual view of all the different mind-body theories as

rivals. And in fact there are two famous theories that are expressly formulated as rivals.

Expressly rival theory (1) is the theory that there are *only* minds *and no* bodies, and hence no logical blends, nor dualistic interaction, nor even one-way causal action, between the two. This theory is called idealism. Sometimes it is called subjective idealism, so as to distinguish it from objective idealism. Neither subjective idealism nor objective idealism logically implies the other. And Hegel, the supreme objective idealist, was no subjective idealist. For more detail on this, see Findlay (1962 / 1958: 15, 19, 292), Kaufmann, (1966 / 1965: 185–187), Stace (1955 / 1924: §§ 7, 30–39), and Hegel (2015 / 1830: 87, 91–92, 199).

Expressly rival theory (2) is the theory that there are *only* bodies *and no* minds, and hence no logical blends, nor dualistic interactions nor one-way causal action of the two. This theory is variously called reductive materialism (really meaning eliminative), materialism, or physicalism, if matter is rejected.

On metaphysical ecumenicism, even these two expressly rival theories are admitted as having a limited validity if and only if they are (1) intelligible, (2) logically possible, and (3) logically analyze ordinary statements about ordinary minds and bodies by means of one-one corresponding logically equivalent statements. For on the containment and dependence arguments, all theories admitted into metaphysical ecumenicism are right in what they affirm, and wrong only in what they reject in each other. Hence the "only... and no" will not prevent our inclusion of these theories.

Similar expressly rival theories can be formulated about free will and determinism, topics discussed later in this chapter, and can be trivially formulated in any area of metaphysics. I trust that the previous paragraph makes my view on all of them clear.

There are four mix and match causal options for theories that admit both mind and body, but that do not logically blend them in any way. (C1) Dualistic interactionism is the theory that minds and bodies act on each other. (C2) Epiphenomenalism is the theory that bodies act on minds, but minds do not act on bodies. (C3) I do not know if anyone holds this theory or even if there is a name for it, but the converse theory would be that minds act on bodies, but bodies do not act on minds. My name for it will be "no efficient cause and only final cause theory." (C4) The fourth mix and match option is that neither minds nor bodies act on each other. This theory is often called psycho-physical parallelism. Now, these four theories appear to logically contradict each other about logically contingent matters of causal fact. But my view on express rivals as stated on this page would still apply. The four causal options would then logically overlap. And in any case, metaphysical ecumenicism applies in that all four theories have a one-sided modal dependence

on the existence of both minds and bodies. Minds and bodies logically can exist regardless of which of these four theories (if any) is true. But none of these four theories can be true unless both minds and bodies exist. That is very clear, in fact a trivial truth.

We might admit a clear "default" sense in which the four "logical blend" theories are species of (C4) psycho-physical parallelism. This is the negative sense in which if minds and bodies are logically blended, then they are not really distinct objects that act on each other as really distinct objects do. Note that efficient causes are really distinct from their effects. And omitting God as necessary final self-cause, the same goes for final causes. But this is not the intended sense in which we distinguish the four logical blend theories. Indeed, the thesis that minds and bodies are really distinct and have really distinct and contingently parallel series of causes and effects is precisely what ensures that psycho-physical parallelism logically *cannot* be a logical blend theory. And a whole person can have two really distinct sets of logical parts, the mental parts and the physical parts, each with a really distinct series of causes and effects. But that is not the intended sense either.

We can give containment and dependence arguments for the logical blend theories in two ways. First, we can start by assuming the ordinary, pre-philosophical existence of ordinary persons, or '*Daseins*', and argue that the <logical constituents> which they <logically contain and depend on>, <minds> and <bodies>, therefore cannot be nothing. Or second, we can go in the opposite direction by assuming the ordinary existence of ordinary minds and bodies, and argue that their <logical blending> into <persons> or <*Daseins*> therefore cannot be nothing. Arguing in both directions at once might seem to be circular, but in fact it is not. For in both arguments, we start from *ordinary things* and end with *positive logical construction-entities*, either simpler, more abstract entities or more complex, more concrete entities. It may sound awkward to speak of logical constituents as ontologically constructed from the wholes that contain them, but it is technically correct. The containment argument applies in both directions here. And "part" and "whole" are reciprocal notions. No ontological parts, no ontological whole. And no ontological whole, no ontological parts.

Metaphysical ecumenicism requires only three conditions. Entities are admitted if and only if they are intelligible, logically possible, and statements about them are logically equivalent to the corresponding statements about the ordinary existents in question. All entities admitted as different ontological parsings of the same ordinary statements are distinct only in reason. This is what the positive construction ontological interpretation of logical analysis is all about. Whether we are proving the existence of ontological

parts from ordinary wholes, or proving the existence of ontological wholes from ordinary parts, or both, does not matter to soundness.

Take the ordinary, pre-philosophical statement S: "Smith sees a tree and throws a ball at it." All the theories mentioned so far will have a logical analysis of it, or so I will construe the theories. I shall simplify some analyses for convenience. Theories (1)–(4) will all analyze it as "Logically primitive person or *Dasein* Smith sees a tree with her mind and throws a ball at it with her body." (C1) Dualistic interactionism will analyze S as "Smith's mind is caused by a tree to see it, and causes Smith's body to throw a ball at it." (C2) Epiphenomenalism will analyze S as "Smith's mind sees a tree and sees Smith's body throw a ball at it." (C3) "No efficient cause and only final cause" theory will analyze S as "Smith's mind actively sees a tree and makes Smith's body throw a ball at it." (C4) Parallelism will analyze S as "Smith's mind sees a tree and *thinks* it is making Smith's body throw a ball at it, and Smith's body happens to throw a ball at it." (R1) Idealism will analyze S as "It is all in Smith's mind (and perhaps also in God's mind and other minds) that Smith sees a tree and throws a ball at it (including the tree and the ball)." (R2) Reductive materialism will analyze S as "Smith is a body that sees a tree and throws a ball at it." Absurd or awkwardly stated as some of these analyses may be, on the face of it they are all intelligible and logically possible. And they are all logically equivalent to each other, assuming they are all logically equivalent to S. Again, logical equivalence is a transitive relation. Also again, it matters not at all that all these theories are logically contingent. "Two oranges are in the bowl" is logically contingent too, and that matters not at all to the logical analysis of the number two as the class of dyads. And yet again, it matters not at all that some of these theories contradict each other. They are wrong insofar as they negatively deny each other, and are distinct only in reason in what they positively affirm as analyses of S. And all that matters to *that* is that their analyses of S are logically equivalent to S, and therefore to each other.

Metaphysical ecumenicism does not extend to disembodied minds, that is, to minds that exist before or after they occupy a body, or never occupy a body. The reason is simple. If Smith survives bodily death, the statement "Smith is / has a disembodied mind" does not even have the same *truth-value*, much less is *logically equivalent*, across the mind-body theories. On materialism the statement is *false*, on idealism the statement is *true*, and the other theories need further specification. And the underlying reason is simple too. Namely, objects referred to in logically equivalent statements are *distinct only in reason*. But disembodied minds are *wholly and thus really distinct* from bodies. Thus metaphysical ecumenicism has a limit. Namely, the containment and dependence

arguments only work for containments and dependences! They do not and cannot show the existence of entities that are really distinct from the ordinary entities we start with.

We have seen that metaphysical ecumenicism works for the formal analyses of ideal language philosophy, at least on a general level. For a specific logical analysis of this mind or that body cannot be stated in a true or false sentence, if the analysis would be for example an infinitely long temporal series of classes of sensed and unsensed sensibilia. Metaphysical ecumenicism also works for ordinary language philosophy. The main example may be called logical behaviorism. This "is the view that the meaning of mental term[s] can be explained wholly in terms of bodily behavior and of the physical circumstances in which it occurs" (Malcolm 1971: 80). The main argument for it is that all talk must be publicly taught and learned. (Never mind the very first talker.) But a metaphysical ecumenicist would ontologically interpret logical behaviorism not as elimination or reduction, but as positive construction. Minds might even be viewed as logically emergent entities from bodily behavior. But logical behaviorism will falsify statements about disembodied minds just as much as materialism does. And we saw that the private language argument is distinct only in reason from the mental language argument, which is *phenomenologically* more correct. And the verification principle, a main basis for logical behaviorism, cannot even verify itself. Still, there is nothing logically wrong with *embodied* minds as private mental logical emergents from public bodily behavior. "Emergent" merely means the thing has properties its constituents do not have. And logico-ontological containment is not the same as ordinary containment.

Likewise for 'holistic' or 'naturalistic' theories of science. Embodied minds logically can be logical emergents from those theories too. In fact, they might be species of logical behaviorism.

Nonetheless, metaphysical ecumenicism is largely limited in its applicability to the philosophy of minds and bodies. For many or most philosophers now think that theories of minds and bodies are not logical analyses or even *a priori* at all, but are logically contingent and even empirical. Or at any rate, they think that *many* theories, and perhaps the *best* theories, are logically contingent and empirical. Talk of shifts of intellectual gravity!

In 1964 and 1970, two principal anthologies on minds and bodies appeared. Anthony Flew says in his editor's introduction to *Body, Mind, and Death*:

> Today questions about the relation between minds and bodies arise most typically in scientific contexts....
>
> All the Readings which follow have been

> selected in the light of an editorial conviction that the fundamental issues outstanding are primarily philosophical rather than scientific. Yet equally certainly, they are issues that can be resolved satisfactorily only by a philosophy receptive to a scientific outlook, and informed by scientific knowledge. (Flew 1964: 1–2)

And C. V. Borst says in his editor's introduction to *The Mind-Brain Identity Theory*:

> The papers in this volume are all concerned with expounding and examining [the Identity Theory] that mental states are quite literally identical with brain states... [W]hat is distinctive about the [theory] is that the proposed identity is put forward as a scientific discovery—or at least potential scientific discovery—and not as a truth concerning the meaning of mental terms or concepts. This explains a good deal. (Borst 1975 / 1970: 13)

There is nothing wrong with metaphysical ecumenicism's not applying to every philosophical theory. And I never said it did. But while the question of the relation of philosophy to science is beyond the scope of this book, and perhaps beyond all of us, my own views can be stated very simply.

Following some logical positivists, a theory is scientific if and only if some logically possible empirical evidence would help confirm or disconfirm it, that is, make it more or less probable than it is without that evidence. That is to say, on Keynes' (1962 / 1921) theory of probability as degree of logical relevance, some logically possible empirical evidence must be logically relevant to the truth or falsehood of the theory. And following Karl Popper, the theory must be empirically falsifiable. I would add that all scientific theories are also subject to Heisenberg's uncertainty principle. But the principle is itself a scientific theory, hence logically contingent, hence not part of the *logically essential*, *a priori* nature of science. Of course, all natural science must be logically contingent and *a posteriori*. But science itself does have an essential nature. For we cannot perform a scientific experiment to determine the nature of science. That would presuppose that we already understood what science is. Thus the nature of science is an *a priori* issue. In fact, that science is logically contingent is *a priori* and even *essential*!

Roughly following Butchvarov, a theory is philosophical if and only if any adequate discussion of it presupposes an adequate discussion of the evidence for it. Thus a philosophy is not logically

independent of the evidence for it. That does not make philosophy circular, empty, or relative. It is either *self*-evident to some degree or based on factually informative formal theses, synthetic *a priori* theses, or other theses that are evident to some degree.

Some theories of mind and body are scientific, or mainly claimed to be scientific, such as the mind-brain Identity Theory of J. J. C. Smart and U. T. Place. Other theories are philosophical, or mainly claimed to be philosophical, such as the mind-body dual aspect theory of Spinoza. Metaphysical ecumenicism applies to the theories if and only if they meet the three conditions.

It is not always easy to tell the difference, and not always because of unclear writing. It is widely accepted that one can offer empirical *evidence* for arithmetical truths. That is, even if Mill's theory that arithmetic *consists of* empirical generalizations is dead wrong, one can still offer counts of pebbles and gingersnaps as empirical *evidence* that two plus two equal four. And it took me over fifty years to see the major respect of *non*resemblance in the famous analogy of dual aspect mind-body theory to a Euclidean curved line segment that appears positive on one side and negative on the other. In the textbook for my very first philosophy course in the fall semester of 1969, Paul Edwards and Arthur Pap say:

> Probably the explanation most popular among [parallelists] has been some form of "identity" or "double aspect" theory... On this view bodily and mental processes are really "at bottom"... the same events. They are two "aspects" of the same reality; they are the same thing viewed from different angles or known in different ways.... Numerous illustrations have been adduced to indicate how on this theory the regular concomitance of mental and physical events would be explained. Fechner gave the example of a curved line which is on one side convex and on the other concave. (P. Edwards 1965 / 1957: 182)

I finally realized on May 23, 2023 that on dual aspect mind-body theory (or on mind-brain Identity Theory, which is virtually a dual aspect theory), understood as a scientific theory, the major respect of *non*resemblance is that the mind-body dual aspect theory is logically contingent and *a posteriori*, while its Euclidean analogue is logically necessary and *a priori*. Thus the curved line is not as good a metaphor as I thought! But it would still work well for Spinoza's *a priori* dual aspect mind-body theory. Very well indeed! Note that for Edwards and Pap, parallelism is distinct only in reason from dual aspect theory, and by implication from all of

"logical blend" theories (1)–(4). Edwards and Pap describe other analogies besides the curved line, but I shall not discuss them.

We can empirically study abstract concept *formation*, and linguistic term *formation*. And that would concern conceptualism and nominalism. But only evidence holists could hold that the in re and ante rem realist theories of universals are matters that empirical science could provide any evidence for or against.

Here we may distinguish 'higher' philosophy from 'lower'. Higher philosophical theories cannot be intelligibly understood as having scientific or empirical *counterpart* theories; but lower theories can. Higher theories may be called more "abstract," and lower theories more "concrete." Of course, as Heidegger notes, talk of minds and bodies is already very abstract. Abstraction is a matter of degree, and perhaps intelligibility is too. Certainly there are degrees of ordinary understanding, in a perfectly ordinary sense. We saw a progressive series of abstractions in the theory of universals, going from classes of particulars to in re universals, and then to ante rem universals. There is even a two-member series of abstractions going from perfect particulars (instances) to bare particulars. But there seems to be no comparable progressive series of abstractions going from mind to body or vice versa, but at most only series *within* the group of theories of mind, or *within* the group of theories of body, or going from them both into neutral monism via moderna ideas such as sense-impressions or sensibilia, which are via antiqua ideas minus their objective realities.

Lower philosophical theories, notably theories of mind, body, space, time, and cause, can be understood or taken as either *a priori* or *a posteriori* because they can be intelligibly understood as having scientific or empirical counterparts. Geulincx nicely but rather circularly states the advantage of taking them as *a posteriori*: "I shall treat this topic *a posteriori*.... Metaphysics will thus be more logically connected with other sciences" (Geulincx 2014 / 1691: 173).

Minds

Insofar as all the various "rival" metaphysical theories of what a mind is provide logically equivalent logical analyses of statements about ordinary, pre-philosophical minds, they are distinct only in reason; and otherwise they are beyond metaphysical ecumenicism. Here we may treat logical supervenience as a sort of one-sided or "limping" logical analysis. As an agnostic, I shall almost entirely omit theories of God's mind, even though for a full discussion of all logically possible minds, we would need to inquire at least what God's mind would be like if he were to exist.

On the phenomenology in chapter 1, there are qualified ordinary minds which may "be" ordinary minds in themselves. On the face of it, they epistemically seem to "be" ordinary minds in themselves, and I see no reason why they would not "be." In fact, we can agree with Descartes' argumentation that the existence of our own minds (in themselves) is one of the two things that we can be absolutely certain of. For no matter how much I try to doubt my own existence, my very doubting cannot exist unless I exist. This is the famous "I think, therefore I am" thesis instantiated to doubting as the kind of thinking. The other thing Descartes says we can be absolutely certain of is what seems to be the case. For him, this means our ideas. For us, it means essential feature (3) of qualified objects: they essentially are as they directly appear to be.

In ordinary life, I have no trouble identifying myself, and I can easily identify other people, especially the ones I know well. In a perfectly ordinary sense, I see them and hear them. And as the saying goes, I often see their thoughts and feelings written all over their faces!

In our theory of objects, we admit objects in a very wide sense. Objects are anything that is not nothing. But for Descartes, there is a huge epistemic and even cognitive difference in introspecting myself and perceiving other people. He says he knows he exists; but for all he knows, the people walking around him in the street are mindless automatons. Evidently he thinks all he perceives is their bodies. Qualified objects theory is very different. I am directly presented with qualified minds in all cases, including my own. In my own case, the indirect presentation of my mind in itself to me via my qualified mind is 'gossamer' or 'diaphanous' (Moorean terms) for the most part. This is at least somewhat like numbers as "utterly transparent" "to our reason" (Frege 1974 / 1884: 115). But I also agree with Hume and Sigmund Freud that I can be very mistaken about my own emotions, not only about what they are, but even whether they are. Freud gives the example of the angry man who angrily denies he is angry. An ego defense mechanism at work!

One measure of the difficulty of knowing my own mind's structure is Charles Hampden-Turner's book *Maps of the Mind*, which offers 60 different maps of the mind (Hampden-Turner: 1981). Will the real mind please stand up? But surely they overlap. Perhaps there is some theoretical science ecumenicism here.

This concludes my phenomenology of mind in very brief overview. A full phenomenology would list the essential features of presented minds in much the same way I listed twenty-one essential features of objects of perception or thought in chapter 1. Qualified minds have all those essential features qua qualified *objects*, but they would have additional essential features qua qualified *minds*.

In metaphysics, there is a large history of "rival" theories of mind. I can only briefly discuss eight of them here. There will be some overlap with the theories of minds and bodies in the previous section.

Some main "rival" theories of mind are as follows. (1) A mind is a mental substance per Descartes or Berkeley. (2) A mind is a bundle of impressions and ideas per Hume, or a temporal series of classes of sensed and unsensed sensibilia per Russell. (3) A mind is an artificial abstraction from *Dasein* per Heidegger, or the mental aspect of a logically primitive person per Strawson. (4) A mind is a physical brain per Smart (1959) and Urmson (1966). (5) My mind is a "pin-point" mental particular per the early Russell (1985a / 1959: 18, 120, 126) or a (simple) Leibnizian monad. (6) A mind is an Atman (timeless individual soul), which is in turn the god Brahman, and more deeply the impersonal Divine or Godhead per Shankara, or consciousness without an object. Or a mind is God, or at least "a spark of the divine" God, per many Western mystics. (7) Our minds are timeless individual souls which timelessly choose either God's heaven or the Devil's hell, per C. S. Lewis (1946) and others. (8) The same as (7), except that minds are temporally eternal and make that choice or come to that end in time. Other theories and variants may be described. Again, if my scholarship is poor, this is not primarily a scholarly book.

Theory (1) says only that an ordinary mind is a "mental substance." One can of course reject substance metaphysics. But if theory (1) is true, how could a mental substance fail to be distinct only reason from an ordinary mind? Where is the real distinction? Could we empirically discover that one ordinary mind is not a mental substance, while all the rest are? Or does the theory merely assert that a mind has the features of a substance? If so, then it is merely adding features to our ordinary description of a mind. Not only that, but the theory asserts that they are essential features! How could this fail to be a distinction in reason? Descartes finds a mental substance to be only modally distinct, in his first sense of modal distinction, from its essential attribute of thinking (Descartes 1969 /1642: 240–244, principles 53, 56, 61). And all ordinary minds are essentially thinking, or are at least essentially logically capable of thinking, as well. Thus mental substances and ordinary minds even seem to have the same essential attribute, thinking! Of course, this means thinking in Descartes' wide sense of having ideas, where ideas include any perceptions or thoughts. Again, his ideas are mental versions of our objects of perception or thought.

Theory (2) asserts a one-sided modal distinction. As we saw in chapter 1, the phenomenologically correct theory is that we are usually and normally directly presented with qualified ordinary minds; and Hume's impressions and ideas or Russell's sensibilia

are then abstracted from them. Thus a bundle of impressions or sensibilia is, so to speak, the via moderna mental history of a self minus the self. Theory (2) is an elimination or at least reduction of minds to such mental histories. This is both phenomenologically incorrect and a wrong use of Ockham's razor. *Contra* Hume and Russell, the mind is directly presented not as a sense-impression or sensibile, but as an object of perception or thought that has an objective reality and that can "be" a self in itself. And surely my qualified mind cannot fail to "be" a mind in itself. How else could my qualified mind be presented to me at all? And all our minds are different, so at most one mind could be nothing. We cannot use Ockham to shave away the self based on an inadequate phenomenology. Adequacy of explanation always outweighs the razor, and so does adequacy of phenomenology. Still less can we use the razor to shave what is the case. Also recall that the reductive and eliminative interpretations of logical analysis are of limited validity. On the containment and dependence arguments, we must instead positively construct the self from the (via antiqua) mental history—a self that can have emergent properties, such as cognizing and acting. At least we must if theory (2) meets the three conditions of metaphysical ecumenicism.

This is what the *neti, neti* ("not this, not that" of jñāna yoga is all about. I am not this or that impression or idea. Eventually I come to see that I am not an impression or idea at all, but the self who has these impressions and ideas. Likewise for objects of perception or thought, except that while I am not identical with an object of perception or thought, indefinitely many objects of perception or thought "are" me. And if I am consciousness without an object of perception or thought, then they still "are" me, but are illusory. They would be the deep part of Maya, the world-illusion.

Again, Hume argues that because he has no impression of a self, he has no idea of a self. That might be correct for his via moderna impressions and ideas. But following Descartes, I have via antiqua objects of perception or thought of myself that I know with absolute certainty "are" me. Neither memory nor the body can be the criterion of self-identity. For they presuppose self-identity. Which memories are mine? Which are Smith's? Which body is mine? Which is Smith's? Indeed, which impressions and ideas, or sense-data, are mine? Which are Smith's? This is deeper and more general than Kant's principle that all *my* thoughts presuppose "*I* think," hence *I* exist. For *my* memory and *my* body presuppose *I* remember and *I* have a body, hence *I* exist. Thus the self seems to be logically primitive, and to have a primitive thisness or haecceity. And in that sense, there is no *criterion* of self-identity. It is merely *presented*, always indirectly via qualified selves. And the existence of such a self is not strictly refutable (Kripke 1982: 51).

A qualified self is an object of perception or thought. And my qualified self is a perfectly fine qualified object. We even admit the qualified round square! On metaphysical ecumenicism, we admit Hume's impressions and ideas as via moderna parsings of via antiqua ideas. In metaphysical ecumenicism, we admit impressions in themselves and ideas in themselves that can be presented through qualified impressions and qualified ideas. We also admit via antiqua ideas in themselves that can be presented through qualified via antiqua ideas. Via antiqua ideas are private and mental, while qualified objects are public and mind-independent. Via antiqua ideas that are formally identical across minds and times are formally distinct from qualified objects with a foundation in reality in qualified objects. For ideas cannot exist outside of minds and are logically contingent, while qualified objects are mind-independent and logically necessary. Their objective realities are the same, but they have essentially different formal realities.

Theory (3) openly states that mind is an abstraction from *Dasein*, or is an aspect of a logically primitive person. Either way, this is another one-sided modal distinction. It is a formal distinction with a foundation in reality in the *Dasein* or the primitive person.

Does theory (4) assert a distinction in reason? Yes, if it is understood as a philosophical theory that asserts a logical analysis of minds as brains. No, if it is understood as a scientific theory.

Theory (5) asserts a distinction in reason. If the theory is true, how could an ordinary mind fail to be distinct only in reason from a pin-point mental particular? That is just a parsing.

Theory (5) seems inspired not only by Leibniz's theory of monads, but also by Russell's physics at the time: Hertz's theory of matter as consisting of material points that can move about and join together to form bodies, of space as consisting of spatial points, and of time as consisting of temporal points. Thus it seems only natural for minds to consist of points too, but for a single mind to be only a single point. For otherwise infinitesimal mental points might join together to form minds that have spatial extension. But a bit less embarrassingly, the theory can be parsed as Descartes' view that minds can have *no* spatial extension, and so can be *extensionless* points. Thus theory (5) is distinct only in reason from theory (1).

Theories (6)–(8) are distinct only in reason from each other. The only differences concern the nature of God or the divine, and the nature of eternity. On the face of it, the impersonal Divine merely abstracts personality from the personal God, and timeless eternity abstracts temporality from temporal eternity. Thus these two distinctions seem to be one-sided modal distinctions, and to be formal distinctions with a foundation in reality in the simpler objects. Thus if we admit a temporally eternal personal God, then on the containment and dependence arguments, we must also admit

a timelessly eternal impersonal Divine as ontologically contained in it! Luckily, our agnosticism spares us from such embarrassments. In fact, such embarrassments are a good reason to be agnostic.

Insofar as theories (1)–(8) assert logical analyses that are logically equivalent to ordinary statements about ordinary minds, all of their posited entities are distinct only in reason from ordinary minds, and thus from each other; and metaphysical ecumenicism applies. The only exception is theory (4), if it is understood as a scientific theory. And as a perhaps per impossibile hypothetical statement, if any of the other theories could be understood as empirical scientific theories, then they too would be outside the scope of metaphysical ecumenicism.

Scientific theories belong to metaphysical ecumenicism. Scientists spend much time working out their logical implications, and these imply logical containment and dependence relations. And any kind of containment or dependence—any relation—will do.

For more on defining mind, see my (2021 / 2020: 52–58). Of course, Aristotle's vegetative, animal, and rational minds are modally distinct in Descartes' second sense from the person who has them; and likewise for Freud's id, superego, and ego.

Bodies

On our phenomenology, there are qualified ordinary bodies which may "be" ordinary bodies in themselves. And on the face of it, they epistemically seem to "be" ordinary bodies in themselves; and I see no reason why they would not usually or normally "be."

There seems to "be" one body in itself which is mine in some sense, which I control in some ways, and which limits me in others. In ordinary life, I have no trouble identifying my body as mine, and I can usually identify the bodies around me, especially the ones I know well. If I could not single out all the cars hurtling around me during rush hour, I would have died long ago!

This concludes my phenomenology of body in very brief overview. A full phenomenology would list the essential features of presented bodies in much the same way I listed twenty-one essential features of objects of perception or thought in chapter 1. Qualified bodies have those twenty-one essential features as qualified objects in general, and they would have more essential features as qualified bodies in particular. Indeed, the same can be said of all the qualified metaphysical categories.

In metaphysics, there is a large history of rival theories of body. I can only briefly discuss six theories here.

Some main rival theories of bodies are as follows. (1) A body is composed of atoms per the ancient Greek atomists and per

modern atomic theory, including quantum physics. (2) A body is composed of form and matter per Aristotle. (3) A body is an extended physical substance per Descartes. (4) A body is a bundle of impressions per Hume, or a temporal series of classes of sensed and unsensed sensibilia per Russell. (5) A body is an artificial abstraction from *Dasein* per Heidegger, or in the case of persons, the physical aspect of a logically primitive person per Strawson. (6) For many, bodies cannot be identified, and therefore do not exist.

Theory (1) is scientific on the whole. Even Democritus and Leucippus offered empirical arguments for it. The early versions of atomism are too primitive to include in metaphysical ecumenicism, but can be included in assimilative / approximative ecumenicism. For example, the ancient atomists' explanation of a gold ring's becoming thinner over the years is that unseen tiny gold particles rub off on the finger. That explanation can be accepted even today. In fact, that much belongs to metaphysical ecumenicism per se.

Theory (2) is early physics, or based on it. But it seems to me primarily a metaphysical theory. In fact, it seems to be a theory of particulars and universals that is adapted or applied to bodies. As such, it seems to be distinct only in reason from ordinary bodies.

On theory (3), how could physical substances fail to be distinct only in reason from ordinary bodies? Could we empirically discover that one ordinary body is *not* a physical substance, while all the rest are? Descartes finds a physical substance to be only modally distinct from its essential attribute of extension (Descartes 1969 /1642: 240–244, principles 53, 56, 61); and all ordinary bodies are essentially extended too.

Theory (4) asserts a one-sided modal distinction. As we saw in chapter 1, the phenomenologically correct theory is that we are usually and normally directly presented with qualified ordinary bodies; and Hume's impressions and ideas or Russell's sensibilia are then abstracted from them. Thus a bundle of impressions or sensibilia is, so to speak, the sensible history of a body minus the body. Theory (4) is an elimination or at least reduction of bodies to their sensible histories. It removes the body itself, keeping only its sensible history. This is both phenomenologically incorrect and a wrong use of Ockham's razor. Hume and Russell overlook that a body is not presented as an impression or sensibile, but by a via antiqua object of perception as an objective reality. We cannot shave away the body based on an inadequate phenomenology, still less shave anything that is the case. The reductive and eliminative interpretations of logical analysis of bodies are of limited validity. But on the containment and dependence arguments, we should positively construct the body from its sensible history—a body that can have emergent properties such as having three dimensions and efficient causes and effects. At least we should if theory (2) meets

the three conditions of metaphysical ecumenicism.

Theory (3) openly states that body is an abstraction from *Dasein*, or in the case of Strawson's persons, is an aspect of a logically primitive person. Either way, this is another one-sided modal distinction. It is a formal distinction with a foundation in reality in the *Dasein* or the primitive person.

Free Will Versus Determinism

All or nearly all of us who take a first philosophy course learn of the theory that free will and physical determinism are logically (in the wide *a priori* sense of logic) incompatible. We act on the physical world through our own bodies. But our bodies as just as physical as the physical world around us. Thus our bodily actions or behavior are physically determined by the same laws of physics as the physical world around us. And free will is logically incompatible with that. Thus free will and determinism logically (in the wide sense) cannot both be true. This theory is often called incompatibilism.

Incompatibilism is not part of our ordinary picture of the world, but is instead a rejection of that picture as wrong. For we ordinarily feel no conflict between free will and determinism at all! Accordingly, I shall discuss several theoretical ways one might try to escape or get around incompatibilism.

First, we could admit a dual aspect theory. For we seem to have free will in our mental aspect, and to be physically determined in our physical aspect. But how can we be free in our mental aspect if we are determined in our physical aspect? Thus admitting a dual aspect theory does not falsify the incompatibilism thesis. It merely shifts the locus of the conflict from minds and bodies to the mental and physical aspects of *Dasein* or of Strawsonian persons. That is, it merely postpones the problem.

Second, some hold that our free will consists in the fact that our brains' causes and effects are largely interior to it, i.e. are physically largely independent and self-determining. But does this give us genuine free will? Not at all. For our brains are physically determined, even if it is only by the quantum probability function.

A third theory is that on quantum physics, the physical side is indeterministic, and this gives room for free choice. But this is a common misunderstanding of quantum physics. Quantum laws are probability laws; but the laws or probability functions themselves are deterministic. Heisenberg says, "The probability function obeys an equation of motion...; its change in the course of time is completely determined by the quantum mechanical equation" (Heisenberg 2007 / 1958: 23). Hawking explains, "If you know the

wave function at one time, then its values for other times are determined by what is called the Schrödinger equation. Thus one still has a kind of determinism.... [But i]nstead of being able to predict the positions and speeds of particles, all we can predict is the wave function. That means we can predict just half of what we could according to the classical nineteenth-century view" (Hawking 2018: 96, see 52, 95, 110; 2012 / 2010: 71). But while "the probability function... is completely determined" (Heisenberg 2007 / 1958: 23), "[t]here seems to be a certain level of randomness or uncertainty in nature that cannot be removed no matter how good our theories" (Hawking 2018: 52). For example, if we cannot determine both position and speed, then "it is impossible to localize anything," nor therefore to "measure the size of something," since "you need to figure out where the ends of this moving object are" (Hawking 2018: 110). But there is a limit to *that* randomness. For "[i]t turns out that the Uncertainty Principle imposes a limit on the size of something.... [T]here is a minimum size" (Hawking 2018: 110–111). In any case, there is no room for free will in quantum physics *or* classical physics, at least if determinism is absolute.

Following Spinoza's principle that "All determination is negation" and Hegel's converse principle that "All negation is determination" (Stace 1955 / 1924: § 42, italics removed), limits work both ways. That is, a limit fixes both sides of the limit. Here the limit of quantum determinacy is the same as the limit of quantum randomness. For where one ends, the other begins. Of course, the literature on Wittgenstein's *Tractatus* is full of discussion of limits beyond which there is nothing that is even thinkable, notably the limit of thinkability itself. (I reject that, since unthinkability is merely not-thinkability, which is thinkable.) And Grice and Strawson show that genuine distinctions can have a logically indeterminate middle (Grice 1956). But on the face of it, the quantum limit is neither of those two kinds of limit. For the Schrödinger equation is a limit that fixes both "a kind of [complete] determinism" for physical probabilities and "a certain level of randomness" consisting of those very probabilities (Hawking 2018: 52, 96, page order inverted). Hawking says in another book:

> Quantum physics.... leads us to accept a new form of determinism: Given the state of a system at some time, the laws of nature determine the *probabilities* of various futures and pasts rather than determining the future and past with certainty....
>
> [Yet these very p]robabilities... reflect a fundamental randomness in nature. (Hawking 2012 / 2010: 72–74, Hawking's emphasis)

A fifth theory is indeterminism, the thesis that physical events are *purely, totally* random, that is, are not made to happen either by efficient causes or by final causes, or for any sort of reason, including even the probability function of quantum physics. Thus on this theory, physical events would falsify the principle of sufficient reason. Thus there can be no *reason* to hold this fourth thesis, except perhaps for skepticism about any causes or reasons for physical events. And if the thesis of indeterminism is even just *logically* possible, that gives us infinitely many logically possible worlds in which it is false, perhaps including the actual world. For us the main thing about such worlds would be that in them there are no causally effective agent choices, any more than there would be any efficient causes. For by definition, nothing happens in them for *any* cause or reason. Thus indeterminism cannot make causally effective free choice possible. Quite the opposite, it makes it impossible. In sharp contrast, quantum physics allows (physically unimpeded) free agent actions to cause, via the agent's body, physical events that are exactly as overwhelmingly probable to happen as are physical events that have purely physical efficient causes, at least on relative determinism, though not on absolute determinism. I shall explain that distinction shortly.

A fifth theory is based on some quantum physicists' own extension of the quantum theory of wave-particle complementarity to chemistry, to teleological explanation in biology, and even to religion and mysticism, all as being about real dimensions of the universe that are different from, but complementary to, the realm described by physics (Heisenberg 2007 / 1958: 76–82, P.S. 23–24; 1972 / 1971: ch. 9, especially 91–92). Why not, then, admit the realm of minds having free will as a complementary realm too, if it is not already part of a complementary religious or theological realm? In fact, Paul Dirac does exactly that (Heisenberg 2007 / 1958: P.S. 22–23; 1972 / 1971: 91 quoting or paraphrasing Dirac). Again, all extensions or widenings of the quantum concept of complementarity to fields outside quantum physics may be called complementary ecumenicism. All such extensions are based on intuitive arguments by analogy to the strict quantum concept, which applies only to position and speed. Analogical arguments like these can be hard even to weigh, much less rule out.

The problem is that complementary realms are just another version of dual aspect theory, this time shifting or postponing the problem to the level of whole realms. One may as well admit Kant's two realms, the deterministic phenomenal realm and the free agent noumenal realm. And that only postpones the problem too.

I think a sixth theory is best. It follows the old adage that if faced with an apparent contradiction, draw a distinction. And if the distinction is only in reason, it is in metaphysical ecumenicism.

The distinction I have in mind is in Anatol Rapoport's *Operational Philosophy*, which is based in turn on John Dewey and others (Rapoport 1965: 4–6). Rapoport distinguishes two kinds of purely physical determinism as follows.

Rapoport defines "apparently absolutely determined events" as "events which seem to be determined regardless of what happens, such as astronomical events" (Rapoport 1965: 85). He distinguishes "absolute" determinism from "relative" determinism as follows:

> Tragic [or ancient] determinism is absolute. It presupposes events determined regardless of *all* other events, in particular regardless of human knowledge. The tragic character of this determinism is rooted in this irrelevance of human knowledge to the course of events.... The determinism of science, on the other hand, is relative to certain events only. The predictions of science are usually stated in "If so, then so" terms, that is, a limitation is placed on those events regardless of which other events are determined. For example, the statement, "If the water supply is polluted, an epidemic will occur," implies a limitation on the determinism of the epidemic, since the epidemic can be prevented if the pollution of the water supply is prevented. (Rapoport 1965: 86–87, Rapoport's emphasis)

Rapoport's distinction between absolute and relative determinism is expressed in flowery language about human or perhaps some sort of cosmic tragedy. He seems to imply that absolute determinism is a kind of causal fatalism in which *all* past events, including all past *physical* events, are unable to alter future physical events, as opposed to making only agent choices unable to. Indeed, if *all* past events are causally irrelevant to future physical events, that is not determinism, but indeterminism! Also, he should be speaking of the irrelevance of *choice,* not the irrelevance of *human knowledge* as such. But at bottom his distinction is valid if it is the distinction between all physical events' being determined by physical law and any earlier physical state of the world *no matter what anyone tries to do about it* (which is a more sensible kind of causal fatalism), and all physical events' being determined by physical law and any earlier physical state of the world, *if no one makes a choice that changes things*. I accept this distinction as intelligible if the free will versus determinism dispute makes any sense at all. And on the face of it, due to the hypothetical (if-then) character of scientific

law, science can only tell us that physical events are relatively determined, and cannot tell us that any physical event is absolutely determined. No doubt this is why we ordinarily feel no conflict at all between free will and physical law. In fact, most people would find it absurd that all physical events are determined to happen no matter what. For we seem to make free choices all the time that change what would otherwise be the course of physical events! Nor does that seem to impact physical law in the least. Thus Rapoport seems to have both the phenomenology and the logic of it right.

We may say absolute determinism is 'exhaustive', 'total', and 'complete' in that it claims physical events are determined by physical law and physical events regardless of how we might try to change the physical world. And we may say relative determinism is 'inexhaustive', 'partial', and 'incomplete' in that it claims that physical events are determined by physical law and physical events if and only if no agent intervenes by changing things. We may even say that relative determinism leaves 'gaps', meaning that any prior physical state of the world could include some events that were made to happen by free agent choices. Thus *left to its own devices*, the physical world would go its own way and behave just as if absolute determinism were true. But if agents make free choices at any point, they would intervene in (not: create) the gaps left open by the merely hypothetical (if-then) character of physical law. Of course, "gap" has its limits as an illuminative metaphor. For *left to itself*, the physical world is fully determined without any (act taking place in any) gaps. In *that* sense, there are no gaps prior to a free act's taking place, and so to speak, a free act creates its own gap.

I hasten to explain that by "merely hypothetical (if-then)," I do not at all mean the material conditional of propositional logic, which is defined by its truth-table. I mean the subjunctive (were-would) conditional of causal law. This should be clear from my admission of efficient cause as a power, and not merely as Humean 'constant conjunction'. Relative determinism is compatible with free acts because even though efficient cause is a power, physical law is only hypothetical (if-then, or really, were-would) in form.

Absolute and relative determinism are modally distinct. For all absolutely determined events are relatively (i.e. hypothetically or if-then) determined events. But relatively determined events logically need not be absolutely determined. These two kinds of determinism are formally distinct with a foundation in reality in relative determinism, since it is simpler and more basic. This may be called *deterministic ecumenicism*. And the logical consistency of relative determinism with free choice may be called *free will and determinism ecumenicism*. Recall that "rival" views are right in what they each affirm, and wrong only in rejecting each other.

The logical compatibility of relative determinism with free

choice may be illustrated by a simple example. I am playing a game of billiards. I freely choose to make the shots I wish to make. Yet all the movements of the billiard balls on the pool table, even the shots I freely make, obey all the laws of physics, since those laws are merely hypothetical (if-then) laws. And when we are done with our game and walk off, the balls will continue to obey the laws of physics, just as they did before I started my game; but now their movements can be predicted, since now they are left to determine their own behavior. And both during the game and after, the balls are always governed by physical law. They are governed in exactly the same way! And there is no sense of incompatibility between my free choices and physical law in the least. *No matter what I freely choose to do*, the laws of physics still determine how physical objects behave. Thus our example shows that relative determinism perfectly fits our ordinary, pre-philosophical, common sense view of free will and physical determinism as logically compatible. This logical compatibility also applies to free will and quantum physics. For the probability function of quantum physics is just as relatively (hypothetical, if-then) determined as are the laws of Newton.

Thus the existence of free agents is itself a third argument for relative determinism and against absolute determinism. For if I *could* have made things happen otherwise, then the events I *did* make happen *were* not, and causally *cannot have been*, absolutely determined. The first argument was that relative determinism fits the hypothetical (if-then) nature of science like a hand in a glove, and we cannot squeeze the blood of absolute determinism out of the turnip of merely hypothetical (if-then) physical law. The second argument was that only relative determinism is *compatible* with our ordinary belief that free will and physical law are compatible.

To say that a law is relatively deterministic / hypothetical / if-then is not at all to imply or suggest that the law is "bang-bang" one cause, one effect. All or nearly all laws in recent science have multiple variables. The if-then consists in the fact that if one variable changes, then at least one other variable must change too. Thus if there are twenty variables in Law L, and if variables 1–18 are held constant, then if variable 19 changes, then variable 20 must change too. Thus multi-variable laws as just as hypothetical (if-then) as bang-bang "For any x, if Ax then Bx" laws.

Rapoport's words may even make absolute determinism sound like *logical* fatalism. It could be consistently interpreted that way, but surely that is not what Rapoport has in mind. He is not talking about anything like Aristotle's problem of the sea battle (Aristotle 1968b: 19a30–35), where I truly assert today that a sea battle, a logically contingent event, will take place tomorrow. Rapoport seems to have in mind only physical events that are of such magnitude that there is nothing, as a matter of fact, we can do

to change them. The reason for my interpreting him this way is that he cites "astronomical events" as his example. If he were talking about logical fatalism, then *every* event, however small, would be an example. Also, on a charitable interpretation, Rapoport is well aware of Archimedes' bold proclamation, "Give me a lever long enough, and I will move the earth." Thus on a charitable interpretation, he means only events that, *as a matter of causal fact*, no one can change. Thus, so to speak, events might change from absolutely determined to relatively determined' if our knowledge and power sufficiently increase. Thus the distinction would devolve to a distinction not in theory, but in practice. But surely the distinction between absolute and relative determinism ought to be a distinction in theory, not in practice. So perhaps it is best simply to say that an absolutely determined event is a physical event that cannot be causally changed no matter what we try to do, and a relatively determined event is one that we *can* causally change due to the hypothetical (if-then) nature of physical laws, *if* we have the knowledge and power.

Allow me to take a moment to discuss logical fatalism. The argument that if it is already true today that the sea battle will take place tomorrow, then the sea battle must happen "no matter what," because my true statement must have a truth-maker, is fallacious. It omits the distinction between tensed truth and timeless truth. My statement is true today only in the timeless sense in which the time I make my statement is abstracted from, and is therefore logically irrelevant. In the tensed or time-relative sense, my statement will not become true until the sea battle takes place tomorrow—*if* it takes place tomorrow. All temporal events are their own truth-makers for any statements about them, regardless of whether the statements are tensed or timeless (often called the "timeless present"). Thus I reject the argument for logical fatalism as a non sequitur, as most philosophers do.

We may also explain relative determinism in terms of the distinction between closed systems and open systems. A closed system is one in which no event from outside the system intervenes (or, perhaps, can intervene). An open system is a system that is not closed. The idea would be that closed systems are absolutely determined, while open systems are relatively determined—and an event from outside the system logically could even be a free act. But this is not helpful on a closer look. The problem is once again the difference between theory and practice. The concepts are clear. But in theory, all physical systems less than the whole physical universe are open. It is only in practice that some physical systems happen to be closed. It might be argued that at least the *physical* world as a whole is a closed system, since by definition no *physical events* can be outside it. But *free acts* would still be outside it, and

so even the physical world as a whole would be an open system. To say that only outside *physical* events are meant would simply beg the question against free will. And the concept of an open system or outside event is not even needed. It is simply a background condition of every law that it is not superseded by an act of free will.

We can now discuss a sixth theory, which I reject. This is the weak substitute sort of "free choice" of John Stuart Mill. Mill says I have freely chosen to do a thing if I wanted to do it and I made it happen, regardless of whether I could have chosen to want it to happen. Millian free choice is so weak that it is logically compatible not only with relative determinism, but even with *absolute* determinism! In contrast, the metaphysical free will of metaphysical agent selves, such as those of Aquinas, Descartes, and Kant, is logically incompatible with absolute determinism, though it is logically compatible with relative determinism. Mill's theory is a first cousin of the theory that we are free in the sense that our brain processes are largely independent of the world around them. If Kant had accepted either Mill's theory or its first cousin, he would not have needed to invent a noumenal realm of free agents!

Suppose a logically possible world in which Newton's laws of motion are the only physical laws. On our theory of scientific law, these laws are relatively determined. That is, they are merely hypothetical universal statements. They apply if and only if their antecedents apply. Thus if our view is correct, then there is logical room for acts of free will in that world. In fact, it is a background condition of every law that it is not interfered with by an act of free will. Thus a free act falsifies only a background condition; the law itself remains true. (In modern classical logic, a false antecedent *implies* truth of the overall if-then statement; but that cannot be said of causal laws, since they are not truth-functional.) Thus no free act logically can change any physical (or even mental) laws.

It might be objected that if we "rolled back" the universe in our Newtonian possible world to some past state, and then roll it forward again, its laws will ensure that the same present or future state will be arrived at. My reply is that this is precisely what I am denying. I have argued that there might have been other free acts than there actually were, and at any stage. The objection merely assumes without argument that I am wrong. In fact, the objection assumes absolute determinism. Talk of begging the question!

Relative determinism is different from 'soft' determinism. Peter van Inwagen says that "soft determinism is the conjunction of determinism and the free-will thesis—which, of course, jointly entail compatibilism" (Inwagen 2017: 82). Hard determinism is the view that "The past determines a unique future (given the past and the laws of nature, the future is determined in every detail)" (Inwagen 2017: 82). Thus hard determinism is the same as absolute

determinism, and is in any case just as logically incompatible with free will. Thus hard / absolute determinism is incompatible with soft determinism, since the latter admits free will. In fact, soft determinism is self-contradictory, unless it comes up with *some* sort of weak version of determinism that *is* compatible with free will. It owes us an explanation. Or perhaps Inwagen does.

Soft determinism is different from relative determinism on three counts. First, soft determinism does not specify the kind of weak version of determinism it is, so as to explain why it is compatible with free will. But relative determinism does just that. Namely, it is the view that the laws of nature are merely hypothetical, as opposed to being such that given the physical past, the physical future is fixed no matter what we try to do. Second, soft determinism is incompatible with hard / absolute determinism. But relative determinism is not only logically compatible with hard / absolute determinism, it is even logically implied by hard / absolute determinism. Third, soft determinism expressly admits free will by definition, and relative determinism does no such thing. It merely makes free will possible in a hypothetical (if-then) way. That is, *if* there is free will, *then* it is compatible with physical law, since physical law is itself merely hypothetical (if-then).

Relative determinism does not imply soft determinism. For without more, soft determinism is self-contradictory, and is thus necessarily false. And if relative determinism is true, then it cannot imply any logically necessary falsehoods. But relative determinism, if conjoined with "the free-will thesis, jointly entail compatibilism" (Inwagen 2017: 82). And it is easy to see why. Physical law is only hypothetical (if-then)! But since soft determinism (without more) is logically self-contradictory, it entails compatibilism only because any necessarily false statement entails every statement, including both compatibilism and its denial. In fact, this entailment is an instance of one of C. I. Lewis's two paradoxes of strict implication.

Relative determinism is a logically contingent sniper's rifle. For physics is logically contingent, and relative determinism cleanly takes out the supposed incompatibility of free will and determinism. Soft determinism is a logically impossible (since it is self-contradictory) blunderbuss that implies every statement. And as the reader has no doubt been dying to hear, relative determinism is the "missing link" definition / specification / explanation of a weak determinism that is logically compatible with free will, which soft determinism utterly failed to do, at least as Inwagen defines soft determinism. Relative determinism provides the explanation that soft determinism lacks. Thus soft determinism is all right after all, but only thanks to relative determinism's coming to the rescue. And it is hard to see what other specification could rescue it.

Relative determinism is a theory that captures and explains

all the logically contingent data: both the data about the uniformity of nature and the data that we often freely choose to act. But absolute determinism is a theory that captures only the data about natural uniformity, and rejects or tries to explain away the data about free will as illusory at best. Now, theories are supposed to capture all the data they consistently can. And here we have one theory that captures millions of data of one sort and rejects or tries to explain away millions of data of another sort, and another theory that captures all the data of both sorts, and admits them all at face value. Which theory do you think better fulfills the basic mission of theories to capture all the data? Surely it is relative determinism. And for this very reason, Ockham's razor does not apply. For absolute determinism does not and cannot explain all the data as adequately as relative determinism does. It is not even close!

Free will may be indefinable, but it is an object of everyday thought; and it epistemically seems to "be" an object in itself very strongly. Descartes says free will is among the most certain data we have. In fact, "freedom of the will is self-evident" (Descartes 1969 / 1642: 234, principle 39). Once again, the admission of simple, indefinable notions, and our apparent direct intuition of their application, are not strictly speaking refutable (Kripke 1982: 51). And on the face of it, that includes acts of free will.

Relative determinism makes hash of Inwagen's attempts to prove that free will and physical determinism are incompatible (Inwagen 2017; 1975; 1974). For Inwagen simply assumes absolute determinism in his very definition of determinism, and shows no awareness whatever that on relative determinism, free choice and physical determinism are perfectly compatible. The burden is on Inwagen to show that absolute determinism is true, or is needed, warranted, or even possible in physics, or at least to show what is wrong with relative determinism as a rescue of soft determinism.

Inwagen is not the only incompatibilist around. But he beats the horse of compatibilism again and again (Inwagen 1974; 1975; 2017: 90, 101–110, 216–217). The horse is perfectly fine; it is just that Inwagen cannot believe it, since he simply cannot understand how the horse could be so fine.

It gets worse. Inwagen rests his proof of incompatibilism on the metaphysical assumption that the past cannot be changed; see Inwagen (1975; 1974). There are at least three problems with that. First, the ostensible fact that the past cannot be changed *now* (because it is fixed *now*, or is even gone and is no longer there to be changed) does not imply that it could not have been changed by free acts *back then*, when it was the past. Second, the assumption is true on absolute determinism, but is false on relative determinism. Third, Inwagen is even out of tune with physics. Hawking says that per Feyman's sum over histories method, "In some histories space-

time will be so warped that objects like rockets will be able to travel into their pasts" (Hawking 2018: 140). In quantum physics, that history is extremely unlikely, but it is physically possible. And that falsifies Inwagen's metaphysical assumption that the past cannot be changed (more on that shortly). By the way, quantum physics is the most verified scientific theory there has ever been. Quantum physics "has never failed a test, and it has been tested more than any other theory in science" (Hawking 2012 / 2010: 74).

Even in ordinary everyday life, when we merely look at the things around us, photons strike the things we see, and quanta go forwards and backwards in time per the determinate probability function, and can even affect the past (Hawking 2018: 154–155; 2012 / 2010: 82). Hawking and Leonard Mlodinow say that in quantum physics, "The fact that the past takes no definite form means that observations you make on a system in the present affect its past" (Hawking 2012 / 2010: 82). Hawking and Mlodinow say that the Feynman sum over histories method:

> leads to a radically different view of cosmology, *and the relation between cause and effect.* The histories that contribute to the Feynman sum don't have an independent existence, but depend on what is being measured. *We create history by our observation, rather than history creating us.*
>
> The idea that the universe does not have a unique observer-independent history might.... sound like science fiction, but it isn't. (Hawking 2012 / 2010: 139–140, my emphasis)

The reader may wish to check if Inwagen's views have improved since 1975. Judging from his continued incompatibilism (Inwagen (2017: 90, 101–110, 216–217), they have not. He still even holds that the past cannot be changed (Inwagen 2017: 228)! At least he is aware his views on physics need a rewrite (Inwagen 2017: 183).

Inwagen discusses two arguments for compatibilism in his (2017: ch. 2). But they are merely conceptual tigers, while quantum physics and general relativity are physical tigers of empirical science. Not only that, but Inwagen's acceptance of "the familiar principle that no one can change the past" (Inwagen 1974: 19) comes over a quarter of a century after all those major scientific discoveries to the contrary were made. Gödel and Einstein agreed that time travel to the past is possible in general relativity theory in 1949. Feynman completed his quantum physics sum of histories method in 1948. And there were major precursors to Feynman. Feynman did not conjure his method out of thin air! And Einstein even explained how backwards time travel is possible in his 1916

book on general relativity theory (Einstein 1977 / 1916: chs. 8–9).

It gets even worse. Inwagen says "it might be possible to devise some empirically tenable theory... according to which a human body is a kind of deterministic subsystem of a world that is, taken as a whole, indeterministic" (Inwagen 1974: 21). Yes, that is *logically* possible. But in quantum physics, this is not how *anything* works in the real world: not on the quantum level, not on the level of ordinary medium-sized macro-objects, and not in the world taken as a whole. Here Inwagen shows a complete ignorance of the most basic principle of quantum physics, called the uncertainty principle. The principle applies to *everything* in the physical world *regardless* of level. "[T]he uncertainty principle places limitations on the accuracy of *all* our predictions" (Hawking 2017 / 1988: 117, my emphasis). The uncertainty principle is a "fundamental limitation on our ability to understand and predict the universe" (Hawking 2017 / 1988: 160, see 171–172, 186). All physical nature is "fundamentally uncertain" (Hawking 2012 / 2010: 72). "In effect, we have redefined the task of science to be the discovery of laws that will enable us to predict events up to the limits set by the uncertainty principle" (Hawking 2017 / 1988: 289). The reason that the behavior of ordinary macro-objects such as stones and trees, and of the universe as a whole, is so stable is that they aggregate such huge numbers of micro-level quantum probabilities that the quantum probabilities average out. Thus the behavior of larger systems is not determined, but only immensely probable. In fact, larger systems (ordinary macro-objects) are so stable that the laws of classical physics approximate very closely to their probable behavior. See Hawking 2018: 52–53; 2017 / 1888: 81; see 2012 / 2010: 73–74). Of course, Inwagen's description applies to all *logically possible* worlds that have deterministic subsystems, but are indeterministic taken as a whole. It just does not apply to the *actual* world, which gets more stable the larger things get.

Thus Inwagen gets the direction of stability backwards. The larger the system, the more stable it is. The "world, taken as a whole," is the most stable system of all. It is so incredibly stable that the empirical fact that it has three main flat spatial dimensions (it also has several small curled-up spatial dimensions) is easily noticed by ordinary observers, and was even taken to be *a priori* for thousands of years! (That there are three flat dimensions of space is a *priori* only in formal Euclidean geometry.) No, ordinary macro-objects are not deterministic subsystems in a world that is indeterministic taken as a whole. It is the other way around. It is the quantum or micro-level that is indeterministic qua particles, and probabilistically deterministic qua waves. *That* is the *subsystem*. Ordinary macro-objects are *large* systems that are stable aggregates of quantum events. And the world taken as a whole is the largest

and most stable system of them all. For it is the super-aggregate of all quantum events.

Inwagen also seems unaware that quantum laws *are* deterministic on the micro-level. It is just that they are laws about probability functions, or waves. In *that* sense, all particulars (as opposed to waves), including macro-objects and micro-particles alike, are indeterminate with respect to position and speed. But as aggregates that average out, macro-objects are far more stable.

Worst of all, to all appearances Inwagen deems "the... principle that no one can change the past" as metaphysical, not scientific, and deems it *a priori* to boot. Inwagen says:

> MAB [Metaphysical Assumption B] asserts that every world to which any person has access must be indistinguishable from the actual world at some point in time. Or, alternatively, every world to which any person has access must share a slice with the actual world. For example, however many possible worlds I have access to, surely they must all be indistinguishable from the actual world at some time in the remote past (say, 10,000 B.C., or, indeed, any time before I was born). In terms of the "infinite-system-of-corridors" metaphor: all the possible worlds (paths) that I have access to are continuations of the path-segment I have already traveled. MAB is a rough echo of the familiar principle that no one can change the past. (Inwagen 1974: 19)

But while all sorts of conceptual and logical points can and should be made about time, time is a feature of the physical world, just like space. Time is studied by physicists. Predictions about time can be empirically confirmed or at least falsified by experiment. Inwagen's Metaphysical Assumption B (MAB) is centuries out of date: classical Newtonian physics at best. All that formal possible worlds talk cannot save MAB from being false in both quantum physics and general relativity. Inwagen is far from alone in this. In fact, he is typical of *merely* logico-conceptual analytic philosophy, as opposed to post-1921 Russell and Quine, who largely base their logico-conceptual analytic metaphysics on actual physics.

MAB seems alive and well in Inwagen (2017). Inwagen says, "There seems to be *no* sense of 'able' such that any agent, natural or supernatural, is able to render false a necessary truth or a true proposition about the past (*pace* Descartes)" (Inwagen 2017: 228, his emphasis). Inwagen's statement is especially unfortunate because no agent "is able to render false" *any* true statement about

anything. Not in the sense of timeless truth! Who can turn truth into falsehood, or falsehood into truth? But even ignoring that silly slip, Inwagen's new claptrap version of MAB cannot save MAB from falsification in physics any more than the old version could.

To strengthen or rescue an argument, it is a good strategy to weaken the conclusion or strengthen a premiss. One might try to rescue Inwagen by replacing the strong metaphysical assumption MAB with the much weaker practically true assumption PAB. PAB is the assumption that in our own Feyman history, for all practical purposes, we ordinary humans cannot travel back in time or change the past. In some Feynman histories, rockets travel back in time. But those are extremely improbable histories, and as far as we can tell, the history we actually live in is not one of them. See Hawking (2012 / 2010: chs. 6–7) for a general description of the multiverse of histories and of those histories' very different probabilities.

The problem is that this reverses good argument strategy. We are weakening a premiss, not weakening the conclusion. And we are weakening it a great deal. It looks for all the world that Inwagen admits MAB as a synthetic *a priori* truth. For he calls it a metaphysical assumption. But PAB is a logically contingent truth. Observations can make it more or less likely. And it is logically contingent which Feynman history we are actually in. And, so to speak, if anything, it is even more logically contingent whether we can meet the power requirements, or any other requirements, to travel back in time in that particular history. Thus replacing MAB with PAB would make Inwagen's conclusion that free will and determinism are incompatible logically contingent as well. And that would mean that in infinitely many logically possible worlds, free will and determinism *are* logically compatible.

I am only touching the surface just enough to show that Inwagen totally overlooks physics on changing the past. For more on the physical possibility of time travel according to physics, see Hawking (2018: ch. 6; 2017 / 1988: ch. 10).

Which level of physics do you think is relevant to the possibility of time travel that changes the past, or more simply and generally the possibility of affecting the past? Do you think it is the metaphysical level of logical analysis and concept definitions? Or do you think it is the level of the actual physics of it? Would you rather listen to a metaphysician about wormholes or Einstein-Rosen bridges, or an actual physicist? Both levels are important, and the metaphysical level is more fundamental. But which level is the appropriate one here? —If you are an astronaut going to the moon, would you rather listen to a metaphysician or a physicist about how and whether you can get there?

Time itself can go backwards! There are at least three "arrows of time" that indicate the direction time is going in. Right

now, all three arrows are pointing in the same direction, toward the future. But that logically need not be so. The universe is still expanding, as far as we can tell. But if the universe were to deflate, time would be running backwards, even though it need not be an exact rewind. See Hawking (2017 / 1988: ch. 9). Note that if all three arrows indicated the past, and if time were going backwards, then time travel would either be into the future, or else faster into the past. This shows even more how far Inwagen is from actual physics on whether the past can be changed. In a deflationary universe, we would *all* be going into the past! But let us return to the subject of determinism.

My last attempt to save Inwagen is to appeal to Hawking's metaphysical theory of model-dependent realism. Hawking says:

> *There is no picture- or theory-independent concept of reality*. Instead we will adopt a view that we will call model-dependent realism: the idea that a physical theory or world picture is a model (generally of a mathematical nature) and a set of rules that connect the elements of the model to observations. (Hawking 2012 / 2010: 42–43, Hawking's emphasis; see ch. 3 generally)

The idea is that both the compatibilism and the incompatibilism theories of free will and determinism are model-dependent, and so is the physical possibility of changing the past; thus there is no real conflict. This might even be called model-dependent ecumenicism! The problem is that this is a form of radical relativity. If all theses are model-dependent, then no theses ever really conflict. Indeed, that is the whole point of the approach. But this is one of the few times Hawking falls down. For his model realism is self-defeating. It applies to itself as well as to any other theories. Or is he going to say that model-dependent realism is the only theory that is *not* model-dependent and that says what is really, mind-independently the case? Hawking falls down a second time in that if, as he claims, we do not even have a concept of mind-independent reality, then it is cognitively meaningless either to assert *or* to deny that there is a mind-independent reality. In fact, the concepts of mind-dependence and of mind-independence differ only by a negation. Thus Hawking is shooting down his own concept of mind-dependence if he denies we do not also have a concept of mind-independence.

I discuss what I call the three pratfalls of radical relativity elsewhere (my 2003 / 1996: 20–21). Hawking's theory of model-dependent realism is a form of radical relativity, and takes all three pratfalls. But Hawking's theory retains the merit of protecting him against Sabine Hossenfelder's criticism that he is too metaphysical.

Hossenfelder says:

> It's not just Stephen Hawking, there's quite a number of people in the foundations of physics.... It's very niche, actually, this whole multiverse thing. Those people are really confused about what science can actually do. How they come to this conclusion that the multiverse must exist is that they have some theory that predicts some things that agree with observations—that's all well and fine. And then they jump to the conclusion that therefore all the mathematics that appears in this theory also has to exist in some sense. But this is not how it works. You've just assigned reality to some mathematical expressions. You can't support it with a scientific argument. (Hossenfelder 2022a)

It is Hossenfelder who is confused. She overlooks that Hawking's model-dependent realism logically instantiates to all physical theories, including the theory of the multiverse. Thus Hawking left himself an enormous hedge to fall back on. The hedge is that there *is* no mind-independent reality, and what is more, we do not even have a *concept* of it. Thus he not only agrees with Hossenfelder that physicists should not assign mind-independent reality to their theories, but he goes beyond her by denying that we even have a *concept* of mind-independent reality. I see nothing in Hossenfelder (2022)'s book that suggests she is aware of how completely wrong her interpretation of Hawking is. Indeed, if she had any awareness, she would never have criticized him in that way.

Now, I just criticized Hawking's model-dependent theory of theories as multiply self-defeating. But since it is his theory after all, he is quite safe from Hossenfelder's criticism. Not only is he agreeing with her, but his anti-realism is deeper than hers! Indeed, his anti-realist model-dependent theory applies to all theories, even to itself. And that is why it takes the three pratfalls of radical relativity. Thus neither of them knows metaphysics very well. And there is no reason why they should. They are physicists, not philosophers. To be sure, even philosophers have failed to discern the difference between ordinary mind-independent realism and realism in the sense of independence even of the logical possibility of minds. But then I may be the first to distinguish them.

Hossenfelder offers an argument that appears to be for determinism and against free will:

> [I]t isn't easy to make sense of free will while respecting the laws of nature. Fundamentally the

> problem is that, for all we currently know, strong emergence isn't possible. This means all higher-level properties of a system—those on large scales—derive from the lower levels where we use particle physics. Hence, it doesn't matter how you define free will; it'll still derive from the microscopic behavior of particles—because everything does. (Hossenfelder 2022: 131)

My reply is that it is actually very "easy to make sense of free will while respecting the laws of nature." All we need to do is accept relative determinism. For the idea that the laws of nature are merely hypothetical (if-then) is very easy to grasp—and to see to be true!

Then there is Hossenfelder's commission of the logical fallacy of appeal to ignorance ("for all we currently know"). And no, that does not "mean" or even logically imply that free will (which she includes among the "higher-level properties" of 'human systems') "derives" (by which she means lawful reduction as opposed to logical elimination, since she admits the higher-level properties) from particle physics. Thus her argument at bottom is a simple one. I charitably rephrase it as follows. 1. Human systems have higher-level properties, including what we ordinarily call free will. 2. (For all we know,) it is not (causally? logically?) possible for such properties to be "strong" (causal? logical?) emergent properties. 3. Therefore free will reduces to ('lower level' laws of) particle physics. 4. Therefore what we call free will is physically determined. I imagine that she specifies particle physics as opposed to wave physics because as we saw earlier, that is where quantum indeterminacy comes in (waves are deterministic). For that would help make free will a more plausible illusion. But as we shall see, that really does not matter to the soundness of her argument.

The main problem with Hossenfelder's argument is that regardless of whether the premisses are true, the conclusion does not follow from them. For her premisses are logically consistent with absolute determinism and relative determinism alike; and free will is in turn logically consistent with relative determinism. That is to say, even if there is no "strong emergence" of higher-level system properties from lower level microphysical properties, the microphysical laws of physics are *still merely hypothetical*, and that is still perfectly compatible with free will. Even the probability function of quantum physics is, though fully deterministic, merely hypothetical (if-then)! And its hypothetical form has nothing to do with its being about probabilities. Newton's laws of physics are just as hypothetical (if-then), and they have nothing to do with probabilities. And multi-variable laws as just as hypothetical (if-then) as "bang-bang" "For any x, if Ax then Bx" laws.

Another problem with Hossenfelder's argument is that free will is not (or logically need not be) an emergent property of bodies because it is not (or logically need not be) a property of bodies at all. Instead, it seems to be (and logically could be) a property of an mind, which exists in a body in a logically contingent, logically primitive *union* per Descartes. Of course, free will is not a logically primitive *property*. For it is the conjunction of my being able to do a thing with my also being able to refrain from doing it. And a conjunctive property is a logically complex property.

Thus Hossenfelder's argument begs all the questions at issue. It begs the question of absolute determinism versus relative determinism, and it begs the question of whether minds as opposed to bodies have free will. If she has an argument proving that absolute determinism is true and relative determinism is false, let her show it to us. Without such an argument, her non-emergence argument is no better than Inwagen's path access argument or the twin worlds argument below (pages 461–462). For all three arguments completely overlook relative determinism. I shall not consider any further arguments against free will that are based on absolute determinism. For there is no point. Again, her argument begs the question whether minds or bodies have free will. It even begs the question whether, if some *bodies* are living and conscious, such *bodies* can also freely choose, on relative determinism. See the similar but somewhat different Richard Taylor (1983: 24–27).

The truth is that just as Hegel says, free will paradoxically consists of *our* determining what we do, and more specifically our use of our faculty of reason to determine it, as opposed to our brains or anything else physical. See Hegel (2015 / 1830: 41, 60, 65, 71, 74–75, 81, 95, 101, 103–104, 216, 230–232, 283). Hegel is deeper than Inwagen, Hossenfelder, and any other incompatibilists on the *dialectical* relationship between free will and determinism. For both are moments of a higher synthesis where everything is determined, but minds are freely self-determining. Physical objects are physically determined only in a relative determinism. I also find Hegel basically correct on what free will is. What else could free will consist of, besides *our determining* what happens? *Everything* is a matter of free choice if God determines the physical world and its laws! Inwagen (1975; 1974)'s formalistic "proofs" properly belong to Hegel's rigid abstract shallow level of the Understanding.

Thus the higher meaning of determinism is that everything in physical nature is *made to happen*. That is a definition of higher determinism by genus and difference, where the genus is 'happen' and the difference is the kind of making. The making is either physical or by free choice. The corresponding higher meaning of freedom is that *we* determine things. Thus there are *three* elements in the higher definition of freedom: 'we', 'make', and 'happen'.

Thus higher freedom is one of the two kinds of higher determinism. The other kind, physical determinism, is the same except that the 'we' element is absent. Thus higher determinism differs from its sub-kind physical determinism only in that higher determinism includes our freely determining some physical things. Thus higher freedom is modally distinct from physical determinism with a foundation in reality in physical determinism. For it merely adds free acts. Making happen is a kind of *raison d'être*, or having a reason for being, per the principle of sufficient reason (page 418).

I derive two corollary principles from the foregoing. The first is the *uncertainty principle of relative lower determinism* (not to be confused with Heisenberg's uncertainty principle). This principle follows from the fact that lower determinism is physical determinism, which is relative determinism. For we cannot predict or retrodict physical events from physical determinism alone, but must also know all free acts. The second principle is the *certainty principle of absolute higher determinism*. For if we *do* know all free acts, in addition to the physical state of the world at time *t* and all physical laws, then we *can* predict and retrodict all physical events, within the limits set by Heisenberg's uncertainty principle. And if God freely decides everything, even quantum uncertainties' actualizations, then as Jesus (1973) says, "Everything is fixed."

Again, on the deepest level, both efficient cause and free agent acts are reasons for being (*raisons d'être*). Thus the way I put Hegel's view is that *everything is determined by its sufficient reason, but sometimes its sufficient reason is a free act*. And again, efficient cause is merely hypothetical on relative determinism.

Let us discuss the case for relative determinism further.

A better question is, Just what *counts* as the complete laws of physics? How do we *know* they are complete? —Is it when they entail absolute determinism? But are the laws of physics ever able to establish that physical things happen *no matter what*? And just what does "no matter what" mean here? On relative determinism, the laws and any antecedent physical world-state can determine the future (with quantum uncertainty) if and only if no one freely acts.

Even in classical physics, we cannot go back from the present or a future physical world-state and *retrodict* the past, even aside from whether there were any free acts prior to that state. For even if the world is purely physical, there logically can be infinitely many ways of *arriving* at the same world-state with the same set of physical laws. This can be easily seen in simple physical worlds.

Georg Simmel disproved Nietzsche's "eternal recurrence" thesis, that a finite material world logically must repeat itself over infinite time, as follows. Suppose a world consisting of "three wheels of equal size, rotating on the same axis, one point marked on the circumference of each wheel, and these three points lined up

on one straight line. If the second wheel rotated twice as fast as the first, and if the speed of the third wheel was $1/\pi$ of the speed of the first, the initial line-up would never recur" (Kaufmann 1968 / 1950: 137). Now invert that so that the initial line-up is the present or future state. Clearly it can be arrived at in infinitely many ways.

Every scientific law as we understand it has background conditions. Thus as we approximate ever closer to the actual physical laws, all our *evidence* is that even a full understanding of the actual laws of physics would *still* have background conditions for every physical cause. Perhaps that commits the fallacy of hasty generalization in deductive logic. But in inductive logic, this evidence is *all* the evidence we have. And background conditions are a back door where free acts can come in. For background conditions are themselves hypotheticals (if-then). But the inductive evidence is that the actual laws of physics are hypothetical anyway, whether we regard any of them as background conditions or not.

Can anyone give even just one example of a physical law, or of a scientific law as we understand it, that is *not* hypothetical? —Why not? It is because even two-variable laws are hypothetical.

Relative determinism makes hash of the traditional notion of a divine miracle. For God's free acts are in principle no different from our own. They may be bigger and more impressive, but that makes no logical difference to the nature of relative determinism. I waive my agnosticism to make this conceptual point. The point is that if I can "intervene" in physical nature by an act of free will, say to hit a ball on an otherwise physically determined pool table, then there is no difference in principle if Jesus walks on water or raises the dead. There is no miracle. It is just that on classical Christian theism, only he can do it. There is no intervention in the sense of suspending or abrogating physical law. The laws are merely hypothetical to begin with! Or if freely walking on water is a divine miracle, then my free pool shot is just as miraculous. It is a human miracle! Or we could go a step further and say *everything* is a miracle, including free will and relative determinism alike. Why is anything the way it is? Why does grass grow? Why are there physical laws? Why does the world even exist? Is it God's miracle? No, because he can freely do anything that is logically possible.

The only difference between my hitting a pool ball and Jesus walking on water is not a matter of causal category (both are agent acts), but a matter of likely fact. Namely, in light of current science, my hitting the cue ball does not violate the basic laws of physics, but walking on water does. Even on the Feynman sum of histories approach in quantum physics, on which Jesus walked on water in some alternative histories, it is unlikely to say the least that Jesus walked on water in our actual history. But we all walk on water in some alternative histories, however unlikely they may be.

Concerning the universality of the laws of nature, there are at least six familiar descriptions whose applicability would falsify absolute determinism, but not relative determinism: "suspend," "abrogate," "intervene in," "contravene" the laws of nature, "exception" to the laws of nature, and "miracle." We seem bewitched by a picture of God on high looking down on earth below, and stepping in to change things that would otherwise happen in regular, lawful ways, much as we could use a hammer to smash a functioning clock on the floor. The picture is wrong for both kinds of determinism, but in different ways. On both kinds of determinism, the very concept of a scientific law includes strict universal applicability, and that means no exceptions See Hawking (2018: 26–29, 49, 90; 2012 / 2010: 28–34, 171; see 2017 / 1988: 55) and many others. But on absolute determinism, the universality of laws of nature implies there can be no free act exceptions to them; and that formally contradicts the claim that God freely acts. Thus if absolute determinism is true, there are no divine miracles, and more deeply and generally there are no free acts of God at all. But on relative determinism, there are no exceptions to the laws of nature for the very different reason that the logical possibility of free act "exceptions" is logically built into the hypothetical form of the laws of nature themselves. For example, suppose a Newtonian world. Newton's laws of motion are hypothetical (if-then). They hold if and only if nothing "from outside" the physical system in question acts on them. Thus the possibility of "intervention" is built right into them. Thus such interventions are not interventions into the *laws*, but only into the *behavior of the physical objects*. A body will remain at rest *unless acted on by a force*. A body will remain in motion at the same speed and in the same direction *unless acted on by a force*. An action gets an equal reaction, *unless a force intervenes*. Absolute determinism claims that all physical events must happen no matter what, while relative determinism does not. Relative determinism leaves the possibility of free acts open. The hypothetical form of the laws of nature logically leaves the door wide open!

Absolute determinists are bewitched by a picture of the physical world as such that if we know the laws, and if we start from any world-state at any time, then we can predict any future world-state or retrodict any past world-state. And I agree with the picture, except for two things. First, the laws are about probabilities in quantum physics. The probabilities are uniform, but the behavior of physical objects is not. And second, even if the laws of nature *were* classical, i.e. non-probabilistic, their universality would still be hypothetical. Thus even in that case, the picture painted by absolute determinism would be true if and only if the physical world were left entirely to its own operations. And this implies that

absolute determinism is *not* true. For if it *were* true, then it would *logically* follow that there is no such thing as a free act that makes a physical change. And free acts are not only logically possible, but actual. On the face of it, they happen all the time!

One might object that all the laws of nature, though hypothetical in form, *collectively* form a web or network that entails absolute determinism for every physical event after all (or at least of every quantum probability). One might even object that the logical fallacies of composition and division apply if we try to argue from the relative or hypothetical character of each individual law to the *whole* set of laws taken together. My reply is that this begs the question of relative determinism, as well as the question of free will. Also, the fallacies of composition and division apply only an emergent property is logically possible. But there is no such emergent property, and it is not even logically possible. Absolute determinism is only alleged, and not a shred of evidence is offered that it is true. To the contrary, all the evidence is that natural law is hypothetical. For every law we have discovered or approximated to so far is hypothetical. And it is not even possible for absolute determinism to emerge. For the set of all natural laws is a mere conjunction of individual laws. Thus the real comparison is of the set of natural laws to an iron machine composed of iron parts, not to a living organism composed of lifeless chemicals.

Of course, it is *logically possible* either that absolute determinism or relative determinism is the case. For the existence of both free agent acts and lifeless bodies is logically contingent. But then there *is* logical room for free acts to "intervene" in the physical order. Which theory, absolute determinism or relative determinism, is more likely, given the evidence? Again, Descartes says free will is among the most certain data we have, and in fact "freedom of the will is self-evident" (Descartes 1969 / 1642: 234, principle 39). And a world in which we make free choices best accords with phenomenology, ordinary common sense, and relative determinism. Again, only relative determinism fits *all* the facts.

One might object that given the same starting conditions, if we could run the history of the world again, or any number of times, or if there were two physically identical "twin" worlds, and we ran them both from the same initial stage, then everything would happen exactly the same in both, even if there might have been a free act influencing the initial stage. And this proves that absolute determinism is correct, and that there is no free will. In other words, even assuming a divine free act at the start, freedom is snuffed out thereafter, because thereafter everything will play out the same. For, waiving changes across twin worlds due to quantum probabilities, the inexorability of physical law will see to that.

My main reply is that the objector misses the whole point

of relative determinism. The objector simply assumes that free will applies only during the initial stage, and then never applies again, because right after the initial stage and from there on, absolute determinism takes over the history of the world, and even of all twin physical worlds! In fact, this whole thing can be put back on the objector. For if there *are* minds who act differently in different twin worlds, then the histories of those twin worlds *are* going to be different, and they are *not* going to be twin worlds. But in every one of those worlds, the laws of physics will apply equally well. For they are merely hypothetical.

I have four replies altogether. The main reply I just gave is the second of the four.

First, this is a pre-quantum physics picture. Even if the two worlds are physically identical twins at some stage, there is a fundamental randomness in nature, and only the probability law of quantum physics is determinate. All physical laws are subject to the uncertainty principle.

Second, and this is my main reply as explained above, this begs the question against relative determinism and free will. The objection simply assumes that absolute determinism applies after the initial stage in every twin world without any evidence that it applies in the actual world. The hypothetical character of physical law, as well as the presented datum of free will, are our evidence that it does not. Even the quantum probability law is hypothetical in the sense of relative determinism, on top of being only about probabilities. Thus even quantum physics does not conflict with the possibility or even the actuality of free will. For even though the quantum probability function is wholly deterministic, it is still only hypothetical (if-then) in form. Thus it is just a case of relative determinism, just like any other scientific law.

Third, the objection is a non sequitur. Even if the twin worlds always do run the same, it does not follow that there are *no* free choices, but only that *if* there are free choices, then they are always the *same* ones. And that is just what one would expect. For the principle of sufficient reason suggests that physically identical people in physically identical situations would have the same feelings, perceptions, and values, and so on, and thus would make physically identical free choices. This is a sort of version of the problem of Jean Buridan's ass. Placed equidistant between two physically identical and identically perceived piles of hay, the ass would have no reason to choose either over the other, and would die of starvation, but for the higher-level reason of making an arbitrary choice so as not to starve to death. Of course, the people would have no equi-available physically identical world histories or twin worlds to choose among. They would only have the one they were in. But just like the ass, they would have no reason to choose

differently if, per impossibile, they were to switch places with their counterpart twins in a twin world. For all their perceptions, thoughts, and feelings would be the same.

Going back in time to change our life does not count as entering a twin world, or starting a new branching twin world history. We cannot go back to exactly how everything was, if we bring back with us our knowledge of how things happened the last time. Whether or not that involves a slight physical change to the memory part of our brain makes no difference to this point. Even if only our purely mental understanding is different, things are not as they were. Far from it! For we act based on our understanding.

Thus free acts can be predicted and retrodicted just as well as purely physical behavior. All we need to know are the laws of science and our reasons for acting the way we do. Surely in phenomenologically identical worlds, in which we are directly presented with identical objects of perception or thought, we would always make the same choices. For our reasons to act would be based on identical objects of perception or thought; and our powers of reasoning would be identical, as well as our emotions. Indeed, our *reasons* would be identical! For they too are directly presented.

Fourth, Buridan himself already solved the problem of Buridan's ass. An ass would *randomly* choose which of two physically identical, equidistant piles of hay to eat for the *higher-level* reason of not starving to death. And that is the one situation where twin asses *might choose differently* in twin worlds. Thus the objector's argument is not only a non sequitur, but is also based on a false premiss. Also, even a random whim is a sufficient reason.

A deeper and subtler objection would be that quantum physics conflicts with the principle of sufficient reason, due to the basic randomness that quantum physics ascribes to nature. My reply is that to the contrary, the quantum probability function law *provides* sufficient reason for the basic randomness in nature. And in turn, the scientific, empirical case for quantum physics provides sufficient reason for accepting that theory in the first place. Again, Hawking says quantum physics "has never failed a test, and it has been tested more than any other theory in science" (Hawking 2012 / 2010: 74). Thus we have more reason to admit quantum physics than we have for admitting any other scientific theory.

Metaphysical ecumenicism applies to all theories about minds and bodies if the theories are intelligible, logically possible, and offer logical analyses of ordinary statements about minds and bodies, including about free will and efficient cause. For then the "rival" analyses will be logically equivalent to each other, since they will be logically equivalent to the ordinary statements. And then on the containment and dependence arguments, all the theories will be distinct only in reason. For they will be merely different

ways to parse the same ordinary things. They will be formally distinct with a foundation in reality in the mind-body or 'concrete' portion of the real order.

Richard Taylor lists eight mind-body theories in his book *Metaphysics*, illustrated by Roderick M. Chisholm: interactionism, epiphenomenalism, materialism, idealism, dual aspect theory, parallelism, occasionalism, and pre-established harmony (R. Taylor 1983: 16). Metaphysical ecumenicism admits them all, if they are intelligible, logically possible, and provide logically equivalent analyses of the ordinary statements in question. Most are parsings of limited validity, disregarding each other's objects and relations.

Physicalism is materialism minus matter. And physicalism is in turn is only modally distinct from "what Donald Davidson has called anomalous monism. Each occurrence of a mental state is... an occurrence of a physical state of a body, but the groupings of these characteristics under mentalistic predicates are largely untranslatable into physiological terms" (Quine 1995: 87, see 88). "Dualism of substance thus gives way to a mere dualism in the predicates" (Quine 1995: 85). Thus physicalism is just anomalous monism minus the mental predicates. Thus they are only formally distinct with a foundation in reality in physicalism.

One might object that the theories have a scientific level, and that on the scientific level, the theories do make rival claims about what, if anything, causes or does not cause what, either as efficient cause, agent cause, both, or neither. They may be deeply based on science, such as neuroscience or cognitive science. They may be theories trying to account for all the empirical data, or at least the general empirical data. For example, as an old empirical saying goes, if the body is drunk, does the mind stay sober?

My reply is that all these theories also have a philosophical level; and philosophical theories cannot be refuted by any logically possible empirical observations. For they are general enough to account for all logically possible empirical data, that is, to "save the appearances." For example, which of Taylor's eight mind-body theories fails to offer an account of unsober drunkards?

The mind-body problem is no different from the problem of universals in this respect. Both problems start from ordinary empirical observations (for us, objects of perception). The mind-body problem starts from ordinary observations of drunkards, and so on. The problem of universals starts from ordinary observations of exact, specific, and generic resemblances. And the theories philosophers offer to explain both problems rise to the same level of generality that includes accounts or interpretations of all possible empirical data. Thus all the fully general theories of both problems are irrefutable by means of empirical data.

As noted earlier, philosophy of mathematics often makes

things clearer. On the empirical level, we can offer plenty of empirical evidence that two plus two equals four. Children first learn that truth by counting things over and over again. But on the level not even of philosophy, but only of ordinary reason, that truth is *a priori*. For we can come to see that it is true independently of experience. Thus Frege is right to ridicule John Stuart Mill's theory of arithmetical equations as empirical generalizations based on counting "piles of pebbles and gingersnaps" (Frege 1974 / 1884: 38, see 9–17). For, to put Frege's point in my own way, two plus two equals four in all logically possible worlds, and thus cannot be logically equivalent to any empirical generalization. For empirical generalizations are logically contingent, and thus cannot be true in all possible worlds. Even a statement that is 100% probable is not a logically necessary truth. If I am standing in the rain, it is 100% probable that it is raining, but it is scarcely true in all logically possible worlds. Thus Mill's theory of arithmetic is not logically equivalent to any of the theories of arithmetic that make arithmetic *a priori*, whether synthetic *a priori* per Kant or analytic *a priori* per Frege and Russell. Thus Mill's theory fails the second condition of metaphysical ecumenicism. For only a theory of arithmetic that makes arithmetic *a priori* can provide statements that are logically equivalent to the ordinary *a priori* truths of ordinary arithmetic.

Even Keynes' and Russell's logicist theory of probability cannot make a 100% probability into a logically necessary truth. For them, *every* statement of the form "Statement S has probability P based on body of evidence E" is a logical truth in the wide *a priori* sense of "logic." For them, "'It is raining' is 50% probable based on body of evidence E," if true, is an *a priori* truth. But that is not a statement that rain is 50% probable. It is a hypothetical statement whose *consequent* is that statement of 50% probability.

The Keynes-Russell theory of probability has nothing to do with the problem with Mill's theory. If, per impossibile, Mill had the right theory of arithmetic, and all the truths of arithmetic were only 100% probable empirical generalizations, the Keynes-Russell theory of probability would apply to them all, but (and this is the catch) only based on, i.e., relative to, logically contingent body of empirical evidence E. That is, even if "Statement S has probability P based on body of evidence E" is a logical truth in the wide *a priori* sense, statement S itself logically need not be.

We might offer this argument by analogy: Just as we can and do have empirical evidence for truths of arithmetic, even though those truths are *a priori* and therefore cannot be falsified by any possible empirical evidence, so too we can have empirical evidence for any philosophical theories that comprehensively interpret all empirical evidence, even though such theories are true *a priori* if they are true at all, and therefore cannot be falsified by

any possible empirical evidence. But that is not an *analogical* argument. It is a literal universal instantiation. For theories that make arithmetic *a priori* are *instances* of just such philosophical theories.

To think that merely because a theory was developed on the basis of empirical observations or generalizations, the theory is still empirical at bottom, or in a hidden way, is to commit what Broad calls the genetic fallacy (Broad 1968 / 1925: 11–14). In fact, all my own containment and dependence arguments start from ordinary facts (not: from fact metaphysics). And the ordinary facts about things' having color and shape, or there being three oranges on the table, not to mention ordinary facts about minds and bodies, are all empirical, that is, perceptible or introspectable. Sometimes the ordinary facts my arguments start from are *a priori*, for example that two plus two equals four. But even here "pebbles and gingersnaps"ordinary empirical evidence is also possible.

This accords with the usual understanding. I am saying no more than that Samuel Johnson did not and could not refute Berkeley's idealism by kicking a stone. For Berkeley interprets the stone as itself a bundle of ideas. Of course, Quine holds that Johnson refuted Berkeley, or at least provided logically relevant empirical evidence against him (Quine 1975 / 1960: 3, 17). But that presupposes Quine's view that the whole of theory, including philosophy, is holistically empirical (Quine 1971b / 1951: 42–46), or at least that metaphysics is empirical. But this theory about metaphysics is right down there with pebbles and gingersnaps arithmetic. On the low level of empirical science, kicking a stone is logically relevant. On the high *a priori* level of metaphysics, not so.

There is a progressive series of modal distinctions here. (1) Statement S is true *a priori* if it can be known independently of experience. (2) S is "immune from revision" (Quine's term) if it logically can be held "come what may" simpliciter (not Quine's view) (Quine 1971b / 1951: 43). (3) S "can be held true come what may, if we make drastic enough adjustments elsewhere in the system" (Quine 1971b / 1951: 43). Except for the later Quine's admitting a very limited sort of stimulation- or observation-analytic statement (Quine 1995: 45), Quine rejects (1) and (2) and admits only (3), due to his rejecting the analytic-synthetic distinction. Due to my phenomenology, and agreeing with Grice and Strawson (Grice 1956) that distinctions can have gray borders, I admit all of (1)–(3). Note that (1) implies (2), and (2) implies (3), but the converse implications do not hold. For if S is true *a priori*, then S logically cannot change in truth-value, regardless of how anything else in the world may change. And if S can be held true come what may simpliciter, then S can be held true if we make sufficiently compensatory adjustments to our theory. But on the face of it, if (3), then (2) does not follow, since (2) might be true *a priori*, or

even a timelessly true logically contingent statement, as in general relativity theory. And if (2), then (1) does not follow, since (again) (2) might be a timelessly true logically contingent statement.

There logically can be any number of timeless logically contingent beings. Notably, there logically can be timeless souls or minds who exist not eternally sub specie temporalis, but sub specie aeternitatis, yet who are created by God in a timeless contingent act of creation. Such souls would not be ante rem. They would be in re, in the timeless present. Or consider ante rem universals that can only be exemplified by logically contingent things. The ante rem universal blue exists timelessly, since it is a logical parsing of blue things that abstracts precisely from location in space and time. But does it follow from its timelessness that it is a *logically necessary* being? How could *any* parsing of blue exist in all possible worlds?

We do not even need to provide an actual example of a timeless logically contingent being, but only an intelligible and logically possible one, in order to show that (2) does not imply (1) for intensional reasons. And I think many theologians would find logically contingent timeless souls to be at least intelligible and logically possible. In *The Great Divorce*, C. S. Lewis provides a metaphorical description of timeless souls that even ordinary lay people can understand (Lewis 1973 / 1946: 143).

But the best example is not souls, but bodies. I once said:

> For Einstein, physical laws are timeless not because they are logically necessary, but because on Einstein's theory, as a matter of logically contingent fact, time itself is not physically real. Thus for Einstein, all physical laws are timelessly true, yet logically contingent. Thus for Einstein, all such truths are counterexamples to Panayot Butchvarov's thesis that "A [logically] necessarily true proposition is one that is true and has as its subject-matter nontemporal entities" [Butchvarov (1970: 149)], that is, to the thesis that logically necessary truth is timeless truth. For in Einstein's theory, all truths about physical reality are about nontemporal entities all right, but not a single one of them is logically necessary. In fact, to refute Butchvarov, Einstein's theory need not even be true. It need only be intelligible and logically possible that physical reality is timeless in the way Einstein says it is. (my 2022: 17)

For my full discussion of Einstein's view that physical objects have no location in space or time in objective physical reality, but only

relative to frameworks of reference, see my (2022: §§ 6, 11).

The Containment and Dependence Arguments for Mind-Body Theories

The arguments are as follows. 1. Ordinary people, their ordinary minds and bodies, the ordinary efficient causes of bodies on minds, the ordinary agent acts of minds on bodies, and thus the ordinary interactions between minds and bodies, all exist in an ordinary, pre-philosophical sense of "exists." 2. The <objects> admitted in the many "rival" theories of body and mind either <are>, or are <logical parsings of combinations of>, the ordinary objects. 3. Thus there are <containment and dependence relations>, including <identifiability relations> and sometimes even the <identity relation>, among the ordinary objects and the <objects> of the many "rival" theories. 4. The ordinary objects cannot be nothing, since they are all different, and at most one of them can be nothing. 5. But nothing can contain, depend on, be identifiable in terms of, or be identical with, nothing. 6. Therefore all the objects admitted in the many "rival" theories exist in the sense of not being nothing. 7. Therefore all the theories are to be admitted into metaphysical ecumenicism. For their entities are distinct only in reason. They are formally distinct with a foundation in reality in the mind-body portion of the real order, or may we say Strawson's persons, or what seems to be the same, Heidegger's *Dasein*. But materialism and physicalism make statements that disembodied minds exist false. I shall discuss that exception shortly.

Again, the three conditions of metaphysical ecumenicism are that the theories be (1) intelligible, (2), logically possible, and (3) logically equivalent to each other in virtue of their logical analyses' being logically equivalent to the corresponding ordinary statements about minds and bodies. Condition (3) is the condition that all the theories must "save the ordinary appearances" equally well. Whether one theory saves the appearances more *elegantly* than another is irrelevant. This is not the shallow level of science, but the deep level of philosophy. And even in science, Ockham's razor is overruled by adequate explanation, as we saw in the section on the razor. And here adequate explanation is adequate logical parsing. Possibly one theory gives the true explanation of the mind-body portion of the real order, in Aristotle's sense of being the most general description. But which theory would that be? They all seem to be on the same categorial level of generality, and seem to differ only in which objects they admit or reject. And in any case, all the parsings admitted by all the theories must exist in the sense of not being nothing.

The ordinary persons, minds, and bodies we start from also seem to be mind-independently real, and even totally real, meaning logically independent even of the logical possibility of observers. This is with the exception that they cannot be logically independent of themselves. But no object can exist independently of itself. Thus all the objects admitted by all the "rival" theories are mind-independently real and totally real as well, in virtue of their being logical parsings of objects that have those kinds of being. The only exceptions we found were acts, groups, and facts *that*.

These containment and dependence arguments do not start from any objects of perception or thought, but from the ordinary persons, minds, bodies, and other objects in themselves that those objects of perception or thought ordinarily seem to "be."

One might object that minds logically cannot overlap with bodies, but must be really and wholly distinct. One might even appeal to Descartes' argument that the essential features of each, respectively thought and extension, are logically incompatible.

My reply is that Descartes' logical parsing is just one of many. And on the relevant containment entailment theory of logical validity, all the truth-grounds of the ordinary statements and their many different logical analyses (metaphysical interpretations) are of the very same mind-body portion of reality, logically parsed differently. Thus the objection merely pretends one "rival" is right.

One might object that physical objects are basic, therefore mental objects, including minds, are logical emergent entities. My reply is that this is just one logical parsing of many. Indeed, if we parse minds as basic, then physical objects are the logical emergent entities. That is not Berkeley's or Leibniz's *idealism*, but a new form of *dualism* that has perhaps not been noticed before.

It should be clear from these first two objections that every "rival" theory is going to have its objection that it alone is right and all its "rivals" are wrong! No flaw is detected in the containment and dependence arguments, or is even looked for.

Again, the containment and dependence arguments imply the positive construction ontological interpretation of logical analysis. Any reductive and even eliminative logical analyses will be admitted, but only as progressively greater abstractions from positive construction, and thus as of progressively less validity. Reduction and elimination are only formally distinct from positive construction, with a foundation in reality in positive construction. For the reductive interpretation retains the positively constructed entities and merely subtracts their special character from them, and the eliminative interpretation further subtracts their existence from them and merely retains their names (nominalism) or concepts (conceptualism). Talk of ontological bracketing!

This is not to mention the relevant containment entailment

theory of logical validity, Aristotle's relation argument, and so on.

One might object that many of these theories differ also on causal issues, including both efficient cause and agent cause. My reply is that these very causes are parsed by the same containment and dependence arguments in passing. To be sure, objects distinct only in reason cannot be each other's efficient or agent causes.

Occasionalism is just interactionism minus any interactive causation. Epiphenomenalism is just interactionism minus the agent cause side of interaction. All the theories merely add or subtract objects from each other, including causes of various kinds.

The best illumination, anticipation, antecedent, instance, and even paradigm of metaphysical ecumenicism of mind and body is the famous dual aspect theory. Indeed, in all of its applications across all of philosophy, metaphysical ecumenicism may be called *multiple objectual aspect theory*! Thus it may help us to review the dual aspect theory again, even though it is far more limited in scope of application, since it concerns only minds and bodies, and not the whole of metaphysics (not to say the whole of philosophy).

Again, the main illuminative analogy of dual aspect theory is of dual aspect 'mind-body' to a curved line. Godfrey Vesey says:

> One of the theories defined in James Baldwin's *Dictionary of Philosophy and Psychology,* published in 1901, is 'The Double Aspect Theory'. It is 'the theory of the relation of mind and body, which teaches that mental and bodily facts are parallel manifestations of a single underlying reality'. It [regards them] as only different aspects of the same reality, like the convex and the concave views of a curve; or according to another favourite metaphor, the bodily and the mental facts are really the same facts expressed in different language'. (Vesey 2017 / 1991: 45)

Conceived or regarded from one side, a curved line in a plane curves outwards (is convex) (has positive curvature). Viewed from the other side, the line curves inwards (is concave) (has negative curvature). Thus the same line has different geometrical properties depending on how it is conceived or regarded. Now, on a more general level, Euclid's flat plane geometry, Bernhard Riemann's positive curvature geometry, and Nikolai Lobachevsky's negative curvature geometry "are intertranslatable" and can be modeled in terms of each other (Nagel 1979: 253–54). The parallel postulate comes out differently in all three of them; but in each case its interpretation is different too, since in each case the interpretation of "straight line" through a point is different. And it is precisely in

this general sense of the intertranslatability of the different geometries that the main illuminative metaphor for dual aspect theory shows that it is an early and very limited version of metaphysical ecumenicism. In fact, this intertranslatability of the three geometries is an instance of metaphysical ecumenicism, which we may call geometrical ecumenicism. Likewise for positive and negative curvature, which are respectively just Riemann's and Lobachevsky's geometries.

It is fun to imagine that the inward curve represents the mental aspect precisely because it is 'inward', while the outward curve of the same line ('looking from the other side' of the flat plane it lies in) represents the bodily aspect precisely because it is 'outward'. But as we saw before, representation strictly requires only one-one correspondence.

Richard Taylor seems to go beyond Quine's claim that he (Quine) is a body, and even to go beyond Davidson's anomalous monism, which claims that he (Davidson) is a mere body of which mental predicates can be anomalously, i.e., irreducibly, predicated. Taylor says that a body can be "a living body, or a living, material animal organism" (R. Taylor 1983: 10). Thus Taylor is (or can be, on this view of his) a living body, presumably with real mental properties. Why then cannot Taylor's body also be a freely acting, freely choosing body? It is a leap over the narrowest of ditches. Thinking otherwise is just part of the misconception of all these theories as partisan rivals, and also part of absolute determinism.

Perhaps the most serious objection to the containment and dependence arguments for minds and bodies is dialectical. I am merely rebaptizing and admitting minds and bodies in the ordinary sense, along with all their ordinary constituents and ordinary relationships, into our metaphysics wholesale. And that begs the question. My reply is that I did give arguments, so no question was begged. And as to the existence of ordinary things, Quine says of ordinary "medium-sized" physical objects that if we refuse to apply "the key words 'understood', 'real', and 'evidence' here,... [w]e should only be depriving them of the very denotations to which they mainly owe such sense as they make to us" (Quine 1975 / 1960: 3). Also, the containment and dependence arguments go far beyond ordinary thought. For they show the existence of all sorts of very different entities of very different rival theories as distinct only in reason; and ordinary thought scarcely admits them all.

One might object that idealism is more intelligible than materialism or physicalism. For we can understand how ordinary bodies could really be mental by analogy to ordinary dreamed and hallucinated bodies, but it is hard to understand how a physical world could cause freely acting minds. My reply is that I agree, but this concerns only the intelligibility condition of metaphysical

ecumenicism, and does not apply to dual aspect theory at all. And physicalism as logical behaviorism seems quite intelligible.

One might object that minds and bodies categorially cannot ontologically contain each other. My reply is that on physicalism, bodies ontologically contain minds, and on idealism, minds ontologically contain bodies, on the reductive or eliminative ontological interpretation of logical analysis. And dual aspect theory is the true general explanation, since any overlapping minds and bodies are formally distinct with a foundation in reality in the mind-body portion of reality. Thus dual aspect theory is not just another turn of the metaphysical kaleidoscope. It is a higher-level turn that logically includes all the lower-level "rival" logical analyses. It includes even itself as it occurs on the ordinary "rival" level.

Disembodied Minds and Transcendental Beings

I return now to this problem for metaphysical ecumenism. On some but not all of the "rival" metaphysics of body and mind, there are or at least logically can be disembodied minds. They logically can exist before being in bodies, after, or both before and after. Perhaps some never exist in bodies at any time. Disembodied minds logically can act on bodies. There is no reliable evidence of any of this as far as I am concerned, but it is still logically possible. And *disembodied* minds logically cannot be logical constituents of logical analyses of ordinary *embodied* minds, still less of bodies. For one and the same mind cannot be both embodied and disembodied at the same time. Thus showing the existence of disembodied minds is beyond the scope of the containment and dependence arguments, if we start from ordinary embodied minds.

If we receive a new kind of body after death, say an "astral body" or a "spiritual body," our arguments can show the existence of *post-death* minds, but they will not be *disembodied* minds. They will be parsings of ordinary, pre-philosophical astrally embodied minds. Thus the problem of disembodied minds remains. Indeed, if we have any sort of ordinary, pre-philosophical life after death, it seems no philosophical issues could change, much less be settled. For no *a priori* issues or truths of any kind logically can change.

Ordinary disembodied minds can be analyzed as bundles of neutral impressions and ideas, neutral sensibilia, or even mental ideas. (Neutral monist events are prior to minds and bodies alike.) But if we parse embodied minds of any kind into disembodied minds, we must admit either two minds or a formal contradiction.

A similar problem arises for transcendental objects. On the usual understanding, Kant asks how it is possible for experience, meaning the world of phenomena, to be the way it is, and answers

that we must posit a transcendental world of noumena to explain that. But if noumena are not in the world of experience, then no parsing of the world of experience can yield them as constituents. And that shoots down any *containment* argument for noumena, if we start from the world of ordinary phenomena. To be sure, we can still hold that the transcendental deduction of the world of noumena from the world of phenomena makes the *dependence* argument apply. For the whole idea is that the world of phenomena's being the way it is logically depends on the existence of a world of noumena. But then the containment and dependence arguments go in opposite ways. And that is fatal to the relevant containment entailment theory of logical validity. For on that theory, logical containment and logical dependence are distinct only in reason. It is also fatal to the idea that valid transcendental arguments can be diagrammed by logic diagrams, *contra* Jens Lemanski (2024). For logic diagrams of valid arguments diagram logical containment of the conclusion in the premisses. And premisses about phenomena cannot logically contain conclusions about noumena, if noumema are not there in the phenomenal world to be contained. To be sure, we can interpret transcendental arguments in some other way. But that would be to sweep the problem under the rug. Nor will it help to admit the universe as containing everything. For the phenomenal world will still contain no noumena.

My reply is that the objection is not fatal to metaphysical ecumenicism, but does describe a basic limitation of metaphysical ecumenicism.

Metaphysical ecumenicism can only go so far. It is not and cannot be the whole of metaphysics. For it must meet the three core requirements of intelligibility, logical possibility, and the logical equivalence of different logical analyses of ordinary things. The containment and dependence arguments cannot prove the existence of disembodied minds if we start from embodied minds, since the requirement of logical equivalence cannot be met. All the ordinary minds we know of are embodied. And by definition, disembodied minds have no bodies. Thus they cannot logically overlap even embodied minds, let alone bodies. That is, a disembodied mind is not logically contained by, and does not logically depend on, the existence of either an ordinary body or an ordinary embodied mind, and vice versa. Thus disembodied minds are beyond the scope of *mind-body* metaphysical ecumenicism. But they do fall within the scope of *neutral monist* analysis as bundles of impressions and ideas, or of sensibilia, and of *idealist* analysis as bundles of ideas. Such analyses are of limited validity, but we do admit them.

One might object that this is counterintuitive. For are not disembodied minds mere abstractions from embodied minds, i.e., logical parsings? Are they not simply embodied minds minus the

bodies? Thus are they not modally distinct from embodied minds? In fact, is not showing the existence of ante rem (i.e. disembodied) minds much like showing the existence of ante rem (uninstantiated) universals? Could we not go even further and show the existence of disembodied souls that are not located in space or time? For that is much like showing the existence of uninstantiated universals that are ante rem, i.e., not located in space or time.

My reply is that this is not about the definability or the progressive abstraction of concepts, but about the existence of the individual minds. If disembodied minds were logically contained in embodied minds, then the existence of disembodied minds would logically follow from the existence of embodied minds. This would prove that disembodied minds exist! But that does not follow at all. Thus disembodied minds are not logically contained in embodied minds. In contrast, on the containment and dependence arguments, the existence of ante rem universals does follow from the existence of instantiated properties. In fact, there could be no instantiated properties if there were no properties there to be instantiated.

Now, we can certainly *conceive or regard* an embodied mind independently of its embodiment. That is abstraction. And as first-year philosophy students are often told, I can easily imagine myself waking up and finding myself floating (without even an "astral" body) over my dead body. I could even watch my own funeral. But that only shows that my continuance as a disembodied mind is *logically possible*. "There are embodied minds" still does not logically *imply* "There are disembodied minds."

What about a disembodied God, or God who transcends the phenomenal world of Kant? As an agnostic, my discussion must be hypothetical. Even if an ontological argument were to prove the existence of God, it would not follow that God is disembodied, unless an embodied God were logically inconsistent with the ontological argument. In fact, on Spinoza's 'perfection' ontological argument, infinite extension is one of God's infinitely many essential perfections! Thus Spinoza's God is essentially immanent (embodied), and essentially not transcendent (disembodied).

At most, the containment and dependence arguments can prove the existence of an *immanent* God, meaning an embodied God-mind, not the existence of a *transcendent* God, meaning a disembodied God-mind. And the arguments cannot even prove the existence of an immanent God, unless there is some ordinary fact about the ordinary existence of some ordinary object in itself for the arguments to start from. And here people may part ways. Perhaps mystics or pantheists can show that <God> is <immanent in> the world, or perhaps classical theists can show that the world is <contained in and dependent on> <God>. But I find no reliable evidence for that. Thus I have no reason to think they are not totally

deluded, or more charitably, subject to some sort of psychological illusion. Based on science, I find most of the universe to be totally lifeless, much less a body animated by God. I also find most of our planet to be totally lifeless, much less animated by the goddess Gaia. I am referring to the basic lack of any evidence for James Lovelock's Gaia hypothesis, however inspirational it may be for the cause of environmentalism. Thus except for Gaia conspiracy theorists, there are no containment or dependence arguments for Gaia, much less for God. Albert Schweitzer (1987 / 1922)'s ethical theory of reverence for all life is a far sounder foundation for both environmentalism and anti-anthropocentrism than mythical Gaia is.

Amusingly, and in the same hypothetical spirit, if there were a reliable ordinary fact that God immanently exists, then not only could we use the containment and dependence arguments to show the existence of the immanent God, but we could parse Him as containing earth goddess Gaia as well! In fact, why stop there? We might as well go back to Thales and prove "there are gods in all things." But they are not there to be contained. And I doubt that minds, immanent / embodied or not, *can contain other minds*. That is not a problem for theologians who hold that "in God we live, move, and have our being." For them it is just another "divine mystery!" But it is a problem for me. It is categorially confused to think that one mind can contain another. Perhaps God is in his own special category and can do that. But how could one show that?

As to the noumenal world, the best solution would be to abandon Kant's bifurcation of the universe into the phenomenal world and a transcendent noumenal world, and make the noumenal world immanent within the phenomenal world. The transcendental deduction would then become the immanental deduction. And if the deduction is sound, the phenomenal world would immanently contain the noumenal world within it, thus honoring the relevant containment entailment theory of validity's logical link between containment and dependence. The phenomenon-noumenon relation would then be a case of the qualified object-object in itself relation, with the phenomenal world as a gigantic qualified object that "is" the noumenal world in itself. We might even add immanent deduction to our list of arguments for metaphysical ecumenicism! But it would be at most distinct only in reason from the dependence argument. We might even admit a new being relation, such that a phenomenon +is+ a noumenon. This new relation would be different but distinct only in reason from my being relation and from Butchvarov's, due to the logical equivalence of our different logical analyses. But I think +is+ is just an instance of "is."

In like manner, we may say that ante rem universals are immanent within individuals that instantiate or exemplify them. In fact, immanence is just another term for ontological containment.

Space and Time

We have already discussed space and time in some detail. We saw that the definitions of space-time as sums of regions, planes, lines, line segments, or points are distinct only in reason. We saw that empirical space-time is built into gravity in general theory of relativity. We saw that quanta can go back and forth in time and even affect the past.

It is easy to see that the "container" theory of space-time is distinct only in reason from the "relational" theory. For each theory will produce statements that are logically equivalent to our ordinary statements about space-time, and therefore logically equivalent to each other. These theories appear to be rivals to their supporters. Yet the only difference is that the container theory states things in terms of containments of things in space-time, while the relational theory states the same things in terms of space-time relations. This is just like positively constructing space-time regions out of space-time planes, lines, or points. But here we see containers (regions) are also positive ontological constructions out of relations.

Likewise, "rival" theories as disparate as Augustine's and C. D. Broad's are distinct only in reason. Augustine says only the present exists, since the past is no more and the future is not yet (Augustine 1988 / 397–400: Bk. 11, ch. 14). Broad distinguishes existence from persistence, and says the past no longer persists, but will always exist, for otherwise past things will no longer stand in any relations to anything, and our memories and other relations to the past will be false (Broad 1968 / 1923: 251–252). We cannot cognize the future, but Broad could still make the same argument for a not yet persisting but always existing future. This is not logical fatalism; see my earlier rejection of logical fatalism as mixing up tenses and truth-makers. But both theories provide logically equivalent statements about the past and future. For where our neo-Broad talks about the past *and* future, Augustine may be interpreted as talking about the <past> and <future>. Since he denies they exist, we can simply bracket them, so as to suspend ontological commitment to them. And statements about the past and future are obviously logically equivalent to statements about the <past> and <future>, for example "The cat was on the mat" and "The cat <was> on the mat." The only difference is the brackets. In fact, this is just another example of the positive construction and the eliminative interpretations of logical analysis. And per our discussion of ontological interpretations of logical analysis, neo-Broad wins, since he is a realist; but we also admit Augustine's eliminationist view as having a lesser validity.

The truth is that Augustine talks about the past and the future all the time. His *Confessions*, in which he offers his theory

of time that there is no past or future, is all about his past sins and the future Kingdom! His theory of time removes his past sins. No past, no past sins. And on it, God, our souls, and the Kingdom exist only in the present. For *everything* exists only in the present.

The containment and dependence arguments for space and time will be much the same as all the previous ones. We start from ordinary things that are ordinarily considered to exist in space and time, show containment and/or dependence relations of those things to <space>, <time>, <space-time relative frameworks of reference>, <lines>, <line segments>, <points>, <properties>, and <relations>, in all three <geometries>, and conclude that all these space-time objects exist in the minimal sense of not being nothing, and a fortiori, in the maximal sense of being totally real. This includes the frameworks of reference. For they are intertranslatable across any observers and are thus totally objective, even though for Einstein there is no such thing as space and time in objective physical reality, which is outside the frameworks. See my (2022: 6–9, 16–18). I shall discuss the three main geometries shortly.

The containment argument is this. All ordinary stones, trees, and dogs are <in> <space> and <time>. Therefore space and time exist in the minimal sense of not being nothing. This might be thought to work especially nicely for the "container" theory of space and time. But that is not so. For the containment argument works for all *logical* containments, not for just *spatial* or *temporal* containments. Thus it works for space-time relations just as well.

The dependence argument is this. Stones, tree, and dogs are ordinary existents. If, perhaps per impossibile, there were (or could be) no <space> or <time>, or other <space-time objects>, then there logically(in the wide sense) could be no stones, trees, or dogs, and arguably vice versa. And nothing can logically depend on nothing. Therefore all the space-time objects admitted by the many theories exist in the minimal sense of not being nothing, and it would seem also in the maximal sense of being totally real.

Space as an object of ordinary thought is still basically Euclidean and Newtonian today. That is how we ordinarily think of it. Ordinary space has three directions or dimensions, all of which are straight and at right angles to each other. Let us not ask which directions are "the" directions; it does not really matter. We may say that ordinary space is such that we may arbitrarily take any three directions that are at right angles to each other as "the" directions. And we must take *some* directions as "the" directions in order to make (really any) geometry apply to the world.

Time as an object of ordinary thought is still basically Newtonian today too. It has a single absolute direction which is different in kind from the three directions or dimensions of space. I agree with Richard Taylor (1983: 71) that the classical difference is

that time "flows" (in a direction), while space is static, meaning it does not flow (in any direction) in that sense. I also agree with him that the basic concept involved in classical time can be called "pure becoming" (R. Taylor 1983: 73). Pure becoming can be inverted and called "pure ceasing (to be)" or "pure receding (into the past)." Just as with Aristotle's road from Athens to Thebes and road from Thebes to Athens (*Physics* 202*b*), they are distinct only in formula, that is, in reason. But unfortunately for Taylor, his reductive or even eliminative analysis of time travel to (R. Taylor 1983: 66–68) is openly admitted to be nothing like time travel as most people would understand it. And Taylor is just as out of date on physics as his student Inwagen, if not more so. For Taylor's theory of time travel is stated in terms of Newtonian absolute space-time. And the real physical possibilities of time travel are not in Newtonian physics, but in general relativity theory and quantum physics. See Kurt Gödel's famous discussion of the paradoxes of causation and of time travel in general relativity theory. The paradoxes arise from the fact that what appears earlier than what depends on your point of view (Gödel 2000 / 1949: 560–562; see Hawking 2017 / 1988: 159–161). Einstein totally agrees with Gödel (Einstein 2000 / 1949: 687–688). On quantum physics, see again Hawking on rocket travel into the past (2018: 140) and on our present observations' affecting the past histories of observed objects (2012 / 2010: 82, 139–140).

It must not be hastily concluded or assumed that the reason for the Newtonian nature of ordinary perception and thought is just some sort of "time lag" in which "Poor dear Common-sense" has not yet wholeheartedly caught up with science today. For it is not as if Euclid is "wrong" and another geometry is "right." For all the geometries are intertranslatable, and thus distinct only in reason. In that sense, all of them are equally "wrong" or "right" as applying to the world. But in another sense one of them may be the simplest and most convenient one, thus raising a question of the razor. One may even be the *most intellectually illuminating in application*, and in that sense the ground or foundation of the others *in application*. In fact, there are at least two senses of "simplest" here. Euclid seems cognitively simplest for us to grasp, in that it corresponds best with our ordinary perception and thought; while Riemann makes advanced physics much simpler to describe and understand.

The verification principle, "The meaning of a statement is the method of its verification," is self-defeating, since there is no method for its verification. Nonetheless, the kind of method (either empirical or analytical is allowed) it defines meaning as being does have limited validity in the metaphysical ecumenicism of meaning. And it is a valid kind of meaning for science, including the physics of time travel, as Einstein and surely Hawking are well aware. But our phenomenology defines a deeper and more general kind of

meaning, phenomenological meaning, for all objects in the wide sense, and for all sciences in the wide sense of organized bodies of knowledge. Presentations (directly presented qualified objects) are connotations and direct referents, and objects in themselves are indirect referents, and we may as well say indirect connotations. These are all distinctions in reason in a wide sense (rational, intellectual, and/or categorial). I explain them in chapter 1.

Just what sort of cognitive basis or starting point does phenomenology provide for space-time physics? The same as for any other science: *any* object of perception or thought we have about space or time is a qualified object. Again, at least initially, it favors the absolute "container" theory. We ordinarily *think of* and even *perceive* the world in Newtonian and even Euclidean terms, that is, of ordinary physical things as existing in what can only be called absolute space as a region as opposed to relational space as a bundle of relations. But we *also* ordinarily perceive and think in terms of relative motion all the time; even if we are not always very aware of it. I think the lack of awareness is because it happens automatically, whether by 'instinct' or learned habit. Even a cat must see and think in terms of relative motion, if it is to intercept and catch a fleeing mouse for dinner! And during rush hours, there are simply too many cars hurtling around me for me to reason out their courses and speeds on a maneuvering board ("MoBoard"). I am just automatically thinking based on training and experience. And all this is totally real. It can be seen in a video, and plotted on a paper MoBoard chart. Navy officers teach and learn how to do it.

We *objectively see* things in relative motion while *thinking that* it takes place in absolute space and time. And we find no conflict in this, any more than we find in our freely acting in a relatively determined physical world while playing a game of pool. And that is not because we are stupid and ignorant, as some of our first-year philosophy professors pretend us to be. It is because we are naturally smart and aware. For we are automatically reasoning *from* absolute motion (taking the earth as frame of reference) *to* relative motion in the moving things around us. And coming now to the point, relative motion and (posited) absolute motion are *distinct only in reason*. For the only difference is perceptual / rational perspective. In relative motion, we are regarding things from our own perspective, which is first person, egocentric, haecceitous. In absolute motion, we are *abstracting from* our own perceived perspective to arrive at a more intellectualized picture that is third person, not egocentric To be sure, terracentric is still haecceitous.

I am not discussing only the qualified world. Much as with the simplest aspects of arithmetic in itself, the simplest aspects of geometry in itself are, on the face of it, transparently given to our reason. And whether space-time in itself is absolute (Newton) or

relative (Einstein) is itself a distinction only in reason. No doubt many readers see that already. If not, allow me to explain.

Einstein rejects absolute motion. But even Einstein admits that, as Heisenberg rightly says, "the relativistic description is also objective inasmuch as every observer can deduce by calculation what the other observer will perceive" (Heisenberg 2007 / 1958: P.S. 19; 1972 / 1971: 88). And that is *functionally* absolute space-time, even if Einstein eliminatively analyzes it away. Shades of the positive construction ontological interpretation of logical analysis!

Both relative and absolute motion are real in the perfectly ordinary sense of wide-awake, pinch-me daily life, as opposed to dreams, hallucinations, fakes, and imagination. The same goes, of course, for our freely choosing to hit the cue ball in a game of *otherwise* physically determined pool—and for all the metaphysical topics we discussed. We did not dream, hallucinate, make up, or imagine any of our many distinctions among kinds of properties, particulars, and groups. Again, distinctions in reason are not mental distinctions. Only the former are discerned in reality. I argue for abolishing mental distinctions altogether in my (2021 / 2020).

Bergmann admits presentations of change in what he calls the "specious present," which lasts a brief moment of some slight duration. See Bergmann (1968: 117–118, 133, 230, 239, 246; 1967: 263, 323, 329; 1964: 28, 31, 40, 43, 98–107, 220, 222, 238). In like manner for Hume, I do not see why there could not be sense-impressions of motions or other changes in a specious present, allowing us to have ideas of them as copies. Here we might waive Hume's views on abstract ideas such as time, if they conflict with that. In my own theory of objects, there are direct presentations of the qualified specious present which "are" the specious present in itself. For me, there are direct presentations of qualified motions and of qualified changes, such as qualified color, touch, smell, or taste, in a qualified specious present, all of which seem to "be" ordinary changes in themselves, no doubt with a basis in physics.

Bergmann does not take his specious present from Russell. For Russell rejects phenomenal change, and more deeply and generally rejects all change, following Zeno. For Russell, any difference over time in a sense-datum is not a change in the sense-datum, but an old sense-datum passing away from being and a new sense-datum coming into being. Even mere "fluctuations" or changes in our *attention* will do that. See Russell (1971d / 1911: 114; 1971e / 1918: 203; 1960 / 1914: chs. 5–7) 1985 / 1940: 334). The main problem for Russell and Bergmann is, What could underlie any phenomenal change in a phenomenal field? For there must be something there to be changing, but it is not phenomenally given. Due to the Poincaré problem we discussed earlier, Russell admits that we are not wholly presented with a sense-datum. But it

is not as if a sense-datum could have a substratum or even (if visual) a back side. Perhaps Bergmann could allow the *roundness* of a round spot that changes from red to green be what underlies the change of color, or better, allow the bare particular to remain the same through the change of color, in virtue of the roundness's remaining the same. But that sounds arbitrary. Why should the shape be essential to the bare particular's identity over time and the color not?

More precisely, Russell admits not only a specious present but time periods of acquaintance much longer than that. What he rejects is *change within* any time period of acquaintance. Russell says,"You can keep 'this' going for about a minute or two.... I mean it varies often.... It does not matter about that if it does not alter its appearance enough for you to have a different sense-datum" (Russell 1971e / 1918: 203). And as Russell indicates, the length of the period of acquaintance is not the problem, though for a sensible change to be sensed, it cannot be in a temporal instant.

Dialectically, this is a dilemma. Should a presented change require an *unpresented* substratum *in* the sense-datum? Or should the lack of presentation of a substratum in the sense-datum require that the presented change be *unreal*, since nothing undergoes it? Bergmann takes the first approach and is thus impaled on the first horn of the dilemma. Russell takes the second approach and is thus impaled on the second horn. And their Moorean phenomenal realism only makes the dilemma worse. For Moorean phenomenal realism requires not only that both the change and the thing that changes be *presented in* the sense-datum, but also that both the change and the thing that changes be *mind-independently real*.

In fact, the real problem with Bergmann and Russell is that their shared Moorean phenomenal realism is via moderna. Both philosophers get too far away from ordinary, pre-philosophical perception and thought when they reject the via antiqua. Reflecting ordinary perception or thought is perhaps the greatest virtue of the via antiqua. And that includes our own via antiqua theory of qualified objects, which is just as Moorean realist as Russell and Bergmann, but without their dilemma.

We do not perceive Newtonian space. We cannot perceive empty space. It is not the kind of entity that logically (categorially) can be perceived by the senses. But like all relations, space-time relations cannot be singled out as *particulars* in perception or thought either, but only as *individuals*, meaning here as different relations. We can see *that* one stone is larger than another, or *that* the stones are five feet apart. Those are perceptible facts. And there is also a sense in which we can say we see *that* the stones are in space, as opposed to existing only in time, or only in thought. And more or less the same can be said of all the theoretical objects of

physics. We cannot perceive quanta for theoretical reasons, but we can perceive *that* they have certain effects, at least in light of our theory. This is sometimes called the propositional sense of perception. Of course, perception even of particulars like stones and trees is not of mere phenomenal sense-data, but involves objective realities as well. Thus, whether propositions are involved or not, via antiqua ideas with their objective realities are far better suited to ground and explain perception and thought in science and philosophy than are via moderna ideas. Of course, on metaphysical ecumenicism, we *also* admit via moderna ideas, as abstractions from, and distinct only in reason from, via antiqua ideas. And sometimes we *do* perceive mere phenomena, as when we have an after-image.

Einstein made a great advance in physics over Newton, and dropping Euclidean "container" geometry in favor of Riemannian relational geometry was basic to that. Newton's physics remains basically valid for local space-time, and is thus subsumed into Einstein's theory in what I call assimilative ecumenicism. But here we must distinguish philosophy from physics. It does not follow that because Einstein is better than Newton in science, the relational theory of space-time is better than the absolute or "container" theory in metaphysics. In fact, I hold that those two metaphysics are distinct only in reason. This is certainly so if they are logically equivalent analyses of ordinary talk of space and time.

We saw that in geometry, a line can be defined as a set of points, a plane as a set of lines, a region as a set of planes, and space as the set of all regions. Thus all those objects are distinct only in reason. We saw that Whitehead and Russell's *Principia Mathematica* boils down in simplest terms to accepting in effect Frege's reduction of arithmetic to logic plus classes, and Descartes' reduction in turn of geometry to arithmetic via analytic geometry, thus reducing geometry to logic plus classes too. Whitehead and Russell do distinguish their logicized formal geometry from empirical geometry, meaning the geometry that best suits the scientific description of the empirical world. And that describes Einstein's advance over Newton. Namely, Einstein has a far better *empirical* geometry than Newton. But just as logic, arithmetic, and geometry are distinct only in reason, so formal geometry and empirical geometry are distinct only in reason. They are modally distinct. For while formal geometry cannot determine the best empirical geometry, the best empirical geometry must be logically consistent with formal geometry. For formal geometry is precisely the form of any logically possible empirical geometry.

But there is more to space-time metaphysical ecumenicism than the rather obvious distinctions in reason I just described. For the three types of pure geometry are Euclidean (flat plane model),

Riemannian (positive curvature plane model), and Lobachevskian (negative curvature plane model) are distinct only in reason as well. They differ only concerning the Parallel Postulate. Euclid says that given a line and point lying in the same plane, there is exactly one line through the point that never intercepts the given line, i.e., is parallel. Riemann says there is no line that intercepts the given line. And Lobachevsky says there are infinitely many such lines. Thus Euclid admits the Parallel Postulate, while Riemann and Lobachevsky deny it in opposite ways. And it is hard to see how there could be a fourth major pure geometry. For the only option left is there is some *finite* number *greater than one* of lines that intercept the given line. And that is absurd on the face of it, except in a warped or uneven space. Of course, there can be models of warped spaces too, and Einstein does hold that space-time is warped by gravity. But that would not count as a major *pure* geometry. For we would have a different applied model for every individual gravitational warping. Pure topology makes this possible, but does not logically require that any such logically contingent applications exist.

Now in the three major pure geometries, each of the three plane models can be modeled within the other two models. For example, in Euclidean space, Riemannian geometry can be modeled by a sphere, and Lobachevskian geometry can be modeled by a "double saddle," a figure defined by a circle in a flat plane, and a straight line intersecting the circle's center point at right angles to the circle's plane, such that the figure extends to infinity on either side of the plane, but without ever intercepting the line. Thus the figure stretches out to infinity on either side of the circle, and the circumference of the figure always gets smaller but never closes at a point in either direction. Ernest Nagel says,

> Since the three major types of pure geometry are intertranslatable, no interpretation converting the statement-forms of one system into true statements can fail to do likewise for the other two systems. The sole difference between the three systems of statements obtained in this way is that the *same facts* receive *different formulations*.... As far as the empirical facts to be codified and predicted are concerned, we are compelled to [conclude], it will not make an iota of difference which language we adopt. However, we may find one language *more convenient* than another.... (Nagel 1979: 253–54, Nagel's emphasis, double quotes deleted)

We saw that Newtonian physics is far more convenient within our solar system, and that Einsteinian physics is far more convenient

for vast astronomical distances (Hawking 2017 / 1988: 11). And we saw that Newton can be roughly subsumed into Einstein in what I call assimilative ecumenicism. But the deeper ecumenicism is that the underlying pure geometries are intertranslatable. That is, for any statement expressed using one of them, there are corresponding logically equivalent statements using each of the other two. Nagel calls this "conventionalism" (Nagel 1979: 254). Others call it pragmatism or instrumentalism. And there is not much difference among those descriptions. But for us, the main thing is that "the *same facts* receive *different formulations*" (Nagel 1979: 254). Thus Newton's and Einstein's physics are distinct only in reason as far as their geometries go. For the geometries themselves are distinct only in reason. In fact, it is well known among physicists that general relativity theory can be rewritten in Euclidean geometry. It is just that the complexity of the rewrite would make physics basically impossible in practice.

Formal geometry and *pure* geometry are very different. Whitehead and Russell have one *formal* geometry, which is logic plus class theory; and all three major *pure* geometries (Nagel uses that common term) must be consistent with it. What Whitehead and Russell call empirical geometry ought to be what Nagel calls applied geometry. But the way they talk, their empirical geometry seems to be what Nagel calls pure geometry. For they call it an empirical choice whether Euclid, Riemann, or Lobachevsky is best in physics. Thus they are missing Nagel's distinction between pure geometry and applied geometry. And the choice of application is pragmatic, not empirical, if Euclid saves the empirical appearances equally well. I believe this is just careless terminology in *Principia*.

One might object that the terracentric (Ptolemy) and heliocentric (Copernicus) astronomies are empirically equivalent too, as well as equally haecceitous, but the heliocentric model is not merely simpler and more convenient, but *true*. Hawking says "keep in mind that because the earth orbits the sun..." (Hawking 2012 / 2010: 93). Thus he seems to be saying that the heliocentric model is right, and the terracentric model is wrong. In fact, most if not all of us naturally think that way today, including astronauts!

My reply is that the point of the passage as a whole (Hawking 2012 / 2010: 92–93) is that all such things are relative. Thus the just-quoted text seems to be just casual, even unfortunate writing. Granted, we all like to think and say the earth goes around the sun, and not the sun around the earth. But that is only because our ordinary thinking is still rooted in Copernican astronomy. Hawking had already said earlier in the book:

> So which is real, the Ptolemaic or Copernican system? Although it is not uncommon for people to

> say that Copernicus proved Ptolemy wrong, that is not true. [O]ne can use either model as a picture of the universe, for our observations of the heavens can be explained by assuming either the earth or the sun to be at rest. [T]he real advantage of the Copernican system is simply that the equations of motion are much simpler in the frame of reference in which the sun is at rest. (Hawking 2012 / 2010: 41–42)

Hawking is appealing to his model-dependent realism here. For he expressly refers to the astronomies of Ptolemy and Copernicus as models. We already saw that his model-dependent realism is not only not realism, but is self-defeating for that reason. But perhaps we should discuss it a little more fully. For we need not appeal to a radical relativism merely to explain why we prefer Copernicus.

Hawking says that in "the science fiction film *The Matrix*, in which the human race is unknowingly living in a simulated virtual reality," "there is no way we could tell [if] there was another reality behind the simulated one" (Hawking 2012 / 2010: 41–42). This is a version of the familiar "brain in a vat" puzzle, which has antecedents in Descartes and ancient skepticism. How can we tell our brain is not in a vat, and is fed its sensory input by a scientist? Hawking says more fully than I quoted him before:

> These examples bring us to a conclusion that will be important in this book: *There is no picture- or theory-independent concept of reality*. Instead we will adopt a view that we will call model-dependent realism: the idea that a physical theory or world picture is a model (generally [in physics] of a mathematical nature) and a set of rules that connect the elements of the model to observations. This provides a framework with which to interpret modern science. (Hawking 2012 / 2010: 42–43, his emphasis)

The view that we do not even have a *concept* of "a real external world" (Hawking 2012 / 2010: 43) recalls Hume's 'no impression, no idea' thesis, and more importantly, is self-defeating. If Hawking were right, then he literally would have no idea of the view he is rejecting. His denial of model-independent reality would be neither true nor false, but meaningless. For a full explanation of the self-defeating nature of his view, see my discussion of three pratfalls of radical relativity in my (2003 / 1996: 20–22). Hawking's model-dependent realism is just another form of radical relativity. My

discussion earlier in this book is too long to repeat here. But it should be clear that if Hawking's thesis, "*There is no picture- or theory-independent concept of reality,*" were true, then it would refute itself as literally unintelligible!

Radical relativity has been around since Protagoras. It is perennial, and naive and not self-reflective enough to realize that it applies to and therefore condemns itself. And that is my negative case against it. My positive case for the intelligibility of objects in themselves is in chapter 1 of this book. Namely, they are indirectly intelligible via qualified objects. In contrast, Hawking has no phenomenology. My positive epistemic case for "how we can tell" we are not brains in a vat is the case for my theory of seeming in chapter 4. Briefly, the evidence may be weak, but it is there.

What is important for metaphysical ecumenicism here is this. The terracentric and heliocentric astronomies are distinct only in reason in the sense that they make the same empirical predictions and retrodictions. They are empirically equivalent. In fact, their observational bases are not just distinct in reason, but literally identical. More deeply and importantly, as we already saw, "the relativistic description is also objective inasmuch as every observer can deduce by calculation what the other observer will perceive" (Heisenberg 2007 / 1958: P.S. 19; 1972 / 1971: 88). Therefore the two seemingly rival astronomies are formally distinct with a foundation in reality in the astronomical portion of the real order. We may say they are empirically ecumenical, and distinct only in *theoretical reason*, meaning in their intellectual theories.

Likewise, Newtonian and Einsteinian physics are formally distinct with a foundation in reality in the physical portion of the real order. But due to the greater accuracy of Einstein, this is best described as assimilative ecumenicism.

Euclid's and Riemann's geometries, which respectively underlie Newton and Einstein, are literally formally distinct with a foundation in reality in the spatiotemporal portion of the real order. For the three main geometries—Euclidean (flat plane), Riemannian (positively curved plane / sphere), and Lobachevskyan (negatively curved plane / saddle)—are logically equivalent, since they "are intertranslatable" and can be modeled in terms of each other (Nagel 1979: 253–54). Nor do they conflict on the Parallel Postulate, since they all assign different meanings to the term "straight line." Thus the containment and dependence arguments apply to all three.

Despite the seemingly deep differences between space and time, I shall now argue that *space and time are themselves distinct only in reason*. Distinction in reason is defined in terms of logical dependence, and I shall argue for their mutual logical dependence. I shall begin by refuting three arguments for the opposite view.

First, in a logically possible world of physical objects that

do not change, it seems plausible to hold that the objects exist in space but not in time, and to hold that therefore space logically can exist without time. Conversely, in a logically possible world of no physical objects but minds that change, it seems plausible to hold that the minds exist in time but not in space, and that therefore time can exist even if space does not. On the face of it, these two worlds are both intelligible and logically possible. And if space and time are necessary beings, then their real distinction could only consist in their having wholly distinct intensional contents. That is, their real distinction would be hypothetical (if-then). That is, if, per impossibile, they *were* logically contingent beings, then they *would* be really distinct in the usual sense that either logically could exist even if the other could not. For their *contents* are wholly distinct, and the only thing preventing real distinction in the usual sense is that each is a necessary being that cannot fail to exist.

This first argument is a non sequitur. We cannot infer from premisses about bodies and minds, or even about logically possible bodies and minds, that space and time themselves are logically independent of each other. Even if the premisses are true, the conclusion does not follow.

Second, one might argue that even if four-dimensional space-time is by definition three-dimensional space plus time, Quine is right that space is still space and time is still time (Quine 1981: 10). And the two are so categorially, radically different that they are logically independent of each other. Compare defining a certain four-fruit set as these three apples plus that orange. By definition, the apples and orange are distinct only in reason from the four-fruit set. In fact, they are the members that define the set. But the apples are still apples and the orange is still an orange, and the apples are wholly distinct from and logically independent of the orange.

This second argument is a non sequitur too. I accept the premiss. In fact, I asserted it earlier: space is space and time is time. And on Butler's level of being, *everything* is what it is, and is not another thing. But here too, the premiss is simply irrelevant to the conclusion. For we can define a set as the numbers two, three, and four plus the class of two-member classes. Each member of the set is what it is, and is not another thing. Yet the number two and the class of two-member classes, though they are different objects, are distinct only reason. Indeed, *all* overlapping, contained, and dependent things are what they are, and are not other things, and are different, yet are distinct only in reason. Why, the distinctions of reason themselves are what they are, and are not other things!

Third, one might argue that Descartes' dualistic mind-body metaphysics makes it very clear that space and time are logically independent of each other. For while no substance logically can

exist without duration, mental substances (minds) logically *cannot* have extension, and material substances (bodies) logically *must* have extension (see Descartes 1969 / 1642: 245, principle 62). Thus time (duration) is independent of space (extension). For if there were minds but no bodies, then there could be time but no space, certainly not as a Cartesian idea that corresponds to reality. And since bodies logically need not change, time is categorially irrelevant to space. Thus by parity of reason, i.e. for categorial reasons, time is irrelevant to space even if bodies *do* change.

My reply is that due to those very facts, Descartes himself finds extension and duration to be only modally distinct in his *second* sense in bodies, though not in minds (Descartes 1969 / 1642: 244–245, principles 61, 62). For bodies logically must have both duration and extension, though minds must have duration and cannot have extension. And a modal distinction is a distinction in reason. I cannot regard this reply as complete. For I wish to show that what Descartes calls the modes (modes are mental ideas for him) of duration and extension are distinct only in reason *from each other*, and not just that each is distinct only in reason *from bodies*. But I hope my positive argument to come, that minds and bodies are distinct only in reason, will complete my reply.

I shall now state my positive argument that space and time are distinct only in reason. The argument assumes that space and time *exist*, and seeks to prove that they are *distinct only in reason*. This is no mere assumption on metaphysical ecumenicism. For we already used containment and dependence arguments to show the existence of space and time, both absolute and relational.

There are at least four options, or seeming facts. And if space and time are distinct only in reason on even just *one* of them, then they *are* distinct in reason. For if the other options do not show it *too*, then they are merely failed intuitive proofs. This is just like logic diagrams in general. If even just one diagram shows that the conclusion is diagrammed when the premisses are diagrammed, then the argument is valid because the premisses logically contain the conclusion. And in that case, the truth-ground content of the conclusion is distinct only in reason from the truth-ground content of the premisses. And if all other logic diagrams fail to show that, then they are merely failed diagrams. In fact, if we diagram all four options, and if even just one diagram shows containment of the conclusion, even if the other three do not, then that is not just *like* a case of diagrams, but it *is* a case of diagrams. But all four options concern our logical intuitions, and I shall not offer any diagrams.

The four options are these.

First, we cannot say whether space and time are really distinct in the usual sense of real distinction. For we cannot say that either logically exist even if the other does not. For neither can fail

to exist simply considered by itself. Or, if you please, if they *do* exist, then neither can fail to exist simply considered by itself. How could there be no space, even if nothing is in it? How could time fail to keep marching on, even if things do not change? Thus this first option fails to show that space and time are distinct only in reason. For so far, they look independently logically necessary. So far, they look like they have no logically necessary containment or dependence relationship between them.

Second, space and time would seem to be really distinct in the hypothetical or per impossibile sense. If, per impossibile, each logically could fail to exist, then they would seem to be really distinct, since then either logically *could* exist without the other. For on the face of it, they have wholly different intensional or intellectual contents. For on the face of it, there is no spatial conceptual content in the concept of time, and no temporal conceptual content in the concept of space. This option looks like it shows real distinction in our second sense (the hypothetical or per impossibile sense). And that is the opposite of what we wish to show, namely, that space and time are distinct only in reason.

Thus space and time seem to be really distinct in the sense of having independent intellectual contents. In thinking of either, we logically need not think of the other. We can think of space without thinking of time, and vice versa. We can identify space in thought independently of identifying time, and vice versa. Here I mean independent thinkability in the wide *a priori* sense of logic.

The problem with this option is that while Kant is right that 5 + 7 is independently thinkable of 12, since either can be thought of without thinking of the other, and each can be identified in thought without identifying the other; nonetheless, they *are* distinct only in reason, certainly on logicism, and even in the wide *a priori* sense. For neither can *exist* without the other existing. Even Kant would agree that 5 + 7 = 12 is *necessary* a priori, synthetic or not!

Third, space and time seem really distinct in the 'possible worlds' talk sense. For on the face of it, there are infinitely many logically possible worlds containing only minds and time without any bodies or space, and vice versa.

The problem with this option is that (again) space and time are modally distinct in temporally changing bodies in Descartes' second sense. And modal distinctions are distinctions only in reason. And that leaves the logical door open to space and time's also being distinct only in reason considered in themselves.

The fourth option is the winning proof. And if so, it is moot whether our logical intuitions were clear or not in discussing the first three options. The fourth option is that space and time are distinct only in reason in a *logically indirect* sense of distinction in reason. This is very much like the logically indirect sense in which

qualified objects (objects of perception or thought) are logically dependent on (and thus distinct only in reason from) minds (cognizers), namely, that qualified objects logically depend not on the *existence* of minds, but only on the *logical possibility* of minds.

We saw in chapter 1 that qualified objects (objects of perception or thought) logically can *exist* even if perceivers and thinkers do not, but logically cannot exist independently of the *logical possibility* of perceivers and thinkers. Likewise, even if space and time logically can *exist* independently of each other in any of the three senses respectively discussed in options (1)–(3) just above, they logically cannot exist independently of each other's *logical possibility*. That is, if, perhaps per impossible, space were *logically impossible*, then time would be logically impossible too, and vice versa.

This is easy to see. For there are no logically possible minds that are in time, but that logically cannot be embodied in a body that is in space. Thus the logical possibility of minds in time logically depends on the logical possibility of bodies in space. Thus, to abstract the general point from any particular minds or bodies, the logical possibility of time logically depends on and therefore logically entails the logical possibility of space. Thus on the relevant containment entailment theory of logical validity, the logical possibility of time logically contains the logical possibility of space. Likewise, there are no logically possible bodies that are in space, but that logically cannot change and therefore be in time. Or to keep the symmetry of our two intuitive insights, there are no logically possible bodies that are in space, but that logically cannot embody a changing mind that is in time. Now, each of these two intuitive insights, taken by itself, shows only one modal (one-sided) logically indirect distinction in reason. But conjoining the two insights together, we have a *mutual* logically indirect distinction only in reason between space and time. And all this is simply due to the fact that it is logically contingent whether any minds are embodied, and logically contingent whether any bodies embody minds. For whatever is logically contingent is logically possible.

Why should we care about logically indirect ontological distinctions? Why should we not insist on the usual logically direct distinctions in terms of logically independent capacity to exist, or of independent intellectual content, or at least of truth in different possible worlds? The answer is famous, if implicit:

> 2.011 It is essential to things that they should be possible constituents of states of affairs.
> 2.012 In logic nothing is accidental; if a thing *can* occur in a state of affairs, then the possibility of the state of affairs must be written into the thing itself.

> 2.0121 ....If things can occur in states of affairs, this possibility must be in them from the beginning.
>
> (Nothing in the province of logic can be merely possible. Logic deals with every possibility and all possibilities are its facts.)
>
> Just as we are quite unable to imagine spatial objects outside space or temporal objects outside time, so too there is *no* object that we can imagine excluded from the possibility of combining with others. If I can imagine objects combined in states of affairs, I cannot imagine them excluded from the possibility of such combinations. (Wittgenstein: T 2.011–2.0121, his emphasis)

Just as for Wittgenstein's objects and states of affairs, so too for minds and bodies, and therefore for space and time. And just as for spatial objects in space and temporal objects in time, so too for embodied minds in space-time. So too for all *a priori* categorial relationships among all metaphysical categories.

I am merely expanding Wittgenstein's examples of spatial objects in *space*, and of temporal objects in *time*, to include spatial objects in *time*, and temporal objects in *space*. Indeed, I can state my point by mirroring Wittgenstein's own language as follows: 'There is no physical object in space that we can imagine excluded from the possibility of being in *time*, and no changing mental object (mind) in time that we can imagine excluded from the possibility of being embodied in *space*'.

Now, that may or may not be true of *Wittgenstein's* objects. For he never expressly states what his objects are. He only states what are, on the face of it, some examples: specks in the visual field "that must have some colour," musical notes that "must have *some* pitch," and "objects of the senses of touch" that "must have *some* degree of hardness" (Wittgenstein: T 2.0131, his emphasis). And I just quoted him as admitting "spatial objects" and "temporal objects"! Everyone I know who says that Wittgenstein never says what his objects are seems to overlook what seem to be his examples of objects. Yet at the very least, his examples clearly refute the view that all of his objects are bare particulars. Now, I cannot say if Wittgenstein would say, if asked, that his spatial objects must be *logically capable* of having *some* duration in time, or if he would say that his temporal objects must be *logically capable* of being embodied in physical objects in space. Indeed, he seems to think the mind, or cognizing self, is in some sense 'beyond' the world of objects. Shades of Hume! And I would bet anything that his objects are via moderna, not via antiqua. But his

point that the logical possibilities of a thing are "written into the thing itself" applies to all *my* objects in the wide sense, as well as to *his* objects, whatever they may be. And *my* objects *do* include bodies, minds, space, and time. All of them are objects in themselves per the containment and dependence arguments, and all have evidence per my theory of epistemic seeming (chapter 4).

Could there be any logically possible minds that logically cannot be embodied? On the face of it, no. What would such a mind be like? Can an example be provided, or even intelligibly described? Of course, the number two or the color red logically cannot have or embody a mind. They are not that kind of thing. But it seems essential to minds that they logically can be in a body.

Could there be any logically possible bodies that logically cannot have or embody minds? On the face of it, no. What would such a body be like? Can an example be provided, or even intelligibly described? Again, the number two or the color red logically cannot have or embody a mind. But it seems essential to bodies that they logically can have or embody a mind.

What about Hertzian material points? Can they embody minds?FN3-25 Even that seems to be logically possible in E. A. Abbott (1992 / 1884)'s mathematical fantasy *Flatland*. Although there the point that is occupied by a solipsistic and rather deluded mind seems to be a spatial point, not a material point that can move about from spatial point to spatial point, it would seem to be, if anything, even more logically possible for a material point to embody a mind. But even if we reject this logical possibility, we would lose a very minor battle indeed, and still win the main war.

What about Aquinas' angels? They have no bodies or extension. Perhaps they logically could have dimensionless (though not infinitesimal) material points as bodies. But I do not see how infinitely many such angels could dance on the head of a pin. If they have no extension, there would be enough room. But how can anyone dance without having any spatial dimensions? Or can a dimensionless point-body dance about from place to place?

Even God *logically* could enter the body of Jesus, or even a material point. Why not? Is not God in all things? All incarnations of gods are *logically* possible. Even disembodied minds and purely mental acts *logically* can at least cause physical things to happen, the former as agents, and the latter as agent acts.FN3-26

What about bodies or minds that are eternal, either sub specie temporalis or sub specie aeternitatis? Must it be logically possible for such bodies to have minds, or for such minds to have bodies? This was already asked and answered in part by the logical possibility of divine incarnations. The short answer is that with the possible exception of the necessary being God, who nonetheless logically can be incarnated, all such bodies and minds are logically

contingent; and animated bodies and embodied minds are logically contingent too. And whatever is logically contingent is logically possible. Again, such possibilities are not categorially confused in the way that numbers' or colors' having minds or bodies is. And again, we distinguished being timeless from being necessary.

I conclude that metaphysical ecumenicism extends to space and time. For they are distinct only in reason *in a logically indirect sense*. For they are logically dependent on each other in the indirect sense that their logical possibilities are logically dependent on each other. And their logical possibilities are built into their essential nature. Thus we have mutual indirect logical containment as well as mutual indirect logical dependence. Again, even direct logical containment is not spatial, temporal, or physical containment.

This point is not the *same* as the point that qualified objects logically cannot exist if, per impossibile, minds in themselves are logically impossible. This point is about space and time *both in themselves*. Thus the two points are deeply different. They are alike only in being the logically indirect kind of logical dependence.

It is essential to the nature of space that temporal things logically can exist in it. And it is essential to the nature of time that spatial things logically can exist in it. And it is trivial that space would not be what it is if spatial things were not what they are, and time would not be what it is if temporal things were not what they are. But then, if it is essential to space that temporal things logically can exist in it, and essential to time that spatial things logically can exist in it, then space cannot be what it is if *temporal things* are not what they are, and time cannot be what it is unless *spatial things* are what they are. And it follows from all this that *space* logically cannot be what it is unless *time* is what it is, and vice versa. Thus space and time themselves also have *direct* mutual logical dependence. Thus they are *directly* distinct only in reason.

None of this should come as a surprise. We discover space and time precisely by abstracting them both as abstract entities from the same ordinary spatiotemporal objects. How then could they fail to fit hand in glove as abstract entities? They were already *given* as fitting hand in glove in ordinary spatiotemporal objects!. Recall that distinctions in reason are discovered, not created. It is mental distinctions that would be created, if there were any mental distinctions. But the very fact that we create them (if there are any) implies that it is false that they exist in the real order, and false that they are there to be discovered. Thus their objective truth-grounds are always false. Simply put, we (or our minds) just make mental distinctions up. And that is why there are no mental distinctions. Even those who admit them admit that by definition, they do not exist in reality! See my (2021 / 2020) for more.

Even ordinary mental objects have a spatial location in a

perfectly ordinary sense. I have never felt an emotion or pain, nor thought a single thought, that was not spatially located within the physical region of my body, and within the spatial boundary of my skin. And these are not just logical possibilities, but the everyday actuality. Likewise for my mind. As an object of introspection or thought (not: Humean impression or Russellian sense-datum), I have never observed it as being outside my body, except in dreams, fantasies, and so on, which are illusional or delusional.

One might offer a Carnapian objection to metaphysical ecumenicism. It may be called nominalistic; it can also be offered in favor of nominalism in the problem of universals. Namely, what Carnap calls the "material mode of speech" (object language, i.e., talk about things) and the "formal mode of speech" (metalanguage, i.e., talk about talk about things) are intertranslatable salva analycitate. Thus in the formal mode of speech, we can in effect say everything we can say in the material mode of speech, in science and philosophy alike, but without assuming the existence of any entities. This is a deep application of Ockham's razor to science and philosophy alike (Carnap 2002 / 1928). Metaphysical ecumenicism would be rejected in the sense of belonging only to the formal mode of speech. It would be talk about talk, not talk about things.FN4-1

My quick reply is that this is why Carnap is a radical relativist; and his radical relativity is self-defeating. For Carnap is purporting to tell us how modes of speech really are!

My full reply is that of Curt J. Ducasse:

> [I]f the process called by Carnap translation from the material into the formal mode of speech is really translation, [then] his conclusion that sentences in the material mode really are disguised syntactical sentences, and therefore that philosophy is really syntax, would not follow. What would follow would be that either they are disguised syntactical sentences, *or* the syntactical sentences into which they are translatable are disguised sentences of the material mode, i.e., are really sentences about objects....
>
> It would thus be perfectly arbitrary which one of such a pair of sentences we chose to describe as a "disguise" of the other, and which one therefore to describe as what the other "really" is; and therefore it would be arbitrary also whether we chose to say that philosophy is really syntax or that syntax, or at least a certain part of syntax, is really philosophy. (Ducasse 1941: 94–95)

This includes metaphysical ecumenicism, since it can be stated in both the material mode of speech and the formal mode of speech, and it is "perfectly arbitrary which" mode of speech we choose. And on the positive construction ontological interpretation of logical analysis, which the containment and dependence arguments for metaphysical ecumenicism imply, the material mode of speech wins. For we must admit the entities of all logically equivalent theories. And corresponding statements in the two modes of speech can scarcely fail to be logically equivalent. Thus corresponding statements in the formal and material modes of speech are formally distinct with a foundation in reality in the entities asserted to exist in the material mode. And just as the material mode wins over the formal mode, so metaphysical ecumenicism wins over Carnapian eliminative translation. But on metaphysical ecumenicism, the formal mode and Carnapian translation are admitted as having limited validity, just like the eliminative ontological interpretation of logical analysis, and just like nominalism in theory of universals.

I admit at least four kinds of infinitesimal points in my metaphysical ecumenicism: mathematical, material, spatial, and temporal. No doubt each of the three main geometries has its own kind of mathematical points. For points, lines, planes, and space are interdefinable, and each geometry has its own kind of lines, planes, and space. For example, points can be defined as intersections of lines. Of course, if points are definable, they are not simple. Or are they? We admitted logical analyses of points in terms of infinite classes or sets, but that did not reduce or eliminate them. Instead, it positively constructed them as emergent objects in themselves. They are objects different from the classes or sets that logically analyze them, though distinct only in reason from them. They are also different but distinct only in reason from each other, since the three main geometries are different but intertranslatable. Thus all the mathematical kinds of points are ontologically simple insofar as they are ontological emergents with no ontological constituents of their own. But that is precisely because they have (many) logically complex definitions. Material, spatial, and temporal points are all ontologically complex, since they respectively conjoin the concepts of matter, space, and time to the concept of a mathematical point. Likewise for space-time points in relativity theory, and for points of indeterminate, probabilistic location in quantum physics. If we admit these last two kinds of points, then we have a total of at least six kinds of points.

The Point in Abbott's *Flatland* was dimensionless and unable to cognize people who have at least one dimension. But if he were an infinitesimal point, would he be an infinitesimal sphere (round)? Would he have any shape? Can space be filled with such points, or would it have gaps? What about our six kinds of points?

Frege and Russell on Metaphysical Ecumenicism

Frege and the early *Principles* Russell (1964 / 1903) seem to be reductionists, not positive constructionists in my sense, about arithmetic. But many of their remarks apply just as well to the positive construction interpretation of logical analysis, and on the face of it, perhaps better. As a point of terminology, please note again that the 1914 Russell's "logical constructionism" is not what I call positive construction, but what I call eliminationism.

Frege says in *The Foundations of Arithmetic*:

> [I]f I place a pile of playing cards in [someone's] hands with the words: Find the Number of these, this does not tell him whether I wish to know the number of cards, or of complete packs of cards, or even say of honour cards at skat. To have given him the pile in his hands is not yet to have given him completely the object he is to investigate; I must add some further word—cards, or packs, or honours....
>
> The Number 1... or 100 or any other Number, cannot be said to belong to the pile of playing cards in its own right, but at most to belong to it in view of the way we have chosen to regard it; and even then not in such a way that we can simply assign the Number to it as a predicate. (Frege 1974 / 1884: 28–29)

Our concern here is not with Frege's view on numbers, but with his view on objects. Frege is arguing that numbers are not properties of objects. But in the course of doing so, he admits cards, packs, and honors, all as objects in their own right. They overlap, but they are all different objects. On the face of it, they are all what he calls "concrete objects," or objects that can stand in causal relations. And thus on the face of it, he would deem all of them equally real. We may say they are formally distinct with a foundation in reality in the portion of reality that he calls "the pile of playing cards." Thus this looks like positive construction, not reduction. Frege is not reducing any objects to other objects. He simply admits all the objects. And on the face of it, he admits all of them as equally real.

Frege says a little later in the book:

> The objectivity of the North Sea is not affected by the fact that it is a matter of our arbitrary choice which part of all the water on the earth's surface we mark off and elect to call the "North Sea."

(Frege 1974 / 1884: 34)

Such regions of water can overlap, and they are all the very same sort of object: regions of water. Thus this too looks like positive construction, not reduction. Frege is not *reducing* the North Sea to a part of the earth's water. He is saying it *is* part of the earth's water. It would be even more absurd to say he is reducing the North Sea to water. It *is* water! And for Frege, both the North Sea and the earth's water are concrete objects, and are therefore equally real.

Frege says strikingly and illuminatingly:

> The more the internal contrasts within a thing fade into insignificance by comparison with the contrasts between it and its environment, and the more the internal connexions among its elements overshadow its connexions with its environment, the more natural it becomes for us to regard it as a distinct object. For a thing to be "united" means that it has a property which causes us, when we think of it, to sever it from its environment and consider it on its own. (Frege 1974 / 1884: 42)

This text implies that there *is* no metaphysical difference among the many different objects that we can conceptually carve or slice out of a given portion of reality. If the portion of reality is a concrete object, then all of the objects we can conceptually carve or slice out of it are equally concrete. For the *only* difference is which property (Frege calls properties "concepts") we choose to "sever" an object "from its environment," i.e., from the rest of the portion of reality, "and consider it on its own." Note that when I say that all the objects logically contained in a portion of concrete reality are concrete objects and equally real, this means *Frege's* objects, and not his concepts, relations, functions, forces, or senses. I am not talking about *my* objects in the wide sense. Nor am I talking about abstracting abstract properties from concrete objects.

Thus Frege admits all sorts of logically overlapping objects which traditional philosophers would regard as distinct only in reason, and even as formally distinct (a deck and its cards, a foliage and its leaves). And he admits one-sided dependences which they would regard as modally distinct (the earth and its axis, a flower and its undetached petals, the North Sea and the earth's water) (Frege 1974 / 1884: 28–29, 32–35, see 42–43). Concrete (causal) objects such as the earth, and abstract (noncausal) objects such as its axis, are different, that is, not totally identical objects. These are modally distinct, since they are different objects, yet stand in a one-sided relation of logical (in the wide sense of *a priori*) dependence.

There logically cannot be an axis of the earth if there is no earth. But the earth logically need not be rotating, hence logically need not have an axis. On the face of it, all this is positive construction, not reduction. For nothing is being reduced to anything.

This raises a dilemma for the ontological interpretation of Fregean logical analysis that I believe no one has seen before. On the one hand, logical analyses of portions of concrete reality, or larger concrete objects, into smaller concrete objects are evidently not reductions, but positive constructions. For the kind of reality, concrete reality, remains the same. On the other hand, Frege insists that his logical analysis of numbers into logic plus classes or class-concepts is reduction. *Or is it?* And whether it is or not, ought not all of Frege's logical analyses be *the same in their ontological interpretation*? Ought not they be either all positive constructions, all reductions, or all eliminations, by parity of categorial reason?

The obvious way out is metaphysical ecumenicism. For it admits all three ontological interpretations of logical analysis as valid, though of progressively diminishing validity, since all the positively constructed entities are there, and elimination is logically further away from admitting them that than reduction is. But is Frege a metaphysical ecumenicist? Can he *positively construct* concrete objects out of logically smaller concrete objects, yet also *reduce* numbers to classes of classes (or class-concepts)? And what about defining the abstract axis of the earth in terms of the concrete earth and its rotation? Is that reductionist or not? Is not the rotation of the earth a concrete object, since it causes things to happen?

I think the best answer, and only plausible answer, is this. Frege is a metaphysical ecumenicist by implication, or at least in actual practice, or at the very least by a principle of charity in interpretation. For he is obviously logically constructing concrete objects out of equally real concrete objects, yet just as obviously reducing numbers to classes of classes or (in *Foundations*) class-concepts. But is there any textual support for this, *other than* what he evidently does in practice?

Frege's famous doctrine in "On Concept and Object" is that "a thought can be split up in many ways" (Frege 1970e / 1892: 49; 47–50 explains the doctrine). In addition, he upholds a context principle: "never to ask for the meaning of a word in isolation, but only in the context of a proposition" (Frege 1974 / 1884: x). I use a very unoriginal analogy of pies and slices of pies to explain both. (This is an illuminative analogy, not an analogical argument.) Where pies are statements or thoughts, and where names, the senses they express, or the referents they refer to, are slices of pie, Frege's doctrine says that pies can always be split up into slices, and his context principle says in effect that *slices*, i.e. names that express a sense, or the referents they refer to, logically can exist

only as logically possible slices *of pies*. (Recall Wittgenstein's view that logical possibilities are essentially written into the thing itself.) If a slice is *removed* from a pie tin, then it is or refers to an *object*. But if the same slice *remains* in a tin from which at least one *other* slice has been removed, then it is or refers to a *function*; and the now-empty parts of the tin from which the removed slices were removed are its *argument-places*, which can be marked either by the same variable or by different variables as needed.

The context principle applies to any pie slices considered *either* as removed from *or* as remaining in pies. But nothing *is* a pie slice unless it both logically *can* fit in as part of a pie and also *can* be removed. Thus any term, freshly cut out of a pie, could hardly be a slice of pie at all unless it *already* had a sense and reference (or in Frege's earlier theory, content) of its own *as part of some already given* whole pie, and indeed of any logically possible pie in which it logically can occur. And that is how the context principle justifies realism for abstract objects. Abstract objects cannot be nothing, since they must be logically removable slices in infinitely many pies. Michael Dummett deserves the credit for this point.

And that is also why, at least implicitly, all of Frege's definitions contextually fix sense and reference (or in his earlier theory, content) rather than eliminate them as logical fictions. Thoughts, and also the referents the component senses of thoughts are senses "of"—I follow Furth's usage of "of" (Furth 1967: xix)—can be regarded in different ways, just as a pie can be variously sliced into different pieces. All the sliced sense- and referent-components for all terms, *contextually defined or not*, and even *defined or not*, are justified as entities *only as slices* of the complete statements they occur in—just as in my pie metaphor, all slices of pie are justified as being pie slices if and only if, and *because* they logically can either be cut out of or remain in a pie.

I submit that on the face of it, Frege's doctrine and his context principle are on such a deep and general level that they are best interpreted as metaphysical ecumenicist. For Frege's doctrine is that *any* thought can be split up in many ways, *regardless* of whether it is about concrete objects, about abstract objects, or about a mix of both, such as the earth and its axis. And his context principle applies to *any* statement, *regardless* of what the statement is about. Thus both Frege's doctrine and his context principle apply *regardless* of whether any given logical analysis is ontologically interpreted as positive construction, reduction, or elimination. And his doctrine and his context principle are precisely at the deep and general level where the containment and dependence arguments apply, and all three ontological interpretations have some validity.

I explain elsewhere how Frege's definition of number is not a merely explicit definition as Michael Dummett thinks (a

thought which leads Dummett wrongly to conclude that Frege has abandoned his context principle), but fully honors Frege's context principle. On Frege's definition of number, see my (2003 / 1996: 89–91, 105–107; 1982: 3–5; my full discussion is 1979: 59–85). On Frege's context principle, see my (2003 / 1996: 86–101; 1982: 1–5; 1979: 80–85). On splitting up and related metaphors in Frege, see Frege (1974 / 1884: 34, 43, 73–74, 100–1). On the analysis of thoughts, see Frege (1970e / 1892: 47–50; compare 1967 /1893: 92–94).

This is important not only to the analysis of arithmetic and the problem of universals, but also to all logical analyses across the board. For one and the same slice can either be removed from a pie tin or remain in the tin. If it is removed, it is an object. If it is left in the tin after at least one other slice is removed, it is a function (concept, relation, or other function). Even in Frege's first major work, *Begriffsschrift*, one can shift about the logical subject(s) and predicate of a single judgeable content as one pleases (Frege 1967 / 1879: 12; 1970a / 1879: 2–3). In Frege's "On Concept and Object," "the concept *horse*" refers to an object, requiring the inversion of logical subject and logical predicate (Frege 1970e / 1892: 46).

Again, Frege's use of the term "concept" is odd. His concepts are objective, mind-independent, and timeless properties. They are categorially universals because some level 1 concepts are such that more than one object logically can fall under them, that is, have them. For example, there can be more than one horse. They are categorially ante rem because no object logically need be green, and no object is or even logically can be a round square. And as for concepts of all levels, so too for relations and functions generally.

In *The Basic Laws of Arithmetic*, Frege formalizes the invertibility of logical subject and logical predicate by means of the representation function. Here a function and its course-of-values represent each other (Frege 1967a / 1893: 92–94). Any assertion about either is a representative assertion about the other. Assertions that represent each other merely carve up the same thought in different ways. And since the assertion that the courses-of-values of concepts F and G are the same, "$\grave{\varepsilon}F(\varepsilon) = \grave{\varepsilon}G(\varepsilon)$," representatively asserts that F and G themselves are identical, then there must be a relation F and G themselves do stand in, "corresponding to identity between objects" (Frege 1970c / 1894: 80). This relation is equivalence, or for Frege, "$(x)[Fx = Gx]$," where "F" and "G" mark the argument-places. Equivalence obtains between concepts if and only if identity obtains between their courses-of-values (Frege 1967a / 1893: 43–44). All courses-of-values are abstract objects.

All the logically possible conceptual slicings of a given propositional pie are modally distinct in Descartes' second sense. They are modally distinct with a foundation in reality in the pie.

My pie-slicing analogy illuminates equally well how in my own metaphysics, a statement, the qualified fact it expresses, and the fact in itself it may truly assert can be respectively split up into logical subject- and predicate-terms, qualified objects, and objects in themselves in different ways. Of course, Frege does not admit a metaphysical category of facts that statements assert to be the case. The earlier Frege admits propositional contents that statements have, and that can be split up into contents of terms. And the later Frege splits up propositional content itself into sense and reference. He calls the sense a statement expresses a "thought" (proposition). He says the statement is a logically proper name whose referent is a truth-value, either the True or the False. For Frege, truth-values are timeless abstract objects. For Frege, thoughts and all other senses are timeless abstract entities as well; but his senses are not among his objects. Or so I have argued elsewhere (my 2007: 81–97; 2003 / 1996: 65–73). Dummett (2007: 122–123) finally came to agree with me on this, after many years of thinking otherwise. My final rejoinder to Dummett on senses and objects is my (2010: 118–119).

Russell admits a context principle too. In fact, Quine says, "Russell gave contextual definition its fullest exploitation in technical logic" (Quine 1981: 70). Russell ascribes "meaning in use" to all words except logically proper names in *Principia*. Russell might seem to reject the context principle in *Principles*: "[E]very word occurring in a sentence must have some [*independent*] meaning..." (Russell 1964 / 1903: x, 42). But even in *Principles*, every term is a logical subject, i.e., a propositional part (Russell 1964 / 1903: 44); and a proposition is prior in unity to its parts (Russell 1964 / 1903: 139). Thus propositions are "more fundamental than... classes [or propositional functions]" (Russell 1964 / 1903: 13, 31). Thus Charles H. Kahn (see my 2003 / 1996: 138–139, 210–224; 226–231)'s order of logical priority for uses of "is" (first copulative, then veridical, then existential) mirrors the 1903 Russell's: "The notion of denoting may be obtained by a kind of logical genesis from subject-predicate propositions, upon which it seems... dependent" (Russell 1964 / 1903: 54). And for defining numbers, Russell needs to be able to tell when "two classes have the same number" (Russell 1964 / 1903: 113). Thus propositions about number identity are prior to numbers. Russell (1964 / 1903: 12) says his contextualism is due to Hugh MacColl. But Frege's was earlier and very clear. Russell's Frege scholarship was not the best! Quine (1981: 68–70) finds contextual *definitions* in Jeremy Bentham, and adds that mathematics "directly inspired Russell's."

Russell's contextualism in *Principles* refutes Dummett's fears that contextualism may kill realism. For *Principles* embraces extreme Platonic and even neo-Meinongian realism. Would Hans Sluga, who sees Frege's *Foundations* and Wittgenstein's *Tractatus*

as Kantian objective idealism due to their contextualist views (Sluga 1980), care to interpret Russell's *Principles* as Kantian objective idealism? Sluga's reading of Frege's *Foundations* is based on highly selective, merely suggestive casual texts, and is very wrong. For Frege very plainly says, "Astronomy is concerned, not with ideas of the planets, but with the planets themselves" (Frege 1974 / 1884: 37). Sluga's reading founders on that rock, not to say planet, of Frege interpretation (Sluga 1980: 54–55, 94-95, 120, 123–24, 133–34, 182). There is all the difference between Sluga's merely suggestive casual circumstantial evidence and the "smoking gun" text I just quoted. There is also the deep and careful case Dummett built for Frege's realism over many years, starting in the 1950s, which Sluga casually dismisses.

In *Principia*, propositions are incomplete symbols; but the mere judgment that a proposition is true completes it (Whitehead 1950 / 1910: 44). Propositional functions are derived in the same manner that Frege derives his functions: by slicing up sentences as if they were pies. Logically proper names have "independent meanings," but this only means that they denote individuals. They must still be capable of use in sentences if they are to be admitted as names at all, both to denote and to represent the determination of variables (Whitehead 1950 / 1910: 4–5).

In Russell's 1918 "The Philosophy of Logical Atomism," not only are propositional functions incomplete, and nothing apart from sentences, but even 'self-subsistent' particulars are defined as "terms of relations in atomic facts" (Russell 1971e / 1918: 199), where "fact" is explained in turn as "the kind of thing that makes a proposition true or false" (Russell 1971e / 1918: 182; see 183).

Just like Frege on piles of cards, Russell says in *Principles*:

> Numbers cannot be asserted of objects, because the same set of objects may have different numbers assigned to them (Gl. p. 29); for example, one army is so many regiments and such another number of soldiers. This view seems to me to involve too physical a view of objects: I do not consider the army to be the same object as the regiments. (Russell 1964 / 1903: 519)

Just like Frege's card deck, suits, and cards, Russell's armies, regiments, and soldiers are overlapping objects. We may say they are formally distinct with a foundation in reality in the soldiers, or at least in the military portion of the real order. We may distinguish again two senses of "foundation in reality," an objectual sense and a portion of reality sense. But a portion is itself an object in my wide sense, and the two foundations are distinct only in reason.

Frege deems logical analysis of *arithmetic* reductive, while Russell deems it eliminative. But on the face of it, Frege and Russell deem their own examples of the card deck and the army to be neither reductionist (Frege) nor eliminationist (Russell), but to consist of *the same kind* of objects that are different but—how else can I put it?—distinct only in reason. Just look at the smoking gun text I just quoted about Russell's army! And there are several smoking guns in Frege: the card deck of many suits and cards, the copse of many trees, the flower with many (undetached) petals. In none of these is there even a hint of reduction, not to say of elimination. For all the objects are concrete in Frege's causal sense.

Can a card deck not be logically analyzed in terms of its suits or cards? Can an army not be logically analyzed in terms of its regiments or soldiers? But then what about numbers and classes of classes, or ordinary bodies and temporal series of classes of sensed and unsensed sensibilia? Should they not be logically analyzed using the same ontological interpretation of logical analysis as card decks and armies? Why should card decks and armies be positively constructed as real objects (Frege and 1903 Russell), yet numbers be reduced to classes of classes (Frege), or bodies be eliminated as logical fictions (1914–1918 Russell)? My answer is that based on the containment and dependence arguments, positive construction wins, but reduction and elimination retain limited validity. For the relations of containment and dependence make all these objects equally not nothing, equally mind-independent in the ordinary direct sense, and equally mind-independent in our indirect sense that numbers, card decks and armies logically cannot exist if, per impossibile, classes, cards, and soldiers are logically impossible. Surely none of these objects can be nothing, and none can fail to be both mind-independently real and totally real.

It goes without saying that the substance tradition is full of distinctions in reason. See my (2003: 28–31).

William George de Burgh says, "That is what Aristotle had asserted of being in the... Categories (substance, quality, relation, and the rest); they were not ten species of a common genus, 'being', nor were they wholly different from one another in their 'being'; there was identity amid the difference and differences amid the identity" (Burgh 1967 / 1923: 462). In other words, Aristotle's categories are distinct only in reason. For Aristotle, they are formally distinct with a foundation in reality in substances.

Plato's forms are timeless and independent of the fleeting world of particulars. But particulars are not independent of forms. Forms are their essence, and the ground of whatever intelligibility they have. This one-sided logical dependence makes particulars modally distinct from forms. Plato's particulars and forms are also formally distinct with a foundation in reality in the world of forms.

For more on ontological complexity and logical analysis, see Umphrey (2002). For the last word in subtlety in describing kinds and nuances of realism and irrealism, see Butchvarov (2015).

Logically Simple Entities

Logically simple entities are entities that logically cannot be defined or logically analyzed in terms of simpler (logical constituent) entities. As a general rule, to be logically simple is to be ontologically simple, or without ontological composition. This makes sense on the containment and dependence arguments, since they imply the positive construction ontological interpretation of logical analysis. Logical analysis and ontological analysis part ways in logically complex *impossibilia* and mere *possibilia*, since they are not there to have any ontological composition. We replace them with qualified objects. Classes, acts, and 'facts *that*' can have *less* real logical constituents, but not constituents that are nothing.

It has been widely held for centuries that whatever is (logically) simple is real and therefore that only what is logically complex can be unreal (e.g. Descartes 1969 / 1642: 146). Could there be any logically simple *impossibilia* or mere *possibilia*? Color is a determinable with indefinitely many possible determinates. But colors that 'do not exist' can only be particular properties or universals in re. For they, can, do, and must exist as universals ante rem. How about 'the merely possible thing'? It is a complex object, since 'mere' is different from 'possible'. For actual objects are possible too. How about 'the impossible thing'? We can take any of the four logical modalities as logically simple, including impossibility, and define the other three in terms of it. But by the same token, "impossible" can be defined as the logically complex 'not possible'. It might be held that on the containment argument, simple 'impossible' is different from but distinct only in reason from complex 'not possible'. But the better view is that the four modalities are mutually definable, and in that sense they are *all* logically complex. Likewise, 'and' and 'or' are mutually definable using 'not', and in that sense *both* are complex. For taking an object as simple in one definition is not the same as its actually being simple. For in another definition, we can define the same object as complex. And even if 'impossible' *is* logically simple, it *is* real qua ante rem universal. Likewise for colors that do not exist, and for mere possibility if, per impossibile, the logically complex term "mere possibility" were logically simple.

To be sure, inferring there are no counterexamples to the "whatever is simple is real" thesis from our not finding any commits the fallacy of appeal to ignorance (ad ignorantiam). But

since the thesis is intuitively very plausible, the burden of proof lies on those who wish to disprove it. Granted, Descartes himself subjects the thesis to his radical doubt. But he would seem to rescue it in the end as a clear and distinct perception. For that matter, Descartes subjects even one plus one equals two to radical doubt! So it is not much of a reason for rejection. For my part, I reject radical doubt itself; see chapter 4. And there I must leave the topic of counterexamples to this thesis. May others discuss it more.

We may admit at least five main senses of "simple" as a theme with variations, meaning as a primary definition with secondary definitions. The first sense is the primary definition that to be logically simple is to be *not* definable or analyzable as having any constituent objects. We may waive the objection that this is a negative definition of a thing that is positive—perhaps to be simple *is* something negative! Second, per chapter 2, real things with only conceptual parts are ontologically simple in the sense of *real* indivisibility, i.e. of having no *real* parts. This variant has as many sub-variants as there are senses of "real." For example, if to be real is to be logically independent of other things, a real thing is simple if it has no constituents that logically can exist independently of it. Here we might make an exception for any ante rem universals or Platonic forms the thing or its necessary constituents instantiate or exemplify. Third, a phenomenologically simple object is an object that has no constituents that are or need be presented in perception or thought when the object is presented. Here the two sub-variants concern direct and indirect presentation. Recall that qualified objects essentially are as they are directly presented to be. Thus a qualified object that is directly presented as having no constituents essentially has no constituents. Butchvarov once gave the example of a phenomenologically simple dimensionless point that appears as the intersection of the edges of two pieces of paper that appear as straight lines from a short distance. That sounds both correct and absurd. I resolve the tension by noting that his example is correct for the directly presented qualified point, but debatable for an indirectly presented point in itself. He could essentially say the same thing using his theory of objects (correct) and entities (debatable). Fourth, an object is epistemically simple if it does not epistemically seem to have constituents. Note that if an object is not *known* to have constituents, it logically can still have constituents. Thinking otherwise commits the fallacy of appeal to ignorance (ad ignorantiam). Fifth, a determinate is simple if it contains no constituent *other than* its determinable. For example, we ordinarily count red as a simple object even though it contains color as a distinguishable constituent, since so to speak, there is no *other* constituent in red *besides* color, i.e., other than red itself. Since simple is itself a determinable, this is surely not a complete

list of kinds of simples. May the reader think of more.

I discuss elsewhere whether logical analysis logically can be endless, or logically must end in simple entities (my 2023 / 2015: 257–267). There my conclusion is that it depends on the individual regress. By definition, benign regresses are endless, while vicious regresses must end. I discuss how to tell which is which. I conclude that while this may be a matter of logical intuition on which philosophers can reasonably differ, analogies to paradigm cases of benign regresses and of vicious regresses can help. Paradigms include well-defined regresses such as of numbers.

The main point for us is that metaphysical ecumenicism has endless levels if logical analysis is endless. If so, then there are no simple objects, meaning no objects without a logical analysis.

The traditional concept of objective reality is complex (objective, reality), but still seems indefinable (really simple). Can an objective reality be logically analyzed as a class of via *moderna* ideas? There are infinitely many ways it logically can be presented. Thus any such class would have infinitely many members. Even if Apollo could count them all and state a *specific* infinite analysis in less than one minute per Zeno, and even if we can state the *general* thesis, "An objective reality is a class of infinitely many via moderna ideas," a very short, simple complete statement that has a determinate truth-value, the blood of objective reality still cannot be squeezed out of the turnip of via moderna ideas. For objective reality is just not there in them. Talk of fallacies of composition! And as we saw earlier, reduction and elimination are of limited validity. Hume might object that he has no impression, hence no idea, of an objective reality. My reply is that the rest of us do have via antiqua ideas—lots of them! For *all* ideas of ordinary objects are via antiqua, since they all have objective realities.

Would God be simple for Hume? If Hume is right that we have no idea of a mind or self, then we have no idea of a God who is a mind or self either. If Hume eliminatively analyzes minds or selves as bundles of impressions and ideas, then that would be his analysis of God too. And if God is the Supreme Bundle of all impressions and ideas, then God is identical with the Universe, or supreme bundle of everything there is. God would be the biggest, most complex fictitious bundle of them all. And since bundles are logically posterior to the neutral monist impressions and ideas that logically compose them, God would be logically posterior to all the impressions and ideas that compose him. On the bright side, the Bundle-God cannot cause miracles any more than anything can cause anything for Hume. For there is no such thing as cause for Hume. No impression of cause, no idea of cause. Thus Hume's arguments against miracles are superfluous on his own showing. Even a real God cannot cause miracles, if there is no thing as cause.

4

Epistemology

I explained the basic ideas of my epistemology in the Introduction, but the present chapter fully discusses them. I define evidence in terms of qualified objects, and then define knowledge in terms of evidence. My main thesis is that to be phenomenologically basic evidence, that is, to be a foundational epistemic datum, is to be a *seeming*, where a seeming is a direct presentation of a qualified object that is directly presented *as* rationally or at least objectively seeming to be the case, that is, as rationally or at least objectively seeming to "be" the lower-level object which it would "be" if it "were" one. But the degree of seeming need not rise to the level of *belief* that it "is" one, and can even be minimal. If there is a lower-level object, it is a level 0 object in itself if the qualified object that seems to be the case is a level 1 qualified object; otherwise the lower-level object is simply the next lower-level qualified object. I call this theory of epistemic seeming the *theory of seeming*. My theory of merely cognitive seeming is the theory of qualified objects discussed in chapter 1.

All epistemic seemings are direct cognitive presentations, but not all direct cognitive presentations are epistemic seemings. For some direct presentations are *merely* cognitive, as in daydreams. They are like what Frege calls mere supposition, as when we suppose a thought without concern for whether it is true or false, or even for the purpose of showing it to be false in an indirect proof. For in a reductio ad absurdum, we are trying to prove that some qualified object "is" *not* an object in itself. Indeed, since objects in the wide sense include facts, merely supposed facts *are* merely cognitive objects. Recall that an object in the wide sense is anything that is not nothing.

An epistemic seeming is distinct only in reason from a direct cognitive presentation. More specifically, it is a modal (one-sided) distinction. For direct cognitive presentations of qualified objects are the genus, seemings are a species, and the epistemic given is the difference (differentia). This genus-species relationship grounds the modal distinction. The modal distinction logically links phenomenology and epistemology by showing them to be only modally distinct. And the distinction is merely an abstraction, or conceptual bracketing. For if we disregard its epistemic aspect, what remains of an epistemic presentation is a merely cognitive direct phenomenological presentation.

Again, a seeming does not actually have to"be" the next lower-level object it seems to "be," but it must rationally or at least objectively *seem* to "be" it. By "objectively" I mean directly presented as mind-independent in the ordinary sense. I do not mean directly presented as independent even of the logical possibility of minds, since that would apply only if the next lower-level object were an object in itself; and therefore that is not part of the general concept of a seeming. By "rationally" I mean *positively* in the light of reason, and not just *intelligibly* seeming to be the case. For mere suppositions and mere cognitions, as such, can be intelligible too. (Even 'the unintelligible object' is intelligible as 'the not intelligible object'.) These two tests are distinct only in reason. For by "reason" I mean objective reason. What genuinely intellectual reason is not objective? But conversely, we often cannot state a reason *why* something is objective, other than *that* it seems to be objective. Thus this distinction may seem to be modal (one-sided). It may even seem that objectivity is a determinable and reason a determinate, like color and red. But objectivity and rationality mutually overlap in that whatever is rational is objective, and conversely in that it is rational to favor whatever objectively most seems to be the case. Thus they are mutually distinct only in reason. This is an equation of the rational with the real. It also makes phenomenology and epistemology distinct only in reason.

I find the concepts of objectivity and of rationality to be logically simpler than, and therefore logically prior to, the concept of evidence. For even if the concepts of objectivity and rationality each stood in a relation of mutual implication with the concept of evidence, they would still be prior to it in the sense of being more illuminating. It is the concepts of objectivity and rationality that illuminate the concept of evidence, not the other way around. The three concepts are different, but distinct only in reason. For even if they all implied each other, they would be *intensionally* different.

Besides objectivity and rationality, a third constituent of the concept of seeming is the cognitive presentation. No cognitive presentation, no epistemic presentation. A fourth constituent is the relationship between the first three constituents. This relationship is described by the principle of seeming in the first section below.

All presentations are either direct or indirect. On pain of vicious infinite regress of presentations of presentations, indirect presentations of lower-level objects are always ultimately via direct presentations of higher-level qualified objects. Thus any presentation of any object always is or includes a direct presentation of a qualified object. Thus we may define an *indirect* seeming as an indirect epistemic presentation of a lower-level qualified object that epistemically seems to "be" a still lower-level object. For example, it epistemically seems to me that last night, it epistemically seemed

to me that my cat was on the mat. And that is an indirect seeming of a fact. Recall again that objects in the wide sense include facts.

Presentations are themselves objects in the wide sense. For they are not nothing. And there are qualified presentations as well as presentations in themselves. For presentations, too, can be informatively identified and informatively said to exist. But to keep my exposition simple, I shall simply speak of presentations. Strictly speaking, only *qualified* seemings (qualified epistemic seemings and qualified merely cognitive seemings) belong to the qualified world. But this simplification is all right. For a qualified direct presentation of any object cannot fail to "be" a direct presentation in itself of that object. For all directly presented qualified objects essentially are as they appear to be. That was essential feature (3) of objects of perception or thought in chapter 1. And this includes directly presented qualified presentations. Recall Descartes' point that we cannot be mistaken about what seems to us to be the case. Thus if it epistemically *seems* to us that something is presented (a qualified direct presentation), then it *is* epistemically presented (a direct presentation in itself). Thus in the qualified world, if it *seems* to us that something is epistemically is presented, it *is* epistemically presented. This is not always true of indirect epistemic seemings about the world in itself. A gun may seem to us to be evidence in itself of a murder, but it logically need not be. More deeply and generally in the qualified world, if it directly *cognitively* seems to us that something is cognitively presented, then it *is* cognitively presented; but any indirect cognition of any *lower*-level object logically can be illusory or delusory.

As with all presentations, there are both qualified seemings and seemings in themselves. For there can be factually informative existence and identity judgments about all objects, including seemings. A seeming in itself is a direct presentation in itself of a qualified object that seems to "be" a lower-level object. Here too, I shall keep the exposition simple by simply speaking of seemings. For a directly presented qualified seeming cannot fail to "be" a seeming in itself. That is just Descartes' point again.

The ultimate justification for any kind of evidence can only be direct presentations of qualified objects that rationally or at least objectively seem to be the case. That is, things are rightly called evidence if and only if they rationally or at least objectively seem to be the case. If something does not even *seem* to us to be the case, how can we have any evidence that it *is* the case? Here I omit outweighed evidence, or better, defeased evidence.

More precisely, there are two levels here. First and more basic, a qualified object is evidence for a lower-level object if and only if it seems to "be" that object. This level resolves the problem of how we can have evidence that there is an external world, or that

there is any object in itself at all. Second and less basic, we often speak of a bloody dagger as evidence of a murder. That is, we often speak of one object in itself as evidence in itself for another object in itself. On my analysis, there is a presented qualified bloody dagger that *primarily* seems to "be" a bloody dagger in itself, and *secondarily* seems to "be" evidence in itself for a murder in itself.

For Russell, there is "no backward road from denotations to [connotative] meanings," nor from objects to descriptions of objects (Russell 1971b / 1905: 50). For any denotation can be intensionally described in indefinitely many ways. Likewise, for me there is no backward road from objects in themselves to qualified objects. For any object in itself can be presented via indefinitely many different qualified objects. See pages 82–83. But then there is no backward road from evidence in itself to seemings either. For all seemings are directly presented qualified objects that rationally or at least objectively seem to be the case. And any evidence in itself logically can be presented via indefinitely many different seemings. For example, a dagger in itself can be presented via indefinitely many objects of perception or thought that seem to "be" it, such as from this angle or last night.

The concept of a seeming is logically prior to the concept of epistemic data as public or private. For as we saw in chapter 1, the concept of a qualified object is prior to the question of publicity versus privacy. For neither publicity nor privacy are part of the definition of a qualified object. And singling out is prior to any concept formation. Thus seemings are logically prior to the dispute whether epistemic data are essentially or at least primarily private ("first person" or Cartesian epistemology) or essentially or at least primarily social ("third person," "scientific," or holistic epistemology). Seemings are foundationalist in that they are directly given. But both private and social evidence can seem to be the case.

Seemings are the datanic foundation of my foundationalist epistemology. But I also argue that foundationalist epistemology is distinct only in reason from holistic epistemology. This is only a shallow, "in-house" ecumenicism within epistemology, as opposed to grounding evidence outside epistemology in phenomenology and objective reason. Again, both private and social evidence can seem to be the case. But any foundationalist can support holistic evidence based on foundationalist evidence for holistic evidence. Epistemic holism itself can foundationally seem to be the case!

Any holism presupposes and is relative to some complex unity. From simple objects (if any) to the universe as a whole, there are indefinitely many degrees and even kinds of complex wholes, all of which are single objects. And all of them logically can be presented as single, hence foundational, epistemic seemings. Even epistemic holism itself can be and is presented as a single seeming.

All evidence is ultimately grounded in epistemic seemings. Epistemic seemings are formally distinct from qualified objects, reason, and objectivity, with a foundation in reality in those three ontological constituents. Hence seemings have the same two sorts of reality that all qualified objects do. They are not nothing, and they are logically independent of the existence of minds. But also like all qualified objects, seemings lack the third sort of reality. They are not logically independent of the logical possibility of minds. And intuitively that is correct. How can there be a direct presentation, seeming or not, that is not presented *to* a mind, much less not presentable to any logically possible mind?

The basic insight of the theory of seeming is due to Roderick M. Chisholm, who cites Carneades in turn (Chisholm (1966: 44–55). I more or less simply restate their theory (or their respective theories) in terms of qualified objects theory. There are any number of candidates for what we are directly given that can serve much the same ontological functions as our own qualified objects in explaining informative existence and identity judgments, and whose presentations could *also* serve as the ground of what epistemically seems to us to be the case. Frege's senses, Russell's descriptions, Butchvarov's objects, and Castañeda's guises are good examples. In fact, on metaphysical ecumenicism, my theory is distinct only in reason from theirs. But qualified objects are the most natural and phenomenologically correct parsing of ordinary, pre-philosophical directly presented objects. See chapter 1.

There must be direct presentations in themselves, on pain of vicious infinite regress of presentations of presentations. And on the face of it, direct presentations are always here, now, and 'first person'. They will always be a cognitive 'this'. And they are the sine qua non of evidence, since seemings are direct presentations. No direct presentations, no seemings, and no indirect presentations or indirect seemings. And no first-person presentations, no third-person presentations. For if I am not presented to myself, then no one can be presented to me as a person *other than myself*. And if I am not there, I will not have any presentations at all. Kant's "I think" prefixes first-person and third-person presentations alike.

Thus epistemology is foundationalist. That is, first-person or 'Cartesian' evidence is prior, and third-person or 'holistic / scientific' evidence is posterior. Even scientists must admit some sort of particular observations by particular observers, even if they are only particular introspective reports by particular people. Group behavior can have emergent, 'holistic' properties. But for all that, if there are no individual people, then there are no groups either. And a seeming, as such, is at least minimally self-evident.

This implies a modal (one-sided) distinction between these two "rival" epistemologies. There can be first-person evidence

without third-person evidence. For there logically can be evidence in logically possible worlds in which there is only one mind. But there logically can be no third-person evidence without first-person evidence. For there cannot even be a third person who is not a first person. For not only must I be a first person to me in order for you to be a third person to me, but you must be a first person to yourself in order to be a third person to me. This resolution of the supposed rivalry between foundationalist and holist epistemology is a major part of epistemological ecumenicism. I shall return to it later.

A presentation is always to a mind; it cannot be to no one. And it must be conscious, i.e., cognitive. A seeming is not only always to a mind, but is also relative to the mind's larger epistemic situation. The same qualified object can be directly presented to two minds, and to one mind be a seeming, but to the other mind not. Much like a gun in itself, two people can directly see the same qualified gun; and a detective may directly see it *as* epistemically seeming to "be" evidence in itself of a murder, but a layperson not. This relativity does not defease the seeming's self-evidence. It is just that the detective has the seeming and the layperson does not.

The Principle of Epistemic Seeming

Simplifying Chisholm's fine work, which is based on that of Carneades, I admit what I call the principle of (epistemic) seeming. The principle is that if it *rationally or at least objectively seems* to cognitive subject *S* that proposition *P* is true, then regardless of whether *S* believes *P*, *S* has at least some minimal *objective reason* to believe that *P*. An even simpler statement of the principle would be: If it seems to *S* that *P*, then it is reasonable to *S* that *P*. See Chisholm (1966: 44–55). Compare D. Paul Snyder (1971: 204–5; see 208 for Snyder's list of epistemic theorems). And of course evidence is just reason to believe. Or better, the concepts imply each other and are therefore distinct only in reason. And since reason to believe has two constituents, reason and belief, and evidence as such has only one, evidence, it is more illuminating to define or understand evidence in terms of reason to believe than the other way around. Of course, objectivity is a synthetic *a priori* logical constituent of both reason and evidence, like color in red.

The principle has a phenomenological antecedent, a direct cognition of rationally or at least objectively *seeming* to be the case, and an epistemic consequent, *having* reason to believe. And the concepts of seeming and of having reason to believe are very different. The former is one of a direct cognitive presentation of epistemic *seeming*, and the latter is one of epistemic *judgment* that we *have* some minimal objective reason to believe. Therefore the

principle of seeming is synthetic *a priori*. For a seeming cannot be intensionally analyzed as containing reason to believe as a formal logical constituent, even though the extensional truth-grounds of the antecedent must logically contain the extensional truth-grounds of the consequent if the inference is to be logically valid. This is much like the inference from being red to having a color. The truth-grounds of being red logically contain the truth-grounds of having a color. But red cannot be logically analyzed as consisting of color plus another logical constituent different from red itself. And a seeming has multiple logical constituents as follows.

A seeming can be logically analyzed as having a series of modally distinct constituents: a qualified object, its direct cognitive presentation, and its direct epistemic presentation. No qualified object, no direct cognitive presentation of it. No direct cognitive presentation, no direct epistemic presentation. A direct epistemic presentation can be analyzed in turn as a qualified object's / being directly presented as / providing / at least / minimal / objective / reason to / favor / something / lower-level as / being the case.

Also, the principle of seeming's antecedent is about a qualified object, and its consequent is about an object on the next lower level. That is another reason why the inference is synthetic *a priori*. Even a transparent 'ontological argument', that the qualified object must "be" the next lower level object, must be informal. For they are objects of different formal, categorial levels. We cannot squeeze the blood of either level out of the turnips on the other.

We cannot be epistemically mistaken about the direct epistemic presentation itself. For as Descartes says, we cannot be mistaken about what seems to us to be the case. For us, this is essential feature (3) of objects of perception or thought: objects of perception or thought essentially are as they directly appear to be.

My principle of seeming basically equates not only to Chisholm's principle (my qualified objects are post-Chisholm), but also to John Maynard Keynes' principle that if we *directly intuit* a degree of logical relevance in presented body of evidence *e* to hypothesis *h*, then *h* really *is* to that same extent probable given *e*. Logical relevance is in effect Keynes' version of epistemic seeming, and probability is in effect his version of having reason to believe. Thus I consider Keynes' principle of probability to be synthetic *a priori*, just like Chisholm's principle of evidence and my principle of seeming. For Keynes' principle of probability follows from his theoretical definition that probability *is* degree of logical relevance, which is on its face a synthetic *a priori* thesis of logical equivalence being stated as a theoretical definition. It is the synthetic *a priori* basis of his synthetic *a priori* theoretical definition of probability. A theoretical definition is a definition that states what the thing is (Copi 1978: 140–141). And if it is to be

both informative and logically necessary in the wide sense, then it must be synthetic *a priori*. Analytic truths cannot do this job.FN4-2

In place of Keynes' Platonic intellectual intuition of the logical relation that based on body of evidence *e*, hypothesis *h* has a certain degree (usually indeterminate) of probability, I am using the direct phenomenological presentation of the relation that if, based on *e*, it objectively seems to subject *S* that *h* is true (with the same degree of probability that Keynes would find), then S has reason to believe that *h* is true (to the same degree of probability). Since one-one corresponding statements of the two relations are logically equivalent, the two relations are distinct only in reason.

If *h* seems to be true on its face, then *h* self-evidently seems to be the case. For example, if we simply seem to see an apple, then the directly presented qualified apple simply seems to "be" the apple in itself. And that can apply to my principle *itself*, as well as to Keynes'. That is, if my principle simply seems to be true on its face, that is, intrinsically plausible, or self-evident, then the seemingly true qualified principle simply seems to "be" the true (in itself) principle in itself, per essential feature (3). Thus my principle can be used to justify itself, and also to justify Keynes' principle. We can even use Keynes' principle to justify itself and my principle, with the seeming as body of evidence *e*. And no doubt Keynes found his principle self-evident. From a logical point of view, it does not matter which way we go, since the two principles are each self-evident and are distinct only in reason. But my principle seems to be phenomenologically and epistemically primary, and to illuminate Keynes' Platonic intellectual intuition more than the other way around.

Some may find the phenomenological concept of a directly given epistemic seeming to be at least as problematic as the concept of a Platonic intellectual intuition of a timeless logical relation. But I do not, thanks to my theory of qualified objects as developed at length in chapter 1. And some have found Keynes' Platonic intuition very obscure indeed. But I must admit both principles into epistemological ecumenicism, since they are logically equivalent and thus distinct only in reason.

Like Keynes, I can explain probability as degree of logical relevance. But I explain degree of logical relevance in turn as degree of objectively seeming to be the case. And *that* is our ultimate direct "intuition," or better, direct presentation.

Thus I find Keynes correct, but logically shallow and limited in scope. I accept his analysis, but advance it to a deeper and more general level that includes not just all *a posteriori* probabilities, but all evidence across the board, including *a priori* arguments in philosophy, and proofs in logic and mathematics.

There is a major exception. All instances of my principle

of seeming are instances of Keynes' principle of probability, but the converse is not the case. Thus the principles are different not only because the intensions of "logical relevance" and "objective seeming" are different, but because even their scopes of application are different. The principles are logically equivalent in probability theory. But epistemic presentations in probability theory are far from the only epistemic presentations. Thus the principles are formally distinct with a foundation in reality in the principle of seeming. And we have four concepts that are distinct only in reason: probability, degree of logical relevance, degree of objective seeming, and degree of reason to believe. The first two are Keynes', and the second two are mine. Again, mine are deeper and more general. And as Butchvarov (1970: 316) says, "the epistemic notion of probability... is nothing but the notion of rational belief."

The truth is that not just probability, but *all* the main starting points in epistemology, such as the data of common sense, or of perception, or of science, or of appropriate use of ordinary language, or of the intellectual light of reason (including both formal and intuitive reason), are ultimately grounded in what seems to be the case. But the converse is not the case. For if these other starting points did not even seem to be the case, then we would not rely on them. If they not even *seem* to be *good* starting points, or *plausible* starting points, or *evidence* for anything, then we would not rely on them. But because, and only because, the data of common sense, perception, science, and so on *do* objectively seem to us to be the case, then we do have objective evidence for them.

Probability is grounded even more deeply than that. We saw that probability is degree of logical relevance, which is more deeply and generally degree of (strength of) objective seeming. But objective seemings are still more deeply and generally direct presentations of qualified objects. Specifically, they are direct presentations of qualified objects that (within or as part of their direct presentation) directly seem to "be" lower-level objects. Note that while qualified objects are timeless logically possible ways that things can be presented, and thus exist in all possible worlds (in possible worlds talk), all presentations, direct or indirect, are logically contingent, with the possible exception of presentations to an omniscient and necessary God. Even in cases where a thing is self-evident, it is logically contingent whether we *notice* or are actually *presented* with that. And more deeply and generally, it is logically contingent whether we notice or are presented with *any* aspect of *any* qualified object, except for what is essential to its presentation. And its self-evidence or intrinsic plausibility is not such a feature. In fact, a qualified object must *already* be identifiable as the qualified object it is, *before* we can ask whether it seems to "be" an object in itself. This must not be confused with

essential feature (3) of qualified objects, that a qualified object essentially is as it directly appears to be. For a qualified object logically need not directly appear as objectively seeming to be the case. And still more deeply, all presentations must be presentations to minds. And, again with the possible exception of God, minds themselves are logically contingent. Thus, it is logically contingent whether *any* aspect of *any* qualified object is ever noticed or presented, waiving any necessarily omniscient necessary beings.

Thus we have advanced the analysis two stages beyond Keynes: first, from his Platonic logical intuitions to our objective seemings, and secondly, to the phenomenology of objects. And that should be no surprise, since Keynes was no phenomenologist. But to his credit, he did take a correct step in the right direction.

The theory of seeming, and more deeply its grounding in theory of qualified objects, presuppose a realm of timeless being, much as Keynes' Platonic logical intuitions and his Platonic, neo-early Russellian logicist theory of probability (based on *Principles*) do. But unlike Keynes' theory, the theory of seeming requires only the timeless *qualified* world. Again, qualified objects are timeless logically possible ways that things can be presented. And that is good. For on that deeper level, we are not liable to Ramsey's criticisms of Keynes's logical intuitions as obscure and even nonexistent. For we simply explain Keynes' logical intuitions as direct presentations in phenomenology, just like any other direct presentations, whether the other ones have epistemic aspects or not.

Ramsey's main criticism is that we simply do not have the "logical intuition[s]" (Keynes 1962 / 1921: 18) that Keynes' theory is based on (Ramsey 1954 / 1931: 161). But I have just grounded logical intuitions as seemings. And seemings are just the ordinary direct epistemic presentations we all ordinarily have in daily life. They are not obscure, occult Platonic intuitions. They are just how things are directly presented to us, if they seem to be the case. This is no neo-Russellian-Keynesian logic of Platonic inductive logical forms (see my 2019), but just a plain Continental phenomenology. And some things certainly do seem to us to be the case.

The existence of seemings is not in doubt. Certainly, and in a perfectly ordinary sense, it objectively seems to us that *many* things are the case. We have seemings all the time!

Ramsey's criticisms do not work well even against Keynes. For it is hard to deny that we have any logical intuitions at all. Even formal deductive logic is ultimately based on logical intuitions. My first logic professor, Mark Brown (1972), used to say logic is the business of rejecting most of our logical intuitions as being wrong, based on formalizing our best logical intuitions. And Kripke in effect rescues primitive logical intuitions when he says that the admission of logically primitive states in general, even

if it "seems desperate" and "leaves the nature of the postulated primitive state... completely mysterious," "may in a sense be irrefutable" (Kripke 1982: 51, word order inverted). But the main things is that the ordinary, garden variety logical intuitions that first-year logic students discuss, not to mention the ordinary seemings we all have even if we never went to school, are far from "completely mysterious" or "desperate." In fact, if we are directly *presented* with a qualified object, then "mysterious" and "obscure" would seem to mean no more than 'indefinable' or 'indescribable'. Can everything be defined or described? No, on pain of vicious infinite regress. And philosophy is the field where we would *expect* to hit logical rock bottom most of all. If not in philosophy, then where? Indeed, it is our professional job to *get* there, if we can.

Sense-perception is just as hard to define or describe as logical intuition. Can anyone define or describe seeing to a blind person, or hearing to the deaf? Should we reject *seeing* and *hearing* as "desperate" and "completely mysterious" "postulations"? Or as "obscure" and "nonexistent"? We might not *understand* seeing or hearing very well, but most of us see and hear things. Compared to normal logic students, Ramsey is like a blind person who denies sight, or a deaf person who finds hearing obscure and nonexistent.

Thus theory of seeming explains logical intuition as being epistemic seeming. My only advantage is that I have a very natural phenomenology, and Keynes has none at all. But that makes all the difference when responding to critics like Ramsey.

Ramsey's second criticism of Keynes is that even if logical intuitions existed, their justification of probability would be unreliable, since we disagree so often on our intuitions of how probable a thing is. My reply is that logical intuitions are just a kind of seeming. And it is only natural for seemings to conflict. For example, if a distant mountain seems more bluish to me and more greenish to you, is our evidence so unreliable that our admittedly somewhat different seemings are not evidence at all?

Ramsey's second criticism does not apply well even to Keynes, any more than his first criticism does. I see nothing wrong with conflicts among weak logical intuitions about degrees of logical relevance. Such conflicts are only to be expected. Logic may be in some sense perfect, and perfectly intelligible. But we finite limited beings are not perfect logicians with perfect logical intuitions. The best logicians often disagree. The standard joke is that no book contains more mistakes than an advanced logic book!

We need not be able to define, explain, or even describe what logical intuition is, or what the color red is, in order to understand them in the sense of direct presentation. Likewise, we need not be able to define, explain, or even describe a seeming any more than we already have, in order to understand them in the

sense of direct presentation. I mean that we need not be able to explain or even describe *why* it objectively seems to us that *P*, that is, describe the *reason* we have to favor thinking that *P* (regardless of whether we actually believe that *P*), if it is directly presented to us that *P* seems to be the case. And the ability to provide an explanation is not required by the principle of seeming. We can simply be aware that things seem the way they do. And I believe, as many do, that we can *have* reason to believe something even if, for whatever reason, we cannot *describe* the reason or reasons we have, either well or even at all.

Lord Chief Justice of England William Murray Mansfield went even further than that. He observed that there are people who make *good decisions* based on their common sense and long experience, that is, based on how things seem to them, but who can only state *bad reasons* for their good decisions. Such people are good *intuitive* judges of things, and are bad only at *describing* the reasons for their judgments. Nor are they just lucky guessers. To the contrary, such people are often known to be both intuitively very skilled and very experienced at weighing what seems to be the case, but also known to be very bad at verbally explaining why they weigh things the way they do.

In fact, all or nearly all of us are like that to some degree. But allow me to give Mansfield's example. A certain general was appointed Governor of a West Indies island, and now also had to be a judge for the first time. Having no legal background, he asked his old friend Mansfield for advice. Mansfield famously replied, "[C]onsider what you think justice requires, and then decide accordingly. But never give your reasons;—your judgment will probably be right, but your reasons will certainly be wrong" (Campbell 1878: 481, quoting Mansfield). John Campbell reports that things went very well for the new judge as long as he followed Mansfield's advice. But when he came to have such a high regard for himself as a judge that he actually explained his reasons for a decision, they turned out to be very bad reasons indeed (Campbell 1878: 481). This judge should never have issued an opinion!FN4-3

My principle about seeming is very much like that. We all know how hard it is to state reasons for us to believe in the existence of an external world, even though it overwhelmingly seems certain, or to prove some mathematical thesis, even though it overwhelmingly seems to be true. Of course, we often *can* state the reasons we have, or at least to some degree. And we should state our reasons if we can, both in ordinary life and in philosophy. But often we cannot describe them very well, or even at all.

But if we accept the theory of seeming, then we can always *generally* describe our reason to believe as follows: our reason to believe is that it objectively seems to us to be the case. Likewise, if

we accept Keynes' theory, our epistemic justification is *generally* a logical intuition. And if we accept Ramsey's theory, our *general* justification is objective willingness to bet.

Objections to the Theory of Seeming

I shall discuss three objections to the principle of seeming.

First, it might be objected that it might objectively seem to *S* that *P*, but *P* not be reasonable to *S*.

My reply is that this is not a reason to reject the principle, but merely a bald, flat denial of its truth. No counterexample to the principle is given. And none can be given, since the principle is a synthetic *a priori* necessary truth on its face. And that is why it can and does justify itself as self-evident without either circularity or begging the question. (These two fallacies are not exactly the same per Douglas Walton and James Woods in Walton 1982: 77–100.) The principle is simply and directly self-evident. And no self-evident truth is circular or begs the question, since those fallacies only apply to arguments, and no argument is being given. There is a big difference between a statement's being self-evident and its being used as a premiss to argue for itself as a conclusion. In fact, I suggest that without independent reason to accept the objection, it is the objection that begs the question. And the objection is not at all self-evident. Quite the opposite! It is the principle of seeming that is self-evident, not the objection.

Second, it might be conversely objected that it may be reasonable to *S* that *P*, but it not objectively seem to *S* that *P*.

My reply has two parts.

First, the principle of seeming is not a biconditional (if and only if) statement. It says only that if it objectively seems to *S* that *P*, then it is reasonable to *S* that *P*. It does not say or imply the converse statement that if it is reasonable to *S* that *P*, then it objectively seems to *S* that *P*.

Second, my reply is the same as my reply to the first objection. Briefly, this is merely a bald, flat denial of the converse principle's truth. No counterexample is given. And none can be given, since the converse principle is a synthetic *a priori* necessary truth on its face as well.

The third objection is that Tertullian says he believes that God exists *because* it is absurd, perhaps meaning that he must believe in God by faith alone, since reason goes against it. And we often believe things that we have no reason to believe, and that do not objectively seem to be the case.

My reply is simple. I wholly grant that our beliefs are often irrational. Tertullian's belief is irrational on his own admission. But

the principle of seeming and its converse are not about belief at all, and do not even mention belief, except as a logical constituent in the property of *S*'s having at least minimal *reason to* believe, regardless of whether *S actually* believes. They are about degrees of objective seeming and degrees of *reason* to believe that may never lead us to actually believe, and that may not even rise to the level of epistemically *justifying* belief.

Suppose the objector replaces my principle of seeming with this principle of belief: "If subject *S* believes proposition *P*, then it objectively seems to *S* that *P*." Or to rewrite Chisholm, "If *S* believes that *P*, then it is reasonable to *S* that *P*." Some philosophers seem to think that this principle is true, and true synthetic *a priori*. But I think that it is quite false. And I think the reason is obvious. Namely, people have nonrational and even irrational beliefs all the time. As Keynes says, "the actual beliefs of particular individuals... may or may not be rational" (Keynes 1962 / 1921: 4). And that is a logically contingent truth. And the principle of belief is not only logically contingent, but false. If it were true, it would be a logically contingent truth. But as Keynes points out in effect, the principle of belief is in fact false. Ths is in stark contrast to the principle of seeming, which is self-evidently true synthetic *a priori*. That is because for intuitive conceptual reasons, there simply cannot be irrational or even nonrational objective seemings. In fact, it is a formal contradiction to assert that there are irrational or even nonrational *rational* objective seemings.

Thus I disagree with Roderick Chisholm's principles that base having reason to believe on believing (Chisholm 1966: 45 principle B, 47 principle C). In my opinion, Chisholm would have done better to stick to Carneades' phenomenological principle. To be fair, Chisholm does require the beliefs to be *about* (objectively) perceived states. But this by itself does not entail that the beliefs are rational. The perceived states, or perceptions, might be illusory, delusory, outweighed by other perceptions or considerations, or simply not rise to the level of justifying belief. Thus Chisholm's talk of perception cannot be taken to imply that we have any reason to believe that his principles of belief are true.

Believing and objective seeming are simply not the same. A seeming is rational or at least objective in virtue of its very being as a seeming. That is part of its definition. But a belief is scarcely rational in virtue of its very being as a belief. In fact, Chisholm's theory was refuted by Keynes long before Chisholm offered it. For as Keynes says, "the actual beliefs of particular individuals... may or may not be rational" (Keynes 1962 / 1921: 4). And in deductive logic, it is a logical fallacy to appeal to belief to justify a claim.

We might try to rescue Chisholm by restricting the kind of beliefs he has in mind. Namely, we might distinguish rational or at

least objective beliefs from merely subjective beliefs, and place all and only objective beliefs on a par with objective seemings. Indeed, rational or objective beliefs are what he has in mind. But then the concepts of reason and objectivity are doing all the work, and the concept of belief none at all. Those two concepts are part of the definition of a seeming, but they are no part of the definition of belief. And the foundation of evidence remains the seeming. For a belief can be rational or objective only in virtue of its being based at bottom on a seeming. A mere perceived state, as such, is not a seeming. A pink rat does not seem to exist even to the drunkard who hallucinates it. Thus the vital point is that a belief is rational and objective if and only if it is based on a rational objective seeming. It would be absurd to say that a seeming is rational and objective only if it is based on a rational objective belief. This not only puts the cart before the horse, but many seemings do not even rise to the level of justifying belief.

Seemings ground the objective rationality of rational and objective beliefs, not the other way around. Objective seemings are deeper and more general than rational and objective beliefs. For there can be and are objective seemings that do not rise to the level of justifying belief, but there can be no rationally objective beliefs without objective seemings. Thus my theory is on the proper level of epistemic generality, but Chisholm's principles based on belief are too narrow. For we do not always actually believe when we have an objective seeming. Far from it! Again, seemings can be too minimal even to cause, much less epistemically justify, belief.

We might try to rescue Chisholm more deeply by speaking of rationally objective perceived states or perceptions. But then Chisholm's theory is not his but ours, or distinct only in reason from ours. I leave further discussion of Chisholm to others.

For six more objections to the theory of seeming and my replies, see my (2023 / 2015: 580–586).

The principle of seeming's being *true* is perfectly compatible with the fact that we rarely *appeal* to it as such. Most people are not even aware of the principle. We ordinarily appeal only to specific data in science, courts of law, and ordinary life. Even I do not appeal to the principle in specific cases! Here I am only giving a general philosophical account of what evidence is.

Justification of Other Theories and Principles of Evidence

The theory and principle of seeming can be used to justify all other theories and principles of evidence, to the extent that they can be ultimately justified at all. I shall discuss some of the other

main theories and principles at least briefly. All other theories are epistemically and modally distinct from my theory, insofar as they depend on mine but mine does not depend on them. They are formally distinct with a foundation in reality in seemings, and more deeply in direct presentations of qualified objects.

Insofar as all theories of evidence in general (and all theories of probability in particular) are (1) intelligible, (2) logically possible, and (3) save the epistemic appearances equally well, they are distinct only in reason from each other. This is basic to epistemological ecumenicism. Insofar as "epistemology is the ontology [or better, the metaphysics] of the knowing situation" (Bergmann 1964: 126), epistemological ecumenicism is also a kind of metaphysical ecumenicism. See chapter 3 on the three conditions of metaphysical ecumenicism; they are essentially the same.

Justification of the Logical Relevance Theory of Evidence

Again, my theory of seeming basically *is* Keynes' theory of probability as logical relevance, More precisely, it is distinct only in reason from it, and underlies, explains, and justifies it. For my theory is deeper and more general. For my theory applies not only to probability and inductive logic, but also to logical relevance in formal deductive logic. Those are the two main categories, mutually exclusive and jointly exhaustive of evidence, at least on the traditional distinction between deductive and inductive logic. Synthetic *a priori* truths and synthetic *a priori* inferences, both of which are self-evident, belong to logic in the wide sense, which includes both formal and intuitive logical reasoning. Keynes' theory is intended to apply only to inductive evidence, and is more specifically intended to apply only to probability; but my theory applies to them all. Even if we extend Keynes' theory of intuited logical relations to all logic, so that the two theories *become* co-extensive in scope, my theory is still deeper, since it still underlies, explains, and justifies Keynes' theory. My theory illuminates Keynes', not the other way around. For my theory takes logical evidence (in the widest sense, including inductive logic) out of the realm of logic and into the realm of phenomenology, while Keynes never breaks out of what Grice and Strawson would call "the family circle" of logical terms (Grice 1956). Thus my theory is modally distinct from Keynes' theory, since the logical dependence is one-sided. Again, the two theories are formally distinct with a foundation in reality in seemings, and more deeply and generally in direct presentations of qualified objects. As with Keynes' theory, the degrees of probability in my theory of seeming can be cardinal,

ordinal, or incommensurable. For more on deductive and inductive logical relevance, see my (2023 / 2015: chs. 9–10; 2021a / 2012).

Four Main Theories of Probability

There are four main theories of probability, and each has and implies its own ontological locus (location) of probability.

On Aristotle's frequency theory, probability is what is usually the case, as determined by empirical counting. Here the locus of probability is things in the natural world, or more precisely the sizes of groups, classes, sets, or collections of things in the natural world. All such alternatives are distinct only in reason.

On Keynes' theory, probability is degree of logical relevance, an intellectually intuited logical relation between a body of evidence *e* and a hypothesis *h*. Here the locus of probability is a Platonic realm of timeless relations among timeless propositions. They need not be Platonic forms; they can be universals ante rem.

On Ramsey's theory, probability is the degree of our disposition or willingness to bet, plus our learning curve as created by rewards (winning) and punishments (losing). Here the locus is the mind: our disposition or willingness to bet, our experiencing rewards and punishments, and our learning from those experiences.

On my theory, probability is the degree of strength of an epistemic seeming, which is a direct presentation of a qualified object as rationally or at least objectively seeming to be the case. Here the locus is phenomenological presentation, and more deeply, qualified objects. No qualified objects, no presentations of them.

As I just explained, Keynes' theory and mine are distinct only in reason. Both theories are intelligible, logically possible, and logically equivalent, that is, save the epistemic appearances equally well, if we *make* their scopes overlap. Otherwise they are modally distinct with a one-sided dependence on my theory. Thus they are formally distinct with a foundation in reality in the objects of my theory. For one thing, my theory applies more deeply and generally to all evidence, not just to probabilities. For another, we would never hold Keynes' theory if it did not even objectively seem to be the case. Indeed, my theory underlies, explains, and justifies whatever is valid in all other theories of evidence, both actual and possible. For if they do not even seem to us to be correct, or even likely, then we can have no reason to hold them.

Could we invert this? Could we define or explain objective seeming as Keynesian logical intuition, and having reason to believe as Keynesian logical relevance? No. Seemings are deeper and more general. For logical intuition concerns only probabilities, and is thus only one kind of objective seeming. And it is logical

intuition that is obscure and in need of illumination, not the other way around. But even if we definitionally reversed what seems to be the natural epistemic order of things, the result would still be a form of epistemological ecumenicism, and that is our main story.

It might be objected that the ontological loci are wholly distinct: for Aristotle, the natural world, or groups of natural things; for Keynes, a timeless Platonic heaven; for Ramsey, the mind; and for me, direct phenomenological presentations of mind-independent qualified objects. And if all these ontological loci are wholly distinct, the theories cannot be distinct only in reason, and must be really distinct. Yes, all four theories give interpretations of purely mathematical probability theory, and are to that extent logically equivalent. For example, Bayes' Theorem is interpreted as true on all four theories. (On Bayes's Theorem, see my 2023 / 2015: 343, 348, 350–353, 382, 395, 513.) But the four theories' *interpretations* of mathematical probability theory, that is, their ontological commitments to objects, are wholly and therefore really distinct. The only exception would be that qualified objects are not *totally* mind-independent; they do not depend on the existence of minds, but do depend on the logical possibility of minds. Thus Ramsey's theory and mine are *indirectly* logically linked. But even so, his theory and mine still interpret evidence in terms of wholly distinct and therefore really distinct (if not *totally* distinct) objects.

My reply is that just as in metaphysical ecumenicism, so in epistemological ecumenicism we must distinguish intensionally different qualified facts, which may be distinct only in reason, from the extensional facts they "are," which are the same if the theories save the epistemic appearances equally well, that is, provide logical analyses of ordinary pre-philosophical epistemic statements that are logically equivalent to the ordinary statements, and therefore to each other. And the containment and dependence arguments will show relevant entailment containment and dependence of the objects in themselves. They will do that by showing that the objects of each theory are logically contained in and depend on the same ordinary epistemic situations, which exist in a perfectly ordinary sense. And if I am right that theory of seeming is logically prior to the other theories, than it logically contains the other theories, and they logically depend on it. Again, this is in the sense that it is intellectually more illuminating of the others than the others are of it, not in the sense that it necessarily has a wider scope of application. But again, theory of seeming does have a deeper and more general scope than the other theories. Aristotle's theory applies or best applies to counting things in the natural world. Keynes' theory applies to logical intuitions. Ramsey's theory applies only if there are minds who are willing to bet, though if there are no minds who are willing to bet, then the probability is

then 50%; and that is Ramsey's interpretation of Bayes' Theorem.

At least in principle, there logically can be indefinitely many kinds of probability theory. For probability is a determinable and its theories are determinates. And there are many probability theories in the literature, I want to say one per original probability theorist. But they are mainly variants of the four I discuss.

On a lower level, I advocate a mixed theory of probability. The idea of a mixed theory is not new (Braithwaite 1975: 239–40). Trivially, a mixed theory is formally distinct from its conjoined logical component theories, with a foundation in reality in them.

For mass repetitive events, I adopt frequency theory. Of course, for me, frequency theory is justified by theory of seeming. Thus I admit frequency theory in a prominent way only indirectly, via theory of seeming. But for unusual or unique (nonrecurrent) events, I use theory of seeming directly. See my (2023 / 2015: 359–360, 363, 517–519, 522, 527– 528, 530, 532, 573–577).

On a deeper level, my theory is distinct only in reason from Aristotle's, Keynes', Ramsey's, and any other theories, if they are intelligible, logically possible, and logically save the epistemic appearances equally well with respect to their respective scopes of application. That is my main ecumenicism *within* epistemology. To be sure, foundationalist and holistic epistemology are ecumenically distinct only in reason as well. This is clearly the case if they are intelligible, logically possible, and save the epistemic appearances equally well. For more, see the section on pages 542–545.

If the many rival epistemologies do not save the epistemic appearances equally well, then the containment and dependence arguments do not apply. There may still be a case to be made for some more limited forms of epistemological ecumenicism. But that is beyond the scope of this book, except to say that if any theory of evidence does not even seem to be the case, then it is hard to see why we would ever accept it, or even how we ever could accept it.

Justification of the Frequency Theory of Probability

The frequency theory of probability is valid to the extent that it objectively seems to be. Likewise for specific frequency counts. In light of Hume's skeptical critique of induction, i.e. of inferring future events from similar events in the past, theory of seeming seems to be the best and indeed only possible justification of the frequency theory. We have saved Aristotle from Hume!

I do not claim that the *frequency side* of my mixed theory *directly* resolves Hume's problem of induction. In fact, I agree with Mises that frequency theory presupposes induction (Mises 1961: ix). At least it does insofar as that in practice, we cannot actually

observe a total empirical frequency across the whole of space and time, and can only assume that the principle of induction is correct. But the principle of seeming is the *underlying* justification of both the frequency theory of probability and the principle of induction on which it is based. For if it objectively seems to us that the frequency theory of probability is true for mass repetitive events, and that the principle of induction on which it is based is true, then we *have* reason to believe that they are true, even if we cannot *describe* the reason, per our earlier discussion of Mansfield.

Russell (1974 / 1912: 66) divides the principle of induction into two theses, which I shall state in my own way. The first is that if events of two sorts, A and B, have always been found conjoined (concurrent), then the more they have been found conjoined, the more probable it is that they will be found conjoined in a new case. (The new case need not be a future case, but merely one that has not yet been found.) The second thesis is that if enough conjoined cases have been found, then the probability of conjunction in a new case is "nearly a certainty, and will... approach certainty without limit" (Russell (1974 / 1912: 66). It seems to me that the second thesis is supported, if not implied, by the first. Russell adds that the more cases of conjunction are found, the more probable the universal law, "A's and B's are always conjoined," is too (Russell 1974 / 1912: 67). Following Hume, Russell argues that "experience can neither confirm nor confute" the principle of induction (Russell 1974 / 1912: 68–69). "Thus we must either accept the principle of induction on the ground of its intrinsic evidence, or forgo all justification" of it, and therefore also of our belief that the future will resemble the past, and of all the "general principles of science," since all these too depend on the principle of induction (Russell 1974 / 1912: 68–69). Nor can the principle of induction be proved or even made probable by induction, which would beg the question (Russell 1974 / 1912: 84). Russell agrees with Hume that the principle of induction is not an *a priori* truth. Russell's argument for this is that all *a priori* knowledge is of relations among universals, while the principle of induction is "derived from instances" (Russell 1974 / 1912: 107; see 103–105).

Russell's solution is that while the principle of induction is neither *a priori* nor evidentially supportable by experience, it has an indeterminate *degree* of intrinsic self-evidence less than the self-evident certainty of many simple logical truths (Russell 1974 / 1912: ch. 12). Russell says, "The inductive principle has less self-evidence that some of the other [!] principles of logic" (Russell 1974 / 1912: 117). I basically agree, but add three comments.

First, the principle of induction is not an empirical generalization. For while events of sorts A and B are empirically observed, their probabilities are objects of thought, not of perception.

Second, Russell's series of three progressively less self-evident things is a "slippery slope." He starts with "'judgments of perception'" that are "immediately derived from sensation" in the present moment (Russell 1974 / 1912: 113). These are highly self-evident. Next are memories, which are as a general rule less self-evident the older they are (Russell 1974 / 1912: 113–117). Then last in the series is the principle of induction. Russell says:

> Truths of perception and some of the [simplest] principles of logic have the very highest degree of self-evidence; truths of immediate memory have an almost equally high degree. The inductive principle has less self-evidence than some of the other principles of logic. (Russell 1974 / 1912: 117).

Russell seems to present this as a series of mere differences in degree of self-evidence. But it is not. For the third member of the series also has a difference in kind. Russell masks this by speaking of truths or propositions in all three cases. In the first two cases, degree of self-evidence is really an epistemic "quality which may be more or less present" in the particular perception or memory (Russell 1974 / 1912: 117); and the truths of perception or memory are epistemically supported by those qualities. That is distinct only in reason from theory of seeming. But the third case, the principle of induction, is not a proposition about a *particular* sensed event. It is a universal proposition about *all pairs of events* that have been found conjoined, and about the probability of their being conjoined in new cases. The degree of self-evidence of already observed conjunctions of A's and B's is not in question, much less the degree of self-evidence of each particular A and B considered by itself. For the conjunctions have already been observed, and are now taken for granted. And the principle does not even assert that the *already observed* conjunctions are probable, but only that *new and therefore unobserved* conjunctions are probable, *given* the already observed conjunctions. Thus the probabilities the principle of induction is all about cannot be epistemic qualities of sensed pairs of conjoined particulars, for the simple reason that by definition, any new pairs *have not yet been sensed at all*.

Russell is right that perception and memory are not *a priori* but only self-evident. And this is so regardless of whether the perception or memory is self-evident with evidential certainty or only to some degree. But Russell is wrong that the principle of induction is not *a priori*, but only self-evident to some degree less than that of evidential certainty. For the test of what is *a priori* is not whether it is evidentially certain, or only to a degree. Instead,

the test is the core meaning of *a priori*, which is whether or not the item is knowable (or self-evident) independently of experience. For perception and memory, any degree of self-evidence they may have is *a posteriori*, not because it is a matter of degree, but because perception and memory are *kinds of experience.* Thus even if the perceived or remembered thing is self-evidentially certain and not just self-evident to a degree, its self-evidence is still *a posteriori*. But the principle of induction is self-evident *a priori*, whether or not it is self-evidentially certain or just self-evident to a degree. For both its antecedent and its consequent are given conceptually, as opposed to experience. For the principle is a hypothetical (if-then) statement. It does not assert we *do* experience constant conjunction of A's and B's in all the cases we have found, and therefore it *is* probable the next case we find will be one of conjunction too. Instead, it asserts that *if* we experience constant conjunction of A's and B's in all the cases we have found, *then* it is probable that the next case we find will be one of conjunction too. No A's or B's need *ever* be experienced, let along conjunctions of them. The principle only says *if* they are experienced. Thus its truth does not require that they *are* experienced. We need not even specify what the A's and B's are. This is a *general* principle! It is about *any* A's and B's, *whatever* they are. Thus we are not even reaching Frege's point that no general statement is about objects, since existence is a second-level concept. (That point has nothing to do with whether the statement is *a priori* or *a posteriori* anyway.) And to top it off, probabilities are not objects of *perception* at all. Thinking they are is categorially confused. If we see an object A and an object B occurring together in a new case, we do not see a probability as a third perceptible object occurring together with them. Probabilities can only be objects of thought, not objects of perception. Thus anything we know about them, or any degree of self-evidence they have, up to evidential certainty, is *a priori* because they simply cannot be given in experience in the first place. For the same reason, even if a hypothetical statement's antecedent *were*, per impossibile, *non*-hypothetically about things given in experience, the statement could still be only *a priori* because its consequent is still about probabilities. That is, in the principle of induction, even if the antecedent *were* about *a posteriori* constant conjunctions, the consequent would still have to follow *a priori* from the antecedent, since the consequent is not even *about* anything that can be given in experience. For it is about *probabilities* of future conjunctions.

And *is* it not self-evident to some degree that if x occurs more often than y, then other things being equal, x is more probable than y? Consider an artificial, controlled, and therefore very clear example: drawing marbles from an urn. Given that there are five white balls and five black balls in the urn, *is* not the 50%

probability of drawing a ball of either color synthetic *a priori*? This is not analytic; the concepts are very different. One concept is of the number of balls in an urn; the other concept is of epistemic likelihood. In fact, if the thesis in question is not merely self-evident to some degree, but is a synthetic *a priori* truth, then we may hold that the concept of probability is logically but non-analytically contained in the concept of frequency, in much the same way that the concept of color is logically but non-analytically contained in the concept of red.

My third comment is that the epistemic justification of the principle of induction is the principle of seeming. For the principle of induction objectively seems to be the case on the face of it, and at bottom that is why we accept it. Both principles are synthetic *a priori*. And both have a logically indeterminate degree of self-evidence. More precisely, they have no cardinal degree, but they have a rather indeterminate ordinal degree. For they are definitely *less* self-evident than many simple truths of logic and mathematics, and also definitely *more* self-evident than some vague perceptions or memories. We may also say that if the principle of induction is justified *only* by the principle of seeming, then it cannot be *more* self-evident than the principle of seeming. But if the principle of induction is intrinsically self-evident, then it may be an open question whether either principle is more self-evident than the other. But the decisive point is that if the principle of induction did not even *seem* to be the case, then there could be no reason to accept it; and it does seem to be the case. We implicitly rely on it!

The principle of seeming, "If it objectively seems to *S* that *P*, then S has reason to believe that *P*," is true synthetic *a priori*. And the instance of that principle, "If it objectively seems to *S* that the principle of induction is true, then *S* has reason to believe the principle of induction," is true synthetic *a priori* as well. But the principle of seeming does not and cannot explain the principle of induction as being *itself* a synthetic *a priori* truth, or as being even just a "weak" synthetic *a priori* truth. That must be determined by inspection of the principle of induction by itself. And on our own inspection, it is a weak synthetic *a priori* truth. For the probabilities it is about cannot even be empirically *presented*. Thus the principle of induction logically cannot be an empirical generalization.

In possible worlds talk, the difference between the 'totally strong' *a priori* truths of logic and mathematics, and weak *a priori* truths such as the principle of induction and the principle of seeming, is easy to articulate, at least after a fashion. Totally strong *a priori* truths are true in all logically possible worlds, and weak *a priori* truths are not, but are true in more than half of them. Almost facetiously, this seems to reduce the principle of seeming to the frequency theory of probability! But there is no extensional

reduction to any exact "body count" of possible worlds. Possible worlds talk is purely intensional. For there is no such thing as a merely possible world. Thus there is no extension to count, not even ordinally. And there is no exact count of existing qualified worlds here either. I shall return to the topic of induction shortly.

Justification of the Subjectivist Theory of Probability

Theory of seeming provides the best explanation of why Ramsey's so-called "subjectivist" theory of probability works as well as it does. The theory is that probability is the degree of people's willingness to bet, waiving Dutch book, as measured by the amount of money they are willing to bet. By "subjective," Ramsey means only that it is about subject *S*'s willingness to bet; it is measured objectively by the amount of the bet. Hidden in plain view is the fact that subject *S* will be *rationally* willing to bet if and only if, because, and to the degree that it *objectively seems to S* that a certain thing will happen. Thus *S*'s "subjective" willingness to bet is ultimately based on *S*'s having objective reason to bet, whether *S* can describe that reason or not (recall Mansfield). To be sure, there can be other factors, such as how much *S* can afford to lose, or a whim of *S*. And theory of seeming only justifies *rational* willingness to make the bet. How could it possibly justify any nonrational factors? *Any* epistemic theory can be outweighed by nonrational factors in decision making. "I know the odds are one out of 38, but put it all on my lucky number 5!"

Since *S* will have a learning curve, Ramsey expects that *S*'s bets will approximate over time to objective probability, but without having to postulate Keynes' mysterious logical intuitions. Thus Ramsey expects an approximative ecumenicism to occur over time between his subjectivist theory and Keynes' objectivist theory.

Justification of Inference to the Best Explanation

My theory also provides the best epistemic justification for abduction in the sense of inference to the best explanation. Not only does this type of inference objectively, rationally *seem* to be probable, but the best explanation simply *is* the explanation that most objectively seems to be the case. Thus inference to the best explanation is a *species* of the genus of seeming. Thus this is a modal distinction. All best explanations are best seemings to explain, but not all seemings even seem to be explanatory. Some simply seem to be the case. If I objectively seem to see an apple on the table, that *does* explain why I *think* an apple is there. I think it is

there because I seem to see it there! But it does not even seem to explain why the apple *is* there. I might have no idea why the apple is there. Perhaps a friend put it there. Or perhaps I did, and forgot.

We would never infer the likely existence of the putative entities of the theory that offers the best explanation unless the theory objectively seemed to be the case. And we would never accept the principle of best explanation, "The theory that offers the best explanation is the theory most likely to be the case," unless that principle objectively seemed to be correct, or likely correct. What if the best explanation were the best of a bad lot? What if it had a one percent chance of being true, and the rest half a percent? And since only one theory logically can be over 50% likely, the principle of best explanation can only *help* choose a theory when *no* theory is more likely than not. What kind of help is that? No theory is even likely! Thus it seems that our real principle is the converse: "The theory that is most likely to be the case is the best explanation." Again, only one theory can be over 50% likely. Only one theory can even *seem* to be over 50% likely, at least to the same subject *S* at the same time. Unless *S* is bad at math!

Even if we use the frequency theory to justify the principle by counting all the cases where the best explanation turned out to be the case (as in our theories of how an elevator internally works), the frequency theory is itself justified by the principle of seeming.

Best explanations can greatly change over time. And what if the best explanation to you is not the best explanation to me? Our only measuring stick is objective seeming to *S* at time *t*.

On a deeper level, the best explanation is the best theory. And we saw in the section on Ockham that there are at least 34 factors to weigh in formulating the best theory. Yet even here, we would not believe a theory if it did not even seem to be the case. (Thus there is a *negative* link between believing and seeming.)

Justification of the Principle of Sufficient Reason

My theory also provides the best epistemic justification for the principle of sufficient reason. The principle says that everything has a cause or reason for being. We unthinkingly assume that the principle is true. But many hold that the principle stands in need of justification, and that it has no justification. For what could its justification be? Surely it cannot be used to justify itself without circular argument and begging the question. And no reason to accept it *other* than itself may seem forthcoming.

Surely the principle is not a merely probable empirical generalization, based on our finding that most things have causes or reasons for being. But surely it is not an analytic truth. For there is

nothing in the concept of an object or event that even seems to imply that the object or event has a cause or reason for being. For random or undetermined occurrence is a *logical* possibility. Thus it would seem that the principle can only be synthetic *a priori*. And it would seem to be weak *a priori*. For it does not seem to have anything like the complete self-evidence of "Red is a color." But is the principle even more likely than not, i.e., true in more than half of all possible worlds? That is hard to say. And if we cannot even say it is more likely than not, how can it be intrinsically plausible?

The famous objection to the principle of sufficient reason is the counterexample of Buridan's ass. An ass would starve to death if it had no reason to choose between equal piles of hay. Jean Buridan says the ass has a higher-level reason to choose eating *something*: to avoid starving to death. The choice *which* pile of hay to eat is arbitrary; but the choice to eat *some* pile is based on a life-or-death reason. Thus Buridan removes the counterexample.

Likewise, two views can equally seem to be the case. That is, they can be equally reasonable and objective. And likewise, we can have a have a higher-level reason for choosing *some* view to proceed with. Consider the famous short story, "The Lady, or the Tiger?" (Stockton 1882). In simple terms, you are in a room with only two doors you can exit, and you have no epistemic reason to choose either door over the other. Behind one door is a lady (safe escape), and behind the other is a tiger (death). And if you choose neither door, you will starve to death in the room. But you can arbitrarily choose *some* door for the higher-level reason of then having a fifty percent chance of safely escaping, as opposed to a hundred percent chance of starving to death in the room.

All such higher-level reasons are higher-level objective seemings. For both Buridan's ass and the person in my version of Stockton's story are directly presented with higher-level qualified objects that objectively seem to be decisive higher-level reasons to resolve these seemingly impossible dilemmas.

Recalling the section on Ockham's razor, any higher-level reason to decide among *epistemically* equivalent theories can only be some *non*-epistemic factor or combination of factors in theory formulation. The razor itself is just such a factor, since we found it to be merely pragmatic. It may sound odd that a merely pragmatic factor can be a reason of a higher level than a substantive epistemic reason, but this is technically correct. And the matter is relative. If several theories were equally pragmatically simple, then the higher-level reason to choose one theory over the others could well be a substantive epistemic reason.

Likewise in ethics. Arbitrary "command decisions" by tossing a coin, for the higher-level reason of just getting on with things that cannot be decided by any other reasons, make good

sense, and are common enough. Hegel does not expressly state that a constitutional monarch's tie-breaking vote is functionally no better than tossing a coin, but his constitutional monarch *is* in effect a sovereign coin (pun intended) who flips himself merely to break a tie vote by the legislature (Hegel 1969 / 1821: 181–184, §§ 279–281; see 288–289, §§ 170–171; Findlay 1962 / 1958: 328–329). We have the same thing in tie-breaking votes by the vice president of the United States in the Senate. The tie vote implies that there was no reason to prefer either alternative as far as the legislature was concerned, at least in the sense that the legislators were equally divided in their vote. Thus, Hegel says, it does not really matter what the monarch does to break the tie, except just to get on with things. And that is essentially the same higher-level reason that Buridan's ass has, and the person in Stockton's room.

Slavoj Žižek says:

> The monarch effectively "decides," makes a choice, only when the best solution, from the rational standpoint, is to leave the decision to chance. He thus prevents an endless weighing of pros and cons. Here Hegel is quite explicit: in his *Philosophy of Right,* he compares the role of the modern monarch with the way the Greek Republic looked for a reference that would help it to reach a decision in natural "signs"(the entrails of ritually slaughtered animals; the direction of the flight of birds, etc.) [Hegel 1969 / 1821: 184, § 279]. With modern monarchy, this principle of decision no longer needs an external support; it can assume the shape of pure subjectivity. The very agency of the monarch thus attests [to] the inherent limitation of Reason.... (Žižek 2008 / 1991: 277 n.54)

Here Žižek misses Buridan's whole point. For Žižek should have said it "attests [to] the inherent limitation of" *lower-level reasons*. Buridan's higher-level-reason solution of all such lower-level dilemmas applies equally well to asses and humans alike. For it applies more deeply and generally to all logically possible rational agents. And that is the proper level of applying the principle of sufficient reason, and more deeply the principle of seeming.

Justification of Induction and Intellection

A (merely) probable inference is an inference that has an

epistemic likelihood less than that of logical certainty in the wide sense of logic. An induction is a probable inference from a few cases to many or all similar cases. It is a main kind of probable inference. Another main kind is analogical argument, as opposed to analogical illumination of intellectual content or meaning. There is no sharp dividing line between inductive arguments and analogical arguments. For both involve at least one initial instance and at least one similarity or resemblance. We may say probability arguments are 'primarily' based on the number of instances, and analogical arguments are 'primarily' based on the strength and relevance of the analogies (resemblances). But even that is not always clear.

We discussed the principle of induction in the section on probability and induction. But there is also a second, deeper and more general sense of the term "induction" in which all merely probable inferences, including analogical arguments, are called inductive inferences as opposed to deductive. Thus the study of probability in this second sense is often called inductive logic.

Intellection is the *a priori* apprehension ("intuition") of a truth or degree of self-evidence, or that something is the case, or of the validity or degree of likelihood of an inference. Intellection is not a type of inference, but a direct cognition of the a *priori* validity or degree of likelihood of any inference. It is the *a priori* species of seeming. For it applies to all *a priori* truths and degrees of likelihood, and to all *a priori* valid or likely inferences, ranging from truths of logic and mathematics to the principle of induction.

One might object that *analytic* inferences are not cognized by intellection or other sort of Platonic intuition, such as directly cognizing ante rem universal relations among universals ante rem, but by far more humble means, such as showing truth in virtue of logical form by truth-tables or other logic diagrams, or showing truth in virtue of definitions alone or language use alone.

My reply is that these alternatives are not rivals in metaphysical ecumenicism. For intellection is the realist option, logic diagrams are the conceptual-formal option, and definitions or language uses are the nominalist option. And we found realism, conceptualism, and nominalism to be distinct only in reason. We even found that realism wins in that its entities must be admitted, and that the other options are of progressively lesser validity.

What is of interest to us here is Aristotle's theory that probabilities in the narrow sense are known by intellection, that is, *a priori*. For that theory of his co-exists, perhaps uneasily, with his more famous frequency theory of probability as what is usually the case. I resolve the tension by pointing out that the frequency theory is epistemically justifiable precisely *by* the intellection theory, and that both theories are epistemically justified in turn by the theory of seeming. For if they did not even seem to be the case, we would

never accept them. In fact, intellection is just *a priori* seeming.

One might object that in a seeming, we cannot tell "It is impossible for us to see that X" from "We see that it is impossible that X." One reply is that there *is* no final court of epistemic appeal beyond seemings. Likewise in phenomenology, the cognitive basis of seemings, there is no final court of cognitive appeal beyond direct presentations of qualified objects. More than that, a seeming *is* a positive thing. We *positively* see that a thing seems to be the case. Negative seemings go the way of all negations in Frege's "Negation" (1970d / 1919). For in "It is not the case that *P*," the assertion is of the whole statement, and the "not" occurs within the statement. Where "¬" is the negation sign and "⊢" is Frege's judgment-stroke or Whitehead and Russell's thesis assertion sign, ¬⊢*P* is not and cannot be an assertion, but ⊢¬*P* is. But my decisive reply is in the section "Rejection of Radical Cartesian Doubt," on page 555. For the proper scope of the impossibility operator really concerns knowledge (epistemic necessity), and not seemings.

Objective rational seeming is logical in the wide sense of logic which admits of (often indeterminate) degrees of *a priori* or at least self-evident strength. Again, that places me in the camp of Keynes and also the 1912 Russell. See my (2023 / 2015: ch. 10; 2019). And Aristotle's intellection theory of induction is essentially the same as Keynes' logical theory of probability. But you would never know it from Keynes. For Keynes discusses only Aristotle's frequency theory of probability as a rival theory, and never even mentions Aristotle's theory of intellection as essentially the same as his (Keynes') own logical theory of probability.

Supposedly, Aristotle sharply separates deduction from induction. Supposedly, Aristotle takes an exclusively frequency approach to probability. But at logical bottom, Aristotle justifies probability essentially the same way Keynes, Russell, Carneades, Chisholm, and I do. It is a presentation of a degree of logical relevance (Keynes), a degree of self-evidence or (later) of objective credibility (Russell), a degree of intellectual intuition (Aristotle), or a degree of objective seeming (Carneades, Chisholm, and me).

W. D. Ross says, "Essentially, induction for [Aristotle] is a process not of reasoning but of direct insight, mediated psychologically by a review of particular instances" (Ross 1960: 44). Ross says:

> The root nature of induction seems to be, for [Aristotle], that it is the "leading on"... from particular knowledge to universal. Whether one instance or a few or many or all are needed depends on the relative *intelligibility* of the subject-matter.... Where the form is easily

> separated in thought from the matter, as in mathematics, the mind passes from the perception of the truth in a single instance to grasping its applicability to all instances of a kind; where the form is less easily dissevered from the matter, an induction from several instances is necessary. But *in both cases the same activity of "intellection" is involved*. (Ross 1960: 43, my emphasis)

Ross says, "The passage from particulars to the universals implicit in them is described as induction; the grasping of the universals which become the first premisses of science must, we are told, be the work of a faculty higher than science, and this can only be intuitive reason" (Ross 1960: 58, 168, 211; see Aristotle 1968d: 88a12–17, 100a5–b15). For Aristotle, "'imperfect induction'... reaches a merely probable conclusion" (Ross 1960: 211). Thus perfect induction belongs to deductive logic in the wide sense of the *a priori* sciences, while imperfect induction belongs to inductive logic in the wide sense of the merely probable (logically contingent) sciences.

Clearly, all this is not only consistent with Aristotle's frequency theory of probability, but can epistemically justify that theory. That is, induction (intellectual intuition) can epistemically justify the frequency theory as being itself probably true, per our intellectual intuition of it as probably true. Russell can do much the same thing in his *The Problems of Philosophy*, since he admits degrees of self-evidence there (Russell 1974 / 1912: 116–118). Keynes can do it too, and so can I. See my (2019) on our three respective theories of probability. They are distinct only in reason!

Besides induction in the narrow frequency sense and analogical argument, induction in the wide nondeductive sense includes at least a third kind: abduction in the sense of inference to the best explanation. In fact, induction, or probability in the wide nondeductive sense, is a determinable of which there logically can be indefinitely many determinates. Theory of seeming underwrites them all, to the extent that they can be epistemically justified at all. Theory of seeming is logically prior to, and phenomenologically deeper and more general than, though distinct only in reason from, Aristotle's, Keynes', and Russell's various theories of intellection. Theory of seeming is better than the theories of Carneades and Chisholm, even though it is essentially the same theory. For the phenomenology it is based on is more natural and correct, and more completely developed. The whole of chapter 1 is its development.

Ironically, Russell is well aware of Plato's theory of participation in the very book in which he (Russell) denies that the principle of induction is *a priori* (Russell 1974 / 1912: 91–92). For

it is self-evident only to a degree. But is that not the weak *a priori*?

The epistemic basis of induction in both the wide sense and the narrow sense is seeming. For if an induction does not even seem to be the case, we would never accept it. In fact, it seems proper and correct to say that an induction *is* a kind of seeming.

Justification of the Factors in Theory Formulation

In the section on Ockham's razor in chapter 3, I said there are at least 34 factors to be weighed in theory formulation and assessment We may say that other things being equal, all the factors objectively seem to be reasonably applicable on the face of it, including even merely pragmatic ones such as the razor. But one question was best reserved to the present chapter on epistemology. Namely, is the razor *a priori*, or at least self-evident to some degree? Or if it is only pragmatic, and only an imperative command instead of a true or false indicative statement, do we judge when best to apply it *a priori*, or at least to some degree of self-evidence?

Again, Russell admits degrees of self-evidence, though apparently not degrees of the *a priori*, in *The Problems of Philosophy*. Wittgenstein says "it is remarkable that a thinker as rigorous as Frege appealed to the degree of self-evidence as the criterion of a logical proposition" (Wittgenstein: T 6.1271). Wittgenstein is right that degrees of self-evidence have no place in formal deductive logic. More deeply and generally, he is rightly pointing out that Frege is wrongly importing epistemology into logic. For as Russell's examples of perception and memory show, to be self-evident is not necessarily to be true *a priori*; and by definition, to be *a priori* is to be knowable independently of experience (including perception, memory, and introspection). And that is indeed remarkable in Frege, whose project is to banish all intuition from logic. (I think Frege does this only in his earliest logical work, *Begriffsschrift*.) But I find it even more remarkable that the rigorous Wittgenstein attempts to justify Ockham's razor by implicitly interpreting it as an *a priori* truth (Wittgenstein: T 3.328, 5.47321). That imports epistemology into logic just as much. For to be *a priori* is to be *knowable* independently of experience. And worse, what is the Tractarian logical form of Ockham's razor?

One might object to Wittgenstein that not only is the razor not *a priori*, it is not even a truth. It is an imperative, a practical maxim. And in many if not most cases, it counsels results known to be *false*. Recall the example of the elevator. Thus the razor can scarcely be stating even a truth, much less an *a priori* truth. Thus in importing the razor into logic, Wittgenstein is doing far worse than Frege. For at least Frege keeps logic within the bounds of the *a*

priori, not to say truth. And all logical truths are *a priori*. More importantly, Frege stays within the bounds of truth. And all logical truths are true. And as Wittgenstein's own truth-tables show, all logical truths are individually confirmable, even if our minds are too limited always to be able to see that, and even if confirmability should not be the *definition* or *criterion* of formal logical truth. (The definition of formal logical truth should be instead truth in virtue of logical form, per Russell.) But by importing the razor into logic, Wittgenstein makes logic not only not confirmable, but not even *a priori*, nor even true. What is the truth-table for Ockham's razor, anyway? And if the razor is in some sense logically true, as Wittgenstein seems to think, then its applications are logically true as well. But that is simply false on the face of it. Its applications are not true because *it* is not true. It is an imperative, not an indicative!

We might try to defend Wittgenstein by noting that even if the razor is an imperative pragmatic maxim, it is based on the indicative factual truth that, other things being equal, it *is* advisable to use the razor, i.e., *is* good pragmatic advice to use the razor. If so, then the pragmatic imperative is formally distinct from the pragmatic indicative with a foundation in reality in the pragmatic indicative. But this does nothing to show that the 'indicative razor' even has a truth-table, much less is true in virtue of its logical form. It does not show the indicative razor is *a priori*, or even true at all.

Also, this is a distinction without a difference, besides the merely grammatical shift from imperative to indicative mood, which Frege would call a change in force. For the thought (for us, the qualified fact) expressed by each sentence is identical! Recall that Frege's three forces are assertion, question, and command. They respectively ground indicative, interrogative, and imperative mood. And we are obviously concerned with the thought, not the force, in assessing whether the razor is *a priori* and therefore epistemological. What could the force have to do with it?

And if Wittgenstein admits the razor into logic because he thinks the *thought* (for us, the qualified fact) it indicates with imperative force is *a priori*, he is still importing epistemology into logic just as much as he (rightly) says Frege does. And once again, logic is analytic for the early Wittgenstein. And he fails to show how we could define or logically analyze the razor so as to show it is true in virtue of its logical form. In fact, on its face the razor would be a synthetic *a priori* truth, if it were an *a priori* truth at all. It would be just another counterexample to the *Tractatus*. To sum up, our attempt to defend Wittgenstein is a total failure.

If the razor is not an *a priori* truth, is it self-evident at least to some minimal degree, or is it merely an *a posteriori* empirical generalization about the pragmatic usefulness of past scientific theories which are formulated using the razor? Again, my view is

that the razor is not even a truth, but a pragmatic maxim, though its value might be based on the truth that it *is* sometimes good advice.

On the face of it, much like the principle of induction, the razor (or better, the truth it might be based on) can be self-evident if and only if it is *a priori* to the same degree. For just like a probability, the razor is not even an object of perception in the first place, but only an object of thought.

The simplifications of theory that the razor advises are not empirically observable either. Even the theories themselves are not empirically observable! We can only see and hear the sentences that describe them. Again, for us sentences express propositions (qualified facts). And while some qualified facts are perceivable, say about qualified horses, theoretical qualified facts are not.

Could we at least have a frequency probability that the razor is more advisable than not, if it was advisable in most cases so far? For we can count imperceptible objects, including theories and uses of the razor. Every object in the wide sense can be counted! Thus perhaps the razor might be an *a posteriori* (not: empirical) generalization justified by the principle of induction. Well, one problem is that the razor, considered all by itself, may be usually wrong. For as we saw, things are often more complex than the simplest theory of them. Another problem is that Mill has an empirical, *a posteriori* frequency probability for arithmetic based on counting piles of pebbles and gingersnaps, but arithmetic itself is *a priori*. Thus by analogy, the existence of *a posteriori* evidence for the razor does not show that the razor itself is *a posteriori*. And if the razor is a pragmatic maxim, then it is neither an *a priori* nor an *a posteriori* truth, since it is not a truth in the first place.

We may say that this is an *a priori* truth: "Other things being equal, a simpler theory is pragmatically better than a more complex theory." This is self-evident *a priori* because pragmatic value is a determinable and simplicity in theory formulation is one of its determinates. Compare "Red is a color," which is likewise self-evident *a priori*. Or closer to home, "Courage is a virtue."

Even if the razor is self-evident to any degree, *a priori* or not, or if there is even any evidence for it at all, it is justified on a deeper and more general level by the principle of seeming. For the principle of seeming justifies all evidence across the board.

Justification of Our Belief in an External Physical World

Let us now try to give the best case we can that there is an external world beyond our minds. Our mind-independent realism will follow that of Frege, Moore, and Russell. I already discussed Moore in chapter 1. There I argued that all objects are act-object

mind-independent in their formal reality, and that there are objects in themselves, that is, objects that are logically independent even of the logical possibility of minds. But what if they are all sensations?

Much like Moore on sensations, Frege argues that his own objects, both concrete objects and abstract objects, are logically mind-independent (Frege 1968 / 1918: 524–534). I shall not assess here who gave the better arguments, since the arguments are rather involved, and they all support each other. But we may note that while Moore analyzes the nature of consciousness and objects of consciousness, Frege offers private language arguments in addition to giving an analysis of cognitive acts. Again, Frege gives at least twelve private languages arguments throughout his career; see my (2003 / 1996: 109; 289 n.1). Frege then argues that the self or mind is not itself a mental idea, but the bearer of ideas. Having thus got beyond the cognitive as well as epistemic barrier of ideas to show our own existence as minds, Frege goes a step further:

> I cannot doubt that I have a visual impression of green but it is not so certain that I see a lime-leaf. So... we find certainty in the inner world while doubt never altogether leaves us in... the outer world. It is difficult in many cases, nevertheless, to distinguish probability from certainty here, so we can presume to judge about things in the outer world. And we must presume this even at the risk of error if we do not want to succumb to far greater dangers.
>
> [I have shown that] not everything that can be the object of my understanding is an idea. I, as a bearer of ideas, am not myself an idea. Nothing now stands in the way of recognising other people to be bearers of ideas as I am myself. And, once given the possibility, the probability is very great, so great that it is in my opinion no longer distinguishable from certainty. Would there be a science of history otherwise? Would not every precept of duty, every [moral] law otherwise come to nothing? What would be left of religion? The natural sciences too could only be assessed as fables like astrology and alchemy. (Frege 1968 / 1918: 529–530)

This is essentially the same level of *a posteriori* epistemic certainty we saw in Russell's view that given enough conjoined cases, the probability of conjunction in a new case is "nearly a certainty, and will... approach certainty without limit" (Russell 1974 / 1912: 66).

In the Frege text quoted above, after breaking through the barrier of ideas to arrive at minds or selves, Frege offers a reductio ad absurdum argument that extends to ethics and even to religion. Or perhaps it is better seen as a dilemma. Either the external world is all but certain based on the evidence we have, including scientific, or the whole thing is just a fable. Skeptics may wish to impale themselves on the second horn! Luckily, our principle of seeming can come to the rescue. The external world objectively seems to be the case, therefore we have reason to believe it exists. And evidence is just reason to believe, or at least to favor. Not only that, but we come close to Frege in that all the seemings we have add up. They may be individually slight in epistemic weight (or not). But they are *collective, cumulative* evidence of an external world. It seems that seemings are collectively the evidence that Frege says is "no longer distinguishable from certainty," and that Russell says "approaches certainty without limit." Dare we say then that we have *knowledge* of the external world?

More on that shortly. But first, four notes.

First, I am not arguing that in every case so far, we have observed that every perceptual seeming has "been" an object in itself, therefore in the next case it probably will "be" an object in itself too. That would be a ridiculously question-begging inductive argument. Our argument is deeper and more general. It is based on the principle of seeming.

Second, Frege does offer a private language argument on which if there were no external objects, then we could not even communicate about them. And we have seen that even if the mental language argument is just as valid, the two arguments and their conclusions are distinct only in reason. And on the containment and dependence arguments, the private language argument's realism wins. For both sorts of entity, real things and formally identical mental ideas, must be admitted on the basis of those seemingly rival arguments. Thus the real things must be admitted in any case.

Third and relatedly, although the principle of verification is self-defeating, there is merit in holding that we cannot teach or learn words without at least initial paradigms of what they mean, meaning what they express as senses (for us, qualified objects), denote as denotations, *and* refer to as referents. For all of these kinds of meaning must be taught and learned, and must have at least initial paradigms too. Likewise for knowledge. Thus there is room for arguing that at least in some paradigm cases, we perceive an external object in itself because the cases are what we *mean* by perceiving an external object. And that would *trivially* count as knowledge, indeed as paradigms of the meaning of "knowledge."

Fourth, seemings that there are external objects include both present perceptions and present memories of past perceptions.

That the principle of seeming justifies all the principles discussed in the previous sections is a main part of epistemological ecumenicism. For all these principles and beliefs are modally distinct from the principle of seeming. They are formally distinct with a foundation in reality in seemings, and more deeply in qualified objects. For the principle of seeming self-evidently justifies itself as seeming to be the case. And no self-evident truth is circular or begs the question. The principle justifies the other principles as seeming to be the case as well. If they did not even seem to be the case, we would never accept them as epistemically justifying anything. But we regard them as our best principles.

We even have two hedges to fall back on. If we do not accept the principle of seeming as synthetic *a priori* true, we can at least accept it as synthetic *a priori likely* to be true. And even if it is not *a priori*, we can accept the principle having some degree of *self-evidence*. All our justifications of the other principles will still succeed. Frege reminds us that the alternative is total skepticism of the sort Hume urges for causation and the external world. But there is all the difference between having the slightest evidence and having no evidence at all. And we have more than the slightest.

Again, there is more to epistemological ecumenicism. I discuss foundationalism and holism further in the next section.

Foundationalism Versus Holism

Epistemological foundationalism is the theory that single, individual pieces of evidence, each of which has its own intrinsic epistemic value, however minimal, are the basic epistemic data on which all other evidence is based on or derives from. Holism is the theory that the basing or deriving goes in the opposite direction: the epistemic value of any single individual piece of evidence is based on, derives from, or is a function of the whole or totality of all the evidence we have. Naturally, these theories are taken as great rivals. They are even respectively described as “first person” and ‘third person” theories, since single items of evidence are normally taken to be presented to single minds, while the totality of all our (!) evidence is normally taken to be social. But their difference is therefore as little as that between “first person” and “third person.” For we saw that there cannot even *be* a third person without a first person to be a different person from. And not only is a third person logically relative to and dependent on there being a first person, but a third person *is* a first person to himself. Thus first persons are logically prior to third persons. Of course, if there is a plurality of persons, then every first person to himself is a third person relative to everyone else. But first persons are still prior. For if there is only

one person, she cannot be a third person to anyone else. She could *speak* or *think* of herself in the third person tense, much as Caesar wrote his books in the third person ("Caesar conquered Gaul"); but really she is not. She would only be a qualified third person who really "is" a first person. Technically, it would be a case of illusion, since she exists and is only misdescribing herself (though she is succeeding in referring to herself via a Donnellanian referential use of her implicit self-description). Thus foundationalism is logically prior to holism. Thus they are modally and formally distinct with a foundation in foundationalism.

There is also no doubt that a single datum of evidence can defease another and can even falsify a whole theory. Again, "There is nothing like a sordid fact to slay a beautiful theory" (T. Huxley 1870 / 1893–1894, paraphrase). This is what Popper's scientific falsifiability thesis is all about.

The defeasing of one epistemic datum by another is much like the defeasing of one value by another in ethics. In fact, it is an instance. For epistemic value *is* a value. Likewise even for logic, where a *good* inference defeases a weak or—shall I say it?—a *bad* one. For a good inference is one we *ought* to draw. It is the one that has *value* as an inference. And a bad inference has *negative value*. It is one we *ought not* to draw. This is old news.

Since seemings are defined as qualified objects that are directly presented as rationally or at least objectively seeming to be the case, the theory of seeming is foundationalist. And ironically, holism is foundationalist too. For whole bodies of evidence, and indeed our evidence as a whole, *are*, most fundamentally, qualified objects that are directly presented as seeming to be the case. Once again, foundationalism is logically prior to holism. To be sure, the converse is that any single datum is a *whole* datum, and has in that sense a holistic unity. But that is merely a case of *ens et unum convertuntur*. Even a simple object with no complexity whatsoever has unity in that sense. *Quodlibet ens est unum*!

I also offer a vicious infinite regress argument against the priority of epistemic holism. If piece of evidence P1 depends for its epistemic value on piece of evidence P2, and so on, then no piece of evidence can have any value at all, if no piece has any intrinsic value. We would end up not with holism, but total skepticism.

We can also argue against the priority of epistemic holism by analogy to Russell's argument against metaphysical holism in natural science. Russell says:

> There are many possible ways of turning some things hitherto regarded as 'real' into mere laws concerning the other things. Obviously there must be a limit to this process, or else all the things in

> the world will merely be each other's washing. Russell 1954 / 1927: 325)
>
> We must find some reality for the electron, or else the physical world will run through our fingers like a jelly-fish. (Russell 1954 / 1927: 319)

Likewise, some data must have intrinsic epistemic value, "or else all the [evidence] in the world will merely be each other's washing," and "the [epistemic] world will run through our fingers like a jelly-fish."

I accept both the regress argument and the analogical argument based on Russell. In fact, the two arguments are distinct only in reason. For neither argument logically can succeed unless the other succeeds. But the deepest and most general solution of the conflict is metaphysical ecumenicism. For the two "rival" theories are distinct only in reason. Again, epistemological ecumenicism is just an another instance of metaphysical ecumenicism. It is the ecumenical metaphysics of evidence. It is the ecumenical "ontology of the knowing situation" (Bergmann 1964: 126).

Epistemic holism is not rejected as wrong. It is admitted as having limited validity. It is affirmed and subsumed as distinct only in reason from foundationalism. The two theories are right in what they affirm, and wrong only in what they deny about each other. This is what metaphysical ecumenicism is all about, as I showed in chapter 3.

I assume that epistemic foundationalism and holism are (1) both intelligible, (2) both logically possible in the wide *a priori* sense of logic, and (3) are logically equivalent as logical analyses of ordinary talk of evidence, that is, save the epistemic appearances equally well. Those are the three conditions of metaphysical ecumenicism as applied to epistemic foundationalism and holism.

Thus we may say I am not a strict foundationalist. For I do admit holism as distinct only in reason from foundationalism, much as I admit universals in re as distinct only in reason from universals ante rem, or a bit closer to home, classes as distinct only in reason from their memberships, and closer yet, as well as more deeply and generally, wholes as distinct only in reason from their parts. For our holistic evidence is merely a whole, and our individual data are merely its parts. This is evidence as epistemic mereology. Indeed, metaphysical ecumenicism is metaphysical mereology. May others explore the logical details.

For a critique of Quine on empirically equivalent theories, see my (2006; 1995). The critique also applies to foundationalism and holism themselves, insofar as they are themselves empirically equivalent theories. For surely the foundationalist and the holist admit same ordinary, pre-philosophical evidence, and merely offer

different logical analyses of it. Empirically equivalent theories are identical in the epistemic data they admit, and are distinct only in theoretical reason, i.e., in their formulations of theory.

Justification of the Traditional Definition of Knowledge

Theory of seeming epistemically justifies the traditional definition of knowledge as true belief adequately or sufficiently justified by evidence. Keynes' theory that evidence is degree of logical relevance can do much the same, and so can Russell's theory of degrees of self-evidence or intrinsic objective likelihood, where their theories are viewed as widely applying to all evidence. Chisholm and Carneades can do this as well. All we need to add adequacy / sufficiency, truth, and belief to our respective concepts of evidence. For our respective concepts of evidence are distinct only in reason. This too is epistemological ecumenicism. And on the traditional definition, evidence and knowledge are modally distinct with a foundation in reality in evidence. All knowledge is evidence in logical part, but not all evidence is part of knowledge.

Going back at least to Plato, the traditional definition of knowledge is that subject *S* knows that proposition *P* if and only if (1) *S* believes that *P*, (2) *P* is true, and (3) *S* has adequate or sufficient evidence *E* for *P*. The theory's traditional justification is in part that *S* cannot be said to know that *P* if *S* does not believe that *P*, or if *P* is not true. But not every case of true belief is a case of knowledge. To give a common example, suppose there is a pasture with a hill. In front of the hill is a fake cow. Behind the hill is a real cow. *S* passes in front of the hill, sees the fake, and forms the true belief that there is a cow in the pasture. But *S* does not *know* that there is a cow in the pasture, and the reason can only be that *S* does not have adequate or sufficient evidence of that. For all *S* sees is the fake. Thus condition (3) must be added to (1) and (2). And nothing further seems needed. Thus conditions (1)–(3) are jointly necessary and sufficient for knowledge.FN4-4

Some object that the definition of knowledge has a fourth condition which they call psychological certainty. They argue that if you *know* something, then you must be *psychologically* certain that it is the case. For how could you not be psychologically certain that P is the case, if you *know* that P is the case? If you know, how could you have even the slightest psychological doubt?

The objection assumes that if we know, we know that we know. For if we do not know that we know, then there is logical room for psychological uncertainty. But I think that assumption is a safe one. How can we know, if we do not know that we know?

Of course, there is a place for ordinary language uses such

as, "Oh, I forgot that I already knew that. But for a while I wasn't sure." That is just the dispositional use of "know," on which we are said to know things, such as that one plus one equals two, even when we are asleep or attending to another matter. Such uses have their roles. But they are clearly secondary to and dependent on the definition of what knowledge is, though of course they must be logically consistent with it. In fact, knowledge is a pros hen term in Aristotle's sense, meaning that there is a primary use and at least one secondary use, the dispositional use, that is related to the primary use.

There is a closely related question about representational adequation in my (2021 / 2020: 26). A concept representationally adequates (is adequate to) a thing if it perfectly and completely represents its reality, i.e., what the thing is. Descartes holds that we can have adequate knowledge in the representational sense only of a few things, and we can never know we have it, because we are finite and limited, and there can always be more to the reality of a thing than what we know of it (my 2021 / 2020: 26). But Spinoza says that the converse is true: we always know if we have adequate knowledge of a thing, since if we know something, we must "know that we know" (my 2021 / 2020: 26 quoting Spinoza). Thus if we know, we know that we know, but only if we know adequately.

My view is that evidence adequate for knowledge, and adequate for knowing that we know, thus dispelling psychological uncertainty, can be had in a more appropriate and less Procrustean sense of "adequate." Namely, we can understand adequate evidence merely as evidence sufficient for knowledge, regardless of whether it is representationally adequate. For evidence sufficient for knowledge logically need not require a complete and perfect understanding of a thing. For example, I can know that one plus one equals two without a complete and perfect understanding of all the infinitely many properties and relations that one, two, addition, and equation have to all the infinitely many other numbers. (Properties are monadic relations, and relations are polyadic properties.) And on its face, adequate evidence in the sufficient sense is consistent with the dispositional sense of "knowledge." In fact, knowledge based on sufficient evidence is logically prior to dispositional knowledge. For it analyzes all knowledge, *including* dispositional knowledge, as having sufficient evidence as a logical constituent. Thus dispositional knowledge is only modally distinct from knowledge based on sufficient evidence. That is clear from their pros hen relation. For dispositional knowledge is precisely knowledge based on sufficient evidence that we *would* have if we *were* awake, not attending to another matter, and so on.

One might also object that knowledge based on sufficient evidence logically can and must have psychological certainty as a

logical constituent, since if our knowledge is based on sufficient evidence, then we know that we know, and this implies that we have psychological certainty.

My reply is that this is a non sequitur. Nothing is implied about our emotions, and psychological certainty is an emotional state. For psychological *un*certainty is an emotional state, and the only difference is a negation.

In any case, I reject both objections for categorial reasons. Psychological certainty logically cannot be a constituent element of knowledge. For knowledge and evidence belong to the realm of the objective and rational. And just like emotions, mere psychological certainty is nonrational. It is emotional subjective uncertainty, not cognitive objective uncertainty. And emotions are not and logically cannot be a logical constituent of objective knowledge.

When we casually speak of emotional knowledge, we do not mean that the knowledge as such is emotional, but that it is cognitive knowledge *about* emotions, or cognitive knowledge that emotionally *moves* us, such as learning of the death of a friend. And the logical fallacies of composition and division do not apply here. For knowledge is objective and rational if and only if all its logical constituents are. Thus we logically can know things even if we are emotional doubters. And conversely, we logically can be psychologically certain even if we do not know anything, and even if we have little or no evidence at all. That happens all too often!

There is a fourth logical constituent, a sub-constituent, in the logical analysis of knowledge. It is rational or at least objective cognitive certainty, as opposed to psychological or subjective emotional certainty. It is logically implied by, and is thus, on the relevant containment entailment theory of logical validity, logically contained in, the logical constituent of sufficient evidence. The logical containment of cognitive certainty in sufficient evidence is like that of color in red. The distinction in reason is synthetic *a priori*. Cognitive certainty if and only if sufficient evidence. And cognitive certainty if and only if knowledge. This last point can be discerned both by logical transitivity and directly as self-evident.

We saw in chapter 3 that on the containment and dependence arguments, the ontological interpretations of logical analysis we called positive construction, reduction, and elimination are a progressive series of greater ontological abstractions, and that positive construction wins in that all the logically contained and containing entities of all three interpretations exist, including its own. And on positive construction, if the traditional definition of knowledge is correct, then knowledge exists if and only if all its logical constituents exist. And that is just what philosophers who accept the traditional definition of knowledge hold, if they are not reductionists or eliminationists.

Butchvarov's Objection to the Traditional Definition of Knowledge

Butchvarov rejects the traditional definition of knowledge as true belief based on sufficient evidence. He rejects it by arguing that there is no concept of evidence in the first place. His solution is to abandon the search for a logical analysis of knowledge into logical constituents, or at least for a logical analysis that includes evidence as a constituent. He defines knowledge instead as the unthinkability of mistake (Butchvarov 1998: 15, 82–88; 1989: 142–145, 150–157, 162–163; 1970: 75–88, 87, 93, 183, 268, 272, 287, 302–304, 315). Thus for him, knowledge has at least five logical constituents: not, think, ability, mistake, and the 'of' relation.

Butchvarov is obviously right that if there is no concept of evidence, then the traditional definition of knowledge must fail.

Butchvarov's argument for his own definition is in effect simply that if the traditional definition of knowledge is wrong because we have no concept of evidence, then what else could knowledge be, except for the unthinkability of mistake? No doubt he thinks that this is a reductio ad absurdum, a sort of indirect proof by cases where we cannot even think of anything else, besides unthinkability of mistake, as a plausible definition of knowledge. But if so, then he commits the logical fallacy of appeal to ignorance (argumentum ad ignorantiam). For there could always be another plausible definition of knowledge just around the corner. That is certainly a zetetic possibility, meaning a possibility relative to the present state of investigation. And his premiss that there is no concept of evidence is false. For the concept of evidence he is looking for is just our concept of objective epistemic seeming! Thus his argument not only commits a logical fallacy, but is also based on a false premiss.

Butchvarov might try to defend himself against the charge of fallacy by an indirect proof by cases in which unthinkability of mistake is the only plausible alternative. But the plausible (not to say correct) alternative analysis is not just around the corner as a philosopher's pipe dream. It is already here. It is the analysis of the concept of evidence as being the concept of objective seeming. And that is also what makes his premiss false. We *have* a concept of evidence! It is objectively seeming to be the case. And going back to Carneades, the concept, or one much like it and distinct only in reason from it, has been around for thousands of years.

Butchvarov's definition has at least five further problems.

First, it violates Aristotle's rule that a definition should not be negative where it can be positive. For on the face of it, knowledge is a positive concept, and unthinkability of mistake is a negative concept. In contrast, true belief with sufficient evidence is

a positive concept, since all its elements are positive.

Butchvarov's definition violates Aristotle's rule twice. For unthinkability and mistake are both negative. Each concept divides into two sub-concepts one of which is negation. Unthinkable is not-thinkable, and mistake is not-correct. Thus his definition now has at least six logical constituents.

Butchvarov might reply that he does not violate Aristotle's rule because the definition of knowledge cannot be positive, since it can only be his negative definition, since there is no concept of evidence. But again, the concept of objective seeming is positive, and is what evidence is at bottom.

Second, even if we accepted Butchvarov's definition, we would still need to add the logical constituents of truth and belief. For they must be in *any* plausible definition of knowledge. How can we know something that is not true, or that we do not even believe? I think Butchvarov would agree. If so, then his definition now has at least eight logical constituents. And we could find more.

Third, Butchvarov's definition of knowledge is a stopgap. For apparently even he *would* accept the traditional definition of knowledge, if there *were* a concept of evidence. And the concept of objectively seeming to be the case fills the gap.

Fourth, if my definition of knowledge as true belief based on sufficient evidence that is based on epistemic seeming is correct, then Butchvarov's definition fails to meet Aristotle's demand that all philosophy state the 'why'. *Why* is mistake is unthinkable if we know something? On my traditionalist account, it is because our evidence is sufficient for knowledge. On my account, Butchvarov has not pushed the 'why' back as far as it can be, namely, to the ultimate level of the concept of seeming. Of course, even the concept of seeming has its overlapping logical elements. A seeming is a (1) direct (2) presentation of a (3) qualified (4) object that (5) objectively (6) seems (7) to be the case. But that is just the logical analysis. The concept of seeming itself is only element (6) on one level, but is a logical emergent from all the listed elements on another. Recall our positive construction ontological interpretation of logical analysis, on which the analyzed thing emerges as real.

Fifth, Butchvarov's definition does not meet Aristotle's requirement that a theoretical definition state what the thing is. And that explains the fourth problem. Butchvarov's definition does not state the why because it does not state the what. The what explains the why. Thus problems (4) and (5) are distinct only in reason with a foundation in reality in the what. And it is the most general what.

I believe that Butchvarov would admit all five problems, if he agreed that there is a concept of evidence. For I believe his view is only that his definition of knowledge is the best that can be given in the absence of a concept of evidence. And he may well be right

about that. In fact, his general strategy is a very standard one. It is in effect Mill's method of residues. As the fictional detective Sherlock Holmes says, 'eliminate the impossible, and whatever remains, however improbable, must be the case'. But "impossible" is too strong in this case. Butchvarov expressly says that we might develop a concept of evidence someday. It is just that he thinks we do not have such a concept now, and therefore he cannot accept the traditional definition of knowledge *at this time* (Butchvarov 1970: 319). Thus he has a sufficient reply to the charge that he commits the fallacy of appeal to ignorance. For he agrees that a concept of evidence and thereby the traditional definition of knowledge might always be just around the corner.

In fact, we have *several* positive concepts of evidence that are distinct only in reason from each other, any one of which can be used well enough to define knowledge: Keynes', Russell's, Chisholm's, Carneades', and mine. But I believe that I define the concept of evidence best. For I believe that seeming is the best phenomenological foundation in epistemic reality for all the other concepts of evidence that are sufficient for defining knowledge. As for the others, only Russell has a fully developed phenomenology. And unfortunately, it is British empiricist, based on via moderna ideas. I admit it as distinct only in reason from mine, but it is a less valid phenomenology. See chapter 1.

Butchvarov's definition of knowledge is bold, elegant, and heroic. Given the situation as he sees it, it is deeply original and ingenious. Even I think the best possible fallback. In fact, if it is logically equivalent to the traditional definition, we must accept it, though as a less valid definition for reasons I have already given.

Butchvarov argues that we have no coherent, unified single concept of evidence because all sorts of different things are called evidence. There are only Wittgensteinian "family resemblances" among them. Butchvarov provides a brief list (Butchvarov 1970: 285). We can add more things to his list: formally valid proofs, intuitively valid synthetic *a priori* inferences, inductive evidence using mathematical techniques for approximating large numbers, mathematical induction as a deductive proof procedure, probable inferences from past instances, analogical arguments, inference to the best explanation, perception, introspection, memory, subliminal Gestalt perception (sensory input below the threshold of conscious sense-perception), common sense, experience, professional sense of the situation (the logical fallacy of appeal to authority applies only to deductive arguments), testimony by witnesses, and, in some theological perspectives, being written in a scripture. To speak of a single concept of evidence would seem to make this list a Hegelian 'night in which all cows are black'.

Unfortunately for Butchvarov, all the different things we

rightly call evidence do have one thing in common: they make something objectively seem to be the case, at least to some degree. This solution is on a deeper and more general level.

Butchvarov is looking at all the things we rightly refer to as evidence and asking what *they* have in common. But he should be looking instead at what Aristotle calls the 'why'. He should be looking at *why* we rightly refer to them all as evidence. This may be called fallacy of not looking for the why, or more precisely, of mistaking a thing we rightly *call* evidence for the reason *why* we rightly call it evidence. And surely we call all these different things evidence for the same *reason*. Namely, they all make something objectively seem to be the case, at least to some degree.

Butchvarov's argument commits a second fallacy as well. Namely, he should be looking not at the *referents* of the term "evidence" to see what *they* have in common, but at the *sense* the term expresses, which is always the same. This may be called the fallacy of confusing sense and reference. For the term "evidence" always expresses the same sense at bottom, the epistemic sense of objectively seeming to be the case.

These two fallacies are essentially related. For we assay an ordinary sense or connotation as a qualified object. And a qualified object that is directly presented as seeming to be the case is precisely what a seeming is. And the seeming is precisely why we rightly call evidence "evidence." Simply put, the sense of the term "evidence" is what expresses the why, which is the direct seeming to be the case. It expresses the why because it expresses the what.

Butchvarov's argument commits a third fallacy, the fallacy of confusing the particular with the general, or perhaps better, of confusing different levels of generality. This is evident from the fact that what all the different *particular* things (or all the different *specific kinds* of things) we rightly call evidence have in common is that they make *something* objectively seem to be the case, at least to *some* degree.

To sum up, I agree that we are not going to find a concept of evidence in a list of family resemblances no one of which is to be found in every instance of evidence. But that is looking in the wrong direction in multiple ways. It is looking at the things instead of the why. It is looking at the referents instead of the sense. And it is looking at the specific instead of at the general.

Likewise, I would agree that we are not going to find that the concept of evidence is any sort of disjunctive concept. That would be no better than a disjunctive list of family resemblances. This is a refutation of the "disjunctive cluster of descriptions" theory of reference, at least in the case of referents of the term "evidence." For there are two kinds of referents, directly presented qualified objects and indirectly presented lower-level objects. And

a seeming is a directly presented qualified object that is directly presented as objectively seeming to "be" a lower-level object. It is always a direct referent, and it is always the same *kind* of direct referent, namely, a seeming. Of course, we can *also* indirectly refer to a seeming, for example as the seeming I had last night.

I would agree that we cannot admit a generic determinable concept of evidence that has indefinitely many determinates, namely all the things or kinds of things we rightly call evidence. For we are looking in the wrong direction, as I just described. What they all have in common is not some literal property they all have, but, as opposed to that, their justification, their 'why'.

And I would agree that we cannot admit a pros hen primary concept of evidence that has indefinitely many related secondary concepts, one for each kind of thing we call evidence. This is the worst idea yet. For this is nothing like the concept of a seeming. For all seemings are the very same kind of thing, namely direct presentations of qualified objects that are directly presented as seeming to be the case. No disjunctive clusters of properties, no clusters of family resemblances, and no clusters of pros hen related concepts need apply. For the collection of different things rightly called evidence is just what Butchvarov is wrongly looking at.

I define evidence on the most basic level as follows. A direct presentation of qualified object *Q* to subject *S* is evidence for object *O* to *S* just in case (1) *Q* is level n, (2) *O* is level n - 1, and (3) *Q* objectively seems to *S* to "be" *O*. I explained what it is to "be" a level n -1 object, in the hierarchy of phenomenological levels, in chapter 1. Object *O* can be either an object in itself or a qualified object, but must be one level lower than *Q*.

Again, I define *a* seeming as follows. A seeming is a (1) direct (2) presentation of a (3) qualified (4) object that (5) objectively (6) seems (7) to be the case. It is element (6), the concept of seeming, as opposed to the concept of *a* seeming, which has seven elements including that one, that is logically primitive.

Knowledge, evidence, and seeming are formally distinct from each other with a foundation in reality in their elements, and are modally distinct from each other, since knowledge is dependent on evidence, and evidence is dependent on seemings.

Rejection of Radical Cartesian Doubt

For our purposes here, we may say that Descartes holds that knowledge requires that there be no epistemic possibility of mistake. Mistake is epistemically impossible if, given the evidence, mistake is logically impossible in the wide *a priori* sense of logic. And there must be no epistemic possibility of mistake about the

evidence either. The evidence must be fully self-evident, not just to some degree. In effect, Descartes demotes Butchvarov's definition of knowledge to a necessary condition. But I think it is more. If it is logically equivalent to the traditional definition, then it is also a sufficient condition of knowledge. It is less valid only because it is less illuminating. It does not state what knowledge positively is.

Descartes requires more of knowledge than no *epistemic* possibility of mistake. He requires that there be no possible *radical doubt*, whether there is any evidence for the doubt or not. I agree with Phillip D. Cummins (1973) that for Descartes, if we can even just intelligibly describe a doubt that is logically self-consistent and not logically self-defeating, then the doubt is *radically* possible, and defeats our claim to know. Note that Descartes does not state what knowledge positively is any more than Butchvarov does. In fact, Descartes makes the definition radically more negative.

Descartes states three radical or 'metaphysical' doubts he believes to be of this sort. He says they apply to every claim of knowledge we have, with only two exceptions: knowledge of what seems to me to be the case, and knowledge that I exist. For, he holds, it would be logically self-defeating to raise any sort of doubt about those two things. For I cannot doubt what seems to me to be the case, and I must exist as a doubter if I am to have any doubts.

Descartes' three radical doubts are: the possibility that we are dreaming; the possibility that we are like machines that are internally wired to compute the wrong answer as correct, so that we cannot be aware of our wrong answers; and the possibility that we are deceived by an evil genius. The evil genius is often thought to be the almost-almighty Devil of Christianity, who is certainly logically possible. But Descartes does not say that, and it is not necessary to the doubt to think so. The evil genius could even be a human superscientist who is keeping our brain in a chemical vat and feeding it (i.e. us) perceptual delusions about the world around us, and perhaps even neurally confounding all our logical and mathematical computations. In recent decades, the evil genius has dropped out of the vat discussions, and we are asked merely to consider the possibility that our brain is in a vat and is deceived about everything, except for what seems to us to be the case, and for our existence. And that too is an intelligible description of a logically self-consistent doubt. Thus it is a fourth radical doubt.

Following Cummins (1973), knowledge claims that meet our ordinary and usual standards of sufficient evidence may be called *evidentially certain*. Knowledge claims that are not only evidentially certain, but are also not subject to any radical or 'metaphysical' doubts, may be called *metaphysically certain*. Thus Descartes is requiring that knowledge be not merely evidentially certain, but also metaphysically certain. And he seems to be right.

For how can we be said to *know* something if any doubt can be intelligibly described and is logically possible given our evidence?

Of course, when we seem to ourselves to be awake, it *seems* to us that we are not asleep and dreaming, are not neurally wired like a malfunctioning computer to do arithmetic wrong, are not being deceived by an evil genius, and are not brains in a vat. And even aside from the evidence that seemings provide, it is plain that in an ordinary, pre-philosophical sense, we have plenty of evidence that these things are *not* the case, and no evidence that they *are* the case. But that is not to the point. Descartes is implying that we do not *know* that these things are not the case, because all the doubts apply their own denials and to denials of each other. For example, all four doubts can be intelligibly described and are logically possible concerning our claim to know we are awake. For it is intelligible and logically possible that all our evidence that we are awake is dreamed, or due to brain malfunction, an evil genius, or a scientist keeping our brain in a vat and deceiving it.

My criticism of Descartes is Dialectics 101. Descartes' biggest mistake in epistemology is to overlook the contrapositive of his thesis that if we have even a radical metaphysical doubt that P, then we do not know that P. The contrapositive is that if we *do* know that P, then we do *not* have even a radical metaphysical doubt about P. Note that the contrapositive of a hypothetical (if-then) statement is always logically equivalent to the original statement. In fact, the two statements *formally* imply each other. Even the relevantists admit contraposition as a valid deductive argument form! And the fact that an evil genius could deceive us about the mutual entailment, or even the truth of the contrapositive, and that the other radical doubts can be raised, is not to the point. For if we *do* know the contraposition is valid, then we do *not* have even a radical metaphysical doubt about it. It follows from all this that Descartes' argument for radical skepticism is unsound. It fails to exclude the possibility of metaphysically certain knowledge. For he argues only in one direction, and there is a second direction, the contraposited direction, that must be argued in as well. And as they say, one philosopher's modus ponens is another philosopher's modus tollens. Thus we have a standoff at the very least. Descartes argues from his three radical doubts to a radical skepticism that applies to everything except our knowledge of our own existence and of what seems to us to be the case. But he never argues from metaphysical certainty to the conclusion that radical doubts *also* do not and cannot apply to something *other than* our knowledge of our own existence and of what seems to us to be the case. He never considers any other possible cases of metaphysical certainty, since he thinks his argument has already ruled them out.

The literature is full of warnings that metaphysical doubt

applies to Descartes' own argument for metaphysical doubt. But all that shows is not that Descartes' argument is wrong, but only that it is not known with metaphysical certainty to be true. The argument could still even be evidentially certain! Certainly the *validity* of his argument, and the *validity* of my contraposition of it, are equally evidentially certain, and the only question is whether the premisses are true. But my criticism goes beyond all that to detect a specific, elementary dialectical flaw in his argument. And no 'converse flaw' exists in my contraposited argument. The very contraposition takes care of that. If we *know*, we *know*!

The specific flaw I detect is a modal scope distinction confusion that is familiar to logicians today. A modality can either prefix and apply to a whole statement, or occur within a statement and apply only to part of it—a very different scope of application.

The difference between Descartes' argument for radical doubt and its contraposition is illuminated by the familiar scope distinction between the negative "It is impossible for us to see that *P*" and the positive "We see that it is impossible that *P*." In the negative statement, an impossibility operator prefixes and applies to the whole statement. In the positive statement, the same impossibility operator occurs within the statement, and applies only to the sub-statement *P* that follows it. Descartes' argument uses the negative scope, while its contraposition uses the positive. For his argument tries to show that based on his radical doubts, it is impossible for us to know that *P*. It does not and cannot show that we *know* it is impossible that *P*. For that is a knowledge claim of the very sort his skeptical argument aims at. His argument cannot even show that we *know* it is impossible for us to know that *P*, for this too is a knowledge claim of the very sort his skeptical argument aims at. Nor can his argument show that we have no evidence, or even that we have no evidentially certain evidence, for *P*. It can only show that we do not *know* that we have it. We can have *evidence*, and even *evidentially certain* evidence, that we have evidence, and even that we have evidentially certain evidence. It is just that we cannot *know* that we do, according to his argument. In contrast, our contraposition is of the positive form, "We know (i.e. we are metaphysically certain) that *P*, therefore we positively see it is impossible for even radical doubts about *P* to be true." For if we *know*, all doubts, even radical doubts, vanish as known to be false.

The next step in my dialectical refutation of Descartes is my thesis that *evidentially certain statements are, as such, always also metaphysically certain*. Granted, they must be *genuinely* evidentially certain statements. But there is no difference between a genuinely evidentially certain statement and an evidentially certain statement, any more than there is a difference between a genuine horse and a horse.

My argument for that thesis is this. If we are evidentially certain that *P*, then we are *also* evidentially certain that any radical or metaphysical doubts about *P* are, for all their intelligibility and logical possibility, *false*. For if we are evidentially certain that *P*, then we are also evidentially certain that *any* doubts about *P* are in fact false, whatever they may be. For we are evidentially certain that *P* is true. And that is why evidential certainty is logically equivalent with metaphysical certainty. For it *already* defeats all radical doubts. Descartes overlooks this vital point because it can only be seen when we contraposit his thesis. It belongs to the contraposition. On the contraposition, we can see that evidential certainty is far stronger than Descartes thought, and defeats even radical doubts. And perhaps that is why evidential certainty is the normal concept of certainty belonging to knowledge. Descartes was adding something to it that was already there. But he could not see that because he did not consider the contraposition of his thesis.

In any case, if I positively know that 1 + 1 = 2, then I also positively know that no evil genius is or can be deceiving me about it. I need not even have an evil genius specifically in mind. For if I know that *P*, then I know that *no* doubt about *P* can be true. For that would imply that *P* could be false. And it is part of the very definition of "*S* knows that *P*" that *P* is true. That is just the contraposition again. If we *know* a thing, we can have no cognitive doubt, not even a radical or metaphysical doubt. For if we *know* a thing, we can have no rational or objective doubt at all. And that is ironically why Descartes' if-then thesis is true! If we contraposit the contraposition, we are back to his thesis.

The contraposition even affects how epistemic concepts relate with logical concepts. For if *P* logically can be false, then Descartes can use the mere *logical* possibility that P is false as a radical doubt about *P*, to show that we do not know that *P*. For we can intelligibly describe that doubt, it is logically self-consistent, and it is not logically self-defeating. Thus it satisfies the definition of a radical doubt. But contrapositively, if we *know* that *P*, then even if *P* logically can be false, that is no reason for doubt, since we know that *P* is true. That is precisely what we know!

The converse (not: contraposition) of our thesis that evidential certainty implies metaphysical certainty is trivially valid. Metaphysical certainty trivially includes evidential certainty. It is part of the definition! This thesis and its converse conjoined give us the logical equivalence of the two kinds of certainty. Thus they are distinct only in reason. Metaphysical certainty merely makes explicit what is already implicit in evidential certainty, namely, that it defeats even radical doubt precisely because it is sufficiently evidenced to show that proposition *P* is true.

Therefore all evidence belongs to the level of evidential

certainty at most. For metaphysical certainty is just the same level more fully articulated so as to include this logical constituent.

But then all knowledge belongs to the level of evidential certainty too. For it already requires sufficient evidence to show that *P* is true, and the level of metaphysical certainty adds no new evidence at all, according to its own definition.

Can There be Knowledge by Perception or Memory?

This section is about the ordinary world, not about science. For Heisenberg's uncertainty principle implies that in science, no evidence can be logically sufficient for knowledge in the traditional sense. Thus there is no possibility of knowledge in the traditional sense in science. But I think we knew that anyway. For 'scientific knowledge' is only the best empirical theory we have at the present time. And that certainly includes the uncertainty principle itself!

If we know that 1 + 1 = 2, then we know that any doubts about it are in fact false. And many, perhaps most people would agree that we do know a few simple truths in arithmetic. But what about sense-perception and memory? Even granting that *if* I know there is a rock on the path by perception or memory, then I know any doubts about it are in fact false, the question is, *do* I (or even *can* I) know anything by perception or memory?

I seem to see a rock while walking on a path. That is my positive evidence that there is a rock on the path. Whether my evidence is sufficient for evidential certainty or not, it is not just evidence that there is a rock on the path. At least by implication, it is also positive evidence that I am *not* dreaming, *not* built to misperceive, *not* deluded by an evil genius, and *not* a deluded brain in a vat. And my evidence for those implications is precisely that I *do* seem to see the rock. Thus to the very same extent that I have evidence that I see the rock, I also have evidence that these or any other doubts are, for all their intelligibility and logical possibility, self-consistency, and lack of self-defeat, in fact false. And this is just the contraposition of Descartes' skeptical thesis that we discussed in the previous section.

Now if that is the case for evidence as such, what about evidentially certain evidence? We must give the same answer, and for the same reason. For evidentially certain evidence is just an instance of evidence in general. If I am evidentially certain that *P*, then I am also evidentially certain that I am not dreaming that *P*, not built to be mistaken that *P*, not being deluded by an evil genius, and not a deluded brain in a vat.

If we cannot epistemically doubt evidence because of mere logical possibilities, then mere logical possibilities are no reason to

doubt evidentially certain evidence either. For that is just an instantiation of a universal truth about evidence to a particular kind of evidence. And this instantiation includes any evidentially certain perceptions or memories. If anything, there is *less* reason to doubt.

Logical possibilities are not evidence at all, except within logic, where for example they are conclusive evidence against a claim of logical impossibility.

Descartes portrays radical doubts as scary vampires. But they are empty, hapless shells with no evidential life of their own. They cannot suck the blood out of positive evidence. In fact, they are automatically warded off by positive evidence as if by a logical crucifix. For they are logically contrary to the positive evidence, and have no evidence of their own with which to defend themselves. The stronger the positive evidence, the better they are driven away. And they are turned to dust by the sunlight of knowledge. For if it is evidentially certain that *P*, then it is *exactly* as evidentially certain that an evil genius is not deceiving us that *P*.

One might object that I have only achieved a standoff. For one philosopher's modus ponens is another philosopher's modus tollens. I only showed that Descartes' thesis *has* a contraposition. And that is of no interest. *Every* hypothetical statement has a contraposition.

My reply is this is no mere logical standoff. If we have knowledge, then we positively *know*, and this stakes all radical doubts in the heart, as well as all epistemic doubts. And do we not know *anything*? Even Descartes holds that we know what seems to us to be the case, and that we exist.

One might object that my criticism may be well and fine in theory, but what about in practice? The real question is whether there *are* any actual cases of knowledge *other than* knowledge of what seems to us to be the case and of our existence.

My reply could be that I am just a theoretician. And even showing that Descartes' theory of knowledge is wrong, because it overlooks a contraposition and thereby changes a scope distinction, is a tremendous theoretical achievement. I could then leave it to each person to judge on her own whether she knows there is a rock on the path, or that $1 + 1 = 2$. I could also remind the objector that metaphysical doubts are mere logical possibilities, and that psychological doubt is not rational doubt. I could even note that knowledge in the primary sense is first-person (individual, not social), and therefore each person can only judge for himself in the end. We can even appeal to Kripke and say that such rock bottom primitive knowledge "may in a sense be irrefutable" (Kripke 1982: 51). But that does not really answer the objection.

My actual reply is that the question has been asked and answered. Evidentially certain evidence is evidence sufficient for

knowledge. What else could it be? How could it be evidentially certain if there are even 'radical' merely logically possible doubts? If we have evidential certainty, then we have no *epistemic* doubt, and that is all that counts. For if we have evidential certainty that *P*, then we also have evidential certainty that all doubts, even merely intelligible, logically possible doubts about *P*, are in fact false.

In a perfectly ordinary sense of "know," of which the traditional definition of knowledge is still the best logical analysis, I do know that 1 + 1 = 2. I even know a rock in the path when I see one. And I I know I am awake when I see the rock.

To think that such knowledge can be defeated by radical doubts is to get the contraposition backwards. We only need the rational courage of our epistemic convictions to see things aright. And we do not even need knowledge to ward off merely logical possible vampires. Any evidence will do. For outside of logic, a merely possible doubt has no epistemic value at all.

Descartes' program of radical doubt, which applies three intelligible and logically possible doubts to everything, to see what survives the doubts and what does not, is a great contribution. His assessment of what survives the program and what does not is very illuminating. But at bottom, it is simply irrelevant to epistemology. Any evidence, however slight, is ipso facto also evidence that the doubts do not in fact apply, and are in fact mistakes. And that is Descartes's greatest mistake. His program is a great contribution to epistemology in that it led to deeper thinking. But it is a negative contribution based on a negative concept of knowledge. It shows us how not to do epistemology.

My criticism has nothing to do with verificationism, that is, with what "This is a rock" or "I know this is a rock" means to us verificationally, *contra* O. K. Bouwsma (1949). Verificationism is self-defeating. My criticism does not even concern Wittgenstein's more modest thesis that teaching and learning require paradigm cases, where we are concerned with paradigm cases of what "This is a rock" or "I know this is a rock" means to us, not to mention "I see a rock" and "I remember a rock." For that is changing the subject from epistemology to semantics. My criticism is epistemic, and simply uses the word "know" in its ordinary, pre-philosophical sense. However, I *also* accept the paradigm meaning argument for knowledge of the external world, as we shall see shortly.

It was quickly noticed that the logical positivists' principle of verification, "The meaning of a statement is the method of its verification" (Ayer 1959: 13), or more precisely, the principle that a statement is cognitively meaningful if and only if either logically possible empirical evidence is relevant to its truth-value or it is analytic, is itself unverifiable by empirical or by analytic means (Carnap 1959: 16). Nor can we save the principle from self-defeat

by making it into a definition or "meaning postulate" that cognitive meaning is verifiability (Carnap 1952; compare Ayer 1952: 15–16), thus making the principle of verification an analytic truth. For the terms "cognitive meaning" and "verifiability" are directly given as expressing very different senses. And a mere postulation would have all "the advantages of theft over honest toil" (Russell 1971 / 1919: 71). Abraham Lincoln adds that merely calling a dog's tail a leg does not make it a leg; the dog still has only four legs. That is, merely claiming, saying or "postulating" that cognitive meaning is or even implies logical positivist verifiability does not make it so.

This point must not be confused with Quine's criticism of Carnap's meaning postulates that natural languages do not work like artificial languages, and that the analytic-synthetic distinction itself does not even make clear sense for them, let alone be fixable by stipulation. My point is phenomenological, and has nothing to do with Quine's anti-phenomenological theory of holistic evidence and meaning, nor with Quine's rejection of the analytic-synthetic distinction. See Hannes Leitgeb and André Carus (Leitgeb 2020).

Of course, there is nothing wrong with a definition that is an *informative identification*. In fact, that is just what we want in a theoretical definition that informatively states what a thing is (Copi 1978: 140–141). And on our phenomenology, that is just a factually informative identification of two qualified objects as "being" the same object in itself (chapter 1). But the verificationist informative identification or 'meaning postulate' of cognitive meaning as being verifiability is not just self-defeating. It is also too narrow. For on the face of it, some but not all cognitively meaningful statements are verifiable, including all the traditional metaphysical statements that verificationists find cognitively meaningless due to their self-defeating verification principle. And the insight that their definition or principle is too narrow is ordinary and pre-philosophical. For no ordinary person would take every cognitively meaningful statement to be empirically verifiable or analytic. And our phenomenology is crystal clear in reflecting that ordinary insight. For us, "cognitively meaningful" and "verifiable" directly express and refer to two very different qualified objects which are as essentially different as they directly appear to be. And it is transparent to the reason that they "are" not the same object in itself.

The principle of verification can still define a limited *kind* of cognitive meaningfulness, namely, the verifiable kind. That might be helpful in philosophy of science (This is a well-known suggestion.) And it is certainly admissible on metaphysical ecumenicism. For cognitive meaning is only modally distinct from verifiable cognitive meaning, exactly as genus is from species, with verifiability as the difference (differentia). On this restriction, the principle is no longer self-defeating. For now it can be cognitively

meaningful without having verifiable cognitive meaning. That is, it no longer logically needs to apply to itself. Also, the principle is now plausible for the first time. For it is a leap over a narrow ditch indeed to informatively identify a statement's *verifiable* cognitive meaning (if any) with its method of verification (if any).

Carnap also suggests making the principle of verification a mere *proposal* that could be useful in science (Carnap 1936). Thus he is not even claiming the principle is true, but only, as Quine might put it, a principle of regimentation of science (Quine 1975 / 1960: ch. 5; Quine dedicates the book to Carnap). The question then devolves to which of the many subtle *variants* of the principle would best regiment science, that is, best capture what we want to preserve in science and best exclude what we want to reject in science. That issue is beyond the scope of this book. But waiving that, Carnap's proposal is perfectly fine if we restrict it to *verifiable* cognitive meaning, as I just explained in the previous paragraph.

Thus I ecumenically admit the principle of verification as having limited validity, namely as applicable only to *verifiable* cognitive meaning. And I can safely use that limited principle (it is safe from being self-defeating) to justify and accept Bouwsma (1949)'s argument that we can sometimes *know* that "This is a rock" is true because sometimes our perceptual situation is just what that statement *means* to us, on our limited verificationism. It also helps that our ordinary perceptual situations are via antiqua. See chapter 1 on via moderna and via antiqua objects of perception.

Therefore I also accept the closely related Wittgensteinian 'paradigm case' argument that we sometimes have knowledge of the external world. For any perceptual situations which are just what ordinary statements about the world mean to us are, in virtue of that very fact, paradigm cases for teaching and learning such statements in the first place. The argument is that we sometimes know we are seeing an ordinary rock, since to teach and learn that very language, there must be paradigm situations of what it *means* to say "I see a rock." And they are ipso facto *also* paradigm situations of what it means to say "I *know* I see a rock." Indeed, the same argument applies directly to "I know I see a rock." For there must be paradigm cases of that too. And that is no coincidence. For the concepts of knowledge and meaning are related synthetic *a priori* in just that way. And in terms of my main argument based on perceptual evidential certainty, it is *because* we know with evidential certainty that we are seeing a rock that the situation is a paradigm of both what it means to say "I see a rock" and what it means to say "I *know* I see a rock.

Our 'limited verification principle' argument and our 'paradigm case' argument for knowledge claim K, "I know I see a rock," are modally distinct with a foundation in reality in paradigm

cases. For we logically need not accept the limited verification principle in order to accept there are ordinary paradigm cases of K. The first argument is: (1) K has verifiable cognitive meaning *if and only if* K is verifiable in teachable, learnable paradigm cases. (2) K is so verifiable. Therefore (3) K. And the second argument is: (1) K has verifiable cognitive meaning *if* K is verifiable in teachable, learnable paradigm cases. (2) K is so verifiable. Therefore (3) K. The second argument keeps only one conjunct of the principle.

We may and must require something more for knowledge of the external world. Descartes requires clearness and distinctness of perception. I disagree. For we can *know* that something is there even if it is *not* very clear or distinct. I believe Butchvarov gives the example of an object on a park bench late at night. We are not sure what it is, but we know it is there. What we need to add is not clearness and distinctness, but evidential certainty that the thing is there. Also, for public teaching and learning, as well as for social verifiability, we need public objects, or at least formally identical mental ideas across minds and time. We can easily meet that last requirement. For qualified objects are essentially public, and are distinct only in reason from private mental ideas that are formally identical across minds and time. See chapter 1.

Let us now carry the warfare into the enemy's camp. In fact, we have basically already done so. If a logical truth is evidentially certain to subject *S* at time *T*, the traditional test of knowledge, then it is also metaphysically certain to *S* at T, the Cartesian test of knowledge via radical doubt. For how could it be evidentially certain, how could we have sufficient evidence for knowing its truth, if it were epistemically possible that we are like a defective machine, or are being deceived by an evil genius? That these are *logical possibilities* is correct, but totally irrelevant. For if we *know*, then they are *epistemic impossibilities*. And that means that we know that these logical possibilities are in fact false. For a statement is epistemically impossible if we know that its denial is in fact false. That is what "epistemically impossible" *means*. We may even call this a paradigm case of what it means.

Likewise, if it is evidentially certain that I see a rock, then it is also metaphysically certain. The argument is exactly the same. As for whether we ever have perceptual evidential certainty, or knowledge that we see a rock, "Let every one be convinced in his own mind" (Paul, *Romans* 14:5). This is first-person epistemology! And we do accept the limited verificationism argument and the paradigm case argument. Are *they* not enough for evidential certainty, and even for metaphysical certainty? To be sure, it is logically possible that an evil genius is deceiving us about all these arguments. But logical possibilities count for nothing here.

As for perception, so for memory. One might think that the

case for memorial knowledge is weaker because memory is of things in the past, not the present. Russell did! But the arguments are exactly the same. For the limited verificationism argument and the paradigm case argument apply to K*, "I know I *saw* a rock," too. And as to evidential certainty, it is up to each of us to judge if we ever know that a memory is true. We are all first persons!

One might object that talk of *future* events is taught and learned too, but there is no perception or foreknowledge of things that do not yet exist. One reply is that teaching and learning about future events is based on present memories of past events that *used to be* in the future, and even goes forward over time as the future *becomes* the present. More deeply, future events are verifiable in the future. Most deeply, they are verifiable *in principle*. For there *will be* logically possible evidence that *will be* relevant to their occurring. Frederick Ferré makes this point about future religious events asserted by religions (Ferré 1961). We just have to wait and see about heaven. I merely wish to add that there is at least some evidence of future events even now. Futurology is based on it.

One might object that we can teach and learn the meaning of "yellow" even if nothing is yellow. For we might all have jaundice and thus experience the sensation of yellow in the same situations. (We can pretend that our eyes are not discolored yellow, since that is logically contingent.) I take this counterexample from Edwards (1965 / 1957: 504), but surely it is much earlier.

My reply is that in our phenomenology, qualified yellow is a public object. Thus we can teach and learn the meaning of "yellow" by paradigms of *qualified* yellow, even if qualified yellow "is" not yellow in itself. There is no way to know sensible yellow without sensing it. And for us that means a direct presentation of qualified yellow. It is not even *relevant* whether qualified yellow "is" yellow in itself, though we normally expect that it "is."

One might object that our understanding of rocks deepens with science and philosophy to the point that we may no longer accept some of the paradigm cases of rocks that we began with, and may accept as rocks our former paradigms of *non*-rocks, and vice versa.

My reply is that this has been asked and answered. Quine says of ordinary "medium-sized" physical objects that if we refuse to apply "the key words 'understood', 'real', and 'evidence' here,... [w]e should only be depriving them of the very denotations to which they mainly owe such sense as they make to us" (Quine 1975 / 1960: 3). More deeply, if we learn that iron pyrite (fool's gold) is not gold, the paradigm shift is irrelevant to the public nature of our teaching and learning what gold is.

One object that all that my contraposition of Descartes, the argument that evidential certainty *is* metaphysical certainty, the

limited verification argument, and the paradigm case argument can establish is that we can know qualified objects, not objects in themselves. And then we have not refuted Descartes at all. We have merely replaced his ideas with qualified objects, and not got beyond them to the external world in itself.

My reply is that all the arguments apply to knowledge of objects in themselves. If we are evidentially certain that the statement "1 + 1 = 2" is true, then we are evidentially certain that it describes a fact in itself. The statement is analytically verifiable. It is true in all possible worlds. And saying "Reality is what reality means to us" is misleading. For what reality most deeply means to us is objects that are not only mind-independent, but independent even of the logical possibility of minds. See chapters 1–2.

It might be objected that this may be fine for "1 + 1 = 2" and other *a priori* truths, but what about the existence of rocks?

I have a simple argument that perceptual and memorial knowledge are at least *logically possible.* Namely, the statements "I know I see a rock" and "I know I remember seeing a rock" are logically contingent. And what is logically contingent is logically possible. In fact, the *definition* of "*P* is logically contingent" is '*P* is logically possible and not-*P* is logically possible'. This simple argument also applies to "I know I will see a rock in the future." For that statement, too, is logically contingent. And I think we can and must admit that even foreknowledge is *logically* possible.

But as we saw earlier, logically possible doubt is not epistemic doubt. And a logical possibility of being wrong is not an epistemic possibility of being wrong. Nor is logical necessity the same as knowledge, which is epistemic necessity. And simplest of all, logic is not epistemology. I take these truths to be self-evident.

In the world of perceptions and memories of logically contingent things, the facade of dreams, defective machines, and the evil genius can be dropped. For there radical doubt boils down to the fact that for any logically contingent *P*, including logically contingent evidence, both it and its denial are logically possible by definition. And on that deepest and most general level of radical doubt about logically contingent things, it is clearer than ever that radical doubt has nothing to do with epistemology. Descartes is in effect playing an Alice in Wonderland game of "Let's change the subject" from epistemic possibility to logical possibility, which Descartes in effect baptizes out of the blue as "radical doubt," and then in effect misconstrues as epistemic. If only he had noticed the contraposition of his skeptical thesis, he might have seen that.

In the world of the logically necessary, we see the same misdirection. In Descartes' program of radical doubt, 1 + 1 = 2 is not being epistemically doubted. Not even the slightest evidence is provided that 1 + 1 = 2 is false. The only difference from the world

of the logically contingent is that it is not logically possible that 1 + 1 = 2 *itself* is false. Instead, Descartes draws our attention to the fact that it is logically possible (because it is logically contingent) that we are *in an epistemic situation* where we are being deceived. This misdirection is subtle. Yes, the *situation* is epistemic; but the *logical possibility* that we are *in* the situation is not an epistemic possibility, but a mere logical possibility that is irrelevant to epistemology. For as we just saw, on the deepest and most general level radical doubt boils down to the fact that for any logically contingent *P*, including logically contingent evidence, both it and its denial are logically possible by definition. The only difference is that in the world of the logically necessary, it is not *P*, say 1 + 1 = 2, that Descartes is doubting per se, but *Q*, the logically contingent statement, "Mind *M* is not in an epistemic situation *E* (e.g. is not dreaming, is not being deceived by an evil genius, and so on) which *would* prevent *M* from seeing that *P* is false if, per impossibile, *P were* or *could* be false." Of course it is logically possible that *Q* is false. For *Q* is logically contingent! But the logical possibility that Q is false has nothing to do with epistemology. For if we *know* that *P*, then we also *know* that *Q*, *regardless* of whether *P*, *Q*, or both *P* and *Q* are logically contingent.

The metaphysical principle of the identity of indiscernibles has an epistemic counterpart which may be called the principle of the epistemic identity of epistemic indiscernibles. Recall Frege's and Russell's point, stated now in my own way, that once we accept that perception provides even the slightest evidence of an external world, the cumulative probability becomes so high as to be "practically," which really means epistemically, indistinguishable from certainty. And on the principle of the epistemic identity of epistemic indiscernibles, the epistemic indiscernibility of the cumulative probability from epistemic certainty implies that the cumulative probability is epistemically identical with epistemic certainty. And dare we say that this epistemic identity *is* evidential certainty, or even *knowledge*? Know or dare! Or as Kant says, *Sapere aude* (Dare to know). Hegel says, "Such language as 'How am I, a poor earthly worm, to know the truth?' is a thing of the past.... Timidity is a further impediment to knowing the truth" (Hegel 2015 / 1830: 48– 49. Whether Hegel means objective cognitive timidity or subjective emotional timidity is not clear; but either way, his point is correct on the contraposition of Descartes.

Subjective personal faith and objective evidential certainty are deeply different. Faith is nonrational, or at least not based on sufficient reason to believe, while evidential certainty is precisely sufficient reason to believe. But they have something deep in common too. Namely, both are first person. Again, Paul says, "Let every one be convinced in his own mind" (*Romans* 14:5). Just as

Paul is talking about personal faith, so we are talking about personal knowledge claims. And that is rock bottom in first-person epistemology for the same reason that seemings are. In fact, it is rock bottom *because* seemings are rock bottom. We may say that faith and evidential certainty are species of the genus, personal conviction, where the difference is that evidential certainty is sufficient reason to believe (and indeed to know), and faith is not.

This suggests a welcome alternative to arguing that on the limited verification principle, or on the paradigm case argument, we sometimes know there is a rock on the path. Namely, it is sometimes epistemically certain simpliciter, whether the evidence is describable or not. And who is entitled to doubt there is a real rock, if it is epistemically certain to us that there is? This is just our contraposition of Descartes again. Is there a further test we should perform to ascertain the rock's metaphysical reality, if we are already epistemically certain that it is there? Shades of J. L. Austin!

We are contrapositing Austin's anti-metaphysical view in the same way we did Descartes. Austin says, "The wile of the metaphysician" consists in asking 'Is it a real table?' (a kind of object which has no obvious way of being phoney) and not specifying or limiting what may be wrong with it, so that I feel at a loss 'how to prove' it is a real one" (Austin 1976 / 1970: 87). The wily metaphysician is better described as the wily epistemologist who applies Descartes' program of radical doubt. And in any case we know how to contraposit Austin. If we are evidentially certain that the rock is real, then we *know* it is real, and there *can* be no way of proving it is not. If we *know* it is real, then we *know* that no further test is needed, just as we know no evil genius is deceiving us. Like Descartes, Austin did not even see the contraposition.

All this applies to memory too. How can I doubt there was a real rock there, if it is epistemically certain to me that there was? If I *know*, I also know any doubt is false, and there is no further test I need to perform to confirm the past rock's metaphysical reality.

Are both identity of indiscernibles principles true? They both seem to be self-evident. And the principle of the epistemic identity of epistemic indiscernibles seems strongly grounded in the metaphysical principle of the identity of indiscernibles. In fact, it is an instance of the latter. For epistemic properties are properties, and to be indiscernible is to have the same properties. Both principles are justified in turn by the principle of sufficient reason. And at bottom, all these principles are justified by the principle of seeming. How strong is the degree of justification at each step in this series of justifications? It might be weak in the sense of having a degree that approaches, but is still distinguishable from, the evidential certainty of $1 + 1 = 2$ as an epistemic asymptote. But following Frege and Russell, it is epistemically indistinguishable

from, hence epistemically identical with, evidential certainty. Let each be convinced in her own mind!

Hegel on Skepticism

I close this chapter with four brief remarks on Hegel. In effect, the first remark will put the last stake in the heart of Descartes' greatest mistake in epistemology.

First, Hegel holds that total skepticism is self-defeating. For total skepticism is skepticism about everything, including itself. Thus it condemns itself as being just another view to be skeptical about. In addition, it is self-defeating for total skeptics to offer any *arguments* for their view. For total skepticism logically applies to any arguments for total skepticism as well. Thus there logically can never be a *reason* for believing that total skepticism is true. This is neither a tu quoque ("you argue in the same bad way too"), nor an argumentum ad hominem (argument not against the view, but only against the person who holds it). For both charges of logical fallacy (the tu quoque and the ad hominem) are all about the person who offers the view, and the charge of logical self-defeat is all about the view. That charge is simply a logical instantiation of the universal thesis of total skepticism to itself, and also to any arguments for it. Yet total skepticism fails to see that it logically applies even to itself. Quite the opposite! "Skepticism... is absolutely certain" Hegel (2015 / 1830: 131). Total skepticism is "a skepticism that regards itself as clever" (Hegel 2015 / 1830: 6, see 125). I completely agree with Hegel on this. Compare Findlay (1962 / 1958: 97–98).

Of course, Descartes is not a total skeptic in Hegel's sense, even though Descartes initially states his program as a plan to doubt everything. For Descartes never really doubts everything. He quickly admits that we know what seems to us to be the case, and that we ourselves exist. But Hegel's point applies to Descartes nonetheless. For Descartes' radical skepticism is about everything *else*, i.e., everything *other than* those two things. And that is a universal thesis too—a very slightly more limited one. And it is just as self-defeating as the total skepticism Hegel rejects. For in both cases, the skepticism logically applies to *itself*. This is committed by Hegel's everything, and *also* by Descartes' everything *except for* what seems to us to be the case, and that we ourselves exist.

Hegel focuses on ancient skepticism, which he contrasts with modern skepticism. Hegel's discussions of skepticism cannot be summarized here. See Hegel (1985 / 1802; 1967 / 1807: 246–251); Kaufmann (1966 / 1965: §§ 18–19, 33, 66); Hentrup (2023). In modern skepticism, Hegel mainly has Hume in mind, no doubt

as a precursor to Kant; but Hegel also mentions Descartes. See Hegel (2015 / 1830: 82, 83, 92, 102 on Hume, 123–125 on Descartes). The main difference is that modern skepticism accepts sense-data as certain (as in Descartes' accepting we know what seems to us to be the case), while ancient skepticism doubts even sense-data, since ancient skepticism doubts everything, even itself.

Second, Hegel says his philosophy is presuppositionless. His discussions cannot be summarized here.FN4-5 What Hegel means and whether he is right are far from clear (Hentrup 2019; see Findlay 1962 / 1958: 31, 41, 155). But without interpreting what Hegel means or assessing whether he is right, and without even distinguishing presuppositions from implications or entailments, we may easily distinguish logical presuppositions from epistemic presuppositions as follows. Every statement *S* has infinitely many implications, entailments, and presuppositions. For one thing, "*S*" implies "*S* or *T*", "*S* or *T* or *U*", and so on ad infinitum. And *S* cannot be true if any of the statements it implies is false. Thus they are *logical* presuppositions of *S*. But if *S* describes an epistemic seeming, then *S* has no *epistemic* presuppositions. For seemings are self-evident. Of course, S can be *supported by* other evidence. But seemings need no other evidence in order to *be* evidence. And epistemic presuppositions are what count in epistemology. In epistemology, the infinitely many logical presuppositions do not count, for exactly the same reason that all the doubts based on mere logical possibilities do not count. In fact, there are infinitely many doubts based on mere logical possibilities. They are just as trivially different from each other as are the infinitely many merely logical presuppositions, and they are distinct only in reason from the merely logical presuppositions. For if I know that *S*, then I know implicitly that all the logical presuppositions of *S*, such as *S* or *T*, *S* or *T* or *U*, and so on, are also true, even if I cannot enumerate them. And a Cartesian 'radical doubt' can be based on each and every one of them. (This is before we contraposit Descartes.)

Here are four exact one-one radical doubt correspondences to the trivial infinite series of disjunctive logical presuppositions I just described. First, it is logically possible that we are deceived by being in dream D1, or in dream D1 or D2, or in dream D1 or D2 or D3, and so on. Second, it is logically possible that our brain is like defective calculating machine (DCM) 1, or like DCM1 or DCM2, or like DCM1 or DCM2, or DCM 3, and so on. Third, it is logically possible that we are deceived by evil genius (EG) 1, or by EG1 or EG2, or by EG1 or EG2 or EG3, and so on. Fourth, it is logically possible that we are deceived by being a brain in vat V1, or in V1 or V2, or in V1 or V2 or V3, and so on. And again, all these logical possibilities count for nothing in epistemology.

Third, just as he does with all other earlier philosophies,

Hegel does not reject skepticism altogether, but subsumes it as a "moment" of limited validity within the whole historico-dialectical development of philosophy up to and including his own philosophy. Thus Hegel says "philosophy... contains the sceptical within itself as one of its moments [logical elements], namely as [a logical part of] the dialectical" (Hegel 2015 / 1830: 131). That all earlier philosophies are so contained in Hegel's philosophy may be called Hegel's *dialectical ecumenicism*. For a discussion of recent literature on Hegel's retention of a form of skepticism, see Hentrup (2018). For our part, we may agree that a robust degree of skepticism is a healthy thing. We may say that a healthy skepticism is a golden mean between the two extreme vices of radical doubt on the one hand, and uncritical acceptance of views unsupported by sufficient evidence on the other. And in that sense we admit a form of limited skepticism too. On golden mean theory, see chapter 5.

Fourth, presuppositionless philosophy and the retention of skepticism as a dialectical moment are essentially related topics for Hegel. And both are essentially related to his thesis that the rational is the real and the real is the rational, and to his theory of factually informative identities. This fourfold essential relation occurs at the level of the Notion (*Vernunft*), or Concept (*Begriff*). Hegel calls his theory of factually informative identities 'identity-in-difference', or theory of immanent or concrete universals. We may call it Hegel's theory of factually informative 'entity if and only if identity'. On the face of it, Hegel's concrete universals are in re, or are at least distinct only in reason from in re universals per the containment and dependence arguments. Thus for Hegel, "concrete" primarily means multiply aspected, though not necessarily "sensuous" (Findlay 1962 / 1958: 84). Having multiple aspects is essentially the same as having identity-in-difference. Thus "concrete" is opposed to "abstract," not in Frege's sense of 'causal' as opposed to 'noncausal', but in the traditional sense that the more we abstract from a thing, the fewer of its multiple aspects are regarded, so that at the end, there is just one aspect and no multiplicity of aspects (Stace 1955 / 1924: § 142). Pure being is the highest abstraction (Stace 1955 / 1924: § 119). And as we saw earlier, this is Parmenidean / Suárezian being, i.e., the most general kind of being. It is Russell's robust sense of reality.

For Hegel, the logical law of self-identity, A = A, is true only on the shallow, abstract, merely logical level of the Understanding (*Verstand*). A full discussion of Hegel's Understanding is beyond the scope of this book.FN4-6 For us, self-identity defines Butlerian existence ("every thing is what it is, and is not another thing"). And for us, self-identity is a Fregean mapping function as real in itself as any other. Recall that Frege's functions are ante rem universals. For Frege's functions include *winged horse that flies*,

which is not instantiated, and even *round square*, which cannot be instantiated. And the function *horse* is literally common to many.

Hegel's deeper, philosophical, and dialectical level of the Notion or Concept (Stace calls it Reason) is the level of identity-in-difference. It too is beyond the scope of this book.FN4-7

Hegel's notion of Absolute being, or the Absolute idea, or God, contains all other notions (Stace 1955 / 1924: § 145, see § 164). Thus the Absolute has the ultimate identity-in-difference. That is beyond the scope of this book as well.FN4-8

Butchvarov (1979: 10) is well aware of Hegel as a major predecessor of his (Butchvarov's) own identity-in-difference theory of objects and entities, where two different objects can be the same entity. And of course our theory of qualified objects and objects in themselves is an identity-in-difference theory as well, where two different qualified objects can "be" the same lower-level object. So are Frege's theory of senses and referents and Russell's theory of descriptions and denotations. For two different senses can be senses 'of' the same referent, and two different descriptions can describe the same denotation. I discussed Frege's, Russell's, and Butchvarov's theories of factually informative identity in chapter 1. I argued that while they are distinct only in reason from each other, and from mine, my theory is phenomenologically the best. Again, my second and deeply different identity-in-difference theory is that different objects *in themselves* that are distinct only in reason *are* each other. My two theories cannot apply in the same situations, since qualified objects categorially cannot be objects in themselves.

Hegel in effect cites Anaxagoras' theory that reality is nous (intelligible being) as the source of his rational-real thesis (Hegel 1969a / 1812–1813, 1816: 50; 1967 / 1807: 114). Compare Hegel (2015 / 1830: 36–37), "*nous*, or in its deeper determination, *spirit*, is the cause of the world" (his emphasis). Hegel might have also mentioned Parmenides' thesis that we cannot *speak or think* of nothing, and Plato's theory of forms as supremely intelligible and supremely real. Hegel cites Plato and Kant as important but limited precursors of his own theory of dialectics (Hegel 1969a / 1812–1813, 1816: 55–56). Hegel might have also mentioned Socrates' dialectics and the dialectical sophistry of the Sophists. Of course, Hegel was well aware of all of these sources.

What is the importance of this to us? If Hegel's dialectical ecumenicism and his theory of 'entity if and only if identity' are correct (and certainly they are plausible), then they are distinct only in reason from our own deeper and more general metaphysical ecumenicism, and can be subsumed into it. For qualified objects theory applies to Hegel's level of the Understanding and level of the Notion alike. In particular, qualified objects seem to be a sharp and clear way to explicate Hegel's view that all the oppositions that

his dialectic seeks to overcome are really differences among the progressively improving dialectical stages of our *consciousness*, which he calls *The Phenomenology of Mind*. For they are really differences in qualified objects that logically can be presented *to* consciousness. Frege can do the same with senses, and Russell with descriptions; but as we saw in chapter 1, qualified objects subsume them and are phenomenologically more correct.

Perhaps Hegel can return the favor and subsume our qualified objects into his dialectical ecumenicism. No doubt he can also subsume Frege's senses and Russell's descriptions via his "extraordinary fusion between nominalism, conceptualism and realism" (Findlay 1962 / 1958: 307). But even if he can, the main point is that Hegel's dialectical ecumenicism would still be distinct only in reason from our metaphysical ecumenicism. And our metaphysical ecumenicism is clearer and more illuminating of his dialectical ecumenicism than his obscure dialectics could ever be of our plain and simple containment and dependence arguments. But I feel the famous difficulty of understanding him is but the lion at the gate guarding a great and magnificent palace. Indeed, Findlay says, Hegel's "most obscure, botched utterances are often worth many of the lucidities of modern philosophers" (Findlay 1969: xi).

Just as Hegel subsumes skepticism into his dialectical ecumenicism, so we subsume epistemological ecumenicism into metaphysical ecumenicism. Again, Bergmann says "epistemology is the ontology of the knowing situation" (Bergmann 1964: 126).

We can also subsume Hegel's immanent universals into our own metaphysical ecumenicism of many sorts of particulars and properties, if they are not already there, both in re and ante rem.FN4-9

To the extent that it is successful, Hegel's subsumption of 'moments' of philosophy into his synthetic *a priori* dialectic of progressively improving views, leading to a final 'absolute' or best view, can be subsumed in turn under our concepts of logical containment and logical dependence, and can be justified by our containment and dependence arguments. And perhaps Hegel can return the favor and subsume our concepts of containment and dependence under his concept of subsumption as well. In any case, if Hegel's dialectic is correct, then just as he says, the ordinary Understanding, or "ordinary mind,"

> does not conceive the diversity of philosophical systems as the progressive evolution of truth; rather, it sees only contradiction in that variety. The bud disappears when the blossom breaks through, and we might say the former is refuted by the latter; in the same way then when the fruit

> comes the blossom may be explained to be a false form of the plant's existence, for the plant appears as its true nature in place of the blossom. These stages are not merely differentiated; they supplant one another as being incompatible with one another. But the ceaseless activity of their own inherent nature makes them at the same time moments of an organic unity, where they not merely do not contradict each other, but where one is as necessary as the other; and this equal necessity of all moments constitutes alone and thereby the life of the whole. (Hegel 1967 / 1807: 68)

This beautiful botanical metaphor suits not only all of Hegel's dialectical distinctions in reason among all the earlier philosophies he discusses, with a foundation in reality in his own 'absolute' philosophy, but also our own metaphysical ecumenicism of theories, with a foundation in reality in qualified objects and objects in themselves.

Herbert S. Long says that the ancient skeptics had "an openness to and impartiality towards the views of all schools" (H. Long 1980: xvii). If that was precisely because of their general skepticism, this may be called *skeptical ecumenicism*.

To sum up the main point of this chapter, recall that at the beginning of chapter 1, I quoted Herbert Spiegelberg on what phenomenology is. Spiegelberg says that the very first criterion of being a phenomenology is: "Explicit or implicit adoption of... (a) direct intuition (in a sense still to be clarified) as the source and final test of all knowledge..." (Spiegelberg 1976: 5). We did this in chapter 1, and our clarification was this: We defined a phenomenon as a presented object of perception or thought, and we logically analyzed an object of perception or thought as a qualified object having 21 essential features. Later, we defined an epistemic seeming as a directly presented qualified object that rationally or at least objectively seems to "be" a lower-level object. It follows from these definitions that all seemings are phenomena. Of course, not all phenomena are seemings. But a seeming is always directly presented. And it is "the source and final test of all knowledge" because it is the source and final test of all evidence.

We come now to ethics. What is the phenomenology of values? Are values objects in themselves? Are they objects at all? What is the relation of nature or form to values, of 'is' to 'ought'? Hume says that values cannot be derived from facts. But if things have no nature or form of any kind, if there are no kinds of facts at all, how can anything have value? No facts of any kind, no values.

5

Ethics

There are two main questions for ethical ecumenicism.

The first is whether the main rival theories in ethics are distinct only in reason from each other and from the ordinary, pre-philosophical ethical data they seek to ground or analyze. If they are, then all the entities asserted by all the main theories exist as parsings of each other, and as parsings of the same ordinary ethical objects, as shown by the containment and dependence arguments. They would be formally distinct from each other with a foundation in reality in ordinarily existing ordinary ethical objects, and more deeply and generally in the ethical portion of the real order.

The second main question is whether facts and values are distinct only in reason. If they are, then all the entities asserted by all the main value theories exist as parsings of facts, as shown by the containment and dependence arguments. Values would be formally distinct from facts with a foundation in reality in facts, or what is essentially the same, the factual portion of the real order.

In the case of both main questions, and just as in all the chapters of this book, metaphysical (here ethical) ecumenicism requires that three conditions be met. If all theories of ethics in general (and all theories of value in particular) are (1) intelligible, (2) logically possible, and (3) save the ethical appearances equally well, meaning that they provide logical analyses of ordinary ethical statements that are logically equivalent to those ordinary statements and that are therefore logically equivalent to each other, then the theories are distinct only in reason. This is ethical ecumenicism. In fact, we may say "ethics is the metaphysics of the value situation," paraphrasing Bergmann (1964: 126). Thus ethical ecumenicism is a kind of metaphysical ecumenicism. See chapter 3 for more on the three conditions of metaphysical ecumenicism.

Thus the general framework for metaphysical ecumenicism in ethics, or ethical ecumenicism, is the same as in phenomenology, ontology, metaphysics, and epistemology. And just as in the other fields, if there is no logically possible empirical difference among the theories, and if their logical equivalences are not analytic, the consequence is not that the theories are verificationist nonsense, but that they are distinct only in reason; and *contra* verificationism, their distinctions in reason are synthetic *a priori*.

And just as before, it may be initially remarked that at least the *supporters* of each theory think their own theory is intelligible,

logically possible, and saves the appearances at least as well as the other theories, or else they would not hold their theory.

Conforming to chapter 3, the containment and dependence arguments in ethics start from the ordinary existence of ordinary values, and conclude to the existence of all the logical parsings of them as distinct only in reason from each other and from the ordinary values. To quote Quine again, if we refuse to apply "the key words 'understood', 'real', and 'evidence' here [in ethics],... [w]e should only be depriving them of the very denotations to which they mainly owe such sense as they make to us" (Quine 1975 / 1960: 3). Butchvarov agrees in his ethics book:

> A proposed solution to a philosophical problem is far more valuable if it does not depend on a change in the conditions in terms of which the problem arose and was originally understood. This is [if anything] especially true in ethics.... [Ethics] is firmly rooted in everyday thought, in which often its subject matter is understood better than by academic philosophers, and from which it derives its identity, interest, indeed life. (Butchvarov 1989: 5)

Indeed, just as in our general phenomenology in chapter 1, we must start from preconceptual direct singlings out of (for us qualified) ethical objects. Butchvarov says in his ethics book:

> H. H. Price... in effect argued that the very idea of our conceptualizing something presupposes that there is something (to be) conceptualized and that this presupposition is coherent only if we allow for an independent, unmediated epistemic access to the thing. (Butchvarov 1989: 3)

Our theory of qualified objects fits the bill, as does Butchvarov's own theory of objects. See chapter 1. For us, epistemic seemings are our independent, direct epistemic access to things. See chapter 4.

In all the famous twentieth century debates on the analytic-synthetic distinction (Sumner 1969), the logical positivists never did succeed in banishing the synthetic *a priori*. Even Wittgenstein found out the hard way. For he could not even analyze "Red is a color" or "Red is not green" as formal tautologies (Wittgenstein 1929). And if logic is the vestibule of philosophy, the synthetic *a priori* is the vestibule of metaphysics. Again, both analytic and synthetic *a priori* reasoning belong to what I call logic in the wide

sense. Again, each involves its own kind of logical containment and logical dependence. Color is contained in red just as much as female is contained in mother, though in a different way, the one synthetic and the other analytic. See my (2023 / 2015: ch. 9).

Sometimes a distinction in reason is obvious on its face. For example, we saw in chapter 1 that a via antiqua idea is essentially just a via moderna idea conjoined with an objective reality. We saw in chapter 3 that a particular is distinct only in reason from the bundle of universals that it uniquely exemplifies. And in ethics, a particular ethical act in act-deontology is distinct only in reason from the bundle of universal deontological rules that the act uniquely exemplifies. This is well known; see William K. Frankena (1973: 24–25). In fact, that is merely an instance of the more general chapter 3 distinction in reason I just described. Also, particular act-deontological *judgments* are and ought to be identical in indiscernible ethical situations, as is especially clear in twin or mirror worlds (except for mirror inversion). Indeed, indiscernible particular act-judgments are identical, i.e., universal, across places and times, per the principle of the identity of indiscernibles.

These distinctions in reason are exactly the same for act-utilitarianism and rule-utilitarianism, and for utilitarian act- and rule-judgments. The only difference is that deontology concerns intrinsic values, while utilitarianism concerns consequential values. This gives us a four part mix and match based the two distinctions, particular or universal value, and intrinsic or consequential value.

Most readers will also be aware that deontology and utilitarianism are themselves distinct only in reason, on pain of vicious infinite regress of consequences of consequences that never have any intrinsic value. That is a modal (one-sided) distinction. For some consequential values logically must have intrinsic value on pain of vicious regress; but acts or other events having intrinsic value logically need not cause any consequences that have value, or indeed cause anything at all. For all causal consequences, ethical or otherwise, of acts or other events are logically contingent. For all the causation is logically contingent agent or efficient cause, and all the consequences are logically contingent effects. Indeed, if any ethical consequences followed logically or *a priori*, they would be deontic logical parts of deontic acts, certainly on the relevant containment entailment theory of logical validity.

But first let us see if goodness is an entity at all, or if there are any ethical entities at all, i.e., if there is any realist ethics at all.

Goodness as a Highly Generic Property

On the containment and dependence arguments for in re

universals, ante rem universals, and Platonic forms in chapter 3, if a generic property of goodness can be abstracted from the various particular things that are good, then goodness exists as a universal in re, as a universal ante rem, and as a Platonic form, all of which are distinct only in reason. Since this is just an instance of the containment and dependence arguments for universals in general in chapter 3, there is no need to repeat the arguments here. All we need to start the arguments are some ordinarily existing ordinary values. And as most first-year students of ethics learn, if they do not already know, most people would accept that at least some things are clearly good or evil in a perfectly ordinary sense. Is not compassion good? Is not cruelty evil? And "There is no other basis from which [ethics] can arise" than "the world as we find it" (Köhler 1970 / 1947: 3, text order inverted).

Many philosophers who admit a highly generic property of goodness go on to assert that it is both ontologically simple (no constituents) and (therefore) indefinable (no genus and difference). Evidently this includes not just philosophers like Moore (1971 / 1903: 5–16, 17 citing Henry Sidgwick) and Butchvarov (1989: ch. 4; 1982), but also traditional philosophers for whom goodness is a transcendental. The two claims are modally distinct. For all *a priori* genera and differences are constituents, but not all constituents are *a priori* genera or differences. But the important point is that both claims, logically related or not, are mistaken. For goodness is very easily defined by genus and difference as *positive value*. Value is the genus, and positive is the difference. Likewise, evil can be defined as negative value. Thus there are not two indefinable properties, good and evil, but three: value, positive, and negative. Compare the 1918 Russell on positive and negative propositions. But perhaps someday someone will show how to define them.

This gives us our second distinction in reason in ethical ecumenicism. Not only are ethical acts and rules distinct only in reason, but so are the species good and evil and their genus, value. The first distinction is mutual, at least for acts and *in re* universal rules. The second distinction is at least modal. No value, no good or evil. But good and evil are only contraries, not contradictories. Thus some values logically might be neither good nor evil.

Some argue that good and evil are 'non-natural properties' (Moore 1971 / 1903: 10, 13–14, 18–20, see ch. 2); see Butchvarov (1989: 7, 36, 59–61, 80, 138). I find this misleading. Granted, they can have no efficient causal impact, since they are abstract entities. (We saw that Frege goes so far as to *mean* by "abstract object," noncausal object.) But they are abstracted from particular concrete good acts and evil acts, and from many other sorts of particular concrete goods and evils, all of which are found in nature, and all of which do have causal impacts. They are no different in this from

many of the other abstractions in philosophy, from 'efficient cause' to 'existence in the sense of not being nothing'. Efficient cause, as a parsed abstract entity, is not a cause; and not being nothing is not a cause. But every concrete natural cause *is* an efficient cause, and is also not nothing. Thus those two abstract entities are ontological constituents of all concrete natural causes. Likewise, good and evil are ontological constituents of many freely chosen agent causes and also of many natural effects, such as sunshine and hurricanes.

The view that good and evil are non-natural properties might be rooted in a further mistake as well. At least in the case of morally good or evil acts of free will, the mistake would be to understand nature as governed by absolute determinism. For that by definition precludes any good or evil free *acts*, or indeed any free acts at all, from occurring in nature. But nature is better defined as that which is governed by relative or hypothetical determinism, which allows for intervening free acts. For again, that best accounts for all the ordinary facts about natural cause and personal agency. And relative determinism makes any free good or evil free acts, and indeed all free acts, possible. See chapter 3.

How can abstract ('non-natural') good or evil properties influence or act on us? Again, for Frege, thoughts are abstract (noncausal) entities. Frege says, "How does a thought act? By being apprehended and taken to be true" (1968 / 1918: 534) We may call this *indirect* cause, and add it to our list of causes or reasons for being. Our grasping thoughts in our mind can lead us to act in new ways. And surely our grasping values can lead us to act in new ways too. Even our grasping the abstract (noncausal) axis of the earth in our mind can do that! This also applies to our qualified objects. For they can be grasped either directly or indirectly. In fact, Fregean thoughts are distinct only in reason from our qualified facts. And we must admit at least *qualified* values. They are presented objects of thought. They are all different, thus at most one can be nothing. And they essentially are as they directly appear to be. Of course, qualified values may or may not "be" values in themselves. But in some cases, their "being" values in themselves is "utterly transparent" "to our reason" (Frege 1974 / 1884: 115). For there are some simple ethical truths, such as that courage is a good; and all truths are about something. Surely Frege would agree. So we may call this the Fregean argument for values in themselves.

Frege expressly admits duties (Frege 1968 / 1918: 530). Duties can act on us in Frege's indirect sense, even if they are non-natural in the sense of not being efficient causes. Likewise for our qualified ethical values, and by parity of reason, ethical values in themselves. Note that since Frege admits duties, then "x is a duty" refers to a Fregean function that is just as real as any other Fregean function. This, then, is Frege's implicit realist ethics: duties imply

values; and both are abstract entities, but can act on us indirectly.

Deontology and Utilitarianism

Let us look more closely at the two main "rival" theories in ethics, deontology and utilitarianism. We may define deontology is as the view that at least some things have some intrinsic value. And we may define utilitarianism as the view that all the values of all things are wholly determined by the (values of the) consequences of the things. Thus they appear to be express rival sectarian views, contradicting each other by definition. This includes every object in itself, including acts. (Qualified objects can only act indirectly.)

One epistemic argument for deontology may be stated in my theory of seeming as follows. Some things seem to have intrinsic values in themselves, therefore we have reason to believe that this is the case. And some qualified intrinsic values seem to "be" intrinsic values in themselves, therefore we have reason to believe that they "are." Thus the argument is based on a direct phenomenological presentation of the sort of qualified object we defined as a seeming in chapter 4, namely, a directly presented qualified object that rationally or at least objectively seems to be the case. The consequential values of utilitarianism can be argued for in exactly the same way. And some simple cases of both sorts of values, intrinsic and consequential, are "utterly transparent" "to our reason," at least if we can apply our Fregean argument to both.

But utilitarians can argue against deontology as follows. The value of a thing logically can and must always change if its consequences change, therefore the thing can have no intrinsic value. For a thing's consequences are always efficient effects, and thus are always logically contingent.

There are four parts to my reply.

First, even though we defined the two rival theories as contradictory, nonetheless their positive admissions of their own respective kinds of values, intrinsic and consequential, are logically consistent. For things logically can have limited or even minimal intrinsic values that can be defeased (outweighed) by the values of their consequences. This point already favors deontology. For on the definitions I gave, utilitarianism logically cannot admit such a compromise, but deontology can. And it is hard to see how intrinsic values could be defeased, except by consequences that have *greater* intrinsic values. Indeed, we defined utilitarianism as precluding intrinsic values, but we did not define deontology as precluding consequential values. For our definition of utilitarianism implicitly rejects intrinsic values, but our definition of deontology has nothing to say about whether there are consequential values.

Second and again, utilitarianism logically implies a vicious infinite regress of consequences of consequences. For it holds by definition that all values are consequential, and this implies that all consequential values can only have consequential value. And this is a vicious infinite regress of consequential values of consequential values, for nothing will have any value. And the only way to stop the regress is to admit that at least one consequence has intrinsic value. This conclusively defeats utilitarianism, if utilitarianism is defined as logically incompatible with intrinsic values.

Third, the vicious regress argument implies not only that utilitarianism as I defined it is self-defeating and false, but also that intrinsic values and consequential values are modally distinct with a foundation in reality in intrinsic values. For the regress argument implies that consequential values logically can exist only if intrinsic values exist. But things that have intrinsic value logically need not have any efficient effects or consequences at all, much less any consequences that have value.

Ironically, the classical utilitarian consequences, pleasure and pain, are a case in point. If pleasure is not intrinsically good, nor pain intrinsically evil, then it is hard to see how the value of, say, an act of kindness or an act of cruelty logically can consist of its pleasurable or painful consequences. In fact, if pleasure and pain have no intrinsic value, it is hard to see how classical utilitarianism could be an objective ethic at all. For we could only assert that we ought to do this just in case it *promotes pleasure*, and we ought not to do that just in case it *promotes pain*, whether or not pleasure or plain have any intrinsic *value*. And that is absurd. Thus pleasure and intrinsic goodness, as well as pain and intrinsic evil, are distinct only in reason.

Wittgenstein says "it is... clear that a reward must be something pleasant and a punishment must be something unpleasant" (T 6.422). And surely he means intrinsic pleasantness and unpleasantness. And if he does not admit that pleasure and pain have intrinsic value, then he is facing the same vicious regress as the classical utilitarian. The only way out is that pleasure is itself a reward with value, and pain is itself a punishment with value.

Fourth, the best solution to the regress dilemma is simply to redefine utilitarianism as the view that any value logically can be *defeased* by the value of its consequences. Thus our new definition of utilitarianism has nothing to say about whether there are intrinsic values. Utilitarianism and deontology are now logically consistent.

Frankena (1973: 45) says, "By the principle of utility I... mean, quite strictly, the principle that we ought to do the act or follow the practice or rule that will or probably will **bring about** *the greatest possible* ***balance*** *of* ***good*** *over* ***evil*** in the universe" (his italic emphasis, my bold emphasis). Clearly, the balance logically

can include the intrinsic value of the act, practice, or rule, as well as the intrinsic value of its consequences. And if *good* and *evil* are not intrinsic values, but have value only because of their utility or consequences, then we have a vicious infinite regress of goods and evils, if we cannot stop it with something that has intrinsic value.

Utilitarianism as Frankena defines it is logically consistent with deontology. In fact, it is modally distinct from deontology with a foundation in reality in deontology, if the vicious regress argument is sound. And it would seem that for Frankena too, the alleged incompatibility of utilitarianism with deontology is merely based on a bad definition of utilitarianism that wrongly makes them incompatible. We may even suggest that it is a test of the adequacy of any definition of utilitarianism that it makes utilitarianism logically consistent with deontology, on pain of vicious regress.

Kant is arguably the greatest deontologist. And it seems to me that as a matter of logic, the classic pleasure-pain principle of utility meets Kant's test of being an intrinsic moral duty, i.e., can be derived from Kant's principle of duty. For it seems to me that the classic principle of utility ought to be universally followed in the way Kant requires. If so, this too is a modal distinction between deontology and utilitarianism with a foundation in reality in the deontological real order. For the principle of utility is entailed by the deontological rule, which is deeper and more general. And on the face of it, we could simply hold that quite aside from Kant's principle of duty, making people happy, and also maximizing their pleasure and minimizing their pain, are intrinsically good things.

It also seems to me that as a matter of scholarship, Kant's fourth example of a duty that satisfies his principle of duty *implies* the classic principle of utility. The example is that we have an intrinsic duty to help people if we can (Kant 1959 / 1785: 41, 48–49). For surely that logically includes making people happy if we can, and even maximizing their pleasure and minimizing their pain if we can. It is a leap over a narrow ditch from a duty to help people to a duty to make them happy. For how could making an unhappy person happy fail to help that person? Thus it seems to me that Kant's fourth illustration of his principle of duty implies the principle of utility. This implies in turn a modal distinction between deontology and utilitarianism with a foundation in reality in the deontological real order. For his principle of duty implies the principle of utility, and is deeper and more general. Note that it might also be conversely argued that the principle of utility implies Kant's principle of duty in virtue of the rational utility of Kant's principle. And if that converse implication obtains, it would further support ethical ecumenicism. More on that shortly.

In fact, in discussing his fourth illustration of duty, Kant expressly refers to happiness. Kant says:

> Fourth, with regard to meritorious duty toward others, the natural end which all men have is their own *happiness*. Humanity might indeed exist if no one contributed to the *happiness* of others, provided he did not intentionally detract from it; but this harmony with humanity as an end in itself is only negative rather than positive if everyone does not also endeavor, so far as he can, to further the ends of others.... (Kant 1959 / 1785: 48–49, my emphasis)

Thus as every good Kant scholar knows, Kant's fourth illustration *expressly* derives the principle of utility from his principle of duty. Thus for Kant, the principle of duty is deeper and more general than the principle of utility. Thus for Kant, the two principles are modally distinct with a foundation in reality in the principle of duty. But I am still glad I gave my own arguments for that derivation. For the mere fact that *Kant* expressly derives the principle does not imply that the derivation is *logically valid*. For that would commit the logical fallacy of appeal to authority.

For John Stuart Mill, who is arguably the greatest utilitarian, the derivation goes in the other direction. Mill says:

> When Kant... propounds as the fundamental principle of morals, "So act that thy rule of conduct might be adopted as a law by all rational beings," he virtually acknowledges that the interest of mankind collectively, or at least of mankind indiscriminately, must be in the mind of the agent when conscientiously deciding on the morality of the act. Otherwise he uses words without a meaning; for that a rule even of utter selfishness could not possibly be adopted by all rational beings—that there is any insuperable obstacle in the nature of things to its adoption—cannot be even plausibly maintained. To give any meaning to Kant's principle, the sense put upon it must be that we ought to shape our conduct by a rule which all rational beings might adopt *with benefit to their collective interest.* (Mill 1985 / 1861: 65, Mill's emphasis)

Thus for Mill, the principle of utility is deeper and more general than Kant's principle of duty, since it gives Kant's principle whatever value, not to say meaning, it has. Mill's converse derivation would make the two principles modally distinct with a

foundation in the principle of utility. This is the converse of Kant's implication, which I explained just a moment ago.

Thus here we have two "rival" accounts. Who is right, Kant or Mill? In which direction does the derivation go? Well, why can they not both be right? If both derivations are valid, then the two principles are *logically equivalent*, and neither is deeper or more general than the other. The two principles would be formally distinct with a foundation in reality simply in the ethical portion of reality. And it seems to me that this is the case. For it seems that both Kant and Mill give sound arguments. Each is right in the derivation he affirms, and wrong only in denying its converse. For I think each denies the other's derivation implicitly at the very least.

Thus I hold that the duty to do a thing because it is the right thing for everyone to do, is distinct only in reason from the duty to do a thing because it is of the greatest benefit or utility to everyone. My argument is that Kantian duty implies maximizing everyone's happiness because that is universally doing the right thing; and conversely, maximizing everyone's happiness implies the duty for the same reason. I think many thinkers have implicitly held that or at least anticipated it, notably the Stoics, and perhaps even Kant and Mill. But I must leave the scholarship to others.

Again, if both derivations are correct, then deontology and utilitarianism are logically equivalent. And both may be taken to imply a principle of universal distribution of intrinsic goods, perhaps principally including happiness, to the extent possible. And if the converse implication holds, then we have three principles that are logically equivalent and distinct only in reason: the principles of duty, utility, and distributive justice. Of course, the concept of justice implies that the distribution must be *deserved*. For example, we ought not to distribute the good of free movement in society to violent criminals because they forfeit it, and not merely to protect society. Thus distributive justice and retributive justice seem distinct only in reason as well, at least if they properly limit each other. For not only is just retribution a logical precondition of just distribution, but retribution itself is one of the many things we wish to distribute impartially and fairly to everyone as needed, that is, universally, contingent on the merits of individual cases, because it is the right thing to do, and also because it maximizes the happiness of everyone. So now we have four logically equivalent principles: duty, utility, distributive justice, and retributive justice, when properly understood. And many thought they were two pairs of rivals! Our ethical ecumenicism is really making headway.

Kant bases his justification of his four examples of duties on his metaphysics as set forth in the *Critique of Pure Reason* and the *Prolegomenon to Any Future Metaphysics* (Beck 1959: xv citing Kant 1959 / 1785: 69–71). Here I merely wish to note, with

reference back to chapter 3 on free will and determinism, that Kant's defense of free will is a poor one. He makes our acts free in the real noumenal world in which we are ends in ourselves, yet also makes them subject to "causal determination in the world of appearance" (Beck 1959: ix). "These appearances are connected by causal laws and the system of them is 'nature'" (Beck 1959: ix). This theory is logically self-consistent. For our free will is real and our being subject to causal determination in nature is merely apparent. But like almost everyone else, Kant has no inkling of the distinction between absolute determinism and relative determinism. There is no need to postulate a noumenal world of freedom when relative determinism is better supported by all the data, and allows logical room for free acts in the physical world. And that is just as good for explaining how all of Kant's duties are logically possible as positing a noumenal world. In fact, it is better, as I shall explain a more fully.

Kant is claiming that noumenal free will is consistent with the phenomenal appearance of absolute determinism. He does this by positing a sort of mythical, pre-established harmony between the phenomenal and noumenal worlds. But if we have free will, it is logically consistent with the phenomenal appearance of absolute determinism if and only if that phenomenal appearance (for us an object of perception) is an illusion or delusion. Rapoport's relative determinism allows free will to be logically consistent even with a real physical world with real causal laws, since the laws themselves are merely hypothetical. And that option is theoretically open to Kant, even on his theory that we ourselves unconsciously impose causality on phenomenal appearances (the phenomenal world). For surely we can unconsciously impose merely hypothetical laws on phenomenal appearances just as easily as we can impose absolute determinism. But Kant does not even seem to see the difference.

Again, relative determinism also allows for the prediction and retrodiction of free choices, not because they are physically caused—they are not—but because even free choices have reasons, namely, *our* reasons. That follows from the principle of sufficient reason, which states that every object, including every free choice, has a cause or reason. Kant accepts that principle, and even offers a proof of it (Kant 1965 / 1787: 226–227 / B246 / A201. But Kant's proof concerns only absolute physical determination of phenomena. As we noted in chapter 3, our free choices are predictable because there are always reasons for them; and in twin worlds, our reasons for making them would be indiscernible, hence identical.

Several rival principles of utility have been proposed in the literature. But broadly speaking, they are just progressive series of refinements, specifications, or limitations of each other. Thus broadly speaking, they are modally distinct as genus is to species.

For example, 'maximizing human happiness for the greatest number of people, as equally as possible, and as reasonably foreseeably as we can' is a species of the genus 'maximizing human happiness'. For it merely specifies the latter principle in more detail. All these modal distinctions, too, are part of ethical ecumenicism. And each more specific version of the maximizing happiness genus may be said to have at least its own limited validity.

In addition, goodness, as the most general *positive* value in ethics, is abstracted as a synthetic *a priori* determinable from all particular goods, which are its determinates. This is part of ethical ecumenicism as well. This is just like abstracting color from red and green. The application of the containment and dependence arguments to goodness and color alike, so as to show that they are both entities, should be obvious. Likewise for evil as the most general *negative* value in ethics. And likewise for value in general and its two main kinds, good and evil, as well as any values that may be neither good nor evil but, as the expression goes, "beyond good and evil." Nietzsche (1968 / 1886) is a famous book by that title, but he means only beyond *conventional* good and evil. The term seems better applied to Buddhism and to mysticism in general.

Yet another sort of ethical ecumenicism may be found in mixed ethical theories, or theories which admit at least one deontological principle and at least one utilitarian principle. Such theories often hold that the two or more principles work together in some way, and always hold they are at least logically consistent with each other. Frankena's own theory of ethics is mixed, with a deontological principle of beneficence and a principle of justice as primary, and with secondary guidance from rule-utilitarianism as needed (Frankena 1973: 43–52). Such theories are ecumenical in that they admit both deontological and utilitarian constituents. Note that all such constituents are species of the genus goodness, if they are good at all. This makes mixed ethical theories express instances of the implicit modal containment sort of ecumenicism described in the previous pages.

My own ethical theory has a single primary principle: "We ought to do X if and only if X is the right thing to do." This may be called the principle of rightness. It is a synthetic *a priori* principle. It is not limited to moral obligation. For there logically can be a right word in a novel, or a right brush stroke in a painting. Since the principle is a logical equivalence, obligation and rightness logically contain and depend on each other. Thus either term logically can be used to define the other. But on the face of it, it is more illuminating to explain obligation in terms of rightness than the other way around. And we may offer our usual "Kripke defense" of rightness as a logically primitive object in itself.

On the face of it, rightness is also logically tied to goodness. For the right thing to do and the best thing to do are logically equivalent. Thus we now have five logically equivalent principles: duty, utility, distributive justice, retributive justice, and rightness. The five principles are distinct only in reason, rightness being primary and the other four derivative. I find this intuitively satisfying; and at bottom, logical intuition is all we have to go with here. Well, almost.

I justify the principle of rightness itself as self-evident by intellectual intuition of its synthetic *a priori* truth. I also justify it by the dialectical argument that any ostensible counterexample would be self-defeating. For any alternative kind of act which is offered as what we really ought to do, *as opposed to* doing what is right, will, if it really *is* what we ought to do, simply *become*, by that very fact, the right thing to do.

The other four principles can be justified in these two ways as well. They all seem self-evident, certainly to some degree. And counterexamples to any of them would simply become the new examples for a modified principle. We can also derive these four principles from the principle of rightness. For example: 1. We ought to do the right thing. 2. Being distributively just is the right thing to do. 3. Therefore we ought to be distributively just. The reader can easily write the parallel arguments deriving the other three principles from the principle of rightness. Of course, perhaps any of the five principles can be used to justify the other four by means of similar derivations. If so, people might intuitively differ on which of the five principles to take as ultimate. Kant and Mill certainly did!

Even aside from arguments for deriving this principle from that, we already found the five principles to be logically equivalent, and we already found them distinct to be only in reason. This too is part of ethical ecumenicism. But which principle, if any, is best taken as ultimate?

I take the principle of rightness to be primitive because it really is more primitive than the other four. For the others are all complex species composed of a genus and a difference. In fact, distributive justice and retributive justice belong to the same genus, justice, and differ only in their defining differences (differentiae).

Of course, all five principles are epistemically justified by the principle of seeming, as seeming to be transparent to the reason.

There is a parallel between the principle of rightness and the principle of seeming. Just as we would not accept evidence of any kind, or an epistemic principle of any kind, if it did not even seem to be the case, so we would not accept goods of any kind, or ethical principles of any kind, if they did not even seem to be right. And the reason for the parallel is clear. Namely, both principles are

sine qua non in their respective fields of philosophy. The principle of seeming is epistemically prior because epistemic seeming to be right is just an instance of epistemic seeming. And the principle of rightness is ethically prior because favoring what most seems to be the case is the right thing to do. (Recall that we ought to draw only valid inferences.) Thus this is yet another mutual distinction in reason—one that ecumenically ties epistemology and ethics.

The main criticism of deontology has been skepticism that there are any logical intuitions of intrinsic goods. We may call this the Ramseyan criticism, since it basically just repeats Ramsey's criticism of Keynes' logical intuitions of probability. Here too the criticism would be most naturally made by British empiricists, and by those who reject intuited abstract entities in general. I shall not repeat my criticisms of Ramsey here; see chapter 4. But we may note that in the case of ethics, the fact-value dichotomy problem enters into the Ramseyan criticism as well, if intuitions (or more generally cognitions) are of facts as opposed to values. For there is also skepticism about deriving values from any facts at all, and not just from factual intuitions. More on that in the next section.

Utilititarianism has been typically criticized by offering counterexamples. There have been many attempts to show that some act that produces the greatest happiness for the greatest number of people is *not* what we ought to do, or that some act that does *not* produce the greatest happiness for the greatest number of people *is* what we ought to do. The counterexamples have led to a progressive series of reformulations of the principle of utility; they famously do that in Mill's *Utilitarianism* (1985 / 1861). This is the progressive series of modally distinct refinements I was speaking of a few paragraphs ago.

But the main question for us is whether deontology and utilitarianism, or any other pair of ethical theories, meet the three conditions of being distinct only in reason. Namely, the theories must be (1) intelligible, (2) logically possible (that is, not self-contradictory, categorially or synthetic *a priori* false, or logically self-defeating), and (3) save the ethical appearances equally well. Again, condition (3) is met just in case both theories produce statements that logically analyze, and are in that sense logically equivalent to, ordinary ethical statements. For the corresponding logical analyses of each theory will then be logically equivalent to each other, and therefore distinct only in reason.

Again, logical equivalence is a sufficient condition of logical containment and dependence, but not a necessary one. For one-sided modal distinctions are one-sided logical containments and dependences. They are distinctions only in reason too. That may be important in the next section, if values can be derived from facts, but not facts from values. For it is widely accepted that what

ought to be implies nothing about what is, with the exception of implying that there is free will. For it is widely accepted that we can have no obligation to do anything we have no choice about. In fact, obligation implies choice, and choice implies cognition. And that is another progressive series of modal distinctions.

Metaphysical ecumenism's logical relation to its species ethical ecumenicism does not need to satisfy condition (3) either. For any genus-species relation is a one-sided modal distinction. Of course, this applies only to *a priori* genus-species relations.

To sum up the chapter so far, ethical ecumenicism includes distinctions in reason between: act and rule theories; deontology and utilitarianism; the whole series of modally distinct refinements of utilitarianism; goodness and its kinds; evil and its kinds; more deeply and generally, value in general and its kinds; mixed ethical theories; the five logically equivalent ethical principles we just discussed; and the distinction in reason between epistemic seeming and ethical rightness. May the reader find more. I certainly plan to!

Beyond logical containments and dependences, there are often also causal containments and dependences. The happiness of a society may causally depend on justice being done, and so on. I call this *causal ethical ecumenicism*. Here we can use Aristotle's relation argument for ethical ecumenicism, since all containments and dependences are relations; see chapter 3.This may even bring us back to the logical containment and dependence arguments, via *a priori* relations among groups and their members in class theory, set theory, and mereology. For as Aristotle says, "Man is a social animal." And our emotional bonds of happiness and unhappiness in groups make great sense in evolutionary theory of survival of the fittest group. For working ethically together helps groups survive.

Hume's Fact-Value Problem

The task of the preceding section was a fairly easy one. It was mainly to show the main kinds of ethical ecumenicism *within* ethics, and many may find that task plausible. But the task of the present section is far harder, and many have thought it impossible. It is to show that values are distinct only in reason from facts. That is, we aim to bridge the gap between facts and values. This task faces Hume's famous problem of deriving values from facts, or of deriving an "ought" from an "is." And even aside from that, facts and values seem very different on the face of it. But then so do numbers and classes, properties and individuals, and so on. And we found distinctions only in reason there, so why not here?

What does Hume mean by "derived?" It is not clear to me whether for Hume "x can be derived from y" means 'y logically

implies x in the wide *a priori* sense', or 'x has a foundation in reality in y', or 'x causally originates, comes or arises from y', or 'there is no more to x than y', or 'if we know y, then we know x in virtue of our knowledge of y', or 'the occurrence of y is a criterion of the applicability of the term "x"'. These may be respectively called the logical, ontological, causal, supervenient, epistemic, and criterial senses of "derive." Of course, these senses can overlap. Or perhaps Hume means something else. But historically, philosophers have discussed Hume's problem as a matter of logical implication.

Setting Hume aside, what is best meant by "derived" here? It depends on our purposes. I am concerned with the logical question. And I think philosophers have been mainly and rightly concerned with the logical question, which includes synthetic *a priori* implication as well as analytic *a priori* implication. But I also think they would be willing to keep an open mind, and be willing to call any or all of these senses "derivation," if a derivation could be shown to obtain in any or all of those senses. But to keep it simple, I shall be concerned only with implication in the wide *a priori* sense. Thus I shall leave the question of the "basis" of morality to Schopenhauer (1965 / 1840). In fact, Schopenhauer's question properly belongs to not to metaphysical or rational ethical ecumenicism, but to *causal* ethical ecumenicism. The very fact that Schopenhauer finds the *causal* basis of morality in compassion is proof that his question belongs to *causal* ethical ecumenicism. See Richard Taylor (1965: xi–xxiii). And Schopenhauer is free to argue that his question is the only one of real importance in ethics, and that all the rest is mere ethical distraction. And perhaps he is right on both counts! But I shall pursue the logical question.

We may also conversely ask if any facts can be logically derived from any values, or any "is" from any "ought." That is the converse of Hume's question. But a derivation in *either* direction would make facts and values modally distinct. And deriving fact from value would seem at least as hard as deriving value from fact. For it is widely accepted that what ought to be does not imply what is. The only widely accepted exception would be that our having an obligation implies that we have free will, that we are conscious, that we have sufficient knowledge and ability to act, and so on. We may say that moral acts logically require acts of free will, which logically require acts of cognition in turn. And these logical preconditions of moral obligation are enough to make all moral obligations formally distinct from the fact of free will with a foundation in reality in the fact of free will; and similarly for any other logical preconditions. Thus, there are *two* problems of derivation that are logical converses of each other; and the second problem *can* be solved, at least in the minimal ways I just indicated. And this already shows that moral obligations are

distinct only in reason from some very basic facts. But that is not Hume's problem. It is the converse of Hume's problem! In fact, it is logically irrelevant to Hume's problem, which is about logical derivation in the opposite direction.

In *A Treatise of Human Nature*, Hume argues that obligations cannot be based on reason, that is, derived from (or intellectually intuited in) facts out there in the world external to us, but can only be based on the moral sentiments within us (Hume 1973 / 1740: book 3, part 1, sect. 1). See also *Enquiry Concerning the Principles of Morals* (Hume 1972 / 1751: sects. 133–138). Hume's actual section title is, "*Moral distinctions [are] deriv'd from a moral sense*" within us, as opposed to being derived from facts out there in the world (Hume 1973 / 1740: 470, Hume's emphasis). Thus he *is* admitting a *derivation*, but only from moral sentiments within us, and not from impressions that belong to the world outside us as well as within us, per his neutral monist theory of minds and bodies as overlapping bundles of impressions. *And that is actually his own derivation of value from fact*. But it is not what his problem is about, or so it seems. Perhaps the reader can already sense a parity of reason problem, or dilemma, across Hume's mind-bundles and body-bundles on deriving value. For the bundles are not so different. But let us continue to expound Hume.

Thus Hume's argument, which I have not yet described, at least anticipates the relevantist theory of entailment containment by grounding the impossibility of deriving an "ought" from an "is" in their being located in two different realms, respectively mind-bundles and body-bundles. More precisely, sense-impressions are members of both sorts of bundles. If I see a house, then at least one house-impression is in both my mind-bundle and the house-bundle. But ideas and moral sentiments are only in mind-bundles. Thus they are wholly distinct from sense-impressions that are in body-bundles. Thus it is logically contingent whether we have any moral sentiments about sense-impressions that are in body-bundles. Thus for Hume, external facts are logically irrelevant to values. For external facts are body-bundles of sense-impressions (bodies). And the existence of such facts is logically irrelevant to the existence of values. For the existence of facts is logically irrelevant to the existence of moral sentiments. For moral sentiments are logically contingent and exist only in mind-bundles. And values are derived only from moral sentiments. At most, facts are *causally* relevant to moral sentiments, and thereby indirectly to values. But for Hume, cause is merely regular concomitance and a habit of expectation. Thus for Hume, any causal relevance of facts to values would be missing any idea of causal power—quite literally!

I just said it initially seems that Hume's derivation of value from moral sentiment is not a case of the very sort of derivation of

value from fact which he denies. But this seeming is an illusion, if not delusion. And that is the case on two levels.

First, even if moral sentiments cannot occur in the bundles of impressions that are bodies, they *are* impressions, and in that sense they are just as much facts as sense-impressions are. They are impressions that are *only* introspected (inwardly perceived). What else could they be? For Hume, everything is either an impression, an idea, or a bundle. And sentiments are neither ideas nor bundles. Thus the only option left is that they are impressions. They are members of the bundles that are minds. And we are aware of them as well as we are of sense-impressions. Sentiments cannot be ideas because ideas are derived from impressions, usually as faint copies of them. And there are no moral impressions that sentiments can be derived as ideas *from*. Quite the opposite, moral sentiments *are* moral impressions, and we derive ideas of moral sentiments from *them*.

Hume expressly says that sentiments are impressions:

> SECTION IL
>
> *Moral distinctions* ***deriv'd from*** *a* ***moral sense***.
>
> Thus the course of the argument leads us to conclude, that since vice and virtue are not discoverable merely by reason or the comparison of ideas, it must be by means of some **impression or sentiment** they occasion, that we are able to **mark** the difference betwixt them. Our **decisions** concerning moral rectitude and depravity are evidently **perceptions;** and as all perceptions are either **impressions or ideas**, the exclusion of the one [i.e. ideas] is a convincing argument for the other [i.e. impressions]. Morality, therefore, is more properly **felt** [i.e. impression] than judg'd of [i.e. idea]; tho' this **feeling** is commonly **so soft and gentle**, that we apt to **confound** it with an **idea**... (Hume 1973 / 1740: 470, Hume's italic emphasis, my bold emphasis)

Thus "vice and virtue... occasion" impressions or sentiments "by means of" which "we are able to" distinguish them. Hume even warns us against 'confounding' them with ideas.

Hume immediately goes on to describe what impressions / sentiments / feelings vice and virtue "occasion": "The impression arising from virtue [is] agreeable, and that proceeding from vice [is] uneasy," for example, "noble" and "cruel" "actions" occasion "pleasure" and "pain" respectively (Hume 1973 / 1740: 470–471).

Thus there is no escaping the fact that for Hume,

sentiments are impressions. And we cannot have sentiment-ideas unless the ideas are derived from sentiments that *are* impressions.

Are "moral distinctions deriv'd" from *factual sentiments*? And are values already outside in the "noble" or "cruel" "actions" that "occasion" the sentiments? Are values in outer action-bundles?

The only dialectical way out is to say that sentiments are a *special sort* of impressions, impressions of *inner* sense; and that Hume's problem is all about impressions of *outer* sense. But all impressions, inner and outer, are categorially the same. They are all impressions! And some of them are categorially factual if and only if *all* of them are. That is the parity of reason argument, or dilemma, I mentioned. If a moral sentiment that murder is evil can give rise to an idea of evil, then why cannot a sense-impression of a murder as evil give rise to the same idea?

The second and deeper level on which it is an illusion to say that Hume's derivation of value from moral sentiment is not a case of the very sort of derivation of value from fact which he denies, is this. Again, sentiments are categorially impressions just like sense-impressions. Therefore just like sense-impressions, they *logically can belong* either to mind-bundles, to body-bundles, or to both. And if sentiments can belong to outer bundles, then it is even more obvious, if that is possible, that Hume has his own derivation of values from facts. For he is then deriving values from moral impressions that logically can be bundled into bodies as easily as house-impressions can.

Even worse, the only difference between inner and outer impressions is which bundles they occur in. And that is a logically contingent matter of their lawlike or regular concomitance.

Hume appears to be wholly unaware of these points. So let us try to make sure they really are valid points about his neutral monism. I shall try to explain how his neutral monism works.

For Hume, there literally are no bodies "out there," and there are literally no minds "in here" either. Not only are there no material substances, but he has no *idea* of body because he has no impression of one. Not only are there no mental substances, but he has no *idea* of self because he has no impression of one. There is no categorial difference between 'outer impressions' and 'inner impressions'. They are all equally impressions. In fact, one and the same impression can be and often is both outer and inner, depending on what other impressions (or ideas) we conceive or regard it as bundled with. And all impressions are equally mind-independent, meaning for him that they logically need not occur in an inner bundle. He can scarcely say they are literally mind-independent, since he literally admits no minds. Thus he literally admits no idea of mind to serve as the meaning of the word "mind," since for him, the meaning of a term is the idea it expresses. Thus

he literally cannot say that anything is literally mind-independent, or for that matter, mind-dependent. For the very word "mind" is meaningless for him. For there is literally no idea for the word to express. Whether this makes his metaphysics self-defeating, since on his own view he literally cannot know what he is talking about when he talks about minds and bodies, not even when he argues that they cannot exist because he has no idea of them, is beside the point. For we are merely trying to explain his neutral monism now.

Thus if Hume cannot derive values or obligations from impressions in externally bundled impressions, then he cannot derive them from impressions in internally bundled impressions either. For they are categorially the same sort of impressions. In fact, they are often *the very same impression*. For example, when I see a house, the house impression is literally in both the house-bundle and my mind-bundle. And categorially speaking, there is no reason why a moral sentiment cannot occur in a bodily murder-bundle. For categorially it is an impression or perception just like any other. Thus if Hume can derive values or obligations from the moral sentiments 'in there' in mind-bundles, then he can derive them from the very same moral sentiments 'out there' in body-bundles. They would not only be categorially the same sort of impressions, but they would also be *the very same impressions (i.e. the very same particulars)*. And it would violate the principle of the indiscernibility of identicals to think that if we can derive a value from a moral sentiment-impression in an inner mind-bundle, that we cannot derive the same value from the same moral sentiment-impression in an outer body-bundle. For it is the identical moral impression! And that principle, unlike the principle of the identity of indiscernibles, is a trivial truth for everyone who does not admit impossibilia. For if a value can be derived from a moral sentiment in a mind-bundle, then the identical value can be derived from the identical moral sentiment if it occurs in a body-bundle. And on the fact of it, it does occur there when we ordinarily say we see an evil murder.

That moral sentiments logically can occur in body-bundles is not as far-fetched as one might think, as I shall try to explain.

First, bundles of impressions are Hume's logical analysis of *ordinary* bodies. And we *ordinarily* think that bodily murders are both objectively and intrinsically evil. Thus bundling the moral sentiment of evil with the visual and auditory sense-impressions of the murder is phenomenologically correct. For us, qualified evil murders and qualified stones are equally real objects of perception or thought. And they both logically can "be" equally real objects in themselves. Likewise, all of Hume's impressions are equally real, all his ideas are equally real, and all his bundles are equally real (or more precisely, in the case of bundles, equally fictitious). And both

in Hume's case and ours, this is for categorial reasons.

Second, if everyone had the same moral sentiments about the same ordinary things, at least as much as they have the same impressions of red and round about the same ordinary things, then sentiments *positively ought* to occur in external bundles, *at least as much* as impressions of red and of round do. And just what *is* the extent that everyone sees the same thing as red or round? It is only *more or less*, since people never or almost never have exactly the same perceptions of an apple. And yet the bundle we call an apple is deemed *sufficiently* red and round to be *called* red and round as well, if people's impressions are sufficiently similar. It should be exactly the same for moral sentiments, since they are equally as much perceptions / impressions). Why this was not seen by Hume's earliest readers, not to mention by Hume himself, is beyond me.

Third, physics today does not find any moral sentiments out there in the physical world. But it does not find red or round, taste, smell, or even a sense-impression of solidity, out there in the physical world either. Ordinary bodies are almost entirely empty space, except for the quantum plenum. A seemingly cubical block of stone is not even cubical, but a jagged, mountainous affair on the level of molecules. On the level of electrons, Quine says, there simply can be no criterion for when an electron leaving or entering a stone block is part of the block. For the block's surface is just too rough and indeterminate for that.

Parsed into an 'inner' bundle, a moral sentiment may be called an inner impression. Parsed into an 'outer' bundle, the very same sentiment may be called an outer impression. If ten people see a bloody murder and have basically the same moral revulsion, the ten impressions of blood red are outer impressions bundled in the murder-bundle, and they are also inner impressions, bundled one each in each of the ten mind-bundles. That is the mechanics of Hume's bundle theory. But then why not the same for the ten moral sentiments of revulsion? The moral sentiments are just as similar to each other as the ten impressions of red are to each other. And they logically could be *more* similar to each other than the impressions of red are to each other! Should not Hume then be bundling the ten moral sentiments into the outer murder-bundle too, as well as one each in the ten mind-bundles? If they are *more* similar to each other than the impressions of red are to each other, should he not be bundling them into the external bundle even more certainly than the reds? For bundling impressions into body-bundles generally goes by similarity of impressions across observers, not by what kind of impressions they are. To be sure, an odd perception of the blood as green by a red-green confused observer is not ordinarily regarded as the blood's real color in ordinary life. And Hume would be wise to bundle the impression of green only in the odd observer's mind-

bundle, and not in the blood-bundle. For Hume's bundle theory ought to be able to distinguish ordinary real things from ordinary illusions and delusions. If it cannot ground even that ordinary distinction, then it simply fails as an analysis of ordinary things. I may be departing from Hume; but if I am, I am improving him.

To sum up, if Hume cannot derive, mark, or discern values from outer sentiments, then he cannot derive, mark, or discern them from inner sentiments *either*. For they are the same sentiments. And if Hume is right that we *can* derive obligations from inner sentiments, then we can derive them from outer sentiments *too*. For again, they are the same sentiments. What a dilemma for Hume!

Let us call this dilemma "Hume's Dilemma." Two remarks may help explain it.

First, Hume is a neutral monist. All impressions, including sentiments, are logically mind-independent in the ordinary sense, except that *my* impressions cannot exist independently of *my* mind (my mental bundle). All impressions, including moral sentiments, are deemed mental if they are members of mental bundles, and are deemed physical if they are members of physical bundles. Thus we have just as much metaphysical right or reason to consider an externally bundled moral sentiment of revulsion an aspect of a murder as we have to consider an externally bundled impression of red an aspect of an apple. And an impression can be both mental and physical in virtue of belonging to both a mind-bundle and a body-bundle. In fact, this happens all the time. If I see a house, my house-impression is a member of both the house-bundle and my mind-bundle. My only criticism on this level is that Hume should distinguish between sensed and unsensed sense-impressions, much as Russell distinguishes between sensed and unsensed sensibilia.

Second, all Humean impressions, including sentiments, are part of what is, as opposed to what ought to be. Moral sentiments are, at most, feelings *about* what ought to be. But how is it possible even to have a feeling about what ought to be, without smuggling the concept of obligation into the feeling itself? Now, if Hume had via antiqua impressions and ideas, we could say that only the formal reality of a sentiment of moral approbation must belong to what is, and part or all of its objective reality can belong to what ought to be. Insofar as that is so, it would be the objective reality of an object of thought. But Hume's via moderna impressions and ideas have no objective reality in the Cartesian (or really medieval) sense. They have only formal reality in the Cartesian (or medieval) sense. Thus Hume's moral sentiments obliterate the hybrid or dual fact-value nature of moral sentiments. For the value-aspect can only be in the objective reality, and Hume's moral sentiments *have* no objective reality.

Recall that an objective reality can be anything. It can even

be nothing (*das Nicht*) or self-contradictory (the round square). To be sure, Hume can object that a fact that implies a value is like a round square. But values are objects in the wide sense. They are all different, so they cannot be nothing. Thus they can be in objective realities. And objective realities logically can "be" objects in themselves, if they are not logically impossible. And on the face of it, there is nothing logically impossible about an evil murder. Quite the opposite! That murder is evil seems logically *necessary*. This is in the wide *a priori* sense of logic.

Again, Hume might object that his moral sentiments are a special *sort* of impressions, such that they imply moral values, and do so *if and only if* they are bundled into mind-bundles. Thus Hume could still deny that in the *external* world of facts, meaning for him his body-bundles, facts do not imply values, nor are there any values in the external world. And he could say that this is what he really meant, and all he meant, by his thesis that facts do not imply values. Or Hume could simply deny that sentiments can be bundled into body-bundles in the first place. I think those would be Hume's two best replies to me structurally speaking, meaning within the "metaphysical mechanics" of his bundle theory.

But we can ask in reply, What *is* so special about moral sentiments? What makes them, alone, imply values? Why could the murder itself not be what motivates, activates, or obliges us to punish the murderer? After all, it is a murder! And why could this not be a synthetic *a priori* intuitive logical derivation of a value judgment from a murder? Is that not just what it is? That a murder is descriptively defined in both ordinary language and law as more than a mere killing, since it requires intent to kill, does not detract from this point. For example, a first-degree murder, or killing with the deliberate, planned intention to kill that is neither a legal execution, nor an act in a declared war, nor a self-defense, is on the face of it a fact, not a value. But on the face of it, it is also a fact that *implies* a value. Is not murder, as such, evil? For life is a fact that has value, and a murder ends a life for no good reason.

I am only showing that *Hume* cannot consistently derive values from moral sentiments when they are bundled into 'minds', but not derive values from the very same sentiments when they are bundled into 'bodies'. What has the way sentiments are bundled got to do with it? It is simply, categorially irrelevant. For Hume, bundles are not even real! They are fictions. Worse, sentiments are facts as opposed to values. They belong to the realm of "is," as opposed to "ought." They are impressions! They logically can, or more precisely, categorially can belong in external bundles, such as murders and acts of kindness, just as much as they can belong to inner bundles, such as you and me. But if so, then if values cannot be derived from sentiments when they are bundled into 'bodies',

then neither can Hume derive values from the very same sentiments when they are bundled into 'mind'. And the real problem is that all his impressions, including moral sentiments, are via moderna. His bundles, including his 'noble actions' and 'cruel actions', are via moderna too. How can a mere bundle of sense-impressions be noble or cruel? They are a poster child for Buddhist non-action!

But enough of Hume for now. Let us return to the deeper, more general question he raises: Can values ever be derived from facts? That is, do facts ever logically imply values? Perhaps a 'fact metaphysic' such as my own might be a more proper venue for exploring the question than Hume's bundle theory ever could be.

The view that values can be derived from facts is often called naturalistic ethics. Here I use "naturalistic" to mean anything that is a fact as opposed to a value, regardless of whether the fact is physical, mental, abstract, or other, and regardless of whether it is essential or accidental, logically necessary or logically contingent, intrinsic or extrinsic, or even real or relative. This is deeper and more general than Moore's use of "naturalistic," since my use includes his naturalistic ethics, his hedonism, and his metaphysical ethics alike (Moore 1971 / 1903: chs. 2, 3, 4 respectively).

Deontological ethics is naturalistic, if in deontology we objectively, rationally intuit whether a thing is *intrinsically* good or evil from its naturalistic, that is, factual properties, including the relational facts in a complex thing or situation. If so, naturalistic ethics is only formally distinct from deontological ethics, with a foundation in reality in the natural (factual) properties or relations of things. But the concepts *naturalistic* and *intrinsic* are different, certainly if we restrict naturalistic objects to things that happen in space and time. For it is intrinsic to the number two to be even, and the number two is an abstract object not in space or time. But on metaphysical ecumenicism, we also parse the number two as an in re universal abstracted from two apples, two oranges, and other dyads (pairs). See chapter 3 on particulars and universals. Thus the in re universal two is multiply located in space and time if it has instances there. If so, it would fail to distinguish naturalistic from intrinsic. Only its parsing as an abstract ante rem universal or particular outside of space and time can do that. Here I speak of ordinary space and time, and classical physics. For Einstein, there is no objective space or time for apples and oranges to be in.

I also deepen and widen the concept of being naturalistic to include extrinsic as well as intrinsic propertial and relational facts. Thus the concept *naturalistic* is deeper and more general than the concept *intrinsic* after all, even waiving abstract objects.

The distinction between deontological and naturalistic ethics is modal (one-sided), since utilitarianism is naturalistic too. For pleasures and pains as such are facts as opposed to values. And

utilitarianism makes values depend on the *extrinsic* consequences of our act, that is, on what pleasures and pains they *cause*. Thus naturalistic ethics is deeper and more general than either deontological ethics or utilitarianism. It is the genus and they are its two main species. Clearly, these species are modally distinct from each other in Descartes' second sense of modal distinction. And we showed earlier in this chapter that they are modally distinct in Descartes' first sense, on pain of vicious infinite regress of consequences.

What Moore calls the "naturalistic fallacy" is purported to be shown by what has been called Moore's "open question test" (Moore 1971 / 1903: 15–16). I shall explain both in my own way. Where P is some natural (i.e. factual) property, R is some natural (i.e. factual) relation, and V is some value, Moore can be said to claim that the following question is always "open," that is, never has a determinate (true or false) answer: "Object O has property P (or stands in relation R to object O*); but does O have value V?" And if the question is open, then the natural fallacy is to think that the question is closed, that is, that O's having value V is *made* determinate by O's having P (or standing in R to O*). Where Moore speaks of goodness, I shall widen the test to include *any* value V. And where Moore infers that goodness is simple and indefinable *from* that question's (supposedly) being open (Moore 1971 / 1903: 14–17), my widening of his test shows that Moore is implicitly committed, if his inference from the openness of the question to the simplicity of goodness is valid at all, to holding that *all* values are simple and indefinable—even logically complex values that we *define* as including simpler values! For *all* values, simple *or* complex, fail Moore's open question test. Clearly, then, Moore's inference is absurd. More precisely, it is a non sequitur. For Moore was wrong to infer the simplicity and indefinability of goodness from the (supposed) openness of the question in the first place. For all questions whether any *logically possible* values, simple *or* complex, follow from any *logically possible* facts, are open questions on his test, if he is right that goodness is open.

Of course, we already knew Moore was wrong to infer that goodness is simple and indefinable from the (supposed) fact that his question is open. For we saw earlier that in point of fact, goodness is a complex property, not a simple one. For I defined goodness per genus and difference. Where value is the genus and positive is the difference, I defined goodness as positive value. And by modus tollens, if goodness is *not* logically simple, and if goodness's being an open question logically implies that goodness *is* logically simple, then goodness does *not* fail the open question test. (Modus tollens is the argument form, If P then Q, but not-Q, therefore not-P.) Either that or it is a bad test, or both. Indeed, if the test does not and cannot show what Moore thinks it does, then the

test is a total failure. Philosophy is the graveyard of bad tests!

If, *per impossibile*, the open question test *worked* for goodness, and successfully *showed* that *no* factual property P or relation R of object O makes it logically determinate, i.e., either true or false, whether O is *good*, then regardless of whether the test *also* showed that goodness is simple and indefinable, the test *would* succeed for *all* values, positive and negative alike, and also for any values that are neither positive nor negative. Note that positive and negative are not contradictories, but only contraries. Positive is not the same as non-negative, and negative is not the same as non-positive. In fact, positive and negative are both positive qualities in the same sense that perceived light and perceived darkness are, and white and black are. All these are contraries, not contradictories. But as we just saw, the open question test is a total failure.

Of course, Moore's open question test is just window dressing for Hume's problem of deriving value from fact. Moore is elaborately asking if we can derive a value from a fact. And that is precisely Hume's problem. In fact, Hume's problem is the plainer and more direct way of putting it. Thus we need not be further detained by Moore. We can proceed more plainly and directly with Hume, even though we are not restricted to his bundle metaphysics.

In fact, Moore's test is a retrograde step. For dressing Hume up with all that open question test rigmarole obscures the real issue, which is logical derivation pure and simple. No doubt many think Moore is throwing the question in sharper relief, or bringing it out better. But Hume is the one who states the problem plainly. In fact, Moore's naturalistic fallacy just *is* Hume's problem of deriving value from fact. More precisely, they are distinct only in reason, since they are different formulations of the problem. On the face of it, they are formally distinct with a foundation in reality in Hume's problem. And if Moore did not notice that he (Moore) is merely reformulating Hume, perhaps that is why Moore does not even mention Hume in his book (Moore 1971 / 1903: Index). If so, then Moore is dressing up Hume without even knowing it! In any case, if Moore had wanted to be as plain and direct as Hume, he should have simply spoken of logical derivations, instead of all that open question test and answer claptrap. In the lexicon of Quine, Moore is dressing up Hume with a mere semantic ascent.

Clearly, Moore's test fails if and only if Hume's problem is defeated by logically deriving some value from some fact. I shall investigate Hume independently. But if we can show that Hume is wrong by deriving some value from some fact, then we show that Hume's semantic mirror, Moore, is wrong too. For the very same counterexample will close the question on Moore's test. And conversely, if we show that Moore is wrong, then we show that Hume is wrong too.

I shall discuss counterexamples to Hume and Moore later in this chapter. But for now, consider these questions: "This is a murder, but is it evil?" "This is an act of kindness, but is it good?" Do we not have determinate answers to these questions? Are these questions not closed? Is it not a fact, yes or no, whether something is a murder or an act of kindness? Is it not easily intelligible to the reason, not to say utterly transparent to the reason, that murders are intrinsically evil, and that acts of kindness are intrinsically good?

I shall not discuss Moore further, but return to Hume, and then proceed on my own, giving counterexamples to both.

Hume's Argument Against Deriving Values from Facts

I shall now present and discuss Hume's argument, or main argument, that no value can be derived from a fact. A full scholarly discussion of Hume's theory of impressions, and of ideas copied or derived from impressions, is beyond the scope of this book. But his theory should be basically familiar to the reader. And we need not discuss his bundle theory further.

Hume rejects Platonic forms, and that would include the Platonic forms of factual murder and of factual kindness, as well as the forms of values like good and evil. Hume denies that any such forms exist. But we may interpret Hume as arguing further that even if, per impossibile (for him), such forms *did* exist, we *still* could not derive values from facts. That is because for him, there would be no reason why the existence of any Platonic forms would affect the question of logical derivation of values from facts. For their existence would simply be a fact, and they would simply be facts. And for the same reason, he would deny that Platonic forms could be dual-aspected as both facts and values that are intelligible to the reason, and distinct only in reason. Here I would distinguish Platonic forms as *perfections* from forms as *values*. All forms are perfect, but only some forms are values. That the form *circle* is perfect circularity is a fact, not a value. At most, it would have the Aristotelian virtue of excellence of its kind. Namely, it would have excellence of circularity. But such virtue-language is very awkward here. In fact, it is literally wrong. How could abstract perfect circularity be a virtue? It is only Platonic forms like courage or wisdom that are virtues. And courage and wisdom would be virtues even if Platonic forms did not exist. We admitted Platonic forms into our metaphysical ecumenicism in chapter 3. I shall return to Platonic forms later, and the Platonic forms that are virtues will be among my counterexamples to Hume and Moore.

What is Hume's argument? Hume says:

> Those who affirm that virtue is nothing but a conformity to reason; that there are [Platonic] eternal fitnesses and unfitnesses of things; which are the same to every rational being that considers them; that the immutable measures of right and wrong impose an obligation, not only on human creatures, but also on the Deity himself: all these systems concur in the opinion, that morality, like truth, is discern'd merely by ideas, and by their juxta-position and comparison. (Hume 1973 / 1740: 456–457; compare 1972 / 1751: 170–171)

Hume says, "As long as it is allow'd, that reason has no influence on our passions, 'tis vain to pretend, that morality is discover'd only by a deduction of reason. An active principle can never be founded on an inactive.... (Hume 1973 / 1740: 457; compare 1972 / 1751: 171–172). Hume argues more fully:

> Since morals, therefore, have an influence on the actions and affections, it follows, that they cannot be deriv'd from reason; and that because reason alone, as we have already prov'd, can never have any such influence. Morals excite passions, and produce or prevent actions. Reason of itself is utterly impotent in this particular. The rules of morality, therefore, are not conclusions of our reason. (Hume 1973 / 1740: 457)

Before criticizing Hume's argument, we should note what his argument is not. It is not Moore's open question test. No question is asked or answered. Nor is it a Wittgensteinian contextual or situational argument that values and obligations cannot be logically derived from any one set of facts, since we can always add more facts that would defease the derivation. Hume's argument concerns influences or excitements to act, not contextual situations. Still less is it a blend of Moore and Wittgenstein, that is, an argument that value-questions are always open *because* the value of a fact depends on the situation and therefore can always be defeased. Neither Hume nor Moore argues like that. But it is merely an ad hominem to point that out, since the argument might still be sound.

My main criticism is that Hume's argument is a non sequitur. It commits the fallacy of ignoratio elenchi (irrelevant conclusion), and is even a red herring (a positive distractor). Yes, deductive (or for that matter, inductive) reasoning is merely factual, and is ethically neutral, except in the (here irrelevant) sense that we always ought to draw only valid conclusions. Yes, even a direct

intellectual intuition of a Platonic form (or for that matter, of anything else) is merely factual, and is ethically neutral, except in the (here irrelevant) ethical sense that we ought to accept veridical intuitions and sound arguments. That much is absolutely correct. But Hume's problem concerns not the *reasoning* or the *intuition*, but what the reasoning or intuition is *about*. It concerns not the *act* of reasoning or intuiting, but the *object* of the act. And Hume's problem specifically concerns whether *within* the object of the act, there is a distinction of reason between a form qua fact and the same form qua value, such that the form qua value can be derived synthetic *a priori* from the form qua fact. I say synthetic because while every form is identical with itself, in any form that is a value, such as the form of courage, the form qua fact is a different object in itself from the form qua values. And objects that are distinct only in reason can only be different objects, since they are distinct. And that trivial universal truth instantiates to forms qua facts and forms qua values as well as it does to any other objects that are distinct only in reason. (Many readers may already see why value-forms are counterexamples to Hume and Moore.)

Surely we should not argue, "There are no minds, therefore there are no acts of cognition of objects (and no other mental acts)." Instead we should argue, "There are acts of cognition, therefore there are minds. For just as there are (and can be) no homeless mental ideas that exist outside a mind (Frege 1968 / 1918: 520–521), so too there are (and can be) no mental acts that exist outside a mind. This is a criticism of Hume's bundle theory, since that theory rejects minds. More deeply, it is also a criticism of that theory for failing to *eliminate* a real act-object distinction. For on the containment and dependence arguments, if Hume's analysis of my seeing a tree in terms of the tree-impression's being in both the tree-bundle and my mind-bundle is logically equivalent to and thus distinct only in reason from a Moorean analysis in terms of a real mental act and the tree as its real object, then realism wins, as it always does in metaphysical ecumenicism. See chapter 3. But the point for us here is that this is also a criticism of Hume's argument against the derivation of values from facts. For in that argument, Hume is mistaking an act for its object. For the premiss of his argument against deriving values from facts is all about *reasoning*. And reasoning is an *act*. But if we are reasoning about *values*, then values are the *objects* of our acts of reasoning. Thus merely because *acts of reasoning* fail to excite the passions, it does not follow that the *objects* we reason about, in this case values, cannot excite the passions. That is why his argument is a non sequitur. His premiss is not even about the same thing as his conclusion! It is just like arguing that because my seeing a tiger charging at me is merely an act of perception in my mind, and as such cannot excite me to

action, since it is a mere mental act that exists only in my mind, it follows that the object of the act, the tiger charging at me, cannot excite me to action.

No doubt Hume's rejection of via antiqua ideas, and his rejection of minds that think about things in cognitive acts that have objects, help prevent him from seeing that his premiss is about the act and his conclusion is about the object. But I think he should have seen it regardless. For his bundle theory is in effect a logical analysis of ordinary statements about people cognizing things, such as values and tigers. But it is an analysis of limited validity. Are values, as well as moral sentiments, to be bundled in both mind-bundles and body-bundles? If I see that Achilles is courageous, is his virtue of courage to be bundled in both Achilles' body-bundle and my mind-bundle? Is then courage an impression, and our idea of courage a faint copy of that impression? Are all values neutral monist 'value-impressions' or 'perceptions'?

Formal deductive logic is a species of reasoning. It has a universal scope because it concerns the logical *form* of reasoning. But we can reason about any objects in the wide sense of "object." Now, values are objects in our wide sense. For they are all different and cannot be nothing. And we can reason about values just as easily as we can reason about anything else. R. M. Hare makes that clear with his logic of imperatives (commands), in which we can formally reason about obligations exactly as well as we can reason about facts in our usual indicative logic (Hare 2001 / 1952). After Hare wrote, it must have been noticed that we can just as easily have and reason in a logic of interrogatives (questions) as well.

This is very easy to explain in Frege's theory. Deductive logic applies to thoughts (propositions). Assertion, question, and command are all what Frege calls "forces." One and the same thought can be asserted, commanded, or questioned. The forces indicated in "The door is shut," "Shut the door," and "Is the door shut?" all apply to the same thought (proposition). And a thought can be grasped without applying any force at all. We do that when we simply think a thought, or use it as a mere assumption or supposition for the sake of an argument or, as Frege says, in an indirect proof that, far from asserting the proposition, is aimed at disproving it. Supposing or assuming is not a force, but is instead merely cognizing the proposition. Thus logical reasoning is really about the propositions, regardless of whether any force is involved. And the logic of indicatives, Hare's logic of imperatives, and the logic of interrogatives all just use the same old propositional logic prefixed or indicated by different forces. Frege and Russell always use a judgment-stroke (Frege) or thesis assertion sign (Russell) as the indicator of assertoric force in their formal logics. And that is because they are concerned with proving assertions, and not with

issuing commands or asking questions. But their proofs would be identically valid if they used an imperative sign or an interrogation sign, or any force at all. For the forcial prefix is logically irrelevant to the validity of the proof. Thus we can have a suppositional logic in which no forces are indicated as well. In fact, suppositional logic *is* just the same old propositional logic that the forcial logics prefix with different force-indicators! The forces are just window dressing for the merely suppositional logic. As a logical ecumenicist, I find that a logic that admits indicators for all the forces is best and most complete, with suppositional logic as the foundation in the logical order. It also reflects the richness of ordinary language reasoning.

Obligations are primarily moral imperatives that belong to the logic of imperatives. All ethical imperatives are imperatives, but not all imperatives are ethical imperatives. Without more, "Shut the door!" is an ethically neutral imperative on its face. However, even here we must not confuse reasoning with the objects reasoned about. For all obligations are objects in the wide sense. And we can reason about them in indicative logic, interrogative logic, and even suppositional logic exactly as well as we can in imperative logic. For obligations are *objects in the wide sense that we can denote, refer to, and reason about* in any of these logics equally well. To think otherwise is to mistake reasoning for the objects of reasoning. It is to think like Hume in his fallacious 'motivational argument' against deriving values from facts.

Formal deductive logic concerns the form of reasoning, not the content. Thus it can and must be about all objects, and this includes values as objects in the wide sense. And this is regardless of whether the formal logic is indicative, imperative, interrogative, or suppositional. Values are objects of formal reasoning, not part of the formal reasoning itself. That some objects are moral values could scarcely be more irrelevant. How could Hume miss that? This is a category confusion if there ever was one. For it confuses a sentence's logical form with its referents. As Russell says, formal logic is purely general in form. And like any other objects, moral values can be the values of its variables (a double entendre).

Likewise for intuitive logically valid derivations that are synthetic *a priori*. If we can derive the form qua value of Achilles' courage from the same form qua fact, that intuitive synthetic *a priori* derivation is logically valid regardless of whether we are reasoning from indicatives (factual assertions) to imperatives (obligations) or the other way around. We could use *interrogative* sentences to derive the value from the fact, and it would make no difference to the validity of the derivation. For logical validity has nothing to do with the force indicators of the sentences that are the premiss(es) and conclusion of the inference. Even forceless merely suppositional logic will make the same inferences logically valid.

Therefore we must not confuse the imperative force of an imperative sentence with any ethical value or moral obligation the sentence may be about. For the same sentence prefixed by an indicative or interrogative force indicator, or even merely supposed with no force indicator at all, will still be about the very same value or obligation. In Fregean terms, a sentence's sense and reference remain the same regardless of which force indicator prefixes it, and regardless of whether it is prefixed at all. And this is so even if we introduce a *specifically ethical or moral* imperative indicator. There is all the difference even between a specifically ethical or moral imperative force indicator and the value or obligation a sentence may be about. For either the force or the referent logically can exist without the other. An obligation can exist even if we never talk about it in a force-prefixed sentence. And we can use assertoric force to falsely assert the existence of an obligation that does not exist. Of course, there is a clear sense in which a specifically ethical or moral imperative force would be the most *fitting or appropriate* one for a sentence about an ethical value or a moral obligation. But we may merely wish to state indicatively that there *is* an obligation, or to ask interrogatively *whether* it exists. We may even merely wish to *suppose* hypothetically that the obligation exists for the sake of some argument, or merely wish to think about the obligation without trying to prove anything.

Thus a value or obligation is or is not the case regardless of any force we may use when we talk about it, and regardless of whether we talk about it at all. And our using a certain force to talk about a value or obligation, not to mention our talking about the value or obligation at all, is or is not the case regardless of whether the value or obligation exists. Recall that when we talk or reason about a value or obligation, we are *directly* talking or reasoning about a *qualified* value or obligation which may or may not "be" a value or obligation, and which we might not even *suppose* to "be."

The same point applies to the apprehension of the truth or falsehood of a single sentence without any reasoning from premiss to conclusion. The apprehension can be either perceptual (in a wide sense) or *a priori*. If *a priori*, it can be either analytic or synthetic *a priori*. But either way, the apprehension is always of the truth or falsehood of the proposition the statement expresses. (For Frege, a proposition is what he calls a thought. For us, a proposition is a qualified fact. See chapter 1.) Here too it does not matter whether the sentence is asserted, commanded, questioned, or supposed. "This is red, therefore it is not green." "Make this red, therefore make it not green." "Is this red, therefore isn't it not green?" The very same proposition can even be grasped without applying any linguistic force to the sentence that expresses it. "I merely suppose that this is red, therefore not green." Likewise for "This is murder,

therefore it is evil." Here too the logical derivation of (negative) value from fact is logically independent of any linguistic force the sentence may be expressed with. Again, a specifically moral kind of imperative force would be in an obvious sense the most fitting one for talking about an obligation. But we can also merely state that there is an obligation, or ask whether it exists. We even may wish merely to suppose it for the sake of the argument. But the obligation is or is not the case regardless of the force we use when we talk about it, and the force we use is or is not the force we use regardless of whether there is an obligation.

Hume would be right that "Murder is evil," or even "We have an obligation not to murder," is merely an indicative statement whose linguistic force is assertoric, not imperative. And he would also be right that any reasoning we do about that statement, or even our (per impossibile for Hume) discovering its truth by a simple Platonic intellectual intuition, is morally neutral, and, as such, logically cannot motivate us or excite our passions. But that is simply irrelevant to the value or obligation the statement is *about*. Surely everyone would agree that it is the value or obligation itself, and not any reasoning we do about it, and not even our synthetic *a priori* intuitive apprehension of the truth of the sentence, as such, that motivates or excites us. I think Hume sees all that too. In fact, that is in effect his premiss. But his conclusion, that therefore values and obligations are derived only from our moral sentiments within us, and not also from murders and other moral events in the outer world', does not follow. And again, that is ironically his own derivation of value from fact. For again, Hume's Dilemma is that he can derive values from sentiments bundled into mind-bundles if and only if he can derive the same values from the same sentiments bundled into body-bundles. For how they are bundled is logically irrelevant. It simply does not matter!

My conclusion is that Hume's positive argument that we cannot derive value from fact, nor ought from is, is a total failure. The premiss is not even relevant to the conclusion. The premiss is a red herring (a logical distraction). It is the value that ethically motivates and excites us (when we cognize it), and not how we reason or think about it, or even how we cognize it.

The Phenomenological Argument for Deriving Value from Fact: The Fact and the Value of Courage are Formally Distinct in Reason

I come now to my first argument in favor of a derivation of value from fact, i.e., my first counterexample to Hume. It is based

on Continental phenomenology, which is very different from Hume's British empiricism. Since I think my phenomenology in chapter 1 is the best, I shall use it. But the argument is really based on Continental phenomenology regardless of whether my particular version of it is its best theoretical articulation. Indeed, that is part of my phenomenological ecumenicism.

In chapter 1, we found that the object of direct presentation in any cognitive act, that is, the object of perception or thought, is a qualified object, or objectual way that a thing logically can be presented to us. And a qualified object is a via antiqua object (it is not a mental idea, but a mind-independent via antiqua object), since it has a formal reality and an objective reality. The formal reality of a qualified object is always the same. It is not nothing, and it is logically mind-independent in the ordinary sense. It is the objective reality that varies, since it is what we perceive or think about. Thus when we perceive or think of a fact or a value, which are both objects in our wide sense, what we directly perceive or think about is the objective reality of a qualified object. And the qualified object, or more precisely its objective reality, may or may not "be" an object in itself. In the present discussion, it may or may not "be" a fact in itself or a value in itself. And on my epistemology in chapter 4, many qualified facts and values objectively seem to "be" facts and values in themselves. That is our ultimate evidence for them. Indeed, sometimes the existence of objects in themselves is "utterly transparent to the reason," based on the seemings.

In any case, that will be the basic structure of my approach to Hume's problem. Thus the question for us is this. Given that there are qualified facts and values that "are" facts and values in themselves, can we derive any value in itself from a fact in itself? In what follows, I shall simply refer to them as facts and values.

I think it is easy to see the distinction in reason between courage as a fact and courage as a value not only in the Platonic form of courage, but also in ordinary thought and language, which is of course what the Platonic form is intended to articulate and ground. Here is an ordinary discussion of courage qua *fact*. Smith: "Achilles is definitely courageous. He is always first in battle. He is always attacking the enemy no matter how many there are." Jones: "No, he is not courageous at all. He knows no one can harm him because he is magically invulnerable." Smith: "What about his heel, where his mother Thetis held him when she dipped him in the Styx?" Jones: "He believes no one will ever find out that this is his vulnerable spot, or would ever think to attack him there." Smith: "Yes, but *he* was aware of it; and he knew that someday some enemy *might* find out." Jones: "Yes, but all the other warriors still showed far more courage than he did, since they were not almost totally invulnerable the way he was. They had no magic protection

from their mothers." And here is an ordinary discussion of courage qua *value*. Smith: "I am so inspired by the courage of Achilles. It's awesome. He is my hero, my model in life, and I try to be brave like him."Jones, "Yes, his courage was of great value, and his story is definitely inspirational; but I am far more inspired by examples of quiet courage off the battlefield. Often that kind of courage is harder to have, even for war heroes." The first discussion concerns the law of excluded middle. Is Achilles courageous or not? It also concerns degree of courage. How much courage does he really have? The second discussion concerns motivation or inspiration for us to act. It too concerns law of excluded middle, not about whether Achilles' courage exists or not, but about whether it is inspiring or not. It also concerns degree, not the degree of his courage, but the degree of its inspiration to action. Once we learn of the courage of Achilles, how moved or inspired are we to act courageously like him? Note that even if we are greatly moved and inspired, there can still be a problem of weak will (Aristotle calls it akrasia).

Now, *both* discussions are the kind of reasoning that Hume *claims* is not morally motivating or exciting us to act. Perhaps then even Hume's premiss is false! For reasoning *can* be motivating and inspiring after all, if it is *about values*. Indeed, motivating and inspiring reasoning is all around us. Just look at religious figures, politicians, warriors, and parents! They are often full of inspiring reasoning about values. And the reason is clear enough. Formal logic as such is not moving or inspiring because it concerns only the form of reasoning, not its content. But synthetic *a priori* reasoning is all about the content, such as red and color. And in the *second* Smith and Jones conversation, their reasoning is *about* the *value* of courage, and merely *assumes* the *fact* that Achilles has courage. And that is why they are being moved and inspired. They are reasoning about values! And that is perfectly consistent with my earlier point that even in synthetic *a priori* reasoning, the force indicator has nothing to do with the validity of the reasoning. That is just as true of reasoning about courage and value as it is about red and color. But reasoning about courage and value can be moving and inspiring in a way that reasoning about red and color cannot, precisely because courage is a value and red is not. To be sure, even a shade of red can have aesthetic value for painters and viewers. We can be moved and inspired by the shade of red in a painting, and can even be moved by talking and reasoning about it.

Even Hume could try to explain the ordinary distinction (we ordinarily speak in both ways, as the Smith-Jones discussions show) between courage as a fact and courage as a value. But Hume, with his bundle theory and his lack of via antiqua objects that can have or contain values as objective realities, could only explain it as a distinction between our cognition (sense-impression?) of the

factual courage we see out there in others (in body-bundles), and the moral sentiment we feel about the value of courage within ourselves (in mind-bundles). For Hume, the 'impression' I have of Achilles' courage-in-fact can only belong to the external Achilles-bundle, as well as to my own internal mental bundle, much like the impression I have of a house. But the moral sentiment I feel when I have that impression is a different and wholly distinct impression, and it belongs only to my own internal mental bundle. Thus for Hume the derivation fails because the two impressions are wholly distinct For there can be no logical implication between wholly distinct objects. Their only relationship is that one 'occasions' the other. And this 'occasioning', for Hume, is surely best analyzed eliminatively in terms of Hume's eliminative theory of efficient cause. Note that for Hume, there are actually two relations involved. My impression of Achilles' courage 'causally' gives rise to my moral sentiment. And then the value of courage can be logically derived from the fact of my moral sentiment. And that is because for Hume, my moral sentiment *is* motivating, unlike the mere fact (sense-impression?) of Achilles' courage, and unlike any amount of reasoning I can do about that fact.

Why the fact that I have a moral *sentiment* or *feeling* about courage, however *causally* inspiring and motivating me to action it may be, *logically* implies the value of courage, is beyond me. For my personal sentiments or feelings about values logically can be wrong. And Hume's deeper and more general view that *no* fact can logically imply a value overrules his own argument that a *moral sentiment* can logically imply a value. Of course, I am arguing that his deeper view is wrong. But even if I am right that some facts do logically imply values, moral sentiments are not among them. For my merely feeling that something is right or wrong does not make it so. For example, modesty inspires and motivates me. But many argue that modesty is a false value, if not an evil, since (they say) falseness is involved. Note that if a moral sentiment *causally* moves me to value it, then it cannot *logically* imply that value. For an efficient cause is wholly distinct from its efficient effect. Thus there can be no logical containment or logical dependence of either on the other. This criticism resolves Hume's Dilemma. But it is only the best in-house resolution for Hume. We ourselves are going between the horns of the dilemma. We are rejecting *both* his view that no values can be derived from facts, and his contradicting view that nonetheless, values can be derived from moral sentiment-facts.

If I see that Achilles is courageous, and if his courage inspires and motivates me act courageously too, then his courage is a logically independent efficient cause of my moral sentiment and of my moral act. But I can also cognize *a priori* that the fact of his courage logically implies its value. After all, courage is a virtue!

The upshot of all this is that intentionally or not, Hume has *set up* the derivation of value from fact, or of ought from is, to fail. It is structurally set up by his metaphysics. And his metaphysics is based on bad phenomenology. Of course *he* cannot derive values from facts, not even from his moral sentiments. But that does not imply a derivation cannot be done with a better metaphysics and a better phenomenology. In fact, we argued for Platonic forms in chapter 3, and the factual form of courage implies its own value.

Thus I can explain the courage-fact versus courage-value distinction, even though Hume cannot. Courage is both a fact and a value. And it inspires us as a value *because* of its factual nature. The distinction is metaphysical. It is a distinction only in reason. That we can easily distinguish the fact of courage from the value of courage as different objects of perception or thought which rather transparently "are" different but distinct only in reason objects in themselves, is shown by the two ordinary and very different Smith-Jones discussions on pages 606–607, if the discussions state truths.

How can courage be a value if it is factually not there? It cannot. Even if it is not there in any person, it must be factually there at least in the Platonic form. This may make the distinction appear to be modal (one-sided). But this appearance is illusory. For the logical dependence is mutual. For on the other hand, the fact of courage has intrinsic value. Hence the fact of courage logically cannot exist without its value. We can choose not to *attend to* or *regard* the value of courage, and merely single out and discuss the fact that Achilles *has* courage (or the fact that the Platonic form of courage is real). And conversely, we can attend to or single out the value of courage without regard for whether anyone in fact has courage (or whether there is in fact such a form). But courage, as such, is intrinsically good. Thus the fact of courage cannot exist apart from the value of courage any more than the value of courage can exist apart from the fact of courage. From the logical point of view, this is no different from the distinction in reason between a three-sided figure and a three-angled figure. Another point is that the fact of courage is identifiable if and only if the value of courage is. This is so even though we can choose to single out only one of them and disregard the other. For the existence, identity, and nature of each essentially depends on the existence, identity, and nature of the other. Talk of mutual logical containment!

Even so, the distinction seems formal with a foundation in reality in the fact of courage. Likewise, the triangle distinction of sides from angles seems formal with a foundation of reality in the sides. For the fact of courage and the sides of a triangle are prior in the order of illumination or explanation. For they seem to explain or ground the value of courage and the angles of a triangle better than the other way around. In that sense, the fact and the sides seem

prior to the value and the angles after all. Also, we see the value of courage in the fact, not the fact in the value. And if we construct a triangle using three sticks or rods, the angles come into being. If we then take the triangle apart, the sticks or rods remain, but the angles cease to exist. This is so even though *while the triangle exists*, its having three sides and three angles are logically equivalent.

In a deeper and more general sense, we may say that the fact of courage and the value of courage are formally distinct with a foundation in the courage portion of reality, which includes both.

In any case, whether the fact of courage and the value of courage imply each other or are only modally distinct, these two aspects of courage—and aspects are objects in our wide sense—are distinct only in reason. For there is *at least* a modal (one-sided) dependence. And on it, the fact implies the value.

That is the phenomenological case for the derivation of the value of courage from the fact of courage. It is directly based on our phenomenology of direct presentations of qualified objects and via them, indirect presentations of objects in themselves, in cases of fairly simple synthetic *a priori* seemings to be the case that seem utterly transparent to the reason: the fact and the value of courage, the sides and angles of triangles, and red and color. And if the courage example is correct, there will be indefinitely many more. For all the values, and the facts we see them in, are just like it. And all the derivations are mutual. (I mean that this *particular red* and this *particular color* are mutually dependent; that is not the case for the in re or for the ante rem universals red and color.) These are all mutual distinctions in reason. And the arguments do not depend on admitting Platonic forms as opposed to any other metaphysic of properties. For any metaphysic will do. Recall that for us, Platonic forms, ante rem and in re universals, and particular properties all exist as distinct only in reason from each other. See chapter 3 on the containment and dependence arguments for this metaphysical ecumenicism. And those arguments always start from the ordinary existence of ordinary things, then admit all their logical parsings as not nothing. Here the distinction in reason between the fact of courage and the value of courage *already exists* in ordinary, pre-philosophical thought. For the two Smith-Jones discussions show that. But it takes metaphysics to *articulate* it with talk of entities and distinctions in reason. This is much the same as how this book began, with an already existing ordinary distinction of two senses of the word "object," one of which we articulated as objects of perception or thought (and further articulated as qualified objects with twenty-one essential features), and the other of which we articulated as objects in themselves.

The upshot is that we need not have stated this argument for deriving values from facts in terms of Platonic forms at all. That

was a simple and convenient way to state the argument. But the ante rem universals of courage in fact and of the value of courage, the corresponding in re universals, and even this particular fact and this particular value of courage of this particular human Achilles, would all do just as well. For they are all distinct only in reason. Welcome to metaphysical ecumenicism in ethics! Any metaphysic of *fact and value* that is intelligible, logically possible, and provides a logical analysis that is logically equivalent to the ordinary statements in question, such as those in the Smith-Jones discussions, is logically equivalent to any other metaphysic that meets the same three conditions. Thus on the containment and dependence arguments, all these "rival" fact-value metaphysics that derive value from fact are distinct only in reason. Indeed, the very fact-value implications themselves are all distinct only in reason.

One might object that our Continental phenomenology is distinct only in reason from Hume's British empiricism. For we showed in chapter 1 that the via moderna is just the via antiqua minus its objective reality. Hence Hume's impressions, including sentiments, are distinct only in reason from my qualified objects. For Hume's impressions and ideas are via moderna, and as such are only modally distinct from my via antiqua qualified objects. (None of these is mental, on Hume's neutral monism and on my Moorean realism.) And since my derivation of value from fact succeeds on my phenomenology but not on Hume's (including his own deriving of values from moral sentiments), the derivation is at least in doubt.

My reply is simple. If there are five proposed proofs of a theorem, and only one of them succeeds in proving the theorem, then the theorem is proved, even if all the other attempts fail. If there are five proposed logic diagrams of an argument that try to show that its conclusion is diagrammed when its premisses are diagrammed, and only one diagram succeeds in showing it, then the conclusion is contained in the premisses, even if the other diagrams fail to show it. Likewise, if there are two phenomenologies that purport to show whether values can be derived from facts, and one phenomenology (mine) shows it, then the derivation is valid, even if the other phenomenology (Hume's) fails to show it. And just as the diagram that shows the validity of an argument is *better than* the diagrams that do not, in virtue of that very fact, so a via antiqua phenomenology that shows the validity of derivations of values from facts is *better than* a via moderna phenomenology that does not, in virtue of that very fact. And we already knew Hume's phenomenology is less valid than mine. Hume's phenomenology is distinct only in reason from mine, but the distinction is modal (one-sided). For his phenomenology can only apply to *mere* phenomena, i.e., via moderna phenomena, while mine applies to *all* phenomena.

At least on a principle of charity in interpretation, we

might interpret Hume as at least implicitly admitting dual-aspected impressions which are both facts and values that are distinct only in reason, even though he admits no distinction between formal reality and objective reality. I am referring, of course, to his moral sentiments. For his moral sentiments are only impressions, but they are *moral* impressions. Perhaps then he can derive values from them after all. And at least on the relevant containment theory of logical validity in the wide *a priori* sense, this implies that the derived values are logically contained in the sentiments. I hold that even a moral sentiment is purely factual. It is an impression! But here I am merely exploring a charitable interpretation of Hume.

Hume says, "The passions of PRIDE and HUMILITY being simple and uniform impressions..." (Hume 1973 / 1740: 277). This is puzzling. Surely impressions as such are factual and belong to what *is*, while vices and virtues (values) like pride and humility are values and concern what *ought to be.* Thus Hume seems to be collapsing the fact-value distinction. Granted, he does not say that pride and humility themselves are impressions. He only says that *passions* of them are. Still, what is the difference between pride and humility themselves and passions of them? On the face of it, they are at least modally distinct. How can there be a passion of pride if there is no impression of pride? Note that passions can motivate us in a way that mere impressions (per Hume) cannot.

We saw earlier that Hume says:

> [S]ince vice and virtue are not *discoverable* merely *by* reason or the comparison of ideas, it must be *by means of* some impression or sentiment they *occasion*, that we are able to *mark* the difference betwixt them. Our *decisions* concerning moral rectitude and depravity are evidently *perceptions*; and as all perceptions are either impressions or ideas, the exclusion of the one [i.e. impressions] is a convincing argument for the exclusion of the other [ideas]. Morality, therefore, is *more properly felt than judg'd of....* (Hume 1973 / 1740: 470, my emphasis)

Here it seems Hume admits *three* categories—impressions, ideas, and values—such that values are not themselves impressions or ideas, but are "discoverable" "by means of" the sentiments (impressions) "they occasion." But this text is full of puzzles. Hume says "decisions... are perceptions." How can a decision be a perception? He then says "all perceptions are either impressions or ideas." So now decisions are either impressions or ideas? Well, impressions and ideas are all he has! But what then of vice and

virtue? Are they perceptions too? And are they, too, therefore either impressions or ideas? —Are they *decisions*? That would be odd indeed, but the whole text is so odd I cannot rule it out. And if only impressions and ideas exist in his metaphysics, then the only other option is that decisions are ideas. Or could decisions be fictional *bundles*? I think not, since they seem better bundled than bundles. And to top it off, he says, "Morality, *therefore*, is more properly felt than judg'd of...." Why the "therefore"? Is he taking himself to have *argued* in this text that vices and virtues literally are impressions? Here too, if only impressions and ideas exist in his metaphysics, then the only other option is that vices and virtues are ideas. Or could they be fictional bundles? I think not, since like decisions, they seem better bundled than bundles. As Alice would say, "Curiouser and curiouser!"

On an even more charitable interpretation, Hume's vices and virtues *are* moral sentiments, which are inner perceptions or impressions. Now, that would be a simple and elegant way to derive values from moral sentiments: they *are* moral sentiments! And the whole structure of Hume's metaphysics seems to drive us to that conclusion. For the only other options, are that values are mere ideas, or else bundles (fictions). But even identifying values as our sentiments is like pounding square pegs into round holes.

This scholarly problem of Hume interpretation is not really our concern, and I merely wished to note it. Hume is famous for being an acute thinker, but also for being a careless and confusing writer at times. So let the Hume scholars take their best shot!

The Epistemological Argument for the Derivation: Some Facts Epistemically Seem to Have Value

This argument is based on the theory of seeming in chapter 4. The argument is that it objectively seems to us that values are intrinsic to certain factual situations, such as that murders are evil; therefore we have reason to believe that values can be derived from those facts. One might add that all my arguments in this chapter for deriving values from facts on seem to be sound, therefore we have reason to believe that they are sound.

One might object to this argument for at least five reasons.

First, mere seeming as such is *insufficient for knowledge*, nor for any high degree of evidence, such as 'clear and convincing', nor even for just 'more likely than not'. For seeming comes in all degrees, from evidential certainty to a modicum, however slight. Thus it is guaranteed to confer only a minimal degree of reason to believe, namely, when there is only a minimal degree of seeming. To confer knowledge, the degree of seeming must be sufficient for

knowledge. It must be such that we can positively and definitely see that the thing is the case, and that therefore we can have no rational doubt that it is the case, since we positively *see* that it is. Readers will recall that this was our contraposition of Descartes' false thesis of radical doubt, i.e., his false claim that even a mere logical possibility we are wrong, supported by no evidence at all, suffices to destroy a claim to know. See chapter 4.

And it may be very reasonably doubted that the degree of objective seeming to be the case rises very high for any claims to derive values from facts. For one thing, Hume's problem is very controversial, and therefore it is fair to say that the seemings go in both directions among philosophers. Surely it would objectively seem to Hume that the derivation fails, except for deriving values from moral sentiments. And that is not even to mention Hume's Dilemma. Thus this is not like a case of conflicting seemings where one suffices for knowledge and the other is just wrong. Compare the problem of whether 123 + 456 = 579. That may seem clearly and distinctly true to many adults once they work it out, but it might seem to a three year old that the sum is 500. My own arguments for the derivation of values from facts are complex and theoretical enough, and based on very controversial Continental phenomenology (and perhaps worse, on my version of it) enough, that there is plenty of room for rational doubt about my arguments as well. I have been raising and answering objections to my views all along in this book!

My reply is that the epistemological argument is strong here. For it seems that we sometimes clearly and distinctly discern the values in a situation from the facts. Where else could we discern them from? No facts, no values. For example, I derived the value of Achilles' courage from the fact of his courage. No flaw has been detected in this simple, direct *a priori* intuition of validity.

Second, one might object that giving the epistemological argument is *superfluous* for most if not all specific puzzle solving. The theory of seeming is only meant to explain what evidence is in a general way. It is not meant to tell us what the particular evidence is in a particular case, such as the evidence for whether this gun was used to commit that murder, or which proof might establish Goldbach's Conjecture that every even number is the sum of two primes. It tells us what the particular evidence is if and only if the particular evidence is the seeming itself. This is paradoxical in the case of the phenomenological argument in the preceding section, though I think not seriously so. The phenomenological argument for the derivation was fairly complicated insofar as it was based on my detailed theory in chapter 1 of what a phenomenon is. And the epistemological argument adds nothing to the phenomenological argument. For that argument is too complex and controversial to

seem to any great degree to be sound.

My reply is once again that the epistemological argument is strong here. For the derivation of the value of Achilles' courage from the fact of his courage very simply and directly seems to be the case. And the Smith-Jones discussions explaining the difference between the fact and the value were simple and clear as well. Thus the epistemological argument is very "transparent to the reason."

Third, one might object that the epistemological argument is based on the nature of evidence as such. It does not change what the *specific* evidence for anything is. It merely discusses *general* theory of evidence and asks how well it applies in a given case. Granted, if we do not know what evidence is, then we have no hope of understanding what the specific evidence for anything is. For we will not even know what we are talking about. That is, we cannot discuss whether there can be specific evidence for something without knowing what evidence is. But I only gave a general theory of evidence without discussing what the specific evidence is for the fact of courage-value of courage derivation. I merely claimed that we can simply see that it is valid. Where is the evidence?

My reply is that the evidence is the seeming. That is, the derivation of the value of courage from the fact of courage very simply, and directly, and clearly, even transparently, seems to be valid. We do not need a detailed phenomenology, metaphysic, or even a theory of evidence in order to see that. All we need is a simple and direct intuition of its validity. The objector is right that my detailed theories of phenomenology, metaphysics, and evidence are not and cannot be my specific evidence for the derivation. My specific evidence is just a simple and direct logical intuition, such as is common in basic logic or mathematics. I was only saying that my theories articulate, explain, and ground that simple intuition in a way that only such theories can. This is what we philosophers do!

Fourth, one might object that evidence that something is evidence *needlessly introduces levels of evidence of evidence*. And that is just what the epistemological argument does. All we need is the evidence provided by the simple and direct intuition of the Achilles example. We do not need to add that this evidence is justified by its epistemically seeming to be the case, per my theory of seeming. No good epistemologist would ever do that. For that merely adds an extra level where more things could go wrong.

My reply begins by agreeing that epistemologists generally do not use a higher level of evidence to justify that something is evidence for a philosophical claim. Hume does not. Kant does not. I certainly do not in chapter 4; this is the first time I am mentioning levels of evidence. But that really does not matter. For it is obvious that there can be and are levels of evidence such that higher-level evidence can and does defease lower-level evidence. This occurs in

legal cases all the time. The evidence that Smith murdered Jones is that Smith's gun was the murder weapon. The evidence that it was Smith's gun is a registration document, a fingerprint, DNA, or witness testimony. The evidence that the registration document, fingerprint, and so on are valid is expert testing and testimony. And so on, for as long as the evidence is challenged at each new level. But if we have a general theory of evidence, such as the theory of seeming in chapter 4, then it trivially applies to all the levels of evidence across the board. And that is why I was not interested in levels of evidence in chapter 4.

There are all sorts of hierarchies of levels in philosophy. Russell admits a logical hierarchy of types. Quine admits semantic ascent. I admit phenomenological ascents in a phenomenological hierarchy of levels of qualified objects. It is important to admit such hierarchies. They can be used to solve important problems. Russell uses his hierarchy to solve Russell's paradox. (It is overkill, but it does eliminate the paradox.) I use my hierarchy of qualified objects to explain the puzzle of how informative existence and identity judgments are possible for all objects in the wide sense, including all qualified objects at all phenomenological levels.

Formally, the question whether we can admit that any such levels exist, or can at least admit level-talk, is the question whether the predicate or operator in question is iterable. Iterations are basic in formal logic, notably in modal logics. Again, the existence of levels of evidence is obvious. That is why epistemologists should simply focus on what evidence is. For anything on any level of evidence is just an illustration or example of evidence in general. But what is the best way to formalize iterations of evidence?

An iterable evidence operator can be easily formalized in epistemic logic, which is a kind of modal logic in which "It is known that P" is the necessity operator. We can use "E" to mean "There is evidence that P [for some object O or for some fact F]." (Recall that for us, facts are objects in the wide sense.) In fact, there have long been similar operators in epistemic logic, such as "It is credible (or rationally believable) that P," or "It is plausible that P" (Snyder 1971: 200–208). These are similar to our own evidence operator: "It is reasonable or at least objectively seems to S that P." See chapter 4 on the theory and the principle of epistemic seeming.

There is much logical and philosophical interest in levels of evidence today. See, for example, the papers in Matthias Skipper and Asbjørn Steglich-Petersen, eds., *Higher-Order Evidence: New Essays* (Skipper 2019).

There are iterable epistemic operators in epistemic logics, and they can be used to paraphrase, articulate, and even formally reconstruct ordinary, legal, scientific, and philosophical epistemic

talk. This has been done for well over half a century. See Snyder (1971: 199–209) discussing Jaakko Hintikka and G. H. von Wright. In more recent literature, Anna-Maria A. Eder and Peter Brössel say, "An assumption is that... the following **EEE Slogan** is correct: 'evidence of evidence is evidence' (Feldman 2007, p. 208)" (Eder 2019: 62 (Abstract), Eder's bold emphasis). But thesis EEE is just an empty tautology. For it has the basic underlying form A = A. Of course evidence (of evidence) is evidence! This is nothing like Jerrold J. Katz's false A = A statements "Decoy ducks are ducks" or "A heathen converted to Christianity is a heathen." (J. Katz 1969 / 1967: 186–187). Unlike the cancelling or reversing description modifiers "*wooden (fake)* duck" and "*converted to Christianity (and therefore no longer)*" heathen," the description modifier "of evidence" does not even appear to function to cancel or reverse the applicability of the description "evidence." It does not even appear to change either the sense or the reference of "evidence," but only the logico-linguistic, or better, epistemic level.

Thus my reply to the fourth objection is that it is just wrong. It is not needless but necessary to distinguish and articulate levels of evidence. Even if a general theory of evidence need not do so, since it applies to all levels, it is obvious that the levels exist, and therefore ought to be admitted.

This fourth objection is distinct only in reason from the third. For both distinguish evidence in general from more specific evidence. The third objection distinguishes evidence in general from specific items of evidence, and the fourth distinguishes evidence in general from specific levels of evidence.

An iterable evidence operator is philosophically interesting if and only if it is based on a theory of what evidence is. Otherwise it will merely formalize ordinary or pre-philosophical talk of levels of evidence, such as in courtrooms. To be sure, that is a logically helpful task that has been pursued for decades. But our evidence operator is based on a theory of evidence. Again, it is based on the theory and the principle of seeming in chapter 4. And it is more deeply and generally based on the theory of phenomenological levels of qualified objects in chapter 1. For all seemings are directly presented qualified objects. Returning to ethics, there are iterable operators in deontic (ethical) logic as well. "It is obligatory that P" is the moral necessary operator. I omit specific details, but the general idea is to formalize different epistemic and deontic logics in order to articulate or reconstruct kinds of informal talk.

Fifth, one might object that we must always be wary of committing the *fallacy of scope difference*, that is, of confusing "It is impossible for us to know that P" with "We positively know it is impossible that P." My reply is that this is a general admonition, and not a specific flaw that I can detect in my epistemological

argument. In fact, I was the one detecting this scope confusion in Descartes! It was revealed by contrapositing his skeptical thesis. Hume does not have a Cartesian program of radical doubt based on mere logical possibilities (Hume 1973: 699–700, "Scepticism").

Still, if the epistemological argument relies on seemings that are not evidence sufficient for knowledge, then we must be wary. But in the case of deriving courage as a value from courage as a fact, we do seem to positively see that the derivation is valid in the wide *a priori* sense. But in other cases, it may not be so clear. And in these other cases, we arguably might confuse our knowing that it is impossible that some derivation D of value from fact is invalid with its being impossible for us to see that D is invalid.

The epistemological argument is at its best when it seems, from the fact that Achilles has courage, that he possesses the value of courage. For again, this simple derivation of value from fact seems "utterly transparent to the reason," and thus evidentially certain, much like red is a color and two plus two equals four.

Three "Meaning of 'Fact'" Arguments for the Derivation

The word "fact" is said in many ways. And in at least one of them, my own, it is very easy indeed to derive values from facts. I shall consider three derivations based on three uses of "fact": the ordinary use, the Wittgenstein-Russell use, and my own.

First, it is a commonplace that there is an ordinary use of the word "fact" on which we can correctly say that: (1) we can spill coffee on the table, and (2) it is a fact *that* we can spill coffee on the table; but (3) we cannot spill coffee *on the fact* that there is a table, and (4) we cannot spill coffee on the fact that we can spill coffee on the table. It would violate the ordinary use of "fact" to deny any of (1)–(4).

On this ordinary use of "fact," "It is a fact that the cat is on the mat," "It is true that the cat is on the mat," and "The cat is on the mat" are all logically equivalent. For us, the terms "fact" and true" directly refer to different qualified objects, and thus the three expressed propositions (qualified facts) are different but distinct only in reason. But there is a heavy sense of empty redundancy. Tarski seems to hold that "It is true that snow is white" adds nothing to "Snow is white." What then of "It is a fact that Achilles has courage" and "The courage of Achilles has value"? In my fact metaphysics, even the two facts in themselves are different but distinct only in reason. For only the value fact has value in itself as a constituent. But in the ordinary sense of "fact," Tarski seems to be right. And likewise, there is an ordinary sense of "value" in which to say that courage has value adds nothing to courage. It *is* a

value! Thus on the level of ordinary language, we do not seem to have even a distinction of reason, but only the empty clanking of logico-semantic machinery, not only in the case of "fact" and true," but also in the case of "courage" and "value." Do the ordinary concepts of fact and truth really add anything to a statement? Does the ordinary concept of value really add anything to courage?

Thus while the derivation of the value of courage from the fact of courage is valid on the ordinary use of "fact" and "value," I reject it as empty and redundant. In fact, it has at least three interrelated problems. First, it adds nothing on its face. Second, it is not what Hume has in mind as a genuine derivation. And third, the reason for the first two problems is that the ordinary word "fact" is functioning too much like the word "truth," both in the ordinary use of "truth" and in the disquotation theory of truth. Likewise for the ordinary words "courage" and "value," for they overlap too much.

The disquotation theory of truth is that "Snow is white" is true just in case snow is white (Tarski 1944: 348). The idea seems to be that saying that it is true that snow is white adds nothing to just saying that snow is white. But as Aristotle would say, it also puts the cart before the horse. It gets the order of things backwards. For it is because something is the case that we can truly say that it is the case. It is not because something is true that the thing is the case. Likewise, saying that it is a fact (in the ordinary sense of "fact") that snow is white really adds nothing to just saying that snow is white. But it too gets things backwards. It is because something is the case that we can correctly say that it is a fact that it is the case. It is not because we can say that something is a fact that the thing is the case. For example, just as "Courage is good" is true because courage is good, and not the other way around, so it is a fact (in the ordinary sense of "fact") that courage is good because courage is good, and not the other way around. The value grounds the fact (in the ordinary sense of "fact"), not the other way around.

Tarski is right that the *mere* logical implication is mutual. For here we are using the words "fact" and "true" in an ordinary, pre-philosophical sense. We are also discussing the word "truth" in the 'deflationary' disquotational sense. By "deflationary" I mean that on the disquotation theory of truth, truth is not a metaphysical property of propositions, facts, or any other objects (in our wide sene of "object") in the world. Instead, talk of truth is only a redundant way to restate statements that do not mention truth. For example, "'Snow is white' is true" is logically equivalent to "Snow is white," which does not even mention truth. In effect, this is a use of Ockham's razor to shave away any metaphysical property of truth in the world, as opposed to our talk or thoughts. Or at least the disquotation theory is logically *consistent* with rejecting any such metaphysical theory of truth, since it does not need or require any

such metaphysical theory. Either way, disquotation theory of truth is nominalistic about truth (in the ordinary sense of "true"). And by parity of reason, likewise for facts (in the ordinary sense of "fact").

Here the reader may already see how disquotation theory of truth is subsumed within metaphysical ecumenism as having a limited validity. For any logical analysis of ordinary talk, including Tarksi's analysis of ordinary talk about truth, can be ontologically interpreted either as realist, conceptualist, or nominalist. And on the containment and dependence arguments, all the entities (if any) on all logically equivalent logical analyses exist as logical parsings of each other and of the ordinary existents the ordinary talk is about. For all the logical analyses are valid, if they are all logically equivalent to each other because they are all logically equivalent to the ordinary, pre-philosophical statements in question. They are wrong only insofar as they deny the ontological commitments of each other. Thus realism wins in that its entities exist. Here disquotational of truth is just as valid qua logical analysis as our own realist theory of truth, which is that truth is the property of propositions (qualified facts)' "being" facts in themselves. (This is the qualified objects theory version of the correspondence theory of truth.) The disquotation theory of truth merely abstracts from and disregards this metaphysical property.

Also, it is a familiar criticism of the disquotation theory of truth that it is factually informative to say that two out of a certain three statements or beliefs are true. That should not be the case on that theory. Likewise, it is factually informative to say that two of three statements or beliefs describe facts. This can have a major impact on our understanding of the world. Suppose we are told that 99 out of a certain 100 statements are true. Would we not regard the world very differently if we are told that 99 out of the 100 statements are false? This criticism, which I accept as correct, is part and parcel of the deeper and more general subsumption of the disquotation theory into metaphysical ecumenicism. For it is exactly what the disquotation theory abstracts from and disregards, when it abstracts from and disregards the realist (correspondence) theory of truth. Likewise, it is factually informative to say that two out of three values are genuine. And here the points coalesce. For what if 99 out of 100 statements of the form "Value v is real" are false? What if courage is a value but modesty is not? It emerges that value exists as a mapping function just as much as truth does. Some but not all things are values, just as some but not all things are true. And I think we already knew that realist fact.

Granted, we could analyze away talk of truth or facts by saying "Either A and B but not C, or A and C but not B, or B and C but not A." That would be logically equivalent to "Exactly two of the three statements A, B, and C are true (or describe facts)." The

problem is that on the containment and dependence arguments, this logical analysis, though logically valid, is of limited validity in that it abstracts from and disregards the ontological commitments of the logically equivalent logical analyses that do admit truth and facthood as properties (mapping functions) in the world. All the logically equivalent analyses are equally valid, but only the realist analysis shows that truth and facthood exist as valid ontological parsings of statements about truth and fact. Likewise for the realist analysis of "Courage is a value." Here we leave the ordinary use of "fact" behind, since the realist analysis, fact metaphysics, wins.

A second basic way the word "fact" is used is its use in Russell's and the early Wittgenstein's fact metaphysics. Any differences between Russell's and Wittgenstein's facts will make no difference here. For the 1914–1918 Russell, there are *also* temporal series of classes of sensed and unsensed sensibilia, as we saw earlier; but that does not matter here either. For it is clear that the temporal real facts that *define* ordinary things, and the temporal series of classes of sensed and unsensed sensibilia that *logically analyze* ordinary things, are distinct only in reason for Russell. See Russell (1971e / 1918: 183, 191–192, 199, 201–204, 209–221, 223, 235–237, 273). For more, see my (2003 / 1996: 144–145).

No doubt Wittgenstein and Russell would reject deriving values from facts in their respective fact metaphysics. For no doubt both would reject values as objects in their respective senses of the term "object," and thus also as logical constituents of facts in their respective senses of the term "fact." Wittgenstein goes so far as to make values transcendental, meaning not in the world of facts and objects. But this puts the cart before the horse. If they had only considered examples like the fact Achilles has courage, they might have been more open about what to admit as facts and objects.

My fact metaphysics is deeper and more general than Russell's or Wittgenstein's. For I define an object in the wide sense as anything and everything. And values are clearly objects in the wide sense. For they are all different, so at most one could be nothing. And Wittgenstein's argument that without admitting facts, we cannot provide a full description of the world, applies to values and their relations to other objects just as well as it applies to any other objects and their relations to other objects. Strictly speaking, his argument entails only that either facts or states of affairs must exist. But for us, these two categories are distinct only in reason, so that to admit either is to admit the other. To be sure, states of affairs are logical subjects, and facts are described by propositions (qualified facts). Thus they have deeply different properties. By comparison, positive integers are odd or even, and classes are wider or narrower; but still they are distinct only in reason. See chapter 3.

Thus I admit 'value facts' as well as 'factual facts'. A

value fact is a fact that has at least one value as an ontological constituent; a factual fact is a fact that does not.

It is easy to see that the factual fact that John Wilkes Booth murdered Abraham Lincoln logically implies the value fact that Booth did something evil, in the wide *a priori* sense of logic. And that would be a synthetic *a priori* intuitive truth. As before, we define "murder" descriptively and not evaluatively as a certain kind (or in law, a certain group of kinds or "degrees") of killing. And it is just as easy to see that the factual fact that Achilles has courage logically implies the value fact that Achilles has a property that has value, and more specifically has a property that is good.

Wittgenstein rejected synthetic *a priori* implications in the *Tractatu*s, but came to accept them in his (1929). I believe that Russell always accepted them. But we need not be detained even by this major difference in their respective fact metaphysics.

Deriving value facts from factual facts is distinct only in reason from deriving values from factual properties. But deriving values from factual properties is logically prior. For it is because the factual property of murder implies the value of evil that the fact that Booth murdered Lincoln implies that Booth did something evil. And it is because the factual property of courage implies the value of courage that the factual fact that Achilles has courage implies the value fact that Achilles has at least one good property.

One might object that on the relevant containment theory of logical validity, the very derivation of the value of evil from the fact of murder implies that evil is logically contained in the factual property (relational property) of murder. Therefore the supposed factual property of murder is not merely factual after all, but logically contains a value. Not only that, but my own containment argument implies the same thing. Therefore all such examples are self-defeating. For they are question-begging and circular.

My reply is that this logical containment does obtain, but murder is factually defined, and evil is not part of the definition. In terms of our theory that propositions are qualified facts, qualified evil is not a qualified object that is directly presented in the directly presented qualified fact that Booth murdered Lincoln. The only qualified constituents in that qualified fact are qualified Booth, qualified factual murder, and qualified Lincoln. And that qualified fact "is" the fact in itself that Booth murdered Lincoln. And the only objects in themselves that are constituents in that fact in itself are Booth in itself, factual murder in itself, and Lincoln in itself. Thus it is a factual fact. The ontological containment of evil is not in the factual fact in itself, but as I explained earlier, in the extensional *truth-grounds* of the statement "Booth murdered Lincoln." The factual fact in itself that Booth murdered Lincoln is purely descriptive. The evil it logically implies is not ontologically

contained in the factual fact in itself per se, but in the truth-grounds of the statement that describes it. This gives us the interesting result that in cases of derivation of value from fact, the fact in itself is different but distinct only in reason from the truth-grounds of the statement that indirectly describes the fact in itself (the statement directly describes the qualified fact). In fact, the *only* difference is that the truth-grounds include the value and the fact in itself does not. For if it had been *true* that Booth did no evil, then he would have done no murder. In contrast, "Booth's murder of Lincoln was evil," a statement that is distinct only in reason from "Booth murdered Lincoln," directly expresses a qualified fact that has qualified evil as a qualified constituent, and indirectly describes a value fact in itself with evil in itself as an ontological constituent.

Thus the third way the word "fact" is used is in our own wide sense of fact metaphysics, which includes not only factual facts but also value facts. All objects in our wide sense are logical constituents of facts in our wide sense. This is deeper and more general than, and subsumes, the facts in the earlier fact metaphysics of Wittgenstein and Russell. Thus the distinction between my fact metaphysics and each of theirs is modal. And regardless of whether derivations of values from facts succeed in their fact metaphysics, the simpler derivations are utterly transparent to the reason in mine.

Forms, Kinds of Being, and the Ens Realissimum

We admitted ten kinds of being in chapter 2. I rejected Meinong's view that some objects are 'beyond being and nonbeing' in my (2003 / 1996: ch 4; 1988), and repeatedly in this book. For his objects beyond being and nonbeing are not nothing; and not being nothing is itself a kind of being. For us, all objects exist in the sense of not being nothing. This kind of being is in Parmenides and Suárez. It is Russell's robust sense of reality as well. See pages 5, 110–113, 125, 166.

There are no such things as objects that are beyond the what is ordinarily called the fact-value dichotomy, which for us is also the factual fact-value fact dichotomy. Defining value facts and factual facts the way we just did, i.e., defining a value fact as a fact that has at least one value as an ontological constituent, and defining a factual fact as a fact that does not, the dichotomy is mutually exclusive and jointly exhaustive by definition. And these definitions imply that if there is an ens realissimum, or 'most real entity', it is *not* beyond the fact-value dichotomy. It cannot be both a factual object and a value-object, and it cannot be neither, since the two classifications are mutually exclusive and jointly exhaustive. The only question would be whether it falls on the side

of fact or on the side of value. The only other option is that it is a pair of objects in themselves, a factual object and a value-object that *are* each other, that is, that are distinct only in reason. But then it would not the most real entity, since it would not be a single entity at all. *Ens et unum convertunter. Quodlibet ens est unum*.

If we accept the law of excluded middle (for any object o and any property F, either o has F or o does not), we at least need to tell whether the *ens* is a factual object or not, and whether it is a value-object or not, if we can. These questions are really the same.

Among Platonic forms, the form of forms is supposed to be the supremely intelligible and supremely real form. And since for Plato, the least form is incomparably more real than any of the fleeting particulars of sense, the form of forms is supposed to be Plato's ens realissimum. But according to the later Plato's own "Third Man" argument against forms, there is no such thing as a 'third' form that is logically common to and therefore prior to both particular (participations in) form and universal (participations in) form, *pace* Owens (1963: 58, 374, 386–395, 434). In fact, there would be no forms at all. For to have something in common is to participate in the same form. Thus if particular and universal forms have nothing in common, then they do not participate in any form of forms. And that is a counterexample to the very notion of a form. For if *forms* have no form in common, then there is no such thing as a form. The simplest argument is that of excluded middle. Either an object is a particular or it is not. Either it is a universal or it is not. It cannot be both particular and universal, and it cannot be neither, since the two classifications are mutually exclusive and jointly exhaustive. For either a thing is literally and numerically common to many or it is not. If it is, then by definition it is a universal. If it is not, then by definition it is a particular. See my (2021 / 2020: 82–83). This applies to the form of forms. It cannot be 'beyond particular and universal'. It must be one or the other if it is an entity—an *ens*—at all. And it must be a universal. For it is what particular and universal forms have in common. (*Even prime number* is a particular form. It is particular to the number two.)

Transcending the categories are kinds of being that things in all the categories, or at least things in *some* different categories, have and must have in common. All objects have being in the sense of not being nothing and in the sense of being mind-independent. Thus those two kinds of being are fully transcategorial. Only objects in themselves have being in the sense of independence even of the logical possibility of minds. But they are widely transcategorial in that they occur in all metaphysical categories in themselves. (Qualified objects belong only to qualified categories, and to categories in the wide sense.) Our minds and bodies have concrete (causal) and temporal being.

All objects have two kinds of being: not being nothing, and being logically mind-independent in the usual sense. To have *qualified being* is to have those two kinds of being and in addition *not* to have being in the sense that the existence and the logical possibility of the object in question are logically independent even of the logical possibility of minds. To have *being in itself*, or *totally real being*, is to have all three kinds of being just described. Both qualified being and being in itself are transcategorial to a limited degree. All and only qualified objects in qualified categories have qualified being. All and only objects in themselves in categories in themselves have being in itself. Among objects in themselves, minds, bodies, space, time, numbers, shapes, properties, groups, and acts in themselves are metaphysical categories in themselves.

Metaphysical categories concern what things are. Ontological kinds of being concern whether things are. They concern not the 'what', but the 'that'. Metaphysics is the study of the ultimate (summa genera) forms. Ontology is the study of the ultimate essences. Forms and essences are different but distinct only in reason. See my (2021 / 2020: 66, 70; 2003 / 1996: xxvi), and pages 126–127, 147–148 in this book.

Of course, none of the kinds of being I just described is the Platonic form of forms. But I do admit Platonic forms and even the form of forms in my metaphysical ecumenicism. And insofar as all objects in the wide sense participate in the form of objects in the wide sense, all qualified objects participate in the form of qualified objects, and all objects in themselves participate in the form of objects in themselves, those three forms are kinds of being. And insofar as all three of those forms participate in turn in the form of forms, that too is a kind of being. In *ontological ecumenicism*, the more kinds of being, the merrier!

If Plato's Third Man argument defeats anything, it defeats only the form of forms. And that is merely a particular case of local self-defeat. That specific form may be self-defeating, but it does not follow that the general concept of form is defeated. This is much like the local self-defeat of Russell's paradox of the class of classes not members of themselves. That specific class may be self-defeating, but it does not follow that the general concept of a class is defeated. See my earlier discussion of Russell's paradox. But we just gave a local solution. The form of forms is a universal.

Particulars and universals have things in common. Lots of things! For all objects in themselves, including both particulars and universals in themselves, have the three main kinds of being I just described, and also Butlerian being. Both are indirectly presentable in perception or thought, and are indirectly denotable and referable to in language. And both participate in forms that participate in turn in the form of forms. Both also participate in universal forms.

Particulars participate in the universal form of being a particular, and universals in the universal form of being a universal.

We come now to the fabled ens realissimum. Its very name ('most real entity') implies that it is not beyond being and nonbeing. What is more, its name implies not only that it has being, but that it is the maximally real being. But as Shakespeare says, "What's in a name? That which we call a rose by any other name would smell as sweet..." (Shakespeare 2024: *Romeo and Juliet* 2.2.47–48). That is, waiving an ontological argument, we cannot bootstrap the existence of a thing out of its mere definition. We cannot define a thing into existence. The most we can admit at the outset is the *qualified* ens realissimum. For certainly it is an object of thought. Certainly we can think of it! But we can think of the round square too, and there can be no round square in itself.

One might argue that the *ens* is the supreme good because it is the sine qua non. Without the *ens*, nothing is possible. Therefore without the *ens*, nothing good is possible. One might also argue that the supreme good is more specifically the form of forms, again because it is the sine qua non. For nothing, so to speak, can have no form. A vague mist has the form of a vague mist. Even forms have the form of forms! Thus the form of forms is the form of the form of goodness. For without the form of forms, the form of goodness is not possible, and so nothing good is possible. And if I recollect correctly, Plato thinks the form of forms *is* the form of goodness, which he calls the Good. The only plausible alternative is a distinction in reason between the Good and the form of forms. But there can only be one *ens realissmum*, so surely it is both.

The problem with this argument is that without the *ens*, nothing evil is possible either, again because nothing is possible at all. Now, if the *ens* is the sine qua non, then we might plausibly argue for it as the most *real* entity, insofar as it is the logico-ontological foundation of all things. And if that is correct, then it is trivially the logico-ontological foundation of all *good* things. But it would also trivially be the logico-ontological foundation of all *evil* things. Nor would it follow that the *ens* is itself either good or evil. For the form of forms is both the form of the form of evil and the form of the form of good. And good and evil are only contraries, not contradictories. And while God may cause the sun to shine and the rain to fall on the good and the evil alike (*Matthew* 5: 45–47), and might be the *ens* and the Good (I am an agnostic), he cannot be the form of forms, since that is not a person nor even conscious.

One might argue that the *ens*, conscious minds, and free choice are at least all good insofar as they are more specifically logically necessary conditions of *moral* good. That is, no *ens*, no *moral* good (and indeed no anything, since the *ens* would be the sine qua non); no conscious minds, no moral value; and no free

choice, no moral value. (I shall return to such negative derivations shortly.) We might even say that these things (the *ens*, conscious minds, and free choice) are *logically indirect* moral goods, since without them direct moral goods are not possible.

But the problem is the same as before, except that it is on a more specific level. Namely, since the *ens* and the other things are logically necessary conditions of moral value in general, including *but not limited to* moral good, they are just as much logically necessary conditions of moral *evil*. That is, no *ens*, no moral evil; no conscious minds, no moral evil; and no free choice, no moral evil. Thus we might say with equal justice that they are logically indirect moral evils. And perhaps it is logically consistent for them to be both goods and evils in this logically indirect sense, in virtue of the very logical indirectness of it.

But it makes more sense to me to say that the *ens* as such, minds as such, and free will as such are morally neither good nor evil, in virtue of the very logical indirectness of their merely being logically necessary conditions of moral good and evil. For minds can freely choose to act for either moral good *or* evil, or for neither. To be sure, minds are said to be morally good or evil in a logically indirect sense in virtue of their morally good or evil acts, and are said to have a morally good or evil character in a logically indirect sense in virtue of their habitually acting in morally good or evil ways. That applies to a personal *ens* as well. For God is morally good only if he acts in morally good ways; his acts are not morally good merely because they are his acts. An impersonal *ens* would simply be the sine qua non logically necessary condition of moral good and evil, and indeed of everything else. To be sure, minds and their acts can be *nonmorally* good or evil. There can be beautiful minds and acts. We also speak of natural goods and evils, such as a healthy climate or a plague. These too are nonmoral, and are goods and evils only in Aristotle's pros hen sense, if they are not free acts of a personal *ens* or some other mind.

Thus I reject the *ens* as it is described by A. E. Taylor:

> The distinguishing characteristic of the 'Form of Good' is that it is the transcendent source of all the reality and intelligibility of everything other than itself. Thus it is exactly what is meant in Christian philosophy by the ens realissimum.... [I]t transcends the distinction, too often treated as absolute, between value and existence. It is the supreme value and the source of all other value, and at the same time it is, though 'beyond being', the source of all existence. (A. Taylor 2001 / 1926: 289)

I reject this view because on its face, the term "ens realissimum" only means the most real thing, and not the supreme value. It is a non sequitur if Plato thinks that just because the form of forms is supremely perfect and real in the sense that, say, the form of a circle is perfectly circular and timelessly eternal, that it is or has any value at all, much less is or has the supreme value, except in the logically indirect sense of being a logically necessary condition of anything that has value. And I am agnostic about the Christian ens realissimum, meaning God; see my (2022a / 2019). The form of courage is a different case because courage is a virtue. Likewise for the form of goodness, since goodness is positive value. The form of value is neither good nor evil, since it is the genus of both. But even there we can derive the value of value from the fact of value.

In any case, the *ens* as Taylor describes it cannot be offered as a counterexample to Hume. For Taylor's *ens* is not only the supreme factual object, but is also the supreme value-object.

In chapter 3, we admitted Plato's theory of forms into metaphysical ecumenicism. The form of forms is a transcategorial form. For every category has a form. And for me, the form of forms and the form of goodness are only modally distinct, just like the form of forms and every other form. There can be no forms without the form of forms! Goodness is positive value, and value is just one category of objects. Thus goodness, as the form of a sub-category of the category of values, participates in the form of forms only on a sub-categorial level. Thus the distinction is modal (one-sided) in the per impossibile (i.e. merely hypothetical) sense that if forms *were* logically contingent, then the form of forms logically *could* exist even if the form of goodness did not, but the form of goodness could not exist if the form of forms did not.

Let us return to Plato's own theory. For Plato, the form of forms is the supremely real and supremely intelligible entity. It is also identical with the form of the Good. Hence it is not just Plato's ens realissimum, but also his supremely valuable entity. In terms of my qualified objects theory, Plato's theory would be understood as follows. The qualified form of forms and the qualified form of the Good are different qualified objects that "are" the same object in itself, the supreme form. The two qualified forms are different but distinct only in reason, and the form in itself both "are" is literally and numerically one. Thus for Plato, there can be no *derivation* of value from fact concerning his ens realissimum. For he holds that his *ens*, the form of forms in itself, is *identical with* the form of the Good in itself. But on *my* theory, not only are there the two *qualified objects*, the qualified form of forms and the qualified form of the Good, which are different but distinct only in reason, but there are also two *objects in themselves* that are distinct only in reason, namely the supremely general transcategorial form of forms

in itself, and the lowly sub-categorial form of goodness in itself. And both distinctions in reason, the one between the two qualified objects and the one between the two objects in themselves, are merely modal (one-sided). For in both cases the categorial level is different. Qualified or not, the form of forms is supremely general, and the form of the Good is a lowly sub-category. Since all four objects, the two qualified forms and the two forms in themselves, are timeless and (we may suppose) logically necessary beings, the distinction in reason between the two distinctions in reason might seem to be mutual. But that distinction in reason can still be modal (one-sided) in the per impossibile or hypothetical sense. And in point of fact, we saw that objects in themselves are prior to qualified objects in the ontological order. And that is the proper order for distinctions in reason. For distinctions in reason are ontological distinctions. Thus this distinction is modal after all.

For me, the *ens* or supremely general being is being in the sense of is not being nothing. That is not a personal God, nor even conscious. For Plato, the form of forms is impersonal and not even conscious. It is just part of how he assays properties of things. But for Aristotle, the *ens* is the Prime Mover, a sort of impersonal god.

Joseph Owens finds Aristotle's science of being *qua* being very different from ontology. Ontology as developed by Christian Wolff is the study of being, where being is the single most general, abstract, and empty entity. Evidently Aristotle discusses no such being. His study of being *qua* being is not the study of an abstract or general entity named "being" or "existence." It is the study of a particular (impersonal and unconscious) divine being: "separate substance," i.e., the "unmoved mover." The study has import for all beings. For the being of all other beings can be understood only in relation to the being of separate substance. Aristotle views the being of things other than separate substance in a pros hen way. Humans are healthy in the literal sense. But food, climate, and complexion are said to be healthy only insofar as they are related to health. Thus health is said in many ways. One way is literal, and the rest are pros hen, i.e. related, ways. Likewise, only the unmoved mover has being in the literal sense. Other things are said to have being only insofar as they are related to the unmoved mover. Thus Aristotle has no ontology, but instead an *impersonal theology*. Thus Paul Natorp was wrong to impose a Wolffian conception of ontology on Aristotle. Instead of general, abstract, empty Wolffian being, Aristotle has a single, particular, most concrete entity, the Prime Mover. It is not a god, nor even conscious. But for Aristotle it is incomparably more real than everything in all the other categories put together. On the impossibility of an ontology for Aristotle, see Owens (1963: 25–26, 103–104, 275–276 n.55, 465 n.38, 478). On Natorp's wrongly imposing ontology on Aristotle,

see Owens (1963: 38 n.16, 267 n.30, 283, 283 n. 99, especially 374 n.36 and 465 n.38). Of course, Aristotle has a science of being qua being, but that is not a Wolffian ontology. It is a pros hen science of an ens realissimum, the Prime Mover, and of all related lesser categories of beings. See Owens (1963: ch. 7) on Aristotle's being qua being. (I admit Wolffian being. But then I admit every kind of being in my ontological ecumenicism. I reject the Prime Mover due to a flaw in the infinite regress argument for it; see my (1989).)

Even though for Aristotle the prime mover is supremely concrete and therefore supremely real, and even though for him there is no category, genus, or kind of being to which all things belong, all the categories do have things in common. They are all precisely categories, that is, summa genera. And at least on the realist interpretation of the categories, all items in all categories have properties and stand in relations, have essential properties, essentially belong to their categories, and are (no doubt essentially) informatively identifiable indefinitely many times via differences in formulae (literally, "little forms"). Formulae are like the ante rem universals that are the determinate constituents of Russell's descriptions, except that formulae are in re, and they even seem to be particulars, since they do not seem to be literally identical across the members of a species, but only formally identical. See my (2021 / 2020: 67–68). And of course all beings in all categories exist in the sense of not being nothing, exist in the sense of being logically independent of minds (except that minds cannot be logically independent of themselves), and even seem to exist in the sense of being logically independent even of the logical possibility of minds. This is the view that makes the most sense of Aristotle, at least to me. For Aristotle is an extreme realist.

In support of his view that Aristotle has no ontology in Wolff's sense, Owens also cites Aristotle's famous argument that being cannot be a genus to which all things belong. The argument is this. A species is defined by genus and difference. A species must not only belong to a genus, but it must also have a difference which differentiates it from other species that logically could belong to the same genus. Thus its genus must be different from its difference. Thus any feature that belongs to the genus logically cannot belong to the difference. But all the differentiae must have being too. For if they are to differentiate different species, they cannot be nothing. But then there can be no species of being. For whatever belongs to the genus of a species cannot also belong to its difference. But if everything has being, then every species, genus, and difference must have it. Thus being cannot be a genus to which everything belongs, on pain of being a genus that logically cannot have any differentiated species, which is absurd (Owens 1982: 33–59; Owens 1963: ch. 7).

Aristotle's genus argument seems conclusive, certainly for the classificatory sciences. But as he doubtless knows, it is only an argument that being cannot be a *genus*. Thus it does not apply to any of the transcategorial kinds of being. For no transcategorial can be a genus. For if it were, then it would not be a transcategorial, but a category, or else a lower-level genus. Here one must not confuse being a genus with being classificatory. Some transcategorials are classificatory. That depends on whether they apply to all categories or only to some. Being totally real (being an object in itself) and qualified being (being a qualified object) are our two classificatory kinds of being. Being anything (being an object in the wide sense) and Butlerian being (being an object that is what it is) are our two nonclassificatory kinds of being. All four of these kinds of being are kinds of 'that', not kinds of 'what'. And that is why they cannot be categories or genera. They are kinds, but not that kind of kinds. Kinds of being that logically must apply across all categories are distinct only in reason; kinds of being that logically must apply to some but not all categories are modally distinct from the first kind.

Does Aristotle admit any kind of transcategorial being? W. D. Ross says of Aristotle:

> There is one kind of being that *is* in the strictest and fullest sense—viz. substance, and all other things *are* simply by virtue of standing in some definite relation to substance—as qualities of substance, relations between substances, and the like. (Ross 1960: 153–154, Ross's emphasis)

That is pros hen being. But Ross continues on the facing page:

> [C]haracters.... are for Aristotle as real, as objective, as the individuals. They are not in any sense the work of the mind.... But he warns us to assign to them only that mode of existence which is proper to universals, viz. existence as characteristic[s] of individuals. (Ross 1960: 155)

Clearly, being "real" and "objective" is *not* pros hen being. Here Ross follows Aristotle in clearly seeing the apparent contradiction in saying on the one hand that individuals have primary being and that universals only have secondary being, and saying on the other that both are equally real and objective; and in clearly resolving it with a 'warning' that these are *two different senses* of "being" or "real": (1) multivocal pros hen being, and (2) univocal reality in the sense of belonging to the real order of nature, that is, of being in re. And surely Aristotle would also admit that everything in the real

order has (3) univocal Parmenidean being in the sense of not being nothing. That is very clear too, from his discussion of Parmenidean nonbeing. For Aristotle admits *anything* as a being in the sense of not being nothing, if it is somehow related to a primary being (Owens 1963: 268–269, 436–437). Thus Aristotle seems to admit at least two transcategorials: being real as opposed to conceptual or nominal, and being real in the sense of not being nothing.

How can everything be equally real and objective, if being cannot be a genus? I think the tension, or more precisely, apparent contradiction can be easily explained and removed. It is as simple as the difference between what a thing is and that a thing is. It is the difference between metaphysics and ontology. For to be a genus is to be a kind of thing, and to be real and objective is not to be a kind of thing, but to have a kind of being. I rejected Meinong's unreals, or nonexistents, or objects that are 'beyond being and nonbeing', in chapter 1. For either his objects have being in the sense of not being nothing, or they are nothing. They also seem to have being in the sense of being mind-independent, and even in the sense of being independent of the logical possibility of minds. This is the view that makes the most structural sense, at least to me.

Categories belong to metaphysics. They are the ultimate *natures* of things. They are *what* things are. Kinds of being belong to ontology. They are the *essences* (beings) of things. They are the kinds of ways in which it can be said *that* things are. Being cannot even *transcategorially* be what things are! Being is instead a kind of *reality* that kinds of things can have. It is the way (or the ways) *that* they are. Nature and essence are distinct only in reason, since every object must have both; but they are also essentially different.

Aristotle's argument that being cannot be a genus is sound as far as it goes. But it wholly overlooks the difference between metaphysics and ontology, i.e., between what and that.

So who is right, Owens or Natorp? Does Aristotle have an ontology or not? Per Ross, Aristotle seems to admit two kinds of being: everything is real in the sense of realism as opposed to conceptualism and nominalism (even minds and languages are mind- and language-independently real, except that no mind or language can exist independently of itself, since *no* object can exist independently of itself); and everything is real in the sense of not being nothing. Thus Owens is wrong. For Aristotle does have an ontology with two kinds of being: radical realism, and Russell's robust sense of reality. But Natorp is wrong too. For while Aristotle does have an ontology, neither of his two kinds of being are empty Wolffian being. But Natorp is closer to the truth. For Aristotle's two kinds of being are distinct only in reason from Wolffian being. For all three kinds of being are taken to necessarily apply to all objects, and are therefore logically equivalent. This is ontological

ecumenicism again.

Deriving Value from Forms and Kinds of Being

We rejected the ens realissimum on the traditional account. For it mixed together into one entity what ought to be two different entities that are distinct only in reason: the fact of the supreme reality and the value of the supreme reality. And that is even assuming that there is a supreme concrete reality in the sense of a personal God, or at least a Prime Mover. We accepted the *ens* only as being in the sense of not being nothing. It is no God or Prime Mover. It is neither personal nor even conscious. It is not even concrete! But as the deepest and most general kind of being, it is at least the Sine Qua Non. And it is Russell's robust sense of reality.

What about the other kinds of being? Does any kind of being logically imply any value, or any kind of value, other than in the indirect sense of being a necessary condition? Or to take a perhaps easier question first, Do all forms as such, or do any forms *other than* forms of values such as courage, logically imply values? The questions are distinct only in reason. For as we saw, forms are distinct only in reason from essences (kinds of being).

I see no intrinsic value in form as such. On the face of it, many forms have no intrinsic ethical value, for examples the form of pebbles and the form of numbers. To be sure, all Platonic forms are perfect ideals. Thus they all have the value Aristotle calls excellence of its kind. But other than that, I see no ethical value in, say, a perfect circle. And I am not even sure what a perfect pebble would be like. And as for forms as such, so for ante rem universals as such, in re universals as such, particular properties as such, and classes of particulars as such. The single example of a pebble and its variously parsed properties can show all that. For all we need to disprove an "as such" universal claim is a single counterexample.

Likewise, I see no intrinsic value in being as such. On the face of it, kinds of being as such have no intrinsic ethical value, for examples not being nothing (our humble *ens*) and being mind-independent. And if even just *one* kind of being has no intrinsic ethical value, then neither does being *as such*. For all we need to disprove an "as such" universal claim is a single counterexample. And except for Platonic ideal formal reality, *most* if not all kinds of being are not ideals in which things can participate to different degrees. For most kinds of being always apply in exactly the same way. Either an object has it or it does not. And even if that *were* a perfection, it would only be excellence of its kind, which Aristotle rightly distinguishes from ethical value in the ordinary sense.

An easy argument to make for this—and perhaps the best

explanation of this—is that kinds of being concern not *what* things are, but *whether* they are. It is good that people exist. But it is good because of what they are: people. If people were good because they *exist*, then *everything* that exists would be good to the same extent and for the same reason, namely, they exist. All the kinds of being are like that, even ideal formal being. Exceptions like *human being*, *animal being*, or even *living being* seem rather circular.

A second argument is that being is not a value, but only a logical precondition of having value. No being, no value. And on the face of it, among beings, some have value and some do not.

A third argument would be that the very being of evil things would be good, if their kind or kinds of being were good. Note that evil things have the same kinds of being as good things, such as not being nothing. Talk of *evil being* seems rather circular.

One might object that in classical Christian theology, evil things *were* good things, but became corrupted. And arguing by analogy, if kinds of being are good, then it is plausible to hold also that the evil of evil things corrupts even the goodness of their very kinds of being. Like bad apples, evil things are rotten to their ontological core! To be sure, again in classical Christian theology, at least some evil people can be saved or redeemed (restored to goodness), and again by analogy, that would apply to their kinds of being as well. But let the theologians decide their theology.

My reply is that the antecedent, "If kinds of being are good," begs the question. That is the very issue in question. On the face of it, kinds of being as such are value-neutral. And no flaw has been detected in my three arguments. Also, I am an agnostic; but that only matters to the objection's analogical basis in theology.

Butchvarov disagrees with my view that all kinds of being as such are value-neutral. For he holds that all concrete things (as opposed to abstract things) as such are intrinsically good. In fact, concrete things are his first (i.e. deepest and most general) level of goods (Butchvarov 1989: 88). The view is traditional; Butchvarov cites Augustine, Aquinas, and others (Butchvarov 1989: 88). It may help to consider the goodness of God's whole creation, which is the concrete world. According to the biblical story, at least God saw it was good! And if God exists (and if this biblical story is true), I would grant that his powers of logical derivation of value from fact are infinitely better than mine. But I doubt that "pebbles and mountains" (Butchvarov 1989: 88) have any intrinsic goodness. As an agnostic, I do not find that they have goodness as part of God's creation. And I do not find my denial that concrete things as such have intrinsic value "question-begging" (Butchvarov 1989: 89). What question is begged? My denial is a direct, positive synthetic *a priori* intuition of the *non*-derivation of goodness from pebbles and mountains. How can a direct synthetic *a priori* intuition beg any

questions? An *a priori* truth is simply true *a priori*!

What about the aesthetic value of pebbles and mountains? Hume's primary topic is deriving moral obligations or values from facts, but I am sure his argument applies to aesthetic values as well. For they too are moving and inspiring. Thus by parity of reason, Hume should derive them from aesthetic sentiments. My earlier critique of Hume's argument would then apply by parity of reason. But the short answer is that while *beautiful* or *ugly* pebbles have aesthetic value, on the face of it pebbles as such do not.

And if some pebbles are intrinsically beautiful, that works out in my favor. It is a derivation of a value from a fact! Just like deriving the value of Achilles' courage from the fact, we derive the beauty of pebble P from the fact of pebble P, that is, from the fact of how that particular pebble is. In both cases, we are deriving a value-object from the corresponding factual object.

Indeed, if kinds of being *did* have intrinsic value, that would work out in my favor too. They too would be derivations of value from fact. So when I question whether kinds of being have intrinsic value, in a way I am working against my own interest in showing derivations of values from facts. But not really so, since my real interest is in the pursuit of truth. And my view is that not every fact implies a value. Far from it!

When Butchvarov says that concrete things as such are goods, that is *his* counterexample to Hume's nonderivation thesis. More precisely, it is the first of his five counterexamples, since he admits five levels of goods (Butchvarov 1989: ch. 5). And on all of them, the fact of the level or kind of thing is distinct in reason from its value. We are deriving the value-levels from the factual levels.

For "intrinsic," read *a priori* and thus logically contained.

One might object that pebbles that are neither beautiful nor ugly at least have the aesthetic value of being plain, boring, or even monotonous. My reply is that this is not a negative value (ugly), but a "default" value, i.e., the 'value' of having *no* aesthetic value. And in fact there are many art objects, such as paintings, that have no aesthetic value to speak of. There are many worthless artifacts!

My conclusion is that Butchvarov's pebbles and mountains ethical goods is as unsuccessful as Mill's pebbles and gingersnaps arithmetic, and for the same reason: the *a priori* truths of ethics and of arithmetic are absent from and do not confirm their views.

Of course, *utilitarian* values can be found for pebbles and mountains. We can use pebbles to build roads and walls. We can use mountains for altitude and defense. Even Millian arithmetic can help people. But utilitarian values are logically contingent.

I find the *a priori* intuition of the nonderivability of value from pebbles and mountains especially clear if we articulate it using possible worlds talk. If pebbles are intrinsically good, then all

pebbles are good in all possible worlds in which they exist. But surely any possible world containing *only* pebbles has no intrinsic value. What value could any such world possibly have? There is no one there! And this is actually a retrograde step from Russell's far more sophisticated robot world. See pages 658–662 on that world.

Deriving Absence of Value from Absence of Fact

I said earlier, "No facts, no values." More deeply and generally, no objects, no values. For all facts are objects in our wide sense of "object." Value-facts are facts in our wide sense of "fact;" the other kind is factual facts. And value-objects are objects in our wide sense of "object;" the other kind is factual objects. For objects in our wide sense include anything and everything. And facts in our wide sense include anything described by a proposition (for us, propositions are qualified facts). Thus the fact that Achilles has courage is a factual fact, and a factual object in the wide sense. And the fact that courage is good is a value-fact, and a value-object in the wide sense.

In the next few sections, I shall first offer some negative derivations, that is, derivations of absence of value from absence of fact, Then I shall offer some positive derivations of values from facts. Of course, I already positively derived the virtues as values from the virtues as facts. For when I ask whether Achilles has courage, and when I ask whether courage has value, I am presented with very different objects of thought, and indeed very different *kind*s of objects of thought—a factual object and a value-object—that are distinct only in reason, and that "are" different objects in themselves that are distinct only in reason. But that was a fairly easy derivation, and there is more to do.

The most general negative derivation is this. There are no value-objects if there are no factual objects. For instance, there are no values in the space-time world if there are no factual objects in the space-time world. By "no factual objects in the space-time world," I mean the situation in classical physics where the space-time world is just an empty void or vacuum containing no bodies, no minds, and no other objects that logically can be in space-time.

The reason is trivial, almost circular. Nothing logically can have value if nothing is there to have the value in the first place. Again, there can be no logically contingent value-objects in the space-time world, if there are no logically contingent factual objects there in the space-time world to have them. More deeply and generally, this is an instance of ex nihilo nihil fit (out of nothing, nothing can come), where the nihilo is no factual objects and the nihil is no values (value-objects).

There can be no particular value-properties if there are no particular factual properties. There can be no in re value-universals if there are no in re factual universals. There can be no ante rem value-universals if there are no ante rem factual universals. And there can be no Platonic value-forms if there are no Platonic factual forms. And on metaphysical ecumenicism, the fact and the value of Achilles' courage are examples of all of them. For the factual courage of Achilles can be equally well parsed as: his particular factual property of courage, the in re factual universal of courage, the ante rem factual universal of courage, and the Platonic factual form of courage. And the value of his courage can be equally well parsed as: the particular value of his factual particular property of courage, the in re universal value of the factual in re universal of courage, the ante rem universal value of the factual ante rem universal of courage, and the Platonic value-form of the Platonic factual form of courage. But these correspondences cannot always carry over across the parsings. For there is an in re-ante rem divide. If there are no particular instances of factual courage, such as the courage of Achilles, then there can be no particular instances of courage-value, no in re factual universal of courage, and no in re value-universal of courage. Those four kinds of in re objects, two factual and two value, all logically must exist or not together. But even if all those in re objects fail to exist, the ante rem factual universal of courage, the Platonic factual form of courage, the ante rem value-universal of courage, and the Platonic value-form of courage will all still exist. For ante rem objects logically need not be instantiated. And "Factual courage is good" is a true synthetic *a priori* statement that is about ante rem objects, even if it has no in re instances to be parsed as being about.

Thus, so to speak, "no facts, no values" is a 'genus' with at least four 'fact-species': particular properties, in re universals, ante rem universals, and Platonic forms. I say "so to speak" because the so-called 'species' are distinct only in reason in various ways. If we were to add groups, such as classes or sets of particular properties, we would have even more 'species' that are distinct only in reason.

I am not sure that Hume would deny the "no facts, no values" negative derivation. I am not sure he even considers the question. But surely he would admit facts in the *ordinary* sense, even though he does not have a fact metaphysics. And even though his bundles are fictions, he might accept "no bundles, no values." But I think he would have to accept "no moral sentiments, no values." For he positively derives all values from moral sentiments; and that is the contrapositive of "no moral sentiments, no values." And he says that sentiments are impressions, which surely fall on the factual side for him. But even that negative derivation is deeply problematic for Hume, due to Hume's Dilemma (explained above).

Perhaps the greatest importance of this section is that it raises the following question: If it is logically necessary that if there are no facts, then there are no values, then how could any positive values be logically completely unrelated to any positive facts? That is, if we can derive "There are no values" from "There are no facts (there to have values)," then how could there fail to be some logical derivation of some positive value from some positive fact? To be sure, the contrapositive of "If no facts, then no values" is not "If facts, then values," but "If values (exist), then facts (are there to have the values)." And I reject "If facts, then values" as a *universal* statement, since we cannot derive values from just any old facts, such as that some pebble exists. But even so, the logical door is open for deriving values from facts. In fact, it seems to make no sense that "If there are no facts, then there are no values" is true *a priori*, but no value logically can be derived from any fact.

At least for the virtues, we have the contrapositive every time. For the fact and the value of any virtue imply each other. For example, courage cannot be what it is if it has no intrinsic value, and no courage-value can exist apart from a factual courage object. Thus we affirm both "if no factual courage, then no courage-value" and its contrapositive "if courage-value, then factual courage." This is the case for both in re and ante rem facts and values.

The nice thing about the space-time world as a whole is that it eliminates any changes of in re value due to our shifting a value question to a larger context or situation. For by definition, the space-time world is the largest context or situation for facts and values that exist in space and time. And both the in re fact and the in re value of Achilles' courage are located wherever and whenever Achilles is. Thus I ask again: Can it really be the case that no values logically can follow from the facts, *no matter how the facts are*? For given the whole factual space-time world and its whole factual history, how could any in re value be any different from what it is? This is getting close to the topic of twin factual worlds and their values. But first let me discuss some more specific negative derivations of "no value" from "no fact."

Deriving Absence of Value from Absence of Change, Motion, and Free Choice

I accept the old distinction between motion and change, but shall widen the concept of motion due to Frege. Namely, not all objects that move (change location) are physical objects. For some moving objects are not physical, but have spatial locations that can change. The axis of the earth is not a physical object (Frege 1974 / 1884: 35). But it moves as the earth moves. It can also move about

in its orientation, that is, move (rotate) to a different angle with respect to the earth's orbit around the sun.

Thus motion is either of two kinds of change. It is change of either location or orientation (rotation). But an apple can change from green to red without moving in location or in orientation, and my thoughts and feelings can change without my body moving in location or in orientation. To be sure, there must be some *causally* necessary internal micro-motions in the apple for it to change color, and in my brain for my thoughts and feelings to change (usually without rising to the level of eliminating free will). But the apple as a whole and my body as a whole can be basically quite motionless while changing in color or mood. And it really does not matter what the causal micro-facts are. They can even occur per quantum probability. The point is that it is *logically* possible for the apple to change from green to red, and for me to change my mood, without *anything* physical moving from one location or orientation to another. Note here that in some logically possible worlds, apples and brains do not even *have* internal micro-events, either moving about or not. A *totally* motionless apple *logically* can change from green to red, and so on. This is categorial metaphysics, not physics.

There are infinitely many logically possible worlds in which all finite minds and bodies are constantly changing. There are also infinitely many logically possible worlds in which all finite minds and bodies never change. We may respectively call these worlds 'changing worlds' and 'changeless worlds'. In a changeless world, there can be no free choice, either in the sense of changing anything, or even being a change itself. Any "free" choice could only be epiphenomenal, i.e., an illusion (some might say delusion), and could not even be a change itself. For even though a choice as such is not a spatial *motion*, i.e., is neither a change of location nor of orientation, a choice as such is still a *change*. It is a *mental* change. Specifically, it is a volitional act, and as such, it occurs in time, as well as within the spatial location of an embodied mind. Nor would there be any other kinds of mental change in a completely changeless world. Not only would there be no new volitional acts, but there would be no new cognitive acts either. There would be no change in presentation of objects of perception or thought. There would be no changes of emotion or feeling.

If Achilles is unchanging in his courage in fact (in amount and quality), then the intrinsic value of his courage is also unchanging (in amount and quality). That is essentially no different from the fact that if an apple is unchangingly green, then it is also unchanging in color. In both cases, the hypothetical (if-then) relation is *a priori* and logically cannot change. The only difference is that the first relation is of a factual object to a value-object, and the second relation is of a determinate to a determinable.

Changeless possible worlds that have changeless people with changeless courage *in fact*, will also have changeless courage *in both intrinsic and consequential value*. But there are some facts and values that changeless worlds logically cannot have. These are precisely the facts and values *of* changes. For example, a change in the factual amount or quality of Achilles' courage entails a corresponding change in the intrinsic value of his courage.

Choices are essentially volitional mental changes. Thus if no changes, then no choices. And if no choices, then no values that logically depend on, i.e. are intrinsic to, choices.

Motions are essentially a kind of physical change. Without motion, no *embodied* persons can make their *bodies* do anything, such help an old person across the street. For we cannot make our bodies do anything without moving them in some way. No motions, no choices that result in physical action, or that make any physical difference. (I deny purely mental power to change an apple from green to red). In worlds without motion, the only real choices, that is, the only choices that can have a real impact on anything, are choices that impact our own mind. (I deny purely mental power to change other minds). (I also waive relativity theory on motion.)

There are logically possible worlds where I can move an apple simply by mentally controlling it (telekinesis), as opposed to using my body to move it. Telekinesis is sometimes defined as action at a distance. But that definition is too wide, since it would apply to gravity in classical physics. Telekinesis is better defined as the mental power to change a physical object other than our own body, regardless of how far away the physical object is. If I mentally make an apple rotate while it remains in place in my hand, or make it change from green to red, that is telekinesis. Mental control over our own body is not included in the definition, even though it might be the very same kind of mental control, with the only difference being the body that is controlled. But we may include mental control of physical objects by disembodied minds as telekinesis. For in telekinesis, there is no logical need for the controlling mind to be embodied itself. To be sure, there is no such thing as telekinesis, or at any rate no reliable evidence that there is. We are discussing categorial metaphysics and logical possibilities here, not physics or empirical evidence.

In the present section, we found three negative derivations, that is, derivations of absence of value from absence of fact. No physical motion in fact, no physical motion-based change in value. No physical change in fact, no physical change-based change in value. No free choice (no free mental act change) in fact, no moral responsibility or moral value. On the containment and dependence arguments, the absence of the three kinds of fact logically contains and depends on the absence of the corresponding three kinds of

value. For if P implies Q, then P logically contains and depends on Q. The natural expectation would be that the corresponding kinds of positive fact and kinds of positive value would be different but distinct only in reason too, since their negative absences are.

Deriving Absence of Value from Absence of Pleasure, Pain, Emotion, Feeling, Sentiment

Here I shall use the terms "pleasure," "pain," and so on in the widest sense possible. The term "sentiment" is Hume's. Hume admits only via moderna impressions and ideas, But if we can have a sentiment *about* anything, then it is a via antiqua term. Certainly it is for me. The same goes for pleasure, pain, emotion, and feeling. But not every pleasure, feeling, or emotion is about something. Simply feeling happy, and general anxiety, are stock examples. Since those feelings are not about anything, they are via moderna. I admitted both via antiqua and via moderna objects of perception or thought in chapter 1. I criticized only those who admit *only* via moderna objects of cognition. Via antiqua objects include objects of ethical sentiment, and also objects of acts of decision.

Hedonic utilitarianism has at least one negative point to recommend it. Namely, nothing has value to anyone in a world *without* pleasure or pain. A world devoid of feelings of pleasure or pain is a world in which nothing has value for anyone. For no matter what happened or what anyone did, no one would feel pleasure or pain in any sense. No one would ever feel any better or worse, or would even feel good or bad at all. I could cure a disease or show courage on the battlefield; but no one would take any pleasure in it. Thus feeling pleasure or pain is a logically necessary condition of value. Thus it is a logical constituent of value.

If I do not feel a toothache, I do not have one. If I do not feel joy or love, I do not have them. This is with the exception of the Freudian unconsciousness, but not with the exception of ethics. I may angrily deny that I am angry (Freud's stock example). But if I feel no pleasure or pain, then nothing matters to me, and nothing has value for me. Thus my feeling pleasure or pain is a logically necessary condition of there being any value in anything for me. And if something has no value for anyone, then there is a sense in which it has no value at all: namely, the in re sense of value.

Actual pleasures or pains are logical constituents of in re values. For categorial reasons, only ante rem pleasure or pain can be logical constituents of ante rem values. And no object, in re or ante rem, can exist apart from its logical constituents.

Ante rem values must be such that if they *were* in re, then they *would* have in re pleasures or pains as logical constituents.

More precisely, any in re values must, and they are distinct only in reason from ante rem values. This is nothing like the difference between being real and being real for me. For 'being real (in itself) (only) for me' is as logically impossible as the round square.

Likewise, nothing has value for anyone in a world without emotions or feelings of any kind. For if we have no emotions or feelings, if we feel nothing, then nothing matters to us, nothing has value to us. No sentiments, no values. It is much like being color blind. If we never see red or feel moral revulsion, we cannot even understand red or evil. (This comparison works poorly in Hume's via moderna theory; see Butchvarov 1989: 55). In fact, our having feelings is a trivially necessary condition of our feeling there is any value. And there is a clear sense in which if something has no value for anyone, then it has no value at all. This is the in re sense again.

The contrapositive is that if something does have value to us, then we do have emotions, feelings about it. These need not be constant or even actual at every moment of our waking existence. We logically need not have exactly the same sentiments, or even any sentiments, every time we cognize a value. For example, we can reason hypothetically about values without feeling anything about them. We need not even have a regular disposition to have feelings. For the logical dependence of value on sentiment requires only that for something to have in re value for us, we have some sentiment about it at some time in our lives.

We actually have two theses here: "No sentiments, no values" and its contrapositive, "If values, then sentiments." Surely Hume is logically committed to both theses if he derives values from sentiments. Here in re values require in re sentiments.

As a general rule, emotions or feelings are not wholly distinct from pleasure or pain. Our positive emotions or feelings are pleasures, and our negative ones are pains. I think that the rule is universal, since an indifferent (non-positive, non-negative) emotion or feeling seems a contradiction in terms. But the converse is not the case. I feel many pleasures and pains without any emotional feeling, as when I eat a candy mint or am jabbed with a needle in the doctor's office. But on the face of it, emotions and feelings essentially involve some pleasure or pain in some way. Even a feeling of boredom or ennui (listlessness) is mildly negative, and therefore a pain in the wide sense. Thus this is a modal (one-sided) distinction. Emotions or feelings logically depend on pleasures or pains, but pleasures and pains do not logically depend on emotions or feelings. What would an emotion or feeling be like that is neither a positive pleasure in any sense, nor a negative pain in any sense? But if I am right that ethical sentiments imply ethical values *and vice versa*, then per our containment and dependence arguments, they are different but distinct only in reason, and their distinction is

not modal but mutual. Thus they logically contain each other. And that is perfectly fine. For logical containment is containment of truth-grounds, and that can be mutual. It is not like a bottle that contains water. (I waive Klein bottles as a sort of illusion.)

One might object that some values are 'beyond good and evil', and the sentiments they derive from are beyond pleasure and pain. For good is positive value, and evil is negative value. And pleasure is positive feeling and pain is negative feeling. And 'positive' and 'negative' are not logical contradictories, but only logical contraries. Thus the logical door is open for values and sentiments that are neither positive nor negative. This might apply to the value of Zen or other mystical sentiment or even experience.

My reply is that this is perfectly consistent with the 'no sentiments, no values' thesis and its contrapositive. Thus we need not reach difficult questions such as whether "the peace that passeth all understanding" (*Philippians* 4: 7) is a good in a higher sense, or whether it can even be understood, according to its own description. Perhaps it is preconceptual. In chapter 1, we argued that the direct singling out of objects is preconceptual, since it is the basis of concept formation. But if so, then it is logically prior to the concepts of value and of sentiment, as well as to the concepts of positive and negative, good and evil, and pleasure and pain. Indeed. such singling out is prior to the concepts of direct, singling out, objects, and concepts. This is William Blake's 'cleansing the doors of perception' from concepts indeed, even if Blake might reject our technical articulation of it. However, all these concepts can be retrospectively applied *post*-experience.

My further reply is that as I was saying before, the rule that emotions or feelings are pleasures or pains seems universal, since an indifferent emotion or feeling seems a contradiction in terms. Perhaps we cannot cognize pleasure while *in* a mystical experience. But it can be conceptualized and cognized as such *post*-experience.

One might object that the whole point of Stoic ethics is to avoid pleasures, pains, emotions, and feelings.

My reply is that for Stoics, virtue is its own reward, and has its own intrinsic ethical pleasure. And that is just an instance of the contrapositive of our "No pleasures or pains, no values" thesis.

One might object that if Stoics found no happiness in virtue, found no pleasure in it, they would still do their duty simply because it is the right thing to do. This is my principle of rightness.

My reply is that if virtue or duty made no difference to the happiness or unhappiness of anyone, and not just to the Stoic in question, then Stoic ethics, and all ethics, lacks not only a logical condition, but its very reason for being. Why be moral if whatever we do makes no difference to anyone's happiness or unhappiness? Again, the logical dependence of value on feeling is the negative

kernel of truth in hedonic utilitarianism. Even worse, utilitarianism would be destroyed, and it has a very important limited validity in our ethical ecumenicism. It is right in affirming the importance of our acts' consequences for happiness or unhappiness, and wrong only in denying that some things have intrinsic value.

Diogenes Laertius says that Thales, the first philosopher, held that there is no difference between life and death. Someone asked Thales why then did he not just kill himself? Thales replied, because it would make no difference (Laertius 1980: 37). If we suppose Thales meant he was emotionally indifferent to life and death, that there was no pleasure or pain in either to him, and that he felt indifferent to anything life had to offer, that is, found no pleasure or pain in it, then this would be a nice illustration of my reply to the present objection. But surely he meant their identity.

Let us carry our argument a step further. Now, there can be no moral duties in a world without ethical values of any kind. For if nothing has any value, then there is nothing we ought to do. Thus values are a logically necessary condition of duties.

But then we have a syllogism whose conclusion is that there can be no duties (moral obligations) in a world without pleasures or pains. For there are no duties without values, and no values without pleasures or pains. And we have a parallel syllogism if we replace pleasures and pains with emotions and feelings.

The full chain of argument is: no duties without values, no values without emotions, no emotions without pleasures or pains, therefore no duties without pleasures or pains. And in re duties and values require in re emotions, pleasures, and pains.

To be sure, a mystical or divine 'beyond good and evil' experience is also beyond duty, since it is beyond any moral good or evil. It is "water without price" (*Revelation* 21: 6). And for some mystics and divines, its value is more motivating than any other value could be. But again, it seems like a higher good for that very reason, and perhaps a higher spiritual duty for that reason. For surely its value is positive. As an agnostic, I speak hypothetically. I shall discuss the obvious objection, that its value can be overruled by the practical needs of others, later in this chapter. Indeed, it can be evil to shut out the needs of suffering humanity while enjoying one's own personal, private mystical or divine rapture. That might be very mystical, but it does not seen very divine!

Emotions are passions in Aristotle's sense that we are their passive recipient. They are not actions that we do, but things that happen to us. But they have at least a minimal tendency or potential to move us to do things, to make us want to do things, at least some of us some of the time. If they never actually motivate anyone to do anything, or more precisely, if they logically cannot motivate anyone to do anything, then they are not emotions. Perhaps that is

the difference between emotions and mere feelings: feelings need not motivate. But in deference to the overlapping ordinary use of these terms, I do not wish to make that definitional. Also, we may remove any objections by stipulating that we mean those emotions and feelings that motivate, i.e., Hume's motivating sentiments.

One might object that if in re values logically depend on in re pleasures, pains, and emotions or feelings, then there logically can be no in re values in themselves. For an object in itself is not only logically mind-independent, but is logically independent even of the logical possibility of minds. And in re pleasures, pains, and so on logically can exist only in minds.

My reply is that no object is logically independent of itself or its logical constituents. Minds are objects in themselves; but each mind is logically independent only of *other* minds, since it obviously cannot exist independently of itself. Even a stick or stone cannot exist independently of itself! It can only exist independently of *other* sticks or stones. Likewise, in re pleasures, pains, emotions, or feelings are logical constituents of in re values. And in re values in themselves cannot exist independently of their own in re logical constituents. For *no* object is logically independent of its own logical constituents. (Note: no ante rem pleasure, no in re pleasure.)

And no object can exist independently of its own logical or categorial possibility. This point is due to the early Wittgenstein. Indeed, an object's logical or categorial possibility is therefore one of its logical constituents. This concerns the essential feature of qualified objects that they cannot exist independently of the logical possibility of minds. It also concerns the defining feature of objects in themselves that they are not qualified objects, that is, that they logically can exist even if, per impossibile, minds were logically impossible. See chapter 1.

Again, we must not confuse the distinction between having value in itself and having value for me (or us) with the distinction between being real in itself and being real for me (or us). At least on the in re side of the metaphysical house, what has no value for anyone has no value at all. And feeling is a logical constituent of value. But 'for me' logically cannot be a logical constituent of being real in itself. For that is essentially self-contradictory.

Deriving Absence of Value from Absence of Persons, Minds, and Consciousness

Like the preceding section, the present section primarily concerns in re values. Ante rem values logically can exist even if no person, mind, or consciousness exists in re, and require only their ante rem possibility. See the preceding section for details.

Nothing can be of value in a world without persons, minds, or consciousness. For if something has no value for anyone, it has no value at all. We discussed that in the preceding section. We also discussed the pebble world as an example.

Arguably, the consciousness of a grasshopper is not sufficiently "organized" or sufficiently capable of reasoning, as opposed to merely perceiving things, reacting to them, and merely feeling pleasure or pain, to merit being called a mind. See Broad (1968 / 1925: 9, 11, 96-97, 438, 464, and ch. 13, "The Unity of the Mind"). But since a grasshopper can find food, reproduce, and make life or death decisions, I include the grasshopper as having a mind, if not as being a person in the sense of having personality and moral responsibility. For grasshoppers seem to be conscious of the world around them, and to make survival decisions based on their perceptions. My cat Milo falls between grasshoppers and humans. Like grasshoppers, "cats can do no [moral] wrong," but like humans, Milo very definitely has a personality. Is he a "person" or not? It is hard to say. But while the concepts of person, of mind, and even of consciousness have vague borders, they are genuine concepts (Grice 1956). For they have clear applications that are ordinary language teaching and learning paradigms. In fact there are many detailed analyses of these concepts in the literature, but for us chapter 3 will have to suffice on minds and persons.

Many animals have minds. They feel pleasures, pains, emotions, and feelings. They value many things highly, such as food, water, safety, sex, social companionship, and love. But they have no moral obligations, Milo values all these things (except sex, since he is neutered), but a cat can do no wrong. If I say "Bad cat!," he only knows I want him to stop whatever he is doing. He does not understand the word or the concept of bad, only the unpleasant volume and tone. Cats have the same basic emotions we do, such as anger, fear, happiness, and love, but have no moral duties. All their values and concepts are ours, but not all our values and concepts are theirs. Many hold that cats are better off for it, but Mill would not. Mill would far rather be an unhappy human than a happy cat.

Some argue by analogy that even plants have minds or at least consciousness. For they too seem to make survival decisions. I disagree with the old maxim that "every analogy limps" (*omnis analogia claudicat*). For there can be and often are intuitive evidentially certain analogies among slightly different paradigms of correct use of the same term, such as slightly different shades of red, or, in philosophy, slightly different definitions of "substance." Hence I hold that some arguments by analogy are logically valid in the wide *a priori* sense of logic. I offer as examples an analogical argument that crimson is red, since cardinal, scarlet, and cherry are paradigms of red, and an analogical argument that Spinoza's God is

a substance (or would be if it existed), since Aristotle's substances and Descartes' substances are paradigms of substance. On the face of it, the analogies are sufficient for these two analogical arguments to be logically valid in the wide *a priori* sense. See my (2003 / 1996: 235). But the two arguments by analogy to humans, that grasshoppers are persons, and that plants have conscious minds, fall far short of intuitive *a priori* validity. For grasshoppers are too far from our paradigms of persons, and plants are too far from our paradigms of conscious minds. In fact, in such cases, the whole point of arguing by analogy is precisely that they are *no*t very near to the paradigms in question, thus making analogical arguments the best we can offer. And the arguments are inconclusive. They even seem to many to be wishful thinking. In contrast, everyone agrees that crimson is a red and that Spinoza's God is a substance. And if grasshoppers do seem like persons, we can downgrade our example to amoebas or viruses, or downgrade further to hypothetical cases.

The so-called "problem of other minds" usually means the question whether I have any evidence for the existence of minds other than my own, given that I do not perceive other minds. This is a very different case. For if *human* minds other than my own *do* exist, it is simply assumed that there are *paradigmatic analogies* among all human minds, and even that they are all *essentially the same*, since all humans belong to the same species. Thus we are not questioning here whether other humans have minds because they function at the level of grasshoppers or amoebas. For most humans basically function at the same level. The question is instead the solipsistic question whether my mind is the only mind because it is the only one I am conscious of. And that question is very different from the questions about grasshoppers and plants. Those questions are about *what* persons and minds are, and whether the mental life of grasshoppers or plants *rises to the level of* persons or minds respectively. The solipsistic question is about *whether* other minds exist, *regardless* of their complexity or organization. The questions about grasshoppers and plants are primarily classificatory, and the question about other minds like our own is primarily evidentiary.

The problem of other minds is essentially the same as the problem of the external world: both are primarily evidentiary. The primary issue is not *what* other human minds or *what* rocks and trees are, but *whether* we have evidence they exist independently of our own mind. And the theory of epistemic seeming solves both problems in the same way, by the accumulation of little seemings into greater probabilities. In both cases it might be objected that the little seemings are indeterminate in quantity, and that *contra* Frege and Russell, a lot of little seemings do *not* add up to any very great probability. My reply would be the same in both cases. I agree with Keynes that *most* probabilities are indeterminate; that is their

nature. And *any* probability, however slight, is what was to be shown. Even the slightest probability is wholly different from no evidence at all. And based on their own cumulative evidence, it is fair to say that nearly every ordinary person intuitively finds more than enough reason to believe in other minds and an external world. See chapter 4 on the theory and the principle of epistemic seeming. (As a parting jab at Berkeley's idealism, we would *expect* a real stone or tree to look differently from different angles. Indeed, there would be something very wrong if it did not! That is why we admit idealism into metaphysical ecumenism as a less valid analysis: its logical parsing of stones omits stones! Here "Poor dear Common-sense" is far more intuitively rational than Broad thinks.)

I mention these issues only to set them aside. For here we are concerned with negative derivations of absences of value from absences of fact. And whatever minds may be precisely classified as, and regardless of whether minds actually exist, all logically possible minds must be included in the scope of the "no minds, no values" thesis. And the thesis seems to be a synthetic *a priori* truth.

We can also use chains of arguments (sorites) to show that without minds, there can be no values or duties. These chains will build on the chains of logical dependences we described before.

Pleasures, pains, emotions, and feelings are logically dependent on minds, or at least on consciousnesses. As Frege says, there are no homeless ideas (Frege 1968 / 1918: 520–521).

Without minds or at least consciousnesses, there cannot even be any misunderstood, subliminal, or unconscious emotions or feelings. Even an unconscious emotion cannot be homeless, but must be in some mind. So to speak, a pleasure, pain, emotion, or feeling cannot be just floating around somewhere on its own. That is fatal to the bundle theories of neutral monism from Hume to Russell. For in any bundle theory, the impressions, sense-data, or whatever objects that are bundled can only exist prior to and therefore independently of the bundles. Thus they logically *can* exist on their own, homeless, outside any mind-bundle. (That is why we admit bundle theory into metaphysical ecumenicism as a less valid analysis. Its logical parsing of things omits not only stones and trees, but you and me as well!) Again, Russell calls lone sensibilia such as phantoms and hallucinations "wild particulars."

Thus the longest chain we can build from all these facts is this. (It is not the only chain, and we will be blurring or slurring some distinctions a bit.) If there are no conscious beings, then there are no minds. If there are no minds, then there can be no emotions or feelings. If there are no emotions or feelings, then there can be no pleasures or pains. (Pleasures and pains are feelings.) And if there can be no pleasures or pains, then there can be no values. (For nothing would make any difference to us.) And if there are no

values, then there can be no moral obligations. Therefore, if there are no conscious beings, then there can be no moral obligations.

That long chain is basically correct. But for the purpose of simply solving Hume's problem, any of these simpler chains work:

Simple Chain #1. If there are no minds, then there can be no values, hence no moral obligations. (For Buddhists: no minds, no free will, no moral responsibility, no karmic justice.)

Simple Chain #2. If there are no emotions or feelings, then there can be no values, hence no moral obligations. (Psychopaths who cannot cognize moral values or have the moral feelings that are distinct only in reason from cognizing them are not morally responsible, since they cannot tell or feel right from wrong.)

Simple Chain #3. If there are no pains or pleasures, then there can be no values, hence no moral obligations.

All four chains, one long and three simple, concern values in re, and also in re cognition of ante rem values. And all four raise the question: Given that these negative derivations are intuitively valid, how can there fail to be positive derivations of values from facts as well? Let us turn, then, to the positive derivations.

Positive Derivations of Value from Pleasures, Pains, Emotions, and Feelings

This is what utilitarianism is all about. For utilitarians derive the value of an act *entirely* from its factual consequences of pleasure, pain, good, and so on. Ad hominem: Hume is a utilitarian!

I have argued that if there are no consciousnesses, minds, persons, pains, pleasures, emotions, or feelings, then there are no values. But those are only negative derivations of absences of values from absences of facts. Are there any *positive* logically necessary derivations of values from these factual objects?

In this quest, it seems promising that there are negative derivations. It also seems promising that we positively derived values from factual forms, such as the value of courage from its factual form. But this new quest also seems far more challenging.

The existence of pleasures and pains positively entails the existence of positive and negative values. For as I noted earlier, pleasure is intrinsically good and pain intrinsically bad. I argued that these two synthetic *a priori* truths describe the deontological foundation of hedonic utilitarianism, on pain of vicious infinite regress of consequences. It is hard to see how utilitarianism can even be a plausible ethical theory, if pleasures are not good and pains are not bad. What does 'producing the greatest happiness for the greatest number of people' have to do with ethics at all, if happiness is not even good to begin with?

My conclusion was that utilitarianism and deontology are formally distinct with a foundation in reality in deontology.

And surely positive emotions or feelings are intrinsically good, and negative ones are intrinsically bad. On the face of it, joy is intrinsically good, and sadness is intrinsically bad. We might ask, Why is joy good? Why is sadness bad? We may as well ask, Why is red a color? And there may be no describable answer. It just is! But we need not describe why. To defeat Hume, it is enough if it simply *is* a synthetic *a priori* truth that the fact of joy implies the value of goodness. Indeed, it is enough if the fact of joy implies the value of *joy*. And at least we can say that the *general* reason why joy is good and why red is a color is exactly the same. Namely, it is a synthetic *a priori* logical containment of a determinate within a determinable. That is far more than Mansfield's judge could say!

This is very close to our Platonic derivations some sections ago. For deriving the value of Juliet Capulet's joy from the fact of her participation in the Platonic form of joy is just another logical analysis of the ordinary fact and value of her joy. And no such fact metaphysics is the same as ordinary talk of facts. Fact metaphysics in general is metaphysical theory, not ordinary, pre-philosophical talk. But while they are different, they are distinct only in reason. That is precisely because any fact metaphysics is a logical analysis of ordinary talk of facts. Likewise for any other logical analyses of that talk. States of affairs and Frege's argument-function-value schema come to mind. Unlike Wittgenstein and Russell, Frege does not admit facts. Instead, Frege admits two abstract objects, the True and the False, for his thoughts (propositions) to be about. But if Frege were to consider facts and states of affairs as "rivals" to his schema and his truth-value-objects, he would be mistaken. For all three analyses of ordinary talk of facts, though different, are distinct only in reason, insofar as they are all logically equivalent to the same ordinary statements they logically analyze. But the main point here is that this gives us at least four derivations of the value of joy from the fact of joy. We can derive the value of Juliet's joy from the metaphysical fact that she feels joy, from the metaphysical state of affairs of her feeling joy, from the metaphysical Fregean schema that the joy function maps the truth-value the True onto the argument Juliet, and also from the ordinary fact that she feels joy. In the previous paragraph, we discussed only the ordinary, pre-philosophical derivation. But here there are at least three logically equivalent metaphysical analyses of it that are distinct only in reason from it and from each other due to that logical equivalence, per the containment and dependence arguments in chapter 3.

Again, we need not reach the question whether *all* emotions or feelings intrinsically have value. To defeat Hume's claim that values can never be derived from facts, it is enough if the

fact of even a single emotion or feeling—or for that matter, any other fact—logically implies a value. But if we were to reach that question, I would say that on the face of it, all emotions and feelings have some minimal intrinsic value, since they are all intrinsically positive or negative. The argument is simple. We showed earlier that all emotions and feelings intrinsically involve some minimal pleasure or pain. And pleasure is intrinsically good, and pain is intrinsically bad. This also settles our earlier question whether all values must be either positive or negative. For there are no values without pleasures or pains. And pleasure is intrinsically a positive good, and pain is intrinsically a negative evil. Thus no value is 'beyond good and evil'. In fact, some values may involve *both* pleasure and pain, as in "Parting is such sweet sorrow" (Shakespeare 2024: *Romeo and Juliet* 2.2.199–200); but that is totally different from involving *neither* pleasure nor pain. Even a feeling of surprise at something new is, qua feeling, no exception.

Emotions and feelings are positively logically linked with pleasures and pains. To feel joy is to feel the pleasure of joy. To feel sadness is to feel the pain of sadness. The link is even stronger on Mark Twain's humorous view that "Happiness is the same as pleasure, except that it lasts longer," or if happiness could be defined as the presence of pleasure and the absence of pain.

Pleasures and pains are logically prior to emotions and feelings. For all emotions and feelings involve pleasure or pain, but not all pleasures and pains involve emotions or feelings. There can be and often are emotionless pleasures and pains, such as from a bite of chocolate or a toothache. But on the face of it, all emotions and feelings must be at least minimally pleasurable or painful.

Mixed emotions or feelings can be logically linked with mixtures of pleasure and pain. If I feel both joy and sadness about certain events, as in the sweet sorrow of parting, I feel a mixture of pleasure and pain. And so my feeling is both good and bad in value.

We noted that there is a formal distinction between the fact of courage and the value of courage with a foundation in reality in the fact of courage, where the logical dependence is mutual, but it is intellectually more illuminating to explain the value as grounded in the fact than the other way around. This applies to pleasures, pains, emotions, and feelings as well. The fact of pleasure and the value of pleasure are formally distinct and mutually dependent, we may say both logically and identitatively, but with an illuminative foundation in reality in the fact of pleasure.

Thus those who say, "Pleasure simply *is* good," or "Pain simply *is* evil," not to mention "Courage simply *is* good," are rather simplistic. They are classifying these things correctly, but they are overlooking the distinction in reason between the fact and the value of these things. For example, Catherine Wilson says, "But I side

with Epicurus, the 3rd century BCE founder of the Ancient Greek sect, who stated: '[I] do not even know what I should conceive the good to be, if I eliminate the pleasures of taste, and eliminate the pleasures of sex, and eliminate the pleasures of listening, and eliminate the pleasant motions caused in our vision by a sensible form'" (Wilson 2021; see 2019). There are no formal distinctions in Wilson's account. There is no logical analysis of any kind. We also "do not even know what" color is if we "eliminate" red, green, blue, and all the other colors we happen to know. But color is categorially different from specific colors. It is a determinable, and they are its determinates. And the categorial difference between goodness and specific pleasures is even deeper than that. For color and specific colors are all factual objects. But goodness is a value-object, and specific pleasures are factual objects.

Perhaps the chief objection to my view is a Kantian one. Surely a person who never feels pleasure or pain and never has emotions or feelings, or who, perhaps per impossibile, *logically cannot* ever experience emotion (i.e. a purely rational being), can, does, and must still have intrinsic value qua conscious being as an end in itself, and can still have Kantian obligations for the well-being of both itself and for other purely rational conscious beings as ends in themselves. Thus at least three kinds of good, namely rational beings as ends in themselves, their well-being, and their performing obligations logically need not be based on pleasure, pain, emotion, or feeling.

My reply is that the objection simply denies the conclusion of my argument without detecting any flaw in the argument. And what is the well-being of any person supposed to consist of, if not pleasure, emotion, or feeling? How could a purely rational being possibly feel happy or fulfilled? How could I be happy without feeling happy, or without even any logical connection to my feeling happy? Wilson would be on even stronger ground here, if she went beyond Epicurus' necessary conditions and admitted pleasure as a *logical constituent* of in re goodness, much as color is of red.

To his credit, Kant makes utilitarianism the first duty he derives from his principle of acting always in accordance with the universality of moral law, i.e., acting only in ways that one would accept that everyone ought to act the same. But his derivation of utilitarianism from his principle of the universality of moral law eludes me, if the content of the well-being of every rational being as an end in itself does not include any pleasure, pain, emotion, or feeling. And surely those are empirical phenomena that logically cannot exist in the noumenal realm of purely rational agent minds. The only solution I can think of for Kant's dilemma is that we are hybrid persons. That is, Kant is bisecting the ordinary human being into an amphibian who dwells in both the phenomenal realm and

the noumenal realm, purely as a matter of metaphysical analysis.

The objection might be restated as follows. Pleasures, pains, emotions, and other feelings belong in the phenomenal world, while the whole of morality belongs to rational beings in the noumenal world. Thus the objection is really that we logically could cease to exist in the phenomenal world altogether, since that whole world is logically contingent, including all pleasures, pains, emotions, and feelings; and we logically could then exist only in the noumenal world as purely rational beings who are ends in ourselves, and who can have goodness in the form of well-being; and we would still be free moral agents who have moral obligations to promote the goodness of everyone's well-being as much as ever.

My reply to the restated objection is that this is absurd. Kant's division of us into a phenomenal self and a noumenal self goes too far. For a *purely* rational agent mind who can *only* cognize noumenal things *logically* cannot experience empirical phenomena. Therefore we cannot be such purely rational agents. For we can and do experience empirical phenomena all the time—including pleasures, pains, emotions, and feelings, as well as salty sea air and green trees. Thus our in re value as ends in ourselves, indeed any in re values at all, can only exist in the realm of phenomena. For all in re values logically depend on pleasures, pains, emotions, and feelings. Thus we must be phenomenal selves for in re morality to exist at all for us. We must be noumenal free agents, but we must also be experiencing, feeling phenomenal selves. But I logically can be only one self. I logically cannot be two persons, but only one. Still less can I be two persons of such radically different kinds, neither of which can even be aware of the other as such. For a phenomenal person can only be aware of phenomena, while a noumenal person can only be aware of noumenal things that cannot even occur in space or time. For the phenomenal world is the world of space and time. To be sure, purely noumenal properties of purely noumenal persons or other objects logically can be parsed as purely noumenal particular properties, in re universals, ante rem universals, and Platonic forms. That is implied by metaphysical ecumenicism. But they cannot include phenomenal properties of pleasure, pain, and so on. Thus they cannot include in re values. Thus noumenal selves and acts logically cannot have in re value. The fact and value of Achilles' courage can exist only in space and time. For pleasures, pains, emotions, and feelings are phenomenal.

My reply to the restated objection is really my objection to Kant. It is deeper than any of the objections to Kant which Louis White Beck discusses in his introduction to *Foundations of the Metaphysics of Morals* (Beck 1959: xvi–xx). For none of those objections raises or even concerns the problem of purely rational beings who can never feel pain, pleasure, emotions, or feelings.

To be sure, I agree with Kant and Butchvarov that "ethics is not about the *human* good" (Butchvarov 2015: 2, my emphasis). For human beings are not the only logically possible experiencers of pleasure, pain, emotions, or feelings. Even my cat Milo feels all those things. Milo has no moral obligations. But he is still an end in himself whose well-being is a good because he feels pleasures, pains, emotions, and feelings, and because those factual things have intrinsically good or bad value. But Milo's in re value as an end in himself, just like our own, can only exist in the phenomenal world.

My objection to Kant is directly based on Kant himself. For Kant expressly contrasts rational beings with human beings, thus avoiding any possibility of either anthropomorphism or anthropocentrism, at least in those particular texts (Kant 1959 / 1785: 5). But Kant thereby more deeply also contrasts rational beings with phenomenal beings. And Kant expressly holds that it is rational beings *as such* that have obligations under the moral law, and that human beings have those duties *only* in virtue of, and *only* insofar as they are, a kind of rational beings (Kant 1959 / 1785: 5).

Kant says that a moral law:

> does not apply to men only, as if other rational beings had no need to observe it. [We] must concede that the ground of obligation here must not be sought in the nature of man or in the circumstances [in the phenomenal world] in which he is placed, but sought *a priori* solely in the concepts of pure reason. [A]ll moral philosophy rests on its pure part. Applied to man, it borrows nothing from knowledge of him (anthropology) but gives him, as a rational being, *a priori* laws. (Kant 1959 / 1785: 5)

Thus Kant is expressly anti-anthropocentric in his moral theory (Butchvarov 2015: 13 quotes some of the Kant text just above). This is so even though Kant's "Transcendental idealism.... has been understood by many as unqualifiedly anthropocentric" (Butchvarov 2015: 11). Butchvarov's own view is that "Transcendental idealism [is] anthropocentric insofar as humans are empirically real, but it [is] not anthropocentric insofar as humans are transcendentally ideal" (Butchvarov 2015: 11). This seems correct, even obvious. Our sex, our race, our even being human at all, all belong to the phenomenal world. In the noumenal world, we are *only* free moral agents as such. Again, my objection is that pleasures, pains, emotions, and feelings belong in the phenomenal world, while Kant places the whole of morality in the noumenal world. If I am right that all values and duties logically contain and depend on pleasures,

pains, emotions, and feelings, then Kant has placed morality in the wrong world!

I am not sure what our values and our obligations to each other could possibly be, if they logically cannot ever affect our happiness or unhappiness. Yes, we can be obliged to promote health and prevent accidental deaths; but if we are indifferent to all such things, if it makes no difference to us, then what do they matter? What value could they have?

Purely noumenal, purely rational beings are not in the phenomenal world of perceptible bodies. They are not just non-human. They cannot be seen or heard. They have no size or shape. They have no health or sickness. They cannot be wealthy or poor, well-fed or hungry, steal things, or start wars. They cannot feel pleasure or pain. They cannot have emotions or other feelings. They are not even in space or time! Thus they are not even subject to change. Thus they cannot make each other better or worse in any possible way. What obligations, then, could they possibly owe each other? How could they make each other better or worse? How could they have any in re value to make better in the first place?

For Kant, space and time belong to the phenomenal world, the world of appearance. Purely noumenal persons are not in the world of space and time. Thus they are not subject to change. And that is a deeper reason why they cannot make each other better or worse. For making each other better would *be* a change. In fact, they cannot even act, since an act, and even a choice to act, would *be* a change. Nor can they reason, insofar as reasoning is a process that takes time. They can only have timeless, purely *a priori* logical intuitions about timeless, purely *a priori* logical things. They would be moral agents who cannot act in time, and rational beings who cannot reason in time. They cannot cognize any changes in the phenomenal world, since their cognitions cannot change. At most, they could only perceive the phenomenal world (or some portion of it) timelessly, from (as the saying goes) outside space and time. But they cannot even do that, since they cannot see or hear anything. They cannot even choose to send each other good (or any other) purely mental telepathic communications, such as "be well," since any choices and telepathic sendings are changes that occur in time. Nor could such messages be received, since their reception would be a change too. Thus any such communications could be cognized neither by the sender not by the receiver, since any good words or good wishes would belong to the phenomenal world of time. How is timeless communication possible? What would it be like?

Arguably, the timeless Platonic forms, and the universals ante rem, which we distinguished as the fact of courage and the value of courage, and the more abstract fact of goodness and value of goodness, as well as the timeless formal distinctions between all

four forms, belong to the noumenal world. Plato would certainly think so. And certainly they are timeless and can be grasped by the intellect. But only in re *instances* of goodness in time can have any *actual* value, or place us under any *actual* obligation. And we would have to be presented with them and act on them in the phenomenal world—the world of space and time—as well.

All these problems with Kant's noumenal agents are problems with C. S. Lewis's timeless souls are well. And that should be no surprise, given Europe's religious history in general and Kant's Pietist upbringing in particular. Lewis does not even attempt to explain how our timeless souls can act in time. It is all a divine mystery to him. And it is certainly a philosophical mystery!

All these problems are genuine, but they are also far from other texts in Kant. All Kant's examples of obligation are very much in the ordinary phenomenal world. We can only tell the truth, pay our debts, and help others where we can in the ordinary phenomenal world of space and time.

Kant is offering a logical analysis of the ordinary, pre-philosophical world which divides it into two really and wholly distinct metaphysical worlds, the phenomenal and the noumenal. But he also tries to put the ordinary world back together as a functional complex whole. On the containment and dependence arguments for metaphysical ecumenicism, Kant's two metaphysical worlds exist as abstractions from, as logical parsings of, the ordinary world. They are modally distinct from the ordinary world in Descartes' second sense of modal distinction, insofar as both logically depend on it as parsings of it. They are formally distinct from the ordinary world with a foundation in reality in the ordinary world. And an ordinary rational person, human or not, can be fully understood only as belonging to both realms. This is how our being noumenal agents can explain how we can act morally in the phenomenal world. We are not two really distinct selves leading two really distinct lives in two really distinct worlds, one the world of space and time, and the other a transcendental world of free agents who must act beyond the veil of empirical appearances, and must also make an unconscious transcendental imposition of space, time, cause, and other categories onto empirical appearances so as to organize them into an orderly, coherent world. Thus *we* can make Kant's two worlds work together as logical parsings of, and abstractions from, the ordinary real world. But can Kant? Do his two worlds exist only as logical parsings or abstractions for him?

Surely *Kant* thinks he can make his two realms function together. Some may be reminded of the joke about the host who had a surgeon among his guests at Thanksgiving. The host kept saying "Wouldn't I have made a fine surgeon?" as he carved the turkey. When the host was done, the surgeon said, "Now let's see

you put the turkey back together again." For us, if Kant provides a logical analysis of the ordinary world that is intelligible, logically possible, and provides statements that are logically equivalent to all the ordinary statements about the ordinary world, then we can and must admit Kant's metaphysic into our metaphysical ecumenicism as distinct only in reason from all other metaphysics that meet the same three conditions. For Kant's divided metaphysics, we can only invoke a principle of charity in interpretation, and leave the matter to the Kant scholars, who have discussed it for centuries.

Kant may locate his *ground* of all morality in his noumenal agents. But no ethics can be understood apart from his phenomenal world. That is why Kant must join his phenomenal world and his noumenal world back together into one world—the ordinary world. For all our promises, debts and other obligations exist in the phenomenal world. At least all the promises, debts, and obligations I ever had existed in time! And our negative derivations of no in re value from no pleasures, pains, emotions, or feelings, and our positive derivations of value from pleasures, pains, emotions, and feelings in the present section, imply that Kant's phenomenal world *logically contains* his noumenal world. For his values are noumenal and his pleasures and so on are phenomenal.

Perhaps we could say that what Kant calls the ground is what Schopenhauer the "basis" of morality (Schopenhauer 1965 / 1840). Schopenhauer is not offering a logical analysis of morality in terms of the sentiment of compassion. He is offering a causal explanation of why we act as morally as we do. But if compassion is the only logically possible causal explanation, then it is a logical analysis in the wide sense. And if we use terms like "ground" or "basis" to mean 'logically necessary condition', there are several grounds or bases of morality that are different but distinct only in reason: the moral forms of Plato, the moral sentiments of Hume and Schopenhauer, the moral particular properties, in re and ante rem universals of metaphysical ecumenicism, and so on. There are actually quite a few! And once again, we have Kant's phenomenal world logically containing his noumenal world. For compassion is phenomenal. We feel it in different places at different times. And likewise for all of Hume's moral sentiments.

Kant's parsing of the ordinary world into a knowable world of appearances and an unknowable world that is transcendentally real behind appearances, belongs to the rise in early modern philosophy of via moderna cognition, and abandonment of via antiqua cognition. This makes Kant and the other post-Cartesian early moderns unable to perceive or think of noumenally real things through the intelligible *objective realities* of the old via antiqua ideas. Ethical perceptions and thoughts are only one instance of this. For the whole via antiqua theory of realist cognition is gone.

On the via antiqua theory of cognition, bodies and minds are not mysterious, unknowable substrata or Kantian noumena behind the veil of appearances. On my theory, they are objects in themselves that are indirectly perceived and thought of via directly presented via antiqua objects of perception or thought, which for us are qualified objects. In fact, veridical objects of perception or thought of bodies or minds, or more precisely their objective realities, "*are*" bodies and minds in themselves. I described this special sense of "are" in chapter 1. Likewise for values and duties in themselves, for example the value in itself of the fact in itself of the form in itself of courage. We grasp them indirectly via directly presented via antiqua value-objects of perception or thought, which for us are qualified value-objects. Again, my theory is in the broad realist tradition of Aristotle, Aquinas, and Descartes, admitting real bodies and minds as rationally presented via perception and introspection (Kenny 1980: 34–35; Wiggins 1980: 4–5; see my 2003 / 1996: 17–21, 234 theme 6, 301 n.1). And whether or not the realist tradition extends the via antiqua analysis of perception and thought to ethics, I do by parity of reason.

Even if the 'real world hiding behind the veil of empirical appearances' were as empirically unknowable as the early moderns from Locke to Kant say it is, true *a priori* inferences, by their very nature, are a valid bridge across the otherwise impassable chasm. The inferences only need to be true and *a priori*. Kant himself uses that very bridge to arrive at everything he says about the noumenal world. Whether he uses the analytic *a priori* approach of the *Prolegomenon* or the synthetic *a priori* approach of the *Critique*, both are *a priori*. And presumably he believes his claims in both works are true. And we may add another synthetic *a priori* principle to the list, the principle of seeming. The principle of seeming states that if anything objectively seems to be the case, then we have reason to believe that it is the case. The principle is deep and general enough to justify our belief in the external world and in other minds via our cognitive seemings. See chapter 4.

Russell's Robot World

A robot world is a world in which there are no persons, no minds, no consciousness, and no animate or living things, but only physical robots which mechanically imitate animate or living things. The world may or may not include other purely physical objects. What are all the ways in which a robot world would imply negative derivations of absence of value from absence of fact?

Russell says:

> That feelings are relevant to ethics is easily seen by considering the hypothesis of a purely material universe, consisting of matter without sentience. Such a universe would be neither good nor bad, and nothing in it would be right or wrong. (Russell 1962 / 1954: 19)

Thus Russell totally agrees with our negative *a priori* derivation, 'no feelings, no values'. Russell says 25 pages later:

> In an inanimate world there would be nothing good or bad. (Russell 1962 / 1954: 44)

This is 'no animation (no life), no value'. Russell says 56 pages later:

> I can make these robots do all the things that are usually praised. I can make them read the *Bible*. I can make them preach eloquent sermons.... But if A said to B, "You ought to substitute robots for human beings, because robots do not sin," almost everybody would reply that the robot world, since it would be destitute of sentience, would be neither good nor bad, and would be in no way better than a world of ordinary matter unable to perform the robots' imitative tricks. (Russell 1962 / 1954: 100)

This is 'no sentience, no value', or if you please, 'no sentiment, no value'. Thus Russell totally agrees with all our negative derivations of absence of value from absence of fact in the preceding section. If his derivations are a little different from ours, we can simply add them to the list.

The main objection is the Turing test (Turing 1950). More deeply and generally, it is the objection that consciousness, life, and being a mind or person can and must be defined, understood, or interpreted in terms of a body's public behavior. This is often called 'logical behaviorism'; and it is often based on Wittgenstein's private language argument, the verification principle, or both. It is also a main objection to having any reason to believe in the existence of embodied 'inner' minds, often derided as 'the ghost in the machine', to say nothing of disembodied minds. We found the private language argument to be distinct only in reason from the mental language argument, and found the verification principle to be self-defeating. But the Turing test remains to be discussed.

I shall present Alan Turing's test in my own way. If we are communicating by computer (typing messages) with what we take

to be a human in another room, and if it turns out that there is not a human being but only a computer there, but we were unable to tell the difference from its linguistic behavior, then for all intents and purposes, the computer may as well be called just as "conscious" as a human being. But then we too for all intents and purposes may just as well be called a machine, to be sure an animated or living one, but with no need to posit a metaphysical mind or soul. For if the computer lacks a mind or soul and still can be said to be conscious in virtue of its conscious-like behavior, then why should we have a mind or soul? At this point it is common to bring up Hume's point that we never observe our self; it is not an introspected impression; therefore we can have no idea of a self, since all ideas are copies of or derived from impressions. We found that Hume has no idea of a self (nor of a body) because he has a very limited via moderna phenomenology, but let us play along.

Turing's test is very limited because keyboard behavior is a very limited behavior. But it is easy to widen the test. As C. L. Hardin (1969) says, we can very easily imagine that our college roommate's skull is opened up, and instead of a brain we find a tiny computer. That would expand the Turing test to the full range of ordinary human behavior, at least if our roommate acts normally (I know, a dubious assumption in some cases).

My criticism of the Turing test, so widened, is that the objection it poses was already asked and answered in chapter 3 on a deeper level than the Turing crowd: metaphysical ecumenicism. For the containment and dependence arguments show that all metaphysical theories that are intelligible, logically possible, and can analyze ordinary statements about the worlds by providing logically equivalent theoretical statements, are logically equivalent to each other, and thus are not "rivals," but merely parse or slice ordinary things in different ways. All the theories are right in the entities they affirm, and wrong only in the entities they deny in the "rival" theories. This includes the 'Turing metaphysic' that affirms physical computers (and more widely bodies), but denies minds or selves. This is essentially just materialism or physicalism, which we already admitted into our metaphysical ecumenicism as having a limited validity (limited in that it rejects minds). We even admitted Hume's and Russell's neutral monism into metaphysical ecumenism, and that has an even more limited validity, since it rejects both bodies and minds! Thus my criticism is that Turing metaphysics is partisan / sectarian, since it regards any metaphysics that admit minds as rival views that are wrong. Metaphysical ecumenicism is on a higher level!

Since the private language argument and the verification principle cannot help, Turing's best rejoinder is that he bases his rejection of minds on Ockham's razor. That is, he finds no *need* to

postulate a mind in my body, if the computer in my roommate's head can perform the all same behaviors without a mind.

My reply is that this too was asked and answered in chapter 3. The containment and dependence arguments prove that minds exist, and we cannot shave entities that are proved to exist. If only one argument succeeds in proving a thesis, we accept the thesis as proved. And if only one containment or dependence argument, the one based on parsing ordinary people as having minds, succeeds in showing that minds exist, then minds have been shown to exist as valid parsings. That minds are not included in the Turing parsing of people does not matter in the least. In fact, the Turing parsing is less valid (less complete) precisely because it excludes minds.

Turing might rejoin that his view is an inference to the best explanation. For the behavior explanation covers both my and my roommate's behavior, while the mind explanation covers only mine. Thus the behavior explanation is deeper and more general.

My reply is that Turing does not have the best explanation. Far from it! This too comes from chapter 3. As Ockham himself is well aware, the razor cannot be used to shave either a necessary being or a being we know to exist. And I know I exist as a mind, based on my phenomenology. Even Descartes' phenomenology of mental ideas is good enough for that! For his ideas are via antiqua ideas. But to come to the point, denying that my mind exists when I know it exists, and denying that it is the cause of my behavior when I know it is the cause, is scarcely the best explanation. In fact, I know it to be the wrong explanation! And if my mind is analyzed in terms of my behavior, we might as well say that my behavior is the cause of my behavior. That is, my behavior is the cause of itself. But if my behavior is self-caused, then except for being logically contingent, it is just like a self-caused, self-creating God! —Would anyone analyze God's mind in terms of his behavior in, say, creating the world? I am agnostic, but even I would not go that far.

There is nothing very new in my discussion of Turing. We discussed all that more deeply and generally for all metaphysics in chapter 3. But the next point may be new, and it is relevant to Hume's fact-value problem.

Even if the Turing test is valid, and even if computer-brain roommates are correctly deemed to be persons, and humans are correctly deemed to have no minds, it would be a Pyrrhic victory for Hume's fact-value problem. For regardless of whether my robotic roommate is a person, and regardless of whether I have a mind, the universal hypothetical "If no minds or persons, then no values" remains true *a priori* just as much as before. We are merely increasing the *scope of application* of the term"person" to include my roommate, and decreasing the scope of application of the term "mind" to zero. Our negative derivation would lose its application,

but it would still be true *a priori*, and a counterexample to Hume.

As a last resort, Turing might appeal to the principle of the identity of indiscernibles. My behavior and my roommate's are indiscernible; my roommate has no mind; therefore I identically have no mind. My reply is that the principle applies only to the behavior. If I have a mind and a body, and my roommate only has a body, our metaphysics are different but distinct only in reason. They are modally distinct by the simple addition of a mind.

The derivations so far have been my own thinking, as far as I know, though directly based on Continental phenomenology and on traditional distinctions in reason. I shall now discuss derivations of value from fact that are based on, or due to, other philosophers.

The Positive Derivation of Values from Persons, Minds, and Consciousness

It is a simple and direct synthetic *a priori* truth that if it is a fact that something is a person or mind, then it has value as an end in itself. And that is a valid derivation of value from fact. Kantian metaphysics does not establish that. Instead, Kantian metaphysics is based on and articulates this ordinary, pre-philosophical insight.

Likewise for the two main factual features of minds. Minds are rational and sentient beings. Reason has its own value or, we may say, dignity. Would life really be worth living without reason? And surely sentience has intrinsic value too. What would life be like without sentience?

Even a mere sentient consciousness without reason has intrinsic value. For it logically can have well-being or ill-being. For it logically can feel pleasure or pain, and pleasure is intrinsically good and pain is intrinsically bad. It logically can feel emotions and feelings as well. Thus we would ethically wish it well. Of course, I already denied that minds with no sentience (no pleasures, pains, emotions, or feelings) have value.

There are degrees and even kinds of sentience and reason, at least in the sense that different species have different kinds of sense-perception. Some are color-blind, or see or hear only certain frequencies, and so on. Mosquitoes can see our body heat (infrared vision) from over 300 feet away! Different people have different capacities for reasoning. There are many differences among the many kinds of *a priori* reasoning and *a posteriori* reasoning. Just consider the differences among arithmetic, geometry, physics, chemistry, legal research, and race car driving. I.Q. (intelligence quotient) is a general measure based on reading and arithmetic. But some psychologists admit many more specific kinds of intelligence. I myself see little if any difference between kinds of intelligence

and kinds of talent or ability to do things. Insofar as they overlap and fall under general classifications, this too is ecumenical. It is also much like overlapping and general kinds of perception. We can see, touch, and at least roughly hear, smell, and taste shapes.

All these degrees and kinds of sentience and reason suggest a case for animal rights, and even for plant rights, with perhaps appropriately different degrees or kinds of rights. Those topics are beyond the scope of this book. But surely my cat Milo has the right not to be harmed without a defeasing reason, even if he has no moral responsibilities. Insofar as such rights overlap and fall under general classifications, this too belongs to ethical ecumenicism.

Charles Sanders Peirce and Frank Ramsey hold that logic is a normative science, i.e., that logic has norms. And it has even been held that *ethical* evaluation is essentially involved in logical reasoning. It has been argued that if an argument is valid, then we *ought* to draw its conclusion. If so, then logic is the art and science of how we *ought* to reason. Logic is the ethics of reason! And every judgment that a statement is true or false is literally an *evaluation* of its truth or falsehood. If these things are the case, then they are further *counterexamples to Hume*. That has not been noticed much (if at all) in the Hume literature, even though the view that logic is normative, and even the view that logic implies ethical obligations, are well known. Even the fact of ordinary reasoning implies values.

It is also widely held that sense-perception is not the mere sensing of sense-data, but has an intellectual component as well. For sense-perception requires some sort of judgment in which the sense-data function as our evidence for how things are in the world. This is so regardless of whether the judgment is carefully reasoned (say by a physicist) or is automatic and unthinking (instinctive or habitual). And on the face of it, we *ought* to judge that the ship on the water is an aircraft carrier and not an oil tanker, if that is what the perceptual evidence indicates. And we just found that judgment as such is evaluative. Thus even the fact of sense-perception is a counterexample to Hume, and on three levels. First, seeing an aircraft carrier implies an evaluative perceptual judgment. Second, the fact of perceptual knowledge has intrinsic value, since all knowledge has intrinsic value. Aristotle says, "All men by nature desire to know. [Even] our senses... are loved for themselves" *(Metaphysics* 980a). Third, the intellectual component of perception is a counterexample to Hume's via moderna theory of ideas. For it is precisely the objective reality of via antiqua objects.

Thus not only persons or minds, but even their two main faculties, reason and sense-perception, are all facts that logically imply values, or at least evaluations. Again, perceptual judgments imply evaluation. Thus a sailor who *correctly* judges ship types is a *good* judge of ship types, and is to that extent a good sailor.

These sorts of derivations of value from fact are not the sort that Hume's problem is normally taken to be about. They are not the sort that Hume seems concerned with. But they are fair game that Hume overlooks, and that the Hume literature largely (if not wholly) overlooks. For they *underlie* the sort of derivation that everyone is concerned with, they are presupposed by it, they are logically prior to it. For they concern *arriving at* the facts which everyone tries to derive values from. For example, first we have to judge whether a certain act *is* in fact a murder. And then we can ask whether, given that it *is* a murder, we can derive that it is *evil*. And it is only this *second* derivation of value from fact that Hume and everyone has been concerned with. But the prior factual judgment *already* implies a value-judgment. And any sense-perception or reasoning that the factual judgment is based on are facts that imply value-judgments as well. And value-judgments are value-objects!

The fact that a person, mind, or consciousness exists is distinct only in reason from its intrinsic value as an end in itself. Neither can be what it is unless the other is what it is. Likewise, the fact of a judgment, reasoning, or cognition is distinct only in reason from its intrinsic value. This gives us a syllogism concluding that fact that a person, mind, or consciousness exists is distinct only in reason from the intrinsic values of their judgments, reasonings, and sense-perceptions. But these last distinctions are modal (one-sided) in that, say, no person logically need judge that some apple is red.

Again, judgment requires both an act of cognition and an act of will, since to affirm is precisely to "[give] our assent to what we have in some manner perceived" (Descartes: 1969 / 1642: 232, principle 34). And both sorts of acts are facts that logically can have intrinsic value. A moral or immoral act of will implies its own morality or immorality. This underwrites and logically articulates the Stoic view that virtue is its own reward (and that vice is its own punishment). For the fact of a moral act is formally distinct from its value with a foundation in reality in the fact of the act. Even judgment, reasoning, and cognition, as such, are intrinsically good, and not merely possibly good. For Aristotle says more fully:

> All men by nature desire to know. An indication of this is the delight we take in our senses; for even apart from their usefulness *they are loved for themselves*; and above all others the sense of sight. For not only with a view to action, but *even when we are not going to do anything*, we prefer seeing (one might say) to everything else. The reason is that this, most of all the senses, *makes us know and brings to light* many differences between things. (Aristotle 1968a: 980a–980b, my emphasis)

Yes, there are plenty of bad judgments, ill reasonings, and delusory cognitions. Perhaps most of them are! But if even a mere cognition as such has a value that the fact of its existence implies, then this would appear to settle that even a mere sentient consciousness as such has a value that the fact of its existence implies. This includes any awareness of pebbles, but not the pebbles themselves. Here Hume is doing very badly indeed. For in his metaphysics, all he has are impressions, including sentiments, and ideas that are derived from them. And at least according to Aristotle, all cognitions of them have intrinsic value. Talk of bearding the lion in its own den!

If all sentient consciousness has intrinsic value, then so does an amoeba. "Look at the birds of the air; they neither sow nor reap nor gather into barns, and yet your heavenly Father feeds them. Are you not of more value than they?" (*Matthew* 6: 26).

Searle's Derivation of Ought from Is

John R. Searle gives the most famous counterexample to Hume. In simplest terms, Searle argues that in ordinary social circumstances, the fact that I make a promise logically implies, in the wide *a priori* sense of logic, that I have a moral obligation to keep it. Searle says it "is... not just a contingent relation" (Searle 1964: 44). This can be generalized to all proper undertakings of obligation in all social institutions, including contract law and even the whole of the political state, on the social contract theory of the state. An ordinary promise is not a contract of mutual consent, but a unilateral contract. It need not be a legal contract, but is a social contract. The term "unilateral contract" is a legal term of contract law, but here I am extending its use to ordinary social promises which need not be legal contracts. Also, we are discussing moral obligation, not legal obligation. And we need not worry about whether I am obliged to keep any promises I make to myself. We will have plenty of counterexamples to Hume without them.

Searle argues that at least one fact entails an obligation. His argument consists of a sequence or sorites (argument chain) of five statements (Searle 1964: 44), but we need not be detained by the full detail here. The gist of the argument is: (1) fact: Smith says, in an ordinary social situation, "I hereby promise to pay you, Jones, five dollars." Therefore (2) obligation: Therefore, Smith ought to pay Jones five dollars. See Searle (1964: 43–44).

Searle expressly gives his argument as a counterexample to Hume. Nor is it just a minor counterexample about promising, if it is generalized to all proper assertions or indications of obligation in all social institutions, as I indicated. Indeed, it seems to be part of

the very function of social institutions to identify moral obligations by using certain standardly recognizable facts or acts, such as making promises, as standard public indicators.

If Searle is right, then our containment and dependence arguments imply that the moral obligation is logically contained in the promise, and that the promise's existence as a promise logically depends on the obligation. The fact of promise and the obligation would be formally distinct with a foundation in reality in the fact of promise. But so to speak, the distinction in reason is a very slight one. For it is only the difference between undertaking an obligation (by making a promise), and having that obligation. It is also a modal (one-sided) distinction. For making a promise logically need not be the only way for Smith to incur the same obligation to pay Jones five dollars.

I have several comments.

First, the statement, "I promise to pay you five dollars," is a performative utterance, not an assertion of fact. It is neither true not false. But the premiss in my simplified version of the argument above does state a fact, and is true or false. Every performative utterance can be factually described as a performative utterance. Indeed, every performative utterance *is* a fact in our wide sense. I defined "fact in the wide sense" as simply meaning 'object in the wide sense'. And I defined "object in the wide sense" as anything and everything, i.e., as not being nothing. More specifically, a performative utterance is a factual fact. I defined a factual fact as a fact that has no value as an ontological constituent.

Second, one might object that if Searle's argument is sound, then on the relevant containment theory of logical validity, Smith's obligation is logically contained in the fact described in premiss (1), just as I said. But then Searle's argument is circular and begs the question. It takes a value-fact and infers its value.

My reply is that just like the fact of Achilles' courage and its value, the fact of promising and the obligation to keep the promise are different but distinct only in reason. They are formally distinct with a foundation in reality in the fact. The question is no more circular or question-begging than "This apple is green, therefore it has a color," which is to say not at all. Searle's example is just another case of determinable-determinate, and such cases are never circular or beg the question. Here the determinable is having a moral obligation and the determinate is having a promise to keep. And not all logical containments are ontological containments. I shall return to that modal distinction later in the chapter.

Third, one might object that even if Searle's argument is not circular or question-begging on the specific level of promises, it is circular and begs the question on the deeper and more general level of all social institutions. For all social institutions *are* moral

institutions, at least in part. That is, they are moral entities in logical part. For social institutions logically contain and depend on persons, and persons are moral agents. And the social institution of promising is an instance of this universal fact. This is more basic than Searle by two levels. Moral obligations are primarily logically contained in persons, secondarily in social institutions in virtue of their logically containing persons, and tertiarily in promises in virtue of promising's being an instance of a social institution. No persons, no social institutions. No social institutions, no social institution of promising. And we saw that persons have intrinsic value as ends in themselves. More importantly here, we saw that the fact that persons act in the ways they do implies the value of their acts, such as acting courageously or making a promise.

My reply is the same as to the previous objection. On all of these levels—from logically deepest to shallowest: persons, their social institutions, and their promises or other acts within those institutions—there can and must be a formal distinction between the fact these objects exist and the value (if any) they have, with a foundation in reality in the fact of their existing. No factual objects, no value-objects. In a per impossibile world with no factual facts, there can be no values either. I say per impossibile because it would be a fact that such a world contains no facts, which makes the description of such a world inconsistent and therefore self-defeating. As we have seen throughout this book, such purely hypothetical inferences are an essential part of the business of describing philosophical insights, especially distinctions; and this is deeper than using possible worlds talk for that purpose. For in drawing inferences from per impossibile worlds, we go beyond possible worlds talk to use impossible worlds talk. To be sure, there is no such thing as an impossible world, any more than there is any such thing as a merely possible world, and so to speak, they are even more impossible than possible worlds are. But all this is far more than merely nominal or linguistic talk. For the talk is not about nothing. It is about *qualified* possible worlds and *qualified* impossible worlds, which are perfectly legitimate qualified objects, and which are the directly grasped intensional meanings and the direct referents of the talk. See chapter 1 on qualified objects.

And here we can see the universal conversion of negative derivations of absence of value from absence of fact into positive derivations of presence of value from presence of fact. If there is no fact of courage in the world, then there is no value of courage in the world either. But if courage in fact does exist in the world, then the value of courage must be there in the world too. And likewise, if there is no act of promising, then there is no act there to have value. But if there is a promise in fact, then it has value too. Note that this concerns in re value. Again, ante rem values derive from ante rem

facts such as the Platonic forms of courage and of promising. And the connection is hypothetical (subjunctive conditional): Factual Platonic forms and ante rem universals *must* have ante rem value if and only if their in re instances (if any) *must* have in re value.

If, per impossibile, we could not tell the difference between fact and value because there *were* no difference, that is, if the fact and the value of courage were *identical*, that is, were literally and numerically one object, an A = A in *both* sense and reference, then Hume's problem could not even be understood as a problem. The problem could not have been seen because it could not have been understood, and it could not have been understood because it could not have arisen. We could not even describe a *per impossibile* world in which fact and value were different, except as a world in which ¬(A = A); and what would be the direct sense and referent of A? There would be no difference between its being qualified fact or qualified value! Thus by reductio ad absurdum, facts and their values are different objects, indeed deeply, categorially different objects But they are distinct only in reason. For in re values logically cannot exist apart from facts, and a fact of courage cannot exist apart from its (in re) value. For if courage had no value, it would not be courage. It could not be what it is. Likewise, if a promise had no obligation, it would not be a promise. It could not be what it is. No promise, no obligation to keep a promise. And no obligation to keep a promise, no promise.

Facts and values are different objects even among timeless Platonic forms and ante rem universals. They are different objects of intelligible thought that "are" different objects in themselves, different logical constituents in themselves, of Platonic forms in themselves. The question whether Achilles has courage is very different in sense and even in reference from the question whether courage has value. This is my improvement, clarification, and logical analysis of Platonic forms, or at any of rate of the forms of the virtues and the evils, and of any other forms that have intrinsic value. For the forms of health and happiness have intrinsic value in this sense, even though they are not virtues like courage or wisdom, while the forms of circle and pebble do not. To be sure, all Platonic forms are perfect ideals, including *circle* and even *pebble*; but that is in a different sense. There certainly is an ideal, perfect Euclidean circle as an *object of thought*; and I hold that it "is" an ideal circle in itself in the real order of geometrical shapes; but there is no ethical value in it. But the qualified pebble cannot even "be" an ideal, perfect pebble in itself, much less of ethical value. Recall that for us objects of thought are qualified objects; and there is certainly a *qualified* perfect circle. I am not sure what an ideal pebble might be; and that is a criticism of Plato. Of course, the *qualified* ideal pebble exists. But then so does the qualified round square.

To review: (1) a promissory obligation logically depends on and is logically contained in the speech act of promising; (2) the act logically depends on and is logically contained in the social institution of promising; (3) the social institution logically depends on and is logically contained in a society of persons; and (4) the society logically depends on and is logically contained by persons with a foundation in reality in persons. For there can be persons without societies, but no societies without persons. It might sound strange to talk of persons as containing societies, but this is logical containment, not ontological containment. And talk of societies as both logically and ontologically depending on the existence of persons does not sound strange at all, but trivial and obvious.

Thus Searle's argument is sound, but is only a small part of the big, universal fact-value picture. But he deserves credit for bringing the logical role of social institutions to light. And it is a measure of the difficulty of Hume's problem that Searle's counterexample to Hume is all anyone could come up with for centuries. I think that is because people were bewitched by Hume's British empiricist phenomenology. But Searle looks at societies, social institutions, speech acts of promising, and people as real in the ordinary, pre-philosophical sense. Hume cannot have a sense-impression of any of these things, any more than he can have a sense-impression of his self, a body, a relation, or even an abstract property. Societies, social institutions, promises, selves, bodies, relations, and abstract properties are not the kinds of things we can have via moderna sense-impressions of. But they are all the kinds of things we can have via antiqua ideas of. For via antiqua ideas have objective realities. Implicitly, Searle is phenomenologically correct! And this despite (or really because of) his being an ordinary language philosopher and major disciple of J. L. Austin. For ordinary language talk is about ordinary objects of perception or thought: here, facts and values. It is a way to describe subtle nuances among precisely those qualified objects, and thus among the subtly different objects in themselves which they truly "are."

One might object that there is a major difference between Searle's example of Smith's making a promise and my example of Achilles' having courage. In Searle's case, so the objection goes, there is no backward road from the "ought" to the "is." If I promise to pay Jones five dollars, my obligation to pay Jones five dollars is logically implied, but there are indefinitely many other factual situations in which I would have the same obligation to pay Jones five dollars; and there is no way to tell which factual situation is the one I am in. I might have promised to pay Smith *whatever* amount I lost in a game. Or a court of law might have ordered me to pay Jones five dollars. But in the case of Achilles, the value of his courage can only come from the fact of his courage. They are

discernibly different objects of thought, but they are so intimately related that they are not even *logically identifiable* apart from each other. But we can *think of* either without thinking of the other, and that is exactly why they are different objects of thought. Yet neither can be what it is apart from the other's being what it is. This is just like a triangle's having three sides and three angles. It cannot have three sides without having three angles, and vice versa. The sides it are not identifiable unless the angles it has are, and vice versa. Yet I can very easily think and reason about the sides without thinking or reasoning about the angles, and vice versa.

My reply is that it makes no difference whether the logical implication of an obligation or a value from a fact is mutual or only modal (one-way). That is not even relevant. But in point of fact, the objection is wrong even about that. No promise, no obligation; and no obligation to keep a promise, no promise. That is the parallel.

Searle remarkably shot a hole in one on Hume's seemingly impossible golf course of deriving value from fact. But a lucky shot is not how to do philosophy. In contrast, we are bulldozing Hume's entire golf course. For *every* in re value must be grounded in an in re fact. In re values cannot exist on their own. There are no homeless values that exist outside facts, just as there are no homeless ideas that exist outside minds. And the facts would not be the facts they are unless they have the values they do. This goes for in re and ante rem facts and values alike. And even a Searlean scope of 'all social institutions' is very limited here. For courage is a value, not a social institution. Alas, if it only were!

Logical Analysis and Supervenience Derivations of Value

This section is my promised return to the topic of logical containment of values in facts. Logical containment is of truth-grounds; ontological containment is also of objects. See chapter 3.

The logical analysis argument for the derivation of values from facts is that if statements of value are intelligible, logically possible, and can be logically analyzed as statements of ordinary fact, then on our positive construction ontological interpretation of logical analysis, values exist as logical parsings of ordinary facts. And as we have seen, the fact of courage and the value of courage, as well as the fact of promising and the value of promising, are intersubstitutable salva analycitate. Thus statements about either are logically equivalent to the corresponding statements about the other. And factual objects and value-objects that correspond salva analycitate logically contain each other. Their logical containment can and must be mutual. For the containment is of the truth-values; and since the corresponding statements are logically equivalent,

they always have the same truth-value. Factual objects and value-objects are ontologically different, but distinct only in reason.

A Supervenience Argument for Value Derivations

The supervenience argument for the derivation of values from facts is merely Hare's physically identical paintings argument writ large. If two physically identical paintings are *a priori* equally intrinsically beautiful, then placing them in physically identical twin worlds will not change that. In fact, that will make even their *consequential* values the same. Thus I accept the supervenience argument for deriving values from facts without further ado. Again, Kim was right about the general form of his supervenience argument, which applies both to minds supervening on bodies and to beauty supervening on physically identical paintings. In fact, these two applications are distinct only in reason. For no minds, no beauty. Indeed, no minds, no values at all! And paintings *are* bodies. Again, Kim was wrong only in his eliminativist ontological "rival" interpretation of logical supervenience. See chapter 3.

While the supervenience argument works for twin worlds, it does not work for mirror worlds. And it is easy to see why. Mirror worlds are *not* physically identical twin worlds, precisely because they invert everything. And I can personally attest that the mirror inversion of my face does *not* look as beautiful as the original! For faces are not perfectly symmetrical. Granted, I am not *as used to* seeing my inverted face. And my mirror twin *logically could* feel the same way about *his* (relative to him) inverted face. But at least in my case, my direct presentation of myself to myself is that I look worse inverted! And of course this can even be seen in a normal and an inverted photograph.

The causal factors (e.g. social, cultural, psychological) do not matter for these points. If they do not matter for physically identical twin paintings, how could they matter for mirror inverted paintings? Of course there are all sorts of causal factors in perception. But they matter not at all for phenomenology as such, that is, for directly presented objects of perception or thought. Our list of their 21 essential features in chapter 1 was a logical analysis, not a causal analysis. The two enterprises are very different. And in phenomenology, it is just a matter of look and see.

Jaegwon Kim (1993)'s supervenience theory seems to permit derivations of all values in the physical world from purely physical facts as follows. The core intuition is that in physically identical situations, any intrinsic values must be the same too. To repeat R. M. Hare (2001 / 1952: 81)'s example, physically identical paintings must be equally intrinsically beautiful. And surely twin

(if not also mirror) physically identical worlds must have the same intrinsic values. There are no fallacies of composition or division here. Indeed, the whole of the logically contingent world logically might *be* a single painting! Compare Russell (1971e / 1918: 202): "Each [logically contingent particular logically] might happen to be the whole [of the logically contingent] universe." I shall call this Kim's *first* core intuition, since he also has a second one.

This is a very persuasive argument. It is simple and elegant in that the implication need only be one-way. There is no need to show a mutual implication, that is, show the logical equivalence of corresponding statements by giving a logical analysis of ordinary value statements in terms of factual statements. We even admit Kim's eliminative ontological interpretation of supervenience as having a limited validity. For on the containment and dependence arguments discussed in chapter 3, all logically equivalent parsings of the same ordinary statements are to be admitted. The realist, i.e., the positive construction ontological interpretation wins only in the sense that all its parsings are to be admitted *too*.

If there is no mutual implication of facts and values, then the distinction in reason between facts and values is modal (one-sided). And that will not prevent the distinction from being a formal distinction. In fact, the foundation in reality will be in facts precisely because the implication is one-way, with facts implying values, but values not implying facts (on our Kimian supervenience account). I provided an example of one-way implication of values by facts in the previous section on Searle as well. The fact that Smith promised implies Smith's obligation to pay five dollars. But Smith's obligation to pay five dollars logically can arise from any number of other facts. Of course, this particular obligation can arise only from this particular promise. For all this is in re.

Kim's theory of supervenience, or supervenience analysis, is just another kind of logical analysis that is distinct only in reason from mutual logical equivalence logical analysis. For so to speak, a mutual logical analysis consists of two Kimian superveniences, one going in each direction. One implication goes from the analysans (analyzing statement) to the analysandum (analyzed statement), and the other goes in the other direction.

The problem with Kim is not that supervenience is only one-way, but that Kim's eliminative *ontological interpretation* of supervenience is of very limited validity. Kim is an eliminativist because his *second* core intuition is that if entities of kind X supervene on entities of kind Y, then there is *nothing more to* X's than Y's. But Kim's second core intuition does not follow in the least from his first core intuition, which was that if entities of kind X supervene on entities of kind Y, then the X-entities are *identical* if the Y-entities that they supervene on are identical. For the fact

that things are identical does not entail that they do not exist, *whether they supervene on anything or not*. If it did entail that, then *nothing* would exist. Kim could hardly be more wrong. Quite the opposite: that things are identical entails that they *do* exist. For *existence if and only if identity*. Every object exists if and only if it is identifiable indefinitely many times. *Ens et unum convertuntur*. And all objects are *self*-identical. Even the qualified object that is not self-identical is self-identical. This is Butlerian existence, and even qualified objects defined as not having it do have it.

More precisely, Kim's second core intuition follows from his first core interpretation only on the eliminative ontological interpretation of supervenience analysis, which is the interpretation of least validity. For the realist or positive construction wins in that all its entities must be admitted. And the reductive interpretation comes in second place, since it only reduces the *kind* of entities.

Kim might as well argue "A = A, therefore A does not exist." Even "A1 = A2 *because* A1 supervenes on B1, and A2 supervenes on B2, and B1 = B2, therefore A1 and A2 do not exist" is a non sequitur. Thus Kim's second core intuition does not follow from his first. But things are even worse for him than that. For his second core intuition not only does not follow from his first, but unlike his first, is provably. For Kim overlooks the containment and dependence arguments. And realism always wins.

Kim has chosen the most limited and empty abstraction of logical analysis of all: the eliminative ontological interpretation. The reductive interpretation is richer, and the positive construction interpretation is full and complete. Again, per the containment and dependence arguments, all three ontological interpretations are equally valid ontological parsings. None of the parsings can be nothing. Thus all of the realist parsings exist, and the "rival" reductive and eliminative interpretations are wrong to deny them.

If ethics supervenes on physical objects, then on Kim's second core intuition, that is, on his eliminative interpretation, ethics vanishes. For there would be nothing more to ethics than physics, exactly as for Kim there is nothing more to mind than physics, if minds supervene on physical objects. Ethics vanishes. Minds vanish. What an empty world that would be! At least the two eliminations would go hand in hand. For no minds, no ethics. We might as well be in the pebble world, or in Russell's robot world as far as ethics and values go. And no matter how Kim may try to explain away the appearances, the appearance of minds and values can only be delusion on the eliminative interpretation. They are eliminated! Even on the reductive interpretation, minds and values are only physical objects in masquerade. They are illusion! This is what being an ontological interpretation of limited validity really amounts to. And it applies just as much to the eliminative

logical analysis of numbers as logical fictions (Russell) and to their reductive analysis as classes of classes (Frege). They are delusion and illusion respectively. Metaphysical ecumenicism is so greatly ecumenical, it admits even metaphysical illusions and delusions as ontological interpretations of limited validity.

Ockham's razor will not help Kim. For as we saw before, the razor cannot eliminate either necessary beings or beings we already know to exist. And the containment and dependence arguments show that minds and values exist as realist parsings of ordinary talk of minds and values. Thus on those two arguments, the realist parsings are either necessary beings or beings we already know to exist, or both. See the section in chapter 3, "The Multiply Limited Validity of Ockham's Razor," for more on the razor.

I discussed whether minds supervene on bodies in chapter 3. Here the question is whether values supervene on facts. In simplest terms, the thesis is that if two facts are factually identical, then their intrinsic value, if any, would be identical too. Again, Hare notes that two physically identical paintings can only be equally (intrinsically) beautiful (Hare 2001 / 1952: 81). I do not see how anyone could disagree with that. Likewise, if there were two factually identical Achilles twins, they could only have the same intrinsic courage, or innate disposition to act courageously. And in factually identical situations, they would doubtless act in the same courageous ways. Here we take factual identity more widely than just physical identity, and include factual identities of all kinds: of mental objects, of particular properties and relations, of abstract objects, of Platonic forms, and so on. I explained in chapter 3 why absolute determinism does not follow from mentally identical embodied acts and agents in physically identical worlds.

We may say more precisely that value supervenience is based on the ordinary intuition that if two things are factually physically *and* mentally identical, that is, are factually composed of physically and/or mentally identical constituents down to the last physical event and the last faint sensation, where the constituents stand in exactly the same relations to each other, then if the two things have intrinsic value, then they must have equal intrinsic value. If this is correct, then by definition of supervenience, values supervene on mind-body facts, regardless of whether any principles of ethics can be "reduced" to any psycho-physical principles or laws by a logical analysis, much less logically "eliminated."

On a larger scale, this applies to factually identical whole "twin" worlds as well. For worlds are just larger objects. Or they can be simple worlds, such as Max Black's famous two physically identical iron spheres in different locations in otherwise empty space (Black 1970a / 1952: 207ff.). Of course, the principle of the identity of indiscernibles rules out indiscernible logically possible

worlds. But Black's spheres have different locations.

Black's possible world consisting of only two 'twin world' iron spheres is logically possible, and he discusses it very well. But since it has no minds, it can have no values. (His "traveller" who investigates the spheres is merely hypothetical.) But we can accept that *physically-and-mentally* identical worlds have identical values. And that implies the logical supervenience of all values on facts in physical-and-mental worlds as correct, in the wide *a priori* sense of logic. Indeed, all we need are two *mentally* identical twin worlds, whether they contain physical objects or not. (Since all cognitive acts and their qualified objects will be indiscernible in twin mental worlds, the physical status of those worlds, whatever it may be, will be perceptually and evidentially identical.) Thus we have yet another counterexample to Hume, and one that covers every value in our mental-and-physical world across the board. And I admire its simplicity and elegance. But just as I did in the case of the supervenience of mind on body, I reject inferring from this any *ontological reduction* of values to facts, much less any *ontological elimination* of values as *consisting of* nothing more than facts. For on the containment and dependence arguments, real values win.

By parity of reason with the supervenience of mind on body, Kim's conclusion here would be that values are dependent on determined by, and nothing more than, physical nature, regardless of whether there are any lawlike reductions. That is, no one-one correspondence of statements about minds to statements about bodies was required for the supervenience of mind on body, and here no one-one correspondence of statements about values to statements about facts is required for the supervenience of value on fact. Per Kim, this implies that there is nothing "*more to*" values than facts, even if a *logical analysis* of values as facts is impossible, that is, even if there is no logical equivalence of any one-one corresponding value-statements with fact-statements. But again, Kim second core intuition, is simply wrong. I shall now spell that out more fully; see chapter 3 for more.

There are three main ontological interpretations of logical analysis, which is based on (mutual) logical equivalence, and there are the same three main ontological interpretations of (one-way) logical supervenience: realism (positive construction), reduction, and elimination. For a logical analysis is just the conjunction of two superveniences, one in each direction. And both in logical analysis and supervenience, there is always a positively constructed emergent entity or property. For the containment and dependence arguments show that realism (positive construction) always wins. For all the existents that all the ontological interpretations admit are valid parsings of the ordinary facts. Thus these two arguments show that the parsings admitted in positive constructions exist *as*

they are, and are not reduced to a different kind of thing or eliminated as logical fictions. For reduction and elimination merely *leave out, i.e. disregard* the real things. And that is why all three ontological interpretations of logical analysis are distinct only in reason from each other. Positive construction admits the realist parsings as existing. Reduction brackets out or disregards the *metaphysical kind* of the analyzed existents. Elimination brackets out or disregards the very *being* of the analyzed existents. Thus the three ontological interpretations are not rivals, but are instead a series of progressive abstractions. And the fact that realism wins applies to values that supervene on facts as well as to anything else. For a logical analysis is essentially just two mutual superveniences.

Thus I can admit reduction and elimination as valid logical parsings, but Kim cannot admit positive construction because he sees it as a rival whose entities are just what his supervenience reduction is reducing, or more precisely what his supervenience elimination is eliminating. Again, the whole problem with partisans or sectarians like Kim is that they think the other views are rivals when all the metaphysical views, and even all the views of logical analysis itself, are distinct only in reason. That is the basic message of metaphysical ecumenicism. And he adopts the worst "rival" of all, meaning the rival that admits the fewest of the entities that the containment and dependence arguments show are there.

There may seem to be no converse ordinary intuition that if two worlds are *ethically* identical, then they must be *mentally and physically* identical. That is, there may seem to be no backward road from ethics to minds and bodies. But how could two paintings be identical in beauty unless they were physically identical? And by parity of reason, how could two worlds be ethically identical unless they were mentally and physically identical? Thus Kim's first core insight for supervenience leads to mutual supervenience here after all. To be sure, even mutual supervenience is not mutual logical analysis insofar as the logical equivalence of the one-one corresponding statements is not only not part of Kim's definition of supervenience (it is not), nor is therefore *formally* implied. But synthetic *a priori* mutual supervenience *intuitively* implies logical equivalence. And there *must* be a backward road if all the mutually implying ethical and mental-physical identities are extensional.

One might object that not physical identity, but only physical *indiscernibility* is needed for paintings to be identically beautiful. For beauty is something that appears to us. In fact, the paintings need only *appear* to be physically identical to us, in order to *be* identical in beauty to us. This gives a new, deep, and precise meaning to the thesis that beauty is only in the eye of the beholder: beauty is on the level of directly presented qualified objects. In this beauty is just like seemings, and may even be a kind of seeming.

My reply is that I accept both the principle of the identity of indiscernibles and the principle of the indiscernibility of identicals. Thus if two paintings or two worlds are indiscernible, then they are identical after all. And the two principles apply to all objects. Thus they apply to qualified objects and to objects in themselves alike. Directly presented qualified objects are indeed our direct appearances. They can be veridical, illusory, or delusory. But the world of objects in themselves supervenes on the qualified world. For indiscernible qualified worlds are identical, and can have no reason not to "be" identical worlds in themselves. Kim would say that if so, then the world in itself is not needed. But the containment and dependence arguments make realism win. And the world in itself is prior to the qualified world in the ontological order. The qualified world is prior to the world in itself only in the cognitive and thereby also the epistemic order. See chapter 1.

One might object that objects in themselves can be logically analyzed as classes of the veridical and illusory qualified objects that "are" them (delusory qualified objects will not "be" them), or if either set of objects at least supervenes on the other. One can then give a Kim-style supervenience argument of the sort we accepted for minds and for beauty. Namely, if all the qualified objects that twin minds directly cognize in twin mental worlds are identical, how could any objects in themselves that they indirectly cognize via them fail to "be" the same objects in themselves? Here qualified objects would stand in the logical place of physically identical paintings and physically identical worlds, and objects in themselves would stand in the logical place of beauty and of minds. If objects in themselves *supervene* on qualified objects, then for Kim there is *nothing more to* objects in themselves than qualified objects. For Kim, we have either eliminated objects in themselves or reduced them to qualified objects.

Even if a specific logical analysis can never be completed, since infinitely many qualified objects "are" any given object in itself, the general analysis can be completely stated very briefly: "Any statement about an object in itself is logically equivalent to a statement about the class of qualified objects that 'are' it."

My reply is that neither qualified objects nor objects in themselves can be logically analyzed as, supervene on, emerge from, be reduced to, or be eliminated in favor of, the other. For the ontological difference is too deep for at least six reasons.

First, both sorts of objects are real in the sense of not being nothing, and also in the sense of being logically mind-independent in the usual sense. But only objects in themselves logically can exist even if, per impossibile, it were logically impossible for minds to exist. That is their kind of being that distinguishes them from qualified objects. And it is tautological that qualified objects,

i.e., objects of perception or thought, logically cannot exist if perception and thought logically cannot exist. For if minds logically cannot exist, then perception and thought logically cannot exist either. For there can be no such thing as a "homeless" perception or thought, that is, a perception or thought that exists outside a mind. This goes against only Kim's second core intuition, and not against his first. For it falsifies only the ontological eliminative *interpretation* of any supervenience of objects in themselves on qualified objects, and by parity of reason to the containment and dependence arguments based on logical analysis, the reductive interpretation. It does not falsify the supervenience itself, i.e., Kim's first core intuition. The positive construction ontological interpretation wins by parity of reason to logical analysis. Again, on metaphysical ecumenicism, elimination and reduction remain valid but limited interpretations as *abstractions* from, or *bracketings* or *disregardings* of, the existence of objects in themselves. Their parsings are valid, and they are wrong only in rejecting the equally valid positive construction parsing.

Second, qualified objects are defined as objectual ways that things logically can be presented. Therefore qualified objects, as opposed to presentations of them, exist in all logically possible worlds. Thus they are logically necessary. But not all objects in themselves exist in all possible worlds. With the possible exception of God, all minds in themselves and bodies in themselves are logically contingent. Thus analyzing an object in itself as a class of qualified objects would not even be salva veritate, much less salva analycitate. For the class would exist in all possible worlds, but the object in itself, say a stone in itself, would not. Russell's logical analysis of the stone does not face this problem, if his sensed and unsensed sensibilia are as logically contingent as the stone.

Third, we might try to rescue the objection by analyzing objects in themselves as *classes* of qualified objects at least some of which have members that are *presented*. For while all qualified objects are logically necessary, their presentations are logically contingent, except possibly for God's necessary presentation of himself to himself, and necessary presentations of other necessary objects to him, such as the numbers, in virtue of his necessary omniscience. (I speak hypothetically, since I am an agnostic.) But there may never be a presentation of, say, a stone on the far side of the moon. Thus the rescue is too narrow. It omits all objects in themselves which are never presented. (For us, presentations of objects in themselves are always indirect via qualified objects.)

Fourth, the relation of a qualified object's "being" an object in itself, as such, does not and cannot have the feature of being logically necessary. For then *all* cases of a qualified object's "being" an object in itself would be logically necessary. If I thought

of Venus last night, it would be logically necessary that the planet I thought of last night "is" Venus!

While it is logically necessary that some qualified objects "are" the objects in themselves they "are," it is logically contingent in the case of others. It is logically necessary that qualified two plus two "is" the number four in itself. But it is logically contingent that the qualified number of planets "is" the number nine in itself. (It is also logically necessary that two plus two in itself is the number four in itself, and it is logically contingent that the number of planets in itself is the number nine in itself. But that is the "is" of identity, and not the "is" of the being relation. Therefore we do not surround its occurrences with quotation marks, since we only do that to indicate the being relation; and this is the identity relation. See chapter 1.)

Fifth, objects in themselves cannot be logically reduced to the qualified objects that "are" them. That is, the total reality of an object in itself cannot ontologically emerge from the qualified objects that "are" it, For all the objects that ontologically compose a given object must have at least as much reality as it has. For otherwise the given object could not have as much reality as it has. Again, we cannot squeeze the blood of total reality out of the turnip of qualified objects. See reason (1) on the preceding two pages. Thus the being relation is not the ontological composition relation. In fact the relations are mutually exclusive. We found only three exceptions to this, and they are exceptions for obvious reasons. First, the direct object of an act in itself is always a qualified object (and the indirect object can be too). Second, at least some classes and sets must have qualified objects as members, if class and set theory are to be universally true. Third, facts that qualified objects exist must be facts in themselves. See pages 224 and 260.

Nor can *any* object logically emerge from, i.e., be logically composed of, its *presentations*. For actual and even logically possible presentations of an object cannot exist unless the object is already there to be presented. And a presentation of an object cannot be identified independently of identifying the object it is a presentation of. This applies both to direct presentations of qualified objects and indirect presentations of lower-level objects via higher-level objects. I can think of only two exceptions to this. First, logical compositions *of presentations* are objects. They are different from each other, thus they cannot be nothing. And by definition, such objects *are* logically composed of presentations. Second, attributive presentations do not referentially identify the object in question. We can think about Donnellan's the murderer of Smith, whoever it may be, without being able to identify who it is.

Sixth, even if, per impossibile, the objector were right that objects in themselves can be logically analyzed as classes of

qualified objects, the containment and dependence arguments still ensure that the positive construction ontological interpretation of logical analysis always wins. Objects in themselves would be established, not reduced or eliminated, by the logical analysis.

A Pre-Wittgensteinian Regress Argument for Deriving Values from Facts

This section and the next discuss two related arguments for the derivation of values from facts. The first argument is in this section, and the second is in the next. I call this first argument pre-Wittgensteinian, but it is the implicit logical core of Wittgenstein's implicit full argument for the derivation in the next section. If this first argument fails, then his implicit full argument for the derivation, which basically only adds the concept of a criterion or rule of linguistic meaning, fails as well. Thus both arguments are implicit in Wittgenstein, and they are modally distinct by a simple addition of a concept. The second argument is an instance of the general vicious infinite regress of criteria or rules argument which he at least implicitly gives for all cognitive language use.

In both this section and the next, I shall first give a regress argument *against* the derivation of values from facts. Then in the course of criticizing that argument, I shall give my regress argument *for* the derivation. As paradoxical as it might sound, in each section the argument *against* will be turn out to be a benign (i.e. unproblematically endless) regress, and only the argument *for* will be a *vicious* regress (i.e. regress that needs a stopping point).

One might argue *against* the derivation of value from fact as follows. Value-judgments can always be made to change as situational facts change in (at least a finite) natural world. For we can always posit some additional fact that defeases (trumps, outweighs, nullifies) our original value judgment. A stock example is that stealing water is basically harmless, and thus no great crime, if we take a cup of water from someone's faucet in a suburb where the water supply is plentiful, and the owner would give us a cup if we asked for it; but out in the desert, stealing water can cause people to die of thirst, and thus can be murder. Compare May Edel and Abraham Edel (M. Edel 1968: 63, 80, 82). And this would also explain why Moore's open question test works here. Namely, the question "This is the fact, but is it good?" is always open because we logically can always posit another logically possible fact that would defease our original value judgment. Thus this argument against the derivation supposes a benign (i.e. endless) regress.

Hume does not give this benign regress argument to refute the derivability of value from fact, nor does Moore use it to justify

his open question test. More importantly than these scholarly points, the argument should be limited to finite values and finite additions of new facts, as opposed to, say, "God is infinitely wise, powerful, and loving, but are his actions good?" To be sure, we can posit a progression of *orders or magnitudes* of infinite values and facts, following Cantor on orders in transfinite arithmetic, and still describe a benign regress. But God would be absolutely infinite with no greater entity or value possible. Likewise, we cannot posit new facts if we posit the universe as *everything* there is. But these are not problems for the argument as applied to our own finite and limited lives, facts, and values. If we start with a finite number of facts, we logically can always add more finite facts in such a way that our last value judgment will be defeased. And for the argument to succeed, these new facts need not be actual facts, but can be merely hypothetical facts for the sake of the argument.

Note that the same argument can be applied to finite bodies of evidence, and to a progression of orders of infinite bodies of evidence (compare the series of even numbers and the wider series of positive integers), as opposed to the evidence an omniscient being would have, or to all the evidence there is. If we start with a finite body of evidence, it is always logically possible to add more finite evidence in such a way that the certainty or probability of our initial judgment is defeased. As more new evidence is posited, what was last taken to be evidence for a certain murder may no longer even seem to be evidence at all! Thus we may speak of epistemic defeasement as easily as we speak of ethical defeasement. And in fact, defeasing the value or worth of evidence is a *species* of ethical defeasement. For there is a synthetic *a priori* tie between evidence and ethics in that we *ought* to believe what we have sufficient evidence to believe. We saw earlier that we *ought* to accept valid arguments as valid; and that is a species of the general tie between ethics and evidence. And on a deeper and more general level, we *ought* to be rational, and evidence as such is always rational, even if it does not always rise to the level of reason to believe.

I find this benign regress argument to be self-defeating. For it begins by *deriving* a certain value from a certain initial fact. And then at every stage of positing new facts, the argument depends precisely on *deriving* a new and different value from the newly posited facts! Thus if the regress were pursued to infinity, the argument would defeat itself infinitely many times. For it would derive values from facts infinitely many times; yet according to its own conclusion, it cannot do that even once. Talk of an argument's tripping over its own shoelaces! And that is my pre-Wittgensteinian regress argument *for* the derivation of values from facts. Namely, the regress argument *against* the derivation *presupposes* that very derivation at every stage. Thus the supposedly benign regress is

actually vicious. For in order to succeed, the regress must continue at every stage. But it actually must stop at every stage with a new derivation of value from fact, contradicting its own conclusion.

Likewise for the parallel argument about evidence. For at every stage of positing new facts, the argument depends on *deriving* a new evidentiary situation from the newly posited facts.

What was the benign regress arguer against the derivation thinking? —That the different value judgments at every stage were coming from nowhere? That the value changes were derived from nothing? That they were not derived precisely from the new facts? And if anything, the case is even worse against the evidentiary version of the argument. If our evidence does not come from facts, if it does not derive from facts—indeed, if it does not in some sense *consist in* facts—then where does our evidence come from? But the case is really the same on the value version. If our values are not based on facts, then where do they come from? This is not a begged question. For as we saw, no facts, no values. Per impossibile, in a logically possible world in which there were no factual objects (i.e. not even the fact that there are no facts), there would be no value-objects either.

Our negative derivations of nonvalues from nonfacts in earlier sections provide insight here. In a world without facts, there can be neither facts for the evidence to be evidence *for*, nor facts that the evidence is *based* on or *consists* of. No facts, no evidence. And no changes of facts, no changes of evidentiary value. And the same can be said for values in general. No facts, no values. And no changes of facts, no changes of values. Indeed, that was the deeper point of the physically identical paintings that had to be equally intrinsically beautiful. For there is no change across them.

Another problem with the benign regress argument is a reductio ad absurdum. Namely, if the regress *were* benignly carried to infinity, then nothing would *ever* have a determinate value. If there is no stopping point at some fact that *does* have some *a priori* intrinsic value, then nothing in this world logically can have value. For we already saw the vicious infinite regress of consequences of consequences argument against all values' being utilitarian. Both give basically the same result. Either way, we would be in a world without any values. And that is absurd. For in a perfectly ordinary sense, our lives are full of values, and the same goes for every possible world (this is only possible worlds talk) that has sentient rational beings. Thus the *proper* regress argument would conclude that the regress must be *stopped* by admitting some derivation of value from fact. That is to say, the proper regress argument must be vicious, on pain of there otherwise being no values at all.

Likewise, if there is no stopping point at which some fact implies evidentiary value or is intrinsically evidence, then nothing

would ever be evidence for anything. Yet in a perfectly ordinary sense, our lives are full of evidence for all sorts of things.

The problem of self-defeat and the problem of reductio ad absurdum are different but distinct only in reason. At the very least they are modally distinct in Descartes' second sense, since both logically depend on a derivation of value from fact at every stage.

In our own ethics and epistemology, there is no problem. We can derive the value of courage from the fact of courage. Again, they are different but distinct only in reason. And in our theory of seeming, we can derive our evidence that something is the case from the phenomenological fact that it seems to be the case; and these too are different but distinct only in reason.

We can even explain away the appearances, i.e., explain why the benign regress argument against the derivation seems to work. We can do that simply by admitting a distinction we need to admit anyway. This is the famous distinction between prima facie values and actual values. For a defeased plausible value is just a prima facie value. In fact, it is our own view that all finite values logically can be defeased by contrary greater consequential values. And that is why it is easy and natural to think that the regress of flip-flopping values can be benignly carried to infinity. But an intrinsic value that is defeased by its causal consequences is still an intrinsic value. Thus the distinction between prima facie values and actual values is not the same as the distinction between intrinsic and consequential values. In fact, sometimes consequential values *increase* the good or evil of an intrinsic value. Far from always defeasing an intrinsic value, the consequential values logically need not always even be contrary.

Another way to explain away the appearance that the benign regress argument against the derivation works would be to say that finite values are values caeteris paribus, i.e., values other things being equal. For if a value is defeased by new facts, then things are no longer equal concerning the factual situation. For example, the change in facts is obviously why the criminal value of water theft in a city full of water is far from equal to the criminal value of water theft in a desert.

These two ways to explain away the argument are not only logically consistent, but are also distinct only in reason. For a value is prima facie if and only if it is a value caeteris paribus.

One might think that the distinction between prima facie values and actual values, and/or the distinction between caeteris paribus values and noncaeteris paribus values, is the same as, or is distinct only in reason from, the distinction between qualified values and values in themselves. But this is not so. In fact, thinking so is very confused.

The distinction between prima facie and actual values, and

the distinction between caeteris paribus and noncaeteris paribus values, must not be confused with the distinction between qualified values and values in themselves, and still less with the deeper and more general distinction between qualified objects and objects in themselves. That is because the first two mentioned distinctions are not between qualified objects and objects in themselves, but between different kinds of objects in themselves. The question of whether values can be derived from facts is a question about the world in itself. It is the question whether values in themselves can be derived from facts in themselves. That is what all the shouting is about. And objects in themselves, including values in themselves, can be and often are distinct only in reason from each other. After all, there are distinctions of reason in themselves. They are not mental distinctions! We abolished mental distinctions as a category confusion and essentially a contradiction in terms in chapter 2. For genuine distinctions are discerned, not created or made up by us.

The total mind-independence of distinctions in reason between facts and values is especially clear in Plato's world of totally mind-independent forms. It is a totally mind-independent fact that the fact of courage and the value of courage are distinct only in reason. Of course, all logical derivations in the wide *a priori* sense are totally mind-independent. But this Platonic or neo-Platonic conception of factual forms as timelessly and necessarily implying values and vice versa is exceeded in its magnificence only by the conception of God as ultimate fact and ultimate value.

Even the distinction in reason between the in re fact and in re value of Achilles' courage is totally mind-independent, except of course for his own mind, since he and his logical constituents cannot exist independently of himself. For no object can exist independently of itself or its logical constituents.

On my continuum theory of value defeasements below, all finite values, whether intrinsic or consequential, are defeasible by greater consequential values. And that is clearly consistent with the synthetic *a priori* fact that some facts, such as facts of courage, have intrinsic values. In fact, all finite values, whether intrinsic or consequential, are values in themselves, yet they are all prima facie due to their defeasibility as finite values. The only indefeasible values would be any intrinsic values derived from God or from *all the facts in the world*. To be sure, we logically can always enlarge the world with additional facts, if the totality of facts is finite, or even forms a progressive order of infinitely more facts. But such a progressive order or series is merely hypothetical. And there is no such thing as a merely possible fact. The benign regress argument is hypothetical, but it is all right for arguments to be hypothetical. For to be hypothetical is merely to be if-then in form, or at least suppositional in Frege's sense of lacking assertoric force.

A Wittgensteinian Criterial Argument for Deriving Values from Facts

The argument in the present section is essentially the same as the one in the preceding section. It merely adds the window dressing of linguistic rules or criteria for talk of facts and values.

In the benign regress argument *against* the derivation of values from facts in the preceding section, we posited new *facts* at every stage, thus defeasing the *value* posited at the previous stage. And then we criticized that argument by pointing out that every stage actually defeats the argument, since it depends precisely on a new *derivation* of value from the newly added facts. And that was a reductio ad absurdum of the argument against the derivation of values from facts. Thus we found that the regress is really not benign but vicious, since it need a stopping point if there are to be any values in the world at all. That is, if there are any values at all, then some values must be intrinsic to, that is, derivable from, facts.

The present section is essentially the same. In a benign regress argument against the derivation of values from facts, we posit new *rules or criteria for* the new facts at every stage, thereby defeasing the *rules or criteria for* the value found at the previous stage. The argument concludes that there are no intrinsic values, since values logically can always be defeased by adding new facts.

Our first criticism is that the argument is self-defeating. For every stage of it depends precisely on a new derivation of the rules or criteria for a new value from the rules or criteria for the new facts. That is, the argument does what it says cannot be done at every stage of the way. Our second criticism is that if there is no stopping point at which we admit rules or criteria for intrinsic values, then there are no values at all. And that is our own vicious regress argument that there must be some intrinsic values, on pain of there otherwise being no values at all.

Likewise for evidence. Evidence is merely an instance, a case in point, since all evidence has evidentiary value. We simply add talk of *rules or criteria for* evidence to our talk of evidence in the preceding section. In fact, the reader can easily rewrite the entire preceding section simply by adding talk of rules or criteria to every mention of facts, values, and evidence.

As far as I know, Wittgenstein never gives the *specific* rules-or-criteria benign regress argument *against* the derivation of values from facts just described, nor the *specific* rules-or-criteria vicious regress argument *for* the derivation of values from facts just described. But both arguments are clearly instantiations of different aspects of his *general* private language argument based on rules and criteria. For his private language argument universally applies to all language, including both language about *facts* and language

about *values*. For all language must be taught and learned.

Our own rules-or-criteria vicious infinite regress argument for the derivation of values from facts is clearly an instantiation of Wittgenstein's private language argument. For that argument is a vicious infinite regress argument that there must be some situations which are rule or criterion paradigms of the sense and reference of our words about things, on pain of our otherwise being unable to teach or learn talk about things at all. No rule or criterion paradigms of talk about values, no talk about values. For no rule or criterion paradigms for talk about anything, no talk about anything. And since the paradigms must be public for teaching and learning to take place, value-objects are just as public as factual objects. To be sure, Wittgenstein himself may reject talk of value-objects as a bewitchment of language. But that is another story. And in ordinary language, we take ourselves to talk about values all the time, and about all the other objects Wittgenstein regards as bewitchments of language. Thus Wittgenstein is actually far removed from how ordinary language actually is. Our via antiqua phenomenology is far closer. Thus it seems Wittgenstein is bewitched by his own earlier uncritical acceptance of Moorean or Russellian via moderna sense-data. I am just accepting the sound core of his vicious regress argument, and showing that its actual scope of application is far wider than he thinks, since he rejects all sorts of via antiqua objects the argument applies to. But his use of the word "object" varies.

Wittgenstein's second private language argument is based on systematic sense and reference inversions of talk about colors, sounds, and so on. Here systematic inversions of talk about values are instances of this general sort of systematic sense and reference inversion. This second argument, too, ends in admitting rule or criterion paradigmatic cases of sense and reference, in order to stop the systematic inversions. Compare Quine on referential relativity and inscrutability, and translational indeterminacy.

Wittgenstein's vicious regress argument and his systematic inversion argument are distinct only in reason. For the inversions logically can go on to infinity if there is no stopping point for them, just like the stages of the vicious regress argument. Thus the second argument is implicitly a regress argument, and implicitly an instance of the first. We are merely adding talk of values to the kinds of talk that Wittgenstein expressly applies both arguments to.

Wittgenstein has a third private language argument that is usually called the "black box" or "beetle in a box" argument. I interpret it as having three levels: two veils and a core dancer. The argument aims to show that talk that seems to be about private mental objects cannot be about anything, or at any rate cannot be about private mental objects. Thus the argument's scope is limited.

The first or outer veil is the verificationist level (PI § 272)

discussed by the first generation of *Investigations* scholars, notably Alfred Jules Ayer. This level is concerned with how we can know, or what evidence could we possibly have, about what another person or mind is experiencing or thinking about. The second or inner veil is the de-epistemicized, purely semantic 'justificationist' interpretation of Kripke (1982), modified by Merrill B. Hintikka and Jaakko Hintikka (M. Hintikka 1986). This level is concerned with semantic rules or criteria for talk about what another person or mind is experiencing or thinking about. I consider this a deeper level because talk about what we mean is prior to talk about what we know. For we cannot know if a statement is true if we do not know what it means. That is, we cannot have evidential certainty.

Stripped of both veils, Frege's realist private language argument is revealed as the dancer. This core argument concerns the supposed metaphysical fact that minds are essentially private, and one mind cannot access what is inside another. This is the deepest level because our inability to literally access other minds explains why we cannot know what objects in the other person's mind the other person may be referring to (outer veil), and why we cannot even know what sense or reference talk of mental objects could have for another person (inner veil). The other person's mind is analogized to a black box, meaning a box we cannot see inside, to see if it contains the same kind of beetle our box has. It might contain a flower instead, or nothing.

The core Fregean argument and the first veil occur together in this famous section:

> The essential thing about private experiences is really not that each person possesses his own exemplar, but that nobody knows [*weiss*] whether other people also have *this* or something else. The assumption would thus be possible—though unverifiable [*nicht verifizierbar*]—that one section of mankind had one sensation of red and another section another (PI § 272).

The basic problem is metaphysical: mental ideas cannot be literally compared across minds (or over time for the same mind) to see if they are the same or not. Take away the epistemic aspect of #272, and the argument is Fregean. The very example of color inversion using red is an homage to Frege (1968 / 1918: 520–522; 1974 / 1884: 29, 36). See my (2003 / 1996: ch. 7, sect. 4) for more.

All three main private language arguments appeal to public, mind-independent paradigms of teaching and learning. But any private language argument is distinct only in reason from the corresponding mental language argument that parses public, mind-

independent objects as mental objects that are formally identical across minds and time. See the "Essential Feature 7" section in chapter 1. On the containment and dependence arguments, both parsings are valid, that is, exist. And realism wins in that the senses and referents of the private language arguments do exist as valid parsings. But even realists are wrong if they reject the parsings of the "rival" conceptualist or nominalist ontological interpretations of logical analysis. See chapter 3 showing that all three ontological interpretations of logical analysis are logically entailed as valid by the containment and dependence arguments. Here I assume that the private language and mental language arguments give logically equivalent logical analyses of our ordinary talk about minds.

Arguably, there are many more private language arguments in Wittgenstein. For *Philosophical Investigations* can be parsed in many ways. And there are many interpretations of the texts. Discussing all of them is beyond the scope of this book. I have simply given my own interpretation of three of Wittgenstein's main arguments. If my interpretation is wrong, then we may consider this section as giving my own neo-Wittgensteinian arguments. Again, this is not primarily a scholarly book.

Twin And Mirror World Derivations of Value

Let us define twin worlds as worlds that are different but identical in every respect. Thus by definition they violate the principle of the identity of indiscernibles. Thus any arguments about them will be per impossibile, since they are themselves impossible. But there is nothing wrong with per impossibile, i.e. purely hypothetical, arguments. Alternately, we can follow Max Black in assigning them different locations as phenomenologically presented to a hypothetical observer who can see both worlds as different worlds in the distance (Black 1970a / 1952: 207ff. stated in my own way). Again, Black's iron spheres logically can be whole worlds, and can even be inhabited by indiscernible people.

Mirror worlds are not twin worlds. We may say that both belong to the genus of duplicate worlds. But only mirror worlds systematically invert some respect or all respects—just like looking in a mirror. If I have a spot on my left hand, it is on the right hand of my twin in a mirror world. We may generalize this to include systematic inversions of color and so on as mirror inversions. Thus the mirror argument for deriving values from facts is distinct only in reason from Wittgenstein's systematic sense and reference inversion argument for the same derivation, in a way that the twin world argument is not. And unlike twin worlds, mirror worlds do not violate the principle of the indiscernibility of identicals. Thanks

to the spot's being on different hands, and (say) the spots' being different colors to private mirror-minds, they are very discernible!

We may generalize mirror worlds even further to include systematic inversions of values. These include "Fair is foul and foul is fair" in Shakespeare (2024: *Macbeth* 1.1.12), Hegel's stages of value inversions for individual consciousness and for society, and Nietzsche's transvaluation of values. These inversions might not be exactly the same as applying Frege's and Wittgenstein's systematic sense and reference inversion private language argument to talk of values, in that Frege's and Wittgenstein's conclusions about *language* might not be drawn; but the ethical inversions themselves are essentially the same as Frege's and Wittgenstein's color inversion of red and green.

Findlay says of Hegel:

> ....Hegel turns to the... fantasy of an inverted, or topsy-turvy (*verkehrte*) super-sensible world, a world that does not copy or correspond to the perceived order, but which at every point runs *counter* to it. In such an inverted world the sweet will be sour, the north pole of a magnet identical with its south pole, and so forth. **Hegel also adds for good measure a few ethical examples**..., e.g. the punishment which disgraces us in *this* world, is in the *other* [twin or mirror] world an exercise of pardon. The point of this grotesque fable would seem to be that the inversion in question makes no difference at all... provided that [it does] the universalizing, conceptual work we require. [Hegel is] making much the same point as do Russell and Carnap, when they stress the importance and the communicability of *structure* and the unimportance of *content*. (Findlay 1962 / 1958: 92, Findlay's italic emphasis, my bold emphasis)

Findlay cites and is describing Hegel (1967 / 1807: 203–206). By the way, Wittgenstein mentions sweet, if not sour (PI § 87); and Hegel inverts black and white, if not red and green (Hegel 1967 / 1807: 204). On Hegel's ethical stages, see Findlay (1962 / 1958: 107–113, 115–121, 313–332).

Hegel's whole conception of stages of dialectical progress applies to values as well as to facts. The two main progressions are of the individual consciousness and of society. For an example that is relevant to systematic inversions, Findlay says of "the Kantian stage" of ethics, "Hegel easily shows that [Kant's sole requirement of universalizability for duty] cannot take us far.... As we look on a

matter from one angle or another, practically any rule for action can be rendered self-consistent, or can be made to seem self-contradictory" (Findlay (1962 / 1958: 112). Here the "angles" from which we conceive or regard things are so many systematic duty inversions. And the systematic inversion of good and evil, morality and wickedness in the stage of Abstract Conscientiousness (Findlay 1962 / 1958: 321–322) is Shakespeare's "Fair is foul and foul is fair." In all these cases, the relational structure or form remains the same, and only the relata or content changes.

There is nothing strange about any of this. Are we going to say that talk of values expresses *no* sense, or refers to *no* referents? (Some do say that!) Are we going to say that values are nothing? But if they are not nothing, then by definition they are objects in the wide sense. And if Moore's theory of cognitive acts is right, or even if the private language arguments apply to cognitive talk about values, then values are mind-independent in the ordinary sense. And if the correspondence theory of truth is correct, then *a priori* truths about value-facts are totally mind-independent as well. Yes, I argued "no minds, no values." But *my* values logically depend only on *my* mind. It is still a totally mind-independent fact *that* I exist and have values. That is part of the totally real order. Indeed, the very logical dependence of my thoughts, feelings, and values on the existence of my own mind is part of the totally real order! For nothing can exist independently of itself or its logical constituents.

There is no reason why our general phenomenology of objects should be any different for values (value-objects). For the ontological puzzles of explaining the possibility of informative identity and existence judgment are transcategorial. Is this value the same as the value I was thinking of last night? Did Achilles' courage exist or not? Also see my (1995: sect. 1, see sects. 4, 5) on the universality of the systematic sense and reference inversion private language argument. Values are different from each other, so at most one can be nothing. But if values are not nothing, then they are objects in the wide sense. And if Moore's act-object distinction is correct, then values are mind-independent. And if the private language argument is correct, then we cannot even teach and learn words about value-objects unless the objects are mind-independent.

Again, no minds, no values; thus values logically contain and depend on minds. But that very fact is totally mind-independent. That is, it is a totally mind-independent fact *that* this is the case. No mind is logically independent of *itself*, but each mind is logically independent of all *other* minds. And perhaps per impossibile, each mind is logically independent even of the *logical possibility* of other minds. Each mind is logically dependent only on its own logical possibility. So too for totally independent values.

Based on the preceding two sections, the reader may

already see how the argument of this section will go. For mirror worlds are a specific kind of systematic inversion, and we already accepted the general systematic inversion private language argument. A twin world is a copy, not an inversion; but if *physically* identical twin worlds have systematically inverted private *mental* ideas, then they too are instances of the general systematic inversion private language argument. Note again that the private language argument is distinct only in reason from the mental language argument, which functions in essentially the same way to explain how it is possible to teach and learn language, but uses formal or functional identities across private ideas in different minds and at different times instead of public objects. Qualified objects are essentially public, and are even logically presentable across all minds and times; and formally identical via antiqua mental ideas are essentially private and nonrecurrent. But while they are deeply, categorially different, they are distinct only in reason. For they provide logically equivalent logical analyses of the same ordinary things. But the private language argument wins over the mental language argument in that it is the positive construction, i.e., realist argument. See chapter 3 for the full story.

The twin world / mirror world argument for deriving values from facts is as follows.

On the face of it, twin worlds, i.e., factually identical worlds, must have identical values. No argument is really needed. But we can offer an analogical argument. The analogy is to Hare (2001 / 1952: 81)'s synthetic *a priori* insight that physically identical paintings can only be identically intrinsically beautiful. Indeed, we are merely giving Hare's insight its proper scope. For we are applying it not only to physically identical paintings, but to whole physically identical worlds. Indeed, a painting logically might be the whole physical world. We might even paraphrase Shakespeare as saying, "All the world's a [painting], / And all the men and women merely [painted figures in it]" (Shakespeare 2024: *As You like It* 2.7.146–147). And twin worlds logically must have not only twin intrinsic values, but also twin consequential values. For twin worlds include not only twin acts, but their twin consequences as well!

Mirror worlds, i.e., worlds that are factually identical except for some sort of physical "mirror" inversion, must have identical values too, or else mirror-invert values. And if they mirror-invert values, then they fall under the general systematic inversion argument. Thus either way, we can derive values from facts by stopping any vicious regress of inversions of values with values that logically in the wide *a priori* sense, i.e. intrinsically, publicly belong to facts. And for teaching and learning purposes, these will be phenomenologically presented as synthetic *a priori*,

i.e. intuitive, derivations / implications / ostensions / distinctions in reason. That is, just as Wittgenstein argues that a systematic red-green color inversion across private minds shows that our public talk about red and green cannot be about mental ideas, and must be about something public and mind-independent, so a systematic good-evil inversion shows that our public talk about good and evil cannot be about mental ideas, and must be about something public and mind-independent. And in both cases, any vicious regress of systematic reference inversions can only be stopped by something that is really, i.e. intrinsically, and mind-independently red, green, good, or evil. And for teaching and learning the words, the objects that stop the regress can only be phenomenologically presented. This is just where ostensive definition by paradigms comes in. To be sure, Wittgenstein speaks of language uses and language-games as an alternative to reference to objects in many cases. But we can differ from him on that. On metaphysical ecumenicism, we can admit his ordinary language-use and game analysis as of limited validity, if it can provide statements that are logically equivalent to ordinary talk. And it can be right about what it affirms. Language uses and games can exist as valid parsings. But he will be wrong if he denies the objects our logically equivalent positive construction realist analysis affirms. For logically equivalent logical analyses are distinct only in reason. As Bradley says, "The man who is ready to prove that metaphysical knowledge is wholly impossible... is a brother metaphysician with a rival theory of first principles" (Bradley 1969 / 1893: 1).

If a spot is on my left hand and the corresponding spot is on the right hand of my mirror twin, that is part of the systematic inversion of left and right. But that should (and surely can) have no impact on values. The values of the spots should either be identical or invert correspondingly. For example, if it is good for me to drive on the right side of the road for legal, moral, and pragmatic reasons (everyone else is driving on that side), then it is good for my mirror twin to drive on the left. That is, on *my* left. It is on *his* right. Thus if we both say "right side," then we mean different things, both in sense (qualified objects) and reference (objects in themselves). I mean my right side, and he means his right side.

Ethical acts can be inverted across mirror and even twin physical worlds, certainly as to private inner mental ideas. Where my idea is to do good and avoid doing evil, my twin's idea is to do the opposite. And the acts I regard as my successes he regards as his failures, and the acts I regard as my failures he regards as his successes. But our outward behavior is the same. My verbal and nonverbal expressions of pleasure are the same as his verbal and nonverbal expressions of pain. Even in actual life, expressions of great pleasure and great pain can look very similar. The agony of

ecstasy, the ecstasy of agony, and all that. My evil mirror twin logically might be a Marquis de Sade, enjoying evil and regarding it as his good. This is just systematic value inversion again. And again, it can only be ended by phenomenology, meaning by its being given to us which things are good and which things are evil.

By parity of reason, the same can be said of the whole world in terms of the acts and motives of its ultimate ruler, if any. It has long been noted that the whole creation, so to speak, can be headed to an ultimate salvation or damnation. The 'moral gymnasium theory of the universe', where evils exist only to be overcome in a program for improving our souls, can be inverted into the 'immoral gymnasium theory', where goods exist only to be overcome in a program for corrupting all our souls. Once again, phenomenology is the way out for the fly trapped in Wittgenstein's fly-bottle of systematic sense and/or reference inversion. Why should it be otherwise? Indeed, how could it be otherwise? We cannot start from nowhere. (The 'moral gymnasium' theory aims to explain why evil exists in a world created by an all-powerful, all-knowing, morally perfect, and infinitely loving God. It claims evil exists for the purpose of our moral training and exercise.)

Although I am agnostic about God and the Devil, I know I am right and my evil mirror twin is wrong about what is good or evil. My knowledge of a few fairly simple ethical facts is just my contraposition of Descartes' skeptical thesis again; see chapter 4. If not, then we must reject not only all values, but also all facts, due to the regress arguments. But this is not just a negative reductio of the benign regress arguments as self-defeating, or as making all talk of facts and values impossible. Nor is it their negative replacement with vicious regress arguments with the reductio built in, so as to conclude that "there must be" paradigmatic ostensions, on negative pain of otherwise facing the vicious regresses. No, this is a positive phenomenological haecceity argument that we do teach, learn, and yes, even know at least a few fairly simple things. In fact, the reductio arguments are merely secondary to and derivative from the phenomenological haecceity argument, and in a word, from the given. For if we contraposit the reductios and admit the given in the first place, we would never give the reductios, except as logical window dressing or overkill. Thus the regress arguments emerge as linguistic versions of Descartes' radical skepticism, with systematic reference inversions taking the place of systematic delusions in dreams or by the evil genius, and above all systematically defective calculating machines. (Recall the veils of the black box argument.) And all of them can be contraposited. Again, objects of perception or thought are the direct senses and direct referents of our cognitive talk, their presentations are essentially haecceitous and indexical, and they are essentially public. See chapter 1.

Thus there is no problem of knowing which twin I am, and in which twin world. That is phenomenologically given to me. We have a correct phenomenology, one that admits haecceity ('thisness') as *directly given* in the case of qualified objects, and indirectly in the case of objects in themselves. This may not explain *why* I am I, and *why* I am not my twin, or anyone else, or a rock or a tree; but that is a different puzzle. Butler says *everything* is what it is and is not another thing, thus evidently explaining why I am I as merely an instance of the law of self-identity. Recall Aristotle's point that the most general true description is the one that gives the explanation. We seem to have that here in that law.

As to mirror worlds, I know which side of the mirror I am on. For unlike Quine, I know when and where I am in space-time because I know which body is mine. Also unlike Quine, I know which phenomenal colors I see and which objects of perception I perceive. Except for the ordinary vagueness and confusions of introspection that Hume and Kant point out (Hume on emotions, Kant on motives for acting), I also know my pleasures and pains, emotions and feelings, values and duties, and my epistemic seemings and reasons to believe. At least I know some fairly simple ones. The number two and the class of dyads may be distinct only in reason, but they are different objects, and I know which one I am thinking of. And at least some of this haecceity is known or knowable in the strong Cartesian sense of knowledge, per my collapse of metaphysical certainty into evidential certainty in chapter 4 (the two kinds of certainty remain distinct in reason). For objects of perception or thought essentially are as they directly appear to be. See essential feature (3) of objects of perception or thought in chapter 1.

One might object that faces look worse if mirror-inverted. I know my face does! I can invert my imaged face in an image editor, and my face will look worse. Faces are generally asymmetrical to some degree. Nor is this just a matter of what I am used to seeing. I am used to seeing my inverted face in the mirror every morning. There is much psychology on point, going back to our very wrongly feeling that what is on our physical right (dexter) is good and what is on our physical left (sinister!) is bad. But I am only making a logical, or phenomenological, point. This is just what I see. Certainly the point is intelligible and logically possible. That is, my inverted face *logically* can be less objectively beautiful than my actual face. Consider the most famous face of all, Leonardo da Vinci's *Mona Lisa* (Madonna Lisa del Giocondo). Would it not look worse inverted? And what could better invert Hare's twin paintings argument than a mirror inversion? Physically identical paintings must be equally intrinsically beautiful. But (otherwise physically identical) mirror inversion paintings? Not likely, unless

they are symmetrical, in which case they are *not* visibly inverted.

My reply is that my mirror twin logically can feel the same way about his inverted face. For we are inversions of each other! And we logically can allow aesthetic inversion. For my mirror twin has a mirror phenomenology. In this sense, there is truly no arguing about taste, and beauty is in the eye of the beholder.

Hegel's Implicit Derivation of Values from Facts

Findlay says of Hegel:

> [I]n saying that an individual man is good, or that an individual picture is beautiful, we are expressing the complete conformity of an Individual both to its Specific and its Universal Notion. The Notion which a good man satisfies is precisely what *he*, as an individual, has it in him to be.... In the same way the Notion expressed by a fine picture is a Notion peculiar to itself.... In the Judgement that something is good or beautiful we accordingly achieve that complete sublimation of the Individual into the Specific and Universal, and that perfect incarnation of the Specific and Universal in the Individual, of which all Judgement has been in quest.... **Hegel implies that the object will ultimately justify its claim to have satisfied its notion precisely by being the individual object that it is. Socrates was a good man simply because he was . . . . Socrates, *The Tempest* is a fine play simply because it is . . . . *The Tempest*.** (Findlay 1962 / 1958: 238–239, Findlay's italic emphasis, my bold emphasis)

That is because "objects are *true* if they are what they *should* be[, i.e., truly fulfill their concept. And] the untrue is... 'the bad'. A bad human being is one who is not truly human" (Hegel 2015 /1830: 284, his emphasis). This seems the best argument for Plato's ideal forms. As we say today, if you swim poorly enough, you are not swimming at all. Hegel's view is distinct only in reason from our inferring the value of courage from the fact of courage. Achilles has courage simply because he *is* Achilles—and his courage has value simply because it *is* courage. And while Hare needs *two* physically identical paintings to show beauty is intrinsic to *both*, Hegel needs only *one*! It is beautiful simply because it is what it is.

Butchvarov says:

> It is unthinkable that we should be mistaken in judging that existence, health, pleasure, satisfaction, knowledge, fortitude, and friendship are good, if we understand them in the manner explained... in chapters 5 and 6. Indeed, much of that explanation consists precisely in rendering those judgments self-evident. [N]eedless to say, there is no room for genuine *arguments* that would show that they are indeed self-evident!
>
> Moore held that "Anyone who considers the facts... cannot well deny that justice, gratitude, and benevolence carry the guarantee of their worth in themselves." And, more recently, Philippa Foot has written that "It is not obvious what someone would mean if he said that temperance or courage were not good qualities,... because of the things that courage and temperance are." ....Usually, one who would deny such attributions of goodness would be, I suggest, no more comprehensible to us than someone who denied that yellow is a color. (Butchvarov 1989: 155–156, his emphasis, cites omitted)

This is why Butchvarov holds that in ethical philosophy, we can never go too far from our ordinary ethical judgments. And that seems to be precisely because our ethical judgments of value are derived from the ordinary ethical facts.

For Hegel, in a value judgment "we... achieve [a] complete sublimation of the Individual into the Specific and Universal, *and* [a] perfect incarnation of the Specific and Universal in the Individual." Butchvarov seems to hold that properties are primarily good, and that individuals are good only insofar as they have those properties. But their views are only modally distinct. Hegel's view is two-way, while Butchvarov's is one-way. Thus Hegel's view is more complete. And in a word, all this is about... *intrinsic* goods! By deeming ethical good humanity's excellence of its kind, Hegel makes these two kinds of good only modally distinct species-genus.

See also *Brentano and Intrinsic Value* (Chisholm 1986) on Brentano's deriving intrinsic values from phenomenological facts.

Putnam's *The Collapse of the Fact-Value Dichotomy*

Hilary Putnam (2002) argues that pragmatic value choices are just as essential to factual science as they are to ethics, so that there is no good reason why science should be objective and ethics

not. This is a tu quoque, or argumentum ad hominem, that is, the pot calling the kettle black. The argument is easy to make, since there are indeed pragmatic factors in scientific theory formulation. I myself argue that Ockham's razor is a purely pragmatic factor in the section on the razor in chapter 3. But there is all the difference between theory formulation and how physical nature actually is. It is precisely the difference between qualified objects and objects in themselves. Even the best and wisest theory formulation is not the same as truth, meaning, or knowledge in itself. It may be all we can get, or it may even be known to be true; but it is not the same. For even a qualified object we *know* to "be" an object in itself cannot be *identical* with that object in itself. The being relation is not the identity relation. And theories fall on the qualified side of being.

Putnam is not collapsing facts and values, but is arguing against their collapse in the Humean or post-Humean literature. He is seeking to rehabilitate values to something of their traditional rational objective nature. Value judgments can be reasonable, so at least reason can be involved! Thus he is more or less on our side, offering a diluted, wishy-washy substitute for our view. I would not even discuss him except for the title of his work; people might say I was ignoring him. But at best, he is only a sideshow in the larger picture of metaphysical ecumenicism. For he belongs to the sideshow of pragmatism in philosophy.

Putnam's view belongs in metaphysical ecumenicism if and only if it has pragmatist logical analyses of ordinary statements of facts and of values that satisfy the three conditions: intelligibility, logical possibility, and logical equivalence to the corresponding ordinary statements. And it may be doubted whether the second and third conditions are met. For are truth, meaning, or knowledge, or for that matter values, merely a matter of their pragmatic usefulness or convenience? What about statements useful or convenient to an evil dictator or a liar?

In fact, much like verificationism, the thesis that cognitive meaning is pragmatic, or is whatever is most convenient, is self-defeating. Truth would then point in any direction it finds most convenient at the moment, spinning around like a weather vane whenever the evidentiary wind changes direction. Truth is the opposite of that. Think of Al Gore's famous environmental book, *An Inconvenient Truth* (2006). Many truths, known facts, and even meanings are very inconvenient! The supposedly pragmatic Hegel dryly takes this criticism one step further: "It would... be even more convenient to abandon all calculation as well as thinking itself entirely" (Hegel 1010 / 1830: 163). For a more extensive criticism of pragmatism, see Russell 's *Inquiry* (1985 / 1940: chs. 21–23) on John Dewey and Rudolf Carnap. But while pragmatism is self-defeating, we may take it to define a limited kind of meaning we

may call pragmatic meaning. Likewise for pragmatic truth and pragmatic knowledge as limited kinds. This too is ecumenicism. We did the same for verificationist meaning earlier in this book.

On the logical containment and dependence arguments, I admit Putnam's pragmatic realism into metaphysical ecumenicism as having a limited validity. On our arguments in this chapter, pragmatic values and pragmatic facts are different but distinct only in reason. Thus any reduction or elimination of values is out of the question. And I suspect that Putnam might agree. If so, the title of his work is misleading. For his argument is only for the dependence of pragmatic facts on pragmatic values, not for their literal identity. That does not even go in the right direction for deriving values from facts! And as a tu quoque, it was never much of an argument, though it may be convenient in the pragmatic arena.

An easier, stronger, and more direct way to show that values are as objective as facts is by Moore's act-object theory realism. As an object of perception or thought, a value is just as mind-independent as a sensation of blue in Moore's act-object theory. Moore even admits indefinable pure goodness as an entity! From there it is but a leap over a narrow ditch to admitting values that are logically independent even of the logical possibility of minds. Of course, *my* in re values cannot be logically independent of *my* mind or of *my* mind's logical possibility, any more than my happiness or my toothache can. But they are logically independent of the logical possibility of *other* minds, just as my happiness and my toothache are. In fact, no object can be logically independent of itself or of its logical constituents. And that goes for rocks and trees as well as minds. Thus my mind and its values can be and are as much a part of the real order as rocks and trees.

To be sure, my in re values can be logically parsed as my private nonrecurrent mental idea-values that are formally identical with other mental idea-values across minds and times. But that is only their parsing on the mental language argument. My in re values are not *only* mental. For there is also their parsing as public value-objects on the private language argument, and on Moore's realism. This applies to my particular property-values and to in re universal values. And beyond those parsings of values, we also admit ante rem universal values and Platonic value-forms such as courage. This is per the containment and dependence arguments for admitting all the main theories of particulars and universals into metaphysical ecumenicism. See chapter 3. Also, many non-mental objects are properly called good or evil, such as food and poison, charitable gifts and murders, and some videos and paintings, even though such goods and evils are pros hen relative to sentient living beings. No sentient consciousness, no values.

Here the notoriously difficult Hegel is very simple for once

—even simpler than Moore or Plato. A person or a play is good simply because it is the person or play it is. Just as Moore's act of cognition or volition is not identifiable independently of its object, and just as the value of courage is not identifiable independently of the fact of courage either in re or ante rem, so Hegel's values are not identifiable independently of the factual objects that have them, and are distinct only in reason. Such intuitive *a priori* knowledge "may in a sense be irrefutable" (Kripke 1982: 51).

An in re particular value-property and the in re universal value of courage are mutually distinct in reason from each other, and from the factual object that has them. The ante rem factual universal of courage and its ante rem value-universal, as well as the Platonic factual form of courage and its ante rem value-form, are modally distinct from any in re factual object that instantiates or participates in them. For they can exist without it, but it cannot be what it is without them. Both kinds of universal (in re and ante rem), and also the Platonic form, are identifiable independently of any one particular factual thing. But a particular value-property is not identifiable independently of the particular factual thing that has it, just like this particular red of this particular apple.

The question of the relationship of Hegel to pragmatism is beyond the scope of this book. I will merely mention the works of Dina Emundts, Willem de Vries, Robert Stern, Robert Brandom, Paul Redding, Louis Altena, Kenneth Westphal, Tom Rockmore, William Maker, Allan Hance, and Richard J. Bernstein.

How Did Hume Miss All This?

Well, much of it came long after him! Hegel's derivation of value from fact, Moore's realism, Wittgenstein's private language argument, Kim's supervenience theory, and Putnam's pragmatism were not around in Hume's time. But via antiqua ideas had been around for centuries. And rejecting or overlooking them is the basic phenomenological problem with Hume. The private language argument had ancient origins as well (my 1995). This is not to mention the Platonic forms of the virtues and of the Good, if not also the forms of the evils and of the Evil—and of the Value.

Besides his simply living centuries earlier, the main reason Hume misses all the derivations of value from fact we discussed is his via moderna British empiricism. This means his theory that all we are presented with are sense-impressions, and that all our ideas are copies of, or somehow derived from, sense-impressions. This is his admission of via moderna ideas, and also his rejection of via antiqua ideas. There is nothing new in this. In fact, it is notorious that this is why he has no idea of minds, bodies, or causes. It is also

why he has no idea of universals, space, time, or numbers—or of values or obligations. Hume missed a lot! As the saying goes, he missed practically everything of importance. But his impressions and ideas remain parsings of limited validity in metaphysical ecumenicism. They are modally distinct from the realist via antiqua parsings, such as minds, bodies, causes, space, time, and so on. In fact, sometimes they are even phenomenologically directly given.

Based on his own metaphysics, Hume *ought* to be arguing that no value can be derived from a fact, and no ought from an is, not because values are activating / motivating and facts are not, but far more deeply because we have no *idea* of value or obligation in the first place. For we can have no sense-impression, as such, of a value or an obligation as such. And if we literally have no *idea* of value or obligation, then in his semantics, the terms "value" and "obligation" are meaningless, unintelligible terms. And then Hume ought to say that the fact-value derivations fail not because they are invalid, but because their conclusions cannot be true or false. They cannot be true nor false because they contain an unintelligible term, meaning for Hume a term that expresses no idea. I suspect the reason he does not offer this deeper structural argument is that he does not want to reject morality along with bodies and minds. Thus he admits moral sentiments, a kind of introspected impressions. Thus he can admit moral ideas after all, as copies of or otherwise derived from moral sentiments. And thereby he can admit the values of ethics, including the obligations of morality, or at least his via moderna ideas as substitutes for them. I suspect this is implicitly, structurally, and/or functionally what is going on. But if so, then Hume faces at least two problems. First, he implicitly admits his own derivations of values and obligations from facts, namely, moral values and obligations from moral sentiments. And second, by admitting values and rejecting minds, he rejects the 'no minds, no values' negative derivation we discussed earlier. For it seems that Hume does not reject values as such. He merely rejects that they can be derived from facts other than moral sentiments. As they say, the history of philosophy is a graveyard of bad theories.

One might very simply and naturally defend Hume by pointing out that obviously *he* did not think he was inconsistently admitting his own derivations of value from fact; and obviously he admits moral sentiments; and obviously these moral impressions would allow moral ideas to exist as copies of or as somehow derived from them, obviously consistently with his theory of ideas. Or alternatively, Hume's implicit derivations of values from moral sentiments are, on the face of it, a special, unique exception to his otherwise universal rule that values cannot be derived from facts. The exception works precisely because they are *moral* sentiments.

My reply is very simple too. There is no such thing as a

sense-impression of a value or an obligation! Wherever we look in the world of sense-impressions (sense-data), we will not find any values or obligations, any more than we will find minds, bodies, causes, universals (recall that all sense-impressions are particulars), space, time, or numbers. When I ordinarily take myself to be seeing two apples, a red one and a green one, for Hume I have only two sense-impressions, a red, round phenomenal spot and a green, round phenomenal spot. I do not have, as a third, additional sense-impression there along with them, a sense-impression of the space they are in, of the time they are in, or of the number two. I do not even have a sense-impression of an apple! Butchvarov (1989: 53) says for Hume, not only "virtue and vice, but also generic colors and shapes, numbers, material objects, and causal connections, are not objects of consciousness," and says a better view "is the lasting contribution of the continental phenomenological tradition."

Is Butchvarov safe because he admits intellectual as well as sensible objects? See pages 344–345 on his "objects... of pure thought." Do they *have* objective realities? I think not. *Are* they objective realities? He finds he cannot single out minds, bodies, causes, or other relations, but is aware of pure generic goodness.

The problem Hume raises about deriving values from facts is not a real problem if we start from Continental phenomenology. For there we can find that the fact of courage and the value of courage are distinct only in reason from each other, even if we reject the Platonic theory of forms. Hume cannot even distinguish the fact from the value of a pleasure or a pain! Yet we all know that a pleasure is a kind of good, and a pain is a kind of evil.

Likewise, every ordinary person can see a brick smash a window. When Curt J. Ducasse rightly says that we can see a brick smash a window (Ducasse 1968: 6, 11; see 26), he not only rejects Hume's eliminative analysis of cause, but he also implicitly rejects Hume's eliminative analysis of bodies as mere bundles of sense-impressions. On metaphysical ecumenicism, we accept Hume's analyses as limited parsings. But our own realist analysis accords far better with the phenomenology of ordinary life, and is in fact implicitly the ordinary phenomenology of the ordinary person. And we admit far more than that, such as quanta as objects of thought.

Hume's problem affects not just his metaphysics and his ethics, but his epistemology as well. For there cannot be a sense-impression of a probability or likelihood, any more than there can be a sense-impression of a cause or of a value. Nor can there be a sense-impression of a reason to believe, or of any reason at all. The theory of seeming would be literally unintelligible to Hume! And so would Keynes' and Russell's logicist theories of probability, which are distinct only in reason from the theory of seeming.

On our theory of via antiqua qualified objects, Hume's

problem vanishes. On our theory, we can perceive and think about what ordinary people ordinarily perceive and think about, and far more. Hume's problem of deriving values from facts vanishes as well. We can derive the value of courage from the fact of courage, and even vice versa. This adds a deeper and unintended poignance to Hume's famous admission that even in his own ordinary life, when he stops doing philosophy, all his philosophical problems seem to vanish. For they exist only in *his* philosophy (and in other via moderna philosophies). They do not exist in *our* philosophy. For our philosophy is via antiqua. It *captures* ordinary life, and far more. Thus his problems vanish *within* our philosophy. Thus *we* need not stop doing philosophy for Hume's problems to vanish. For they have already vanished. More precisely, they do not arise.

Hume does admit distinctions of reason (Hume 1973 / 1740: 695). But he does not admit them between facts and values the way we do, nor between formal realities and objective realities at all. I suggest that the relation between the fact and the value of courage in a Platonic form in itself is much like the relation between the formal reality and the objective reality in a via antiqua object of perception or thought, with the fact corresponding to the formal reality and the value corresponding to the objective reality. If so, then there will be a deeper and more general underlying universal relation, which might be called "x is the 'aspiration' of y" in some generic sense, where a value motivationally 'aspires' to be instantiated in reality, and an objective reality ontologically 'aspires' to "be" an object in itself. This in turn resembles Aristotle's notion of final or teleological cause, where an acorn in some sense 'aspires' to be a tree, or Phidias consciously aspires to sculpt a statue. My analogical suggestion is that fact is *at least somewhat* to value as formal reality is to objective reality, and is *at least somewhat* as efficient, formal, and material cause are to final cause. The underlying relation they all have in common, which I just called 'aspiring', might also be called 'going outside of itself', 'directionality', 'intentionality' (not necessarily purposive or even cognitive intention in the case of acorns's becoming oaks, but more like Schopenhauer's unconscious will to live), or to use Hegel's term, "aufheben" (sublation or sublimation) (Kaufmann 1966 / 1965: 180–182). And what could be more ecumenical than an underlying generic relation of 'aspiration' that is modally distinct from and the foundation in reality of its three (or more) species?

I agree that this underlying generic relation is very obscure and hard to discern. But Findlay is right that Hegel's "most obscure, botched utterances are often worth many of the lucidities of modern philosophers" (Findlay 1969: xi), and I hope that applies here as well. May others find a better way to describe the generic relation I have in mind and am trying to articulate. But it may well

be that the 'inner purposiveness' or 'pointing beyond itself' of an acorn that Aristotle, Kant, Hegel, and many others call final cause (Hegel 2015 / 1830: § 204) is a logically primitive relation whose existence "may in a sense be irrefutable" (Kripke 1982: 51). And whether final cause can be described or not, surely Heisenberg and Bohr are right to extend the concept of complementary description, from wave descriptions and particle descriptions in quantum physics, to efficient cause and final cause, as being complementary descriptions of reality without admitting both of which we would not fully understand the real order. Once again, see Heisenberg (2007 / 1958: 76–82, and especially P.S. (post script) 23–24; 1972 / 1971: ch. 9, especially pp. 91–92).

At their best, ontology and metaphysics are not speculative, but intuitive *a priori* discernments of things, however weak or poor our intuitive powers may be. In philosophy, we may be in the coal bin at midnight, but at least we can see that much. And the present book suggests we can make out more than that. Even Kant discerns a little about his unknowable things in themselves. And Hegel goes so far as to find distinct only in reason, if not strictly identify, the rational and the real.

Since this is not primarily a scholarly book, it might be best to say I am discussing neo-Hume, and not Hume himself. But I think I come close enough. And it is a tribute to Hume's depth and greatness that he serves as such a great foil to the tradition. For only a great philosopher can make great philosophical mistakes seem so plausible for so long, or even arrive at the depth where great mistakes can be made.

Four Objections to Ethical Realism

One might object to the containment and dependence arguments in ethics in four related ontological / metaphysical / semantic ways. I shall defer my replies until all four objections are presented. This is the main extension of my long discussion of these arguments in chapter 3.

First, one might object that ethical talk does not consist of true or false assertions about the real order, and therefore must be *some other kind of talk*, such as emotivist or persuasive talk. Thus there are no 'value-objects' there to contain or depend on, or to be contained by or depended on by, any factual objects. Or one might claim with Hume that morality in particular and ethics in general are essentially motivational in a way that merely factual objects are not and cannot be. Thus, the objection concludes, the ontological locus of the essential motivational or activational *aspect* of morality can only be in moral talk (moral nominalism), moral

thought (moral conceptualism), moral emotions (emotivism), or moral persuasion (persuasionism), and not in any moral facts, such as the fact of courage (moral realism). There are no facts about values or obligations that truths or falsehoods can be about, since values and obligations are not objects at all, not even in our wide sense of "object," not to mention our wide sense of "fact."

Second, one might reject the *correspondence theory of truth*, either in general or in ethics in particular. Here the idea is that even if ethical statements or judgments are true or false, they are not *about* anything real. Thus for ethics, we need to admit another theory of truth, perhaps a "motivational coherence" theory of truth, where ethical truths 'motivationally cohere' with factual truths about pleasure and pain, or have some other relation to facts, such as emotive or persuasional. Thus we can and must admit a 'mixed' theory of truth: a correspondence theory of truth for facts, and a 'motivational coherence' theory (or other theory) of truth for ethics.

The third and deepest objection underlies the first two. It is that there is *no such thing as ethical reality*, no such thing as ethical fact. There is nothing there to be talked about in the first place. That would moot the question whether the correspondence theory of truth is correct for values. The objector can say that even if the correspondence theory is *true* for all *true or false* talk, since such talk is always about real things, the theory does not *apply* to ethical talk, since there are no ethical real things for it to be about, hence no ethical truths or falsehoods. Thus it is really this third and deepest objection that implies that ethical talk must be some kind of talk other than true or false talk about ethical reality. For ethical talk is after all *some* kind (or family of kinds) of talk.

Fourth, nor are values somehow *transcendent* of the real or factual world, in some noumenal world of their own, perhaps *á la* Wittgenstein's *Tractatus*, if we so interpret that work. The objector might then hold that the correspondence theory of truth applies only to the real or factual world, meaning the world of what I called 'factual facts' earlier, and not to any transcendental ethical values.

Along the lines of this fourth objection, I myself suggested analogizing talk of "good" or "ought" to Frege (1970e / 1892: 44–51)'s famous problem of the concept *horse*, where the term "the concept *horse*" cannot refer to or denote the concept *horse* because the term is logically complete, but the concept is logically incomplete. I suggested that in like manner, ethical terms cannot refer to or denote anything in the factual world. I said:

> Value, beauty, causation, God, and the thinking subject are not even minimally identifiable as denotable entities. I may identify a thing and fully

> describe it, and still ask is it good, beautiful, or causally efficient. I cannot identify myself as an object of introspection, and who has seen God?.... Wittgenstein was right that they are transcendental, at least so far as the denotable world is concerned. But we have seen that even the daily workings of language cannot be ontologically understood by means of denotation alone. If these things can in any sense still be distinguished from each other and recognized again, and if they can be put in one-one correspondence *salva veritate* with what can be denoted, then our account of representation applies to them. Perhaps those who found "that the sense of life became clear to them" [T 6.521] did so by ceasing their search for denotable entities, and by letting things present themselves in their own way. (my 1982: 14, my emphasis, cites omitted)FN5-1

Ramsey famously criticizes this whole line of thinking by saying "what we can't say we can't say, and we can't whistle it either" (Ramsey 1954 / 1931: 238). Ramsey is criticizing Wittgenstein's *Tractatus*, which I believe was deeply influenced by Frege's concept *horse* on this very point. Ramsey is the chief proponent of this fourth objection.

Those are the four objections to ethical realism which I wish to discuss. I proceed to my replies, beginning with Ramsey. That way it will be easier to reply to all of them at once.

Ramsey is rarely, if ever, criticized. I shall first argue for a limit of scope to his criticism, and then offer four criticisms of him.

The limit of scope is that even if Ramsey's criticism applies to its intended target, namely Wittgenstein's 'mystical' view that there are some things we cannot say, but "must pass over in silence" (T 7), it fails to apply to views like Frege's logically paradoxical but decidedly nonmystical problem of the concept *horse*. For while we cannot refer to the concept *horse* by means of the definite article "the," since the article always refers to a complete object and concepts are always incomplete in the sense of including at least one variable as an argument-place, the concept *horse* is nonetheless a well-defined function in Frege's notation. I need not reach the question of whether Ramsey's criticism also fails to apply to my (1982) view as quoted just above. For five years later, I introduced qualified objects theory in my (1987). And in my (1987), goodness, beauty, cause, my self (mind), and God (who *may* exist on my agnosticism), *are* objects in the wide sense. Thus we *can* speak of them in language. We need not 'pass over

them in silence' at all. For linguistic terms for them *have* qualified objects as their direct senses, referents, and denotations. Many of those terms even seem to have objects in themselves as their *indirect* senses, referents, and denotations, though that is not needed for the terms to express a direct sense or have a direct referent or denotation. Thus we 'say' them all; we do not 'whistle' them. And the reason is that we have a correct phenomenology. Our phenomenology even includes value-objects. For they cannot be nothing, since they are all different from each other.

I proceed to my four criticisms of Ramsey.

First, so-called "transcendental" objects are not and cannot be nothing, since they are all different from each other. Thus they are objects in the wide sense, just like all other objects. Thus the term "transcendental" merely means the objects in question are not some *other* kind of objects, namely the kind of objects they are said to "transcend." Thus if Wittgenstein says values 'transcend' facts, we logically can invert that, i.e., flip it around and say that facts 'transcend' values. (Compare: Is philosophy the highest study above all others, or is it the deepest study underlying all others?) Kant's whole transcendental philosophy overlooks that inversion. For Kant overlooks that if noumena 'transcend' phenomena, then phenomena 'transcend' noumena right back. I imagine that is because Kant does not give objects of thought (noumena) equal *cognitive* status with objects of perception (phenomena), nor give them equal *ontological* status with objects of perception as qualified objects. It is also evidence that Kant's ideas are not even via antiqua (the Kant scholars are divided on this point). For if all of Kant's ideas were via antiqua, then surely noumena would be just as cognitively intelligible as phenomena. Recall Kenny (1980: 34–35); see also Wiggins (1980: 4–5).

Second, if all the scholars are right who say Wittgenstein never says what his objects *are*, then how can we tell what is *beyond* his objects? That is, how can we tell what for him can only be 'whistled' or shown, not said? I myself find indications in the *Tractatus* as to what Wittgenstein thinks many kinds of his objects are. But until it is settled what his objects are, it cannot be settled what is beyond them. This is another scope criticism, in that we cannot say just what Ramsey's criticism applies to in Wittgenstein.

Third, there is a big difference between *showing* and *whistling*. In a perfectly ordinary sense, all sorts of things can be shown but not said (described) in language. The later Wittgenstein is a fine guide to this. Again, he asks us to describe "how a clarinet sounds" (PI § 78). It cannot be said (described). But it can be heard ("shown"). And likewise, the sound of a whistle cannot be said (described), but can be heard (shown). Thus Ramsey could not have picked a worse analogy by which to criticize Wittgenstein.

For whistling is a perfect illustration of Wittgenstein's *successfully* showing something that we cannot say. The *reason* why we cannot say (describe) these things is different: too much concrete richness in physical whistling, too much abstract simplicity in imperceptible ante rem values. But what logical difference would that make?

Is there any ordinary adult who cannot tell the difference between the sound of a whistle and a clarinet, nor understand the difference between courage and wisdom? To tell the difference, is a description or verbal definition always necessary or even always possible? Will not showing examples suffice, and sometimes be the only way? Perhaps Mansfield's judge could have shown examples!

The fourth criticism is an ancient criticism of analogy, both as argument and as illumination. Ramsey's analogy is that of literal whistling to literal ostending or showing. And the criticism is that except for paradigmatic analogies, such as cardinal and scarlet as literally being kinds of red, every analogy limps (*omnis analogia claudicat*). And this applies to Ramsey's whistle. For whistling is no paradigm of showing. For whistling can completely fail to show the object whistled at. For in Keith Donnellan's terms, the proper analogy is not of whistling to attributive description, but to referential description. And that is precisely because whistling is not describing, but trying to point out. In terms of Frege's threefold distinction among explication, explanation, and definition, whistles can only be explications (hints, suggestions, ostensions). Whistles can succeed in point out without providing any description for this very reason. But they can also totally fail to point out. Here too the later Wittgenstein is a fine guide. For he notes that whatever we point to (or whistle at) is multiply aspected. Am I pointing to a chess board, or to a schema of black and white squares (PI § 47)?

While whistling may be a paradigmatic kind of nonfactual communication, it is by no means a paradigmatic kind of *verbal* nonfactual communication, which is what value-talk is if value-objects are not factual objects. In fact, whistling is normally not verbal *at all*, though it can be used as verbal *code*, as in Morse code. And Paul Revere could have *coded* one whistle if the British are coming by land, two whistles if by sea. Whistling can *mimic* or *suggest* all sort of things in charades or elsewhere. And *Wikipedia* says there are over 80 whistled languages. But German and English are not among them. And Ramsey is comparing *nonlinguistic whistling by German or English speakers* to *value-talk in German or English*. Thus his analogy is hopelessly too far-fetched *content-wise*. For there whistling *has no content at all*. The analogy looks plausible only because Wittgenstein first paints himself into the corner of denying that value-talk is about any objects or facts, and then goes on anyway to talk about what "transcends" what we can talk about. That first denial is the real problem. For *his* objects and

facts are not the only ones. And that we are simply *presented* with value-objects and facts "may in a sense be irrefutable" (Kripke 1982: 51). This kills Wittgenstein and Ramsey alike. Ramsey is not criticizing Wittgenstein so much as he is being led down the garden path by Wittgenstein's own initial denial. And that is why so many people uncritically accepted Ramsey. He would have been right!

Earlier in this chapter, I argued that factual objects and value-objects are different but distinct only in reason. The fact of courage and the value of courage logically cannot exist apart from each other. For neither can be what it is without the other. Thus the containment and dependence arguments show they contain and depend on each other. And that is my reply to all four objections.

Factual objects in themselves and value-objects in themselves both have the same three main kinds of reality.

First, both kinds of objects are objects in the wide sense of not being nothing. For they are all different, so that at most one could be nothing. And there is in principle no way to tell which one is nothing. Thus by parity of reason, all of them exist in the sense of not being nothing.

Second, both are mind-independently real per Moore's act-object theory of cognition, and also per Frege's, Russell's and Wittgenstein's private language arguments. Private language arguments are sound in their ontological parsings, even though they are distinct only in reason from the traditional mental language argument. We accept both sorts of argument as sound, and admit the entities that both conclude to as ontologically overlapping. Metaphysical ecumenicism is full of such distinctions in reason.

Third, both kinds of objects are not only not nothing and logically mind-independent, but they are also logically capable of existing even if per impossibile, minds logically could not exist. And on the face of it, there are both values in themselves and facts in themselves both in re and ante rem. Achilles cannot in fact have courage in the ordinary sense of the word if his courage is not a value in the ordinary sense of the word. And is that not just a very accurate metaphysical articulation of ordinary common sense? Recall the Smith-Jones discussions earlier. The value of Achilles' own courage cannot exist apart from his own mind or its logical possibility, but it exists apart from all other minds and their logical possibility. And *no* object and its logical constituents can exist apart from each other or their own logical possibility.

Implicitly if not explicitly, Hume holds that facts and values are really distinct because they are categorially different: values are essentially motivational and facts are not. This is a non sequitur. For even if Hume is right that facts and values are categorially different, it does not follow that they are really distinct. For many objects are categorially different but distinct only in

reason. Indeed, all objects that are distinct only in reason are at least different objects. Thus his premiss is simply irrelevant to fact-value ethical ecumenicism. For any categorial difference between facts and values would be simply *subsumed* into fact-value ethical ecumenicism as an essential part of the very distinction in reason between facts and values.

Hume is wrong in any case that only sentiments are or can be motivating. For as John Stuart Mill says, the sole evidence it is possible to produce that anything is desirable is that people do actually desire it" (Mill 1985 / 1861: 45). On the face of it, Mill's point is not merely evidentiary. He predicates the term "possible" not of desire, but production of evidence. But surely he means to say that anything desired is desirable. And Butchvarov agrees with Joseph Butler that we can want or desire all sorts of objects (Butchvarov 1989: 85–86, 93, especially 124). In fact, Lewis White Beck says, "In all action there is some object of desire" (Beck 1959: xviii–xix). And this includes desires to act morally in moral acts. Thus it is not only *sentiments* that can motivate. We are also motivated by *wants* and *desires*. In fact, Kant says pure moral duty, in the *absence* of any sentiments, is *more* motivating than any sentiment could be, at least for those in whom moral reason is well-developed. Kant says, "For the pure conception of duty and of the moral law generally, with no admixture of empirical inducements, has an influence on the human heart so much more powerful than all other incentives..." (Kant 1959 / 1798: 27). This does not really contradict our 'no emotions or feelings, no values' thesis precisely because "In all action there is some object of desire" (Beck 1959: xviii–xix). Thus acting purely from duty includes the desire to act purely from duty.

For Kant, acting merely because of a moral sentiment, or even merely because of a desire to act morally, falls short of acting because of moral duty. For that requires acting because of a universal moral obligation that applies to all logically possible rational (and for us sentient) beings. Thus the distinction is modal (one-sided). For all acts from moral duty include a moral sentiment and a desire to act, but not all acts from moral sentiments or desires to act are acts from moral duty, that is, universalized by the agent into a moral duty for all possible persons. And objects that are modally distinct are different objects. An essential difference between these two kinds of objects is that sentiments and desires are empirical and logically contingent, while moral duty is *a priori* and necessary. See Kant (1959 /1798: sects. 1–2 generally, especially pp. 5–7, 27–28, 39–41). How can an *a priori* and necessary moral duty include an empirical and logically contingent moral sentiment or desire as a logical constituent, so as to satisfy our 'no emotions or feelings, no values or obligations' thesis? The

same ways any ante rem value can: indirectly via any instantiations, and also per impossibile, i.e. hypothetically, if they *were* in re.

This is fatal to Hume. For Hume's sentiments are empirical and logically contingent. They can only be logical *constituents* of moral duties at most. By themselves, they cannot be the ontological *foundation* of moral duty, and can only be modally distinct from it.

It is also fatal to Schopenhauer's view that the sentiment of compassion is the basis of morality. In fact, Kant goes *precisely* against any good sentiment as the *logical* basis of morality, though he admits it is often the *causal* basis for ordinary well-meaning people. See Kant (1959 /1798: sects. 1–2, especially pp. 39–41 giving four examples of people in conflict between moral duty and other aims or desires) and Beck (1959: xviii–xix). Even if we reject Kant's theory of morality as being what we can and do will to be a universal duty, Kant does well to distinguish duty from sentiment, and to hold that duty is clearest when it goes *against* sentiment. But even then acting from duty logically includes the desire to do so.

Again, our thesis is 'no emotions or feelings, no values'. And that includes purely moral feelings that we ought to act purely because of a universal moral duty. In fact, we must admit Butlerian purely moral wants or desires to do our universal moral duty as necessary concomitants (logical constituents) of our acts of duty. For we must *want* to do our duty *because* it is right. And we *feel* all such wants and desires. But moral wants or desires to act purely because it is our universal moral duty are nothing like Hume's sentiments and Schopenhauer's compassion. For the former are logically necessary to moral acts, while the latter are not. Quite the opposite, according to Kant! See Kant (1959 /1798: sects. 1–2). Or can there be a sentiment or compassion to act purely out of duty?

Butchvarov accepts Kant's view that moral motivation is not logically based on moral sentiment as such: "Let us call *virtuous* an action that is motivated solely or at least sufficiently by the agent's belief that the action is right or at least likely to be right" (Butchvarov 1989: 24, his italic emphasis, see 27–28, 43–52, 86, 94, 157–158, 160). But *some* sentiment, emotion, feeling, want, and/or desire is a logical constituent of every act. In an act out of pure duty, it is a desire to act purely out of duty.

This concludes my reply to the four ontological / metaphysical / semantic objections to ethical realism. I proceed to discuss three logical / dialectical objections to deriving values from facts.

Three Objections to Deriving Values from Facts

The first two objections are contemporary and are closely related, and the third objection is based on ancient skepticism.

First, one might object that any logical (meaning *a priori*) derivation of value from fact violates the containment argument for metaphysical ecumenicism. For a logical derivation implies a logical containment, and a fact that logically contains a value is not wholly factual. Thus either the derivation of value from fact, or the containment argument, or both, must be rejected. For they are logically incompatible.

My reply that logical containment is not always ontological containment. For it is containment of truth-grounds. See chapter 3. Values are ontologically contained only in value-facts. Values that are logically contained in factual facts are different from, though distinct only in reason from, some ontological constituents of those facts. For example, the fact and the value of courage are different but distinct only in reason. The value of Achilles' courage is ontologically contained in the value-fact that Achilles's courage has value, but is only logically contained in the factual fact that Achilles has courage. Thus there is not, so to speak, a little bit or piece of value contaminating the factual purity of the factual fact, as if it were a drop of oil contaminating a bucket of water. The two facts themselves are different but distinct only in reason. Specifically, they are modally distinct. The value-fact ontologically contains all the logical constituents of the factual fact, and also ontologically contains a value-object. The containment argument does show the ontological existence of all the logical parsings of an ordinary fact, but we must be clear on which ordinary fact we are starting from. For more on logical containment, see my (2021a / 2012: chs. 1–5; 2023 / 1999: subject index, p. 637).

Second, one might object that even the mere *logical* containment and dependence of values on facts, or for that matter of facts on values, is enough to destroy the distinction between facts and values. For how can a fact be a purely factual fact if it even just *logically* contains and depends on the value we derive from it? For the whole idea of the correspondence theory of truth is that there must be something real out there in the world that corresponds to the containment of truth-values. That is, the truth or falsehood of a statement must reflect and be due to a difference in the real world, much as a mirror reflects things. And that is all about the truth-grounds, which we therefore wrongly distinguished from ontology in our reply to the first objection.

My reply is that except for inverting me, the man I see in the mirror faithfully reflects me, but the mirror image is not literally me or a part of me. It is just a reflection of me. Likewise, truth-values are abstract semantic objects that are not literal ontological constituents of the facts that statements are about. For example, the truth-value of "Milo is a cat," *truth*, is neither Milo nor the property of being a cat. By parity of reason, even truth-

values of statements *about* truth-values are not literally parts of the lower-level truth-values the statements are about. The most that can (and must) be said is that the different levels of truth-values are distinct only in reason. For example, the truth-value of "Truth is one of the two truth-values" is a higher-level truth-value than the truth-value names in the statement. To be sure, the mirror-truth analogy limps in that it is logically contingent whether any physical objects reflect my image. But that is as logically irrelevant as the logically contingent fact that mirrors invert my image.

The third objection is the ancient skeptical one that *any* logically valid inference is empty and circular. For the truth of the premisses contains and depends on the truth of the conclusion. For in a valid argument, the truth-grounds of the premisses must contain, in some sense, the truth-grounds of the conclusion. This can even be diagrammed in a logic diagram. For in diagramming the premisses of a logically valid argument, the conclusion is already diagrammed. Thus no argument can ever prove anything. For its logical validity presupposes that the conclusion is true. Thus the dilemma is that the very rules of logical inference are useless for inferring anything. Again, truth-tables are logic diagrams.

My reply is perhaps as ancient as the objection. In effect, the ancient skeptics overlooked that this dilemma is essentially the same as the paradox of logical analysis. For a logical analysis consists of two logically valid inferences: one from the analysans to the analysandum, and one from the analysandum to the analysans. Recall that the paradox of analysis is that in some sense the analysans and analysandum must be the same, in order to be an analysis at all; and yet in some sense they must also be different, if the analysis is to be factually informative. In our theory of objects, the solution is that the analysans and analysandum are different qualified objects that "are" the same object in itself. But on the containment and dependence arguments, even the objects in themselves that the analysans and analysandum qualified objects "are" are different but distinct only in reason. Only the foundation in reality is the same, and that is the analysans, or at least the portion of reality that both describe. And they are really one in that they *are* the same. In fact, that is a sense of real indivisibility. But not every factually informative identity is a logical analysis. The Morning Star and the Evening Star are qualified objects that "are" the same planet, Venus. But that is a logically contingent astronomical fact. For more on this ancient skeptical objection, see my (2021a / 2012: 97–98, 130–131; 2023 / 1999: 285–288).

Speaking of ancient skepticism, note that the self-defeating nature of radical relativity in ontology, of radical skepticism in epistemology, and of radical skepticism on ethical realism are all much the same. In fact, the third is merely an instance of the first.

Just as it is self-defeating to say it is *really* the case that nothing is real, or that we *know* that we know nothing, so it is to say that we *ought* to hold that there are no obligations, or that it is *best* to hold that there are no values in reality. This self-defeating nature is just one of the three pratfalls of radical relativity; see my (2003 / 1996: 20–21) for the other two. Of course, values *for me* are relative *to me*, but are not radically relative in the ontological sense. For they have all three main kinds of being or reality, as explained a few paragraphs ago. Likewise for all relative objects. Many are not even relative to me, but to something else. Indeed, the better term is not relative, but relational. Relations are totally mind-independent, just like properties. Properties are monadic relations, and relations are polyadic properties. Both are Fregean functions in themselves.

Two Relevant Containment Objections

The first relevant containment objection is really a further discussion of the second logical / dialectical objection just above, so we will be going over the same ground a little differently and a bit more fully. It can be stated both generally and in its specific application to ethics. Its general statement has been known since ancient times, and its specific application is just its logical instantiation to ethics. I shall discuss its general statement first, then its specific application to ethics. Either way, the derivation of value from fact is assumed to be logically valid, and the objection is that the derivation is empty and proves nothing, since it is both circular and question-begging. Again, these two fallacies are not exactly the same per Walton and Woods (Walton 1982: 77–100); but we can disregard the difference here. The general discussion here is an extension of the discussion of relevant containment in chapter 3.

Again, the general version of the objection is found in the ancient skeptics. I will state it in two ways, a containment way and a dependence way. The first is that the conclusion of a logically valid argument is always somehow or in some sense contained in the premisses. In general, the containment can even be diagrammed in a logic diagram. Therefore all valid arguments, as such, are circular and beg the question. Second, the conjoined truth of all the premisses in a logically valid argument logically depends on the truth of the conclusion. If the argument is valid and its conclusion is false, then at least one premiss must be false. Therefore once again, all valid arguments are circular and beg the question. Of course, these two ways of stating the general objection are distinct only in reason, since they are logically equivalent. This is even aside from the relevant containment theory of logical validity, be it

extensional truth-ground, formal relevantist, or synthetic *a priori*.

The specific version of the objection concerns deriving values from facts. The objection is that I can obtain only a Pyrrhic self-defeating victory over Hume at best. For even if I succeed in deriving a value from a fact, or an "ought" from an "is," then in virtue of that very fact, the fact logically contains the value. Thus any valid derivation of value from fact is circular and begs the question. Again, this is even aside from the relevant containment theory of logical validity. This is not the same as the objection that the containment makes the fact impurely factual because it contains a value, but it implies that objection.

The objector might add that even if a derivation of value from fact is not formal or analytic, but synthetic *a priori*, there is still a logical containment. For example, it is a synthetic *a priori* truth that whatever is red has color. And surely part of what it is to be red is to have color, even if red cannot be logically analyzed as having any logical constituents other than color and, so to speak, red itself. (Recall that color is a determinable and red is one of its determinates.) I myself distinguish several senses of the term "logical containment" in the wide *a priori* sense of logic. And I find that synthetic *a priori* inferences involve logical containment in what I call my third kind of partial relevance entailment. That is, here we do not have *fully* formal or analytic containment in the sense that a species contains by definition a genus and a difference, but we do have logical containment precisely in the sense in which a determinate (red) logically contains its determinable (color). See my (2023 / 2015: 235, 238–239, 560–61).

Another way to state the first objection is that since the premisses of a valid argument logically contain the conclusion, and since values are not facts, the premisses of a logically valid argument from facts to values logically cannot logically contain the conclusion; and that is why such an argument cannot be valid.

More deeply, the conclusion cannot be factually true about what is; it can only be evaluatively true about what ought to be. To be sure, some objects that are the case *also* intrinsically ought to be the case, and the difference between their existence and value is a distinction in reason, for example the fact and the value of doing one's duty. But then the argument is circular and begs the question.

My reply is the same as my reply to the second logical / dialectical objection. Truth-grounds are not ontological grounds. They are different, though distinct only in reason. A statement's truth-ground is the truth-value, truth; and truth-values are abstract semantic objects that are not literal ontological constituents of the facts that statements are about. The fact a statement is ostensibly about is not its truth-*ground*, but its truth-*maker*. If "The cat is on the mat" is true, then the fact that the cat is on the mat makes it

true. If the cat is not on the mat, then the fact that it is not makes the statement false. To be sure, we can *call* factual grounds truth-grounds, as I often do. But then we really mean truth-maker. The correspondence theory of truth is that a statement is true if and only if the fact it describes, i.e., its truth-maker, is the case. The truth-*ground*, i.e., the truth-*value* we call *truth*, belongs not to that fact, but if anything to the proposition the statement asserts, which is for us a qualified fact that may or may not "be" the lower-level fact that is the statement's truth-*maker*. That is my best articulation of the correspondence theory of truth. No truth-makers, no truth-grounds. No truth-grounds, no truth. These are distinct in reason.

Thus logical containment is still misunderstood even in the present, subtler objection. Again, the value of Achilles' courage is ontologically contained in the value-fact that Achilles's courage has value, but is only logically contained in the factual fact that Achilles has courage. The statement "Achilles has courage" does not describe, denote, or refer to the *value* of Achilles' courage, either directly or indirectly. The statement directly expresses / describes / refers to the qualified fact that Achilles has courage. This qualified fact has only three ontological constituents: qualified Achilles, qualified courage, and qualified having. Qualified value is not one of them. And if the statement is true, it is indirectly about the fact in itself that the qualified fact "is." And that fact in itself has only three ontological constituents: Achilles in himself, courage in itself, and having in itself. Value in itself is not one of them. Contrast the logically equivalent statement "Achilles has courage, and his courage has value." That statement directly refers to qualified value, and indirectly refers to value in itself if the statement is true. The two statements are different in their direct and indirect referents, but distinct only in reason. Qualified value is an ontological constituent of the proposition expressed by the second statement, but not of the proposition expressed by the first. It is not even expressed! And if the two statements are true, then value in itself is an ontological constituent of the fact in itself indirectly described by the second statement, but not of the fact in itself indirectly described by the first. In the first statement, value in itself is not even referred to! The two statements express propositions and indirectly refer to facts in themselves that are different but distinct only in reason. More precisely, the two facts in themselves are formally distinct with a foundation in reality in the factual fact. In another way, we may say that both facts in themselves have a foundation in reality in the same portion of reality, namely Achilles, or more precisely, his courage in fact, or still more precisely, his factual courage in re. That the fact is the foundation in reality for the value may be called foundational containment. But that is only formal containment, not ontological.

The reason we can discern that the two facts in themselves are different is phenomenological. As we saw in chapter 1, there is intentionality or aboutness in our cognition or singling out of facts. It can be direct for qualified facts, but is always indirect for facts in themselves. But in both cases, it requires discerning or identifying *some* parsing of the fact's logical constituents. That is our principle of presentation (our version of Russell's principle of acquaintance). This does not affect the reality of qualified facts or the total reality of facts in themselves in the least. Compare our phenomenological total realism to the types of realism discussed in Chisholm (1960).

In simplest terms, the objection commits the fallacy of non sequitur. If A logically implies B, i.e., if B can be logically derived from A, it does not follow that B is an ontological constituent of A. For B can be a merely logical constituent of A, in that B is different from but distinct only in reason from some ontological constituent of A. In short, the objection overlooks distinctions in reason! Here A is the fact of Achilles' courage and B is the value of his courage.

The second relevant containment objection has a general version and a specific version as well.

The general objection is this: How can there be *mutual* ontological containment, or even just mutual logical containment? If A contains B, how can B contain A? If a jar contains marbles, how can the marbles contain the jar? If a bucket contains sand, how can the sand contain the bucket?

The specific objection is: How can there be mutual ontological containment, or even just mutual logical containment, of a fact and a value? And mutual containment is what we have here according to my account. For I hold that the courage portion of reality, the fact of courage, and the value of courage all logically imply each other in the wide *a priori* sense.

My reply is that this is confused. Again, terms can acquire new uses that are both similar to the old uses and perfectly valid (intelligible) in their own right. We can do that by giving examples that define them ostensively, or by describing or explaining the new meaning (Price 1969: 11–12). Indeed, it is an old point that old terms can acquire new uses. Descartes says, "It does not at all matter whether [a] term... is proper..., so long as it is serviceable" (Descartes 1970 / 1642: 76). Again, the terms "logical containment" and "logical dependence" are very easily introduced and explained in terms of the notion of logical implication.

Water can be both in a glass and in the ocean outside the glass. But the same *portion* of water cannot be both inside and outside the glass at the same time, unless the glass container is a Klein bottle. And then talk of inside and outside would seem to be mere semantics. Likewise, *air* can be both in a building and in the earth's atmosphere outside the building, but the same *portion* of air

cannot be both inside and outside the building at the same time, unless it is a Klein building. And again, that seems mere semantics.

The objector might ask, If there were a logic diagram of mutual logical containment, would it not be like an Escher drawing? Such drawings are illusions. But there really are such drawings. And there really are Klein bottles, and everything in the space-time world is both inside and outside each of them, including all other Klein bottles. The solar system both contains and is contained by all Klein bottles, and likewise for the Milky Way galaxy. It is rather amazing, since most Klein bottles are smaller than a bread box!

My reply is: Escher drawings are genuine physical objects, but visual illusions; Klein bottles are genuine physical objects, but talk of what is inside or outside them is a semantic illusion; but logical containment is neither physical containment nor illusory, but abstract and veridical. Logical containment can be *represented* by physical logic diagrams. But logic diagrams are not like Escher drawings or Klein bottles. For valid logic diagrams are plain and straightforward, and there is no illusion about them. Granted, there is often discussion of how to draw and interpret them, and a logical paradox may even be said to be a logical illusion; but that is not the same thing. For the containment is not of marbles, sand, water, or air, but of truth-grounds, and often of real, factual truth-makers.

A paper truth-table representatively contains all the truth-possibilities of a given statement. The truth-grounds of a statement are the truth-possibilities on which it is true. A logical truth is true on all truth-possibilities. The mutual logical containment of logically equivalent statements, and of the conclusion of a formally valid argument in its premisses, is just truth-ground containment. The mutual truth-ground containment of logically equivalent statements is simply *having the same truth-grounds*. That is the sense in which they logically contain each other. See Wittgenstein (T 5.101–5.122). For us, talk of truth-possibilities is just talk.

One might object that the mutual logical containment of the fact, the value, and the portion of reality of Achilles' courage is synthetic *a priori*. Thus the truth-tables in Wittgenstein do not and cannot show that triple *a priori* logical containment.

My reply is that the mutual logical implication and logical containment of facts and values is indeed synthetic *a priori*.

Talk of *either* kind of logical containment, both analytic (formal or reducible to formal) *a priori* and synthetic *a priori* (intuitive), is not talk of ordinary physical or mental parts and wholes, but has developed an intelligible logical use in its own right. Again, see (Price 1969: 11–12); Descartes (1970 / 1642: 76). And while the rule that if A contains B, then B does not contain A applies to physical or mental containment, it does not apply to the

logical containment of truth-grounds in either analytic *a priori* inference or in synthetic *a priori* inference. Escher drawings and Klein bottles might seem to be exceptions to the physical rule. But again, they, or at least perception or talk of them, involve illusions. Thus they are red herrings (logical distractors) here.

There are at least two things that both formal and intuitive truth-ground relevant containment entailment have in common.

First, modern classical (Frege-Russell style) truth-ground logic admits the two paradoxes of material implication as valid. The first is that from a falsehood all things follow, and the second is that a truth follows from all things. Modern classical logic also implicitly admits the two paradoxes of strict implication as valid. The first is that from an impossibility all things follow, and the second is that a necessity follows from all things). These are implicitly admitted simply because an impossibility is false and a necessity is true. Thus they are instances of the material paradoxes.

In all valid truth-ground implications, there is truth-ground relevant containment in the negative sense that there is no line of the truth-table, and no area of a geometrical logic diagram, in which the premiss is true and the conclusion false. For in any valid truth-ground implication, the lines and columns of the truth-table, and the areas of a geometrical logic diagram, represent all the truth-possibilities. And the implication is valid if and only if on every truth-possibility, either the premiss is false, or the conclusion is true, or both. That is, there is no truth-possibility that logically contains the premisses as true and the conclusion as false. Truth-ground containment is literally visible in the truth-table or other logic diagram representation of it; and all the truth-possibilities are visibly contained in the diagram as a whole. See my (2023 / 2015: 267–272; 2021a / 2012: 85–87).

If we are unhappy that from a logical impossibility, or even just from a falsehood, any old proposition P follows, or that from any old proposition P, all truths and even all logical necessities follow, regardless of whether there is any connection between their propositional contents, then we can impose a relevance "constraint" or "filter" on modern classical logic, requiring that the propositions be related or connected in some way beyond mere truth-ground containment, and therefore that the inference not be based merely on the falsehood or impossibility of at least one premiss, or on the truth or necessity of the conclusion, but also on their relationship.

To eliminate the paradoxes of material implication, we can impose the constraint that the proof be based on some relationship between the propositional constituents of the premisses and the propositional constituents of the conclusion: on what they are and how they are internally related in each proposition. To eliminate the paradoxes of strict implication, we can also impose a possibility

constraint which requires that it is logically possible for the premisses to be conjointly true, and logically possible for the conclusion to be false. See my (2023 / 2015: 324; 2021a / 2012: 62–64, 73–76, 85–87; see also 82, 98, 101, 109). Both constraints are well known.

I impose five relevance constraints on modern classical logic altogether: 1. It must be possible for all the premisses to be conjointly true. (This excludes purely hypothetical per impossibile arguments.) 2. All the premisses must be true. 3. The proof must be truth-functionally valid. 4. The proof must be directional. That is, the proof must move from premisses to conclusion, and not be based on the premisses alone or on the conclusion alone. (This is our relationship constraint.) 5. The proof must be indexable. See my (2023 / 2015: 324). I call these respectively the compossibility constraint, the soundness constraint, the formal deducibility constraint, the forward constraint, and the indexing constraint. See my (2021a / 2012: 73–91). These are familiar constraints on formal deductive logic. They are my constraints on modern classical logic.

Strict implication is an in re red herring (a distractor) in that it is logically contingent whether Achilles has courage. But ante rem, there is no doubt that the fact, the value, and the portion of reality of courage are internally related. For they are distinct only in reason. Here the relationship constraint on deriving value from fact is not formal or even analytic, but synthetic *a priori*.

Thus the second and deeper thing both sorts of relevant containment entailment, i.e. analytic and synthetic *a priori*, have in common is that the premisses and conclusions of valid arguments always have propositional constituents which stand in propositional relationships. Again, for us propositions are qualified facts that are logically composed of qualified objects. Thus their constituents are always qualified objects. In a valid formal arguments, the internal relations of the constituents of the premisses and the conclusion have a formal pattern. In valid synthetic *a priori* arguments, these internal relations are synthetic *a priori*. An internal relation is a relation that is logically determined by the natures of all the relata.

This completes my picture of relevance logic. Derivations of values from facts are not on the formal deductive side of the relevance house, but on the synthetic *a priori* side. What the two sides have in common is the deepest and most general kind of logical relevance: truth-ground containment.

The so-called "relevance logicians" overlook that even before we impose any relevance constraints on it, modern classical logic already has the deepest kind of relevant containment: truth-ground relevant containment. For the full story, see my (2021a / 2012) and my (2023 / 2015: ch. 9). Both analytic and synthetic *a priori* relevance are formally distinct from and have a foundation in

reality in truth-ground relevant containment entailment. Thus they are modally distinct from each other in Descartes' second sense of modal distinction. For neither logically can exist independently of truth-ground relevant containment entailment. The main thing for us is that derivations of value from fact fall on the synthetic *a priori* side of the house. And that makes them just as much truth-ground relevant containment entailments as valid formal entailments.

Fact and Value in Mysticism

There are only a few mystics, meaning persons who have attained a mystical state. But they are there in every land and time, or almost so. And at least for them, the mystical state, or something they find in the mystical state, is in some way the ultimate reality and value. Thus at least for them, it is the ultimate test of any theory of fact and value, as well as of every phenomenology, ontology, and metaphysic, and also of every theory of knowledge or value. This is so even though most mystics are not interested in theory, but only in practice. Still, a few of them are interested in the theory. Here I can only briefly sketch the basic issues for us.FN5-2

It is said both that the 'Mystical One' is supremely real and that it is a psychological delusion, and that it defies logic and even defies description, even though the mystical state is described all the time. If it is both nonrational and unreal, this negatively honors Hegel's thesis that the rational is the real. And this is why some deny such states. But if the mystical state *is* the experience of the One, then it *is* beyond all distinctions, and that would explain why it is beyond description. And that would include even describing it as real or unreal, or as logical or illogical. It also includes describing a mystical state in terms of act-object theory, as in "I am experiencing a mystical state." For the distinction between act and object is a distinction too, and would vanish in any experience of 'the One that is beyond all distinctions'. Even consciousness itself is a distinction that would vanish. For some objects are conscious, and others are not. (While pure consciousness is a valid parsing of ordinary act-object experience, deeming it a Divine Person goes beyond the containment and dependence arguments, just as disembodied minds do. See chapter 3 on disembodied minds.)

How about post-experience descriptions? If they cannot apply to the state as it is at while it occurs, what good are they?

On the bright side, the description "indescribable" applies perfectly well to *qualified* mystical states. Recall the round square!

Still, we must say something, if we are to have any theory. People often speak of mystical 'states' or 'experiences' neutrally as

not implying act-object theory. We may think of that as a kind of phenomenological bracketing or disregarding of act-object theory. And our theory of objects is as helpful as a phenomenology can be here. For while mysticism is the ultimate ontological paradox, and far deeper than Russell's very local paradox about classes, there is no problem at all about admitting *qualified* mystical states. If we already swallowed the qualified round square and the qualified Nothing (*das Nicht*), why strain at the gnat of a mystical state?

We are already more than halfway there. For we already admit the qualified round square as a logically self-contrary object of thought, and the qualified round non-round thing as a self-contradictory object of thought. Being a qualified object is a low hurdle! From there, it is but a leap over a narrow ditch to a qualified object that is both one and many, supremely real and supremely delusory, an experience that is beyond the act-object distinction, and also none of the above. Now, that is a perfectly fine qualified object! The only question is whether it "is" or can "be" an object in itself—a mystical state in itself.

Per our epistemology, that question turns on whether a qualified mystical state epistemically seems to "be" a mystical state in itself. The question seems best left to mystics, who have the experience. But everyone can weigh the indirect evidence, such as written reports of the experience, the general honesty of mystics on other topics, and so on. All this is old news in the literature.

Let us define a state as an experience minus the act-object distinction. Then experience is the genus, and states and act-object cognitions are its only two species. For they are mutually exclusive and jointly exhaustive, insofar as either the act-object distinction is there or it is not. Experience is formally distinct from states and from act-object cognitions, and is their foundation in reality. States and act-object cognitions are modally distinct in Descartes' second sense, since both logically depend on the existence of experience.

I admit a mix-and-match matrix of four kinds of possible mystical states, based on two distinctions. The first is between introvertive and extravertive mystical states. Both are experiences of the One. In the introvertive state, experience of the many objects of the ordinary world, or any other objects, is absent. In the extravertive state, the Many are experienced as illusion. Thus the introvertive state is held to be deeper than the extravertive state, since even the illusion of the Many is gone. The second distinction is between the personal One, i.e. God, and the impersonal One, often called the Divine or the Godhead. The impersonal state is held to be deeper than the personal state, by philosophical mystics such as Shankara and Ramakrishna. For the impersonal state is just the personal state minus the personality. The personal state is often held to be the deeper or even the only sort of state for theological

reasons, and the impersonal state is often rejected as heretical.FN5-3 But even the personal state is often rejected as heretical. For it implies there is no distinction between the mystic and God. For example, some hold that only Jesus can truly say "I and the Father are one" (1 *John* 10:30). And strict monotheists who reject the Trinity generally reject even that Jesus could be God.

I am an agnostic about all four kinds of states in themselves, but I am quite happy to admit all four kinds of qualified states. For me, the main thing is that the matrix is a matrix of two distinctions in reason, specifically two modal distinctions. This is very easy to see. The introvertive state is the extravertive experience minus the illusion of the Many. The impersonal state is the personal state minus the personhood of the One. Admitting that the four kinds of state in themselves are distinct only in reason is mystical ecumenicism.FN5-4 On the reality and the value of the One, see the section on the ens realissimum earlier in this chapter.

We can say more precisely now that there *can* be act-object cognitions in the *extravertive* state. It is just that there the many directly presented *qualified* objects are *illusory* appearances of the One, and *delusory* appearances of there being Many. And to the extent that I single out many qualified objects, the extravertive state is in fact not a state, but an act-object cognition. In the extravertive experience (not: state), mystics can walk about, talk to others, and even act out of compassion. But the objects of all their cognitive and volitional acts will be directly presented to them *as* illusory / delusory, and so will their qualified acts of cognition and volition.

But there cannot be even a *qualified* act-object distinction in the introvertive state in itself. For that is a distinction. Thus it could be only be (falsely) described outside the introvertive state, that is, pre- or post-experience. In fact, within the introvertive state, there is no presentation even of qualified times. There is not even a presentation of a qualified now, before or, after. For that too is a distinction. Qualified time is directly presented in the extravertive experience, but only as an illusion of the One and/or a delusion of the Many. That includes direct presentations of qualified motions and other qualified changes in the *qualified* specious present, which would itself be just another illusion / delusion to the extravertive mystic. Indeed, the qualified mystic herself would be just another illusion of the One and/or delusion of the Many. This is not news.

Perhaps Hegel would best describe the distinction in reason between mystical fact and value. Namely, if a mystical state has the supreme value of bliss or joy of enlightenment, it is simply because it is the mystical state it is. See the section on Hegel in this chapter. But *within* the mystical state, there is no distinction between its fact and its value. For that is another kind of Many.

Continuum Theory of Value Defeasements

Defeasement is another main locus of distinctions in reason in ethics. Here the distinctions of reason are not between different ethical theories, nor between facts and values, both of which we have already discussed, but between any two or more values and what I call continuums of logically possible situations in which the values conflict and can defease each other by greater or lesser: degree of intrinsic value (quality), magnitude (quantity or amount), intensity, purity / homogeneity (consistency), and/or causal consequences. Consequential values can be weighed in turn as to quality, quantity, intensity, and so on. A greater total good will defease a lesser total good, and a lesser total evil a greater total evil.

My continuum theory of value defeasements applies to any two or more logically possible values, positive or negative, each of which or sets of which logically can defease (trump, overcome, nullify, cancel) the other(s) in at least one logically possible situation S. In the case of a two-value continuum, it is a logical precondition that the two values not logically imply each other, since then neither can defease the other, not even consequentially. In the case of one-way implication, we can have at least a half-continuum. For example, where courage is a species and goodness is its genus, courage implies goodness, but goodness does not imply courage. Thus courage cannot defease goodness as such, but the total goodness in a given situation can defease courage. To be sure, courage and goodness *other than* courage can defease each other; but goodness *other than* courage is not goodness as such.

The continuum theory of value defeasements applies to all logically possible value defeasements in all possible worlds. Thus continuum theory belongs to synthetic *a priori* ethics.

It is a synthetic *a priori* principle that if A defeases B in situation S, then B does not defease A in S. That is, defeasement is not symmetric. Nor is defeasement reflexive: A cannot defease itself in S. But defeasement is transitive: In S, if A defeases B, and B defeases C, then A defeases C. This is so for both intrinsic and consequential defeasements, as long as S remains the same.

All defeasements are of and by particular in re *instances* of values. This includes both single and multiple instances of value-universals, members of value-classes, and participants in Platonic value-forms. We may also include in re value-universals by logical courtesy, since they are mutually distinct only in reason from their instances. By parity of reason, we may also admit in re classes and in re Platonic forms which categorially can exist if and only if they have members or participants. (Do not look for such forms in Plato!) But values as such, meaning ante rem value-universals regardless how many instances they have, ante rem value-classes

regardless of how many members they have, and ante rem Platonic value-forms regardless of how many participants they have, logically cannot defease each other. For they exist in all possible worlds. And that would require that one value defease the other *a priori* in every logically possible situation S. And that is impossible and absurd. For they logically cannot nullify each other because they logically cannot fail to obtain in the first place. Thus values as such cannot defease each other; only their instances or some sort of groups of their instances can. And the instances must be logically contingent. For even logically necessary *instances* of values, e.g. the necessary omniscience, omnipotence, and omnibenevolence of a necessary God, logically cannot defease each other. They logically cannot nullify each other because they logically cannot fail to obtain in the first place. Thus all logically possible defeasements must be of logically contingent instances of values in logically contingent situations S.

One might object that one ante rem value logically can be intrinsically better than another. The Apostle Paul says that "faith, hope, and love abide[,] but the greatest of these is love" (1 *Corinthians* 13:13). That love has the greatest value of all is very plausible. The Apostle John says, "God is love" (1 *John* 4:8). It is better to have one drop of love than all the other gifts and values put together. Paul and John do not say ante rem, but we can.

My reply is that this is a category confusion. That is not defeasement, but just intrinsically greater ante rem value. Ante rem values cannot defease each other. If love has the greatest intrinsic value, that does not *nullify* or *cancel* any other ante rem values. For they all timelessly and necessarily obtain. Nor can we cash this out via in re instances, since the situations S will be all over the map. For in infinitely many logically possible situations S, faith, hope, or some other value trumps love. For which value defeases which in S depends not only on their intrinsic value, but also on their intensity and quantity, and on their consequences. In some S, mild love leads to disaster, while great courage leads to the best consequences. Paul says that different spiritual gifts bring different benefits. And Solomon says, "For everything there is a season, and a time for every matter under heaven" (*Ecclesiastes* 3:1).

I define a simple (two-value) continuum of defeasements as a ranking of all logically possible defeasements, in all logically possible situations S, of in re instances of two values, A and B, either of A by B or of B by A. Paradigmatic or evidentially certain defeasements are at either end, one end being the A-end, where A paradigmatically or certainly trumps B and the other end the B-end, where B paradigmatically or certainly trumps A. On the face of it, where "paradigmatic" concerns criterial meaning, and "evidentially certain" concerns knowledge, the two concepts are distinct only in

reason. For they are intersubstitutable *salva (synthetic) a priori*.

We may represent a two-value continuum by the diagram "A—x—B". The line segment between A and x represents all the logically possible cases or situations S where A defeases B, with progressively diminishing certainty as they approach x. And the line segment between x and B represents all the logically possible cases or situations S where B defeases A, with progressively diminishing certainty, again as they approach x. Thus x is a *double* asymptote. For it represents the "logical middle," or indeterminate area, where *neither* value defeases the other. On the face of it, and at least by logical courtesy, there is always an x. In our diagram, x need not be a dimensionless or even an infinitesimal point, but can and doubtless ought to be a line segment of indeterminate length. In fact, the whole A—x—B continuum, not just x, can be ordinal as opposed to cardinal. And in re it always is, unless we are counting equal or at least cardinal units of in re value, such as dollar bills.

Jeremy Bentham holds that "Quantity of pleasure being equal, pushpin is as good as poetry" (Russell 1964 /1938: 174). But Mill argues that it is better to be a human than a pig because the intrinsic qualities of the pleasures are far better (Mill 1985 / 1861: 14, see 11–13). Their debate is about in re pleasures, and I agree with Mill that there are intrinsic qualitative differences among them. For that is directly presented as an *a priori* truth, and *a priori* truths must correspond to reality. To be sure, what is best depends on situation S. For us, there is a two-value continuum with the pleasure of pushpin as A and the pleasure of poetry as B.

Mill's and Bentham's views are only modally distinct. For disregarding Mill's quality leaves Bentham's mere quantity, whose sole quality is generic pleasure, if it is not to be quantity of nothing.

A logical middle must not be confused with a golden mean. A logical middle is *logically indeterminate* as to defeasement in S. It consists of those situations S where it is indeterminate whether to do A or B. But a golden mean is quite the opposite. It is the *best course of action* in situation S. It is positive guidance. It steers a course between excess and deficiency. And depending on S, the golden mean can be A, B, a balance of A and B, or even x (meaning inaction). More on golden means shortly.

A situation S can belong to the logical middle x in either of two ways or senses. First, the balance between A and B can be numerically (either cardinally or ordinally) equal in situation S, for example if A and B each produce the same amount of pleasure of the same kind, and if nothing else in S matters to defeasement. For example, A and B could be reading different copies of the same book. Second, the balance between A and B can be logically vague or indeterminate, so that neither value determinately defeases the other. For example, I may be unable to decide whether it is better

for me to read a book or take a walk (Raz 1986: 328). If there are no cases of either sort in the logical middle, then we may say that x has the numerical value 0, meaning there are zero cases in x. But x has no determinate numerical value, not even 0, if it is logically indeterminate how many cases are in the logical middle.

On the face of it, there are infinitely many logically possible situations S where x is zero. For example, there are infinitely many possible worlds W in which the only instantiated values are A and B, they never give equal amounts of pleasure in any situation S in W, and nothing else matters for defeasement in W. Thus for any S in W, either A defeases B or B defeases A, and x is always zero. There are cases more or less like that in the actual world, for example where the main defeasement is by financial value, the two competing values do not cost the same amount of money, and there are no significant consequences.

Logically vague or indeterminate cases of defeasement do not violate the law of excluded middle, any more than any other logically vague or indeterminate objects do. For every vague or indeterminate object is exactly as vague or indeterminate as it is *or not*. And that applies to any vague or indeterminate value, as well as to any vague or indeterminate area x, by logical instantiation.

Continuum end points A and B can be understood to take numeric values, too. Their numeric value is always infinity, if there are infinitely many logically possible paradigmatic or evidentially certain instances of each and every value-universal. Any logically simple positive universal logically must have infinitely many logically possible paradigmatic or evidentially certain instances, if it has any possible instances at all, which it will. However, there are defined complex universals that must have a finite number of instances by definition or by implication, such as *even prime number* or *sum of two and two*, Each of those logically can have only one instance, respectively the number two and the number four. The universal *even number between one and nine* logically can have only four instances: two, four, six, and eight. But even these can apply to infinitely many A or B cases, e.g. dollar values.

If A and B have no (zero) values, then there will be no paradigmatic or criterial instances of the meaning of "A" or "B" either, and the A—x—B continuum would be meaningless in the first place. For its defining end point terms "A" and "B" would be meaningless. At least this is so if terms cannot have meaning without any paradigms or criteria for their application.

We can define complex defeasement continuums for any number n of values in situation S simply by conjoining all the two-value continuums. The result will look like a spider whose body is logical middle x and whose many legs each extend to a different value, A, B, C,... N. There will be infinitely many logically possible

situations S involving values A, B, C,...N. All the values logically can be weighed and balanced with each other differently in different situations S. Many if not most ordinary ethical situations in ordinary life involve multiple values. Our complex defeasement schema can be applied to diagram them all.

The reader must not be confused by my using "value" to mean both ethical values and logical values of variables. This is just another modal distinction. Some but not all values of logical variables are ethical values. We can quantify over ethical values either directly or by using logical variables and ethical predicates.

Value defeasement implies distinctions in reason, and thus belongs to metaphysical ecumenicism, in at least four ways.

First, a defeasement *continuum* and its *values* are distinct only in reason from each other. For a continuum is defined in terms of its values. It cannot be identified independently of identifying them. For they are its defining end points. Conversely, to paraphrase the early Wittgenstein, 'if a value *can* occur in a continuum, the possibility of the continuum must be written into the value itself' (T 2.012, his emphasis). That is, it is essential to value A that for any value B such that A and B logically can defease each other, there exists an A—x—B continuum. Thus this is a mutual distinction in reason, not a modal (one-sided) distinction.

Second, a *multiple value* continuum is distinct only in reason from the *two-value* continuums which logically compose it. Recall that my first definition was of two-value continuums. There can be no simpler continuums, since there must be at least two values for one value to defease another. The simple two-value defeasement continuums, such as A-B, B-C, and so on, compose the complex defeasement continuum A, B, C,...N. Thus they are distinct only in reason from the complex continuum they define. It cannot be identified independently of identifying them. Conversely, to paraphrase Wittgenstein again, 'if a two-value continuum *can* occur in a complex continuum, the possibility of the complex continuum must be written into the two-value continuum itself' (T 2.012, his emphasis). Thus this too is a mutual distinction in reason.

Third, in any situation S, any defeasement continuum of *values* in S is distinct only in reason from the *facts* that define S. That follows from the derivation of values from facts argued for earlier in this chapter. And that should be clear anyway. How could any values in situation S, much less value defeasements in S, have nothing to do with the facts of S? No facts in S, no values in S. And where, say, a fact of courage and its value mutually depend on each other, since neither can be what it is without the other, this is a third mutual distinction in reason.

In all three mutual distinctions of reason, the underlying principle is a widening of Wittgenstein's thesis that an object's logical possibilities of logically combining with other objects are essentially "written into the [object] itself" (T 2.01–2.0141).

All three distinctions in reason are formal distinctions with a foundation in ethical reality, and ultimately in factual reality.

We saw that values are either positive or negative, since they are essentially related to pleasures and pains. (There is no third "neutral" option, though to be sure, a pleasure and a pain can in a sense cancel each other out to a zero *total*.) This may seem to be a synthetic *a priori* truth. But if we widely define "analytic" as meaning 'true in virtue of the connotations of its constituent terms', as opposed to the narrower definition 'reducible to a logical truth by putting synonyms for synonyms', it is in fact an analytic truth in that wider sense. We might even introduce a Carnapian "meaning postulate" that if x is ethically neutral, then x has no ethical value. But again, as Russell says, postulation has all "the advantages of theft over honest toil" (Russell 1971 / 1919: 71). Note that in the wider sense of "analytic" I just defined, "Red is a color" is an analytic truth too, and so is "The value of courage derives from the fact of courage." Now, if we *define* "ethically neutral" as meaning 'has no ethical value', then "x is ethically neutral if and only if x has no ethical value" is an analytic truth in the narrow sense. For putting synonyms for synonyms, it reduces to the logical truth: "x has no ethical value if and only if x has no ethical value." But this definition has all "the advantages of theft over honest toil."

To be sure, such a meaning postulate or definition is not a mere logical sleight of hand, but is intrinsically plausible, even evidentially certain. For it is based on an underlying synthetic *a priori* truth. But for that very reason, it *conceals* the underlying synthetic *a priori* nature of the truth. Compare Russell (1976 / 1948: 139–140 on defining copper, 261 on defining color shade) on scientific theories' concealing their underlying inductive inferences as formal deductive inferences from the postulates of the theory.

Continuum theory applies to all values, both positive and negative. And if, per impossibile, there were any neutral values, it would apply to them too.

If there are no neutral values, there are only three kinds of continuum to consider: values A and B are both positive, or both negative, or they are mixed, one positive and the other negative. So far, we have discussed only the first case.

Continuum theory applies to any pair of negative values in the same way that it applies to any pair of positive values. For the direction of defeasement always moves toward the good end point of the deepest and most general continuum, the mixed continuum of good and evil, and away from the evil end point. This is always

the same regardless of whether both values occur on the good side of that continuum, or both on the evil side, or one on each side of the logical middle. The two-value schema for this deepest and most general mixed continuum is the usual A—x—B, but with A as Good and B as Evil, or the other way around if you prefer.

In this mixed continuum schema, a greater total good will defease a lesser total good. A lesser total evil will defease a greater total evil. A total good will defease a total evil. A total good will defease any total in the logical middle, which is neutral in the sense of being vague or indeterminate. And any total in the logical middle will defease a total evil. But if two totals are in the logical middle, then neither will defease the other.

The question whether good always defeases evil is not at all the same as the question whether we always ought to reduce any evils *before* we increase any goods. On that question, see Frankena (1973: 47–48). In our schema, that question is whether we always ought to move from evil B to neutral x before we move from x to good A. The dilemma is that we can move the very same distance toward A either way, yet we can lessen the horrors of evil only on the x—B side. My solution is easy: it depends on situation S. For if we set up a two-value schema with A as the value of *moving some given distance toward good*, and B as the value of *lessening evil*, there will be infinitely many logically possible situations S where A defeases B, infinitely many where B defeases A, and infinitely many which are in indeterminate middle area x. The problem then devolves to assessing which situation S we are in, if we can. But that is more of a practical problem than a theoretical one.

This deepest and most general good-evil mixed continuum, where A is Good and B is Evil, includes all logically possible situations S, and all logically possible two-value continuums, as logical constituents. All good A-good B continuums will occur on the good side of the good-evil continuum, and all evil A-evil B continuums will occur on the evil side. All mixed good A-evil B continuums will occur with A on the good side and B on the evil side of the good-evil continuum. All situations S that are in the logical middle of a specific good-evil continuum are also in the logical middle of the general good-evil continuum. For no situation S can belong to two different specific two-value continuums. More precisely, the *factual* situation S can, but the *value*-situation cannot, since either value A or value B or both must be different. For otherwise we would just have the same old value-continuum again.

This gives us our fourth distinction in reason in continuum theory. Namely, all situations S, and all specific continuums, are modally distinct from the general good-evil continuum, and are formally distinct from it with a foundation in reality in it, and more deeply in the ethical portion of reality. For they logically cannot

exist without it; but it can exist without them. This logical point is purely hypothetical, i.e., per impossibile, for ante rem values. For they are all necessary beings, the specific values and the generic values alike. But for in re values, the modal distinction is plain and straightforward. The containment and dependence arguments will show that the general good-evil continuum exists. For all the specific value continuums logically contain and depend on it. And the specific value continuums logically contain and depend in turn on all values, which exist in the ordinary, pre-philosophical sense. Do not ordinary values exist in the ordinary world?

The whole theory of defeasement continuums is really just a logical analysis or structure in the wide a *priori* sense of logic. But then metaphysical ecumenicism itself is a logical structure of theories that are distinct only in reason. And so is Aristotle's theory of the golden mean. (That is the popular term; it is not Aristotle's.) How does our continuum theory relate to Aristotle's theory? This is my promised return to the topic of the golden mean.

Our defeasement continuum theory is logically deeper and more general than, and is thus logically prior to, Aristotle's golden mean continuum theory. The golden mean theory locates a virtue, for example courage, in the logical middle flanked by two vices, its excess (foolhardiness) and its deficiency (cowardice), as the end points of a 'golden mean' continuum. Here the logical middle is not logically vague or indeterminate, since it includes paradigm cases of courage, as well as fairly clear cases, and even cases where it is more likely than not that courage occurs. Instead, there are *two* logically indeterminate logical middles, one between courage and foolhardiness, and the other between courage and cowardice. Thus the *full* schema is: Foolhardiness—x—Courage—y—Cowardice. It can now be easily seen that Aristotle's golden mean continuum is a complex logical conjunction of two of my two-value continuums: Foolhardiness—x—Courage, and Courage—y—Cowardice, and that my two continuums are logically simpler than and logically prior to his. This advances the analysis of golden mean theory.

Thus every Aristotelian golden mean continuum can be logically analyzed as consisting of two of my mixed two-value good A-evil B continuums. Where A is the virtue (e.g. courage), B is the vice of A's excess (foolhardiness), and C is the vice of A's deficiency (cowardice), every golden mean continuum B-A-C is logically composed of the B-A defeasement continuum and the A-C defeasement continuum. Since each of B-A and A-C has a logically indeterminate logical middle, the full representation will be the two conjoined continuums B—x—A and A—y—C. The first is the continuum between the virtue and its excess, with an indeterminate area between them, and the other is the continuum between the virtue and its deficiency, again with an indeterminate area between

them. Again, this advances the analysis of golden mean theory.

It is often objected to golden mean theory that at least in some cases, "You cannot have too much of a good thing." That is, at least some virtues have no vice of excess. My reply is that I neither know nor care. My position throughout this book has been that metaphysical ecumenicism applies if and only if there is a logical analysis, or at least a one-way logical supervenience; and that if an analysis does not apply, then it does not apply. My theory of metaphysical ecumenicism was never intended to apply to all philosophy, but only to the theories that *are* distinct only in reason. Likewise for the objection that sometimes you cannot have too much of a good thing. In fact, my logical analysis of Aristotle's continuum as consisting of two of mine remains undisturbed by the objection. For his golden mean continuum applies to a situation if and only if my logical analysis of his continuum applies as well.

Aristotle's golden mean continuum is formally distinct from my logically simpler continuums with a foundation in reality in my continuums, and in the value continuum portion of reality.

Continuum theory is a theory about the ethical portion of reality. It is about values in themselves, continuums in themselves, defeasements in themselves, and ethical situations in themselves. Of course, in our phenomenology of ethics, there are also qualified values, qualified continuums, qualified defeasements, and qualified ethical situations, all of which may or may not "be," or even seem to "be," objects in themselves.

Continuum theory applies even to mystical values. It is well said that if one is deep in mystical contemplation and a thirsty traveller comes to the door and asks for a cup of water, it is best to stop the contemplation and give the water. Yet if the need for the mystical experience is great and the need for water is slight, the value of the mystical state can defease the value of the water.

Continuum theory implies that every in re finite total (intrinsic plus consequential) value logically can be defeased by a greater in re finite total value. Therefore there is no absolute right or wrong in the in re finite world. This is just plain common sense, and continuum theory is just a logical articulation of it. The very plainness of this theory, and its consistency with common sense, suggest that it is on the right track. For after all, continuum theory is just a logical analysis of our ordinary, pre-philosophical ethical defeasements. It is just another kind of ethical ecumenicism.

Thus it might be thought that continuum theory implies we ought to take a neutral, nonpartisan, middle of the road approach in the world of in re finite values. Certainly the theory of the golden mean takes a middle of the road approach to virtue. A virtue is the logical middle of its excess and deficiency! But the implication is invalid. For the value of being neutral, nonpartisan, and middle of

the road is itself just an end point of infinitely many continuums. That is, in the world of in re finite values, the value of being neutral logically can be defeased by any greater *partisan* value. Again, as Solomon puts it, "For everything there is a season, and a time for every matter under heaven" (*Ecclesiastes* 3:1). That includes any good *or* evil value of being neutral. Thus there is no absolute right or wrong even about neutrality. For it all depends on situation S.

There are higher-level continuums whose end points are values we use to *decide whether* to defease values. In the in re finite world, there is no absolute right or wrong about them either.

Doing less than our best, or even choosing inaction, can be for the best on the whole. For there is a modal distinction—a logical part-whole distinction—between our choice of act in situation S and the whole of S, understood as also including the act's causal consequences. For the intrinsic value of our act is only a logical part of the whole value of S, including any consequences.

For more on continuum theory, see my (2016: §§ 14–18).

Conclusion of the Book

This book is about reconciliation in philosophy. Many kinds of ecumenicism have been discussed. But they are all kinds of metaphysical ecumenicism, insofar as "epistemology is the [metaphysics] of the knowing situation" (Bergmann 1964: 126), ethics is the metaphysics of the value situation, phenomenology is the (typically bracketed) metaphysics of the cognitive situation, and so on. All the admitted theories are valid to one degree or another.

On his own dialectical ecumenicism, Hegel colorfully says:

> The ordinary mind.... does not conceive the diversity of philosophical systems as the progressive evolution of truth; rather it sees only contradiction .... The bud disappears when the blossom bursts forth, and we might say that the former is refuted by the latter; in the same way when the fruit comes, the blossom may be explained to be a false form of the plant's existence, for the fruit appears as its true nature in place of the blossom. These stages are not merely differentiated; they supplant one another as being incompatible with one another. But... their own inherent nature makes them at the same time moments of an organic unity, where they not merely do not contradict each other, but where one is as necessary as the other.... (Hegel 1967 / 1807: 68)

That nicely describes our progression from elimination to reduction to positive construction as well. There are also some more limited attempts to reconcile traditions, such as pragmatism and analytic philosophy in Morton White's *Toward Reunion in Philosophy* (White 1956). But at least as far as I know, I am the only one to use the traditional ontological distinctions to show that all the main ostensibly rival theories in all the fields we investigated are distinct only in reason. Thus, to use Sinclair (1944: 86)'s phrase again, metaphysical ecumenicism is "astonishingly rich and complex." It is a higher-level jungle metaphysics that logically includes lower-level jungle and desert metaphysics alike as logical parsings of reality and of each other. All the metaphysics we admit are modally and formally distinct from metaphysical ecumenicism with a foundation in reality in metaphysical ecumenicism, and in reality.

Ethics, the rational study of values, ecumenically includes morality (obligatory values), social ethics (social values), political ethics (political values), and aesthetics (aesthetic values).FN5-5 Where ethics is the genus and they are species, ethics is modally and formally distinct from them and is the ethical foundation in reality for them. If no values, then no morality, no social ethics, no political ethics, and no aesthetics. I argued that values are in turn distinct only in reason from facts, *contra* Hume.

I was already metaphysically very ecumenical in my (2003 / 1996). There the main thesis was that modified realism, the view that there are both real identities of some sort and identities in reason of some sort, is the ontology shared not only by Frege, Russell, Wittgenstein, and Quine in the analytic tradition, but also by the great thinkers in the Aristotelian substance metaphysics tradition, and by other great thinkers such as Plato. I was already using the ontological distinctions to show that. And it was virtually metaphysical ecumenicism. But that book lacked the containment and dependence arguments. And lacking them, it took an agnostic approach toward reduction, elimination, and positive construction. In the present book, that agnostic approach is replaced by a metaphysical ecumenicism in which positive construction realism wins as the ontological interpretation of every logical analysis; but conceptualism and nominalism are admitted as retaining a limited validity as logical parsings of, or abstractions from, realism. For the containment and dependence arguments show that. But agnosticism remains for 'transcendental' topics like the transcendent personal God, the transcendent impersonal Divine, introvertive mystical experiences, and even disembodied minds. For these are not logical parsings of, that is, are not logically immanent in, the ordinary, pre-philosophical world of experience of living and other bodies. At least I find no reliable evidence that Jesus was an immanent God, and likewise for the other topics. Again, see my (2022a) on God.

And in my (2023 / 2015: ch. 9; 2021a / 2010), I argued that extensional truth-ground containment relevance is deeper and more general than intensional containment entailment relevance. Thus they are modally distinct with a foundation in reality in extensional truth-ground containment relevance. For modern classical logic has the former, but not the latter, at least not without admitting some filters or constraints. This is *logical relevance ecumenicism*.

In addition to the theory of metaphysical ecumenicism, I presented the theory of qualified objects, the theory of epistemic seeming, and the theory of value continuums. Each of these four theories can stand independently of the others. But together they form a closely knit comprehensive new philosophy covering all the main fields of philosophy. Even aesthetics is included via ethics.

Those who wish ethics to be objective will be happy here. For all in re and ante rem values in themselves are totally real. Those who wish ethics to be relative can find that in the relativity of all value defeasements to a situation S. Those who wish life to be real will be happy here too. For our lives, thoughts, and feelings are totally real, and how things appear to us is almost as real.FN5-6

It might be objected that perhaps some day metaphysical ecumenicism may be subsumed into a higher-level ecumenicism in turn. My reply is that a more ecumenical ecumenicism is always welcome. But any new theory worth its salt must be intelligible, logically possible, and provide a logical analysis that corresponds one-one to ordinary statements about the world. And if it fulfills those three conditions, then it is distinct only in reason from the metaphysical ecumenicism in this book, and can be subsumed into it. And as we saw, mutual logical containment is perfectly fine.

Again, this book offers a comprehensive new philosophy that covers all the main areas of philosophy. Yet logically speaking it does only half of what philosophy should do. For it is wholly on the side of logical or conceptual analysis. There is no moral casuistry or applied ethics, and there are no arguments starting from actual facts of any kind, except perhaps for very general phenomenological and ordinary, pre-philosophical existence facts. —Or am I relying on facts (premisses) at every step?

The side of logical or conceptual analysis is the logically prior, more fundamental one. But the side of actual facts may be the more important one. For to repeat an earlier quote, “What does a drowning sailor care for the chemical composition of the sea?” (translator unknown; see Nietzsche 1984 / 1878 § 9). But this too is a distinction only in reason. For what fact has no logical analysis? Perhaps only mystical facts! —Or is mysticism beyond facts?

And in a real sense wisdom is not to be found in books and “salvation is not to be found in the scriptures” in the first place, but instead in the reality, if any, they attempt to refer to or describe.

Notes

I follow the legal style of using "FN" for footnotes, mainly for greater visibility in a long book, but also for easier electronic searching in the ebook. I added chapter numbers too. For example, "FN3-2" means chapter 3, footnote 2.

Introduction

FN0-1. Frege's senses and his modes of presentation do not fall under his category of objects, though they do fall under my own wider category of objects. Michael Dummett has recanted his long-held view that Frege's senses are Fregean objects, and now agrees with me that senses cannot be Fregean objects. See Dummett (2007: 122–123) replying to my (2007: 81–97). See also my (2003 / 1996: 65–73). My rejoinder to Dummett was my (2010: 118–119).
FN0-2. On the different philosophical and ordinary literary uses of the word "trope," see Chakrabarti (2006: 14).

Chapter 1: Phenomenology

FN1-1. Concerning what I call objects of perception or thought, ordinary dictionaries define "object" as 'that toward which our actions, thoughts, or feelings are directed'. See e.g. *The Compact Edition of the Oxford English Dictionary* (Murray 1974: 1963), *Webster's Ninth New Collegiate Dictionary* (Mish 1985: 814–815), and *Funk & Wagnalls Standard Desk Dictionary* (Landau 1984: 449). My theory of objects of perception or thought, or more precisely, my theory of qualified objects, is intended to ground this ordinary lexical definition, and more deeply the ordinary use of the ordinary word "object" which it defines. It is, of course, not the only ordinary use of the word. My theory of objects in themselves is intended to ground the other main ordinary use of the word. Both ordinary uses should be familiar to every reader.
FN1-2. Koestenbaum (1970: xii–xv) lists seven presuppositions of Husserl's "presuppositionless" philosophy. Also, Husserl's concept of progressively more accurate description of phenomena faces the problem that since phenomena are exactly as they seem, attending to new, more precise aspects of phenomena is attending to different phenomena. Compare Dreyfus (1982: 13). Also compare Russell on how attending to a new aspect of a phenomenon is attending to a new phenomenon (Russell 1971e / 1918: 203; see 1971d / 1911: 114; 1985 / 1940: 334). This is the phenomenological version of the paradox of analysis, which is that an analysis must be both the

same as and different from the analyzed thing. If it is not the same, then it is not an analysis of the thing. But if it is not different, then it is not informative. But new phenomena *are* different phenomena.

Things get even worse than that. If we refer to a Fregean sense, we treat it as an object, and then it no longer functions as a sense. If we attend to Heideggerian *Dasein*, we treat it as a presented thing, and it no longer functions as a background of unthinking, automatic social practices. These are paradoxes of change of kind of presented entity due to change in functionality.

No one who offers a logical analysis can fully escape such paradoxes. But on my analysis of objects of perception or thought, the distinction between formal reality and objective reality explains the paradox of changing functionality, namely, as a shift from attending to the formal reality to attending to the objective reality, or vice versa. And this distinction is already logically implicit in any via antiqua object of perception or thought. I also explain the phenomenological version of the paradox of analysis in terms of two qualified objects that "are" the same object in itself. Namely, one qualified object is the intensional sense and direct referent of the analysans (the term offered as the analysis), and the other is the intensional sense and direct referent of the analysandum (the term being analyzed). The two qualified objects are different, but they "are" one and the same lower-level object. And that is how a logical analysis can be of the same thing, yet different and thus factually informative. For the analysans- and analysandum-terms directly refer to different qualified objects that "are" the same lower-level object if the analysis is correct. But some analytically intersubstitutable different terms indirectly refer to lower-level objects that are not identical, but distinct only in reason.

FN1-3. Hume argues that the metaphysical self is unthinkable. We literally have no idea of it because we have no impression of a self; and ideas are copies of or derived from impressions, except for his famous missing shade of blue, which is irrelevant here. But Hume also argues that persons are bundles of the impressions and ideas they are ordinarily said to perceive or think of. And in that sense he *seems* to make perceivers and thinkers not only logically possible, but actual. For he *seems* to say that there are such bundles, and that your bundle is different from my bundle. And we do seem to have an idea of bundles, because we do have an impression of our own mental bundle, as well as of tree-bundles and house-bundles. In fact, they *consist* precisely of impressions and (in the case of mind-bundles) ideas! Thus his elimination of minds *seems* to be only his elimination of the metaphysical self. On the other hand, Russell often talks about classes, and that they are logical fictions for him does not stop him from talking about them. Perhaps then Hume's talk of bundles is likewise just talk. On a third hand, Russell's mere

talk of classes is based on his famous view that class-expressions are nondenoting because they are logically incomplete; and Hume has no such view to prevent his bundle-expressions from denoting. On a fourth hand, even class-expressions, as physical marks or sounds, are logical fictions for Russell, since he analyzes bodies as logical fictions too. So even his *talk* of class-expressions is just talk! On a fifth hand, while Hume clearly admits impressions and ideas of *constituents* of bundles (again, the constituents *are* impressions and ideas), it is not clear he admits impressions or ideas *of bundles*. And that would seem to be the main remaining question about his metaphysic of minds and bodies. That scholarly and philosophically interpretive question is beyond the scope of this book.

Another problem is that while Hume clearly admits complex impressions of houses and trees at any single moment, many bundles seem to exist across many years. Here Russell admits temporal series of classes of sensed and unsensed sensibilia. But would Hume admit temporal series? Would he have an impression or idea of them? This takes us into Hume's phenomenology and metaphysics of time, which is also beyond the scope of this book.

FN1-4. The mind-independent reality of persons, minds, ideas, and other mental objects must be restricted to the awareness, thoughts, and words of "other" minds. Obviously, my mind logically cannot exist independently of itself, and my *conscious* mind cannot exist independently of my consciousness of it. Yet it should not be deemed less real than other minds on that account. For everything in the same metaphysical category is equally real. Compare the language-independent reality of languages. No language can exist independently of itself! In fact, no object of any kind can exist independently of itself.

Here I mean the mind-independent existence of minds in the ordinary, pre-philosophical sense of "mind," and *also* of any metaphysical minds we may admit. (I admit them in chapter 3.) The same goes for the language-independent reality of languages.

FN1-5. The scope of the concept of a qualified object, i.e., of an *indirectly* mind-dependent object, is different from the scope of the concept of a merely possible object. For some but not all objects are qualified objects, and in possible worlds talk, qualified objects exist in all possible worlds; but there is no such thing as a merely possible object. That includes logically possible worlds, since they are themselves merely possible objects. But qualified objects are not merely possible objects. In fact, they are logically necessary objects.

Some objects, e.g. mental ideas in themselves, are directly mind-dependent, while other objects, e.g. stones and trees in themselves, are not. And some objects, i.e. objects of perception or

thought, are indirectly mind-dependent, while other objects, i.e. objects in themselves, are not. This must not be confused with the fact that all objects of perception or thought are logically necessary and exist in all possible worlds. That makes them mind-independent in the ordinary or direct sense, since (waiving the question of minds like God that are necessary beings) not all possible worlds contain minds. But they are still mind-dependent in the *indirect* sense, since that concerns not the existence of minds, but only the *logical possibility* of minds. And it is logically necessary that minds are logically possible. That is, it is true in all possible worlds that minds are logically possible. Thus objects of perception or thought can be in all possible worlds even though they logically depend on the logical possibility of minds. For minds are logically possible in all logically possible worlds. There is no logically possible world in which minds are logically impossible. And objects of perception and thought are in all logically possible worlds, since they are logically possible objectual ways that things logically can be presented. There is no logically possible world in which objects of perception or thought are logically impossible.

This is intuitively satisfying because objects of perception or thought correspond in ontological function to Frege's senses and to Russell's ante rem descriptive universals. And exactly like our objects of perception or thought, Frege's senses and Russell's ante rem descriptive universals timelessly exist in all logically possible worlds. For all three sorts of entity—my objects of perception and thought, Frege's senses, and Russell's ante rem descriptive universals—function to explain all logically possible informative identity and existence judgments in all logically possible worlds. In fact, on metaphysical ecumenicism, all three sorts of entity are distinct only in reason. For my objects of perception and thought, Frege's senses, and Russell's ante rem descriptive universals are all in effect logically equivalent logical analyses of the same ordinary, pre-philosophical objects of perception or thought. See chapter 3 on metaphysical ecumenicism.

FN1-6. My three realms theory corresponds to Frege's three realms theory of concrete objects, abstract objects, and senses as follows. Those of my objects in themselves that can cause changes correspond to Frege's realm of concrete objects. For me, these include both physical objects (efficient causes), and in my theory, minds (agent causes). Those of my objects in themselves that cannot cause changes correspond to Frege's realm of abstract objects. And my qualified objects correspond to Frege's realm of senses. They correspond even more closely to Frege's modes of presentation (cognition), which all his senses essentially contain. On Frege's senses as deeply different from the modes of presentation Frege says they contain, see my (2010: 120–121,

especially 121 n.2). I wish to add now that senses and modes of presentation are modally distinct. For all senses must contain modes of presentation, and must be capable of expression in a logically possible language. But some nonlinguistic animals use perceptual modes of presentation to make informative identity and existence judgments without grasping any senses or languages. My cat Milo makes informative identity and existence judgments all the time. In fact, we humans do too, e.g. driving in heavy traffic.

FN1-7. R. J. Kilcullen (1996: 6) traces the concept of objective reality to the *esse obiectivum* (objective being) of John Duns Scotus and William of Ockham, citing Ockham on "'being a thought object'"(Ockham 1957: 41–43). Kilcullen says it was Descartes who first made such objects exist only in the mind by assigning to them the formal reality of mental ideas. In contrast, my qualified objects are mind-independent in the ordinary sense, but do have *indirect* mind-dependence. But Kilcullen seems mistaken about Ockham. Ockham says, "[F]ictions have being in the mind, but they do not exist independently, because in that case they would be real things... So some things exist only as thought-objects" (Ockham 1957: 42). This text implies that any things that have "being in the mind," i.e., that are mental entities, "exist only as thought-objects." Thus Descartes is merely improving Ockham's terminology. Note that for Ockham, a universal, which is a thought-object for him, is "a kind of mental picture" (Ockham 1957: 41).

Franz Brentano finds the distinction between formal and objective reality in Aristotle (Brentano 1971 / 1889: 15). But few scholars today find even intentional objects in Aristotle, as opposed to mere representations which function to give us "epistemic access" to the external world without being "immediate intentional objects of our ordinary perceptions and thoughts" (Esfeld 2000: 324–325). Brentano has also been criticized for misunderstanding the medieval conception of intentional existence, in particular for deeming intentional objects beyond any kind of being, as opposed to having some kind or kinds of reality intermediate between substantial reality and nothingness (Deely 1968). Brentano seems to do this because he attributes formal reality not to intentional objects themselves, but to acts of intending (cognizing) them, making only acts formally mental (Brentano 1971 / 1889: 15–16).

FN1-8. Frege says that while identity cannot be defined (*Definition*), it can be explained (*Erklärung*) (Frege 1970c / 1894: 80). What may be called Frege's threefold distinction between definition, explanation, and explication (*Erläuterung*) is as follows. A definition stipulates the sense and denotation of the term defined (Frege 1967 / 1893: 82). As a stipulation it is neither true nor false (Frege 1971 / date unknown: 7; 1971b / 1903: 23–24). Not all names can be defined; to suppose that they can would involve us in

a vicious infinite regress of definitions (Frege 1970e / 1892: 42–43); compare Frege (1967 / 1893: 85) saying definition "always presupposes" some names as already denoting. Thus, Frege argues, there must be indefinable names. Their meaning must be conveyed by explication, which consists of hints, metaphors, and suggestions (Frege 1971 / date unknown 8–9; 1971c / 1906: 59–61). While definitions are foundationally part of science, explications are a propaedeutic to science (Frege 1971 / date unknown 8–9; Frege 1971c / 1906: 59–61). Frege's definitions are intended to guarantee both sense and denotation for the defined term. Explications are not at all guaranteed to provide these (Frege 1971 / date unknown 8–9; Frege 1971c / 1906: 59). Thus science, which means for Frege all statements concerned with truth, always begins "with an element of uncertainty."

What is an explanation? Frege says that Leibniz's "explanation" of identity as indiscernibility (it was a definition for Leibniz; and identity had been definable in *Foundations*, Frege 1974 / 1884: 76) "could be called an axiom that brings out the nature of identity; as such, it is fundamentally important" (Frege 1970c / 1894: 81). That distinguishes explanation from both definition and explication. But what does an explanation explain? While a definition provides a sign with a sense and a denotation, in an explanation the explained term is assumed to have a sense and denotation already. At the same time, an explanation seems to leave nothing to chance, as an explication would. I suggest that an explanation may be understood as the assertion that two names, both already assumed to have sense and denotation, denote the same entity. An explanation, if correct, is therefore a true statement. To call Frege's explanation of identity an axiom, as Frege does, is merely to add that it cannot be derived from more fundamental truths (Frege 1971b / 1903: 23–25). An explanation explains an entity that is presented to us in one way as being the same as an entity that is presented to us in another way. At bottom, it is simply an informative identity statement based on terms that are intersubstitutable salva analycitate, or at least on the explained term's occurring in only one of two logically equivalent statements. For more on Frege's threefold distinction, see my (2003 / 1996: 73–74).

FN9. Thomas Reid says, "I am certain there are not two objects of this conception, but one only.... This one object I conceive, it is not an image of an animal, it is an animal" (Reid 1969: 419). In a via antiqua mental idea, the image is the formal reality, and the animal object of thought is the objective reality. For Hegel, too, the image must not be confused with the objective reality (Stace 1955 / 1924 : 69). Thus Hegel anticipates the later Wittgenstein's critique of the image theory of meaning for mistaking images for meanings. And

Hegel does so from within the via antiqua tradition, where direct referential meanings are objective realities as opposed to any accompanying images. The later Wittgenstein fails to discuss the objective realities of the via antiqua tradition. At the beginning of *Investigations*, Wittgenstein cites only Augustine's statement that all nouns are names of objects as the view he is combatting. And on the face of it, Augustine's statement is about names of objects that are in the real world, not names of objective realities that are not in the real world, but that may correspond to objects in the real world.

FN1-10. To that extent I invert Descartes. Where Descartes makes the formal reality of ideas mental and their objective realities often nonmental, I make the formal reality of objects of perception or thought nonmental and only indirectly dependent on the mental, and I make their objective realities often mental. But for both of us, some objective realities are mental and others are not.

FN1-11. Husserl says, "I experience other minds as real, and.... as experiencing this selfsame world which I experience.... I experience the world not as my own private world, but as an intersubjective world, one that is given to all human beings and which contains objects accessible to all" (Husserl 1970 / 1929: 34). Husserl's principal aim in *The Paris Lectures* is to combat the impression that his phenomenology is solipsistic (Dreyfus 1998; 1982: 20, 25).

FN1-12. One might wish to use the private language argument to show that all *objective realities* are as public as the objects of perception or thought that logically contain them. For it is objective realities that are the cognitive contents and connotative meanings of our words. But it seems that the private language must fail here, and it seems that only the mental language argument can succeed in showing that objective realities are formally identical across persons and times, in order to ground the objective and public communicability of those objective realities that are mental and private objects. For objective realities are anything we logically can directly perceive (this includes introspection) or think of; and they essentially are as they directly appear to be. And some of them directly appear to be private minds or constituents of minds. Some directly appear to be Cartesian mental ideas, and others directly appear to be via moderna mental ideas that have no objective realities themselves! (We generally think of those last two kinds only when we are doing philosophy.) And all the objective realities that directly appear to be mental and private *are* essentially mental and private. Thus it seems that only the mental language argument can explain public talk about them. For how can they be public objects if they are essentially private? This is in contrast to the objects of perception or thought that logically contain them. For objects of perception or thought are objectual ways things logically

can be presented in all logically possible worlds. That is their *formal* reality. Therefore they are *formally* essentially public and objective. Therefore they are consistent with the *private* language argument's conclusion that they are public. Yet they are not *wholly* public if their objective realities are essentially mental and private.

The solution to this dilemma is this. Essentially private objective realities cannot *be* public entities themselves, and can be publicly discussed only because they are formally identical across minds and times. But they are *distinct only in reason* from the public entities they are according to the private language argument.

A successful logical analysis of *talk* of public objects in terms of behavior would qualify for admission into metaphysical ecumenicism. But it would only be a nominalistic analysis of lesser validity. For the obviously objectual phenomenology of minds and mental objects is the realist analysis, and realism wins in that we admit all the entities admitted by all the logically equivalent "rival" theories. And that includes both qualified private mental objects and private mental objects in themselves. See chapter 3. Nor would we wish to find the private language argument unsound, which we must if private mental objects are a counterexample. Nor would we wish to find that the private mental language is not distinct only in reason from the (equally sound) mental language argument.

FN1-13. If the formal reality of objects of perception or thought really were that of mental ideas, as Descartes holds, then we could offer much the same solutions with much the same naturalness simply by allowing the *forms* (the formal realities as opposed to the objective realities) of my objects of perception or thought to be *formally* identical across minds and times. This logically parallels the formal identity of Cartesian ideas across minds and times.

In any case, Descartes can use ideas to explain Frege's puzzle of informative identity judgments. Compare E. M. Curley (1978: 190) on Descartes as having contentually different ideas of the same sun. And Descartes speaks of ideas as representing or failing to represent, or corresponding or failing to correspond with, reality. That can be taken as his analysis of true singular negative existential statements. See Curley (1978: 149–154) on Descartes, Meinong, and Russell. And while Descartes might not expressly say so, it very much seems that he regards ideas as the connotative meanings of referential expressions, and as the epistemic basis of our evidence for the physical world. In any case, formally identical mental ideas are distinct only in reason from my qualified objects, since all the objective realities are identical. Thus I must admit Descartes' mental ideas into my metaphysical ecumenicism.

FN1-14. Dummett (2007: 114) says he has always held that for Frege there is no backward road from referents to senses. But unfortunately, as I show in my (2007: 56), Dummett says things

that seem to imply that there is a backward road. This makes his interpretation inconsistent by implication. Dummett (2007: 114ff.) replies to my points. But I do not think he successfully removes my objections, as I explain in my (2010) rejoinder.

FN1-15. Georg Simmel proves that eternal recurrence is not logically necessary in a finite deterministic world over infinite time, *pace* Nietzsche (Kaufmann 1968 / 1950: 327). Note that for the 1940 Russell (1985 / 1940: 102–103), recurrent world-cycles of the ordinary world would consist of recurrent sensible qualities.

FN1-16. Roger Penrose (2012) suggests that due to the second law of thermodynamics, each world-cycle will differ from the last because entropy increases across the cyclic series. Compare Hawking (2017 / 1988: 154) saying that if our expanding universe contracts and returns to a timeless state, it need not "be the time reverse of the expanding phase," i.e., it need not be like a movie running exactly backwards.

In a cyclic theory of the universe, is not each cycle either *before* or *after* all the others? That seems at odds with the view that time began after the timeless big bang (Hawking 2018: 35–38). If time began *after* the big bang, how could there have been a cycle *before* the big bang? How could there be any timeless periods with temporal cycles both before and after them? Or does each cycle start continuously and immediately after the last cycle ends, with *no time* in between? Can a 'timeless period' have a start and an end? Or may it occupy a dimensionless temporal point?

Haecceity to the rescue! *This* cycle is not *that* cycle. And *this* timeless period-point is not *the next* timeless period-point.

Chapter 2: Ontology

FN2-1. I mainly present my ontology in my (2003 / 1996: ch. 1), and I already discussed many ontological issues in chapter 1 of the present book. Thus in this chapter, I will mainly discuss only what else I need to, in order to set the stage for the rest of the book. For more on the ontological distinctions, see my (2021 / 2020).

FN2-2. An object may be said to have *analogical being* if it is sufficiently like another object that has *non*-analogical being that it would be better or more proper or fitting to say it has being than that it does not, in virtue of its likeness to the object that has non-analogical being. Or better, we can call that primary analogical being, and look for chains of secondary, tertiary, and quaternary kinds of analogical being. But all of them must be sufficiently like some non-analogical being to count as a kind of being. For an analogical being is a kind of being. It is not *no* kind of being. This is just like other analogies. If a shade of color is sufficiently like a

paradigm of red, then we count it as red. We may or may not count all non-analogical beings as paradigms of being, since some kinds of non-analogical being may be more real than others. Those who, like Butchvarov and Meinong, admit objects that have *no* kind of being, would use a different kind of language for those objects. They would not say that an object that has no kind of being is *an analogical being*, as if it had a kind of being after all, the analogical kind. They would say that such an object is at most *analogous to* a being. And Butchvarov (2004) does say that.

Since such sufficient *likeness* is a significant *relationship*, *analogical* being is a kind of *pros hen* being. Aristotle holds that "being" is a pros hen term. He uses the term "health" as an example of a pros hen term (Aristotle 1968a: 1003a32–1003b15). By "pros hen" term, he means that "health" has both a primary use and some secondary uses in virtue of their (significant) relationships to the primary use. Humans and other living bodies are said to have health in the primary sense. They are literally healthy. But we also say that climate is healthy if it tends to produce health, and we say that urine is healthy if it is the sort normally produced by healthy bodies. (The climate and urine examples are due to Aquinas.) Aristotle then finds that the word "being" is pros hen too. For substance has being in the primary sense, and things in all the other categories have being in virtue of their relations to substance. He concludes that the word "being" is multivocal in the same pros hen way that the word "health" is. (Aristotle 1968a: 1003b5–1003b15). Whether this is an argument by analogy to the term "health," a mere illustration by analogy, or not an analogy at all, but a finding that "being" is the very same sort of term as "health" in this regard, is unclear. It is also very doubtful that he means to say that only substances literally and actually *have* being, and items in the other categories are merely *called* beings, since that would make him a nominalist with respect to the other categories; and he is not a nominalist with respect to them, but a realist (Ross 1960: 26–28, 131, 155; Owens 1963: 131–132). In any case, a pros hen term must have a primary use and at least one secondary use.

If Aristotle does give an analogical argument that the term "being" is pros hen, based on an analogy to the term "health," the theory of pros hen kinds of being is based on an analogy. But the analogy is not to analogical kinds of being, but only to ways the term "health" is said. And analogy is in any case only one kind of pros hen relationship. In the case of healthy climate and healthy urine, the relationships to healthy organisms are causal. (A healthy climate is one that promotes health in living things. Healthy urine is the kind of urine produced by healthy animals.) And in the case of properties and relations, the relations to substance are not analogical but metaphysical. At least they are on my containment

and dependence arguments. Thus all analogical beings are also pros hen beings, but not all pros hen beings are analogical beings. Thus the distinction in reason between analogical being and pros hen being is modal, i.e., a one-sided as opposed to mutual dependence.

Chapter 3: Metaphysics

FN3-1. Whatever is logically possible must be intelligible, but not everything that is intelligible is logically possible. Thus the two concepts are modally distinct. That is why intelligibility and logical possibility are different conditions of metaphysical ecumenicism.

The expression "the round square" is intelligible, but round squares are logically impossible. We know that a round square is impossible precisely because we understand what is meant and can see that it cannot exist. Compare Butchvarov (1970: 81). Likewise, one can try to show a theory of universals is impossible even if it is intelligible, precisely by understanding its sense and finding some absurd, i.e., logically impossible, consequence.

Some paraconsistent logicians admit the round square. But even Meinong wants his *theory* of objects to be intelligible and logically possible. And paraconsistent logicians want their *logics* to be intelligible and logically possible. But why would *they* care? On their own showing, they should be perfectly happy if their own logics are both intelligible and unintelligible, and both logically possible and logically impossible. Russell (1964 / 1938: xii) has a better view: exactly the same logical truths should occur in every logic. And that cannot consistently happen in paraconsistent logics.

FN3-2. We need not require that theories of metaphysics are true if and only if they both positively admit their own entities *and also* reject the entities of their rivals. I do not see what it is about the existence of, say, universals ante rem that essentially, intrinsically, necessarily, or logically precludes the existence of, say, universals in re. Have we forgotten that entities can overlap and be distinct only in reason? Even if someone takes it to be definitional of the theory that universals ante rem exist that universals in re do not exist, that part of the definition is merely postulated without any necessity as far as I can see. In fact, it is absurd on the face of it.

FN3-3. Many find logical simples (logically simple entities) to be what is independent and most real, and what is complex to be dependent and less real. Conversely, many find complex wholes to be more real than their parts, including any logical simples. At the general level of the containment and dependence arguments, we need not take sides on that dispute. The arguments purport to show only that both wholes and their parts are real in the minimal sense of not being nothing. Thus the arguments rule out only the theory

that wholes are unreal or nothing, and the theory that parts are unreal or nothing. We can still argue about the comparative reality of parts and wholes on a lower ontological level. In general, a whole is mind-independently real, and is logically independent even of the logical possibility of minds, if and only if all its parts are as well. I found only three exceptions; see pages 224, 260, 679.

FN3-4. As to the existence of ordinary things, Quine says of ordinary "medium-sized" physical objects that if we refuse to apply "the key words 'understood', 'real', and 'evidence' here,... [w]e should only be depriving them of the very denotations to which they mainly owe such sense as they make to us" (Quine 1975 / 1960: 3). Quine's point applies to ordinary *properties* as well. For "we quite readily say that a particular colour exists" (Wittgenstein: PI § 58); and "ordinary language is all right" (Wittgenstein 1965 / 1933–1935: 28). Again, Köhler says "the whole development [of science] must begin with a naïve picture of the world. This origin is necessary because there is no basis from which a science can arise" (Köhler 1970 / 1947: 3). That "naive" ordinary picture is precisely the basis of our phenomenology, which is a logical analysis of it.

FN3-5. Even so-called 'external relations' are logically contained in what we may call, with a bow to Russell, ordinary relational *facts*, e.g., that the cat is on the mat. That is simply a different and unrelated use of "external" to mean 'not intrinsic to, i.e., not essentially due to, the nature of the relata'. For that matter, even Platonic forms, which Aristotle criticizes for being wholly external to ordinary individuals, are logically contained in what we may call "participatory facts," e.g., that this particular cat participates in the timeless form of ideal cathood. Later in this chapter, I offer a deeper and more general Aristotelian version of the containment and dependence arguments. I call it the relational argument. There anything that is related in any way to an entity is an entity. For only something can be related to something. This very clearly includes both internal and external relations. They are all relations!

FN3-6. Ontological brackets do not function to indicate qualified, i.e. phenomenological ascents, even though the bracketed term does always intensionally express and directly refer to a qualified object that is one level higher than the object it might "be." For a term (ostensible name or description of an object in the wide sense) has a higher-level qualified object as its intensional meaning and direct referent whether the term is ontologically bracketed or not. Instead, ontologically bracketing a term functions to indicate that we are *disregarding* the ontological status of the object that is ostensibly named as the term's *indirect* referent / denotation. Thus we can bracket terms for ostensible objects of any phenomenological level n. The terms will already have qualified objects of level n + 1 as their intensional meanings and direct referents whether the terms

are ontologically bracketed or not. Thus this point applies not just to terms for ostensible objects in themselves, but to all terms.

The essential difference between qualified ascent and ontological bracketing is that a qualified ascent from level n object *a* to level n + 1 object *b* implies the factually informative existence assertion that *b* "is" *a*, while ontologically bracketing the name "*a*" as "<*a*>" never does. Quite the opposite, ontological bracketing "*a*" as "<*a*>" functions to indicate precisely that we are *not* making a factually informative existence assertion about *a*, or for that matter any other kind of ontological assertion about *a*, the object that is the ostensible indirect referent / denotation of the name "*a*".

Again, the assertion that *b* "is" *a* is factually informative. If true, it *adds* factual information to our understanding of the world. Specifically, it asserts that *b* stands in the being relation to *a*. And that would be a relational fact. But ontologically bracketing "*a*" as "<*a*>" *subtracts* factual information from anything we use "*a*" to assert. It subtracts existential / ontological import.

The assertion of the being relation that *b* "is" *a* implies in turn the existential assertion that *a* exists. This is so even though the "is" of the being relation is not the "is" of existence, any more that it is the "is" of identity, the "is" of predication, or the "is" of class membership. For all the uses of "is" have existential import when used in a statement. The only difference is that in the use of the "is" of existence, it is expressly stated, while in the others it is only implied. And that is precisely why statements of the being relation can, are, and must be logical analyses of ordinary factually informative existence assertions. The most general arguments for metaphysical ecumenicism are the relation argument and the (true) predication argument. And the "is" of the being relation, the "is" of identity, the "is" of predication, and the "is" of class membership are all predications of relations. On Frege's analysis, even the "is" of existence refers to the relation of falling under or within a concept, i.e., the relation of instantiation. (Frege's objects are complete and fall *under* concepts; his concepts and more generally his functions are incomplete and fall *within* higher-level concepts.)

Ontological bracketing is a linguistic act. If it asserts anything, it asserts the *suspension* of ontological assertion. Thus it is not at all what Frege calls mere supposition, as in supposing something to exist for the mere sake of the argument, e.g. in indirect proof or reductio ad absurdum. For supposing that an object *does* exist, even merely for the sake of the argument, is not at all the same as suspending the question *whether* it exists.

For Frege, "supposition" means apprehending the sense of a sentence without indicating any linguistic force, such as the force of assertion (act of judgment), question (act of interrogation), or command (imperative act). But bracketing is even less than that.

For in bracketing we are not even *hypothetically supposing* the thing to exist. We are suspending even ontological supposition!

Supposing and bracketing are not acts of *assertion*. In fact, neither indicates any force at all. To be sure, bracketing can occur *within* an asserted statement; and we can parse supposition that way too, though Frege does not. For Frege, only a whole statement can be supposed. But, so to speak, bracketing is even less an act of assertion than supposing is. That may sound Orwellian. ("All animals are equal, but some animals are more equal than others.") But in Vaihingerian terms, to suppose is to act *as if* the thing exists, say in the course of an argument, while to bracket is to preclude even that. It is to disregard the existence of the thing completely, and thus we cannot even hypothetically suppose that it exists.

We may say that supposition, or acting 'as if', is a positive act of fictive pretense, while ontological bracketing is a negative act of declining to consider ontological status. But we might also say that bracketing is positively declining to consider ontological status. As Frege notes, it is not always easy (nor perhaps even possible) to tell what is positive from what is negative, at least not in language. Again, Frege's example is "immortal" and "lives for ever" (Frege 1970d / 1919: 125). But in any case, the concepts of supposition and bracketing are clearly wholly different, thus really distinct. For neither logically presupposes the other. In fact, they logically preclude each other, as explained earlier in this footnote.

In our phenomenological semantics, any term that occurs within ontological brackets and/or within a supposition always has a qualified object that is both its intensional sense and its direct referent. They do have that much in common.

For us, a supposition can be either of a whole statement or of one of its terms (we suppose its indirect referent). These are logically equivalent, hence distinct only in reason. For a statement is supposed if and only if at least one of its terms is supposed.

FN3-7. Logical containment can be said in many ways. This is not logical containment in the sense that red is an essential property of the apple. Its being red is logically contingent (accidental). But it is logical containment in the sense that this apple would not be exactly as it is if it did not contain redness. In that sense, the apple logically contains even its accidental properties. This is essentially related to the logical containment of external relations in facts in which external relations occur. For the fact that an apple is red is just such a fact, and its being red is just such an external relation. See note FN3-5.

FN3-8. If the logically sufficient condition of x is no more than the sum of all the logically necessary conditions of x, then the relevant containment entailment theory of logical validity implies that an argument is logically valid if and only if the set of necessary

conditions of the premisses includes the conclusion as a member. A sufficiently perspicuous logic diagram of a logically valid argument represents all the necessary conditions, including the conclusion. For all the conditions are truth-conditions, and the conclusion is one such truth-condition. And all the representations are visual.

Just as for Aristotle the road from Athens to Thebes and the road from Thebes to Athens are distinct only in formula (Aristotle: *Physics* 202*b*), i.e. only in reason, so the containment relation and the dependence relation are distinct only in formula, i.e. only in reason. The truth-grounds of an argument's premisses *logically contain* the truth-ground of the conclusion if and only if the truth of the conjoined premisses *logically depends* on the truth of the conclusion; and those containment and dependence relations obtain if and only if the argument is logically valid.

If the relevant containment entailment theory of logical validity is false, and if my containment and dependence arguments are logically independent of each other as well, they can still be *independently* sound arguments for metaphysical ecumenicism.

FN3-9. Anthony Edwards shows how to construct Venn diagrams for any arbitrary finite number n of classes by drawing them on topological surfaces of positive curvature called "Vennis balls" (A. Edwards 2004: ch. 3). Venn believed his kind of diagrams could be drawn for no more than four classes; but that is only because he limited his drawings to flat Euclidean planes (A. Edwards 2004: 9–10). But Edwards' Riemannian (positive) Vennis ball diagrams visually represent relevantist logical containment entailment for all valid arguments using any arbitrary finite number n of classes.

FN3-10. I am referring to Frege's distinction between definition (*Definition*) and explanation (*Erklärung*). See FN1-8.

FN3-11. Again, Arthur Pap lists twelve main plausible definitions of "analytic" in his *Semantics and Necessary Truth* (Pap 1966: Appendix A).

FN3-12. Consistently with my reply, we can extend Long's (or Ockham's) view that an ordinary individual grounds its own individuality, and that an ordinary individual's ordinary properties cannot be identified apart from identifying the ordinary individual (D. Long 1968), to include all of an ordinary individual's logical constituents, and indeed all objects in the wide sense, as grounding their own individuality. And if there *were* only one 'true' theory of individuation, then I think Long would be right. For what a fine lot of candidates for ground of individuation of ordinary individuals these other particulars are. They cannot even be identified apart from identifying the ordinary individuals whose individuation they are supposed to ground! How can I identify which bare particular or perfect particular is in a certain ordinary phenomenal red round spot if I cannot identify the spot in the first place? Likewise for any

bundles of in re universals, ante rem universals, or Platonic forms which uniquely identify an ordinary individual. Every ordinary individual must instantiate / exemplify at least one such bundle if the principle of the identity of indiscernibles is true. But how can the bundle be identified without first identifying the individual?

Long's theory of individuation is the closest one I know of to my own. But I have two criticisms of it. First, like all other theories I admit into my metaphysical ecumenicism, Long's theory is right as far as it goes, but wrong insofar as it considers the other theories as rivals. Second, the concept of an ordinary individual is far more specific than the concept of a portion of reality, or portion of the real order. Even though the ordinary individual occupies exactly the portion of reality it does, the concept of a portion of reality is deeper and more general. Thus it is a deeper and more general ground of the individuality of the ordinary individual than the ordinary individual itself is. And its identification is the same.

FN3-13. Discussion of whether there is any hard 'core' or 'kernel' of reality within entities (Butchvarov 1989: 80) is disingenuous if Long is right that ordinary individuals simply ground their own individuality, or as I would ecumenically put it, are the *primary* ground (aside from other theories and from the portions of reality they occupy). Should we then say that an ordinary individual *is* a kernel of reality, or that it *has* a kernel of reality inside it? Surely the former, and not the latter. For it is not a kernel inside itself! And if an ordinary individual is mind-independent, then it is metaphysically real. And if it is totally mind-independent, that is, independent even of the logical possibility of minds, then it is totally real. Why then would it need a core or kernel of reality? To be sure, it must contain at least one bare particular and at least one particular property. But if the ordinary individual is totally real, why would the bare particular and particular property it contains merit being called the *core* or *kernel* of its reality? It is already just as real as they are. They are merely contained in and distinct only in reason from it! What is "conferring" reality on what here?

Although Butchvarov's objects are nonexistent in his own *classificatory* sense of "exists," it is precisely his objects which are the kernels of *mind-independent* reality within his entities, in my *non*-classificatory sense of "real" as not being nothing. Indeed, his entities are mere conceptual classifications of his mind-independent objects into classes. And his objects are the kernel-members of the classes. See Butchvarov (1979: 62–63, 253).

FN3-14. The probable entities of scientific realism are, *if they exist*, distinct only in reason from ordinary individuals and their ordinary sensible qualities, in the sense that they are not identifiable independently of them. And that solves the so-called problem of the two tables, the ordinary solid table we see and the probable table of

physics that is mostly empty space and invisible for theoretical reasons: Do both tables exist or only one; and if both exist, how are they related? Namely, if both exist, then they are distinct only in reason in the identifiability sense. The distinction is modal (one-sided), since the ordinary table can be identified independently of the table of physics, but not vice versa. But that is enough for the containment and dependence arguments to show the existence of the table of physics based on the existence of the ordinary table. It may seem curious that this is so even though the existence of the table of physics is merely probable. But as I said, this *applies* if and only if the table of physics *exists*. But even that may be felt to be strange. Allow me, then, to explain further about identifiability.

More precisely, the full solution involves four tables: two qualified tables and two tables in themselves. The qualified ordinary table "is" the ordinary table in itself, and probably "is" also the sub-atomic table in itself. And the qualified sub-atomically composed table probably "is" the sub-atomic table in itself. The two qualified tables are logically necessary, and the two tables in themselves are logically contingent. For the qualified tables are qualified objects, and qualified objects exist in all possible worlds. The two qualified tables are really distinct from each other, but only in the sense of having independently thinkable content. The two tables in themselves exist in some but not all possible worlds, and not always in the same possible worlds. Thus they are really distinct from each other in the sense that they logically can exist independently of each other. The theoretical identification of the ordinary table in itself with the sub-atomic table in itself is a logically contingent identification based on a logically contingent physical theory. Therefore, the ordinary table in itself and the sub-atomic table in itself are not distinct in reason, but really distinct, in the sense of logically independent existence. The term "probable" gives this away. If it is *only probable* that the ordinary table in itself has a sub-atomic structure in itself, then there can be no logically necessary relation between the ordinary table in itself and the sub-atomic table in itself. But as explained in the previous paragraph, the two tables in themselves are distinct only in reason in the sense that the sub-atomic table in itself, if it exists, is not *identifiable* independently of the ordinary table in itself.

We can and do reasonably judge that the two tables in themselves are one and the same table in itself, with the table of physics being the real table in the real *physical* order. We can even "enforce" their indiscernibility once we make the identity judgment (Butchvarov 1979: 37–38, 66–68, 71, 100, 181, 227). But the identity judgment remains logically contingent. For in infinitely many logically possible worlds, ordinary tables have no sub-atomic structure. Thus all we can say is that the theoretical identification

of the two tables in themselves is *causally* necessary in the *actual* world. For efficient cause is a logically contingent relation. And even the causal necessity of the identification is only *probably* the case. But at least it *is* probably the case, based on current physics. Indeed, in quantum physics *all* causation is merely probable, and only the probability function is determined.

FN3-15. Compare Berkeley (1965: 193–95) parsing a house, which is for him an idea in the mind of God, into the many private ideas other minds have (or, I add, logically could have) of the house.

FN3-16. One might object that Russell's definition of a concept can be inverted. We might define a universal as the determinate constituent of a concept, where a concept is defined in turn as the sense or intension of a propositional function. The possibility of such an inverted definition is in fact in Russell; see Russell (1976a / 1910–1911: 159–166). But Russell can reply that 'determinate constituent' gives the game away. For a determinate constituent is a determinate logical constituent. Thus the universal is logically prior to the concept after all, and the concept ought to be defined in terms of the universal. In fact, this is essentially what Russell does when he assigns universals to be the determinate constituents of propositional functions (Russell 1976a / 1910–1911: 155–167). For the intension or sense of a propositional function is essentially a concept; and to grasp the sense of a propositional function is essentially to be aware of a concept. Also, while for Russell all concepts are universals of which we are aware, we are not aware of all universals. That too makes universals prior to concepts. And thirdly, for Russell that is *because* concepts presuppose awareness, while his timeless ante rem universals do not. Perhaps God exists, and perhaps even *a priori* ante rem universals logically cannot exist without his awareness of them; but in any case I am an agnostic.

One might urge that on metaphysical ecumenicism, it is a standoff which definition, Russell's or its inversion, is better, since each is a different valid parsing of concepts and universals, and the parsings are distinct only in reason. But that is not the whole story. Where two terms are intersubstitutable salva analycitate, we ought to choose which term to analyze in terms of which on the grounds of which analysis is intellectually more illuminating. And it is more illuminating to follow Russell in analyzing concepts in terms of universals and our awareness of them, instead of inverting him.

For us, a concept, or intension / sense of a predicate, is a *qualified* universal. Russell's concepts of which we are aware are much like our directly grasped qualified universals. And we admit both on metaphysical ecumenism. For they are distinct only in reason. But our view is more illuminating. It advances the analysis by analyzing his concepts as *directly* grasped *qualified* universals.

FN3-17. Richard Robinson's (1950: ch. 6) criticizes real definition

(theoretical definition). He discusses many uses of the term, and concludes that there is no such thing as real definition, since there is no one thing that the term means. But the *core* meaning is that of stating what the thing is. And the core argument for real definition is that there is nothing ('that') that is nothing ('what'). That is, every *thing* is some *kind* of thing. Even pure being is a kind of ontological being: it is not being nothing. Even a hybrid, mutation, aberration, constantly changing thing, or random thing is not nothing. For it can be described precisely as a hybrid, mutation, aberration, and so on. Its form or nature is not a total blank. Even a bare particular is essentially bare and a particular. And as an object of thought, that is, as a qualified object, even nothing (*das Nicht*) is not nothing. That is, *qualified* nothing has being in the sense of not being nothing. There is something that it is—a something that is precisely why it cannot "be" an object in itself. Even its objective reality, qua objective reality, is something! Qualified nothing also has being in the sense of being mind-independently real. And all these examples are theoretical / real definitions of what the thing is.

Robinson also overlooks that while some of the main uses of the term "definition" are different, they are, in varying degrees, distinct only in reason. In ordinary language, there may be indefinitely large families of resembling ordinary pre-philosophical uses of each of the main philosophical terms, with no one feature in common to all of the uses. But in philosophy we are *interested in* only a few ordinary uses that lead to philosophical uses, which are or ought to be carefully defined so that they are *not* families of ordinary uses, but instead refer to (simple or complex) *features*. See Butchvarov (1970: chs. 1–2). And *pace* Robinson, there is something that each of those features is. And a theoretical / real definition states what a thing by describing such features.

FN3-18. It is best to think of the concepts of being real and of being intelligible as determinables with indefinitely many determinates. For example, most people barely understand technical concepts of relativity theory or of quantum mechanics. But lay concepts for lay people are intelligible enough for us to apply the concept of being real to strange things like curved space-time and quantum events. Thus technical concepts and lay concepts are determinates of the determinable intelligible concept. Of course, the ordinary word "concept" is said in many ways, and refers to a determinable. And our concept of being real splits into the progressively more determinate concepts of not being nothing, mind-independence, and independence even of the logical possibility of minds.

FN3-19. It is controversial whether Plato's forms or Aristotle's forms are universals, particulars, or in some sense prior to the universal-particular distinction. I briefly note some main scholarly issues in my (2021 / 2020: 82, 85 n.9). But the present book need

not enter such scholarly debates. Russell's regress argument for universals shows that regardless of what Plato or Aristotle *took* forms to be, their respective forms *are* universals. That is, Plato and Aristotle *ought* to have admitted their forms as universals, whether they *actuall*y did or not. See my (2021 / 2020: ch. 2). Plato's universals (forms) would be ante rem, and Aristotle's in re.

FN3-20. It might be argued that Plato's forms are prior to the distinction between particulars and universals, For everything must have a form, including both particulars and universals. Compare Cornford (1957: 186, 259, 266–298) on forms as having forms in common, and on how forms relate to other forms as opposed to how they relate to the particulars that participate in them. All such relations must be via forms. But 'the form prior to the particular-universal distinction' fails to meet the condition of being logically possible. For everything is either particular (i.e. categorially not capable of being common to many, or impredicative) or universal (categorially capable of being common to many, or predicative). And these two predicates are logical contradictories: mutually exclusive and jointly exhaustive. Thus all things must be either particular or universal. And that includes forms. Thus forms cannot be *prior* to the particular-universal distinction. Granted, 'the form prior to the particular-universal distinction' is as *intelligible* as the round square, but neither is *logically possible*.

Ante rem universals are simpler than particular properties and in re universals, and therefore prior in the order of things in themselves, thus the foundation in reality for the other predicative parsings. For they are abstractions from both space and time, while particular properties are in both space and time, and in re universals are in time if not also multiply locatable in space. And the portion of reality occupied by properties in the ordinary pre-philosophical sense, which all of these parsings parse, is prior to them all.

We may distinguish two senses of "prior" here. One is that of being prior *to* philosophy (specifically to metaphysics), and the other is that of being prior *within* philosophy (within metaphysics). In the first sense, the foundation in reality is the property portion of reality. In the second, ante rem universals are prior to particular properties and to in re universals, as explained in the previous paragraph. By parity of reason, this answers the question who has the deeper theory of forms, Plato or Aristotle. We admit both of their kinds of forms in metaphysical ecumenicism as logically valid parsings of ordinary properties. But Plato's are prior to Aristotle's, and are the foundation in reality for Aristotle's, because Plato's are logically simpler. For Plato's are ante rem, and Aristotle's are in re.

FN3-21. No one should be confused by the fact that Plato calls his forms 'ideas', or by the fact that his forms are ideal properties in the sense of being perfect exemplars, which is yet another parsing I

admit if and only if it meets the three conditions of metaphysical ecumenicism. I am inclined to think that there are perfect geometric forms in *a priori* geometry. We can reason about perfect circles and perfect squares. But even Plato doubts there is any such thing as perfect mud, since it is a mixture, and since it is lowly and ignoble; see Cornford (1957: 8, 10). And I doubt there is any such thing as a perfect ship. For we build different ships for different purposes. A perfect cargo ship would not be a perfect aircraft carrier. And I doubt there is even a perfect cargo ship or perfect aircraft carrier. For these divide into sub-kinds, such as for dry goods or for oil, or for helicopters or for fixed wing aircraft, and so on, theoretically all the way down to individual ships for individual purposes.

FN3-22. Emergent properties are properties of a whole that are not properties of any of its parts. An emergent entity is a whole that has at least one emergent property. Insofar as the emergent property must have a bearer, its bearer is just the whole entity that has it. Bergmann (1966: 151–152) also requires that an emergent property be "indefinable" in terms of the properties of the ("configuration" of) parts it emerges from. And surely he is right.

FN23. Russell's paradox is that the class of classes that are not members of themselves is a member of itself if and only if it is not a member of itself. Russell resolves it by his theory of types. The theory rules out the class as wrongly belonging to two type-levels, since it is predicated of itself in its definition. Russell comes to hold that the *specific* kind of type theory does not matter, but that there must be *some* theory of types to resolve the paradox (Russell 1985a / 1959: 61). But even that more general requirement is unnecessary on my theory that logically paradoxical classes simply, individually, 'locally' defeat themselves. Of course, even I *have* a phenomenological hierarchy of type-levels of qualified objects; and *inconsistent* level n qualified classes cannot "be" level n - 1 classes. But this too is a matter of local self-defeat of individual classes.

Are we also going to rule out the round square by means of a type-hierarchy preventing shapes from being defined by self-reference? For there is *implicit* paradoxical self-reference here too, of the sort that calls for prevention by a type-hierarchy, according to Russell. For it is the square that is *itself* also round (or vice versa), or the object that is *itself* both square and round.

Nor can a type theory *explain* why the paradoxical classes are paradoxical. For no such theory has yet been tailored to rule out all and only just the paradoxical classes. For they also rule out infinitely many innocent classes, meaning classes that violate the type-hierarchy but are not paradoxical. For example, the class of classes having at least one member is innocent, since it includes itself as a member without any paradox. Thus the explanation that the classes are paradoxical *because* they violate a type-hierarchy is

insufficient. For it must take *more* than merely violating a type-hierarchy to make a class paradoxical. In contrast, local self-defeat captures all and only the problematic classes, i.e., exactly and perfectly. And it is always an intuitively satisfactory explanation.

Indeed, devising a type theory to explain why a class is paradoxical, when we can already see why it is paradoxical just by looking at it, is like the cart pulling the horse, or the tail wagging the dog. Yes, Aristotle is right that the true explanation is the most general one. But we do not have that here, unless (again) we can devise a type theory that does not also rule out innocent classes.

In Aristotle's example of true explanation, in Euclidean geometry two lines are parallel because they generally intersect a third line at the *same* angle, and not because they specifically intersect at, say, *right* angles, There is no ruling out of any innocent classes of lines or angles. For being parallel and intersecting at the same angle are logically equivalent. But the class of classes that violate Russell's type-hierarchy and the class of paradoxical classes do not even have the same *members*. For infinitely many innocent classes violate his type-hierarchy.

Russell implicitly accepts Aristotle's theory of true explanation as the most general correct description in a very strong way:

> In all our knowledge of general principles,... first of all we realize some particular application of the principle, and then we realize that the particularity is *irrelevant*, and that there is a generality that may equally truly be affirmed. (Russell 1974 / 1912: 70–71, my emphasis)

Thus Russell implicitly accepts Aristotle's theory that the true explanation is the most general correct description, for the reason that any more specific description is *not even relevant* to "our knowledge of general principles." In Aristotle's example, it is *not even relevant* to the lines' being parallel that they both intersect the third line at 90 degrees. It is only logically relevant that they intersect it at the *same* angle. For they would still be parallel if they intersected it at any *other* angle, as long as it was the *same* angle. Note that Russell's explanation of Aristotle is *itself* at the perfect level of generality. For the *logically relevant* degree of generality of explanation is logically equivalent to the *most general* degree of explanation simpliciter. Russell repeats the point a few pages later. There he says that at first we think specifically of "two coins or two books or two people," and then we can rise to "think of [the number] two abstractly" (Russell 1974 / 1912: 77). And then,

> as soon as we can divest our thoughts of **irrelevant particularity**, we become able to *see* the general principle that two and two are four; any one instance is [then] seen to be typical, and the examination of other instances becomes **unnecessary**. (Russell 1974 / 1912: 77, his italic emphasis, my bold emphasis)

We may use Russell's exact words to restate Aristotle as follows. Aristotle's "general principle" is that two lines are parallel if and only they intersect a third line at the same angle. We then "become able to *see*" that the "**particularity**" that they intersect it at *right* angles is "typical, and the examination of other [specific angles] becomes **unnecessary**," since it is now seen to be "**irrelevant**."

Aristotle's principle that the most general description is the true explanation is itself the most general description, and therefore is both the true explanation, and the only relevant explanation, of explanation. For what description of explanation could be more general? And according to the principle itself, the most general description states the true explanation.

One might object that on my own interpretation of Frege as implicitly describing explanation as a true factually informative analysis that is not a definition, it is a more general description of explanation than Aristotle's description of explanation. My reply is that Aristotle implicitly intends the most general description to *be* a true factually informative logical analysis. For his two geometrical examples of explanation are just that: Fregean explanations. And if Frege does not intend his (Frege's) own explanations to be the most general descriptions, he certainly ought to. And Frege's example of explanation, explaining identity as indiscernibility, *is* the most general description of identity on its face; or at least there can be no *more* general one. For it applies to all logically possible cases of identity. Thus Aristotle's and Frege's descriptions of explanation are logically equivalent and distinct only in reason.

FN3-24. Ducasse (1968) analyzes causation as having three logical components: a cause, an effect, and what we may call a background situation, or set of background conditions. I see this as a tacit admission of multi-variable causal systems, where we often call one constant the cause because it is presented to us in a salient way as the "trigger" event, i.e., as the one causal event that changes, with all the other interacting causal events remaining constant in an unchanging "background." The trigger event is the constant we ordinarily call the cause. But another constant may become more salient to us later, if we find out later that it changed things more.

FN3-25. The notion of a Hertzian material point is logically complex. It is (1) matter that (2) occupies (3) a spatial point at any

given time, and (4) occupies (in a different sense) (5) a temporal point at any given time, and (6) can move about, i.e., can occupy different spatial points at different temporal points. Kinds of points include material points, spatial points, temporal points, geometrical points as defined in each geometry, and for the 1911 Russell, minds as "pin-point particulars" (Russell 1985a / 1959: 120). Points of each kind surely would include infinitesimal points at the least.

FN3-26. Gustav Bergmann expressly admitted in lecture the logical possibility of purely mental causes with purely mental effects. He gave the example, "Thinking of the death of a friend causes me to feel sad" (Bergmann 1973–1974). His books suggest this logical possibility as well. Bergmann (1966: 110) says that anxieties or neurosis can affect our color vision. Bergmann says, "For to look for laws is the same as to look for causes.... The animal will go down the right path (1) if it is hungry or, as one also says, is motivated or has a need, and (2) if it 'knows' the maze" (Bergmann 1967a: 306). And on the face of it, hunger, motivation, need, and knowledge are all mental. For Bergmann, hunger would at least be a phenomenal sense-datum, as are the colors we see. Going down the right path would of course be physical. And Bergmann is Humean on cause. Only a regular pattern (typically multi-variable) of events is required. Therefore whether the events are physical, mental, or anything else (if there are any other kinds of space-time events) is logically irrelevant to whether there is causation in the Bergmann-Hume sense. But efficient causes in the Aristotle-Ducasse sense logically can be purely mental too. For it is logically contingent what efficiently causes what.

"Event" is a determinable. "Physical event" and "mental event" are two of its determinates. On the face of it, "physical" and "mental" are not contradictories, but only contraries. Thus there is logical room for other logically possible determinates of "event," even if we cannot conceive what they might be. Compare Spinoza's view that thought and extension are the only two attributes out of God's infinitely many attributes that we can conceive. "Causal event" is a determinable too. Physical causal events and mental causal events are two of its determinates. Aristotle's four causes are four determinates of cause as well. All this is on a logical par with red and green as determinates of the determinable color. All intuitive determinate-determinable relations are synthetic *a priori*.

Chapter 4:Epistemology

FN4-1. José Benardete says, "Himself a relativist in regard to truth, Alfred Tarski allows a statement to be true... only relative to some restricted universe of discourse.... thus... Tarski is anti-meta-

physical root and branch" (Benardete 1989: 31). But Tarski says:

> **We should like our definition to do justice** to the intuitions which adhere to the *classical Aristotelian conception of truth*—intuitions which find their expression in the well-known words of Aristotle's *Metaphysics*:
>
> > *To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, or of what is not that it is not, is true*.
>
> If we wished to adapt ourselves to modern philosophical terminology, we could perhaps express this conception by means of the familiar formula: *The truth of a sentence consists in its agreement with (or correspondence to) reality*. (For a theory of truth which is to be based upon the latter formulation the term "correspondence theory" has been suggested.) (Tarski 1944: 342–343, his italic emphasis, my bold emphasis)

What Benardete calls a linguistic framework for "some restricted universe of discourse" is precisely the vehicle by which truths and falsehoods *can* be stated about the world, such as that it is true that snow is white. And as a formalization of the correspondence theory of truth, Tarski's theory is at most only formally distinct from it: his theory is that "Snow is white" is true if and only if snow is white! The correspondence theory could scarcely be better stated.

FN4-2. Again, there are at least twelve main plausible ways to define "analytic" (Pap 1966: Appendix A). And since "synthetic" means 'not analytic', there are at least twelve corresponding main plausible ways to define "synthetic."

FN4-3. Where subliminal Gestalt perception is sensory input below the threshold of sense-perception (a well-tested phenomenon), we might say that this judge had a subliminal ability to judge cases that was below his threshold of description!

On the deeper level of mysticism, the early Wittgenstein says "those who have found... that the sense of life became clear to them have then been unable to say what constituted that sense" (T 6.521). He continues, "There are, indeed, things that cannot be put into words. They *make themselves manifest*. They are what is mystical" (T 6.522, his emphasis). The later Wittgenstein asks us if we can describe "how a clarinet sounds" (PI § 78), and whether or in what sense we can describe "the aroma of coffee" (PI § 610).

FN4-4. Edmund Gettier (1960: 121–123 n.1) says, "Plato seems to be considering some such definition at *Theaetetus* 201, and perhaps

accepting one at *Meno* 98." I agree with those who reject Gettier's use of "justified" as too weak to refer to evidence adequate for knowledge. For otherwise his so-called "problem" would not even arise. His problem is precisely that in some cases, our justification is too weak for knowledge! As Phillip D. Cummins says, "This is a game not worth the candle."

FN4-5. See Hegel (1969a / 1812–1813, 1816: 1–78; 2015 / 1830: 11, 19, 28, 37, 38, 39, 43, 45, 61, 62, 68, 77, 79, 81, 83, 95, 99, 124, 125, 132, 141, 222, 231, 242, 261, 292, 295, 297, 298).

FN4-6. See Hegel (1969a / 1812–1813, 1816: 38, see 34–35, 52–53, 411–415; 2010 /1830: 52, 176–179; 1967 / 1807: 76, 79). See also Findlay (1962 / 1958: 85, 191); Stace (1955 / 1924: §§ 127, 136–140, 166, 245, 255, 306, 349, 400, 479, 508).

FN4-7. See Hegel (1969a / 1812–1813, 1816: 1–78, especially 27–28, 31, 35–42, 48–50, 54; 413–415, 600–622, 724–725, 755–760; 2015 / 1830: 5–7, 20–21, 31, 43–46, 51–58, 176, 188, 208, 219, 231–240, 281–282, 301–303; 1967 / 1807: 67–227, 789–799). See also Brinkmann (2010: xi–xv); Findlay (1962 / 1958: 69, 84, 151, 153, 222, 223–230, 232); Stace (1955 / 1924: §§ 145, 165, 171, 173, 307–312, 314–321); Kaufmann (1966 / 1965: §§ 19, 34, 67, 68).

FN4-8. See e.g. Stace (1955 / 1924: §§ 130, 138–139).

FN4-9. On immanent universals, see Hegel (1969a / 1812–1813, 1816: 31, 36, 600–622; 2015 / 1830: 11, 42, 58–59, 294, 301; 1967 / 1807: 181–184; Findlay 1962 / 1958: 227–229; Stace 1955 / 1924: §§ 6, 7, 9, 10, 12, 13, 33, 95, 314–315, 318, 416–417).

Chapter 5: Ethics

FN5-1. This may help answer the vexed question of what the Tractarian Wittgenstein's objects are, at least indirectly, by making clear what they are not. It has been often claimed that Wittgenstein never tells us what they are. But we can at least say what they are not. They do not include values, beauties, causes, God, or the self. The *Tractatus* makes that evident. And this also squarely places Wittgenstein's objects on the side of British empiricist (via moderna) phenomena as opposed to Continental (via antiqua) phenomena, if his objects are phenomena at all. From the historical viewpoint, this makes all the sense in the world. For his main teacher was the early Russell, and Russell's sense-data are via moderna. And from a logical point of view, this makes sense too. For Tractarian objects are simple, but via antiqua ideas have both a formal reality and an objective reality. No one has ever suggested that Tractarian objects have objective realities. How could they, and still be simple? But the main point is that values, beauties,

causes, God, and the self cannot be via moderna sense-data. Now, if A's and B's are not C's, it does not follow that A's are B's. But via moderna and via antiqua ideas are mutually exclusive and jointly exhaustive of ideas (phenomena, objects of perception or thought), since either an idea has an objective reality or it does not. Hence if Tractarian objects (A's) and via moderna ideas (B's) are not via antiqua ideas (C's), it does follow that all Tractarian objects are via moderna ideas, at least if they are ideas (or phenomena, or objects of perception or thought) at all. But it does not conversely follow that all via moderna ideas are Tractarian objects. For example, Wittgenstein might admit Moorean or Russellian mind-independent sense-data, but reject Berkeleyan mind-dependent merely mental ideas. Recall that a via moderna cognitive object is not necessarily mental, but can be any cognitive object that has no objective reality in the scholastic / Cartesian sense.

Again, Wittgenstein states what seem to be examples of his objects: spatial objects, specks in the visual field "that must have some colour," musical notes that "must have *some* pitch," and "objects of the senses of touch" that "must have *some* degree of hardness" (T 2.0131, his emphasis). And what could these be but sense-data, or at least visible, audible, or tangible objects?

FN5-2. My views on mysticism are influenced by Stace (1960); S. Katz (1978); Underhill (1961 / 1911); Happold (1981 / 1963); Suzuki (1964 / 1910); Eckhart (1978); Bharati (1976); Otto (1960 / 1932); Watts (1960); A. Huxley (1945); Shah (1970); Over (1977); Shankara (1978 / 1947); Müller 1962 / 1879, 1884); Nāgārjuna (1987); St. John of the Cross (1959 / ca. 1577–1579); St. Teresa of Ávila (1965 / 1565); Lao Tzu (1972); and many others.

FN5-3. Evelyn Underhill takes the religious view that "Purification [or purgation is] the necessary corollary of conversion" (Underhill 1961 / 1911: 198, see pt. 2, ch. 3). But Agehananda Bharati says that mystics also include those who are "once a schnook, always a schnook" (Bharati ca. 1971; see 1976: ch. 4). I suspect the reason for the difference is that for Underhill, mystical experience is always of a personal God who requires spiritual purification, while Bharati more inclusively and ecumenically admits impersonal mystical states that can happen to anyone, good or bad, at any time.

FN5-4. Some admit a third kind of state, called the unitive state, which is an intermediate blend of the introvertive and extravertive states. Logically it is just the extravertive state with a strong sense of oneness of the One. If so, then the three states are modally distinct, forming a progressive series going from extravertive through unitive to introvertive, or vice versa. For there can be no blended intermediate state without two states to blend. In fact, there is no logical reason why we cannot admit indefinitely many degrees of strength of unity in extravertive states. The two extreme

states remain mutually exclusive, but they are no longer jointly exhaustive, much as nothing can be both purely red and purely green at the same time, but there can be reddish greens or greenish reds. The progress of the soul to higher spiritual stages would logically go from extravertive through unitive to introvertive. However, the unitive stage is typically thought of as the last stage of a mystic who returns from the high introvertive state back down to some degree of extraversion, so as to communicate with and show compassion to others. Compare Underhill (1961 / 1911: pt. 2, ch. 10), and the Buddhist concept of a Bodhisattva.

FN5-5. Different political theories can have identical values but emphasize or weight them differently. For a simplified hypothetical example, let A be the value of taking responsibility for one's own well-being, and B be the value of taking responsibility for the well-being of others who are unable to do so themselves. Then let a conservative be one who shouts A and whispers B, and let a liberal be one who shouts B and whispers A. We may call this *shout and whisper ecumenicism*. Where a conservative finds a deficiency of A and an excess of B in situation S, a liberal may find the reverse. But our theory is simply that on the A—x—B continuum, whether either value defeases the other depends on situation S. I think this purely logical analysis is the correct theoretical solution. But it cannot be a practical solution, since in practice everything depends on situation S. And if rival theorists are putting their thumb on the scales to tip the balance to A or B in advance, they are not true to the spirit or concept of rational or even objective discourse. Recall also that a continuum is of logically possible situations, not just actual ones. Even our most cherished in re finite values are defeased in infinitely many logically possible situations. With a bow to quantum physics, we may call that the principle of ethical uncertainty. The principle applies to all logically possible in re finite values. Weighting values in advance of situation S equates to defeasing them ante rem and *a priori*. And we saw that this cannot be done for categorial reasons, not even in the case of love. Situational ethics is in re and finite; *a priori* ethics is ante rem.

FN5-6. Compare Deena Mousa (2024)'s good discussion updating Robert Nozick (1974) on whether we would be happier living in a *Matrix*-like simulation if we could have everything we wanted at the price of its not being real. Mousa holds that most people would prefer living in a less than delightful real world to living in a world of delightful illusion. Compare Mill's point that most people would prefer being unhappy humans over being happy pigs (Mill 1985 / 1861: 14, see 11–13). The connection is that the pigs are living in the delightful illusion that their pleasures are the only pleasures; but we know better, and would prefer not to live in such an illusion. To be sure, even this depends on situation S in continuum analysis.

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