

Physical-Object Ontology, Verbal Disputes, and Common Sense

ELI HIRSCH
Brandeis University

Two main claims are defended in this paper: first, that typical disputes in the literature about the ontology of physical objects are merely verbal; second, that the proper way to resolve these disputes is by appealing to common sense or ordinary language. A verbal dispute is characterized not in terms of private idiolects, but in terms of different linguistic communities representing different positions. If we imagine a community that makes Chisholm's mereological essentialist assertions, and another community that makes Lewis's four-dimensionalist assertions, the members of each community speak the truth in their respective languages. This follows from an application of the principle of interpretive charity to the two communities.

I

My central claim in this paper is that many familiar questions about the ontology of physical objects are merely verbal. Nothing is substantively at stake in these questions beyond the correct use of language. A derivative claim is that, since they are verbal, the proper way to resolve these questions is by appealing to common sense or ordinary language.

The first claim is evidently connected to Carnap's famous distinction between "internal" and "external" questions, but I'm not sure how close the connection is¹. Although it's not my aim to engage here in Carnapian exegesis, let me mention one immediately important difference between my approach and Carnap's. Whereas Carnap evidently intended his distinction to apply to all issues of ontology, including those involving abstract things such as sets and properties, my claim about verbalness is restricted to questions about the existence and identity of highly visible physical objects. I'll later say something briefly about why the claim may not be extendible to the wider range of ontological issues, but this question must remain largely for a separate discussion. It should be understood, furthermore, that throughout this paper I make the assumption, which I think is common in disputes about

Rudolph Carnap, "Empiricism, Semantics, and Ontology," in *Meaning and Necessity*, 2nd edition (University of Chicago Press, Chicago, 1956).

physical-object ontology, that all sides to a dispute have at their disposal constructions involving sets (or properties).

Questions about the ontology of physical objects have been prominent in the recent literature. Some of the doctrines that have been most frequently debated include the following:

Nihilism. There are no composite objects.²

Quasi-Nihilism. Some few composite objects exist, including persons and perhaps some other living things, but there are no tables, ships, mountains, rivers, planets, pebbles, leaves, eyes, or almost any other of the variety of composite objects that people ordinarily seem to be talking about.³

Mereological Essentialism. An object cannot persist with any of its parts replaced.⁴

The doctrine of mereological sums. Any two objects compose an object.

The doctrine of temporal parts. If an object persists through an interval of time, there is a temporal part of the object that exists only during that interval and that spatially coincides with the object during that interval.

Four-dimensionalism. This is the conjunction of the doctrines of mereological sums and temporal parts. It implies that, if we start with the objects ordinarily talked about, any sum of temporal parts of these objects, however discontinuous or gerrymandering, constitutes an object on a par with them.⁵

Nihilism is discussed (and rejected) in Peter van Inwagen, *Material Beings* (Cornell University Press, Ithaca, N.Y., 1990), ch. 8. Nihilism may be suggested in Peter Unger, "There Are No Ordinary Things", *Synthese* 41 (1980), 117-54. The dispute over nihilism that I view as verbal occurs when both sides agree that there are simples and disagree about whether there are composites. As Theodore Sider pointed out to me, my arguments in this paper do not seem to imply that the question whether there are simples is verbal—a question which, it may be noted, is not about the existence of highly visible objects. Cf. Sider's "Van Inwagen and the Possibility of Gunk", *Analysis*, 53 (1993), 285-89. See also note 29, below.

Two quasi-nihilists are van Inwagen, Material Beings, and Trenton Merricks, Objects and Persons (Oxford University Press, Oxford, 2001).

Roderick Chisholm, Person and Object (Open Court, LaSalle, Illinois, 1976), ch. 3; reprinted in J. Kim and E. Sosa, eds., Metaphysics: An Anthology (Blackwell Publisher Ltd., Oxford,1999); James van Cleve, "Mereological Essentialism, Mereological Conjunctivism, and Identity through Time", Midwest Studies in Philosophy XI (1986).

I adopt the expression "four-dimensionalism" for the highly popular and influential conjunction of the two doctrines, but the reader should be aware, first, that some authors use the expression for the doctrine of temporal parts, without regard to the doctrine of mereological sums, and, second, neither doctrine really has much to do with the intuitive idea of "four dimensions." Most proponents of either of these doctrines also accept the other and are therefore four-dimensionalists in the defined sense. Two exceptions are Van Cleve, "Mereological Essentialism, Mereological Conjunctivism, and Identity through Time", and Judith Jarvis Thomson, "Parthood and Identity Across Time", Journal of Philosophy 80 (1983), 201-20; reprinted in Kim and Sosa, eds., Metaphysics: An Anthology. Four-dimensionalists include W. V. Quine, Word and Object (The MIT Press, Cambridge, MA, 1960), esp. p. 171; David Lewis, On the Plurality of Worlds (Basil Blackwell, Oxford, 1986), esp. pp. 202-4, 211-13; Mark Heller, The Ontology of Physical Objects: Four Dimensional Hunks of Matter (Cambridge University Press, Cambridge, 1990); chapter 1

A final position that is often ignored in the current literature is:

Common sense ontology. This denies all of the above doctrines. The composite objects we ordinarily talk about really exist; they typically persist through changes in their parts; they typically do not have sums; and they typically do not have temporal parts.⁶

According to my first claim the dispute between these various positions is purely verbal, and this implies, according to my second claim, that the position of common sense ontology must be correct.

H

Let me begin by saying something about what I mean by a verbal dispute. The following is a fairly simple example. I know someone, whom I'll call A, who claimed that a standard drinking glass is a cup. "Just as a cat is a kind of animal", she said, "a glass is a kind of cup." Everyone else whom I've asked about this agrees with me that a glass is not a cup. Clearly, this dispute is, in some sense, merely about language. It's tempting to try to elaborate the sense in which this is so by saying that A's assertion is true in her idiolect, and mine is true in mine. This appeal to private idiolects may, however, have the drawback of suggesting that, in asserting what she does, A does not express a false belief or thought about cups and glasses. An influential view of Tyler Burge may imply, on the contrary, that A's beliefs and thoughts about cups and glasses are determined by what her asserted sentences mean in the public language, not in A's alleged private idiolect. I intend to skirt this entire issue. I think we can bring out a relevant sense in which the dispute is merely a matter of language without getting involved with questions about private idiolects.

Let's assume that all of the disputes considered in this paper are intended to take place in plain English. Each disputant claims to be speaking the truth—that is, the strict and literal truth—in plain, non-technical English. Now let's imagine a linguistic community which is in all other ways as close as possible to our actual English-speaking community but in which everyone agrees with A. We'll call this the A-community. To say that members of the A-community agree with A means, roughly, that they accept all

reprinted in Kim and Sosa, eds., Metaphysics: An Anthology; Theodore Sider, Four-Dimensionalism: An Ontology of Persistence and Time (Oxford University Press, Oxford, 2002). An argument from the doctrine of mereological sums to temporal parts is given in Richard Cartwright, "Scattered Objects", in K. Lehrer, ed., Analysis and Metaphysics (Reidel, Dordrecht, 1975); reprinted in Kim and Sosa, eds., Metaphysics: An Anthology.

⁶ A highly original formulation of common sense ontology is given in Ned Markosian, "Brutal Composition", Philosophical Studies 92 (1988), 211-49.

Tyler Burge, "Individualism and the Mental," Midwest Studies in Philosophy IV (1979). Since I'm not clear about the intended scope of examples to which Burge's idea applies, I'm not entirely confident that it applies to the trivial example of the glass and cup. Certainly it would apply to other examples I'll consider in this paper.

of the disputed sentences which A accepts. They will accept such general sentences as "A glass is a kind of cup." With respect to perceptual sentences, involving demonstratives or indexicals, something a bit more complicated has to be imagined. The basic idea is that they say the same things A would say in relevantly similar perceptual circumstances. In the A-community anyone shown a standard drinking glass will assent to the sentence "This (here) is a cup." This characterization of the A-community is not completely precise, but I think it's good enough for my purposes.

By A-English we'll mean the language that would most plausibly be attributed to the imagined A-community. I think it's obvious that in A-English the sentence "A glass is a cup" is true. In that language the word "cup" denotes, roughly, any vessel designed for drinking, that is, all the things we call "cup" plus drinking glasses. My dispute with A is verbal because the disputed sentences asserted by A are true in A-English, and, by the same token, the disputed sentences asserted by me are true in the language corresponding to my position. The only real question at issue is which language is (closest to) plain English. I take it that the answer to that question is that the language corresponding to my position is plain English. That's the sense—the only sense—in which I'm right and A is wrong. In this kind of example it's seems obvious that the proper way to resolve a verbal dispute is by appealing to common sense or ordinary language.

If Burge's view applies to this example, it implies that A is not speaking (or thinking in) A-English (or in a corresponding private idiolect); rather A has the mistaken thoughts and beliefs that are expressed by her assertions in plain English. I'm not entering into that question. What is important for my purposes is that the sentences asserted by A are true in A-English, so that the only real question is whether A-English is plain English. This is why the dispute with A is merely verbal. In effect I am redefining "A's idiolect" to mean the (imagined) public language associated with A's position. This redefined sense of "A's idiolect" captures the relevant sense in which "A is right in A's idiolect (and we are right in ours)."

I say that on the most plausible interpretation of the A-language the sentence "A glass is a cup" is true in that language. By the "most plausible" interpretation I mean one that is *permanently* most plausible; I'm taking it as given that the members of the imagined A-community are not going to change their linguistic behavior in any relevant way. Might it nevertheless be the case that the most plausible interpretation is not the correct one? Is it possible that, contrary to all evidence, the members of the A-community really mean by "cup" what we mean, but they have for some reason the

Throughout this paper I will allow a single expression to have different meanings in different languages. In another sense we can say that the different languages contain distinct expressions that are phonetically and syntactically indistinguishable.

intractable inclination to falsely judge that glasses are cups? That makes no sense, I think, for reasons related to the "Wittgenstein paradox" discussed by Kripke. But that's another issue that I'm not entering into here. I'll simply assume in what follows that once we agree on the most plausible interpretation of a language, no further questions will be raised about whether that is the correct one.

But why is it plausible to suppose that in the A-language the word "cup" doesn't mean what it means in our language, so that the sentence "A glass is a cup" is true in that language? The basic answer to this question comes out of a widely accepted principle of linguistic interpretation that has often been called the "principle of charity." This principle, put very roughly, says that, other things being equal, an interpretation is plausible to the extent that its effect is to make many of the community's shared assertions come out true or at least reasonable. As Davidson says, interpreting a language is part and parcel of explaining people's behavior and psychology, and such an explanation is, other things being equal, simpler and more plausible if it depicts people as reacting in some reasonable way to the facts they confront.11 If we tried to interpret the word "cup" as meaning in the A-language what it means in our language, we would have to depict the A-speakers as inexplicably making false and unreasonable judgments about cups. The principle of charity tells us to avoid this implausible result by interpreting the word "cup" differently.

The general idea of interpretive charity is to make the community's assertions come out as far as possible true or reasonable. I think it's obvious, however, that some assertions demand more charity than others. Perceptual assertions are evidently central to linguistic acquisition and interpretation. What I'll call "charity to perception" is the very strong presumption that any language contains sentences used to make perceptual reports, and that these reports are generally accurate (to a fair degree of approximation), especially when they are widely accepted in the community. It's hard to imagine any procedure for interpreting a language that does not take charity to perception very seriously. If we interpreted the word "cup" as meaning in the A-community what it means for us, we would regard as false such perceptual reports as, "Here is a cup", said with respect to a glass. Charity to perception urges us to avoid such an interpretation. One other salient kind of charity that I want to mention is what I'll call "charity to understanding." Certainly there must be

⁹ Saul A. Kripke, Wittgenstein on Rules and Private Languages (Harvard University Press, Cambridge, MA, 1982).

Quine, Word and Object, p. 59; Donald Davidson, Inquiries into Truth and Interpretation (Oxford University Press, Oxford, 1984), esp. "Belief and the Basis of Meaning" and "Thought and Talk"; David Lewis, "Radical Interpretation" in Philosophical Papers 1 (Oxford University Press, N.Y., 1983), and "New Work for a Theory of Universals", Australasian Journal of Philosophy 61 (1983), 343-377, at pp. 370-77. 11

Davidson, Inquiries into Truth and Interpretation, esp. pp. 159-60.

the strong presumption that typical speakers of a language have a sufficiently adequate grasp of their linguistic and conceptual resources so that they don't generally make a priori (conceptually) false assertions, especially when these assertions seem to be relatively simple, not ostensibly involving any complicated calculations or computations. If "cup" were interpreted in the A-language to mean what it means in our language, the A-speakers would inexplicably make such a priori false assertions as, "A glass is a cup." Worst of all, they would make a priori false perceptual assertions, such as, "There's one cup here, and it's a glass." An interpretation that simultaneously violates both charity to perception and understanding can typically not be taken seriously.

The general characterization of a verbal dispute is one in which the controversial sentences are most plausibly interpreted as having different truth conditions in the different languages associated with the contending positions, so that each position turns out to be correct in its associated language. In the sense intended throughout this discussion sentences have the same truth conditions if (relative to the same context of utterance) they hold true in the same possible worlds. The verbalness of a dispute may turn on the reference of a term such as "cup", or it may turn on the meaning of logical constants—as in a verbal dispute as to whether "Either John or Mary is ill" is true when both John and Mary are ill—or any semantic or syntactic feature of language that affects the truth conditions of sentences. The primary focus is always on whole sentences and how to assign truth conditions to them in the most charitable way possible. When I speak throughout this paper about interpreting a language this is always to be understood in the narrow sense of assigning truth conditions. I leave it open what there is to understanding a language beyond knowing the truth conditions of its sentences, but, whatever this additional element may be, it will have a bearing on my argument only insofar as it might affect the plausibility of certain truth-condition assignments. These points will be important to bear in mind when we consider later the different ways to assign charitable truth conditions to sentences in the ontological cases.

Charity in the sense I've explained—that is, the presumption that sentences widely accepted by the linguistic community are true or reasonable—is not the only interpretive consideration mentioned in the literature. Considerations of semantic compositionality, complexity, and property-naturalness may play a role, and will be addressed later. A point that I want to stress at present is that most disputes, whether in ordinary life, in science, or in mathematics are substantive rather than verbal. It's essential to realize that if we pick almost any intuitively substantive dispute, and set ourselves the task of finding some plausibly charitable assignment of truth conditions that will make both sides come out right in their associated languages, we generally

find that we have not the faintest idea of how to proceed. We are emphatically not merely looking for "models" here (in the sense of Putnam's "model-theoretic argument"). 12 We are looking for genuinely plausible truth-condition assignments that make the most charitable sense of what members of a community say, and especially the most charitable sense of how what they say rationally reflects their perceptions (hence, their causal connections to their environments) and their understanding. I repeat that if we consider virtually any familiar question from outside philosophy—the question whether God exists, whether there is extra-terrestrial life, whether Goldbach's conjecture is true—we find that we have not the faintest idea of how to plausibly interpret both sides of the questions as coming out right in their associated languages. 13 In the minority of cases where this is possible we have a merely verbal dispute.

Leaving aside various complications for the moment, I want to mention another fundamental element of interpretive charity that in many relatively easy cases immediately settles that a dispute is substantive. This element, which I'll call "charity to retraction," is illustrated in the following case. My friend B claims, "When a ball is thrown into the air at a certain speed, it hits the ground at a much greater speed." I say it hits the ground at roughly the same speed. This is surely not a verbal dispute. If I imagine the B-community, in which everyone accepts the disputed sentences that my friend accepts, I'm obviously imagining a community that is ignorant of basic physics, not a community that asserts true sentences in a different language. If I tried to interpret B-English so as to make the community's assertions come out right, I would find myself quickly faced with cascading complications, but even apart from that, in the present example there is an obvious reason not to seek any such interpretation. My friend B may suffer from a perversely irrational confidence in his untutored physical intuitions, but, like most people, he is by no means beyond the reach of reason. There are any number of experiments that, if he confronted them, would get him to retract his original assertion. We imagine the members of the B-community as behaving in the same way. When we try to interpret a language in a manner that is charitable to what people say, we need to take into account not just what they actually have said, but what they will or would say in the face of additional evidence. If we tried to interpret the sentence "It hits the ground at a much greater

Hilary Putnam, Reason, Truth, and History (Cambridge University Press, Cambridge, 1981), ch. 2.

When considering the interpretation of a mathematical sentence such as the Goldbach sentence it must be borne in mind that such sentences are always related to other kinds of sentences. A plausible assignment of truth conditions that would make the Goldbach sentence come out false must make the sentence "The number of stars is even (and more than two) and not the sum of two primes" come out true in some worlds and false in others. It can never be simply a matter of formulating a rule—supposing that were possible—that makes some mathematical sentences true (or false) in every world.

speed" as being true in *B*-English, we would imply that the *B*-speakers make a mistake when they are disposed to retract the sentence in the face of additional evidence. This is surely not charitable. A plausibly charitable interpretation must take account of the strong presumption that reasonable people are expected to improve the accuracy of their judgments in the face of additional evidence. This is obviously a complicated principle that would ultimately need to incorporate facts about probability and conflicting evidence, but a very simple application of it is "charity to retraction." Certainly we must, other things being equal, favor an interpretation that makes the community's retractions in the face of additional evidence come out right. This consideration suffices to explain why we must regard the imagined *B*-community's assertion, "It hits the ground at a much greater speed," as false, and why my dispute with my friend *B* cannot be viewed as merely verbal.

Many disputes, both of an a priori and empirical nature, are immediately shown to be substantive by the consideration of charity to retraction. Suppose it's known that there are eighteen rows of coins on the table, each row containing seven coins. Someone says, "So there are 146 coins," and I disagree. This person would surely retract his claim if he checked his computations or counted the coins, so this dispute is obviously not verbal. Or take the case of someone who says, "A whale is a big fat fish." Many people disagree. If this dispute is not viewed as merely verbal, one reason might be that this person would retract her claim if she were shown empirical evidence about how whales differ from other things she regards as fish. This example, however, introduces complications that I'll want to come back to later. Finally, consider my disagreement with a student who starts out by saying that there is no difference between doing something by accident or by mistake. Assuming that she would retract her claim once she is shown Austin's famous examples, she is making a substantive a priori (conceptual) mistake, in the sense that she is wrong even in "her own idiolect." ¹⁴ If we imagine a community that agrees with her, they would all be wrong, and would realize it if Austin arrived on the scene.15

Perhaps I've said enough in this section to provide a preliminary framework within which to start to consider now the ontological examples.

J. L Austin, "A Plea for Excuses", in *Philosophical Papers* (Oxford University Press, London, 1961), p. 185, note 1.

In the initial example, A would presumably retract her claim that glasses are cups if she found out more about how the community uses the word "cup", but this source of retraction cannot be relevant to what I mean by "charity to retraction (in the face of new evidence)", since there evidently could not be any such retraction if the community agreed with A. Retraction in the sense relevant to interpretive charity must be generalizable to the imagined community that agrees with a speaker, since (in interpreting the speaker's "idiolect") it is the language of this community that we are trying to interpret.

Ш I'm claiming that the familiar disputes about physical-object ontology that fill the current literature are all verbal. Let's initially focus on the dispute between mereological essentialists and four-dimensionalists. In order to fix our ideas—since different theorists may present these positions in different ways-let's take Roderick Chisholm as representing mereological essentialism and David Lewis as representing four-dimensionalism. We imagine, then, the RC-community in which everyone accepts the disputed ontological sentences accepted by Chisholm, leaving everything else as close as possible to our actual community. And the imagined DL-community accepts the sentences accepted by Lewis. RC-English and DL-English are, respectively, the languages spoken in these imagined communities. My claim is that all of Chisholm's accepted sentences are true in RC-English, and all of Lewis's accepted sentences are true in DL-English, so that the only real issue is which, if either, of these languages corresponds to plain English. (I'll argue in a later section that neither does, so that both of these philosophers are making verbal mistakes.) Let's begin by looking at this from the four-dimensionalist's standpoint. I

want to get these philosophers to agree that all of Chisholm's mereological essentialist claims are true in RC-English.

If we are four-dimensionalists trying to understand what members of the imagined RC-community are saying, we quickly realize that, on the assumption that they mean the same thing by their sentences that we mean, they are frequently making extreme mistakes, both of an a priori and perceptual sort. The following is a representative example. Suppose that in the room there is a brown wooden pencil on the table and a pink rubber ball on the floor. We four-dimensionalists will say that the following sentence is true: "There is something in the room that is first brown (and wooden, and cylindrical), and later it—that same thing—is pink (and rubber, and round)." This sentence is true because there are any number of things in the room that are composed of an early part of the pencil and a later part of the ball. But when members of the RC-community are presented with this scenario and are queried about the sentence they adamantly insist that the sentence is false, even though the relevant things are right in front of their eyes. If they mean what we mean, not only are they making a mistaken perceptual report, but they are a priori contradicting themselves, since they admit, "There is a brown (and wooden, and cylindrical) thing in the room, and later there is a pink (and rubber, and round) thing in the room", from which the truth of the sentence they deny follows a priori.16

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¹⁶ My assumption here is that four-dimensionalists regard the principles of mereological sums and temporal parts as a priori truths.

It seems evident that, as four-dimensionalists, we should try to reject the assumption that the RC-speakers mean what we mean, and instead look for an interpretation of RC-English that respects charity to perception and understanding. Such an interpretation doesn't seem hard to find. Lewis has pointed out that people often use contextually restricted quantifiers. For example, someone says, "There is no beer", where the conversational context indicates that the quantifier is meant to range only over beer in the fridge, excluding beer elsewhere.¹⁷ It seems perfectly intelligible to suppose that there can also be semantically restricted quantifiers, that is, quantifiers that, because of the semantic rules implicit in a language, are restricted in their range in certain specific ways. If the quantifiers in a language are semantically restricted, they are always limited in their range, regardless of the conversational context. It seems evident (we should say, as four-dimensionalists) that the quantifiers in RC-English are semantically restricted, excluding from their range such things as the object that is composed of the early part of the pencil and a later part of the ball. This must be why the RC-speakers reject the sentence, "There is something in the room that is first brown and later pink." How exactly to characterize the semantic restriction on the quantifiers might have to be fine-tuned, but the rough idea seems to be that the range of the RCquantifiers excludes any physical object that is composed of matter but is not itself a mass of matter (in roughly the sense of Locke¹⁸). Excluded, therefore, are (proper) temporal parts of a mass of matter and mereological sums of temporal parts of different masses. As four-dimensionalists, we believe that physical objects comprise (1) masses of matter, (2) objects (such as temporal parts and sums of masses of matter) that are composed of matter but are not themselves masses of matter, and (3) perhaps other objects such as fields of energy. The RC-quantifiers exclude from their range the second kind of physical object. In RC-English the word "(some)thing" is roughly equivalent to "(some)thing that is either a mass of matter or is not composed of matter." Given that this is what "(some)thing" means in RC-English, it makes perfectly good sense that the RC-speakers will reject the sentence "There is something in the room that is first brown and later pink." 19

Lewis, On the Plurality of Worlds, p. 3 and pp. 212-13.

John Locke, An Essay Concerning Human Understanding (1690), book 2, chapter 27. Ignoring certain complications, let's assume that mereological essentialism holds for masses in Locke's sense. Furthermore, we can assume for the purposes of this discussion that the particles of physics count either as masses of matter or as not being composed of matter.

One reason why this account of the range of the RC-quantifiers has to be fine-tuned is that, while Chisholm certainly rejects temporal parts of masses, I'm not sure what his view is about mereological sums. Van Cleve, "Mereological Essentialism, Mereological Conjunctivism, and Identity through Time", is a mereological essentialist who accepts mereological sums.

Moreover (we ought to continue, as four-dimensionalists), the semantic restriction on the RC-quantifiers does not prevent the RC-community from adequately describing the physical facts. Chisholm, we will assume, accepts set-theoretical constructions, and so, therefore, do the imagined members of the RC-community. (It would not affect matters if some property-theoretic constructions were used in place of sets.) Where we four-dimensionalist talk of sums of temporal parts of objects, the RC-speakers talk of sets of pairs of objects and times. For anything we can say about the world they can evidently say something (a priori necessarily) equivalent. Their description of the physical facts seems therefore to be as adequate as ours. It's a delicate matter whether distinct facts might be equivalent, but it doesn't seem necessary to enter into that question. What seems important is that, for any fact we can express, the RC-speakers can express an equivalent fact.

The RC-speakers will, of course, make the platitudinous disquotational assertion, "If something exists it is referred to by the word 'something'." Given what they mean by "something" this sentence is trivially true. We cannot therefore ask the RC-speakers, "Is there a semantic restriction on the RC-quantifiers?" since that question is merely another form of the question whether there exists such things as mereological sums and temporal parts, a question which has different answers in the different languages.

Hence, four-dimensionalists ought to conclude that, on the most plausibly charitable interpretation of RC-English, all of Chisholm's disputed assertions are true in that language.

Let's now adopt the standpoint of mereological essentialists who are trying to understand what members of the imagined DL-community are saying. We're faced with the same kind of problem that the four-dimensionalists faced when they tried to understand our language. Members of the DL-community accept the sentence, "There is something in the room that is first brown and later pink," though there is nothing in the room that is first brown and later pink. Charity to perception and understanding indicates that they must evidently mean something different by this sentence than we mean. Can we make intelligible to ourselves a charitable interpretation of DL-English that makes the ontological sentences that they accept come out true? I think it's clear that we can, though it may not be clear how exactly to spell out this interpretation. One thing we need to bear in mind is that our primary focus is on the truth conditions of sentences rather than on the reference of terms. We want to assign charitable truth conditions to such DL-sentences as, "There is something in the room that is first brown and later pink." We need not immediately concern ourselves with what to say about the reference of such DL-expressions as, "first brown and later pink." As regards the truth conditions of the sentence, "There is something in the room that is first brown and later pink," it seems that the DL-speakers accept the sentence with respect to any situation in which there is first something in the room that is brown, and later there is something in the room that is pink. The charitable interpretation, then, is that in DL-English a sentence of the form "There is something that is first F and later G" is true with respect to any situation in which there is first something that is F and later there is something that is G. In fact, since there is often no dispute between us and the DL-speakers with regard to sentences of the form "There is first something that is F and later there is something that is G" we can ask the DL-speakers how this undisputed sentence relates to the disputed sentence "There is something that is first F and later G." They will tell us that the sentences are (a priori necessarily) equivalent. We should believe them. That is, we should make the charitable assumption that in DL-English these sentences really are equivalent, so that the undisputed sentences can be taken as providing us the truth conditions for the disputed sentences in DL-English.

There is another way to look at this. It seems obvious that the principles of mereological sums and temporal parts are in some sense central to the DLcommunity's linguistic behavior. From our own mereological essentialist perspective we can usefully regard those principles as working in effect as semantic rules that generate truth conditions for the disputed sentences. It works like this. Suppose we have a disputed sentence X, and we are trying to decide whether X, as understood in DL-English, is true with respect to some situation or world w. We ask ourselves whether there is some undisputed sentence U, such that U is true with respect to w, and the truth of X follows (by standard logic) from the conjunction of U and the principles of mereological sums and temporal parts. Sentence X is true with respect to w if the answer to this question is yes. In other words, a disputed sentence is true in DL-English if it follows from the undisputed facts in conjunction with the two principles. An immediate consequence is that the principles themselves are (a priori) true with respect to every possible situation, which is of course what the DL-community says.

"But why," it may be asked, "should we regard the principles as working in effect as semantic rules, rather than as false beliefs shared by the members of this community, which lead them to all kinds of other perceptual and a priori mistakes?" I think the question answers itself. Why should we *not* regard the principles in that charitable manner? By so regarding the principles we make good sense out of why the DL-speakers say what they say, instead of having to assume that they have some incurably irrational tendency to make a priori mistakes about what they perceive in front of their faces.

A kind of DL-sentence that may seem especially challenging to us, if we are mereological essentialists, involves the word "reference", for example, the sentence, "The expression 'thing that is first brown and then pink' refers in DL-English to something in the room that is first brown and then pink."

Since, as mereological essentialists, we say that there is nothing in the room that is first brown and then pink, hence no such thing that can be referred to, we certainly cannot accept this sentence (about DL-English) in our language. What we have to say is that this sentence, if understood in DL-English, correctly describes the mentioned expression's function in DL-English, but, if understood in our language, incorrectly describes the expression's function in DL-English. Viewing DL-English from our perspective as mereological essentialists it must strike us that, since the sentence "There is something in the room that is first brown and then pink" is true in DL-English, the expression "first brown and then pink" seems in some sense to function in that language as if it refers to something that is first brown and then pink (though, since there is no such thing, the expression cannot really refer to such a thing). One should not ask, "So which is it? Does the expression really refer to something, or does it merely behave 'as if' it refers to something?" That question is just the same old question about whether mereological sums and temporal parts exist, in a slightly different guise, and therefore has different answers in the two languages. As goes quantification so goes "reference." Since the DL-speakers don't mean what we do by "(there exists) something", they can't mean what we mean by "reference (to something)."²⁰

A question might be raised, however, as to whether we have presented a "compositional semantics" for the charitably construed DL-English, a semantic analysis, that is, which explains how the truth conditions of sentences are determined by the meanings and ordering of the words in them. Obviously no attempt has been made here to present any formal or rigorous semantics, but, on an intuitive level, the account that has been sketched above does, it seems to me, satisfy the demand for a compositional semantics in the only sense in which such a demand has any clear force. The basic point is that truth conditions cannot be assigned to sentences one at a time. We must have some intelligible way of arriving at the truth conditions of a sentence by looking at its composition. That mereological essentialists do have such a way of arriving at the charitable truth conditions of the sentences of DL-English is shown by the following experiment. Take a group of mereological essentialists. Present them with any series of disputed sentences paired off with undisputed sentences, and ask them whether four-dimensionalists will say that the paired sentences are equivalent. The mereological essentialists will agree on the answers to these questions, and their answers will be right. That shows that they have a general way—whether or not they can spell it out rigorously—for charitably interpreting the truth conditions in DL-English of the disputed

I discuss "as if reference" further in *Dividing Reality* (Oxford University Press, Oxford, 1993), pp. 12-13, 188; "Quantifier Variance and Realism," *Philosophical Issues*, 12 (2002), pp. 55-56; and "Sosa's Existential Relativism," in J. Greco, ed., *Ernest Sosa and His Critics* (Blackwell Publishing Ltd., Oxford, 2004), pp. 231-32.

sentences: they need only take the charitable truth conditions of the disputed sentences to be given by the undisputed sentences that the four-dimensionalists would regard as equivalent.

I think it would, in fact, be interesting to see how a philosopher might try to argue that a charitable interpretation of DL-English, which makes the disputed sentences accepted by the DL-speakers come out true, is unintelligible because no compositional semantics could be given for such an interpretation. The burden would fall on this philosopher, first, to explain what the required compositional semantics is, second, to show that it's not possible to provide such a semantics for the charitably interpreted DL-English, and, third and by far most important, to explain why we should think that an interpretation is unintelligible just because it resists a particular kind of semantic analysis.²¹ It may be sufficiently clear that, to the extent that we cannot provide a certain kind of compositional semantics for some language (or, perhaps, to the extent that we cannot provide a word-for-word translation from some language into ours), we will be unable to straightforwardly express in our terms the fine-grained intentional content of some of the assertions made in that language. What needs to be shown is the bearing this point might have on my argument. I am claiming that if we (as mereological essentialists) consider the linguistic behavior of people in the DL-community, we are obliged to assign charitable truth conditions to their asserted sentences, and to conclude, if need be, that some of their intentional states may not be fully expressible in our own language. I'm not insisting that there can't be an argument against this. Let's see someone produce the argument, and then we can try to assess it.

In applying charity to the interpretations of RC-English and DL-English in the above discussion I emphasized charity to perception and understanding. What about charity to retraction? Should that also play a role here? Of course ontologists do occasionally retract their positions, but, as Lewis remarks, a stage seems eventually to be reached in ontology when "all is said and done," when "all the tricky arguments and distinctions and counterexamples have been discovered", so that each position has achieved a state of "equilib-

It seems obvious that, if we are mereological essentialists, we can't do a straight-out Tarskian referential semantics for the charitably interpreted DL-English, but no one, I think, has ever claimed that such a semantics is feasible for any natural language without the addition of various equivalence transformations. See Davidson, *Inquiries into Truth and Interpretation*, pp. 29-30; W.V. Quine, *The Roots of Reference* (Open Court, Illinois, 1973), pp. 93-95. We might attempt to assign truth conditions to the disputed sentences in DL-English by way of equivalence transformations from the undisputed sentences, treating the latter the same way in DL-English as in our language. Furthermore, to whatever extent we mereological essentialists can provide a referential semantics for our language, the DL-speakers can as easily provide for their language what they (but not we) will call a "referential" semantics. See also Kripke, *Wittgenstein On Rules and Private Languages*, pp. 71-72, note 60.

rium."²² I'm assuming that in the ontological disputes under discussion the "all is said and done" stage has been reached. In imagining the RC and DL-communities, therefore, we imagine that the members of this community are not disposed to retract their ontological assertions in the face of additional evidence or arguments. Since charity to retraction plays no role the verbalness of the dispute is especially clear in this kind of case. Lewis's view is that when we have reached the "all is said and done" stage we are left with a "matter of opinion" in which one side "is making a mistake of fact."²³ That, I am saying, is the wrong way to view the matter.

Prior to the "all is said and done" stage, when retraction is still a live option, ontological disputes may not be verbal in the intended sense. I'll argue in section V, however, that, since these disputes are verbal after all is said and done, any retractions ought to be in the direction of the common sense position.

Let me say something about how the "all is said and done" stage is reached. It's useful to roughly delineate a special kind of disputed sentence that figures in ontology, which I'll call "ontological axioms". The way it typically works in ontological disputes is that each camp will try to defend its position by appealing to its favored axioms. The axioms themselves can't be defended—they are, so to speak, the bottom line for each camp—but they can sometimes be effective in arguments, leading some people to retract their positions. The reason for this is that the axioms are often tricky. Their connection to the other disputed sentences, which I'll call the "(plain) ontological sentences", may not be immediately transparent. The latter sentences describe in fairly straightforward terms what objects exist in the world or some perceived part of the world. It may happen that some people who accept the plain ontological sentences of one camp are seduced into committing themselves to the axioms of another camp, only to realize too late that they now have no option but to switch camps.²⁴

One of the favorite axioms of the mereological essentialists is: "Two things cannot spatially coincide at any time." This supports the correctness of mereological essentialism in the following tricky way. Suppose an object can persist while losing a part. It used to be larger, but the mass of matter that now composes it was always the same size. So it can't be identical with the mass of matter, though they spatially coincide. Someone who starts out

David Lewis, Philosophical Papers, Volume 1 (Oxford University Press, Oxford, 1983), p. x.

²³ Ibid., p. xi.

Some of the examples that I give of "axioms" may not be viewed by their proponents as the bottommost line, but they are very close to the bottom, and it's the way they support the plain ontological sentences that most concerns me.

See Van Cleve, "Mereological Essentialism, Mereological Conjunctivism, and Identity through Time", p. 149. Van Cleve's use of the principle is actually far more subtle than the argument I'm about to sketch.

blithely assuming that a car can survive the change of a tire, but then innocently accepts the "no-coinciding-things" axiom, because he doesn't sense any danger, may soon be made to realize by the pouncing mereological essentialists that he has gotten himself into a problem.

The "all is said and done" point has been reached when ontologists have gone around the dialectical block enough times to feel secure that they are prepared to reject any axioms that might undermine their ontological assertions.

The DL-community is therefore to be imagined as rejecting the "no-coinciding-things" axiom, which evidently cannot be reconciled with the four-dimensionalist's world of overlapping and crisscrossing space-time chunks. Mereological essentialists ought to agree that this rejection is perfectly reasonable in the DL-language. The charitable interpretation of the language that made the sentence "There exists something that is first brown and then pink" come out true will also make the "no-coinciding-things" axiom come out false.

I'll mention a number of other axioms later, but the general lesson that I hope is reasonably clear is that the presence of the axioms does not complicate in any essential way my argument for the verbalness of the ontological disputes. If we take any two opposing camps, the members of each camp will be able to find a plausibly charitable interpretation of the language associated with the other camp which makes its ontological sentences come out true and any axioms that threaten these sentences come out false. Both the question about the plain ontological sentences and the question about the axioms are merely verbal.

IV

I want to briefly explain in this section why my approach may diverge from Carnap's treatment of "internal" and "external" questions. Consider the dispute between a platonist who accepts sets (or properties or numbers) and a nominalist who rejects all such abstract items. Carnap holds that this dispute simply turns on the choice of a language. The dispute does not, however, appear to be verbal in the sense I've been discussing. I consider a dispute verbal only if it satisfies the following condition: Each side ought to acknowledge that there is a plausibly charitable interpretation of the language associated with the other side's position which will make that position come out true. It does not appear, however, that nominalists can acknowledge that there is any such interpretation for the platonists' position. For example, platonists will regard the following sentence as contingent, that is, as true in some worlds and false in others: "There are two (perhaps infinite) sets X and Y, whose members are (perhaps infinite) sets of persons, satisfying the condition that, for any set X' in X, there is a set Y' in Y such that all persons in X' love

all and only persons in Y', and some person in Y' loves some person in some set in X other than X'." Nominalists do not appear to have any plausible way of assigning truth conditions to this sentence which, from their point of view, will make the Platonists come out right in viewing it as true in some worlds and false in others. 26

The simplest paradigm of a verbal dispute—the simplest way it can happen that each side of a dispute can find a charitable interpretation that makes the other side come out right—is where, for each disputed sentence D, there are two undisputed sentences U1 and U2, one true and one false, such that one side holds that D is (a priori necessarily) equivalent to UI and the other side holds that D is equivalent to U2. Each side can then assign charitable truth conditions to D in the other side's language simply by assuming that in that language the other side's asserted equivalence holds. In the previous section I tried in effect to show that the simple paradigm applies to the dispute between mereological essentialists and four-dimensionalists.²⁷ There are evidently examples of verbal disputes in which the simple paradigm fails. Suppose there are two versions of English such that "red" means in one what "green" means in the other, and vice versa. The speakers of one language ought obviously to assign charitable truth conditions to the disputed sentences accepted by the speakers of the other language. ("In their language the sentence 'Grass is red' holds true of any situation in which grass is green"), though these assignments can't be made in terms of undisputed sentences. In the case of nominalism versus platonism, however, it's not just that the simple paradigm evidently fail. The question is whether the nominalists can in any terms acceptable to them assign charitable truth conditions to the disputed sentences accepted by the platonists.

We should take note of another kind of verbal dispute that departs from the simple paradigm. Imagine a philosopher named Shmgettier who, when presented with standard Gettier examples, insists that they are cases of knowledge because they satisfy the three traditional conditions. Assuming that Shmgettier has no disposition to retract, it seems that our dispute with him is merely verbal. If we imagine a linguistic community that agrees with Shmgettier, the plausibly charitable interpretation of the languages of that community and ours implies that they assert epistemic sentences of the form

For illustrative purposes I've constructed more-or-less randomly a moderately complex sentence, without carefully checking whether this sentence might somehow reduce to a sentence in predicate logic. If necessary, a more complex example could obviously be constructed.

For the disputed sentence, "There is something in the room that is first brown and then pink", four-dimensionalists take it to be equivalent to the undisputed true sentence, "There is first something in the room that is brown, and later there is something in the room that is pink," whereas mereological essentialists take it to be equivalent to the undisputed false sentence, "There is in the room a mass of matter (or something not composed of matter) that is first brown and then pink."

"S knows that p" on the basis of the three conditions, whereas we assert them on the basis of some other conditions. A complication, however, is that the Shmgettier-speakers may reasonably claim to be unable to find a formulation in their own terms of what these other conditions are. Their inability to find such a formulation would follow on the supposition that the speakers of our language are unable to formulate any clear analysis of what is required for knowledge beyond the three conditions. Nevertheless this dispute is verbal because the Shmgettier-speakers can at least formulate a rough approximation to these conditions. They can at least say something like this about our epistemic assertions: "In this other language a sentence of the form 'S knows that p' is true only if some condition is satisfied related to the cause of S's belief that p, or perhaps related to the potential defeasibility of the belief, or perhaps some combination of these conditions is required, perhaps satisfied to some required degree along some relevant dimension." Even this kind of rough sketch suffices to allow the Shmgettier-speakers to acknowledge that there is a plausibly charitable interpretation of our language which makes our epistemic assertions come out true.²⁸

It seems questionable, however, whether nominalists can formulate in terms acceptable to them even the roughest sketch of plausible truth-conditions for the platonist's assertions that would make these assertions come out true. I make this remark with some reservations, because I am insufficiently knowledgeable of various logical maneuvers found in some nominalist literature, such as, substitutional quantification, plural quantification, meta-linguistic quantification, infinitary sentences, schemata, fictionalism, and other devices. I can't rule out the possibility that, given a sufficiently resourceful application of such devices, the dispute between platonists and nominalists might ultimately dissolve into verbalness. This dispute is, however, not verbal in any straightforward way. If resolving the dispute is merely a matter of choosing a language, as Carnap says, that would have to be developed along lines that go substantially beyond the present discussion.²⁹

It may be held that the deepest disagreements in epistemology concern our "right to be sure", and that such disagreements aren't verbal for the same reason that ethical disagreements aren't, namely, that they involve "disagreements in attitude." Our disagreement with Shmgettier, however, has nothing to do with the right to be sure.

A more general question is which fundamental disputes in metaphysics are merely verbal. I am certainly not inclined to think that all are (even after "all is said and done", and no retractions are forthcoming). To mention two examples very briefly, consider the position of dualists who reject both identity-theoretic and functionalist accounts of mental states. It seems to me that the identity-theorists and functionalists cannot begin to formulate in terms acceptable to them even the roughest sketch of a plausibly charitable interpretation that will make the dualist position come out right. As another possible example, consider the dispute (referred to in note 2, above) about whether simples exist. Can either side of this dispute find a charitable assignment of truth conditions to their opponents' assertions?

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I turn now to my second claim in this paper: Since the disputes about the ontology of physical objects are merely verbal (when "all is said and done"), the correct position must be that of common sense ontology. I want to begin, as before, by having a specific representative of this position, and then imagining a corresponding community and language. Let me take myself as the representative. We imagine, then, the EH-community in which everyone accepts the disputed sentences I accept. The argument up to this point implies that these sentences are true in EH-English. The only question now is whether plain English is EH-English, RC-English, DL-English, or something else.

The ontological sentences I accept, and that are therefore accepted in the EH-community, include all of the ones typically accepted by the non-philosophers in our actual community. That's why I call my position one of common sense. But it may not follow immediately that EH-English is plain English, for the EH-community differs from our actual community in two relevant ways. First, the non-philosophers in our actual community may not agree with me about some of the axioms. Second, many philosophers in our actual community don't agree with me about any of the disputed sentences, whether they be axioms or plain ontological sentences, whereas even the philosophers in the imagined EH-community agree with me about all of these sentences. I'll return to these differences shortly.

Many axioms have been put forth to refute the common sense position. Let me mention a few of the most important ones.

- 1. Two things cannot spatially coincide at any time. (This was already discussed.)
- 2. A composite thing must have causal powers beyond the causal powers of its parts.³¹
- 3. The conditions for a thing's unity through space and identity through time cannot be intractably complex or "arbitrary."³²

I accept sentences involving sets and properties. If some of these are not understood and therefore not accepted by the non-philosophers in our actual community, neither are their negations. I don't accept any ontological sentence (in plain English, without special stipulations) whose negation is typically accepted by the non-philosophers in our community.

Merricks, Objects and Persons, ch. 3.

Cartwright, "Scattered Objects", in Kim and Sosa, eds., Metaphysics: An Anthology, p. 293 and p. 298; Ernest Sosa, "Existential Relativity", Midwest Studies in Philosophy XXII (1999), p. 143; Van Cleve, "Mereological Essentialism, Mereological Conjunctivism, and Identity through Time", p. 145; van Inwagen, Material Beings, esp., pp. 64-71 and pp.

- 4. Qualities such as shape, color, and texture cannot function semantically as relations between things and times.³³
- 5. It cannot be indeterminate whether two things compose a third thing.³⁴
- 6. If it's indeterminate whether a is identical with b, then there must exist a plurality of things such that it's indeterminate which of them is a (or which of them is b).³⁵

I reject all of these axioms and so do the imagined members of the EH-community.³⁶ I've already said in my earlier discussion of RC-English and DL-English that ontological axioms do not bring in any essentially new difficulties. If considerations of charity show that the question about the truth of the plain ontological sentences is verbal, then considerations of charity show in the same way that the question about the truth of the axioms is also verbal. Axioms 5 and 6, however, may require special attention. These axioms—especially axiom 6—seem often to be treated in the literature as if they simply derive from standard logic. Since the EH-community follows me in accepting all of standard logic, it may seem that these axioms must be accepted. Let me concentrate here on axiom 6; the treatment of axiom 5 easily follows along the same lines.

I've criticized axiom 6 at length in a previous article.³⁷ In the context of the present discussion I want to present something akin to a *reductio* of it—or, more accurately, something akin to a reductio of the use made of the axiom in arguing against the common sense position. I'll imagine the four-dimensionalists using the axiom in arguing against common sense. Let's assume (as the premise of the "reductio") that four-dimensionalism is right. I'll now show that, on that assumption, axiom 6 is false in EH-English. Hence the appeal to axiom 6 as an argument against the common sense position has no force.

^{122-23.} A rare heroic instance of resistance to axiom 3 is found in Markosian, "Brutal Composition".

Lewis, On the Plurality of Worlds, pp. 202-4. Axiom 4 is apparently Lewis's main reason for accepting temporal parts. Cf. Sider, Four Dimensionalism: An Ontology of Persistence and Time, pp. 95-101.

Lewis, op. cit., pp. 212-13. Lewis says that axiom 5 is his reason for accepting the doctrine of mereological sums. Lewis's argument is clarified and elaborated in Sider, op. cit., pp.120-32.

A modified version of four-dimensionalism is defended on the basis of axiom 6 in Sydney Shoemaker, "On What There Are", *Philosophical Topics* 16 (1988), p. 217.

In truth, I'm not sure if I fully understand axioms 2 or 3, but I reject them conditionally: If they turn out to make sense and to threaten the common sense position, they must be false.

[&]quot;The Vagueness of Identity", *Philosophical Topics* 26 (1999). I criticize axiom 5 in "Quantifier Variance and Realism", pp. 65-66.

The prima facie problem for common sense from axiom 6 is brought out in the following sort of example. It may be determinate that there is exactly one ship in the harbor on Monday and one ship in the harbor on Tuesday, but indeterminate whether the ship of Monday is the ship of Tuesday (because it's indeterminate whether a change of planks has been too extensive, too discontinuous, and so on). Axiom 6 would then require that there exist a plurality of things such that it's indeterminate which of them is the ship of Monday (or the ship of Tuesday). But, on the common sense position, there are no such things. To satisfy axiom 6 we need to accept the four-dimensionalist's posit of numerous ship-like space-time chunks, some of which persist from Monday to Tuesday, some of which exist only on Monday, and some of which exist only on Tuesday. It's indeterminate whether the ship of Monday is the ship of Tuesday because it's indeterminate which of these space-time chunks will count as a ship.

Axiom 6 is thought to follow from the Evans-Salmon result: "There cannot be things x and y such that it's indeterminate whether x is y." The Evans-Salmon result does indeed seem to be a truth of logic (coming out of Leibniz's Law), and hence something that the EH-community must accept. But accepting axiom 6 does not really follow from accepting the Evans-Salmon result.

If we are four-dimensionalists trying to interpret the linguistic behavior of the EH-community in the most charitable way possible, we're faced with the same kind of problem we had with respect to the RC-community. Here again it seems clear that we are dealing with a semantically restricted quantifier. Whereas the quantifier in RC-English is restricted roughly to masses of matter (or things not composed of matter), the restriction in EH-English—subject to some necessary fine-tuning—is to (ordinary) bodies (or things not composed of matter). ⁴⁰ (Let's suppose, for simplicity, that a mass

Gareth Evans, "Can There Be Vague Objects?", Analysis 38 (1978), 208; Nathan Salmon, Reference and Essence (Oxford University Press, Oxford, 1982), pp. 243-46, and "Modal Paradox: Parts and Counterparts, Points and Counterpoints", Midwest Studies in Philosophy 11 (1986), pp. 110 ff.

Contrary to what seems to be implied in: Evans, "Can There Be Vague Objects?" (as interpreted in David Lewis, "Vague Identity: Evans Misunderstood", Analysis 48 (1988), 128-30); Salmon, "Modal Paradox: Parts and Counterparts, Points and Counterpoints," pp. 110 ff.; Timothy Williamson, Vagueness (Routledge, London, 1994), pp. 253-54; Shoemaker, "On What There Are", p. 217; Richmond Thomason, "Identity and Vagueness", Philosophical Studies 43 (1982), pp. 329-32. A position that seems closer to mine is Robert Stalnaker, "Vague Identity", in Philosophical Analysis: A Defense of Examples, ed. D.F. Austin (Kluwer Academic Publishers, Dordrecht, 1988), p. 354.

Quine, "The Roots of Reference", p. 54, distinguishes between the four-dimensionalist's general notion of a "physical object" and the more specific notion of a "body." Some form of the latter notion figures in virtually all four-dimensionalist literature. See Lewis's notion of a "natural thing" in "New Work for a Theory of Universals", p. 372, and his notion of an "ordinary thing" throughout *The Plurality of Worlds* (e.g., pp. 203-4).

of matter counts as a body.) Now what axiom 6 says in EH-English is that, if it's indeterminate whether the ship of Monday is the ship of Tuesday, there must exist a plurality of bodies (or things not made of matter) such that it's indeterminate which of them is the ship of Monday (or Tuesday). That is surely false. It's clear therefore that, given the restricted way the quantifiers function in EH-English, axiom 6 is false in EH-English.

Of course if we are operating from inside EH-English we will not formulate the argument that was just put from outside the language. (We cannot coherently say in EH-English, "The quantifiers of EH-English are semantically restricted.") From inside EH-English we simply reject axiom 6.⁴¹ And four-dimensionalists must approve of our doing this. They can't then turn around and try to refute us by claiming that we violate logic by rejecting axiom 6.

My argument up to this point has attempted to establish that RC-English, DL-English, and EH-English are intelligible languages, in each of which the ontological sentences accepted by the associated community are true. My next step is to show that, given this, plain English is EH-English, at least to a good approximation, so that the position of common sense ontology is true (in plain English). I'm going to move quite quickly through this step, since I think it's virtually irresistible. I can scarcely imagine a philosopher saying, "Yes, there are these three possible languages, and people in North America might have spoken any one of them. As it happens, they speak RC-English (or DL-English)." If there are these three possible languages that North Americans might have spoken, then it seems obvious that they are in fact speaking a language in which the ontological sentences they accept are true, rather than a language in which those sentences are false.

One difference between the imagined EH-community and our actual community is that, whereas everyone in the former community rejects the axioms that challenge the ontological sentences accepted in both communities, the non-philosophers in the latter community are generally perplexed by the axioms. In the case of one (and I think only one) of these axioms—that is, the "no-coinciding-things" axiom 1—they may be inclined to accept it, before they realize the problems this generates. Suppose a mereological essentialist says, "What we're faced with here is a conflict of charity: We can interpret the language in a way that is charitable to what the community says about the ontological sentences, yielding EH-English, or in a way that is charitable to what the community says about the 'no-coinciding-things' axiom, yielding RC-English. The latter interpretation is more plausible." How could the latter

Since axiom 6 is false in EH-English and the Evans-Salmon result is true, it emerges that the context "It's indeterminate whether a is b" is referentially opaque in EH-English, even where there do not exist a plurality of referential candidates for "a" (or "b"). All of this should really be worked through at the level of precisifications, as I try to do in "The Vagueness of Identity."

interpretation be more plausible? At most what this philosopher might claim is that there is an element of indeterminateness in (plain) English, reflected in the two possible interpretations. But even that seems extremely far-fetched. I think everyone agrees that perceptual sentences are central to both the acquisition and interpretation of language. To interpret the language of our community as RC-English is to imply that typical speakers make countless mistakes—not just mistakes, but a priori mistakes—in their perceptual reports. Such an extreme simultaneous violation of charity to perception and understanding seems out of the question. The more plausible interpretation, surely, would imply that the accepted ontological sentences are true, but people are understandably prone to make mistakes about a few tricky general statements like the "no-coinciding-things" axiom. 42

A second difference between the imagined EH-community and our actual community is that in the latter community many philosophers disagree with me, both about the ontological sentences and about the axioms. But they also disagree with each other, thereby canceling each other out as a source of linguistic interpretation. I'm not of course suggesting that when experts have prolonged disagreements about intractably difficult questions, we can ignore what they say. From my point of view, however, we are dealing here with the exceptional case in which, first, the questions at issue concern matters of linguistic interpretation, and, second, many philosophers don't realize this, and therefore produce endlessly conflicting arguments on behalf of their favored entities—arguments that are irrelevantly convoluted and hyper-theoretical—while ignoring the genuine task of interpreting the language properly.

The scenario that we are faced with is roughly this: (1) The non-philosophers in the community are essentially agreed on which ontological sentences (of the sort at issue) to accept; (2) the non-philosophers are generally perplexed by the ontological axioms, and may occasionally accept axioms that conflict with the ontological sentences they accept; (3) many philosophers in the community engage in endless hyper-theoretical debates about both the ontological sentences and the axioms. Philosophers—unfortunately, at present a minority—who understand that the only genuine question at issue in these ontological debates is one of linguistic interpretation must conclude, upon examining (1), (2), and (3), that the language of this community is one in which the ontological sentences accepted by the non-philosophers are true. Plain English, in short, is EH-English, at least to a good approximation.

A familiar maneuver found throughout the anti-commonsensical literature is to claim that while many of the ontological utterances of non-philosophers are strictly and literally false, they are nevertheless true (or in some manner

I say something more about "conflicts of charity" in "Against Revisionary Ontology," Philosophical Topics 30 (2002).

acceptable) in some "loose" sense. I don't think it's necessary to examine the details of these maneuvers here. If the general framework of my argument is accepted, then I think it's sufficiently clear that these maneuvers are misguided. Of course there are distinctions—of various sorts—that need to be made between "strict" and "loose" talk, but these distinctions themselves must be based on a charitable interpretation of what people say. They cannot be imposed imperiously by philosophers just to save themselves the embarrassment of flying too flagrantly in the face of common sense. The following seems sufficiently clear: If you simply set yourself the task of interpreting in the most charitable way possible the language of our community, you cannot avoid the conclusion that the ontological sentences typically accepted by the community are true in that language, in the strictest and most literal sense.

VI

Amongst the numerous anti-commonsensical ontologists who currently dominate the literature, Theodore Sider is, to my knowledge, alone in seriously addressing the issues of linguistic interpretation that I've been discussing in this paper. 44 Sider has a clear and definite response to my argument: The ontological disputes are not verbal because it is impossible for there to be the different languages I describe. The RC, DL, and EH-communities must all be using the same language, and are disagreeing with each other on matters of ontology. Since I think that Sider's position is the only possible hope for anti-commonsensical ontology, I regard it as being of singular interest. I will try to explain, however, why I judge the position to be ultimately untenable. 45

A basic premise in Sider's account might be put by saying: Charity is not enough. What I call "(interpretive) charity" Sider calls "use", by which he evidently means the charitable interpretation of the use people make of their language. In interpreting a language, according to Sider, we cannot simply appeal to charity or use, because some interpretations are more "eligible" than

I do examine some details in "Against Revisionary Ontology." For illuminating critiques of such maneuvers, see Merricks, Objects and Persons, pp. 162-70, and John O'leary-Hawthorne and Michaelis Michael, "Compatibilist Semantics in Metaphysics: A Case Study", Australasian Journal of Philosophy 74, 1 (1996), 117-34.

See "Criteria of Personal Identity and the Limits of Conceptual Analysis" in Philosophical Perspectives 15 (2001), and the Introduction to Four Dimensionalism: An Ontology of Persistence and Time.

Sider has responded to some of my criticisms of his position in a recent publication that did not appear prior to my submitting the present paper: see his "Replies to Gallois, Hirsch, and Markosian" in the book symposium on Four-Dimensionalism, in Philosophy and Phenomenological Research 68, 3 (2004), 674-87, at pp. 679-82. I discuss Sider's position further in my contribution to that symposium, and also in "Ontological Arguments: Interpretive Charity and Quantifier Variance," forthcoming in J. Hawthorne, T. Sider, and D. Zimmerman, eds., Contemporary Debates in Metaphysics (Basil Blackwell).

others. A more eligible interpretation may be the best candidate, all things considered, even though another interpretation is more charitable. On behalf of this general picture Sider cites Lewis's influential idea that there is an a priori presumption that words express (relatively) natural properties rather than unnatural ones. Lewis has given us one principle of eligibility, related to the general words in a language, and Sider now wants to propose a second principle, related to quantificational expressions. Sider's principle is this: The quantificational expressions of any possible language must answer to the "logical joints in reality". To find out about the logical joints in reality requires that we do substantive ontology, for a quantifier answers to reality's logical joints only if it refers to everything that exists. Sider's constraint implies, therefore, that the quantifiers of any language must have the same semantic function as our quantifiers, namely, to refer to everything that exists.

Suppose our ontological reflections have led us to believe (as they have in fact led Sider to believe) that four-dimensionalism is correct. In trying to provide a charitable interpretation of the linguistic behavior of the RC-community we find that we would have to interpret their quantifiers as semantically restricted in certain ways. But that interpretation is ruled out by Sider's constraint as ineligible. The RC-quantifiers must refer to everything that exists, and the RC-community must therefore be making substantive ontological mistakes when they deny the existence of temporal parts.⁴⁷

Suppose, on the other hand, that our ontological reflections have led us to accept mereological essentialism. Then, in trying to provide a charitable interpretation of the linguistic behavior of the DL-community, we find that we would have to regard the DL-quantifiers as having the semantic function within certain sentences of not really referring, but only behaving "as if" they refer. Sider's constraint rules out this interpretation, and forces us to regard the DL-community as simply being wrong when they affirm the existence of temporal parts.

Lewis, "New Work for a Theory of Universals", pp. 370-77. Lewis's terminology is a bit puzzling, since he seems to treat his naturalness-presumption as a corollary of the principle of charity, although there is no obvious connection between this presumption and the charitable presumption that the sentences accepted by the community are true or reasonable. (The apparent absence of any connection between the two presumptions is the main topic of my *Dividing Reality*.) I will continue to use "charity" in the sense of the latter presumption (which is equivalent to Sider's "use") and to distinguish it from the naturalness-presumption.

It might be objected that the RC-language can be charitably interpreted without violating Sider's constraint on quantifiers, by supposing that the RC-quantifiers refer to temporal parts and sums, but every predicate in RC-English (including such predicates as "can't be described") have built in as part of their meanings "thing that is either a mass of matter or not composed of matter." I think, however, that Sider can very plausibly respond that there is really no distinction between a blanket restriction on every predicate and a restriction on the quantifiers.

Hence the issue between the mereological essentialists and the four-dimensionalists is not verbal at all.

I noted earlier that certain problems of compositional semantics may be thought to intrude when mereological essentialists try to provide a charitable interpretation of DL-English. Certainly no such problems intrude from the other direction, when four-dimensionalists are trying to interpret RC-English—semantically restricting the quantifier raises no such problems. Sider's constraint, therefore, evidently does not derive from considerations of compositionality. It is rather a straight-out constraint on the semantic function of quantificational expressions.

Occasionally Sider seems to slip into a trivially ineffectual defense of his constraint. He sometimes says that if an expression doesn't have the semantic function of referring to everything that exists then it's simply not a *quantifier*. That's irrelevant. Call it something else if you want. The relevant question is why we, as four-dimensionalists, ought to rule out a charitable assignment of truth conditions to the sentences of RC-English. If there could be a charitably construed RC-English then—as Sider is well aware—it would be the speakers of that language who might worry whether we are really using "quantifiers." So this is neither here nor there.

In order to avoid a facile appeal to the word "quantifier", let me say that the "quantifier-like" expressions in a language are expressions that function formally like our quantifiers, that is, roughly, they satisfy the formal rules of predicate logic. Sider's constraint implies that the most plausible interpretation for the quantifier-like expressions in any language is that they refer to everything that exists.

I think it's obvious that Sider's talk of "logical joints" is merely giving us a kind of metaphorical representation of his quantificational constraint; it does nothing to explain the constraint. The image is of joints or grooves in the world into which properly functioning quantifier-like expressions easily fit. In the absence of the constraint the idea of there being such joints is meaningless.

Another metaphor that Sider uses is far more dangerous. He says that, in formulating his constraint, he is appealing to the view that the world comes "ready-made" with a domain of objects. 49 Here again Sider is merely repeating his constraint in pictorial language. I, who reject his constraint, also believe in "ready-made objects" in the following prosaic sense: There are numerous objects in the world—rocks, rivers, trees, apples, planets, electrons—whose existence do not depend in any way on the existence of language or thought. These objects typically do not have temporal parts or sums, and that too does not depend in any way on the existence of language or thought. If I had been

^{48 &}quot;Criteria of Personal Identity", p. 16, "Introduction to Four-Dimensionalism, pp. xv ff.

speaking DL-English instead of plain English, I would have correctly said, "These objects have temporal parts and sums, and that does not depend in any way on the existence of language or thought." It's essential in this area of philosophy to avoid a gross but somehow tempting use-mention confusion. My view is that if we consider expressions in languages with the same formal role as our expression "the existence of things in the world", the semantic functions of these expressions may vary depending on the specific rules of the different languages. I am most emphatically not saying that the existence of things in the world depends on there being certain rules of languages. The sentence, "The existence of things in the world depends on there being certain rules of languages", is absurdly false in EH-English, as well as in RC-English and DL-English. My rejection of Sider's quantificational constraint does not imply idealism.⁵⁰

At one point Sider says that those who reject his constraint must be "committed to a fairly radical conception of the nature of existence." I can't imagine what he means by that, unless he has gotten himself to think that the rejection of his constraint implies some form of idealism.

Is there, then, anything to be said in favor of Sider's constraint? Let's first consider his basic premise that charity is not enough. I agree with this, but I think it's important not to exaggerate its import. Sider cites with approval Lewis's claim that the answer to "Putnam's paradox" cannot appeal to charity or use, but can appeal to the principle that eligible interpretations involve (sufficiently) natural properties. The paradox is that if you take some false theory, such as the phlogiston theory, so long as it is consistent (and so long as there are enough objects in the world), there will be objects and properties in the world that could provide a truth-making interpretation of the theory. Why, then, isn't the theory true? Lewis's answer is that an eligible interpretation must involve (sufficiently) natural properties.

That doesn't seem to be the right answer. Suppose there are perfectly natural properties of objects on Alpha Centauri—objects that have no special connection to people on Earth—that could provide a truth-making interpretation of the phlogiston theory (together with any other relevant sentences accepted by the phlogiston theorists). That still doesn't make the theory true.

Even if Lewis is right in claiming that the naturalness-presumption solves Putnam's problem, he also states (and Sider agrees) that another solution might appeal to a requirement that there be some kind of appropriate causal connection between the elements of the interpretation and the linguistic community in which the theory is formulated. But the principle of charity

A potential source of confusion is that the doctrine Putnam calls "conceptual relativism" implies both the rejection of Sider's constraint and (often) some form of idealism. The two don't have to go together, however. For further discussion, see "Quantifier Variance and Realism" and "Sosa's Existential Relativism."

[&]quot;Criteria of Personal Identity", p. 17.

itself requires some such causal connection. A charitable interpretation of a theory must make it come out reasonable, hence, must make it come out connected in some reasonable way to the community's perceptions (or perceptual reports), hence, to certain (reported) causal connections between the community and its environment. Ideally a charitable interpretation seeks both truth and reasonableness for a theory, but if both cannot be jointly achieved, reasonableness without truth is far more charitable than truth without reasonableness. The reason why the phlogiston theory is false is because any interpretation that makes it reasonable (to some significant degree) makes it false. The theory is false because it comes out false on the most charitable interpretation of it. In the community of the co

It's therefore not obvious at all that Putnam's paradox shows that charity is not enough.

I think that many philosophers are under the impression that Lewis's naturalness-presumption is needed to explain why we interpret "fish" to exclude whales. Earlier I imagined a scenario in which people who say "Whales are fish" are disposed to retract this if they are given evidence of the biological differences between whales and other things called "fish." If our interpretation is guided by charity to retraction, then we don't need Lewis's naturalness-presumption. But what about a case in which there is no community-wide disposition to retract? Melville's protagonist Ishmael insisted in Moby Dick that, despite what is said by tendentious scientists who hang around in laboratories, people who hang around with whales understand that they are really big fat fish. Melville/Ishmael was well aware of the biological differences between whales and other things he called "fish," but didn't care.⁵⁴ If we imagine a Melville-community in which everyone agrees with Melville/Ishmael about this, it seems obvious that in Melville-English "Whales are fish" is (strictly and literally) true. People have the right to use the word "fish" to mean, roughly, "creature that lives in the water and has a fish-like appearance," and charity would surely determine that the Melville-community uses "fish" in that way. It might be suggested that in our own community people are ambivalent about whether or not to agree with Melville, and Lewis's naturalness-presumption gives the word "fish" a little nudge in the

Charity requires that certain sentences be interpreted as conveying reports about perception. They can't be treated merely as sentences containing the word "perception" to be interpreted in terms of some relation on Alpha Centauri.

My point does not depend on charity to retraction, although that may certainly play a role, albeit complicated somewhat by the fact that many phlogiston theorists refused to retract.

Herman Melville, Moby Dick, sec. 32. After quoting Linnaeus's grounds for not classifying whales amongst the fish, and reporting that his shipmates remained unconvinced, Ishmael states: "Be it known that, waiving all argument, I take the good old fashioned ground that the whale is a fish ... This fundamental thing settled, the next point is, in what internal respect does the whale differ from other fish. Above, Linnaeus has given you those items."

direction of excluding whales. Maybe so, but it's far from obvious. Once we bring in Kripke's picture of a reference chain going back to an initial baptism of a natural kind, the baptism presumably being interpreted as charitably as possible, the dependence on Lewis's naturalness-presumption becomes even more obscure. I think it's not clear that Lewis's naturalness-presumption figures critically in this kind of example at all.

Nevertheless, I do agree that at some point interpretations must go beyond charity. Lewis applies his naturalness-presumption to a form of Kripke's "Wittgenstein paradox", and here I am inclined to agree. As I understand it, the essential problem in the form presented by Lewis is how to determine the correct interpretation of certain very complicated or difficult sentences (say, in mathematics) when this cannot be settled by appealing charitably to the judgments people (would) make about the sentences, because people may find the sentences too hard to make any judgments about them. In this form the problem doesn't really give us a case in which the naturalness-presumption points to one interpretation (in terms of plus) and charity points to another (in terms of quus). Rather we have a case in which there is no possible appeal to charity, so naturalness takes over. I suspect that there may be other kinds of cases—I won't try to produce them here—in which a somewhat less charitable interpretation is favored over one that would require going down an unnaturally twisted quus-like path. I am not, however, aware of any convincing example in which an appeal to naturalness (or compositionality, or general simplicity) would have us reject an interpretation that is demanded by the clearest forms of charity (e.g., charity to perception and understanding).⁵⁵

Even if I have, in the above sketch, overstated the role of charity, the following is undeniable: Lewis's interpretive constraint related to naturalness is only a *defeasible presumption*. It is defeasible by considerations of charity, and is in fact very often defeated in this way. Almost no word of ordinary language expresses what Lewis would regard as a perfectly natural property, and numerous words ("game", to take a famous example) express properties that he would regard as quite unnatural. The naturalness-presumption is regularly trumped or compromised by charity.

The contrast with Sider's proposed quantificational constraint could therefore not be greater. What Sider wants is not a presumption, but an absolute and indefeasible constraint on how quantifier-like expressions can possibly function. If we are four-dimensionalists viewing the linguistic behavior of the RC or EH-community, the hypothesis that their quantifier-like expressions are semantically restricted in certain describable ways is supported by the

Williamson's "epistemic vagueness" may provide another kind of example in which the correctness of an interpretation is not determined by charity (use), at least at a level knowable by us, but this would certainly not be an example in which charity is trumped by other factors. See Williamson, Vagueness, esp. pp. 205-12.

most overwhelming demands of charity to perception and understanding. Sider wants us to rule out that hypothesis because it violates his constraint. There is nothing that we know about the nature of language or interpretation that prepares us for this kind of absolute constraint or that makes it seem credible.⁵⁶

If we tried to formulate a defeasible presumption related to quantifier-like expressions on the analogue of Lewis's naturalness-presumption, it would not support Sider's position, for it would not exclude charitable interpretations of the different ontological sentences accepted in the different communities. Let me also mention a major problem we face if we try to formulate such a presumption. If we have a defeasible presumption related to quantifier-like expressions, it must be an open possibility that, in our own language, this presumption has been defeated to some degree (as evidently happens with respect to Lewis's presumption). The problem is that the following is trivially true: "The quantifier-like expressions in our language (e.g., the expression 'everything that exists') refer to everything that exists." This makes it seem that, in whatever language we formulate the presumption, it will be trivially correct to say that the presumption holds to the highest degree in that language. It is difficult to see, therefore, how a defeasible presumption related to quantifier-like expressions can be coherently formulated.

There appears to be another important contrast between Sider's quantificational constraint and Lewis's naturalness-presumption. Lewis presents his presumption as a solution to certain existent problems in the philosophy of language. Sider's proposed constraint seems, by contrast, designed to create problems rather than solve them. A main point of the constraint is to get us to think that there is some problem in defending our common sense judgments about what we perceive in front of our faces. A philosophical proposal that would have the effect of making it seem reasonable to worry, given that there are apple trees, whether there are apples is probably not geared towards solving our problems.⁵⁷

Sider does allow that quantifier-like expressions can trivially vary in meaning as a result of outright stipulation, but in the texts cited in note 44 above he seems to imply that quantifier variance cannot occur any other way. Here especially, however, see what Sider says in "Replies," p. 680. Without being able to enter into any details, let me simply state that, to the extent that Sider is at present prepared to hold that four-dimensionalism is true in plain English, he would defend this position by making the following claim: "It is metaphysically impossible for the quantifier-like expressions to have different meanings in the different linguistic communities, on the assumption that speakers in these communities accept and reject their ontological sentences in the same manner that speakers in our actual community do." I think that my arguments against Sider in the present discussion would not be significantly altered if they are taken to address that somewhat qualified claim.

Ouasi-nihilists like van Inwagen and Merricks are prone to believe that, whereas apple trees exist, apples don't.

A good rule of thumb in philosophy, I think, is that whatever seems to be actual is at least possible. Sider's important insight is that anti-commonsensical ontologists must hold that the language we seem to be actually using—a language in which the ontological sentences typically accepted in the community would be trivially true—is not even a possible language. There appears, however, to be little to recommend this extraordinary idea beyond the wish of these philosophers to find some way to justify their attacks against common sense.⁵⁸

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