

## **IS THERE A TRUE METAPHYSICS OF MATERIAL OBJECTS?**

Alan Sidelle  
University of Wisconsin-Madison

The work that has been done in the metaphysics of material objects over the past twenty or so years is full of creativity guided by the hand of rigor. In what follows, I have no desire to disparage it. Nonetheless, at the end of the day, I think the best interpretation of these good works is as developing and showing how one or more scheme of description—one ‘package’ account of what there is, how things change and trace through time (and possible worlds) and how our ‘ordinary’ views on these matters fit in—can (or can’t) be coherently worked out. More simply, I will argue that there is no fact of the matter about which package is true—each is metaphysically as good as the others, and the world is incapable of discriminating among them. How best to articulate this position will be considered in the final section of this paper.

In Section I, I will discuss the most prominent views in the area, illustrating what I mean by a ‘package’, and claiming that for each view, there is an acceptable package that meets standard objections and all *clear* requirements. I hope this rehearsal of views and packages will provide some intuitive force to the idea that these packages don’t really make different claims about the world, but just provide different ways of describing the material contents of space-time (including property instantiations and causal relations). Thus, the differences between the views look more semantic than factual. In Section II, I will argue that there is nothing in the world that could make for the truth of one of these views as opposed to the others,<sup>1</sup> although each provides an acceptable way of describing the world. Finally, I will consider some objections to and questions raised by my proposal.<sup>2</sup>

### **I. The Views**

#### *1. Background*

Much recent work in this area has been guided by puzzles that aim to show that not all of our ordinary views about what there is, and how things

persist through change, can be true together with strongly held theoretical views. One central such view I call ‘The No Coincidence Thesis’ (NC): There cannot be two material objects wholly located in the same place at the same time (some prefer: No two objects can wholly consist, at a time, of just the same parts). This principle conflicts with our everyday judgments that there are both ordinary objects—sweaters, trees and cows—and ‘constituting’ objects—pieces of yarn and wood, maybe aggregates of cells or quarks—combined with our views about how these things move through time, which, more theoretically, underlie our views about the persistence conditions for these sorts of things. Since the ‘macro’ objects can go from existence while the constituting objects persist, and more generally, since the histories traced by each can differ, an object and its ‘constituting’ object cannot, in general, be identified, so we are committed to coinciding objects (Wiggins (1968)). NC also plays a role in Van Inwagen’s (1981) modern version of the ancient Dion/Theon puzzle; he shows that this principle is inconsistent with our belief in arbitrary undetached parts, combined with the view that objects can lose parts (plus an intuitive judgment that undetached parts persist if all their parts persist arranged in just the same way). Whether the Doctrine of Arbitrary Undetached Parts is one of our ‘ordinary views’ isn’t as important as the fact that many find it very intuitive, and commonsense seems committed to it in our judgments of persistence when things break—the broken bits count as objects, but don’t seem to have just come into existence. All recent theories of the nature of material objects and/or change at least try to handle these puzzles somehow, and many, if not most, are motivated by their purported ability to provide solutions.<sup>3</sup> So, one desideratum for an acceptable theory is to either avoid coincident entities, or explain how to make sense of its possibility.

Another theoretical idea often invoked in criticism of ordinary (and other) views is a proscription against *arbitrary distinctions*. Arbitrariness, or its appearance, can show up in judgments about which portions of the world do, and which do not, contain objects, and in judgments about how things persist through change—what changes are ‘substantial’, and how things move through time. For instance, we commonly think cells arranged in certain ways constitute cows, but that no object is constituted by this paper and my eye. But one may wonder whether there is any difference here which can, in an appropriate way, substantiate such a distinction, especially when science reveals how much space there is between small particles making up cows. What of our judgment that something ceases to exist when a cow dies, but not when a hoof is clipped, or it catches cold? In each case, it seems that something persists, but some properties change. Or why does a car become larger when bumpers are attached, but not when a trailer is?<sup>4</sup>

The point is not that these questions have no answers, but that the failure, or absence, of obvious answers is often presented as grounds for rejecting a theory—so, conversely, a positive desideratum for a theory is to avoid arbitrari-

ness, and to have explanations for those distinctions that might be challenged as being so.

Now, as theories attempt to avoid arbitrariness and coincidence, they wind up rejecting or revising some, or many, of our ordinary views about what there is and how things persist—for instance, Mereological Essentialism meets both desiderata by denying that anything ever genuinely persists through any change in parts, so we needn't distinguish the persistence conditions for trees and bits of wood, nor between parts an object can and can't lose. But this, of course, runs quite against the bulk of our ordinary reidentifications of objects. This is standardly offered as an objection, and all sides agree that the Mereological Essentialist—and more generally, the critic of common sense—must somehow accommodate our ordinary views. One must at least rationalize them, if not actually make them come out true.

Thus, an acceptable theory needs to avoid inconsistency with (1) ordinary judgments/intuitions, about what there is and how things persist, and (2) theoretical judgments/principles, most notably NC and No Arbitrary Distinctions, though there could be others. And a theory should avoid simple internal incoherence. Correspondingly, the correlative types of consistency are positive desiderata. With these puzzles, challenges and desiderata in view, we can now survey the major views currently taken seriously, and see how they can attempt to motivate themselves and handle challenges. To keep things manageable, I will often give a feel rather than track things down fully, but I hope to make it clear enough that each view can make itself 'adequate' to the above requirements, and I will then argue that beyond this, there are no truth-makers to distinguish among the positions.

Typically, a view has a 'leading idea' which is either itself strongly intuitive, or else is intuitive or promising in light of the puzzles and one or more of our desiderata. Each such idea, however, on its own, runs up against some of these desiderata, and so a proponent needs to build on, or add to, the leading idea to somehow accommodate the difficulties.

In general, conflicts with our ordinary views are handled by some combination of (a) ascription of mistake to us, with some explanation of our confusion (e.g. the universalist may say we have practical reason to 'privilege' certain objects, which may lead us to overlook other sorts), and (b) a scheme of paraphrase or redescription such that our ordinary judgments, so understood, can be allowed as either true, or at least 'appropriate' and tracking *some* genuine feature of the world. Conflicts with our theoretical principles are met either by challenging the principle (this is done, for instance, by those who appeal to 'brute facts' to combat arbitrariness), or trying to show that *properly understood*, the principle does not conflict with the main idea (for instance, Wiggins' proposal that NC should really only be No Coincidence of objects of the same kind).<sup>5</sup> In each case, to use Quine's figure, the leading idea can meet our desiderata by 'making accommodations elsewhere in the system,' thus generating a package view.

## 2. *The Views*

A. ‘*Commonsense*’/*Coincidence*. Let’s begin with what I think of as the ‘commonsense’ or ‘ordinary’ view, as represented by Wiggins. The ‘leading idea’ here is given simply by our ordinary judgments about what there is, what there isn’t, and how things trace through time. In Wiggins (1968), he argues that these judgments combine to commit us to coinciding entities, but he then attempts to make this acceptable by suggesting that (a) the coincident entities can be distinguished by sort, (b) we can still say that the tree just is the wood—in the sense of being wholly constituted by it, and (c) we can still accept the claim that no two objects of *the same sort* can coincide—implicitly suggesting that the intuitive pull of NC really resides in the truth of this more restricted doctrine. However, to many, this seems a misdiagnosis, for it is equally mysterious how such objects *can* differ in sort. Whatever might make some *tree* sortally a tree—have the identity conditions for trees—will also be true of the *wood* co-located with the tree. So, appeals to difference in sort, or identity conditions, or modal properties, are as problematic—and seemingly, for just the same reasons—as the original claim that there are, or could be, two objects.<sup>6</sup>

Now, the defender of coincidence may point out that this argument presupposes that kind membership, and/or identity conditions, supervene on other, non-modal and ‘less problematic’ properties, and in a very particular way. This allows two moves. One may simply deny that these properties are so supervenient; alternatively, one may suggest that while they *are* supervenient, we have to be clearer about supervenience. Usually, the supervenience of F on G is understood as roughly:

(x)(y)(if x and y agree with respect to their G properties, they agree with respect to F),

thus implying that there can be no difference in F without a difference in G. Since the tree and wood don’t differ in their non-modal, current actual properties, they can’t differ in sort or identity conditions. However, the core idea behind the supervenience of identity conditions—the main idea behind wanting to deny their ‘brutality’—is roughly that, if matter gets arranged in exactly the same way, by the same processes, etc., in two situations, then if you have, say, a tree in one case, you have one in the other. But here, we’ve focused on *two situations* not differing: there is a tree in each. It is less clear that we want or need to insist that the wood *in the same* situation needs to realize all the same non-actual properties the tree does. So long as there is *a* tree, the two situations don’t differ by a ‘brute fact’, and in some sense, the presence of an object of some particular sort, with these identity conditions, is not something ‘above and beyond’ the obtaining of the less problematic properties. Along these lines, then, it may be urged that all supervenience really requires is that whenever these G properties co-occur, there is *an* F.<sup>7</sup>

<b>Theory</b>	<b>‘Leading Idea’</b>	<b>Need to Deal With:</b>	<b>Ways of Dealing</b>
Commonsense	Normal judgments of what there is, persistence are correct	Coincidence	Modified supervenience, brute fact
<i>Persistence Views:</i>			
Mereological Essentialism (ME)	Handles puzzles about change; ‘An object is its parts’	Arbitrariness (what there is/isn’t, what changes are substantial)	Causal relations, brute facts
Hyper-Essentialism ‘Intrinsic’ Essentialism	Leibniz’s law (LL); puzzles LL, but for ‘real’ properties; puzzles	Ordinary views about change; possibly arbitrary?	Series, sets, paraphrase; temporal counterpart theory
Four-Dimensionalism	Time relevantly like space; Apparent coincidence is identity of parts (sometimes LL; vagueness)	Ordinary views, distinctions Ordinary views; explain intrinsic/extrinsic distinction Apparent ordinary views; Lump1/Goliath; Spatiotemporal essentialism	Same Same; intuitive, various options Paraphrase and bullet biting; Counterpart theory
Burke (Sortal Dominance)	Avoid coincidence by denying apparent persistence conditions of ‘under object’—“when wood is a tree, it isn’t ‘just’ wood”	When and why does G dominate F?	Various options (‘F implies more properties’)

Persistence Universalism	Arbitrariness of alteration/ corruption distinction	Are ‘under objects’ and arbitrary parts actually saved? Ordinary persistence judg- ments Ordinary distinctions; coinci- dence	Yes—revision is only partial  Emphasize partiality of revision Redescribe/paraphrase; (triv- iality)
<i>Ontological Views:</i> Universalism (Ontological)	Arbitrariness of distinctions (but worries about Nihilism)	Ordinary distinctions; com- mitment to ME	Redescribe/paraphrase Same as ME
Nihilism	Distinctions arbitrary, suspi- cion of modality/identity conditions/boundaries	Ordinary claims; no values of variables for redescription	Paraphrase; blame the me- dium
‘Just Simples’	Complexity root of all prob- lems	Arbitrariness; ordinary claims	Deny arbitrariness; para- phrase
Van Inwagen (There are simples and living organ- isms)	Cogito commits us to hu- mans, non-arbitrariness to other living things; nothing comes to be when sand forts made; no coincidence	Ordinary commitment to artifacts, the inanimate and arbitrary parts. Arbitrary to allow organ- isms? Commitment to simples?	Paraphrase  Deny arbitrariness?  Bite or deny commitment

It doesn't much matter whether this is viewed as a reinterpretation of supervenience, or its denial and replacement by an alternate 'determination' relation; either way, it goes *some way* towards meeting the counterargument against Wiggins. Of course, it does not make things utterly unmysterious—it trades the 'brute fact' that something is sortally an F, or has such-and-such persistence conditions, for the 'brute fact' that despite both realizing the same G properties, the tree, but not the wood instantiates these identity conditions (while only the wood instantiates *those* conditions). But there is no *incoherence* here, and it does say *something*.

I don't want to say that I am *happy* with this; it still violates deep theoretical ideas. But it will seem enough, I think, to those who are deeply enough committed to our other views that lead to coincidence, and so who think one merely needs to show that the view is not incoherent. For our purposes, what matters is that the commonsense view has a reply, by offering a total, coherent story within which its leading idea fits, and which, to the satisfaction of some, at least, addresses the objection.

The other approaches, except for Persistence Universalism, try to avoid coincidence. Consequently, they need to deny one or another ordinary view about what there is, or how things persist. To avoid coincidence, one must make out that in all cases where coincidence threatens, either (a) one (or both) of the objects does not exist, or (b) they are identical. (Though four-dimensionalism may not seem *best* captured by (b), claiming instead that the objects are not wholly located in the same place.) As far as 'leading ideas' go, the first sort of approaches may be thought of as 'ontological'—revising some view about what there *is* (here I place Van Inwagen, Ontological Universalism and Nihilism), while the latter may be thought of as revising some view about how things *persist*, since these are what seem to preclude identity, and so, force coincidence, in these cases (here, I put Mereological Essentialism (and other 'strong' essentialisms—see note 10), four-dimensionalism, and Burke's sortal dominance view). Of course, on investigation, views of either sort may wind up needing to make changes of the other kind as well—four-dimensionalism and the strong essentialisms may delete ordinary objects from their ontology, and Ontological Universalism may need to embrace a strong essentialist view about persistence. But each *starts* with one sort of idea.

*B. Views about Persistence.* One view of the 'change our views about persistence' sort that is always around, though rarely explicitly endorsed, is Mereological Essentialism (ME).<sup>8</sup> This is the view that an object cannot gain or lose parts.<sup>9</sup> ME rejects the ordinary judgments about persistence that give rise to the puzzles of coincidence—a tree *cannot* survive the loss of a branch any more than its constituting wood can, nor can a statue or organism survive the loss of a leg. Strictly, by only providing a necessary condition for persistence, coincidence may still be possible—x and y might differ over what *non-mereological* changes they can undergo or what rearrangements of smaller parts, if any, they can tolerate (like a sweater and a piece of yarn). Thus, most friends of ME

either embrace persistence of parts as a sufficient condition as well, or add some further necessary condition (such as that the parts remain appropriately related—this, I think, is Chisholm’s view). ME also avoids Sorites puzzles, and the arbitrariness that seems to infect any other theory’s attempts to say just how much mereological change an object can undergo.<sup>10</sup>

Despite these advantages, ME is, as I say, rarely championed, and this is for one main reason: It is incompatible with everyday and obvious judgments of persistence. On versions requiring some sort of continued ‘unity’ or arrangement of parts, things that seem to persist do not—the tree in my yard was not there five minutes ago, much less two hundred years—and versions that take the survival of parts to alone suffice would have the tree, and everything else, be millions of years old, and imply that the locations of these things at other times is never what it seems—though the tree existed ten years ago, it was not (wholly) located in my yard.

Mereological Essentialists (and the others—note 10) may and do make two general sorts of moves in reply, though they aren’t always distinguished and it may not be that important to do so.<sup>11</sup> One is to simply *accept* the implications, and try to explain why they *seem* wrong (as in Chisholm’s echoing of Butler’s distinction between ‘strict and literal’ and ‘loose and popular’ identity); the other is to deny the implications by denying the existence of the seemingly mereologically incontinent objects. Either way, they need to give *some* reasonable interpretation of our ordinary judgments, and either way, it is pretty clear how it will go—our ordinary use of ‘car’, etc., traces *series* of objects, related to each other in various ways, such as sharing parts and causal relations. On the first interpretation, our ordinary claims are all *false*, because we apply ‘car C’ to numerically distinct objects; on the second, our judgments may be *true*, but that is because ‘car’ applies to *series*, rather than single, objects. (There are, of course, variations upon this strategy.) Notice that insofar as others have accounts of how cars and cows ‘genuinely’ persist, ME can ride piggy-back upon such accounts and simply reinterpret: what the opponent sees as persistence conditions, ME sees as the conditions guiding ordinary judgments or ‘unifying’ series.

One may not like this—one may think it doesn’t *really* square ME with our normal views, and that it ‘strictly and literally’ is tantamount to denying that cars and cows exist.<sup>12</sup> But it does square with all the *hard* facts, and it is handy with the puzzles. If we cross the three sorts of strong essentialism with universal and more restrictive views about when one has an object, we get six possible views, all with something to recommend them and some champions, and all needing—and able to use—some reconstruction strategy, to make sense of our ordinary judgments.

Another approach, in some ways like the above, is Four-Dimensionalism (sometimes called the Temporal Parts view). This view sees time as a fourth dimension along which material objects extend, and along which an object may be arbitrarily divided into parts. Many people claim to find this intuitive, while



opponents think all that is intuitive is that the *career* of an object is so extended and divisible. Be that as it may, Four-Dimensionalism allows us to treat cases of apparent coincidence as we treat cases of objects sharing spatial parts. Just as two highways may share a common stretch, or Siamese twins may share a hand, so a tree and its wood may share a *temporal* part. In none of these cases are there actually two things wholly located in the same place at the same time: what is wholly located, in the relevant spot, is just *one* thing, which is a part of both (and more) objects. Consequently, each object is *partly* located at that place and time—but only partly. Some Four-dimensionalists also claim motivation and support, as our strong Essentialists do, through worries about how objects can really persist through change: Four-dimensionalists explain that different temporal parts bear the contrary properties. And Four-dimensionalists also tend to be Universalists about when temporal parts compose a single object, and so can say that there is a single four-dimensional object with precise boundaries for each vague possible boundary a three-dimensionalist might try to arbitrarily select as demarcating the coming or ceasing to exist of a three-dimensional object.<sup>13</sup>

It is often claimed that Four-Dimensionalism goes strongly against our ordinary views, that we are intuitively Three-Dimensionalists. I am not holding just part of a paper—I'm holding the whole thing! I find this hard to assess. It is also claimed that Four-Dimensionalism is incompatible with change: change requires a common subject to be at one time F and at another time not-F, while on Four-Dimensionalism, one temporal part is F while a *different* one is not-F. But of course, the Four-Dimensionalist will reply that these are temporal parts of the same Four-Dimensional object, so there *is* a common subject. And if one charges that change requires the common subject to be the 'primary' or 'direct' bearer of the properties, one may deny this or even challenge its sense. There are, though, a couple of more serious problems. One is that examples of apparent coincidence are not restricted to cases where the objects differ historically—most famously, Allan Gibbard's "Lumpl/Goliath" case. Here, one cannot say the objects are only *partly* co-located, because neither object has any *other* temporal parts. But then, coincidence is not entirely avoided, or else there are other ways of avoiding it. A related problem, due to van Inwagen (1981, section VI), is that on pain of coincidence, Four-Dimensionalism seems committed to a temporal, or maybe even a spatiotemporal, boundary essentialism: an object cannot have existed any longer or shorter than it actually exists—for if it had, it would have coincided with another object which is a temporal part of it (in the case of shorter existence), or of which it—or something for all the world exactly like it—would be a temporal part (in the case of longer existence). This is particularly important insofar as the Four-dimensionalist hopes—or hoped—to claim superiority to competitors in handling coincidence, since it could also preserve our views about objects' ability to survive change, the existence of arbitrary undetached parts, *and* our ordinary ontology. But ordinary objects aren't obviously saved—anyway, not intact—if their spatiotemporal boundaries are

so modally intractable. Surely, the Colossus at Rhodes might have lasted longer than it did—so if the four-dimensional hunk of rock with which it shared its entire career could not, the Colossus is not identical to it. Thus, to avoid coincidence, the Four-dimensionalist must revise our ordinary modal views, or deny that the Colossus exists.

The Four-Dimensionalist has various options here; most combine some amount of bullet-biting with some amount of paraphrasing. Heller, for example, gives up ordinary objects—there is neither the statue nor the piece of clay nor the Colossus at Rhodes: there are just Four-Dimensional hunks of matter with essential spatiotemporal boundaries, and since ordinary objects are not these, there just aren't such (Heller (1990), especially Chapter Two). This, of course, requires some accounting of our ordinary claims, and these are as easily rendered as for ME, in paraphrases. Another option is to adopt a sortally-relative Counterpart Theory for modal discourse.<sup>14</sup> Since the Counterpart relation is sortally relative, it would not simply be true that Lump1, but not Goliath, would have survived smoshing, or that the Colossus, but not the Four-dimensional lump, might have lasted longer. Rather, Lump1—and Goliath—have lump counterparts that are not statues, and the name 'Lump1', but not 'Goliath', invokes the lump counterpart relation in modal contexts; ditto for the Colossus. This allows contingent identity statements, and for pairs of identicals, in the relevant sense, to differ in their modal properties—so one could claim that Lump1 *is* Goliath, and the Colossus *is* the four-dimensional lump, but that statue-counterparts needn't be lump-counterparts, and vice-versa, and they might endure for different lengths of time.

I shan't rehearse the familiar back-and-forth about Counterpart theory; as at least a paraphrase strategy, it doesn't seem obviously worse than that required by any of the other views, and at worst, there is always the retreat to the more simple denial and more ordinary paraphrase.

Perhaps the most creative 'persistence altering' view is Burke's 'Sortal Dominance' view (Burke, 1994a and b). Burke, like the others, starts with a denial of coincidence. But in diagnosing apparent cases of coincidence, he sees the mistake not—as in more obvious approaches—in our judgments about the persistence of the 'superobject'—the tree or sweater—rather, he finds it in persistence judgments of the constituting objects—the wood or yarn. After all, if we *start* with the idea that in one location, only one set of identity conditions can be instantiated, why should the yarn win out over the sweater? If we are confident that the sweater, or statue, or tree, comes into existence at a certain time, then so must the yarn, bronze or wood that is located there. An interesting point Burke notes to help this seem more palatable is the plausibility of the claim that when a piece of bronze (wood, yarn) is formed as a statue (tree, sweater), it is not 'just' a piece of bronze: it is a *statue*—when asked 'what is it?', 'statue' ('tree', 'sweater') seems the right answer. Now, if the piece of bronze we had at t1 was just a piece of bronze, while that at t2 is a *statue*, is it so strange to claim that, as things of different sorts, they have different identity conditions,

and so cannot really be the same? The denial of this apparent identity is no more bizarre than the answer ‘this is a statue’ (tree, sweater). Similarly for arbitrary undetached parts—a ‘torso’—the part of a body apart from its left foot—is ‘just’ a torso when it is a part, but when a body loses its foot, we have a torso which is an organism. Burke thus tries to hold onto our ‘commonsense’ ontology along with No Coincidence, by what can seem a relatively small change in some of our judgments of identity through time.

One question for Burke is: when and why does one sortal dominate another? There are various options; Burke suggests that one sortal dominates another when it ‘implies more properties’—‘tree’, for instance, implies everything ‘wood’ does, plus further functional and formal features. As this stands though, it can only be clearly applied when one sortal implies another. ‘Statue’ doesn’t imply anything about specific materials—so does ‘statue’ imply more properties than ‘piece of clay’ or ‘bronze’? But there may be other options, and one might leave it intuitive—asked what this piece of clay is, ‘Statue’ *is* a better answer than ‘piece of clay’. An account would be nice, but does the view *require* one? The same might be said about ‘Why?’ One might want to know why the fact that F implies more properties than G makes it determine the object’s identity conditions—but at this level of analysis, it isn’t clear *any* view can tell us *why* meeting its conditions makes for objecthood or persistence: the theory merely needs to get it right.<sup>15</sup>

A potentially more damaging objection asks whether, given what Burke says about the persistence of torsos, lumps and pieces of yarn, he can really claim to have *saved* them, and especially, whether there is any motivation for saving them *in this way* which wouldn’t be better served by just denying their existence, like Van Inwagen. After all, perhaps the main argument for believing in arbitrary undetached parts is that they can *become* detached, and when they do, it seems clear that they have not just come into existence. But according to Burke, a fair number of these parts *cannot* become detached: a torso that ceases to be attached to a foot ceases to be—it is replaced by another torso which is an organism. Worse, this ‘new’ torso is made of just the same matter arranged just the same way through a causally continuous path. Is denying that this suffices for torso—or lump, yarn or aggregate—identity compatible with acknowledging their existence at all (at least, short of hyper-essentialism)? A related objection asks whether, if a torso becomes detached from a foot, and the resulting torso is reattached, isn’t the third torso identical to the first?<sup>16</sup>

While this is serious, Burke may respond in various ways. First, he may emphasize that he only changes our views about persistence *in certain cases*—namely, when an object comes to satisfy another sortal. And this is rare. Relatively few of an object’s arbitrary undetached parts can be an object of the higher sort. And of those that *can*, most *never will* become detached, so we needn’t change our views about *their* persistence. Similarly for most lumps and aggregates. So this may stave off the charge of motivational incoherence. The problems of reidentification call for different treatment, but there are again var-

ious options. One can allow for gappy existence, or explain the *appearance* of identity in terms of the common components. Again, one may not like this, but we can *understand* it, and it can claim some amount of independent motivation from our ordinary answers to Aristotelian ‘What is it?’ questions.

One last view in this category that is, I think, never explicitly discussed but worth mentioning may be called ‘Persistence Universalism’. On this view, for any materially occupied path through time, there is an object whose career that path traces.<sup>17</sup> This is rather like liberal four-dimensionalism, but in a three-dimensional framework—what we have at  $t_1$  and  $t_2$  are not parts of an extended object, but the numerically same object. It is ‘Universalism’ in that *all* possible candidates for persistence conditions are acknowledged to be the conditions of persistence for *some* object. In this, it claims to avoid the arbitrariness of more restrictive views about persistence, as do liberal versions of four-dimensionalism.<sup>18</sup> This, presumably, would be the chief motivation for the view.<sup>19</sup> The view certainly appears to conflict with commonsense—but only in allowing identities and persistence where commonsense denies them (that is, it agrees with commonsense where commonsense *finds* identities). However, one might maintain that commonsense doesn’t so much deny them as ignore them, and that when we *appear* to make a denial, we are only denying that some *particular* object—like this *car*, or *Tony*—would be present in a certain possible future location—not that there is *no* object which is both present here, and would be (is) present there.<sup>20</sup> This, though, does bring out another seemingly serious problem—the view is committed to massive coincidence of objects. Even if the *car* is not identical to the ( $t_2$ ) paint chip (say), there is some object wholly located where the car is, which *is* so identical. So we have vastly many objects co-located at any place and time—not just the usually problematic two. On the other hand, the extent of coincidence, I think, makes this an interesting view, because it makes coincidence so *trivial*. That is, since wherever you have an object, every possible criterion of identity/method of tracing is instantiated, there is no special problem saying why, for each one, it *is* instantiated, and coincidence follows trivially. There may remain the problem of explaining how the car has the persistence conditions it does, while the other objects there do not, but given this view, the denial of the supervenience of identity conditions is natural and straightforward, and may be urged as the price we have to pay for not being arbitrary. So, while coincidence is not avoided, the view offers a novel account of its acceptability.<sup>21</sup>

*C. Ontological Views.* Having spent this much time on the above views, I hope the basic picture of the sort of objections—particularly from commonsense—and the sorts of package-building replies that may be offered, is apparent enough that it can be easily applied to the remaining views. Thus, I shall be rather briefer with them, hitting only significant highlights.

There are two extreme views about what there is which are fairly familiar—Universalism and Nihilism. According to Universalism, wherever you have some matter, you have an object which that matter composes, while according to Ni-

hilism, there are no objects—there’s just the matter.<sup>22</sup> These views share their fundamental ‘leading idea’, that any distinctions between (materially filled) portions of the world which do, and which do not, contain objects would be ultimately arbitrary—so they both treat all such regions alike. Universalism is then more impressed with the seemingly obvious fact that there are objects, while Nihilism urges that there is a problem with how the conditions distinctive of objects—identity conditions—can be supported by the world at all. Even if we have a simple, what determines whether a change in property at that location constitutes an accidental or a substantial change?<sup>23</sup> And while certain sorts of arbitrariness are avoided by the extreme essentialist views, like Hyperessentialism, what makes ‘objects never survive change’ a better answer than ‘they always do’? Since the world is not up to determining which changes are accidental and which substantial, the Nihilist urges denying the presupposition of such questions, by denying the existence of objects altogether.<sup>24</sup>

Universalism here—like Persistence Universalism—may seem to score poorly on commonsense, but as suggested earlier, it isn’t clear that commonsense so much denies the bulk of scattered objects, as it ignores them. I haven’t found many people deeply committed (prior to certain arguments like the one to follow) to denying that there is something composed of my fish and my daughter’s left pinky. At any rate, to the extent that we do make such distinctions, the Universalist will just redescribe our distinction between objects and non-objects as distinctions between objects of different sorts, and will do so not only for commonsense, but for whatever distinctions other views which fall between Universalism and Nihilism have to offer. Nihilism will offer the same sorts of redescriptions, except (a) it will not be able to claim with any plausibility that the view doesn’t conflict with commonsense, and (b) the distinctions will not be between objects of different sorts, but non-objects of different sorts—different distributions of matter and properties. Nihilism here is actually threatened with incoherence in a way none of our other views are, which could potentially rule it out as a live option. For it is not completely clear that we can understand the distinctions it wants to and must acknowledge without being committed to objects of some sort or another. For instance, if one attempts to redescribe what we ordinarily would describe as one car surviving being painted, and to distinguish this from, say, a car being destroyed by pulverization, the nihilist will want to talk about car-shaped portions of matter, at different times, and causal relations and properties thereof—but what about these portions? How are they not objects? The Nihilist seems committed to denying that these portions are literally the same before and after the changes: otherwise, we would have the sort of persistence he purports to find so problematic; but if he does so deny, he looks just like a mereological or hyperessentialist, who doesn’t deny objects, but only their persistence. And if he offers no paraphrase, one may wonder whether he can truly claim to have a theory about the real world at all—or anyway, one compatible with the ‘palpable phenomena’.

I don't think the Nihilist's position is really so hopeless; I have elsewhere (Sidelle (1998) section VI) suggested a number of options available to him, citing, in part, the 'feature-placing' language proposed by Hawthorne and Cortens (1995), and the idea that each apparent objectual expression in a paraphrase can be seen as just a place holder. If this is right, the Nihilist can continue to speak with the vulgar, and acknowledge all facts about the distribution of matter through space and time, while denying 'in his heart' that there really are objects.

The Universalist's further problem arises when he turns to persistence. Van Inwagen's (1981) argument against arbitrary undetached parts applies equally against Universalism (since Universalism entails the existence of arbitrary undetached parts): it seems to show that on pain of coincident entities—which Universalists by and large wish to avoid—the Universalist must adopt one of the strong essentialist views we've discussed, denying, at least, that objects can gain or lose parts. Otherwise, they would 'run into' the larger, or smaller, objects which also, according to the Universalist, exist. Van Inwagen, and others, take this as reason to reject Universalism—but the Universalist himself can make all the moves we earlier saw were available to the mereological and other strong essentialists. Van Cleve (1986), indeed, starts with Universalism in an argument for Mereological Essentialism, thus presenting the package as a whole.

Another option for the Universalist is to adopt a Burkeish, sortal dominance view of persistence. Such a package amplifies the questions already posed for Burke's view, since *whenever* a 'normal' object undergoes mereological change, some aggregate will cease to exist—i.e. the one that would otherwise be located where the object now is. But perhaps this is just a difference of degree, and isn't much more objectionable than what we've already seen.

Finally, between Universalism and Nihilism come more restrictive ontologies. Obviously, there are many options here. The most obvious ones—those close to commonsense—lead to coinciding entities unless they are combined with a revisionary view about persistence. Thus, these packages would be either like Wiggins', or one of those discussed in the above section on persistence. What this leaves among well-known and reasonably motivated views are those that allow one or more of: simples, masses (lumps) and organisms.

Views that allow simples differ, I think, from the rest we've been discussing insofar as it seems a genuine scientific question whether matter has smallest parts. That aside, it is plain what looks good about simples—not being complex, they seem to avoid troublesome puzzles. On the other hand, those concerned about arbitrariness—Universalists and Nihilists—may want to know what is so special about simples that allows them to have genuine persistence conditions of a sort nothing else in the world has. And what are they? Which properties of a simple can be lost, while the simple persists? Unless one property, or set of properties, can be singled out, there is a threat of coinciding entities here—the simple for which 'being a quark' (say)—and only that—is essential, and that for which having spin up is essential. And plainly, avoiding

coincidence must be done in a way that doesn't give us arbitrariness.<sup>25</sup> Of course, anyone who thinks the truth is somewhere between Universalism and Nihilism will think *something* counts as sufficiently non-arbitrary; one common answer appeals to causal powers—here, those most central to any particular simple.

In addition, a view will really be intermediate only if it does not allow aggregates—otherwise, it will amount to Universalism. If it *only* allows simples, it will be like other views which deny the existence of most common-sense objects, and will presumably try to accommodate our ordinary judgments via some paraphrase strategy. The same goes for masses—if masses can be scattered, then mass theory is a Universalist view; if they must be, in some way, unified, it will need to say what sort of unity is object-making; again, some appeal to causal relations among parts can be expected, and if done well, this will resonate with some, while raising the question 'What's so special—from the metaphysical, object-making perspective—about causality?' from Universalists and Nihilists. Further, as Zimmermann (1995) has argued, mass theory cannot be combined with ordinary objects without encumbering coincidence (again, short of a modified theory of persistence).

This brings us finally to organisms, the most visible non-ordinary, non-Universalist champion of which is van Inwagen, who also allows simples.<sup>26</sup> There isn't a simple leading idea behind van Inwagen's position, but perhaps we can summarize it like this. Of course there are simples. However, not every collection of simples is an object—this Universalism, besides being counterintuitive, generates either coinciding entities (van Inwagen's objection is to objects sharing all their parts) or Mereological Essentialism, both of which are unacceptable. However, the Cogito—combined with obvious scientific facts—ensures that at least one non-simple exists: me (van Inwagen has a different favored first complex object). But there is no non-arbitrary reason for allowing myself but not other living organisms—thus, living organisms exist. On the other hand, artifacts and other inanimate objects are not 'sufficiently like' living organisms—or better, the simples 'arranged chairishly' and 'rockly' are not related sufficiently like the way those constituting organisms are. They are, really, rather more like aggregates. So there are no such other things.

If van Inwagen really has established that there are organisms, then Nihilism is out. But of course, many have wondered about what the Cogito really establishes: why does thought have to have a subject? Why can't there just be some stuff arranged so that thought occurs there, just as conductivity may so occur? Nihilism aside, the move from the Cogito to the claim that I (or van Inwagen, anyway) am (is) an organism has been questioned. Why isn't the subject of thought a certain aggregate? The appeal to identity through time, which van Inwagen uses to argue that he is not an aggregate, while *independently* plausible, is not supported by the Cogito, which is a synchronic matter. It is of course true that the matter underwriting the thought 'I think' has a certain biological arrangement—but it has lots of features. Another more restrictive move from this starting point would restrict the ontology to *thinking* things, or con-

scious things—after all, they have more in common, in arrangement of parts, with van Inwagen, than non-thinking animate organisms, and in particular, more in common that has something to do with the purported need to acknowledge the existence of the first complex item. I suppose these questions all come under the general rubric of ‘arbitrariness’—and we can expect van Inwagen to deny that his way of extending from himself is arbitrary. And he will be able to point to an interesting feature—constituting a life—that all and only his preferred candidates for object-constituting simples have. But both the broader and narrower intermediate proposals share interesting features as well.

Van Inwagen’s negative views have probably attracted more attention than his positive ones, and his response to them is especially important for us—indeed, we’ve more or less presupposed it throughout. van Inwagen, more than any other ‘revisionary’ ontologist, has developed a proposal about how to paraphrase ordinary claims without commitment to the objects one wishes to eschew from one’s ontology. van Inwagen develops it mostly in connection with his rejection of artifacts: when, as we would say, I am sitting on a chair, van Inwagen would have it that I am sitting on simples arranged chairishly. Particularly noteworthy, and praiseworthy, is van Inwagen’s discussion of transtemporal statements. There has been a fair bit of discussion of whether van Inwagen is right to claim that our ordinary claims should be understood in terms of his paraphrases, so that his view can truly be said to be compatible with ordinary claims like ‘There are three chairs in the room’<sup>27</sup>—but even if this fails, his paraphrases can give us what is genuinely true in our ordinary, false assertions. And all that is really required is that our ordinary views be *accommodated*—handled, rationalized—not that they come out true. van Inwagen’s work here is particularly worth noting because it provides resources for all of the revisionary views we’ve been discussing. As we’ve seen, all the views require some revision, and van Inwagen’s work here makes it clear that acceptable paraphrases will be available. And as we noted earlier, those unhappy with his *particular* proposals can hardly deny that whatever their ‘right’ view is, it can supply a basis for a van Inwagensque paraphrase to ride piggy-back upon. Thus, the desideratum of ‘accommodating ordinary views’ can be made part of the package of any of the views we’ve been discussing. On the other hand, in all these cases, it can hardly be denied that the ontologies are *revisionary*, and that the answers they give to ‘how is your favored ontology not arbitrary?’ are hardly candidates for logical truths.

## II. (Contra Realism)

Now, I have to admit to being *unhappy* with many of the packages, but there is a minimum constraint they all meet. Their leading ideas are well-motivated, they have *something* to say to each desideratum, we can *understand* them (some charges of incomprehensibility notwithstanding), and crucially, any distribution of matter in space-time can be coherently described by them. This



is why each is defensible at least to the satisfaction of its proponents—who, in each case, consist of at least some intelligent philosophers. What I submit is that, among these packages—and perhaps others—there can be no fact of the matter as to which *truly* describes the material ontology and persistence of things in the world. They can only be understood as different ways of articulating, extending and making coherent the combination of our ordinary judgments and theoretical ideas. But short of showing that really, all but one are incoherent, I don't see what in the world can *make* one true; or equivalently, while the theories plainly *differ*, I don't see how *that with respect to which they differ* can be understood as a factual matter.

What can I mean in questioning whether these views differ factually? According to Mereological Essentialism, no dog has ever survived the loss of a tail, while on most other views, this has happened plenty. According to van Inwagen, there really aren't cars; on most other views, there are. According to Burke, this piece of yarn did not exist yesterday, when my sweater had not yet been unraveled; on most other views, it did. According to Wiggins and Persistence Universalism, the tree and its wood are two material objects, occupying the same space in my yard; according to four-dimensionalism, they aren't entirely there, according to Burke and Mereological Essentialism, they are identical, while according to van Inwagen and Nihilism, one or both don't exist. According to van Inwagen and commonsense, certain causal relations among things are needed for them to compose an object; according to Universalism and Nihilism, this cannot be the difference between the presence and absence of an object. What more can you want?

But I hope, after our lengthy discussion of the views and their resources, it is clear why I am not moved. What we describe as a dog's losing its tail, ME describes as one dog-shaped sum replacing another slightly larger one; what we call a car, van Inwagen calls some car-arranged simples. What we distinguish as 'a collection of objects,' Universalists call 'a spatially dispersed object'. What Wiggins calls the persistence of a piece of yarn and destruction of a sweater, Burke calls the coming to be of 'just' a piece of yarn. One may, of course, insist that at most, one of each pair is true—but it is not hard, I think, to see them as just different descriptions of the same situation, the same spatiotemporal distribution of matter (properties and causal relations). What could *make* one of them true? What would it *be* for there *really* to be the same dog after tail-amputation—or really *not* the same dog?

One way to consider the matter is to ask: what story about the world are these theories telling us? Are these 'facts of persistence' or 'objecthood', etc., *extra* facts, beyond the arrangements of matter in various ways, with certain properties and in certain causal relations, to which all parties are agreed? Or is it enough that we simply do, in fact, use words like 'object' and 'same' to mark distinctions which are independently recognizable and of no further significance? For example, some might say that the question: "What is it about the difference between spatiotemporally continuous S-paths and other paths that

makes only the first paths traced by single objects?”—a question some press to urge the arbitrariness of our ordinary judgments—asks too much. That may simply *be* the distinction we mark with the expressions ‘same/different object’ (used transtemporally). Call this ‘the semantic account’. On this approach, what would make one of the views true is not the correct postulation of ‘extra facts’ beyond what we all agree upon, but rather, the proper description *of* this agreed upon stuff *in English*. We all acknowledge A at t1 and B at t2, differing in respect of part P—the question is whether the rules of English permit, or require, or rule out, the claim that A is B. Is the difference between objects having different parts that which we mark by ‘not the same thing’? (A sophisticated version might hold that while not ‘directly’ what we mean, this is how we must interpret the expression, given other things we want to hold on to.) On this view, there is nothing ‘metaphysical’, so to speak, determining the truth of the views—our metaphysical vocabulary simply marks non-metaphysical distinctions, and does so, roughly, via linguistic rules.

The semantic approach is easily comprehensible—but on such a view, I submit, none of the theories can claim victory over the others. Each package represents a total reconciliation of our otherwise inconsistent cluster of particular judgments and theoretical views, each with some important ties to our usage and ‘deep convictions’. The fact that each view is *comprehensible* shows that it is not ‘simply’ false in virtue of meaning, and by the same token, that none are *simply* true, on the semantic approach. At best, one view might offer the ‘best’ reconciliation.

I suppose it is clear that this is how I view things, and is, at bottom, why I think there is no fact of the matter. It is also why I think that even if there were a fact of the matter, it would be a matter of convention.

In contrast, one might think there *are* further facts, and that such further facts are what could make one of the theories true. For example, in addition to the difference in parts between A at t1 and B at t2, there is the *further*, non-semantic fact that this constitutes A’s non-identity to B. That you cannot have two things in the same place at the same time would be another further fact, not made true by our rules of description, but instead, by ‘the nature of things’. Call this, in contrast to the semantic approach, ‘the metaphysical approach’. It is, I submit, the view of anyone who thinks there can be a genuine fact of the matter as between our views. When I earlier said I didn’t see how one of the views could be true, that might be read as: “I see how one of the views might in principle be true on semantic grounds—but none of them is—and I don’t understand a more metaphysical interpretation”.

To some extent, the suspicion I’ve expressed about non-semantic facts discriminating among the views comes from the intuitive force of seeing the pairs of descriptions offered in the second paragraph of this section as just offering different descriptions of the same facts. But perhaps I’ve focused too much on particular judgments, while overlooking our theoretical constraints—for example, No Coincidence. Wiggins’ and our ordinary descriptions here, *if* they were

true, would imply that there could be coincidence and complete sharing of parts. Since this is *not* possible, some of our ordinary descriptions are false. But how much factual content is there to NC? Is *it* more than a possible constraint upon descriptions? Admittedly, the question of how two such things could differ in sort, or persistence conditions, has force—but sufficient prior commitment to our persistence judgments will make it seem adequate to note that when matter is so-and-so arranged, there is an instantiation of such-and-such identity conditions, and more than one such arrangement can be instantiated at a particular location. Still—*isn't* just one of these *right*? Either there *can*, or *cannot* be two such objects! But—I hope I'm not alone here—I find it very hard to get a handle on this, unless considered in terms of particular cases, and then we are back to our questions about whether there is a factual difference between more specific, less theoretical, pairs of descriptions. I admit not *liking* coincidence, and preferring views that avoid it (all else equal). But pressed on what the difference could be between coincidence being possible or not, I am at a loss, except as we go round and round about what other descriptions of cases we can give consistently with either acceptance or rejection. (Similar remarks apply to other contested theoretical constraints.)

My position here, I think, is an application of Carnap's (1950) distinction between internal and external questions, and his rejection of external questions as only apparently factual. Within each view, one can answer questions like "Was this tree in my yard yesterday?" and even questions like "In virtue of what is this the tree that was in my yard yesterday?" Of course, the views will often give different answers. And one can say *of* each view what it implies, in each case. But when one asks "But is there *really* an object that was in my yard both yesterday and today, with different parts?" no answer can be sensibly given (beyond repetition). "Really", and other such terms, just don't have the content to generate an answer at a level 'above' those given within each theory—or as Carnap might call them, 'linguistic frameworks'.

Put another way, each theory attempts to address questions like "In virtue of what is object Z still around?" or "Under what conditions do we have an object?" When we see the diversity of answers, we are moved to ask another set of questions: *Why* does the presence of a,b,c make for constitution, or persistence, or substantial change? These questions can have *semantic* answers—'that's what 'constitution' means'—but if we want *metaphysical* answers, these will be hard to come by. One might object that these are questions which cannot *have* any answers: if this is what persistence is, that is what it is. And sometimes, such answers are fine. But when faced with competing theories, each of which is *understandable* and can be used to coherently describe any possible situation, this simple answer is unsatisfactory.

Here's something of an argument, or at least, something which may make the metaphysical option, and consequently, the view that the views differ factually, seem even more mysterious than I hope it already seems. If we suppose the theories differ factually, and that the deep facts about objecthood and iden-

tity are what determine their truth-values, then it seems we should be able to make sense of any of these views, so far as they are coherent, being the correct description of these facts, and of the more manifest facts the correct description of which depends upon this. So far, so good. But now let us ask: Can the truth here be contingent? Or must it be necessary? There is reason to think it must be necessary—but on the ‘factual difference’ view, this is hard to sustain.

Certainly, no advocate of any of the views proposes their view as just a contingent truth—those who think it impossible for two objects to coincide don’t think this just happens to be true in *our* world—it is supposed to be the metaphysical truth about material objects. Those who think objects can’t survive the loss of a part don’t think they *might* have been able to, but it turns out they can’t *here*. And so on. This is as it should be. These views are all themselves modal, and it is hard to interpret the modalities as anything other than the strongest sorts of necessity and correspondingly weakest sorts of possibility. The weakest possibilities, that is, count against the views.<sup>28</sup> So, if one of the views is true, it is necessarily true and if false, necessarily false.

But I suggest that insofar as we have any grasp at all on factual differences between the views, we cannot think of one as necessarily true and the rest necessarily false. The factual differences between the views would consist in the ‘extra’ truths that, say, such-and-such a relation between parts was (or wasn’t) necessary, or sufficient, for objecthood—or that when any A and B were exactly co-located, they’d have (or might not) the same conditions of persistence and transworld identity. Insofar as we can make sense of one ‘package’ of superfacts obtaining, we can make sense of *any* of them obtaining, just as, if laws of nature are something supra-Humean, we can equally make sense of any of a host of such laws being the ‘real ones’ governing motion and change. And this, I think, makes it impossible to see any of them as actually necessary in the widest sense.<sup>29</sup>

Of course, one may object that the necessity here is *metaphysical*, not logical, so we cannot take the equal *conceivability* of each view to establish their equal *possibility* in any but an epistemic sense. If, as a matter of fact, objecthood *is* the obtaining of such and such relations, or persistence *is* continuity of form, then all the other views just give necessarily false descriptions of the one true way things are and can be. But now we are piling mystery on mystery. I had enough trouble understanding how there is any factual difference at all—now I’m being told that of these supposedly factual differences, only one is really possible? Only one of these ‘extra sets of facts’ really *can* obtain? At this point, I have lost my frail grip on there being a factual difference between the views, insofar as only one of these ‘extras’ is so much as possible. This feeling is further encouraged, I think, insofar as so-called ‘metaphysical necessities’ really always cover up some genuine possibility, but require it to be differently described. The ‘necessity’ of water’s being H<sub>2</sub>O doesn’t rule out the other cases we might have thought of as non-water H<sub>2</sub>O or non-H<sub>2</sub>O water—it only keeps them from *counting* as non-water, or water, respectively. There is still a robust

sense, then, in which the possibilities—H<sub>2</sub>O that behaves very unwaterly, and non-H<sub>2</sub>O that is like water in all other relevant respects—are still acknowledged.<sup>30</sup> As Kripke saw and insisted, handling these apparent possibilities is crucial for the plausibility of the corresponding necessity claim. But in the current case, what possibilities can be acknowledged for the other views? None—and I think this is indicative of the fact that the *only* handle we have on the supposed factual differences between the views is *given by the very descriptions themselves*. That is why no ‘redescription’ of the possibilities they postulate is left. I, of course, have no brief for metaphysical necessity in the first place, but even granting its sensibility in other cases, I contend we have no handle on it at all here. And so, I think we do *not*, in fact, have any genuine handle on factual differences between these views, *even if* we try to take the ‘metaphysical’ route seriously.

At this point, one might draw back and reconsider the possibility that the true view is only true contingently, just as the laws of nature, whatever they are, are true contingently—but I don’t see that our handle on the differences between the views is anything like sufficient to undermine our conviction that whatever is true here—if anything at all—it is so as a matter of necessity.

### III.

That ends my basic brief for taking the differences between these views to be non-factual, and so, along with no semantic resolution, for thinking there is no fact of the matter as to which view is correct. The views, instead, represent different coherent ways of describing the world in terms of objects at a time and across times, which take seriously our actual particular usage and general principles. I will conclude with a couple of questions that should be asked about this view.

One important question—or set of questions—is whether my supposed meta-perspective on these disputes is not in fact a commitment to some substantive position. For instance, the major ground for my position is that I cannot understand the ‘superfacts’ upon which differences between these views would have to depend. But is that not to say, then, that all the views are really *false*, except, perhaps, Nihilism?

I don’t think so. The theories would be false if they were committed to such facts, but I do not see that they are. The theories themselves only make claims about objects, how they persist, and the like. The metaphysical interpretation of the theories, whereby comes the commitment to these superfacts, is no more a part of them than is Platonism in the practice of mathematics. No doubt, it may be accepted by many *advocates* of the theories, but that doesn’t make them part of the theories themselves. And so, my position does not entail that the theories are all false—at least, not for this reason.<sup>31</sup>

But perhaps it is incompatible with *some* of the views. In particular, my argument, or ‘intuition’ if you prefer, might seem incompatible with the appeal

to brute facts I described some of the theories as having recourse to. I treated such appeals, in a way, as trump cards—something upon which one may look with disdain, but against which one is powerless to argue. But am I not really saying that I cannot understand such appeals? If so, I cannot really think it is okay for commonsense to claim it is a brute fact that the sweater is sortally a sweater, and not a piece of yarn, while the co-located piece of yarn is not, sortally, a sweater. Similarly, I cannot think challenges of arbitrariness can be met by brute appeals: these simply do, and those—apparently relevantly similar—do not, constitute an object, or a substantial change.<sup>32</sup> Am I not committed to claiming that these claims really are not understandable, and so, it *is* a fact that they are false, and the metaphysical requirements of No Coincidence and No Arbitrariness *are* factual?

But, in accordance with my above remark, I think there is a difference in the sense in which the particular theories discussed may appeal to brute facts, and that in which *all* the theories, interpreted metaphysically, postulate brute facts. They all attempt to say what makes for objecthood, or persistence, or what accounts for certain distinctions. Insofar as one advances any view in contrast to the others, and doesn't think it is *just* the correct description in English—as the semantic view would have it—one must be taking seriously the differences between the theories. *Insofar as one is taking this seriously, everyone* is accepting brute facts—even the nihilist must think there *are* necessary conditions for objecthood, which are just never (and perhaps cannot be) met. So the sort of rejection of brute facts I am suggesting—insofar as that is what I am suggesting—is, I think, neutral among the theories. *Within* particular theories, on the other hand, the appeal to brute facts does not concern the *interpretation* of the view. Rather, it is, in effect, the assertion that a certain fact has no further explanation. And I think our ordinary and theoretical judgments, taken together, allow this sort of move—especially if it is needed to hold onto the set of our ordinary judgments of persistence, as discussed earlier. If yarn is yarn, and a sweater is a sweater, and so have different identity conditions despite their common location, the having of the identity conditions of a sweater, and not of a piece of yarn, can only be, in some sense, a brute fact about the sweater. But so long as we are playing this game, this is something we can, I believe, understand. And certainly, interpreted *semantically*, there is no puzzle how apparently arbitrary distinctions may nonetheless mark distinctions between concepts we apply. Thus, to be Carnapian about it, I'd like to say that certain positions—certain descriptions—may be acceptable *within* a framework for describing the world in terms of objects, even if they include appeals to brute facts—but that the sort of appeal to such facts needed to metaphysically *interpret* a framework, for it to be 'the true framework,' is something of which we simply have no understanding (beyond the semantic).

Finally, there is a cluster of interrelated questions about the evaluation of the various theories. On the one hand, our view is partly motivated by the idea

that in some way, the theories differ only verbally, and so, in some sense, 'say the same thing'. This would then seem to push towards saying that they do not really contradict each other, and so, to a semantic interpretation which would accord with this. On the other hand, it seems very hard to maintain that the claims of the theories do *not* contradict each other, or that when someone says 'I used to think objects could survive changes in parts, but now I don't,' he is not truly expressing a change in view. Further, if the theories and claims *do* contradict each other, does this not mean that at least one of each pair is false, contrary to my earlier claims that none of the theories is false?

One obvious approach would claim that advocates of each theory speak in their own idiolects, with their theories providing varying definitions for 'object', 'same object', 'was located at L at t', and so on, so that in fact there was but a verbal dispute among the views, and the claims—both theoretical ('objects can/can't lose parts') and particular (that is/isn't the tree that was in my yard yesterday) did not contradict each other. The views, however, could be said to 'say the same thing' in that for any complete distribution of matter through space-time, each view could give a complete description—including paraphrases—which was true in the language of that theory, and made true by the complete world. Further, there is a straightforward mapping between chunks of the theories—claims and paraphrases—which would have exactly the same truth-conditions.

While this approach is elegant, I find it in important ways unsatisfactory. Start by noting that we *see* ourselves as contradicting each other in these claims—so at the least, the claim that we are really all speaking different languages is a revisionary one. Of course, that is hardly final—many seemingly real disputes are *not* genuine, and the apparently contrary claims involve either the same words with different meanings, or words that are relativized or relational with the disputants in relevantly different contexts. But it is important to note that when it doesn't *seem* so, the claim of nonunivocality needs special defense, and the proposed definitions must be defended as only implicit. And here, the usual signs of 'implicit definition' seem lacking. For example, one can usually imagine oneself being persuaded, by argument, to adopt the contrary view. That means the opposing claims don't seem *self-contradictory*—just false (even if necessarily so). Further, we provide *arguments* for our views, and typically feel compelled to *respond* to arguments against our views. Another relevant point is that many of us don't *have* fixed views—even when, at the moment, we find one side's claims more compelling.

A deeper point is that even if we *attempt* to stipulate meanings here, this can be expected to be unstable. Someone will always come along and say: 'Fine. Your 'objects' can survive loss of parts. But then, 'object' for you does not—or may not—represent the important ontological category—let's talk about *schmobjects*. I say your objects are not schmobjects'. Insofar as the challenge can be understood and taken up, and everyone so challenged can be expected to defend their views about 'schmobjects' in just the way they had defended their

claims about *objects*, it is hard not to see the resulting discussion as simply the earlier discussion about *objects*—which it could not be, if ‘objects’ (etc.) had had its meaning successfully stipulated.

I think the reason for this is that the categories in question—object, persistence, part, past and future predications—are so general and fundamental. There is *some sort of core meaning* to each of these terms—given, more or less, by the formal or functional role each plays in our overall descriptions of the world—that, I think, all parties agree to, and at that level, there is neither factual nor verbal disagreement. For example, objects are the suitable values of first-order variables. They are subjects of properties. They are that which persists, if anything does. But this core meaning only provides necessary conditions. It is, of itself, neutral between the more substantive specifications which is what makes it possible to sensibly disagree with other views, and also, to think that even if one tried to ‘define’ one of the views into analytic truth, there would remain some question, e.g. “But are these *really* the values of first-order variables?” or “Does persistence *really* occur under these conditions?” Now, if what I’ve argued is correct, these questions don’t have any answers—don’t, as Carnap would say, have any answers understood *externally*. But because of the role of these concepts, they will always sensibly admit a variety of specifications, and this, I think, is what keeps us from being able to say, with all the plausibility we could hope, that any of these specifications can be treated as the meaning of the term, even in a speaker’s own idiolect. But it is *also* true that in *no* acceptable specification can one simultaneously say, for example, nothing persists through the loss of a part, and some things do—and this, I think, is the respect in which the different theories contradict each other. They cannot simultaneously be specifications of a univocal term, ‘object’, and as I say, there is pressure to *treat* the term as univocal.

So tentatively, here’s what I’d like to say. We should treat this as other cases of indeterminacy, where certain parameters of a term have been specified, but others are left open.<sup>33</sup> The view that the positions don’t each define their own senses of the key terms seems clear because there is agreement on the core, formal meaning of the terms, and everyone can *understand* the views of the opposition *as about a common subject matter*—namely, that determined by the core meaning. *Nonetheless, insofar* as we are considering the possibility of one of the views being *true*, this can only be in virtue of treating the more substantive portion of the view as given in the term’s full meaning. But no one can actually be seen as *adopting* such a meaning, and all of the views are *acceptable* specifications, insofar as they fit adequately with our ordinary and theoretical judgments: this is why, from the semantic perspective, there is no fact of the matter among them. But what about our initial question: Do the views contradict each other? My inclination is to say ‘Yes.’ I think this is because while the assertions are each indeterminate, the common use suffices for them to be *univocal*: no one *wants* his use to be ‘constrained’ by the definitions of his own idiolect. Thus, I think, on any acceptable understanding, my ‘This



dog was in my yard yesterday' and your 'This dog was not in my yard yesterday' cannot both be true together. Thus, they contradict each other. If there are powerful reasons for denying that indeterminate claims can be genuinely contradictory, I suspect we can find a 'quasi-contradiction' relation which answers to our purposes. But a full discussion of the best way to think about and articulate indeterminacy is, unfortunately, something we cannot undertake here.<sup>34</sup>

## Notes

1. Let me enter one caveat at the start, which I will ignore hereafter. I can understand there being a factual difference between three- and four-dimensional ontologies if both the following are true: (a) four-dimensionalism requires eternalism about time, while three-dimensionalism entails presentism (Merricks (1995)) (or simply allows presentism, and presentism is true) and (b) there is a factual difference between eternalism and presentism (of a sort, say, that physics could bear upon). I find these both doubtful, but here is not the place to discuss it. However, even if this is a factual difference, there remains, within each camp, the full range of total packages—does the four-dimensionalist require spatial continuity? Temporal continuity? Causal relations? How will he deal with apparent full-term coincidence, as in the Lump/Lump/Goliath case? So, while four-dimensionalism is usually represented as simply one of the candidate views, on a par with, say, commonsense or reductionism, it really represents but one parameter of disagreement, needing as much filling out to make an appropriate full package as 'three-dimensionalism *per se*', and so, will allow for the same variety of views which I maintain cannot be discriminated among. So, a factual difference here would only mildly affect my claims.
2. My proposal may recall Carnap's ideas about frameworks and external questions, Quine's Ontological Relativity and his liberality about holding onto views by 'making adjustments elsewhere in the system', and perhaps even Goodman's views about 'worlds'. Perhaps this will make it seem less plausible, or original; however that may be, the current controversy hasn't been much presented in this light, so I hope there is value in this investigation even if it is not wholly original in conception. (Since this was written, I have become aware of some efforts in this direction—see Goggin (1999) and Yablo (1998)—so perhaps this is an idea whose time has come.)
3. For a good selection and bibliography, see Rea (1997a).
4. This last question was first asked, to my knowledge, by Eli Hirsch (1982), 86–90.
5. Wiggins (1968), 93.
6. See Burke (1992).
7. Rea suggests this move in (1997b). Zimmermann suggests it in passing in (1995), 88–90.
8. But see Chisholm (1973, 1976, Appendix B), and Van Cleve (1986).
9. More carefully (and tediously): for any time at which the object exists, there is some complete decomposition into parts such that the object has always had exactly those parts—this allows changes in more complex parts by rearrangement of constituent parts, but without explicit commitment to simples. Those not worried about such commitment could just say that an object must always have the same ultimate, simple parts.

10. Some people also claim to find ME intuitively obvious (E.g. Chisholm (1976, Appendix B). I suspect that typically, those who find it so really find obvious one of two more extreme essentialist positions. The first, sometimes called 'Hyperessentialism', holds that an object cannot persist through change *period*, and is almost always advocated because it is thought to follow from Leibniz' law. The second view only disallows change in *intrinsic* or 'genuine' properties, although, contrary to Hyperessentialism, it permits 'Cambridge change', such as coming to be the tallest person in the room due to the only taller person's leaving. As both these views entail ME, it is 'obvious' if they are. But it would be misleading to advocate ME *as such*—one should instead forward one of these other views.
11. See Chisholm's articles again.
12. I argue this in Sidelle (1998), section III.
13. Sider (1997) argues along these lines.
14. Van Inwagen suggests—but does not (to put things mildly) endorse—this, in his (1990a).
15. Rea (2000) offers similar and further criticisms in presenting his own sortal-dominance view.
16. See Carter (1997).
17. We might distinguish a wholly universal view from ones requiring temporal, or spatiotemporal, continuity. The latter might be called 'Persistence permissivism'.
18. The 'permissive' versions (note 17) look less arbitrary than non-universalistic views, but as they make distinctions the extreme universalist view does not, they need some motivation for their particular choice.
19. Unwin (1984) seems to offer a view of this sort.
20. I offer a similar defense of permissive views against our ordinary judgments in Sidelle (1992), especially section V.
21. Perhaps ultimately, the 'acceptability' of coincidence offered here doesn't differ from that already offered to the commonsense view, but its being offered in a more 'set-theoretic' framework may make it seem less mysterious. The question 'Why doesn't having actual properties  $p_1...p_n$  suffice to make Goliath a lump, if they are all Lump1's properties, and Lump1 *is* a lump?' may have less bite if we are already committed to all methods of tracing being instantiated.
22. Universalism is sometimes formulated as the view that whenever you have some objects, there is a further object they compose. As it stands, however, a Nihilist could accept this as well, and the obvious claim which would distinguish them—that there are simples—doesn't seem something to saddle Universalists with at the outset. Hence, the current formulation.
23. For further discussion, see Sidelle (1998). sec. V.
24. Perhaps Nihilism is better contrasted with *Persistence* Universalism, since worries about persistence conditions motivate its denial of objects. However, since it is most straightforwardly presented as a view about what there is(n't), I include it under Ontological views. The main grounds for preferring Nihilism to Persistence Universalism—which also avoids arbitrariness here—is the avoidance of coincidence.
25. I raise this objection in my (1998), sec. V.
26. For his fullest presentation, see van Inwagen (1990b).
27. See, for instance, Hawthorne and Michael (1996), and Rosenberg (1993).

28. Furthermore, insofar as these matters were thought to be contingent, how could anyone hope to tell which was the right view? The evidence would be just the same in any possible world.
29. In the case of laws, however, I think this is an unobjectionable result—laws of nature, whether Humean or not, need *not* be really necessary in the widest sense. See Sidelle (forthcoming).
30. I argue for this in Sidelle (1989), chapter 3.
31. Trenton Merricks, in comments on this paper, disagrees, maintaining that the metaphysical interpretation *is* built into the views of (serious) practicing metaphysicians. While I think this is false (does one retract acceptance, say, of a psychological theory of personal identity, if one thinks ultimately, this is grounded in the meanings of the words ‘person’ and ‘same’?), my points would not be materially affected if we distinguished the THEORY—which involves the metaphysical interpretation—from the theory—which does not, though perhaps is *accompanied* by it: I would then have to say the former is false, but that my discussion concerns the latter.
32. See Markosian (1996).
33. Here’s an imperfect example—Dr. Seuss books often have a number of pictures of strange characters on a page, variously arranged, and a list of names in the text. There may be more characters than names. Now, suppose the doctor didn’t have in mind any particular name to go with any particular character, and suppose also that no ‘obvious’ mapping is clear (e.g. start at the left, move right and then down to the left again, assigning names until they are gone). In some such cases, I think, the ‘core’ facts are that these names each apply to one of the characters, but it is not determinate to which. (It may help further to imagine Seuss at one point considering each of two mappings—neither of them at all ‘natural’, but then deciding against either.) At any rate, I hope this illustrates how indeterminacy is not vagueness, and that the pressures there may be for epistemic accounts of vagueness don’t obviously apply to this sort of indeterminacy.
34. Many thanks to audiences at Arizona State University’s conference on Convention and Logic, and Syracuse University’s Mighty Midwest Metaphysical Mayhem, for helpful comments, skepticism and encouragement. Special thanks to Ted Everett, Martha Gibson, Trenton Merricks, Antonio Rauti and Dennis Stampe.

## References

- Burke, Michael (1992) “Copper Statues and Pieces of Copper: A Challenge to the Standard View,” *Analysis* 52 : 12–17
- Burke, Michael (1994a) “Dion and Theon: An Essentialist Solution to an Ancient Puzzle,” *Journal of Philosophy* 91: 129–139
- Burke, Michael (1994b) “Preserving the Principle of One Object to a Place: A Novel Account of the Relations among Objects, Sorts, Sortals and Persistence Conditions,” *Philosophy and Phenomenological Research* 54: 591–624
- Carnap, Rudolf (1950) “Empiricism, Semantics and Ontology,” reprinted in Rudolf Carnap, *Meaning and Necessity* (Chicago: University of Chicago Press, 1956)
- Carter, William R. (1997) “Dion’s Left Foot and the Price of Burkean Economy,” *Philosophy and Phenomenological Research* 57: 371–379
- Chisholm, Roderick (1973) “Parts as Essential to their Wholes,” *Review of Metaphysics* 26: 581–603
- Chisholm, Roderick (1976) *Person and Object* (LaSalle: Open Court)

- Goggins, P. (1999) "How Not to Have an Ontology of Physical Objects," *Philosophical Studies* 94: 295–308
- Hawthorne, John O'Leary and Andrew Cortens (1995) "Towards Ontological Nihilism," *Philosophical Studies* 54: 143–165
- Hawthorne, John O'Leary and Michaelis Michael (1996) "Compatibilist Semantics in Metaphysics: A Case Study," *Australasian Journal of Philosophy* 74: 117–134
- Heller, Mark (1990) *The Ontology of Physical Objects: Four Dimensional Hunks of Matter* (Cambridge: Cambridge University Press, 1990)
- Hirsch, Eli (1982) *The Concept of Identity* (New York: Oxford University Press)
- Markosian, Ned (1996) "Brutal Composition," *Philosophical Studies* 92: 211–249
- Merricks, Trenton (1995) "On the Incompatibility of Enduring and Perduring Entities," *Mind* 104: 523–531
- Rea, Michael (ed.) (1997a) *Material Constitution* (Lanham, MD: Rowman and Littlefield)
- Rea, Michael (1997b) "Supervenience and Co-location," *American Philosophical Quarterly* 34: 367–373
- Rea, Michael (2000) "Constitution and Kind Membership," *Philosophical Studies* 97: 169–193
- Rosenberg, Jay (1993) "Comments on Peter Van Inwagen's *Material Beings*," *Philosophy and Phenomenological Research* 53: 701–708.
- Sidelle, Alan (1989) *Necessity, Essence and Individuation* (Ithaca: Cornell University Press)
- Sidelle, Alan (1992) "Rigidity, Ontology and Semantic Structure," *Journal of Philosophy* 89: 410–430
- Sidelle, Alan (1998) "A Sweater Unraveled: Following One Thread of Thought for Avoiding Coincident Entities," *Noûs* 32: 423–448.
- Sidelle, Alan (forthcoming) "On the Metaphysical Contingency of Laws of Nature," in John O'Leary Hawthorne and Tamar Gendler (eds.), *Conceivability, Imagination and Possibility* (Oxford: Oxford University Press)
- Sider, Ted (1997) "Four-Dimensionalism," *The Philosophical Review* 106: 197–231
- Unwin, Nicolas (1984), "Substance, Essence and Conceptualism," *Ratio* 26: 41–53
- Van Cleve, James (1986) "Mereological Essentialism, Mereological Conjunctivism, and Identity Through Time," French, Uehling and Wettstein (eds.) *Midwest Studies in Philosophy XI* (Minneapolis: University of Minnesota Press): 141–156
- van Inwagen, Peter (1981) "The Doctrine of Arbitrary Undetached Parts," *Pacific Philosophical Quarterly* 62: 123–137
- van Inwagen, Peter (1990a) "Four Dimensional Objects," *Noûs* 24: 245–255
- van Inwagen, Peter (1990b) *Material Beings* (Ithaca: Cornell University Press)
- Wiggins, David (1968) "On Being in the Same Place at the Same Time," *Philosophical Review* 77: 90–95
- Yablo, Stephen (1998) "Does Ontology Rest on a Mistake?" *Proceedings of the Aristotelian Society, Supplement* 72: 229–261
- Zimmermann, Dean (1995) "Theories of Masses and Problems of Constitution," *Philosophical Review* 104: 53–110