Fundamental Quantification and the Language of the Ontology Room

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Abstract

Nihilism is the thesis that no composite objects exist. Some ontologists have advocated abandoning nihilism in favor of *deep nihilism*, the thesis that composites do not exist$_O$, where to exist$_O$ is to be in the domain of the most fundamental quantifier. By shifting from an existential to an existential$_O$ thesis, the deep nihilist seems to secure all the benefits of a composite-free ontology without running afoul of ordinary belief in the existence of composites. I argue that, while there are well-known reasons for accepting nihilism, there appears to be no reason at all to accept deep nihilism. In particular, deep nihilism draws no support either from the usual arguments for nihilism or from considerations of parsimony.

1. Introduction

Many ontologists defend views that seem to be at odds with our ordinary beliefs about which material objects there are. Concerns about vagueness and arbitrariness lead some to conclude that there are a great many more highly visible objects, right before our eyes, than we ordinarily take there to be. Concerns about material constitution, causal redundancy, and (again) vagueness and arbitrariness lead others to conclude that there are far fewer objects than we ordinarily take there to be: no statues, no mountains, and, according to some, no ontologists either.[1]

Many of these same ontologists would rather not endorse theories that are incompatible with the things that we are ordinarily inclined to say and believe. This may be because they regard ordinary utterances or beliefs as something like the data for philosophical inquiry. Or it may be because they endorse principles of interpretive charity that prohibit attributing massive error to ordinary speakers. Or it may have more to do with the threat of self-defeat: if other intelligent folks are prone to egregious errors in their judgments about material objects, it would be unrealistically optimistic for ontologists to put much credence in the lines of reasoning that led them to their own conclusions. Or it may be a purely dialectical consideration: even those ontologists who themselves could not care less about vindicating ordinary belief realize that they have no hope of convincing their opponents unless they can somehow pay it lip service. Whatever their reasons, ontologists have

shown tremendous creativity in devising compatibilist strategies for reconciling their surprising views with the things that we are naturally inclined to say and believe.[2]

Yet the usual compatibilist strategies leave much to be desired. They typically take the form of assimilating the problematic utterances we use to report our beliefs to various sorts of linguistic phenomena that are known to be potentially misleading— including loose talk, ambiguity, and tacit quantifier domain restriction—and they have been widely criticized on the grounds that these linguistic hypotheses are implausible and unmotivated.[3] Moreover, focused as they are on utterances, the strategies often fail to engage the deeper issue of whether the surprising ontological theses are compatible with ordinary *belief*. Consider, for instance, the universalist thesis that there are such strange fusions as "trout-turkeys": objects composed of the undetached front half of a trout and the undetached back half of a turkey. It is often suggested that ordinary speakers are tacitly restricting their quantifiers in such a way as to exclude trout-turkeys when they say such things as 'nothing has both fins and feathers'.[4] But even if folks are in fact *saying* only that no ordinary things have both fins and feathers, it may still be that they believe that absolutely nothing has both fins and feathers. In fact, there would seem to be little reason to doubt that ordinary speakers also have this stronger belief, at least tacitly, and surely they can be excused for having it as they have never encountered the usual philosophical reasons for believing in trout-turkeys.

Perhaps such strategies are ultimately defensible; it is not my goal here to show that they aren't (though see §3). I want to explore the possibility of a compatibilist account that does not rest on such controversial linguistic and psychological hypotheses. Rather than *hypothesizing* a semantic difference between ordinary utterances and sound-alike utterances made in ontological discussions, or endorsing questionable claims about ordinary belief, perhaps ontologists can simply *introduce* a specialized "language of the ontology room," in which familiar expressions are understood to have a new technical meaning. Ontologists could then go on as before, making their surprising ontological claims, while at the same time avoiding conflict with ordinary discourse and belief.

Theodore Sider proposes just such a strategy:

> Perhaps my book, and other works of ontology, should not be interpreted as English, but rather as "Ontologese", a language distinctive to fundamental ontology, in which the quantifiers are stipulated to mean something new.[5]

> Let's give the speakers of ordinary English 'there exists'; let us henceforth conduct our debate using '∃'... We hereby stipulate that although the meaning of '∃' is to obey the core inferential role of English quantifiers, ordinary, casual use of disputed sentences involving 'there exists' (such as 'Tables exist') are not to affect at all what we mean by '∃'. We hereby stipulate that if there is a highly natural meaning that satisfies these constraints, then that is what we mean by '∃'.[6]

In other words, ontologists who wish to deny that 'there are statues' is true are to take themselves to be denying, not that statues exist, but rather that statues exist$_O$, where existence$_O$ is something other than existence. Ontologists who wish to affirm 'there are trout-turkeys' are to take themselves to be affirming, not that there exist

trout-turkeys, but rather that there exist$_O$ trout-turkeys, where again existence$_O$ is not existence.

It would seem that the ontologist can, in this way, have her cake and eat it too. Take the nihilist who exchanges commitment to the non-existence of composites for commitment only to the non-existence$_O$ of composites. She would seem to get all the benefits of a simple, parsimonious ontology, free of all the puzzles and problems that accompany the postulation of ordinary objects, while at the same time avoiding having to venture controversial hypotheses about what ordinary speakers are "really" saying when they seeming to be talking about statues and the like.

My aim is to show that these seeming advantages are illusory. On closer inspection, it is not clear how denying the existence$_O$ of ordinary composite objects is meant to yield a more parsimonious ontology, nor is it clear how the usual puzzles about ordinary objects are meant to lend any support to the view that they do not exist$_O$. Even if the question of what exists$_O$ is a sensible and important question (and I do not deny that it is), as far as I can tell there is no good reason to prefer any one account of what exists$_O$ to any other.

2. Ontologese and Existence$_O$

Here, I take it, is what Sider and others have in mind when they speak of a "highly natural" quantifier, or a "fundamental" quantifier that "carves reality at the joints."[7] The idea is that the world has objective structure, and some accurate descriptions of the world are superior to other accurate descriptions, insofar as they describe the world in a way that more perspicuously discloses (or matches or corresponds to) that structure.[8] Let *Ontologese* be the unique language—assuming there is one—that is best equipped for so describing the world. Let the *existential$_O$ quantifier* be the unique quantifier in Ontologese—assuming there is one—which is inferentially ∃-like, that is, which plays the same core inferential role as the ordinary existential quantifier. And let us say that x *exists$_O$* just in case x is in the domain of the existential$_O$ quantifier. (It may help to pronounce these as 'oxist' and 'oxistential'.) The idea, then, is for ontologists to stipulate that they shall heretoforth be using this existential$_O$ quantifier in all ontological discussions.

This stipulation enables ontologists to grant that ordinary utterances and beliefs about what exists are correct without having to endorse questionable linguistic or psychological hypotheses to the effect that 'existence'-claims are being used to express different beliefs in ordinary and ontological discussions. They can simply grant that statues exist and trout-turkeys do not. (I too will assume in what follows that these existence claims are not in dispute: statues exist and trout-turkeys do not.) They can say that those ontologists who think that trout-turkeys exist or that statues do not exist are mistaken, and insist that these ontologists should instead be defending the associated claims about existence$_O$. This sort of *revolutionary* strategy for securing compatibility between ordinary and ontological utterances may be contrasted with *hermeneutic* strategies according to which ontologists have all along been expressing beliefs about existence$_O$ when they make their surprising

ontological claims, whereas ordinary speakers are merely talking about existence ($\neq$ existence$_O$) when they say such things as 'statues exist'.[9]

Once we shift our attention from existence to existence$_O$, counterparts of the usual views about what exists remain available. One can accept *deep nihilism*, according to which statues and other such ordinary objects do not exist$_O$; only mereological simples exist$_O$.[10] Or *deep universalism*, according to which there exist$_O$ not only statues but also trout-turkeys and other strange fusions.[11] Or even *deep conservatism*, according to which all of the ordinary objects but none of the strange fusions exist$_O$. Indeed, one of the main virtues of the present revolutionary strategy is that there is room for sensible debate about what exists$_O$. Sensible debate would not be possible if, for instance, 'exists$_O$' had been stipulated to mean simply 'is mereologically simple', for then 'statues do not exist$_O$' would be trivially true.[12]

Deep nihilists may naturally be described as taking the existential$_O$ quantifier to be "restricted" relative to the ordinary existential quantifier. However, one need not understand it to be a restricted quantifier in the usual sense. On the usual understanding of quantifier domain restriction, the occurrence of 'there is' in both the explicitly restricted 'there is nothing edible in the fridge' and the tacitly restricted 'there is nothing in the fridge' is semantically associated with a domain that includes absolutely everything—even non-edible items—and the restriction is imposed by a further constituent of the proposition expressed or communicated (in this case, the property of being edible). But one may favor a different picture of the restrictions at issue here, on which the different quantifiers are themselves semantically associated with different domains.[13] Deep nihilists, for instance, may hold that the existential quantifier is semantically associated with a domain that includes statues, while the existential$_O$ quantifier is semantically associated with a domain that does not include statues.

Deep universalists, by contrast, may naturally be described as taking the existential quantifier to be restricted relative to the existential$_O$ quantifier (though, again, they need not take the quantifier to be restricted in the usual sense). Further articulation is a delicate matter. Deep universalists cannot report their view by saying that there are things that are not in the domain of the existential quantifier, since this is tantamount to saying that there are things that are not among the things that there are. Indeed, it is unclear whether there is any straightforward way of characterizing deep universalism in unsupplemented English. Still, one can attain some understanding of deep universalism by way of analogy. Imagine a language, Nihilese, whose only quantifier is semantically associated with a domain that includes only simples. Using the most unrestricted quantifier available to them, Nihilese speakers speak the truth when they say 'there are no composite objects'. The deep universalist is claiming that, in just the way that the quantifiers of Nihilese are expressively impoverished from the perspective of English, the quantifiers of English are expressively impoverished from the perspective of Ontologese.

There is certainly room for skepticism about the possibility of a quantifier that is "more comprehensive" than the existential quantifier, but my objections to deep universalism in what follows will not turn on any such skepticism. I will take for

granted that there is such a quantifier, and my question will be whether there are any grounds for taking it to be the existential$_O$ quantifier.

There is also room for skepticism about whether the stipulative introduction of the existential$_O$ quantifier was successful. One could grant that there is such a language as Ontologese but deny that it includes a unique inferentially ∃-like quantifier, either on the grounds that it includes no such quantifier or on the grounds that it includes more than one.[14] Or one could deny that there is any such language as Ontologese (and thus no existential$_O$ quantifier), either on the grounds that the world lacks objective structure or on the grounds that talk of "objective structure" is meaningless or incoherent.[15] My own view is that we grasp this notion of structure at least as well as we grasp various other elusive quasi-technical notions (e.g., phenomenal character, semantic content, logical constant), and my objections will not turn on worries about existential$_O$ quantification *per se*.

My main complaint, rather, is that, while there are well-known and quite compelling reasons to accept nihilism and universalism, there seems to be no good reason to accept these "deep" counterparts of nihilism and universalism. In §§4–5, I argue that deep nihilism draws no support from the observation that composites are nonfundamental or from considerations of parsimony. In §§6–7, I show that deep nihilism draws no support from the usual arguments for eliminating ordinary composites. Finally, in §8, I turn to deep universalism and show that it draws no support from the usual arguments for unrestricted composition.

3. Hermeneutic Compatibilism

The motivation behind revolutionary compatibilism comes from a perceived need to reconcile surprising ontological theses with ordinary belief, together with a desire to avoid having to defend the questionable empirical hypotheses that underwrite the various forms of hermeneutic compatibilism. Before exposing the problems with the revolutionary strategy described above, it will be useful to say some more about the case against the associated hermeneutic account, according to which, in discussions of ontology but not in ordinary discussions, we have *all along* been expressing beliefs about existence$_O$ when we say such things as 'there are (no) statues' or 'there are (no) things with fins and feathers'.

To my mind, the most serious problem facing any sort of hermeneutic account of the conflicts that arise in connection with universalism and nihilism is that the *arguments* that ontologists put forward in defense of these views seem to call into question the very things we are initially inclined to say and believe. This is precisely what makes the arguments so gripping.[16] When we are convinced by such arguments, it seems to us that we have changed our minds, as opposed to merely making up our minds about some arcane hypothesis.[17] And, if after giving the usual arguments for her surprising ontological claim the ontologist then claims not to be denying what we have believed all along, we wonder *why not*, since her reasons, if taken seriously, strike us as reasons for revising our beliefs.

Admittedly, when the surprising ontological claims are considered in isolation, it is reasonable to suspect that ontologists cannot possibly be denying the seeming

banalities expressed by the associated ordinary utterances. When one first encounters a universalist saying "there is a thing whose parts are the front half of a trout and the back half of a turkey," it is only natural to suppose that she must be using 'part' or 'thing' in some unfamiliar way. But when one is reminded of one's own commitment to scattered objects (e.g., constellations), and finds oneself unable to identify any principled difference between them and trout-turkeys, one feels the pressure to accept the very thing that one was at first inclined to deny. Likewise when one hears the puzzles of material constitution that are sometimes used to motivate the elimination of statues (see §6), they seem to reveal a tension in one's own beliefs. Once one attends to the reasoning behind the ontological utterances, it is perfectly clear why an ontologist who is convinced by that line of reasoning would be denying the very things that we are initially inclined to say and believe. (Indeed, this is precisely the sort of thing we would tell our students if they were to suggest that Zeno must mean something different from us by 'motion' when he denies that there is motion.)

This is not at all what one finds in cases in which it *is* plausible that philosophers have been using some term in an idiosyncratic way. The mereologist's "the table is part of itself" seems utterly unmotivated even once one hears the reasons: "the table is identical to itself and must therefore be part of itself." One has to take him to be using 'part' in some technical sense in order to understand how the self-identity of the table could strike him as a reason for saying what he did. Similarly for the philosopher's use of 'possible'. Hearing 'possible' as something like 'possible given the current state of technology', our students are sometimes baffled when we insist that brain swaps or experience machines are possible, and are only more puzzled when they hear the reasons: "well, it's imaginable, isn't it?" Here, the philosopher's reasoning does not render her surprising utterances intelligible unless we take her to be using her terms in some unusual way. By contrast, there is no need to suppose that the universalist is using 'part' or 'thing' in a technical or unusual sense in order to understand why she takes the existence of constellations and the absence of a principled difference between them and trout-turkeys to be a reason for believing that the trout parts and turkey parts are parts of a single thing.

Hermeneutic compatibilists about the conflicts at hand must therefore think that we suffer from a sort of *semantic blindness*: competent speakers (philosophers included) are blind to fact that 'exists' and 'there is' shift their meaning when one moves from ordinary discussions to ontological discussions. By the hermeneutic compatibilist's lights, the arguments being made in the ontology room have no more bearing on ordinary utterances of 'there are statues' than my overwhelming evidence that it is now raining has on yesterday's utterance of 'it is not now raining'.

It is illuminating to compare this attribution of semantic blindness to attributions of semantic blindness that arise in epistemology. Contextualists about knowledge attributions claim that 'knows' has a different meaning in high-stakes and low-stakes contexts, and they have invoked semantic blindness to explain why, upon entering high-stakes contexts, we are inclined to retract 'knowledge' claims made in low-stakes contexts.[18] This sort of special pleading would be entirely unmotivated if not for the fact that there are powerful independent reasons for taking knowledge

attributions to have different truth conditions in different contexts. As Keith DeRose puts it:

> The contextualist argument based on [low-stakes and high-stakes cases] is driven by the premises that the positive attribution of knowledge in [the low-stakes case] is true, and that the denial of knowledge in [the high-stakes case] is true ... *[T]hose premises are in turn powerfully supported by the two mutually reinforcing strands of evidence that both of the claims intuitively seem true* (2006: 316, my emphasis).

What motivates contextualist accounts in the first place is that they are so well suited to explain our strong inclination to affirm in some contexts precisely the sentences that we are strongly inclined to deny in other contexts, even if they fail miserably at explaining our inclinations to retract.

By contrast, we don't become strongly inclined to deny 'there are statues' when we enter an ontological discussion. Eliminativists themselves expect their view to sound absurd even in those contexts.[19] The usual evidence for compatibilist treatments is simply missing. Thus, even in comparison to attributions of semantic blindness in other domains, the attribution of semantic blindness to an alleged ambiguity of 'exists' and 'there is' seems utterly ad hoc.

There are various ways that one might respond to this argument from semantic blindness, and this is not the place to address them.[20] I put it forward only as a further motivation for exploring the prospects of revolutionary strategies. Proponents of revolutionary strategies escape this charge of semantic blindness because they do not claim that we all along have had one thing in mind when we make 'existence'-claims in ordinary discussions and another thing when we make them in ontological discussions. Rather, they take themselves to be shifting our attention to a new object of inquiry, one that is not already familiar from having been under discussion in the ontology room all along.

4. Fundamentality and Parsimony

We turn now to revolutionary strategies and, more specifically, to the question of which composites (if any) exist$_O$. Do statues exist$_O$? The reasons for denying that statues and the like *exist* are well known: denying that they exist yields a uniform solution to a variety of puzzles involving vagueness, arbitrariness, overdetermination, persistence, and identity. Hermeneutic compatibilists will say that these familiar reasons for denying that statues exist *just are* reasons for denying that they exist$_O$, for existence just is existence$_O$. (I can say this because, according to hermeneuticists, 'exist' always means exist$_O$ in ontological discussions like this one.) However, if revolutionary compatibilists are right, then existence$_O$ is not existence, in which case it is far from clear that the reasons for denying that statues exist give one any reason to suppose that they do not exist$_O$ (more on this in §6). So what reason could there be for denying that statues exist$_O$?

Here is a natural suggestion. The existential$_O$ quantifier is, *ex hypothesi*, the most fundamental quantifier: the $\exists$-like quantifier best suited for describing the world as it fundamentally is. Yet statues and other such ordinary composites almost certainly

are not fundamental. After all, facts about statues are all very plausibly grounded in, or explained by, facts about the features and arrangement of their microscopic parts.[21] Thus, the reasoning goes, statues and other ordinary composites are not in the domain of the existential$_O$ quantifier. So, they don't exist$_O$.

One might object to this line of reasoning on the grounds that the operative notion of fundamentality—which applies to properties, quantifiers, and modes of being (like existence$_O$)—cannot sensibly be applied to individual objects like statues. I myself see no principled reason to think that there cannot be a single notion of fundamentality that covers items of all sorts, though admittedly I am not sure how exactly such an account would go. The basic idea is that an item's fundamentality should be a function of the way in which it features in metaphysical explanations. As a first (not entirely satisfactory) stab, we could say that (i) A is fundamental simpliciter iff it features in facts that do not obtain in virtue of any other facts, and (ii) A is more fundamental than B if some B-involving facts obtain partly or wholly in virtue of A-involving facts and never vice versa.[22]

The more serious problem, to my mind, is the inference from the plausible claim that statues are nonfundamental to the conclusion that the fundamental quantifier does not range over statues, or (equivalently) that the most fundamental mode of being is not enjoyed by statues. I see no good reason to suppose that the relative fundamentality of a quantifier is measured by the relative fundamentality of the items in its domain.[23] After all, we don't think that a relation can only be as fundamental as its least fundamental relata. We certainly would not deny that identity is fundamental simply because entities of all kinds—fundamental and nonfundamental—stand in this relation. Nor is it especially plausible that a restricted identity relation which relates only fundamental objects to themselves is more fundamental than identity. Nor does anyone think that the fact that conjunction operates on nonfundamental propositions precludes it from being fundamental. And so on.

By parity, it is hardly obvious that the most fundamental mode of being cannot be one that is enjoyed by nonfundamental objects, or that the most fundamental quantifiers cannot range over nonfundamental objects. In other words, it is very much an open question whether to exist$_O$ is to be the value of a bound variable in the complete Ontologese description of the world. For it may be that some existents$_O$ are nonfundamental objects that have no business being the value of a bound variable in such a description, on pain of introducing redundancies and diminishing perspicuity.[24]

What one needs to determine in order to figure out what is in the domain of the existential$_O$ quantifier is not the relative fundamentality of composites and their parts but rather the relative fundamentality of different modes of being. Let the *existential$_N$* quantifier be the most natural inferentially ∃-like quantifier that ranges only over mereological simples.[25] The question of whether any composites exist$_O$ may then be reframed as the question of whether existence$_N$ is more fundamental than all other modes of being, where to exist$_N$ is to be in the domain of the existential$_N$ quantifier. The competing view is that the most fundamental mode of being is one that is enjoyed by both simples and composites—for instance, existence, or even *existence$_U$*, where to exist$_U$ is to be in the domain of the existential$_U$

quantifier, the most natural ∃-like quantifier whose domain includes all of the universalist's composites. Cast in these terms, the question of whether deep nihilism is correct becomes the question of whether existence$_N$ is more natural than existence$_U$, and the fact that composites are nonfundamental seems to be no reason whatsoever to answer in the affirmative. What is needed is some reason to prefer the first of these three conceptions of what is fundamental, all three of which agree that no composite objects are fundamental:[26]

	1	2	3
Nonfundamental	Composites, Existence$_U$, Existence . . .	Composites, Existence$_N$, Existence . . .	Composites, Existence$_N$, Existence$_U$ . . .
Fundamental	Simples, Existence$_N$ . . .	Simples, Existence$_U$ . . .	Simples, Existence . . .

Once we clearly distinguish the question of which objects are fundamental from the question of which mode of being is fundamental, other prima facie reasons for accepting deep nihilism lose their force as well. For instance, one might take existence$_N$ to be more fundamental than existence and existence$_U$ on grounds of ontological parsimony: an ontology that has only simples at the fundamental level is more parsimonious than one that treats both simples and composites as fundamental.[27] But, while ontological parsimony is indeed measured by what one takes to be fundamental, what one takes to be fundamental has no clear bearing on what one takes to exist$_O$. As we just saw, one can wholeheartedly agree that no composites are fundamental, all the while maintaining that existence or existence$_U$ is the most fundamental mode of being. Put another way: there is no need to suppose that the most fundamental quantifier "drags" its whole domain down into the fundamental level with it.

Nor is it arbitrary to take ontological parsimony to be measured by what one takes to be fundamental—as opposed, say, to what one takes to be in the domain of the fundamental quantifier—given the way that parsimony is tied to explanation. The most parsimonious theory is the one that explains what needs to be explained using the fewest resources. Since fundamental objects are those in terms of which everything is explained, it only makes sense to measure ontological parsimony in terms of which items are taken to be fundamental. The mere fact that a theory's fundamental mode of being is enjoyed by a wide range of objects is no strike against the parsimoniousness of that theory, since one need not suppose that those objects themselves all enter into fundamental explanations. There is no more need to suppose that everything in the domain of the fundamental quantifier is fundamental than there is to suppose that everything that stands in the fundamental identity relation (viz., everything) is fundamental.

(Is there any contravening reason to suppose that ontological parsimony *is* measured by what is in the domain of one's fundamental quantifier? Cameron may appear to be giving such a reason when he suggests that the parsimony of one's

theory should be measured by which things one takes to "have real being".[28] But how are we to understand this? If 'has real being' means *exists*, then this is no help to the revolutionary deep nihilist, who concedes that statues exist. If 'has real being' is supposed to mean *is in the domain of the most fundamental quantifier*, then there is no argument here, only a bald assertion that parsimony is measured by what exists$_O$. If 'has real being' means *is fundamental*, then this is merely an assertion of the view I have endorsed: that parsimony is measured by what one takes to be fundamental. If it means something else, I don't know what that is.)

Similar points apply to the suggestion that deep nihilism has greater *ideological* parsimony than its rivals. For instance, one might observe that deep nihilists do not need any mereological predicates in their primitive ideology, since they have no composite objects at the fundamental level.[29] But deep conservatives and deep universalists can agree that no composites are fundamental and, thus, will be just as well positioned as deep nihilists to eliminate mereological vocabulary from their primitive ideology. For instance, deep universalists can maintain that the mere fact that fundamental objects $f_1 \ldots f_n$ exist$_O$ suffices to explain the (nonfundamental) fact that there exists$_O$ a sum of $f_1 \ldots f_n$.

5. An Alternative Revolutionary Strategy

The recurring problem here is that the nonfundamentality of statues has no direct bearing on whether they exist$_O$. One could try to circumvent the problem by adopting an alternative revolutionary strategy to the one described in §2. Rather than stipulating that one is using the existential$_O$ quantifier—and thus leaving it an open question whether the intended quantifier ranges only over fundamental objects—one could instead directly stipulate that one's quantifier is to range only over fundamental objects. One could then insist that one's own ontological utterances of 'there are no statues' are both true and compatible with ordinary utterances of 'there are statues'; after all, ordinary speakers certainly are not claiming statues to be fundamental when they say 'there are statues'.

The problem with this alternative revolutionary strategy is that it shifts attention from the contentious question of whether statues exist to the uninteresting question of whether statues are fundamental. This question is uninteresting not because questions of fundamentality are not interesting—surely they are!—but rather because virtually all parties to these existence debates are in agreement that statues are nonfundamental.[30,31] It seems fairly obvious that all facts about statues can be accounted for in terms of facts about the arrangement and activities of their microscopic parts; statues have no emergent properties. If one's only goal were to find *something* to mean by 'there are no statues' that is compatible with ordinary utterances of 'there are statues', one could just as well stipulate that one's quantifier ranges over all and only prime numbers. But if the goal is to find a way of untethering familiar ontological debates from ordinary discourse about existence in a way that allows parties to these debates to "go on as before," defending the usual positions and arguments but in a new idiom, this goal cannot be achieved by changing the subject from existence to fundamentality.

Nor is it plausible that what nihilists (or deep nihilists) meant to be saying or ought to have been saying all along is only that statues are not fundamental—as if denying that statues are fundamental has all the benefits and none of the costs of denying that statues exist.[32] Denying that statues and other familiar composites exist enables one to block the puzzles of material constitution without incurring commitment to coincident entities (perdurantism, etc.), block the problem of the many without incurring commitment to vague objects (overpopulation, etc.), embrace causal exclusion arguments and thereby avoid commitment to systematic overdetermination (emergent properties, etc.), embrace sorites arguments and thereby avoid commitment to nonclassical logics (sharp cut-offs, etc.), block the argument from vagueness without incurring commitment to indeterminate existence (strange fusions, etc.), and avoid postulating strange kinds without arbitrariness (anti-realism, etc.).[33] The costs and benefits of admitting statues into one's ontology—at fundamental *or* nonfundamental levels—are therefore best assessed only after one has articulated alternative strategies for blocking each of these arguments.

6. Existential Puzzles

Neither the observation that ordinary composites are nonfundamental, nor the observation that the most parsimonious fundamental theories explain everything without reference to composites or mereological relations, provides any support for deep nihilism. What other reason could there be for accepting deep nihilism?

One might think that the usual arguments for the non-existence of statues are equally well suited for establishing the non-existence$_O$ of statues. Ross Cameron, for instance, contends that deep nihilism not only resolves the puzzles of material constitution—which are often cited as reasons for denying that ordinary objects exist—but does so in a way that "save[s] common-sense intuitions without resorting to the outlandish ontologies of the perdurantist or constitution theorist."[34] Let us have a closer look at how deep nihilism is meant to resolve these puzzles.

Here is a representative puzzle of material constitution. On Tuesday a statue is sculpted out of a pre-existing lump of clay. Call the statue 'Goliath', and call the lump of clay where Goliath is 'Lump'. What is puzzling is that all of the following seem true:

(A1) Goliath exists.
(A2) If Goliath exists, then Goliath is co-located with Lump.
(A3) If Goliath is co-located with Lump, then there exist distinct co-located objects.
(A4) There do not exist distinct co-located objects.

Here are some prominent responses to the puzzle. Nihilists deny A1: statues do not exist. Perdurantists deny A2: Goliath is not co-located with Lump but is rather a proper temporal part of Lump. Stage theorists and phasalists deny A3: Goliath is identical to Lump, and their apparent temporal differences are merely apparent. Constitution theorists deny A4: Goliath and Lump are distinct despite being

co-located. Each response is thought to have its costs, and most wear their costs on their sleeves.[35]

How is deep nihilism supposed to help? Deep nihilists do not deny A1; they deny only that statues exist$_O$, not that they exist. Nor can they grant all of A1 through A4, on pain of contradiction. They are of course welcome to deny A4 and join constitution theorists in their efforts to address the problems that beset this "outlandish" solution. But if the puzzles of material constitution are to give us any reason to accept deep nihilism, then it itself must be shown to play some role in the ultimate strategy for solving the puzzles. Simply denying one of A1 through A4 isn't enough, nor is simply affirming some claim about what exists$_O$. So how is the non-existence$_O$ of statues meant to "get in on the action"?

Here is one possibility. Deep nihilists might embrace one of the traditional solutions to the puzzle, but then try to diagnose the allure of the puzzles as resulting from *confusing* existence and existence$_O$. For instance, they might join constitution theorists in rejecting A4, but unlike typical constitution theorists—who attribute the allure of A4 to mistaking an 'is' of constitution for an 'is' of identity when we assess 'Goliath is Lump'—deep nihilists may contend that, when we assess 'there do not exist distinct co-located objects' we mistake A4 for A4$_O$:

(A4$_O$) There do not exist$_O$ distinct co-located objects.[36]

We are inclined to accept A4 (the story goes) only because we inadvertently end up considering A4$_O$, finding it unassailable, and mistakenly thinking that it was A4 that struck us as unassailable. Because deep nihilists deny that statues and lumps exist$_O$, they can then happily agree that A4$_O$ is true. Thus, by accepting deep nihilism, one is able to resolve the puzzles of material constitution.

Like the claim that we confuse the 'is's of identity and constitution when we assess 'Goliath is Lump', the claim that we confuse A4 and A4$_O$ when we assess 'there are no distinct co-located objects' is a psychological hypothesis. As such, the first question we should ask is whether the hypothesis is psychologically plausible. If *hermeneutic* compatibilism is correct, and ontologists have a deeply entrenched and largely inscrutable habit of making claims about existence$_O$ and mistaking them for claims about existence, then this sort of confusion is exactly what one should expect. But if deep nihilists take a more revolutionary tack, and concede (on pain of facing the problems discussed in §3) that prior to Sider's introduction of Ontologese in 2004 ontologists had been talking and thinking only about existence, not existence$_O$, then it is difficult to see why or how A4$_O$ would have found its way into the thoughts of traditional anti-constitutionalists.[37] Moreover, even supposing that we *have* all along been unwittingly thinking about A4$_O$, not A4, the fact remains that A4 seems true. Once we get the *existence* of distinct co-located objects clearly in mind, it does not stop seeming objectionable, nor does the usual anti-constitutionalist invective suddenly strike us as off-target.

(It is not entirely clear whether Cameron himself means to be defending a hermeneutic or revolutionary strategy. Some of what he says about Ontologese suggests that he is a revolutionary:

"there is a possible language such that the true existence claims in that language correspond to the quantificational structure of the world . . . *But I do not think English is such a language.*"[38]

However, it may still be that Cameron has in mind a hermeneutic account, for he might think (i) that we English speakers have unwittingly been speaking something other than English in ontological discussions or (ii) that although we have been speaking English, and speaking about existence, our words betray us, for the beliefs we are trying to express concern existence$_O$. In any case, he faces the following dilemma: opt for a revolutionary account and face the problems just raised or opt for a hermeneutic account and face the problems raised in §3.)

My point here is not that deep nihilists have failed to solve these puzzles or that they cannot solve these puzzles, for they can avail themselves of any of the standard solutions.[39] The point, rather, is that unless deep nihilism can itself be shown to underwrite an account of the puzzles traditionally cited in defense of nihilism—for instance, by showing that reflection on existence$_O$ reveals some particular solution to be more palatable than it might otherwise seem—it cannot claim to draw any support from those puzzles.

7. Existential$_O$ Puzzles

7.1 Revolutionary and Hermeneutic Epistemology

As we have just seen, revolutionaries cannot simply go on as before citing the usual arguments for nihilism in support of deep nihilism. But perhaps there is another sense in which they can "go on as before": they can put forward simple reformulations of the usual arguments, in which the existential vocabulary is replaced with existential$_O$ vocabulary.[40] The revised arguments may then be held to provide the missing justification for deep nihilism.

Before evaluating the existential$_O$ arguments, it is important to appreciate a crucial difference between revolutionary and hermeneutic approaches. To bring out the difference, let us consider a hypothetical compatibilist treatment of knowledge attributions. Suppose that you want to agree that ordinary utterances of 'I know that I have hands' are true, but that you have become convinced that ordinary uses of 'know' express a less than fully natural propositional attitude. You decide to shift your attention to the most natural propositional attitude—call it φ. Now, consider the following argument for φ-*skepticism*, the view that you don't φ that you have hands:

(B1) You don't φ that you are not a brain in a vat.
(B2) If so, then you don't φ that you have hands.
(B3) So, you don't φ that you have hands.

Needless to say, you should accept φ-skepticism on the basis of this argument only if you have more reason to accept the premises than the reject them. Should you take yourself to have good reason to accept them? That depends, I claim, on how

you answer this question: does 'know' express φ in the context of epistemological discussions?

Suppose that you give the hermeneutic answer: "yes". In that case, by your lights, B1 is just the deeply familiar, well understood proposition that you don't know that you are not a brain in a vat. In other words, it is the very proposition that we find so plausible (albeit suspicious) when we read papers on skepticism, the very proposition that is supported by such familiar intuitive theses as *that one knows that ∼p only if one has evidence against p* or *that one knows that ∼p only if one is certain that ∼p.* The B-argument supports φ-skepticism to exactly the extent that the traditional brain in a vat argument supports knowledge-skepticism, because the former argument just is the latter argument, and φ just is knowledge (i.e., the relation always expressed by 'knowledge' in epistemological discussions like this one). The main burden on the hermeneutic compatibilist who wants to defend φ-skepticism isn't coming up with arguments for it (since she can help herself to existing arguments), but rather coming up with evidence for the linguistic hypothesis that 'knows' expresses different relations in the different contexts, and addressing the sorts of concerns about semantic blindness sketched in §3.

Suppose instead that you give the revolutionary answer: "no". Now, try to assess whether the sentence labeled 'B1' is true. And be careful not to be lulled by a sense of false familiarity into reading it as saying that you don't know that you are not a brain in a vat. All you know for sure is that it's denying that the most natural propositional attitude, *whatever that may be*, holds between you and the proposition that you are not a brain in a vat. Perhaps that attitude is something knowledge-like but with a more stringent justification condition, and B1 and B2 come out true. Or perhaps that attitude is belief, in which case B1 is false. Or perhaps it is experience, in which case B1 is true, but B2 is false: just because you do not have an experience with the content *that you are not a brain in a vat*, it hardly follows that you do not have an experience with the content *that you have hands*.

Now, it may well be that we can somehow get to the bottom of the question of whether the sentence B1 is true. But what I hope is obvious is that the only way to investigate this question is by investigating what the most natural propositional attitude is and whether you bear it to the proposition that you are not a brain in a vat. This is because our cognitive grip on the concept φ is exhausted by the description used to stipulatively introduce 'φ', namely, 'the most natural propositional attitude'. It also may well be that we know φ under other guises. Perhaps the most natural attitude is belief, in which case φ is belief and B1 expresses the very proposition we know to be false under the guise *you don't believe that you are not a brain in a vat.* But even if (unbeknownst to us) B1 does express that proposition, we are unable to tell that B1 expresses that falsehood except by way of ascertaining that belief is the most natural attitude.

7.2 The Existential$_O$ Puzzle of Material Constitution

With this in mind, let us turn to the existential$_O$ analogue of our puzzle of material constitution:

(A1$_O$) Goliath exists$_O$.
(A2$_O$) If Goliath exists$_O$, then Goliath is co-located with Lump.
(A3$_O$) If Goliath is co-located with Lump, then there exist$_O$ distinct co-located objects.
(A4$_O$) There do not exist$_O$ distinct co-located objects.

If one embraces deep nihilism, one can resolve this puzzle by denying that statues exist$_O$ and rejecting A1$_O$. To the extent that this is a plausible solution to the puzzle, deep nihilism draws support from its ability to resolve the puzzle. If on the other hand it is utterly implausible to deny A1$_O$, deep nihilism draws little if any support from the observation that it yields *a* way of resolving the puzzle.[41]

How are we to assess the plausibility of denying A1$_O$? Like φ above, it would seem that our cognitive grip on the concept *existence$_O$* is exhausted by the descriptions used to stipulatively introduce 'existence$_O$'. Accordingly, there would seem to be only one way to investigate the question of whether 'Goliath exists$_O$' is true, namely, by investigating whether statues enjoy the most fundamental mode of being (or, equivalently, whether they are in the domain of the most fundamental quantifier).

Does this prevent us from assessing the relative plausibility of denying A1$_O$? Not necessarily. The relative plausibility of denying A1$_O$ would seem to turn largely on whether the non-existence$_O$ of Goliath entails the non-existence of Goliath. If we can find some reason to think that existence$_N$ is the most fundamental mode of being, then we have reason to believe one can deny A1$_O$ without thereby (very implausibly) denying the existence of statues. On the other hand, if we can find some reason to think that existence$_U$ is the most fundamental mode of being, then we have reason to believe that denying A1$_O$ *is* tantamount to denying that statues exist. I have been searching for such reasons (in §4 and §6) and have come up empty-handed. I see no way to tell whether denying A1$_O$ is any less implausible than denying A1 of the existence puzzles and, thus, no way to tell whether its ability to resolve the existence$_O$ puzzles lends any real support to deep nihilism over any other view about what exists$_O$.

Now, some may simply find it obvious on its face—and not for the bad reasons surveyed in §4—that existence$_O$ is existence$_N$ and that the most fundamental mode of being (unlike existence) is not enjoyed by statues and other composites. They will be unmoved by my complaint that, until we find some independent reason for thinking that the most fundamental mode of being is less inclusive than existence, we cannot assess whether denying A1$_O$ has the same unpalatable implications as denying A1. For finding something obvious is plausibly reason enough to accept it, absent arguments to the contrary (which I have not provided). But those of us who do not find it obvious one way or the other whether the fundamental mode of being is enjoyed by composites should not view the existence$_O$ puzzles as giving us any reason at all to favor deep nihilism.

I have tried to explain why neither the usual arguments against the existence of statues nor their existential$_O$ counterparts give us any reason to accept deep nihilism. Perhaps I have been unfair to deep nihilists by focusing on the puzzles of material

constitution; perhaps they would be better served by sorites arguments, or by the problem of the many, or by causal exclusion arguments. I suspect, however, that the same problems would arise: the familiar versions of these arguments support the wrong conclusion, and we are in no position to assess the existential$_O$ counterparts of these arguments.

It bears repeating that my aim at this point in the paper is only to expose the shortcomings of *revolutionary* strategies. One might prefer a hermeneutic account, on which ontologists have all along been employing the existential$_O$ quantifier.[42] In that case, the puzzles about existence$_O$ just are the deeply familiar puzzles that we have been discussing all along, and there is no special problem of assessing the relative plausibility of the different premises—we understand 'existence' claims (i.e., existence$_O$ claims) in just the same way that we understand claims involving any other well-entrenched vocabulary. The objections to this sort of view are to be found in §3, not §§4–7.

8. Deep Universalism

8.1 The Existential Argument from Vagueness

Having found no good reason to accept the deep nihilist's account of what exists$_O$, let us see whether deep universalism fares any better. Deep universalism, recall, is the thesis that the existential$_O$ quantifier is the existential$_U$ quantifier. In other words, there exist$_O$ all of the things that the traditional universalist takes to exist: pluralities of existing$_O$ objects always have an existing$_O$ fusion. Is there any good reason to accept deep universalism?

As with deep nihilism, the usual arguments for universalism lend no support to deep universalism. To see this, let us consider one of the most influential arguments for the existence of arbitrary fusions: the argument from vagueness.[43] In order to highlight the role of existence in the argument without making the premises too cumbersome, I will speak of composition being *existentially restricted*, which is shorthand for: there exists at least one plurality of objects such that there exists an object that is composed of them and there also exists at least one plurality of objects such that there exists no object that is composed of them.

Here is the argument from vagueness:

(C1) If composition is existentially restricted, then it is possible for there to be a sorites series for composition.
(C2) If it is possible for there to be a sorites series for composition, then some expression in some existential numerical sentence is vague.
(C3) No expression in any existential numerical sentence is vague.
(C4) So composition is not existentially restricted.
(C5) There exist at least some composites.
(C6) So, pluralities of existents always have an existing fusion.

The idea behind C1 is that if some things compose an existing object and others do not, then there could in principle be a continuous series of cases running from a

case in which some existents compose an existent to a case in which they do not—for instance, a moment-by-moment series running from the beginning to the end of the assembly of a hammer from a handle and head. C2 compresses a controversial line of reasoning which will not concern us here.[44] The idea behind C3 is that no expression in a numerical sentence (e.g., '∃x∃y(Cx & Cy & x≠y & ∀z(Cz → (x = z v y = z)))', which says that there are exactly two concrete objects) has multiple precisifications, from which it is meant to follow that no expression in the sentence is vague. These together imply C4—that existents either always or never compose an existent—which together with C5 entails that existents always compose an existent.

If deep universalism is to serve as a revolutionary compatibilist strategy, then deep universalists must deny that trout-turkeys and other strange fusions exist. Accordingly, they cannot accept the conclusion of the argument. Thus, if deep universalism is to draw any support from the argument, it would be by providing the resources for *blocking* the argument. Here is one natural suggestion about how it might do so. Deep universalists, the reasoning goes, can deny C3 and insist that '∃' has multiple precisifications: "liberal" precisifications—like the existential$_U$ quantifier—that do range over a fusion of the handle and head in the intuitive grey area of the sorites series, and "conservative" precisifications that don't range over any such fusion. Thus (the reasoning goes), deep universalism draws support from the fact that it enables one to resist this argument and thereby avoid the counterintuitive conclusion that strange fusions exist.

On closer inspection, however, deep universalism has no role to play in this strategy for resisting the argument. Deep universalism is not simply the thesis that there is an existential$_U$ quantifier; even the deep nihilist can accept that.[45] Rather, it is the thesis that the existential$_U$ quantifier is the existential$_O$ quantifier. All that is needed to resist C3, however, is that there be multiple ∃-like quantifier meanings to serve as precisifications of '∃'. Taking one of them to be the existential$_O$ quantifier would be explanatorily idle in the present context.[46]

Furthermore, what this strategy requires is only that there be ∃-like quantifiers that range over borderline existents, for instance, an object composed of the handle and head in the intuitive grey area. It gives us no reason to postulate the far more comprehensive existential$_U$ quantifier, which additionally ranges over trout-turkeys and other strange fusions. Indeed, if the revolutionary deep universalist is right that trout-turkeys and the like do not exist, then the existential$_U$ quantifier *cannot* be a precisification of '∃': just as no property that applies to definite non-heaps is among the precisifications of 'heap' (since we definitely do not mean *it* by 'heap'), no quantifier that ranges over definite non-existents is among the precisifications of '∃'. Only far less comprehensive quantifiers are suitable to serve as precisifications of the existential quantifier.

Deep universalists may well be able to resist the argument from vagueness, but not *qua* deep universalist. Yet if the existence$_O$ of trout-turkeys and other strange fusions does not itself have any role to play, then deep universalism derives no support from the success of this strategy for resisting the argument.

8.2 The Existential$_O$ Argument from Vagueness

Perhaps revolutionaries will instead attempt to establish deep universalism by appeal to the existential$_O$ analogue of the argument from vagueness.[47]

(C1$_O$) If composition is existentially$_O$ restricted, then it is possible for there to exist$_O$ a sorites series for composition.

(C2$_O$) If it is possible for there to exist$_O$ a sorites series for composition, then some expression in some existential$_O$ numerical sentence is vague.

(C3$_O$) No expression in any existential$_O$ numerical sentence is vague.

(C4$_O$) So composition is not existentially$_O$ restricted.

(C5$_O$) There exist$_O$ at least some composites.

(C6$_O$) So, pluralities of existents$_O$ always have an existing$_O$ fusion.

Just as we saw in §7, since our cognitive grip on the concept *existence$_O$* is exhausted by the descriptions used to stipulatively introduce 'existence$_O$', the only way to investigate the truth of the various premises is by investigating the associated claims about the most fundamental quantifier. For instance, in order to assess C5$_O$, we must ask ourselves whether there are at least some composites in the domain of the most fundamental quantifier. But this is precisely the question that we have been trying to answer since §4, and we have so far come up empty-handed in our search for reasons to think that this quantifier does (or doesn't) range over composites. Thus, we would seem to have no reason to accept C5$_O$, and thus no reason to accept this argument for deep universalism.

Notice that there is no comparable obstacle to assessing the plausibility of C5 of the original argument for universalism. We have clear intuitions about when there *exists* a fusion of some objects, and it is intuitively obvious that existents arranged statuewise compose an existing statue. Intuitions about composition surely give one at least some reason to accept C5 (which is not to deny that C5 begs the question against the nihilist). By contrast, I for one have no intuitions at all about whether pluralities of existents$_O$ ever compose an existent$_O$, any more than I do about whether anyone φs that they are not a brain in a vat. Those who do have such intuitions can, I suppose, rationally accept deep universalism on the basis of this argument. Though I suspect that those who are attracted to deep universalism are in fact like me in having no such intuitions, and that the attraction lies in its supposed theoretical virtues.

Neither the usual arguments for universalism nor their existential$_O$ counterparts seem to give us any reason to accept deep universalism. Perhaps deep universalists would be better served by other arguments for unrestricted composition, for instance, arguments from arbitrariness. I suspect, however, that the same problems would arise: the familiar versions of these arguments support the wrong conclusion, and their existential$_O$ counterparts cannot be assessed without first answering the very questions about the domain of the fundamental quantifier with which we began.

9. Conclusion

The revolutionary's move from existence to existence$_O$ was supposed to enable defenders of surprising ontological theses to avoid conflict with ordinary belief without having to venture objectionable empirical hypotheses to the effect that what ordinary speakers have all along been saying is compatible with what certain ontologists have all along been denying. The problem is that, by shifting the focus from existence to existence$_O$, we lose our anchor for assessing the resultant ontological theses. There are well-understood arguments for the existence of trout-turkeys and other strange fusions. There are well-understood arguments for the non-existence of statues and other ordinary objects. But we have been unable to find any good reason for taking strange fusions to exist$_O$ or for denying that ordinary objects exist$_O$. In the absence of such reasons, it would seem that ontologists ought to be entirely agnostic about what does and doesn't exist$_O$.

As indicated above, it *may* be that some simply find it obvious that statues don't exist$_O$. They may dismiss my demand for arguments and independent reasons, and insist that its being obvious that statues don't exist$_O$ is reason enough to believe that they don't, just as its being obvious that statues exist is reason enough to believe that they do. I am not sure how to respond to such conviction, other than with surprise and disbelief. I suspect that any appearance of obviousness arises from confusing the claim at issue, that statues are not in the domain of the most fundamental quantifier, with the claim that statues are not fundamental, which *is* more or less obvious. In any case, I hope to have convinced those who (like me) do not find any answers to these existence$_O$ questions immediately obvious that there are no grounds for accepting deep nihilism (or deep universalism).

Finally, it is worth emphasizing that, because we lack the means to assess the relevant existence$_O$ claims, we lack the means to assess whether they are compatible with ordinary discourse and ordinary belief. Deep nihilism is compatible with the belief that there are statues only if, as deep nihilists (but not deep universalists) would have it, the existential$_O$ quantifier ranges over fewer objects than does the ordinary existential quantifier. Deep universalism is compatible with the belief that there is nothing with fins and feathers only if, as deep universalists (but not deep nihilists) would have it, the existential$_O$ quantifier ranges over objects that are not in the domain of the existential quantifier. As we have been unable to find any reason to suppose that existence outstrips existence$_O$ or vice versa, we have no reason to think that either deep nihilism or deep universalism is compatible with ordinary belief. Thus, it is unclear whether these revolutionary strategies are able to provide the sort of reconciliation that motivated the project to begin with.[48]

Notes

[1] See my (2011) for an overview of these views and their motivations.

[2] For a representative sampling of such strategies, see Wiggins (1968: 91–92), Chisholm (1976: 102–103), van Inwagen (1990: ch. 10), Lewis (1991: §3.5), Thomasson (2007: §10.3), and Horgan and Potrč (2008: ch. 3). I borrow the label 'compatibilism' from Hawthorne and Michael (1996).

[3] See Hawthorne and Michael (1996), Markosian (1998: 220–229), Merricks (2001: §7.1), Eklund (2002), Hirsch (2002a: 109–112), Varzi (2002: 65), my (2008, 2009: §3), and Pickel (2010).

[4] See, e.g., Lewis (1991: §3.5).

[5] Sider (2004: 680).

[6] Sider (2009: 412). See also Sider (2011: §5.3 and §9.3, forthcoming a: §3, forthcoming b: §1). Cameron (2008a, 2008b, 2010a, 2010b) appears to endorse this strategy as well. For instance, he says: "there is a possible language such that the true existence claims in that language correspond to the quantificational structure of the world . . . But I do not think English is such a language" (2010a: 156).

[7] See Sider (2004: 680–681, 2009: 411–421, 2011: ch. 9), Dorr (2005: §7, 2007: §1), and Cameron (2008a: 300–301, 2010a: 256, 2010b: §2).

[8] See, e.g., Hawthorne and Cortens (1995: §3), Horgan and Potrč (2008: §3.2), and Sider (2009: §§7–10, 2011: ch. 1).

[9] See Burgess (1983) on the revolutionary/hermeneutic distinction. In the earliest discussions (2004 and 2009), Sider treats the revolutionary strategy as a "back-up plan", in case a hermeneutic approach is shown to be untenable, while in more recent discussions (2011 and forthcoming a and b), he expresses a preference for the revolutionary approach. Cameron seems undecided as well. As we saw above, he says of languages in which the quantifiers are maximally natural, "I do not think English is such a language" (2010a: 156). Yet elsewhere, he says "I . . . don't want to claim that the English 'exist' *never* means the natural meaning" (2010b: note 12). Thus, my paper is perhaps best understood as a dilemma: opt for a revolutionary account and face the problems raised in §§4–7 or opt for a hermeneutic account and face the problems raised in §3.

[10] See Cameron (2008a: §2, 2010a) and Horgan and Potrč (2008).

[11] Sider (2004) appears to be advocating deep universalism in the passage quoted above. In more recent work (forthcoming a), Sider defends deep nihilism, though perhaps without intending to endorse it (see his 2011: ch. 13).

[12] See Sider (2004: 681, 2011: §5.3).

[13] Cf. Sider (2007: §2.2), Dorr (2005: 265), and McDaniel (2009: 303).

[14] See Hawthorne and Cortens (1995) and Turner (2011) on the former view; see McDaniel (2009) and Turner (2010) on the latter.

[15] See, e.g., Hirsch (2008: 520–521) and Chalmers (2009: §8).

[16] Cf. Hawthorne and Michael (1996: 117–118).

[17] Fine (2009: 171)—in a different but related context—observes that "there is no plausibility in the thought that when a single philosopher changes his mind on an ontological issue, he has somehow slipped from using the quantifier in one sense to using it in another." Cf. Stroud (1984: 33f) against structurally similar responses to the skeptic.

[18] Contextualists are concerned with cases like the following: Hannah is running errands on Friday and considers postponing the trip to the bank (low stakes). She says, 'I know that the bank is open on Saturdays', remembering having been there on a Saturday about year ago. Later, realizing that it is extraordinarily important to make the deposit by Sunday (high stakes), she says 'I don't *know* that the bank is open on Saturdays'. When reminded of her earlier utterance, she retracts: 'I was wrong. I didn't know.' See Schiffer (1996), Hawthorne (2004: §2.7), and DeRose (2006) on the charge of semantic blindness.

[19] See, e.g., van Inwagen (1990: 1) and Horgan and Potrč (2008: §6.2). Of course, nihilists may themselves feel strongly inclined to affirm 'there are statues' in ontological discussions, but here the natural explanation is that they have been persuaded by arguments, not that they are enjoying a superior semantic competence.

[20] E.g., Dorr (2005: 249) suggests that a hermeneutic account can explain certain peculiar behaviors of ontologists, which may in turn serve as the sort of independent evidence needed to warrant the attribution of semantic blindness. But the evidence he offers is underwhelming; there are obvious incompatibilist explanations of these behaviors. Similarly for Chalmers's (2009: 81) observation that some remarks that are "appropriate" in ontological discussions are not appropriate in ordinary discussions.

[21] Or, as priority monists (e.g., Schaffer 2010) would have it, they are grounded in facts about the cosmos as a whole.

[22] Another approach would be to characterize relative fundamentality in terms of *levels* of fundamentality. Level L_1 will include all entities featuring in facts that obtain in virtue of nothing else. Call these the L_1-facts. Level L_n will include all entities that (i) feature in facts that obtain in virtue of nothing other than $L_1 \ldots L_{n-1}$ facts and (ii) are not themselves at levels $L_1 \ldots L_{n-1}$. We can then say that an item at L_i is more fundamental than an item at L_j iff $i < j$.

[23] Sider himself makes roughly the same point, though he distances himself from talk of fundamental entities (2011: 170–171): "On my conception, to accept an ontology of tables and chairs is not to say that tables and chairs are 'fundamental entities', but rather to say that there are, in the most fundamental sense of 'there are', tables and chairs. And saying this is not absurd. For one can say this while conceding that the *property* of being a table, the property of being a chair, and indeed, all other properties of tables and chairs, are not particularly fundamental. Intuitively speaking, although the natures of tables and chairs are nonfundamental, their being is perfectly fundamental." Those who are uneasy with talk of "modes of being," or who (like Sider 2011) eschew talk of fundamental objects, may recast all of what follows in terms of the relative fundamentality of different pieces of ideology (existential quantification, existential$_N$ quantification, etc.) and of different predicates ('statue', 'electron').

[24] Cf. Schaffer (2009: 372).

[25] As indicated in §2, one need not take the existential$_N$ quantifier to be a syntactically complex quantifier defined in terms of existential quantification ('there exists a simple such that . . . '). One can instead think of it as syntactically simple but semantically associated with a smaller domain than the existential quantifier. If one prefers, the existential$_N$ quantifier may be introduced metalinguistically, as the most natural $\exists$-like quantifier Q which is such that the sentence $\sim Qx(x$ *is not mereologically simple*) comes out true.

[26] Here I am assuming, for purposes of illustration, that material simples are fundamental. Some (e.g., Schaffer 2010) will deny this on the grounds that the composite cosmos is more fundamental than any simple. Others (e.g., Sider 2011: §9.13) may deny that any individuals are absolutely fundamental in the sense specified above, insofar as all fundamental facts are general facts (like $\exists x Fx$ or $\exists x \exists y Rxy$).

[27] See Cameron (2010a: 262–263).

[28] Cameron (2010a: 250).

[29] Cf. Sider (forthcoming a: §1).

[30] Cf. Sider (2011: 170–171). Similarly, the debate over the existence of trout-turkeys cannot be reinstated as a debate about the fundamentality of trout-turkeys, since even universalists certainly will not want to say that such strange fusions are fundamental. See, e.g., Lewis (1983: 372) on the ineligibility of arbitrary fusions.

[31] For a dissenting voice, see deRosset (2010).

[32] *Pace* Schaffer (2009: 361), who says, "When the mereological nihilist denies that fusions exist, what she is denying is that such entities *ultimately* exist—she is denying that such entities are fundamental." Contrast van Inwagen (1990: 99–100): "My position vis-à-vis tables and other inanimate objects is simply that there are none. Tables are not defective objects or second-class citizens of the world; they are just not there at all."

[33] See my (2011) for an overview of these motivations for eliminativism.

[34] Cameron (2008a: 298). Heller (1990: §§2.4–2.7), van Inwagen (1990: 125–127), Hoffman and Rosenkrantz (1997: §5.2), Merricks (2001: §2.3), and Olson (2007: §9.4) cite such puzzles as a reason for denying that familiar composites *exist*.

[35] For representative defenses, see Heller (1990: 14–16) on perdurantism, Hawley (2001) on stage theory, Price (1977) on phasalism, and Baker (1997) on constitution theory.

[36] The problems I am about to raise are not specific to denying A4; they arise for any revolutionary strategy that invokes an equivocation between existential and existential$_O$ readings. For instance, they arise for the suggestion (which perhaps Cameron would endorse; see his 2008b: 16) that A1 . . . A4 are all true, and that this seems implausible only because we are confusing the false claim that there are no true contradictions with the true claim that there are no true contradictions expressible in Ontologese. For even when we get the proposition *that there are no true contradictions at all* clearly in mind, our anti-dialetheist intuitions are as strong as ever.

[37] One must resist the temptation to invoke reference magnetism here, for one would then face the problem of explaining how A4$_O$ could have found its way into the contents of our thoughts without also

becoming the content of the English sentence 'there exist distinct co-located objects'. After all, if $A4_O$ *is* the semantic content of that sentence and the associated thought, then it would seem that the existential quantifier just is the existential$_O$ quantifier, which would undermine the revolutionary's compatibilist ambitions.

[38] Cameron (2010a: 256, my italics).

[39] Contrast McGrath (2005) and Nolan (2010), who argue that the standard existential puzzles cause trouble for compatibilists.

[40] This evidently is what Sider has in mind when he says "perhaps my book, and other works of ontology, should not be interpreted as English, but rather as 'Ontologese'" (2004: 680).

[41] After all, deep universalists and deep conservatives also have a way of blocking the puzzle, namely, denying any of $A2_O \ldots A4_O$. So the mere fact that deep nihilists have a way of blocking the puzzle gives one no reason to prefer deep nihilism over other views about what exists$_O$.

[42] See, e.g., Dorr (2005: §7).

[43] See Lewis (1986: 212–213) and Sider (2001: §4.9.1).

[44] In short: Such a series arguably must contain borderline cases of composition, from which it is meant to follow that it is indeterminate how many objects exist, from which it is meant to follow that some numerical sentence lacks a determinate truth value, from which it is meant to follow that some numerical sentence contains vague vocabulary.

[45] See, e.g., Dorr (2005). Another way of seeing that deep universalism has no role to play here is to notice that this exact solution was originally put forward by an opponent of deep universalism; see Hirsch (1999: 149–151; 2002b: 66).

[46] Worse than that, the supposition that one of the putative precisifications is far more natural than the others threatens to undermine this line of response; see Sider (2003: §3).

[47] For composition to be existentially$_O$ restricted is for there to exist$_O$ a plurality of objects such that there exists$_O$ an object composed of them and also a plurality of objects such that there exists$_O$ no object composed of them. An existential$_O$ numerical sentence is a sentence of the form '$\exists_O x \exists_O y (Cx$ & Cy & $x \neq y$ & $\forall_O z(Cz \rightarrow (x=z \text{ v } y=z)))$', where '$\exists_O$' is the existential$_O$ quantifier and '$\forall_O$' is the dual of '$\exists_O$'.

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