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DIAGNOSING VERBAL DISPUTES: THE CASE OF ONTOLOGY

by

NATHAN DAHLBERG

Under the Direction of Andrea Scarantino, PhD

ABSTRACT

According to Eli Hirsch many ontological disputes are verbal because, in these disputes, each side is most charitably interpreted as speaking the truth in its own language. In this thesis I argue that the ontological disputes Hirsch targets can't be verbal. The problem with Hirsch's proposal is that these ontological disputes are explicable in terms of ancillary disagreements about the explanatory value of intrinsic properties. If Hirsch believes that the ancillary disagreements are nonverbal, I argue, then he should interpret ontological disputes as being nonverbal as well. Alternatively, in order for Hirsch to interpret the ancillary disagreements as being verbal, he must reject an assumption implicit in ontologists' existence assertions. In this case, he ought to interpret ontologists' positive existence assertions as false. Either way, there is no plausible way to interpret the disputes Hirsch targets as being verbal.

INDEX WORDS: Philosophy of language, Metaphysics, Ontology, Verbal disputes

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1 INTRODUCTION

According to Eli Hirsch (2010) two parties engage in a verbal dispute just in case, given the correct view of linguistic interpretation, each party would concede that the other speaks the truth in its own language. The correct linguistic interpretation, Hirsch suggests, is the one that adheres to the *principle of charity*: When interpreting other speakers, we ought to do so in a way such that their utterances come out true or at least reasonable. Hirsch applies this principle to ontological disputes and concludes that many are merely verbal. For example, when philosophers disagree about whether tables exist in addition to simples arranged tablewise, Hirsch suggests that each side is most charitably interpreted as speaking its own language, such that the sentence ‘tables exist’ expresses an obvious truth for one side and a trivial falsehood for the other. Therefore, Hirsch concludes, each side speaks the truth relative to its own language, making the dispute a verbal one.

In this thesis I argue that the ontological disputes Hirsch targets can’t be verbal. The structure of the paper is as follows: In section two I present Hirsch’s characterization of a verbal dispute and his argument that many ontological disputes are verbal. In section three I present an initial challenge to Hirsch’s proposed interpretation. Ontologists insist that their disputes are nonverbal because both sides of these disputes agree that sentences of the form ‘Fs exist’ are true only if there is an objectively privileged set of fundamental entities such that ‘Fs’ successfully refers to some of its members. The problem for Hirsch’s interpretation is that, while it allows us to charitably interpret ontologists as making true existence assertions, it also forces us to uncharitably interpret ontologists as being mistaken when they insist that they are having a nonverbal disagreement about which entities are fundamental. Hirsch anticipates this response but suggests that it is inadequate. Because each side of these disputes will use expressions like

‘x is a fundamental entity’ in a manner that is consistent with its own view, Hirsch argues, these ontologists are also charitably interpreted as engaging in verbal disputes about which entities are fundamental. Thus, framing ontological disputes in terms of notions like *being a fundamental entity* does little to show that these disputes are charitably interpreted as being nonverbal.

In section four I argue that Hirsch’s appeal to charity fails to show that ontological disputes are verbal because we should expect ontologists to use expressions like ‘Fs are fundamental’ as they actually do, even if the ontological disputes are nonverbal. I show that many of the ontological disputes Hirsch targets are explicable in terms of ancillary disagreements, for example, about whether or not we must characterize certain objects in terms of their intrinsic properties in order to explain change over time and solve the new riddle of induction. I argue that although these ancillary disagreements are about hard questions whose answers might be unknowable, there is good reason to think they are nonverbal. Thus we have good reason to interpret ontological disputes as being nonverbal disputes whose outcome depends on the outcome of the ancillary disagreements. Furthermore, as long as the tough, ancillary disagreements persist, we should expect ontologists to use expressions like ‘Fs exists’ or ‘Fs are fundamental’ in a manner that is consistent with their own view. Hence, Hirsch’s appeal to charity fails to support an interpretation that makes ontological disputes verbal.

In section five I consider a potential objection. Hirsch might reapply his argument from charity to the ancillary disagreements and argue that these disputes cannot vindicate ontology because they too are verbal. However, I argue that one can only maintain that the ancillary disputes are verbal by rejecting some assumptions implicit in ontologists’ existence assertions. Thus, if the ancillary disputes are verbal, then we ought to interpret ontologists’ positive existence assertions as false. Hirsch, therefore, cannot interpret both sides of the ontological

disputes he targets as speaking truly.

The arguments in sections four and five present a dilemma for Hirsch's argument. On one hand, Hirsch can say that the ancillary disagreements are nonverbal; in which case he should prefer whichever ontology is best, given the outcome of the ancillary disputes. On the other hand, if Hirsch says that the ancillary disputes are verbal, he must deny an assumption necessary for the truth of ontologists' positive existence assertions and, thus, must interpret these assertions as false. Either way, there is no plausible way for Hirsch to charitably interpret both sides of the ontological disputes as speaking truly. Therefore, I conclude that the ontological disputes Hirsch targets cannot be verbal disputes.

2 VERBAL DISPUTES IN ONTOLOGY

2.1 What Makes a Disagreement a Verbal Dispute?

Philosophers sometimes present the following scenario as an illustrative example of a verbal dispute¹:

Marc and Laura are sitting at a table with an appletini, a drink made with vodka and apple liquor, and find themselves in a dispute about the truth of the sentence ‘there is a martini on the table.’ Marc insists that the sentence is false. As it turns out, Marc is quite the purist about martinis and uses the word ‘martini’ to refer to drinks containing only gin with a splash of vermouth. Laura, on the other hand, insists that the sentence is true. As it turns out, Laura is more liberal with her use of the word; she uses ‘martini’ to refer to any drink containing liquor in a V-shaped glass.

This example intends to elicit the intuition that Marc and Laura’s disagreement is not about the contents of the drink on the table, but about how they are using the word ‘martini.’

In general, philosophers characterize verbal disputes as disputes that are somehow explicable in terms of each side’s use of language, rather than the subject matter of the disagreement at hand. For example, Jenkins (2014) suggests that two parties engage in a verbal dispute when they “are engaged in a sincere prima facie dispute D, but do not disagree over the subject matter(s) of D, and merely present the appearance of doing so owing to their divergent uses of some relevant portion of language” (p. 21). Similarly, Chalmers (2011) says a dispute about D is verbal when the parties disagree about the meaning of some expression T in D, and “the dispute over [D] arises wholly in virtue of this disagreement regarding T” (p. 7). It’s important to mention that although these accounts differ in certain respects, they should not be understood as competing accounts of a uniquely correct notion of a verbal dispute. Chalmers,

¹ This example is adapted from Sider (2009) and Bennett (2009).

for example, cautions that asking which of these characterizations is uniquely correct would plausibly lead to a verbal dispute about the expression ‘verbal dispute.’

Eli Hirsch (2010) offers an account similar to that of Jenkins and Chalmers. According to Hirsch, a verbal dispute is a dispute “in which, given the correct view of linguistic interpretation, each party will agree that the other party speaks the truth in its own language” (p. 229). In the martini example we might think of Marc as speaking his own language, M-English, in which ‘martini’ refers to any drink containing only gin with a splash of vermouth. And we might think of Laura as speaking her own language, L-English, in which ‘martini’ refers to any drink containing liquor in a V-shaped glass. Insofar as both Marc and Laura agree that there is a drink containing liquor in a V-shaped glass on the table, but that it doesn’t contain only gin and vermouth, each of them ought to admit that the other side speaks the truth in its own language.

It will be helpful to clarify what Hirsch means by ‘a speaker’s own language.’ A language, in Hirsch’s sense, is understood as a map from sentences (relative to context of utterance) to intensions, where the intension of a sentence is a function from possible worlds to truth values. For example, in Laura’s language, L-English, we can interpret the sentence ‘there is a martini’ as having an intension that is true in possible worlds where there exist liquor-based drinks in a V-shaped glass.

Some philosophers, most notably Tyler Burge (1979), argue that a person’s language is the language spoken by whatever linguistic community the person belongs to. This view makes trouble for the idea that members of the same linguistic community, like Marc and Laura, could be interpreted as speaking different languages. To circumvent this worry, Hirsch stipulates that by ‘a speaker’s own language’ he means the language spoken by a counterfactual community of people who use language like the actual speaker does. For Hirsch, this means a community of

speakers who assign the same intensions to the same sentences (relative to context of utterance) as the actual speaker. The idea here is that Marc and Laura can be interpreted as speaking different languages because a community that used Marc's intension for 'there is a martini' would use the sentence differently than a community that used Laura's intension.

So far, this characterization doesn't tell us how to determine which intensions are assigned to which sentences in a speaker's language. According to Hirsch, in the context of ontology, the relevant interpretive principle is given by, what he calls, the *principle of charity*: "If we are trying to decide between two interpretations of a language, there is a presumption in favor of the one that succeeds better in making people's assertions come out true, or, if not true, at least reasonable" (p. 180).

Hirsch suggests that this principle has two components. The first, *charity to use*, says that if a speaker consistently uses an expression in a certain way, then we have reason to believe that they are using it correctly. For example, if a speaker consistently uses 'elephant' when in the presence of elephants, it would be uncharitable to interpret them as using 'elephant' to refer to apples and suppose that they systematically mistake elephants for apples.

The exception to *charity to use* is given by the second component, *charity to retraction*: When a speaker retracts an earlier utterance, we have good reason to interpret the earlier utterance in a way that makes it come out false. For example, if a speaker says 'that is a flying pig' upon seeing a pig-shaped rocket, but upon closer examination retracts this utterance, then it would be uncharitable to interpret the speaker as using 'flying pig' to refer to pig-shaped rockets once the retraction has been produced.

Hirsch applies the *principle of charity* to ontological disputes and argues that many of these disputes are verbal. In particular, he targets ontological disputes about the existence of

highly visible material objects, including disputes that engage “[p]erdurantists, endurantists, mereological essentialists, four dimensionalists, and sundry nihilists” (p. 221). Let us consider a couple of examples.

2.2 The Argument from Charity

Hirsch argues that, for many ontological disputes, each side is most charitably interpreted as speaking the truth in its own language. His primary example of a verbal dispute in ontology concerns the topic of *temporal parts*. The central question here is: In addition to having spatial parts, do material objects have temporal parts? One can think of temporal parts as objects that exist momentarily and then go out of existence. For example, a table that exists from some time t_i to t_n might be said to be composed of a succession of momentarily existing objects at every time t_m between t_i and t_n . On one side we have perdurantists, who say that ordinary material objects are always composed of successions of temporal parts. They explain how objects change over time (e.g. how the color of a table was once brighter than it is now) in terms of the properties of these temporal parts (e.g. the table has a some temporal parts that are less faded than the table’s presently existing temporal parts). On the other side we have endurantists, those who reject the existence of temporal parts and argue that objects are wholly present from moment to moment. They explain change over time by characterizing what an object is like at a given time (e.g. the table was brighter at t_i than it is at t_n).

Let’s consider how Hirsch uses the *principle of charity* to show that the dispute between perdurantists and endurantists is verbal, such that each party ought to agree that the other party speaks the truth in its own language. According to Hirsch perdurantists and endurantists are most charitably interpreted as speaking P-English and E-English respectively. When shown a table, P-

English speakers will assent to sentences like ‘there is a succession of momentarily existing tables.’ While endurantists deny this sentence in every context, when presented with a table they will assent to ‘there is a table.’ Hirsch suggests that, in this case, the most charitable interpretation is that ‘there is a table’ in the endurantists language, E-English, has the same intension as ‘there is a succession of momentarily existing tables’ in P-English.

Similarly, Hirsch suggests that the latter sentence, in E-English, is most charitably interpreted as expressing a contradiction, because there are no contexts in which endurantists will assent to it. Given this interpretation, endurantists should agree, in contexts where they are disposed to accept ‘there is a table,’ that ‘there is a succession of momentarily existing tables’ is true in P-English, because these sentences have the same intension relative to each party’s respective language. And perdurantists should agree that ‘there is a succession of momentarily existing tables’ is false in E-English, because it has an intension that is false in every possible world. Therefore, each side should agree that the other speaks the truth in its own language. If so, their dispute is a merely verbal one because they are not disagreeing about the nature of the object before their eyes, but about how they use language to characterize it.

Hirsch thinks that similar arguments can be made for other disputes in ontology. Take an example from the ontology of composition, which asks: Under what conditions do two or more objects come together to compose a further object? At one extreme we find the mereological nihilists, who answer: Never! These ontologists hold that only simples (partless objects) exist. They deny that tables exist, insisting that what we ordinarily call ‘tables’ are merely simples arranged tablewise. At the other extreme we find the mereological universalists. These ontologists say that for any unique collection of objects there exists some further object that has

the others as its parts. Universalists believe, not only in ordinary objects like tables, but also bizarre entities like the mereological fusion of the Eiffel Tower and my left ear.

While nihilists deny that tables exist, they will nonetheless be disposed to accept ‘there are some simples arranged tablewise’ in the same contexts where universalists will say ‘there is a table.’ Thus, Hirsch argues, we should interpret the sentence ‘there is a table’ in the universalists language, U-English, as expressing something that both parties believe is obviously true, while the same sentence in the nihilists language, N-English, is best interpreted as expressing some necessary falsehood (perhaps that there is a simple table). Again, in this case each side speaks truly in its own language, making their dispute verbal.

It’s important to note that Hirsch does not think that all ontological disputes are verbal.² However, he thinks that for most disputes about how we should carve the world into physical objects, arguments similar to the two above can be made to show that these disputes are verbal. In addition to the two examples above, these include disputes about whether distinct objects can occupy the same space at a given time, whether enduring objects occupy four-dimensional space, whether there exists only a single ‘world’ object, etc.

² Hirsch (2010 and 2005) mentions both the dispute between platonists and nominalists, and the dispute between nihilists and gunk theorists, as examples of ontological disputes that he thinks might not be verbal. He argues that, in these disputes, one side will be able to express certain sentences such that there is no plausible, intensionally-equivalent sentence available to the other side. For example, consider the dispute between nihilists (those who believe that only simple objects exist) and gunk theorists (those who believe that every object is infinitely divisible into parts). For whatever Xs the nihilist deems mereologically simple, the gunk theorist will be able to express the sentence ‘there is half an X.’ It doesn’t seem like there is any sentence available to the nihilist that could have the same intension as the gunk theorist’s sentence. After all, ‘there is half an X’ will be true in possible worlds where the largest object is half an X, and yet the nihilist is committed to the view that such a world contains no objects. This is because the nihilist’s central claim is that only simples (i.e. Xs) exist, and such a world would contain no simples.

3 THE MOST CHARITABLE INTERPRETATION

In this section I present an initial challenge to Hirsch's interpretation. Ontologists insist that their disputes are nonverbal. So while Hirsch's interpretation allows us to charitably interpret ontologists' existence assertions as true, it also requires us to uncharitably interpret ontologists as being mistaken when they say their disputes are nonverbal. I then consider why Hirsch thinks it is acceptable to be less charitable to ontologists' claims about their disputes being nonverbal than their claims about which entities exist. With Hirsch's motivation in mind, I outline the general strategy for my argument that the ontological disputes he targets can't be verbal.

3.1 Conflicting Applications of Charity

Ontologists make it clear that they believe that ontological disputes are not merely about each side's use of language. For example, Dorr suggests in his aptly titled *What do we disagree about when we disagree about ontology?* (2005) that ontological disputes are about "what there really, ultimately is—what there is in the most fundamental sense" (p. 20). Sider (2011) frequently characterizes the aim of ontology as inquiry into the entities that 'carve nature at the logical joints,' or inquiry into those entities bound by 'the most natural existential quantifier.' Similarly, Schaffer in his *On What Grounds What* (2009) suggests that there is a trivial sense in which any entity that might be said to exist does in fact exist, but that the primary aim of ontology is to characterize the minimal set of entities in virtue of which all other entities exist. For present purposes, we can set aside any nuance between language like 'fundamental entities,' 'most natural quantifier,' and 'those entities that ground all other entities,' and frame the

question of ontology as follows: Which entities should be included in a theory of *fundamental* entities?

The problem for Hirsch's interpretation is that ontologists stipulate that the question about fundamental entities has a uniquely correct answer, such that only one side of an ontological dispute *gets it right*. As Sider (2011) puts it, ontologists proceed from the assumption that "the world has a distinguished structure, [with] a privileged description" of which entities are fundamental (p. i). If we follow Hirsch and interpret both sides as speaking truly when they make existence assertions, then we must also interpret both sides as being mistaken when they claim that their respective views are incompatible - a consequence that violates charity.

In other words, ontologists' reluctance to accept Hirsch's interpretation is data about their use of language that must be considered when deciding how to interpret ontologists charitably. While charity demands that we interpret ontologists' utterances such that they come out true or at least reasonable, Hirsch's interpretation says that ontologists are not only mistaken about their disputes being nonverbal, but that these ontologists, quite unreasonably, refuse to recognize this mistake once they have been presented with the correct interpretation. Thus, in order to motivate his claim that ontological disputes are best interpreted as being verbal disputes, Hirsch must justify why it is acceptable to be more charitable to ontologists' existence assertions than their insistence that their disputes are nonverbal.

3.2 Motivating Hirsch's Interpretation

Hirsch offers a couple of reasons why his interpretation is acceptable in spite of its uncharitable consequences. First, he argues that the introduction of terminology like 'being a

fundamental entity' does little to show that ontological disputes are nonverbal. In the ontological disputes he targets, Hirsch notes that each side is disposed to use sentences of the form 'Fs are fundamental' in a manner that is consistent with its own view. Thus Hirsch can recast his argument from charity to show that both sides are most charitably interpreted as assigning different intensions to the sentence 'Fs are fundamental,' such that each side's claim comes out true in its own language.

Second, Hirsch admits that if we had some reason to expect ontologists to change their use of expressions like 'fundamental' and retract their prior utterances, then it might be charitable to interpret ontological disputes as being nonverbal. However, Hirsch argues that once a dispute reaches a certain stage, there is a presumption in favor of being more charitable to the disputed claims, rather than each side's claim that their dispute is nonverbal. He says:

Lewis (1983) points out that a stage seems eventually to be reached in ontology when "all is said and done," when "all the tricky arguments and distinctions and counterexamples have been discovered," so that each position has achieved a state of "equilibrium" (p. x) ... Prior to this stage, if an endurantist, say, is disposed to change her mind in response to some perdurantist arguments, then charity to use may favor interpreting her language as P-English, so that the change of mind is deemed reasonable and her earlier judgement deemed mistaken. But after the "all is said and done" stage has been reached, there is nothing to be said but that each side speaks the truth in their own language. (Hirsch 2010, p. 231)

Hirsch's point is that when two parties disagree about some sentence S, we might initially be more charitable to the claim that their dispute is nonverbal than we are regarding their claims about the truth of S. However, once 'all the tricky arguments have been made,' if the dispute

persists as a stalemate, we might think the only remaining culprit that could possibly explain their disagreement is that each side associates a different intension with S, such that each side speaks truly relative to its own intension.

This point certainly seems to apply to the earlier example about the appletini. When Marc and Laura disagree about whether the appletini is a martini, we might initially think that their dispute is nonverbal; we might suspect that both parties associate the same intension with 'martini,' but that one side is mistaken about the contents of the drink on the table. However, if both parties are still reluctant to retract their initial position after reaching the 'all is said and done' stage, once it is clear that both parties know that the drink contains vodka and apple liquor, then it would seem that there is little else, beyond Marc's and Laura's use of language, that can explain their disagreement. In this case, our most plausible explanation for the persistent disagreement is that Marc and Laura associate different intensions with 'martini' such that each person speaks truly relative to their own intension, making the dispute a verbal one.

Hirsch thinks that ontological disputes are similar. He holds that although ontologists appear to agree, for example, that objects like temporal parts exist only if temporal parts are fundamental, their persistent disagreement about the latter suggests that both parties associate different intensions with the sentence 'temporal parts are fundamental.' Thus, because ontologists use expressions like 'fundamental' in a manner that is consistent with their own view, and because the 'all is said and done' stage suggests that ontologists will not change their linguistic behavior in the future, Hirsch maintains that his interpretation is indeed the most charitable one.

3.3 General Strategy

In the next section I aim to explain both why ontological disputes are nonverbal and why we should expect them to reach the ‘all is said and done’ stage even though they are nonverbal. I will first make two preliminary points. First, I suspect that many philosophers would argue that ontological disputes have not yet reached the stage where ‘all is said and done.’ After all, there are still active ontologists and Hirsch provides no evidence for the claim that ‘all of the arguments and counterexamples have been given.’ For present purposes I will set this worry aside and suppose that ontological disputes have in fact reached this stage. Rather than negotiate the conditions for a dispute’s having reached the ‘all is said and done’ stage, I will argue that ontological disputes, as they actually are, are not verbal disputes. However, my arguments could be reconstructed to support the claim that ontological disputes haven’t reached the stage where ‘all is said and done’ after all.

Second, in the next section I argue that we should expect ontological disputes to reach the ‘all is said and done’ stage because these disputes are explicable in terms of clearly nonverbal disagreements about ancillary claims. Furthermore, these ancillary disagreements are about difficult issues, perhaps even unknowable truths, such that we might expect them to persist indefinitely as stalemates. Thus we should expect the ontological disputes based on these ancillary disagreements to persist as stalemates as well.

In general, when a dispute is explicable in this way, we ought to be more charitable to each side’s insistence that their dispute is nonverbal, even if it requires us to interpret at least one side as being wrong about the disputed claim. Consider, for example, the disagreement among climate scientists about how much the global temperature would increase in scenarios with high greenhouse gas emissions. Predictions about global temperature change are made using

Representative Concentration Pathway (RCP) models. While the RCP 8.5 predicts that in such a scenario the global temperature would rise 5-6°C by the year 2100, under similar parameters the RCP 6 predicts that the temperature would only rise 3-4°C (Riahi 2007, Hijoka 2008).

Imagine an RCP 8.5-theorist and an RCP 6-theorist who disagree about the claim ‘In a high emissions scenario the global temperature would rise more than 4°C.’ In this case, we might interpret each side as speaking the truth in its own language; we might say that the RCP 8.5-theorist is making a claim that is true in possible worlds where the RCP 8.5 predicts that the global temperature will rise more than 4°C, and that the RCP 6-theorist, who denies the disputed sentence, is making a claim that is false in possible worlds where the same prediction is made by the RCP 6. But this interpretation clearly misses the mark. These scientists disagree about the real global temperature change in high emissions scenarios. They are not making trivially true claims about what their respective models predict. Even if they reach the ‘all is said and done’ stage, the primary dispute is explicable in terms of a clearly nonverbal ancillary disagreement about which RCP model is better suited to make predictions about global temperature change. In fact, assuming that both models are well motivated, we should expect the disagreement about global temperature change to persist into the ‘all is said and done’ stage, even though it is a nonverbal dispute.

This example shows that if we can explain why a dispute has reached the ‘all is said and done’ stage by explaining it in terms of some clearly nonverbal ancillary disagreement, then we ought to interpret the primary dispute as being nonverbal. In the next section I argue that ontological disputes are more like the example about global temperature change than the martini case. I present two examples of ancillary disagreements that explain why ontologists are so reluctant to agree about which entities are fundamental, and argue that once we appreciate how

these ancillary disagreements generate competing ontological theses, we have good reason to be more charitable to ontologists' claims that their disputes are nonverbal than their claims about which entities exist. In each of the disputes Hirsch targets, I argue, we should interpret disputant ontologists such that at least one side makes false existence assertions, even if we cannot know which side is making such false claims.

4 EXPLAINING ONTOLOGICAL DISAGREEMENT

Although ontologists claim to be engaged in nonverbal disputes about which entities are fundamental, I suspect that Hirsch's lack of charity towards this claim stems, in part, from the fact that few philosophers have given an explicit characterization of what it means for an entity to be 'fundamental.' In fact, Sider (2011) argues that the notion is primitive and thus resists precise analysis. Chalmers (2011) is also open to this idea, suggesting that the notion may very well be a 'bedrock concept,' one that is essential to our conceptual framework, but unanalyzable. However, Lewis (1999) comes the closest to giving a straightforward characterization. He suggests that the fundamental entities are those entities posited by our best theory of fundamental properties, where the latter is a theory that provides a "minimal basis for characterizing the world completely" (p. 12).

While few ontologists explicitly endorse this characterization, many seem committed to it. Their commitment is revealed by the argumentative strategies, or what Hájek (forthcoming) calls the 'philosophical heuristics,' that make an appearance in ontological disputes time and time again. For example, in each of the ontological disputes that Hirsch targets, one side will adopt an eliminative ontology, one that does away with many of the objects posited by their opponents, while the other side will adopt a permissive ontology, one that includes an abundance of objects. The eliminative side will argue that their ontology is best because it is *simpler* than their opponents', but equally informative. The permissive side will reply that the eliminativist's ontology is *insufficiently informative*; the eliminativist just doesn't have enough objects to account for all of the phenomena needed to 'characterize the world completely.'

One worry is that ontological disputes are merely the product of philosophers' assigning different weights to the virtues of simplicity and informativeness. As Hájek puts it, "there may

be more than one reasonable way to trade off simplicity against informativeness. Different standards for balancing [these virtues] may yield different theories as the winner of the Lewisian competition” (p. 11-12). If this were the primary source of ontological disagreement, it would seem to support Hirsch’s interpretation. We might charitably interpret the eliminative side as making true claims about which entities are fundamental_E, where an entity is fundamental_E if it is posited by a theory that is both simple and informative, with more weight placed on simplicity. And we might interpret the permissive side as making true claims about which entities are fundamental_P, where an entity is fundamental_P if it belongs to a theory that is simple and informative, with more weight placed on informativeness.

However, I think that ontological disputes are not merely the product of assigning different weights to the two virtues. After all, both eliminative and permissive ontologists are burdened with being informative enough to offer a complete characterization of the world. Furthermore, eliminativists argue that their ontologies are just as informative as their opponents’. Instead, the key sources of ontological disagreement are nonverbal ancillary disagreements about which phenomena must be accounted for in order to completely characterize the world. In what follows I consider two examples, which relate to whether or not certain intrinsic properties are needed to fully characterize how objects change over time and how we can solve the new riddle of induction.³ I argue that these disagreements reveal that disputant ontologists are most charitably interpreted as assigning the same intensions to sentences of the form ‘Fs exist’ or ‘Fs are fundamental,’ making the ontological disputes about these sentences nonverbal.

³ These certainly aren’t the only examples of ancillary disagreements that generate ontological disputes. For example, many ontologists will agree that the fundamental entities are those that have causal powers. They will then appeal to different views of causation to motivate their respective views (for two examples, see Merricks 2001 and Lewis 1973).

4.1 How Can We Explain Intrinsic Change Over Time?

The first example of an ancillary disagreement that explains an ontological dispute relates to the dispute about whether temporal parts exist. Lewis (1999), in his ‘argument from temporary intrinsics,’ argues that we must posit temporal parts in order to explain why some changes that affect an object are intrinsic, while others are extrinsic.

For example, imagine that Marc has a seafood allergy. At some time t_1 Marc enjoys a bowl of clam chowder in the kitchen. As one might expect, at some time later t_2 Marc becomes very ill and moves to the restroom. In this scenario Marc undergoes two changes: From t_1 to t_2 Marc transitions from being in a healthy state to being in a sick state, and he transitions from being in the kitchen to being in the restroom. Intuitively, the change in Marc’s health is an intrinsic change; it doesn’t depend on the time or place where the change occurred. By contrast, Marc’s change of location is obviously extrinsic.

The perdurantist will be able to characterize the difference between these two changes. They can say that one of Marc’s temporal parts, his part at t_1 , has the intrinsic property of *being healthy* and the extrinsic property of *being in the kitchen*, and that another one of Marc’s temporal parts, his part at t_2 , has the intrinsic property of *being sick* and the extrinsic property of *being in the restroom*. The endurantist, however, will find it more difficult to characterize Marc’s change in health as an intrinsic change. For fear of contradiction the endurantist can’t simply say that Marc is both healthy and sick. Instead, they must say that Marc has the properties of *being healthy at t_1* and *being sick at t_2* . But both of these properties make reference to a particular time and are therefore extrinsic properties. So, Lewis argues, the endurantist is unable to explain why Marc’s change in health, unlike his change in location, was an intrinsic change.

Endurantists will deny that we need to distinguish intrinsic and extrinsic changes in order to characterize the world completely. They will insist that once we've characterized what Marc is like at every time where Marc exists, we have characterized Marc completely.

Here we see an example of an ontological dispute that is explained in terms of an ancillary disagreement about the following question: Do we need to explain why some changes are intrinsic, while others are extrinsic, in order to characterize the world completely? It's hard to see how this disagreement could be merely verbal. If one thinks the difference must be explained, then they ought to favor perdurantism. Alternatively, if one thinks the intrinsic-extrinsic distinction is no big deal, then *ceteris paribus* there is a default presumption in favor of the endurantist's simpler ontology. Even if we cannot know which side is right, we can know that at least one side is wrong. In this case, it is most charitable to interpret endurantists and perdurantists as assigning the same intensions to sentences like 'temporal parts exist,' an intension that is true if the intrinsic properties of temporal parts are needed to explain the difference between intrinsic and extrinsic change. Thus, if we interpret one side as speaking truly, then we must interpret the other as making a false claim. Either way, we cannot interpret the dispute as being verbal.

4.2 How Can We Solve the New Riddle of Induction?

The second example of a dispute-explaining ancillary disagreement builds on the previous one. Some philosophers think that we can solve Goodman's (2000) new riddle of induction by appealing to the intrinsic-extrinsic distinction. This solution, however, will be unavailable to eliminative ontologists like endurantists and nihilists. If this solution is required to explain why

induction works, then eliminative ontologies are insufficiently informative to characterize the world completely.

Let us first consider Goodman's riddle: Common sense tells us that if we observe many emeralds and find that every one of them is green, then we have a good inductive reason to expect the next observed emerald to be green. However, in such a scenario, each observed emerald also has the property of *being grue*: That is, *being green and observed before today, or being blue and observed today or later*. Thus, it appears, we have just as much inductive reason to expect the next emerald to be grue (which, if observed today or later, consists of *being blue*). How then can we justify the intuition that greenness is somehow more eligible for inductive reasoning than grueness? One solution to the riddle, from Lewis, appeals to the idea that *being green* is a more natural property than *being grue*. For Lewis, intrinsic properties are, in general, more natural than extrinsic ones. Thus one can appeal to the fact that an emerald's *being green* is an intrinsic property, whereas an emerald's *being grue* is an extrinsic one (it depends on the time and place at which the emerald exists), to justify the common sense intuition.

Lewis' proposed solution to the new riddle is unavailable to eliminative ontologists (as far as I know, he never gives the following argument himself, but it follows naturally from his views). For example, suppose that every time Marc has eaten seafood in the past, he has become ill. Common sense tells us that Marc will become ill again the next time he eats seafood. However, because the endurantist does not posit temporal parts, they will only be able to characterize these occurrences in terms of Marc's *eating seafood and becoming ill at times $t_1 \dots t_n$* (where t_n is the present time). One could then construct a grue-like property, such as *eating seafood and becoming ill prior to t_n or eating seafood and remaining healthy after t_n* , and argue that we have just as much inductive reason to expect Marc to remain healthy the next time he

eats seafood. The endurantist will not be able to appeal to the intrinsic nature of Marc's illness in order to privilege the properties that common sense tells us are better suited for an induction than the grue-like property just mentioned. If one must appeal to the intrinsic nature of certain properties to solve the new riddle of induction, then endurantism is unable to provide an adequate account of inductive justification.

The mereological nihilist will face a similar challenge. Using Goodman's original example about emeralds, the nihilist will only be able to characterize the greenness of emeralds in terms of some property that supervenes on simples arranged emeraldwise. However, this will be some property that purports a relationship among a collection of simples, and is therefore extrinsic (it depends, not on what any particular simple is like, but how the simples stand in relation to one another). Thus the nihilist will be unable to contrast the intrinsic nature of observed emeralds' greenness with the extrinsic nature of observed emeralds' grueness in order to say that the former, but not the latter, is better suited for inductive reasoning.

In this example, eliminative and permissive ontologists disagree about the following pair of questions: Do we need to solve the new riddle in order to characterize the world completely? And, must we appeal to the intrinsic properties of temporal parts/composite objects in order to do so? The permissive ontologist will say 'yes' on both counts, while the eliminativist must say 'no' to at least one. Again, it's hard to see how this ancillary disagreement could be verbal. Induction is either justified or it isn't, and if so, intrinsic properties are either required to make sense of this justification or they aren't. Our ability to show how this sort of disagreement can explain ontological disputes suggests that we should, once again, interpret each side as assigning the same intensions to sentences like 'temporal parts exist' or 'some composite objects exist.' For both parties, these sentences are true if it turns out we must characterize temporal parts or

composite objects in terms of their intrinsic properties in order to explain what justifies induction.

4.3 How the Ancillary Disputes Explain Ontological Disagreement

The key premise in Hirsch's argument is that ontologists are most charitably interpreted as assigning different intensions to the sentences they disagree about, such that each side should agree that the other speaks truly in its own language. According to Hirsch, when the nihilist says 'there are some simples arranged tablewise,' they utter a sentence with the same intension as their opponent's utterance 'there are tables.' When the endurantist says 'the table is F at t,' they utter a sentence with the same intension as the perdurantist's utterance 'the table has a temporal part (the part that exists at t) that is F.' The ancillary disagreements above, however, reveal at least one source of inadequacy in Hirsch's proposed translations. The properties that supervene on collections of simples, and the properties that characterize what an object is like at a given time, must be extrinsic properties. By contrast, some of the properties that can be attributed to tables and temporal parts are intrinsic.

The ancillary disagreements we've just considered suggest two reasons why it is important to distinguish intrinsic from extrinsic properties. It might be the case that only intrinsic properties can be used to explain cases of apparently intrinsic change over time. It might also be the case that intrinsic properties are needed to justify induction.

On one hand, if these are features of the world that must be accounted for in order to characterize the world completely, then we can charitably interpret eliminative ontologists as producing false utterances when they say 'there are no tables' or 'there are no temporal parts.' In this case, it would be perfectly reasonable to interpret eliminativists as being mistaken about

what exists, because their mistake is explicable in terms of the fact that they underestimate the significance of certain intrinsic properties.

On the other hand, if change over time and induction can be wholly explained without appealing to these intrinsic properties, then we can charitably interpret permissive ontologists as producing false utterances when they say ‘tables exist’ or ‘temporal parts exist.’ Again, it is perfectly reasonable to interpret permissive ontologists as being mistaken, because their mistake is explicable in terms of the fact that they overplay the significance of the intrinsic properties of tables and temporal parts.

Not only can we explain how the ancillary disagreements generate ontological disputes, but we can also explain why we should expect the ontological disputes to reach the ‘all is said and done’ stage. We should have this expectation because the ancillary disagreements are plausibly disagreements about hard to know, or perhaps unknowable, truths. For example, we can never be certain that induction is justified, because we can always entertain the hypothesis that the future will not resemble the past. And yet, unless we have an experience that falsifies some of our most strongly held inductive expectations (like the discovery of a blue emerald), we will never have a good reason to think that induction isn’t justified. If it turns out that we cannot know which side of the ancillary disagreements is correct, then we should expect the same epistemic limitation when it comes to the ontological disputes.

It’s worth clarifying the sense in which ontological truths might be unknowable. Ontologists seem to agree that it is unlikely that these disputes will be resolved by the discovery of some new empirical evidence. Rather, if these disputes are to be resolved at all, it must be due to some clear a priori argument for why a particular ontological thesis is the simplest theory that is sufficiently informative to characterize the world completely. Yet in the absence of such an

argument, ontologists nonetheless believe that there is a fact of the matter about which ontology best meets the theoretical virtues of simplicity and informativeness. It simply might be the case that human beings are not the sorts of creatures that can determine which ontology this is. Hence, the ‘all is said and done’ stage offers a positive reason for the unknowability of ontological truths, rather than evidence that ontological disputes are unknowable. For example, Bennet (2009), while arguing that ontological truths are unknowable, says that the lesson we should take from the persistence of ontological disagreement is ‘not that work on the metaphysics of material objects is pointless, but rather that *we have more or less done it already*’ (p. 73).

Whether or not ontological truths are unknowable, they are at the very least difficult to know. As a result, we should expect ontological disputes to reach the ‘all is said and done’ stage, even though they are not verbal. Thus Hirsch’s appeal to the ‘all is said and done’ stage fails to show that ontological disputes are verbal.

5 WHY ONTOLOGICAL DISPUTES CAN'T BE VERBAL

The discussion above shows how ontological disputes can turn on questions about the explanatory value of intrinsic properties. In this section, I consider a potential objection. Hirsch might insist that in order to show that the ancillary disagreements are nonverbal we must be able to show, through charity, that ontologists are best interpreted as assigning the same intensions to sentences like 'intrinsic properties are needed to explain change over time.' He might argue that because ontologists use these sentences in a manner that is consistent with their own views, these ontologists are most charitably interpreted as speaking truly in their own languages, making the ancillary disagreements themselves merely verbal. If correct, this point would undermine the argument in the previous section. We cannot explain why ontological disputes are nonverbal by showing that they turn on ancillary disputes, if it turns out that the ancillary disputes are verbal.

In response to this objection I argue that even if the ancillary disagreements are verbal, we can only interpret them as being verbal by rejecting an assumption implicit in ontologists' existence assertions. Ontologists assume that sentences of the form 'Fs exist,' if true at all, must be true in virtue of some feature that makes their disputes nonverbal. If so, then whatever set of facts makes each side correct in the ancillary disagreement cannot play the role needed to make ontologists' existence assertions true. Furthermore, I show that ontologists hold that the truth conditions for an entity's being fundamental cannot be wholly understood through ontologists' use of language. If, as Hirsch suggests, ontological terminology must be apprehensible through charity, then 'being fundamental' is most charitably interpreted as failing to refer to any property at all. I argue that these points show that, if the ancillary disagreements are verbal, then we ought to interpret ontologists' positive existence assertions as false, making their disputes nonverbal.

5.1 Stipulating that a Dispute is Nonverbal

Let's take stock of some of the claims that ontologists are committed to about their own disputes. Recall that ontological disputes proceed from the assumption the world's structure includes some feature that determines a uniquely privileged set of fundamental entities. These ontologists characterize this feature in terms of its explanatory role; it determines which entities provide a minimal basis for characterizing the world completely. Furthermore, ontologists insist that their disputes are nonverbal. That is, they believe that it is in virtue of this feature that both sides of the ontological disputes are best interpreted such that at most one side speaks truly. Ontologists tell us that the truth of sentences like 'Fs exist' depends on the existence of such a feature; 'Fs exist' is true only if 'Fs' successfully refers to some entities included in the privileged set of entities.

The problem for Hirsch is that if he interprets the ancillary disagreements as being verbal, then he must deny the existence of the very feature needed to make ontologists' existence assertions true. If we say that both sides speak truly when they disagree about which entities are required to characterize the world completely, then we must deny that their utterances are true in virtue of some feature that makes it the case that at most one side of the ontological disputes is best interpreted as speaking truly. But ontologists stipulate that their existence assertions, if true at all, must be true in virtue of some feature that plays both the role of determining what entities are needed to characterize the world completely and the role of yielding a unique victor in the ontological disputes. Furthermore, in addition to the fact that ontologists explicitly say that the truth of their existence assertions depends on their disputes being nonverbal, this commitment is revealed by each side's linguistic behavior. To reiterate a point from section three, the very fact

that ontologists refuse to accept Hirsch's interpretation is evidence about their linguistic behavior that supports an interpretation that makes ontological disputes nonverbal.

In other words, ontologists are able to make their disputes nonverbal simply by stipulating that any interpretation that makes ontological disputes verbal is inadequate. Recall that Hirsch's objection to ontologists' attempt to show that their disputes are nonverbal by appealing to notions like 'being fundamental' was that each side uses these expressions in a manner that is consistent with its own view. He writes:

This is evidently less an explanation than an invitation to accept "logical joints" and "*Existence*" as primitive notions. Can they be explained ostensively, by citing examples? Apparently not, since there is no agreement on what the examples are. I think one must feel some skepticism about the intelligibility of an allegedly primitive notion when there is no agreement as to what examples come under the notion. (p. 234)

However the same cannot be said for ontologists' insistence that their disputes are nonverbal. Unless ontologists use language quite differently from the rest of us, they would surely agree about many paradigm cases where a sentence like 'S is true in virtue of some feature that makes disputes about S nonverbal' is true or false. For example, in the martini case, we said that Laura's claim 'There is a martini on the table' is true in virtue of the fact that there is a drink containing liquor in a V-shaped glass on the table. Given that Marc assigns a different intention to 'There is a martini' than she does, it is clear that her utterance is not true in virtue of some feature that makes their dispute nonverbal. Similarly, in the case about global temperature change, for whichever side is correct about the truth of 'In a high emissions scenario the global temperature will rise more than 4°C,' it is clear that their claim *is* true in virtue of some feature that makes their dispute nonverbal.

Because there are so many contexts where we would expect ontologists to agree with one another about the truth or falsity of sentences of the form ‘S is true in virtue of some feature that makes disputes about S nonverbal,’ it seems that Hirsch should charitably interpret ontologists as assigning the same intension to the claim ‘‘Fs exist’ is true only if it is true in virtue of some feature that makes our dispute nonverbal.’ Thus, in order to interpret an ontologist as speaking truly when she says ‘Fs exist’ Hirsch must either deny that she is correct about her own characterization of the truth conditions for ‘Fs exist’ (a gross violation of charity) or else admit that it is also true in her language that ‘there is some feature that makes ontological disputes nonverbal.’

In order to maintain that ontological disputes are verbal, Hirsch’s last recourse is to say that his view is consistent with the truth of ‘there is some feature that makes ontological disputes nonverbal’ in the ontologist’s language. But, again, this interpretation is also uncharitable. In most cases, Hirsch plausibly uses the sentence ‘There is some feature that makes dispute D nonverbal’ just like ontologists do (the martini case and the dispute about global temperature change would be two examples). Thus, the principle of charity gives us every reason to suppose that ontologists assign the same intension to ‘there is some feature that makes ontological disputes nonverbal’ as Hirsch does. In other words, because ontologists stipulate that their disputes are nonverbal, and because they reject Hirsch’s interpretation, we have strong reason to think that it is uncharitable to interpret these ontologists as engaging in verbal disputes.

5.2 Beyond Charity

Another reason to reject Hirsch’s interpretation is that ontologists explicitly say that they do not think that the intensions they assign to sentences like ‘Fs exist’ are wholly revealed by

ontologists' use of language. In a response to Hirsch, Sider (2009) suggests that we might need to apply some principle of linguistic interpretation beyond charity to determine the truth conditions for ontologists' existence assertions. In considering what information an ideal interpreter would need to interpret ontologists' existence assertions, Sider says:

[An interpretation like Hirsch's] is a *mis*interpretation of my words, but if the ideal interpreter has only the facts of use to go on, nothing will tell her this. So, what else beyond my use of words must the interpreter consult? Lewis's answer is: the facts of naturalness. Other things being equal, the ideal interpreter must assign natural properties and relations to my predicates (p. 400).

Without offering any precise analysis of 'the facts of naturalness,' we can say that these are the facts that are, in part, picked out by the theoretical virtues of *simplicity* and *informativeness* discussed earlier. The relevant point is that ontologists hold that one cannot adequately interpret their existence assertions merely by relying on their linguistic behavior.

Ontologists' insistence that charity is not the best principle for interpreting their utterances presents a dilemma for Hirsch. On one hand, he can concede that there are other relevant principles that must be considered when interpreting ontologists' utterances. But in this case, his argument from charity fails to show that ontological disputes are verbal. Even if ontologists are most charitably interpreted as speaking the truth in their own languages, if it turns out that the most charitable interpretation is not the best one, then it does not follow that ontological disputes are best interpreted as being verbal.

On the other hand, Hirsch might stick to his guns and insist that the intensions that ontologists' assign to their existence assertions must be revealed by their use of language. However, in this case, ontologists' positive existence assertions are most charitably interpreted as

being false. Again, the fact that ontologists deny that charity is the only relevant interpretive principle for interpreting expressions like 'Fs are fundamental' is evidence about their linguistic behavior that must be considered when interpreting them charitably. If charity is the only relevant interpretive principle, then we should understand 'fundamental' as expressing a defective notion; it doesn't refer to anything. After all, it would follow that ontologists have introduced the expression 'fundamental' by stipulating that its intension can only be understood by appeal to an illegitimate principle of linguistic interpretation. In this case it does not follow that ontological disputes are verbal. Instead, sentences like 'Fs are fundamental,' and in turn 'Fs exist,' should be interpreted as false because 'fundamental' fails to refer to a property that has any instances.

6 CONCLUSION

In this thesis I argued that there is no plausible way to interpret the ontologists Hirsch targets as engaging in verbal disputes. I considered Hirsch's argument from charity, which says that many ontological disputes are best interpreted as being verbal because ontologists' linguistic behavior suggests that each side is most charitably interpreted as speaking the truth in its own language.

I demonstrated that Hirsch's interpretation is less charitable than it seems because it requires us to be uncharitable to ontologists' insistence that their disputes are nonverbal. Hirsch suggests that this uncharitable consequence is acceptable given that ontological disputes appear to have reached the stage where 'all is said and done.' However, I argued that if ontological disputes are explicable in terms of some clearly nonverbal ancillary disagreement, then we should expect the ontological disputes to reach this stage even though their disputes are nonverbal.

I then presented two examples of ancillary disagreements about the explanatory value of intrinsic properties, and showed how these disagreements explain the ontological disputes Hirsch targets. I argued that if the ancillary disagreements are nonverbal, then we ought to interpret the ontological disputes as being nonverbal as well. I also argued that in order to interpret the ancillary disagreements as being verbal, one must reject a basic assumption implicit in ontologists' existence assertions; in which case we must interpret ontologists' positive existence assertions as being false. Taken together these arguments rule out any plausible ways to interpret both sides of the ontological disputes as speaking truly. For these reasons I conclude, not only that Hirsch's argument from charity fails to show that the ontological disputes are verbal, but that

there is no plausible way to interpret these as verbal disputes. Therefore, the ontological disputes Hirsch targets are best interpreted as nonverbal disputes about which entities are fundamental.

The arguments in this thesis are intended to appeal to readers with a variety of views about the importance of ontological disputes. Those readers who are already convinced that there is progress to be made in ontology will likely be unmoved by Hirsch's argument. They will plausibly deny that ontological disputes have reached the stage where 'all is said and done.' However, for those readers who are pessimistic about ontological progress, I have argued that even if the ontological disputes Hirsch targets are utterly misguided in some way, it is not because these disputes are verbal. In fact, I argued that much of the evidence Hirsch cites in favor of his position actually provides more support for the view that ontological disputes are either about unknowable truths or about a defective notion. So, even if pessimism is justified by the unknowability or incoherence of ontologists' existence assertions, it still follows that ontological disputes are not verbal.

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