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# GROUNDING THE FREE LUNCH:

# CAN GROUNDING THEORY ESCAPE ONTOLOGICAL COMMITMENT?

by

Sara Copic

A Thesis Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

in Philosophy

at

The University of Wisconsin-Milwaukee

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# ABSTRACT GROUNDING THE FREE LUNCH: CAN GROUNDING THEORY ESCAPE ONTOLOGICAL COMMITMENT?

by

Sara Copic

The University of Wisconsin-Milwaukee, 2014 Under the Supervision of Professor Joshua Spencer

Many ordinary claims seem to straightforwardly entail ontological commitment to problematic entities, such as numbers and properties. If our ordinary claims or commonplace truisms are indeed ontologically committing, it looks like any plausible theory—that is, any theory that accepts these claims—will fail to be ontologically parsimonious, and any parsimonious theory will be implausible. I argue against four ways to resolve this tension, and focus primarily on the solution invoking *grounding*. I show that the grounding solution rests on a new conception of ontological parsimony that pries existence and ontologically commitment apart. I argue that this conception fails to differentiate between theories that are otherwise on a par, but between which there remains a salient difference. Therefore, the conception fails as a theoretical virtue. Now, grounding can no longer resolve the tension. I thereby undermine one motivation for positing the grounding relation in the first place—its purported ability to resolve this tension. © Copyright by Sara Copic, 2014 All Rights Reserved

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V

# **0.** Introduction

Are there properties? Are there numbers? Are there things with proper parts? We go through life asserting willy-nilly that there *are* prime numbers between 4 and 10, or that cats and dogs share *some* common properties. These are just mathematical and biological commonplaces, after all. Now, the truth of such ordinary claims seems to straightforwardly entail ontologically committing conclusions (e.g. that there are numbers, that there are properties). Yet, the desire for ontological parsimony (OP) drives some philosophers to deny that many things we ordinarily talk about exist.<sup>1</sup> Problem: If our ordinary claims or commonplace truisms are indeed ontologically committing, it looks like any plausible theory—that is, any theory that accepts them—will fail to be ontologically parsimonious, and any parsimonious theory will be implausible (insofar as it rejects our ordinary claims). While we have no reason to flat out deny the possibility of attaining ontological parsimony while accepting our ordinary claims, this possibility is anything but firmly established.<sup>2</sup>

No need to panic, though! Even if our ordinary claims are true and the things they are about (e.g. numbers) exist, we can nevertheless escape ontological commitment to them—or so the grounding theorist would have it.<sup>3</sup> On this view, existence and ontological commitment diverge; even if a theory says that numbers exist, it need not be committed to them so long as the theory has it that they exist *in virtue of*, say, the existing concrete things. The aim is to get the best of both worlds: theories that are at once plausible (since our

<sup>1</sup> For instance, van Inwagen accepts the following rule of thumb: it would be better not to believe in abstract objects if we could get away with it. So, although we ordinarily talk about numbers and properties, it would be best if we found a way to reject that such things exist. If we accept this intuitive rule of thumb, then we are justified in pursuing theories constrained by it. See van Inwagen, "A Theory of Properties" (2004).

<sup>&</sup>lt;sup>2</sup> One of my starting assumptions will be that a plausible theory accepts our ordinary claims as true, though I will treat this as a defeasible assumption.

<sup>&</sup>lt;sup>3</sup> I have in mind the views put forth by Kit Fine in "The Question of Realism" (2001) and Jonathan Schaffer in "On What Grounds What" (2009). Their views differ in letter, but both Fine and Schaffer maintain something like a principle of ontological parsimony associated with grounding theory. I will flesh out how I understand this principle in section 3.

ordinary claims come out true) and ontologically parsimonious (since numbers, or propositions about them, are grounded—more on that later). What's more, grounding theorists take it that its ability to reconcile OP and ordinary claims gives us good reason to believe in the grounding relation. The thought is familiar: if a theoretical posit can solve an important problem—in this case, a problem of theory-building—then we should believe it exists.

In this paper, I will argue that there continues to be some reason to panic. I will show that grounding theory cannot give us the best of both worlds because the specialized notions of ontological commitment and parsimony on which the solution implicitly relies are flawed. Since OP is a theoretical virtue, it should (i) differentiate between theories that are on a par with respect to all other virtues but between which there remains a salient intuitive difference, as well as (ii) provide the criterion by which we can, in such a case, justifiably choose one theory over the other.<sup>4</sup> The grounding theorist's conception of OP, though, can neither distinguish between such theories, nor provide the basis for choosing between them. We should therefore give it up. Once we jettison this conception of OP, however, grounding theory can no longer drive apart existence and ontological commitment and thereby substantiate the view that some existence claims, though true, are ontologically innocent.<sup>5</sup> Moreover, my argument will undermine one motivation for believing in grounding—namely, that it solves the problem of building plausible and ontologically parsimonious theories. If the grounding relation is a good theoretical posit, we should believe in it for other reasons.

The paper will proceed in stages. I begin with some sample arguments in which an apparently ontologically problematic conclusion follows from an ordinary claim, after which

<sup>&</sup>lt;sup>4</sup> I argue for this claim in section 4.

<sup>&</sup>lt;sup>5</sup> Any proposition that x exists or that there is an x is an existence claim. Throughout the paper, I will accept that to say there is an x just is to say that an x exists. I will assume that the existential quantifier exhausts the meaning of both "exists" and "is". See van Inwagen (1998).

I highlight some problems with three candidate responses to such arguments. This will motivate us to pursue the grounding theorists' response. I then make explicit what I take to be the implicit conception of ontological commitment and parsimony on which this solution relies. Finally, I argue against the usefulness of this conception of OP, and defend my argument against some objections a grounding theorist might make.

# 1. The Problem and Some Problematic Solutions

The following arguments<sup>6</sup> demonstrate the connection between an ordinary claim and a *prima facie* ontologically committing one:

- 1. There is a prime number between 4 and 10.
- 2. Therefore, there are prime numbers.
- 3. Cats and dogs have some properties in common.
- 4. Therefore, there are properties.
- 5. My hand is a proper part of me.
- 6. Therefore, there are things with proper parts.

In each case, an ordinary claim appears to entail an ontologically committing conclusion. Insofar as a theory is plausible—insofar as it accepts our ordinary claims—it also seems committed to numbers, properties, and things with proper parts. Below, I lay out some candidate responses and their problems. While a thorough inquiry into these views lies outside the scope of this paper, we can motivate the grounding theorists' approach to the problem inasmuch as we want to avoid other, though perhaps not insurmountable, troubles.

I'll address four responses to these arguments:<sup>7</sup>

i. error theory, which rejects each premise for the sake of OP;

<sup>&</sup>lt;sup>6</sup> I borrow this type of argument from Schaffer (2009) and Fine (2001).

<sup>&</sup>lt;sup>7</sup> There are other responses available which I do not have the space to address. Notably, we might accept that the arguments are sound, but deny ontological commitment by positing a *truth-making* relation between the conclusion and some ontologically unproblematic things. See Cameron "How to Have a Radically Minimal Ontology" (2010).

- ii. ontological permissivism, which accepts soundness and ontological commitment at the cost of ontological parsimony;
- iii. paraphrase, which denies the inference to escape ontological commitment;
- iv. grounding, which accepts soundness but rejects ontological commitment.

I will treat the first two responses more quickly but will discuss the paraphrase view at some length.

Error theory sacrifices our ordinary claims to OP. To deny the premises (1, 3, and 5) outright is to dodge ontological commitment, but at the cost of denying the truth of almost any plausible ordinary claim. Some philosophers, notably Schaffer and Fine, take any outright denial of ordinary claims to reduce the theory that denies them to absurdity. While I think their position is too strong, the truth of our ordinary claims cannot be overturned merely for fear of abundant ontological commitments; surely our credence in there being prime numbers between 4 and 10 is stronger than that, and rightly so.<sup>8</sup>

Even if we had strong reason to deny our ordinary claims, the error theorist still carries several burdens. First, she must show that the falsity of our ordinary claims is no great loss. More precisely, she must show that a theory is no worse off in respect of explanatory power if it denies ordinary claims; we must be able to explain all of the phenomena that need explaining without quantifying over numbers, properties and composite objects. Second, the error theorist must explain how our assertions systematically connect to the world without undermining error theory itself. That is, she must explain how it is that we make assertions in systematic ways such that they are appropriate in some cases,

<sup>&</sup>lt;sup>8</sup> Schaffer (2011) p. 357; Fine (2001) p. 2. Williams, in "Requirements on Reality," (2011) articulates a related concern, arguing that what I've called ordinary claims are subject to revision *only* when it is rational to change one's belief that they are true. He writes, "The suggestion is not that it's impossible for anyone to rationally come to believe that there are no numbers. It's simply that *given my starting point* it's irrational for *me* to come believe there are no numbers—at least without much more impressive evidence than philosophy has so far provided," (p. 4).

but not in others, without undermining the view that these assertions are nonetheless false when appropriate. Error theory must also be shown to comport with our ability to employ apparently sound arguments to support conclusions that regularly lead to successful action. If we regularly use false ordinary claims to support action-guiding conclusions, it's natural to wonder what properties these claims have that allow us to rationally deliberate and act successfully.<sup>9</sup>

The second response, ontological permissivism, accepts the soundness of the arguments and ontological commitment but thereby sacrifices OP to our ordinary claims. Like error theory, this approach to the problem fails to resolve the tension between plausibility and parsimony. On this view, the truth of our ordinary claims forces us to accept all the entities they can be about; no plausible theories could be ontologically parsimonious. However, we should only choose between error theory and ontological permissivism when all hope is lost that our best theory can fulfill both desiderata.

# 1a. Paraphrase It All Away

Perhaps we can get plausible and parsimonious theories by accepting each premise but escape ontological commitment by blocking the inference to the ontologically problematic conclusion. One way to do that is to paraphrase the original premise into a new sentence, where the latter will not entail the ontologically problematic conclusion.<sup>10</sup> The idea is to "paraphrase away" all talk of properties, for instance, and thereby reveal that we can

<sup>&</sup>lt;sup>9</sup> Thanks to Joshua Spencer and Michael Liston for their helpful comments regarding error theory and the related linguistic problems.

<sup>&</sup>lt;sup>10</sup> There may yet be other ways to deny the inference. Jonathan Schaffer (2009) mentions two, p. 357. First, one might reply that the sense of 'is' or 'are' has shifted from 1 to 2. But Schaffer retorts, if that were the case then any adjective drop inferences would be invalid; one couldn't infer from 'there are blue tables' that 'there are tables', but one can, so there is no shift in the meaning of 'are'. Second, perhaps quantification is ontologically neutral. On this view, if a statement quantifies over numbers, it needn't be ontologically committed to them. Schaffer objects that, "the neutralist seems committed to the following unfathomable conjunction: 'Numbers do not exist, and there are numbers.'"

escape ontological commitment to them. We don't really mean that cats and dogs share some common properties when we say that they do; perhaps we only mean that they resemble each other in certain respects. As stated, the ordinary claims 1, 3, and 5 are ontologically misleading. Trouble sets in, though, when we try to carefully spell out just how they are misleading. There is a two-fold problem for the paraphrase view here: either the paraphrase expresses a different proposition than the original claim or it expresses the same one, and there are problems no matter what the answer is.<sup>11</sup>

If the paraphrase expresses a different proposition than the original sentence, it either fails to address the argument or it becomes a denial of ordinary claims in disguise. Although 'cats and dogs share some common properties' is false, the thought goes, there is a similar *true* sentence in the vicinity that does not quantify over properties. This view, however, may seem to fall prey to the same objections as error theory because our premises (1, 3, and 5) come out false.

In response, the proponent of paraphrase might argue as follows: when, for example, we use the sentence "the average American has 1.5 children" we do not thereby commit ourselves to the existence of some individual who satisfies the description "the average American" because we *know* that the sentence is just shorthand for something like "the quotient of the number of Americans divided by the number of their children is 1.5". We can even concede that the sentence "the average American has 1.5 children" is ontologically committing outside of its usual background context without giving up the view that our normal use of the sentence does not commit us to an average American. This is because the paraphrase view we are considering here has it that the two sentences express different propositions, but we use the one as a matter of convenience (when we really mean the

<sup>&</sup>lt;sup>11</sup> The following objections are due to Alston (1958).

other). Hence, the latter is a paraphrase of the former and reveals that quantifying over an average American was ontologically misleading. By analogy, then, we can replace the sentence "cats and dogs share some common properties" with "cats and dogs resemble each other in certain respects" and thus avoid commitment to properties.

Unfortunately, most cases where paraphrase is purportedly useful are *not* familiar in the way that our average American example is, and in such unfamiliar cases it becomes unclear what makes one sentence a paraphrase of the other. In the case of "the average American", the paraphrase works because we already know how we use this expression, and so interpreting it as ontologically committing to an individual who satisfies the description is a known mistake. However, we do not already know that "cats and dogs share some common properties" is used to mean what "cats and dogs resemble one another in certain respects" means, and the paraphrase view must offer an explanation as to why we (misleadingly) use one sentence to express a proposition that is actually expressed by a different sentence. Without such an explanation, the propositions may be wholly irrelevant to one another, and the paraphrase solution wholly unhelpful.

One might claim that the paraphrase expresses a different proposition than the premise with which we started while staying silent about the ordinary claim's truth or falsity. But, then the paraphrase becomes irrelevant again. We want to know whether "there is a prime number between 4 and 10" commits us to the existence of numbers—not whether some irrelevant claim does.

If, by contrast, the paraphrase expresses the *same* proposition as the original sentence, it becomes unclear why we should read the premise of the argument in one way rather than another. Since the proposition expressed by the original and the paraphrase is the same, either *both* sentences carry ontologically commitment to numbers, or *neither* does. Call

the naïve reading of sentence 1, "there is a prime number between 4 and 10" where there *is* a prime number, inflationary and its paraphrase deflationary. In order to successfully deny the inference from ordinary claim to ontologically committing conclusion, we must have a reason to believe that the proposition expressed by both readings is better represented by the deflationary sentence. The burden is on the proponent of paraphrase to give us this reason.

One paraphrase view does not fit so neatly into this dichotomy—a paraphrase that turns out not to express a proposition at all, and hence is not capable of being true or false. On this view, some of our ordinary claims merely appear to express proposition because of their surface grammar, so we can't infer the ontologically committing conclusions from them. For instance, emotivism in ethics has it that moral claims are not capable of being true or false. Hence, the following argument fails: Torturing cats for fun is wrong; therefore, it is a fact that torturing cats for fun is wrong. The premise is an ordinary claim, but it does not commit us to moral facts if it really expresses a sentiment instead of a proposition (since the former can't be true or false).<sup>12</sup>

This view is subject to a challenge exactly analogous to that which I lodged against the error theorist. The emotivist must explain how our ordinary (moral) claims are incapable of being true or false, but must account for our systematic and appropriate use of moral utterances in particular circumstances without undermining the view that these appropriate utterances are not true (but not false, either). The emotivist must also explain what makes the paraphrase a paraphrase of the original claim, since the case is unfamiliar in the way "the average American" case is not.

<sup>&</sup>lt;sup>12</sup> See Fine (2001), pp. 4-8.

One pragmatic reason to worry that paraphrase cannot succeed in widely cutting down the number of things in our ontology is that it can only work piecemeal. One may want to reject properties in favor of sets and simultaneously accept that composite objects exist. Hence, one might agree that talk of properties can be paraphrased away, but talk of composite objects cannot. Given that many such pairs of views are consistent, any method of paraphrase that treats all ordinary claims alike should be rejected. But, then we have reason to worry that the explanations for why one sentence is a paraphrase of another vary widely from case to case, making the practice of cutting ontological commitments via paraphrase too disparate to be useful.

We are now left with the grounding theorists' proposal, on which ontological commitment and existence diverge. According to Schaffer, questions of existence are trivial.<sup>13</sup> *Of course* numbers, properties, and composite objects exist; the interesting question is how they do—that is, what explains their existence.<sup>14</sup> (In undertaking this very project, I reject that those existence questions are trivial; that philosophers have meaningfully disagreed with regard to these matters should be enough to show that they are anything but trivial.) Although many kinds of things exist on Schaffer's view, he seems to suggest that there is room for *some* kind of ontological parsimony. This is why I say that grounding theory pries existence and ontological commitment apart: that properties exist, for example, is not enough to make them ontologically weighty; they don't "count" against one's theory as long as they are grounded.<sup>15</sup> Now, let's figure out what all this means.

<sup>&</sup>lt;sup>13</sup> Schaffer calls this ontological permissivism, and it is important to note that my use of the term is different; I use it to name a view on which there is no room for any conception of ontological parsimony, but I will show below that Schaffer does not reject OP altogether.

<sup>&</sup>lt;sup>14</sup> Schaffer (2009), p. 348.

<sup>&</sup>lt;sup>15</sup> See Schaffer (2009), p. 353.

### 2. Grounding, Basicness, and How to Get a Free Lunch

## 2a. Isolating Grounding

Kit Fine offers a helpful description of grounding. He writes, "We take *ground* to be an explanatory relation: if the truth that *P* is grounded in other truths, then they *account* for its truth; *P*'s being the case holds *in virtue of* the other truths' being the case."<sup>16</sup> A proposition P is grounded when another proposition Q explains why P obtains. I'll show what kind of explanation this is by way of examples from philosophy, and I'll introduce grounding against a backdrop of related metaphysical relations.

If grounding is to be uniquely useful, we must differentiate it from the following similar relations: reduction, supervenience, causation, and composition. I will treat each of these quickly. My task here is not to give an independent argument for grounding on the basis that it can do explanatory work the aforementioned relations can't, but rather to explain what grounding is; to avoid any confusion, this explanation requires distinguishing grounding from these other relations. Ultimately, grounding seeks to explain more than each of the others can do alone (but assessing whether grounding actually does is another matter).

First, consider reduction. If a proposition M reduces to a proposition P, then M is identical to P.<sup>17</sup> For example, we might think that *all it is* for the proposition (M) that my cat, Milo, is cute to hold is for the proposition (P) that Milo's parts are arranged thus and so to hold. Notice, however, that reduction is very similar to one interpretation of the paraphrase view, namely the view where the paraphrase expresses the same proposition as the original sentence. I criticized this conception of paraphrase on the basis that it's unclear why we

<sup>&</sup>lt;sup>16</sup> See Fine (2001), p. 15. Fine goes on to claim that grounding is the "ultimate" kind of explanation, and is the "tightest" connection between truths, but I'm not sure what to make of these claims. I prefer to elucidate through examples what kind of connection it really is, if it exists at all, and to remain neutral about its tightness or its being ultimate in some sense.

<sup>&</sup>lt;sup>17</sup> I follow deRosset in "Getting Priority Straight" (2010, p. 75) here by taking reduction to be an identity relation between facts or propositions.

should think the paraphrase better represents the proposition than the original sentence. Now, if "Milo is cute" expresses the *same* proposition as "Milo's parts are arranged in a certain way W", it becomes unclear why we should think P represents the world more perspicuously than M; we need a reason to "deflate" the proposition that Milo is cute, rather than to "inflate" the proposition that Milo's parts are arranged thus and so.

Most importantly for our purposes, a reductive claim may be informative, but it cannot be explanatory. If we want to explain *why* Milo is cute, we cannot do so by appeal to the fact that his particles are arranged thus and so, because this just *is*, according to reduction, the fact that he is cute. Yet, P seems like a good candidate to explain why M is the case. Since grounding is an asymmetric dependency relation between propositions, it can capture that M depends on P (or that M depends on *something*).

Second, I turn to supervenience. M supervenes on P just in case any time P obtains M obtains also.<sup>18</sup> So, that Milo is cute supervenes on the fact that Milo's parts are arranged thus and so when there is no possible world in which Milo's particles are arranged in *that* way but in which Milo is not cute. Supervenience is non-asymmetric, however, and hence fails to explain why M obtains. Kim writes that, "Supervenience itself is not an explanatory relation. It is not a 'deep' metaphysical relation; rather, it is a 'surface' relation that reports a pattern of property covariation, *suggesting the presence of an interesting dependency relation that might explain it.*"<sup>19</sup> So, while Milo's cuteness may supervene on the arrangement of his parts, this does not demonstrate anything about the asymmetric relationship between cuteness and arrangement. All we know from supervenience is that they "go together". At the same time, we think that one depends on the other in some way. In particular, we think cuteness most likely depends

<sup>&</sup>lt;sup>18</sup> Kim, "Concepts of Supervenience" (1984), my emphasis. See also, Karen Bennett, "Global Supervenience and Dependence" (2004).

<sup>&</sup>lt;sup>19</sup> See Schaffer (2009) p. 364 on Kim (1993).

on arrangement (importantly, it's doubtful that the fact that Milo is cute determines and explains the arrangement of his parts). This is so even for necessary co-existents, like Socrates and his singleton set; in any world where we find Socrates, we will always find his singleton, and vice versa—but Socrates is ontologically prior to his singleton set.<sup>20</sup> Grounding captures more than supervenience by identifying these asymmetric dependences between facts.

Third, grounding also differs from causation. Like grounding, causation is asymmetric and explanatory. Unlike grounding, it only has the resources to explain matters concerning material things or events. While we think the fact that Milo's cuteness can be explained by appeal to, say, the fact that his parts are arranged in a particular way, it's doubtful that his being cute is *caused* by the arrangement of his parts. For, it doesn't seem like Milo's being cute is a material thing or an event. Nevertheless, his being cute is not primitive, nor unexplainable, nor mysterious; since his being cute is explainable and causation cannot explain it, there must be another relation that can do the job.

Finally, consider composition. It might be said that the arrangement of Milo's parts explains his existence, for instance, because his parts compose him. But there are many other facts about Milo that are not readily explained by the composition relation, such as Milo's being alive, or his being hungry. For, there are many other things that are alive or that are hungry, but which are composed of very different parts in very different arrangements. The composition relation is not suited to explain various other facts about Milo apart from his existence. Grounding, on the other hand, aims to explain a variety of facts about Milo,

<sup>&</sup>lt;sup>20</sup> See Fine, "Guide to Ground" (2012) and Schaffer (2009). In this example, I have shifted from speaking of propositions to grounding entities (both concrete and abstract), but we can translate the example into the language of propositions. The proposition that Socrates exists is true only when the proposition that his singleton exists is true, and vice versa; but, we think the fact that Socrates exists grounds the fact that singleton Socrates exists, and *not* vice versa.

including facts about his existence and facts about his features.

# 2b. Examples of Grounding

Now that I've differentiated grounding from four neighboring relations, I'll turn to examples that show what grounding is.

First, when we ask why an action is moral or immoral, it appears we are asking what it is in virtue of which the action has the status it does, or what *grounds* its moral status. The kinds of answers we present to this question are telling. They suggest that the explanation of an action's moral status is a grounding explanation.

Note that we are not asking for a causal explanation. Indeed, the question 'What causes the moral wrongness of an action?' makes little sense—we don't really know how to start answering it because it's unlikely that wrongness (as opposed to wrong actions) can be caused. Even if morality supervenes on something else (e.g. utility), that it does so won't explain why some actions are moral and others are not. And, even if an action is composed of things such as an intention and a voluntary movement, these parts of the action would not be fit to explain what makes it morally wrong or obligatory. After all, the moral properties will not be parts of the action, but rather, features of it. So we can't look to composition to explain this. Finally, while facts about an action's moral status might reduce to other facts, it still makes sense to ask for an explanation of why some acts are forbidden, and others obligatory. Yet reduction cannot explain this. Hence, none of the other relations I have considered are fit to explain the dependencies we want to explain.

However, answers that invoke grounding abound. An action might be morally right because God commands it, or because it maximizes utility, or because it accords with the categorical imperative, or because it is permitted by principles no one could reasonably reject, etc. That God forbids an action, say, explains why the action is morally wrong, and that God commands it explains why it is obligatory; God's command grounds the action's moral status.

A second example: it seems plausible that biological facts depend on, or are grounded in, the facts of fundamental physics. The fact that my cat Milo is alive, say, is most likely grounded in the fact that various subatomic particles are colliding thus and so. Were they not moving and colliding in those ways, he would not be alive.<sup>21</sup> Milo's being alive metaphysically depends on the collision of certain particles in the region he occupies, at least in part.

However, it need not be the case that Milo's being alive *reduces* to the fact that subatomic particles in the Milo-region are colliding thus and so. It is plausible that facts of fundamental physics cannot capture what it is for something to be alive, but that it's nonetheless necessary for them to obtain in order for biological facts to obtain. In part, that is what it means for biological facts to be grounded in physical facts—the former are necessary for the latter. I take it that supervenience, causation, and composition also fail to explain the fact that Milo is alive for reasons analogous to the moral case.

The two examples I have given may seem disparate; the first points to a conceptual ground, perhaps, whereas the second points to a physical ground. I will assume that these are instances of the same phenomenon, and it is a virtue of grounding that the notion is applicable to a variety of cases. If grounding is to provide a systematic solution to the ontological problems our ordinary claims present we will need to assume that the same

<sup>&</sup>lt;sup>21</sup> Note that the converse is not true; the fact that Milo is alive does not ground the fact that particles in the Milo-region are moving and colliding. This could be the case in another possible world, but presumably the grounding claim that is plausibly true in the actual world does not hold there. Likewise, the physical facts could have obtained without the biological facts being the way they are; Milo's being alive does not require that the physical facts had been one way rather than another; that he's alive could have been grounded in his having a vital life force. This implies grounding is asymmetric, and I will assume this throughout. For a thorough treatment of the properties of grounding, see Kit Fine (2012).

explanatory relation is at play; for the aim is to exploit the ubiquity of grounding in order to dodge ontological commitment to many things (e.g. numbers, properties, things with proper parts) all at once.

The remainder of the paper will deal with grounding as a relation that obtains between propositions. Since this way of talking is not essential to my argument against grounding, it should apply just as well to a view on which grounding can obtain between concrete things, as Schaffer has it.<sup>22</sup>

#### **2c.** Basicness

Grounding theorists can only escape ontological commitment, as I hope to make clear below, if there is some end to the chain of dependent facts—if all grounded facts "bottom out" in something *basic*.

What it means for a proposition to be basic is that nothing grounds it, but that it grounds something else. For example, it's plausible that propositions about social and economic matters are partially grounded in propositions about individuals, which are grounded in propositions about mental states, which are grounded in biological propositions, which are grounded in propositions about chemistry, which in turn are grounded in the propositions of fundamental physics.<sup>23</sup> But if there are no further propositions that ground the ones of fundamental physics and yet the physical facts ground the rest, then the fundamental physics propositions are basic. Moreover, these are wholly

<sup>&</sup>lt;sup>22</sup> See Jonathan Schaffer, "Monism: The Priority of the Whole" (2010).

<sup>&</sup>lt;sup>23</sup> This is only one picture of how facts could be structured. Schaffer (2010) argues instead that the universe as a composite whole grounds the existence and features of all of its parts (or, to put it in terms of facts, one could have a view—though this is not Schaffer's view—that facts about the universe as a whole ground all the facts about its parts).

responsible for the holding of all of the social and economic facts—they provide the complete ground for the higher level facts.<sup>24</sup>

The propositions in which I am interested here are existence claims, since those are the ones causing our ontological problems. Now, if an existence claim is grounded, then its truth can be blamed on another proposition or set of propositions. The grounded existence claims are *due* to the basic propositions. In the section below I'll explain informally what this means for grounding and ontological commitment.

## 2d. How to Get a Free Lunch

The key move the grounding theorist makes in response to the arguments with which we started is this: so long as a proposition (e.g. 'there are prime numbers') is grounded, the entities it is about exist *without being an ontological burden in addition to whatever fully grounds the proposition*. Only the basic propositions determine that to which we are ontologically committed.<sup>25</sup>

Take the following passage from Jonathan Schaffer to illustrate the point: "The derivative [i.e. grounded] entities, in order to be an 'ontological free lunch' and count as no further addition [to being], ought to be already latent within the substances. In other words, the grounding relations should just be ways of separating out aspects that are implicitly present from the start."<sup>26</sup> Schaffer believes that entities flank the grounding relation rather than propositions and he takes substances to be basic, but the lesson is the same: if the grounded propositions are "implicitly present" or "already latent" in the basic ones, then the

<sup>&</sup>lt;sup>24</sup> There is still room, on this picture of explanation, for reduction of one fact to another. If, for instance, mental facts reduce to (i.e. are identical to) brain states, then brain states can still be grounded in microphysical goings on.

<sup>&</sup>lt;sup>25</sup> Note that grounding theorists deny that things can exist in different ways—existence is univocal (Schaffer 2009, p. 360). The suggestion that existence is not enough for ontological commitment is not substantiated by a contentious view about what it means for a thing to exist.

<sup>&</sup>lt;sup>26</sup> Schaffer (2009) p. 378.

entities over which the grounded propositions quantify are a free lunch; they are free in the sense that their existence can be wholly "blamed on" or attributed to the basic propositions.

Occasionally, the following metaphor is used to explain why basic propositions are ontologically burdensome, but the grounded existence claims are not: all God would have had to do to make the world is to make the basic facts obtain—all the rest would simply unfold from the basic.<sup>27</sup>

Here, my claim that a basic proposition must ground something else (as opposed to merely being an ungrounded proposition) plays an important role. While Schaffer and Fine do not make this assumption explicitly, I believe it is required in order to capture the sense in which the basic is ontologically weighty while the grounded is not. If there were some ungrounded propositions that ground nothing further, these would not let anything else unfold from them—nothing would metaphysically depend on them. Therefore, they could not do any ontological work.

# 3. Two Conceptions of Ontological Parsimony

Above, I suggested informally how the grounding theorist plans to escape ontological commitment. Here, I spell out more precisely what I take to be the principle of ontological commitment and parsimony implicit behind this line of argument. First, I introduce a familiar view of OP. I then present my own interpretation and defend it.

The familiar view is what I'll call the Quinean conception of OP.<sup>28</sup>

<sup>28</sup> While Quine's own view may have been much richer than the statement I am putting forth, I this conception of ontological parsimony is Quinean in spirit. See Quine, "On What There Is" (1948); also, van Inwagen, "Meta-Ontology" (1998) for a contemporary defense of Quinean ontological commitment; finally, see Schaffer (2009) for a similar reconstruction of Quine's view.

<sup>&</sup>lt;sup>27</sup> Schaffer (2009) p. 351.

# QOP:

- (i) A theory T is ontologically committed to Fs just in case T includes a statement S that existentially quantifies over Fs.
- (ii) A theory T1 is more ontologically parsimonious than T2 just in case T1 has fewer statements that existentially quantify over Fs, Gs, etc.

On this view, a theory's ontological commitments are exhausted by what the theory says there is. Recall that any statement that quantifies over an entity is an existence claim (e.g. 'there are properties' is an existence claim). According to QOP, deciding which theory among several is most ontologically parsimonious requires counting the number of nonredundant existence claims in each theory and seeing which one has the least number of these.

I propose that we interpret grounding theorists as holding a *new* conception of OP (NOP).

#### NOP:

- (i) A theory T is ontologically committed to Fs just in case it includes a statement S that existentially quantifies over Fs and S is basic according to T.
- (ii) A theory T1 is more ontologically parsimonious than T2 just in case T1 has fewer statements that are basic according to it than T2 has according to T2, where the statements existentially quantify over basic Fs or Gs, etc.

On this view, ontological commitment is *not* exhausted by what a theory says there is. Rather, a theory's ontological commitments are determined by what the theory says there is *and* by what it says about the status of its own existence claims, where the status is either basic or grounded; only when an existence claim is basic according to a theory is that theory ontologically committed to the entities the claim is about. It is important that the ontologically committing statements be basic *according to the theory of which they are a part.* Just as a Quinean shouldn't hold that a theory is ontologically committed to cats just in case there are cats (but rather, just in case a statement in the theory existentially quantifies over cats), likewise NOP should not state that a theory is ontologically committed to cats just in case the actually basic propositions quantify over cats. For, NOP would then be holding a theory's ontological commitments hostage to what really is basic. What we want instead is to use NOP to assess a theory's ontological commitments, which does not require appealing to facts about the world.<sup>29</sup>

I would like to motivate the way I have articulated NOP before I move on to assessing its efficacy in adjudicating between theories. NOP emerges as a plausible interpretation of the grounding literature. For instance, Schaffer seems to suggest NOP (i) when he argues that existence claims lose their ontological import as soon as we invoke grounding. Accordingly, he writes, "there is no longer any harm in positing an abundant roster of existents, *provided it is grounded on a sparse basis*."<sup>30</sup> This suggests that the sparse basis—that which is ungrounded but which grounds everything else, or what I've called a theory's basic statements—is the only ontologically burdensome part of a theory. Schaffer is claiming that what *makes* it unproblematic to posit many existents is their being grounded in the few basic entities. One reason to interpret Schaffer in this way is that he thinks

<sup>&</sup>lt;sup>29</sup> Louis deRosset understands grounding theorists to hold a principle he calls SPARSITY, which says: the number and variety of fundamental entities and kinds determine the ontological sparsity of the world. While I think deRosset is right in attributing SPARSITY to Schaffer and Fine, I don't think this principle can function as a conception of ontological commitment. SPARSITY is a view about what is really in the world, and not a view about what constitutes a theory's ontological commitments. I focus on how sparse a theory's commitments are, and not how sparse the fundamental basis is in *fact*. However, our interpretations are not really in tension with one another; mine is a natural interpretation of how grounding theorists determine a theory's commitments, and SPARSITY is a view about the sparse basis of the world. Schaffer and Fine could hold both. See deRosset (2010), p. 75.

<sup>&</sup>lt;sup>30</sup> Schaffer (2009) p. 353

grounding can make sense of the claim that some things are an ontological free lunch.<sup>31</sup> Schaffer also seems to endorse NOP (ii). He writes, "Occam's Razor should only be understood to concern substances: *do not multiply basic entities without necessity*." (Recall that substances are basic on Schaffer's view.)

Like Schaffer, Fine also seems to endorse NOP. He writes, "even though two nations may be at war, we may deny that this is how things really or fundamentally are because the entities in question, the nations, and the relationship between them, are no part of Reality as it in itself."<sup>32</sup> Fine must be getting at NOP (i), since he does not want to deny the existence of nations, but maintains only that there is a sense in which they are not real. I take it that the unreality of nations consists in the fact that true propositions about them, including facts about their existence, are grounded.<sup>33</sup>

Finally, NOP captures our intuitions underlying cases of metaphysical dependence. For instance, if the truth of moral facts metaphysically depends on God's command, then God's command is responsible for (i.e. determines) the moral facts. We might think that doing this intuition justice requires that we accept only the basic facts as ontologically burdensome, since they are "to blame" for *all* the other existence claims—including the problematic ones quantifying over abstracta and other ontologically unpalatable things.

#### 4. Argument Against NOP

So far, I've presented a tension between OP and ordinary claims and I have shown that NOP, which relies on grounding, is one way to address the arguments and reconcile the tension. Below, I argue that NOP fails to do its job as a theoretical virtue, however,

<sup>&</sup>lt;sup>31</sup> Schaffer (2009) p. 353.

<sup>&</sup>lt;sup>32</sup> Fine (2001) p. 25.

<sup>&</sup>lt;sup>33</sup> Fine (2001) would not want to deny that nations exist, since that would amount to what he calls skeptical anti-realism, the very view he rejects.

wherefore grounding theory can no longer be motivated by appeal to its ability to resolve the tension.

First, I'll present my argument against NOP. Then, I'll show support for the premises.

- 7. If a conception of OP does not help us choose justifiably between theories otherwise on a par and between which there remains a salient intuitive difference, then we should reject such a conception.
- 8. NOP is a conception of OP that fails to differentiate between theories that are otherwise on a par and between which there is a salient intuitive difference.
- 9. So, we should reject NOP.
- 10. If we reject NOP, then grounding cannot resolve the tension between ordinary claims and OP.
- 11. So, grounding does not resolve the tension.

The first premise requires unpacking but should be uncontroversial. When I say that two theories are otherwise on a par, I mean that there is no other theoretical virtue, such as explanatory power, empirical adequacy, or simplicity, according to which one theory is better than the other; by hypothesis, the theories differ only in respect of ontological parsimony. Now, assume the antecedent of premise 7: that some conception or other of OP does not help us choose justifiably between theories otherwise on a par and between which there remains a salient intuitive different. Since it doesn't justify our choosing one theory over the other, such a conception of OP must fail to pick out the salient intuitive difference between the theories that are otherwise equally good. But then that conception of OP, unless it simply ignores the difference, would *arbitrarily* pick one theory over the other. However, we employ theoretical virtues such as OP precisely in order to avoid choosing arbitrarily between theories. So, we must reject such a conception of OP.

Premise 8 calls out for an argument before we can conclude that we must reject NOP.

Imagine two theories, A and B.

#### Theory A states:

- i. There are mental properties and there are physical properties.
- Mental properties are neither identical with physical properties nor grounded in them.
- iii. Only propositions about the physical properties are basic.

# Theory B states:

- i. There are mental properties and there are physical properties.
- ii. Mental properties are identical with physical properties.
- iii. Only propositions about the physical properties are basic.

Note that the only difference is between A(ii) and B(ii). According to theory A, mental properties are robust or sparse. On the other hand, B is an identity theory of the mind.

Let us assume theories A and B share exactly the same set of basic existence claims. Now, both theories have the same ontological commitments according to NOP—since they both claim that only the physical facts are basic, they agree on what the physical facts are, and physical facts only quantify over physical things.<sup>34</sup> Assume also that A and B are on a par with respect to all other theoretical virtues. They differ neither in simplicity, nor in their number of primitive predicates, nor do they differ in explanatory power, and so on. Then, the *only* difference between A and B is that theory B identifies mental states with physical states, whereas theory A distinguishes them.

This appears to be an important difference and, given that A and B are otherwise on a par, intuitively it seems that we should choose theory B. If we can get the same explanatory power by identifying propositions about the mental with propositions about the physical (and hence, mental properties with physical properties) as we can by distinguishing the

<sup>&</sup>lt;sup>34</sup> Here, I assume something like Sider's Purity principle in *Writing the Book of the World* (p. 106-107); I assume that basic facts only quantify over basic entities, and Sider says basic propositions only employ basic notions.

mental and physical, we might as well identify the two. But NOP would have it that A and B are theoretically indiscernible in respect of ontological commitment, since what's basic according to A is exactly the same as what's basic according to B. NOP only has the resources to distinguish between theories whose *basic* statements differ.

The problem is not that A and B are tied, so to speak, according to NOP; for, even useful theoretical virtues may sometimes draw a tie between theories. Rather, the problem is that there is a salient difference between A and B: one posits robust mental properties and the other does not. If NOP were a useful conception of ontological parsimony, it would detect this salient difference and offer the reason according to which we prefer B to A in virtue of the difference between them.<sup>35</sup>

Now, take two new theories, C and D.

## Theory C states:

- i. There are mental properties and there are physical properties.
- ii. Mental properties are *not* identical with physical properties.
- iii. No propositions whatsoever are grounded.

## Theory D states:

- i. There are mental properties and there are physical properties.
- ii. Mental properties are identical with physical properties.
- iii. No propositions whatsoever are grounded.

Neither C nor D posits a grounding relation between the mental and the physical. So, NOP can't be used to distinguish between these two, either, although D makes an identity claim and C does not—C could be a substance dualist view. This is an unacceptable result because

<sup>&</sup>lt;sup>35</sup> Interestingly, NOP fails to differentiate between theory A and a theory, B\*, which denies that there are any mental properties whatsoever but which has the same set of basic propositions as theory A. This tie seems even less warranted here than before. Thanks are due to a fellow graduate student for pointing out the B\* example.

there remains a salient difference between C and D, namely, that D identifies mental properties with physical ones and C does not. Moreover, since C could be a substance dualist view, the salient difference is most likely an ontological one.

NOP is entirely unable to deal with theories according to which nothing is basic theories that make no use of the predicate 'is grounded', like C and D. However, theories that don't qualify their existence claims as basic or grounded either have ontological implications, or they do not. We need a criterion of ontological commitment that shows us whether or not they do, and if they do, what exactly these implications are. Since NOP can't do that, it fails as an adequate conception of OP.

I have sought to defend premises 7 and 8, but I must also defend premise 10. Assume 'there are numbers' is a fact. Then, numbers exist. According to NOP, however, we can escape ontological commitment to numbers when 'there are numbers' is grounded. But I've just shown that NOP fails as an adequate conception of OP on the basis that it cannot adjudicate between theories otherwise on a par, where this ability is something any theoretical virtue must have. So, even if 'there are numbers' is grounded, the ontological implications cannot be shed by appealing to NOP, and grounding can no longer resolve the tension without its associated conception of parsimony.

#### 5. Objections and Replies

In this section, I will reply to some objections that might be raised against my argument. First, what are we to make of the intuition that, in "paradigmatic" cases of metaphysical dependence<sup>36</sup>, the grounded existence claims can be "blamed on" the basic

<sup>&</sup>lt;sup>36</sup> For example, a paradigmatic case of metaphysical dependence might be the relationship between the physical and the mental. Likewise, the truth of a proposition might depend on a state of affairs obtaining in the world, a

propositions? For instance, it's plausible that propositions about the mental are actually grounded in the physical, and that the two are non-identical; it seems that, at least in the actual world, the physical facts are responsible for the holding of the mental facts. If we discard NOP, it appears that we give up this intuition of metaphysical dependence (note that this was the very intuition underwriting the objection against supervenience as an explanatory relation).

However, the grounding relation can still exist even if we discard NOP, and some existence claims can still be grounded according to the theory of which they are a part. So long as there are reasons independent of NOP that substantiate grounding, we *can* make room for the intuition that the basic propositions are "responsible" for the grounded ones. That some kind of metaphysical dependence holds, however, is not a reason to amend our view of ontological commitment, as I've tried to show. Rather, it may show that we should prefer theories with more structure rather than theories with less.<sup>37</sup> The reason, though, will be that a good theory must account for the dependence relations in the world, not that the theory will be more ontologically parsimonious provided its statements are structured by the grounding relation.

Perhaps we can leave room for NOP as long as it does not replace QOP. So, although it cannot be the standard conception of OP on which we rely, NOP could be a more fine-grained conception that we employ only when choosing between *structured* theories (those that invoke grounding) that are otherwise on a par, since those are the only theories NOP applies to. In this case, we should amend NOP in order to restrict its application exclusively to structured theories as opposed to all theories. Even so, however, this restricted

modal truth might depend on a particular concrete possible world, and the existence of a set might be said to depend on the existence of its members.

<sup>&</sup>lt;sup>37</sup> Schaffer (2009) does argue that we should prefer theories with more structure to theories with less. While this may be true, I disagree that this carries any implications for ontological commitment.

version of NOP will be unable to differentiate between theories A and B. I therefore have reservations about the usefulness of even a revised articulation of NOP.

Second, one might object that no two theories are ever on a par except with respect to ontological commitment—this is just too difficult to achieve when theory-building. Since my argument (especially premise 7) heavily relies on this possibility, it cannot go through. I concede that no two actual theories developed by people may ever be on a par in all respects but one. Nevertheless, when we evaluate a theoretical virtue we must work with idealized theories to see if the virtue is useful at all. If NOP cannot justifiably adjudicate between the idealized toy theories used in this paper, we have reason to doubt that it can arbitrate between much more complex ones.

Third, one might object that I have misdiagnosed the salient intuitive difference between theories A and B, and between theories C and D. If I have failed to show that the difference between A and B as well as that between C and D *ought* to be picked out by OP, then I will not have justified premise 8 of my argument, since NOP's failure to pick out the difference is unproblematic when any conception of OP would fail to discern it. Perhaps the difference is better detected by *ideological* parsimony (IP) rather than OP. While OP is the measure of a theory's ontological commitments (where what constitutes such commitments can vary from one conception of OP to another, as we have seen), IP is the measure of a theory's primitive or undefined terms.

One might think that theories B and D, which both assert that mental properties are identical with physical properties, make the term 'mental property' ideologically superfluous; anything we could explain by appeal to mental properties we can explain by appeal to physical properties. If the mental properties in B and D might as well not have been posited by those theories, then theories A and C are more ideologically parsimonious, for they make use of the predicate 'is a mental property' whereas B and D do not need this term.

The objection from IP seems to imply that theories B and D have *defined* the predicate 'is a mental property' by identifying mental and physical properties. Only if this were the case could we say that B and D make the predicate 'is a mental property' ideologically superfluous. But, it is not clear that the identity claim does imply that one predicate is defined in terms of the other, nor that the predicates are inter-definable. If this objection is to work against me, we need an argument to show that an identity claim between properties carries implications for the definitions of their corresponding predicate terms. In the absence of such an argument, we should think ontological commitment is the relevant distinguishing feature between the theories.

Is there still reason to doubt that the theories I've presented can be weighed against each other by appeal to salient ontological differences? One might object that theories such as C and D, which lack the structure provided by the grounding relation, fail to reflect the world properly and as such fail to explain properly. Therefore, C and D are not yet strong enough to be assessed by appeal to other theoretical virtues, such as simplicity, ideological parsimony and yes, ontological parsimony. Neither are theories A and B fit to be weighed against one another with respect to ontological parsimony, since A leaves mental properties "hanging"; mental properties are an unstructured bit of ideology because neither grounded nor basic propositions of theory A will invoke them. But, nothing in the world is really left hanging like that.<sup>38</sup>

To put the objection another way, adequate explanatory power is a precondition for the application of all other theoretical virtues, and—the grounding theorist will argue—

<sup>&</sup>lt;sup>38</sup> That is, if we buy the general proposal that there is an ascending chain of grounded facts originating from the basic.

theories whose structure fails to mirror the world's structure will always fall short on explanatory power. Since my objection to NOP requires that an application of some conception of OP is applicable to the toy theories I presented, my argument fails; the theories are *anything but* on a par in all respects besides OP. Call this the objection from explanatory power.

Recall that my argument puts pressure on the "best of both worlds" motivation for believing in grounding: we should believe in grounding if it can get us theories on which our ordinary claims (e.g. statements 1, 3, and 5) come out true without those claims ontologically committing us to the entities they are about. I showed that NOP is the principle that invokes grounding to accomplish this goal. The objection from explanatory power trades on grounding *already* having been established; it rests on theories A through D failing to capture enough of the dependence relations that the objector has already been convinced hold in the world. But, we are not trying to discover whether the grounding relation, once we've accepted that it exists, can adjudicate between the theories. Rather, we need to employ these theories as a tool for finding out whether grounding can do this job. Since my argument attacks a motivation for accepting grounding, the force of this objection depends on whether we should embrace grounding theory for other reasons besides. That, however, is another project.

# 6. Conclusion

In this paper, I have shown that ordinary claims conflict with ontological parsimony because they seem to straightforwardly entail ontologically committing conclusions to problematic entities (e.g. numbers, properties). I pointed to the problems surrounding some traditional approaches to this problem, and suggested that the grounding relation might let us have the best of both worlds: plausible but ontologically parsimonious theories. Grounding theorists implicitly rely on a specialized conception of ontological parsimony that pries existence claims and ontologically committing claims apart. I then argued that this conception (NOP) fails to differentiate between theories that are otherwise on a par, and between which there remains a salient difference. Therefore, NOP fails as a theoretical virtue. Once we jettison NOP, grounding can no longer resolve the tension with which we started. As a result, one motivation for positing the grounding relation in the first place—its purported ability to resolve this tension—has been undermined.

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