Priority Monism, Partiality, and Minimal Truthmakers

A. R. J. FISHER

Abstract   Truthmaker monism is the view that the one and only truthmaker is the world. Despite its unpopularity, this view has recently received an admirable defence by Jonathan Schaffer (2010b). Its main defect, I argue, is that it omits partial truthmakers. If we omit partial truthmakers, we lose the intimate connection between a truth and its truthmaker. I further argue that the notion of a minimal truthmaker should be the key notion that plays the role of constraining ontology and that truthmaker monism is not necessary for an appropriate solution to the problem of finding truthmakers for negative truths. I conclude that we should reject truthmaker monism once and for all.

1 Introduction

Truthmaker theorists tell us that truth depends on reality. As D. M. Armstrong puts it, truths must have an 'ontological ground' (1997, 115). Jonathan Schaffer (2010b) has recently interpreted this intuition as literally about 'the world' by defending *truthmaker monism*:

> M. For all worlds w: the one and only truthmaker at w is w.

Truthmaker monism is one of the most unpopular theses in the metaphysics of truthmaking. It is written off because it is trivial (Molnar 2000, 83) and uninteresting (Armstrong 2004, 18). In the face of this peer pressure Schaffer provides an admirable defence of (M). His defence is against the backdrop of an Aristotelian metaphysic of grounding which states that 'the truthmaking relation is to be identified with certain instances of the dependence relation, namely, those which relate substance to truth' (Schaffer 2010b, 310). In other words,

> A5. *Truthmaking is truthgrounding*: the truthmaking relation is the relation of grounding between substance and truth.

The notion of a substance is understood as the notion of an entity that is 'fundamental, independent, brute, irreducible, sparse, and primary' (Schaffer 2010b, 309). Therefore, the truthmaking relation is the dependence relation that grounds truth in fundamental entities. The notion of dependence or ground, which is gaining much currency in metaphysics, expresses the idea that one thing can depend on or be grounded in the existence of something else. It is an explanatory notion that attempts to explain one thing in terms of another in virtue of one thing grounding the other. This kind of explanation is non-causal and metaphysical in nature. Examples include: Socrates' unit set is grounded in Socrates; the fact that the ball is red and round is grounded in the fact that the ball is red and the fact that the ball is round; mental properties are

grounded in physical properties. In similar fashion truth is grounded in substance, according to Schaffer. Truth is a derivative or nonfundamental aspect of reality.[1] Schaffer assumes the following account of what it is for a truth to have a truthmaker:

> T. For all propositions p and all worlds w: if p is true at w, then (p's truth at w is grounded in w, and for any x such that p's truth at w is grounded in x, $x = w$).[2]

According to (T), every world is a big object that makes true every truth at a given world.[3] For the world to be the only ground for every truth, we need the thesis that the world or cosmos is the only fundamental entity, i.e., the one entity that is prior to everything else. Call this *priority* monism.[4] By contrast, pluralism is the view that there is more than one fundamental entity and the cosmos is not one of them. Pluralism is the dominant view in contemporary metaphysics. It enjoys the status of being the default position that places the burden of proof on competing views. Priority monism in this context is a minority position and a controversial thesis. Nevertheless both theories are substantive. They are both theories about what is fundamental.[5]

Schaffer's package deal is attractive. It is ontologically parsimonious (in a quantitative sense) since it posits only *one* fundamental entity and only *one* truthmaker. It also solves the problem of finding truthmakers for negative truths without positing negative entities or a primitive totality state of affairs (an issue we will return to). Unfortunately, it omits partial truthmakers, i.e., parts of the world that intuitively suffice for the truth of certain truths, especially truths that are about specific portions of reality or contain descriptions that pick out *minima* such as 'the place where the accident happened' (Mulligan, Simons, & Smith 1984, 298).

In what follows, I analyse the notion of a minimal and partial truthmaker and present the objection that (M) is false because it omits partial truthmakers. I critically discuss Schaffer's response to this objection and argue that the notion of a minimal truthmaker should be the key notion that plays the role of constraining ontology since it is neutral on what is fundamental whereas (M) is not. I then show that Schaffer's solution to the problem of finding truthmakers for negative truths is not unique and so does not provide a reason to adopt his package deal. I conclude that Schaffer provides no convincing reason to deny partial or minimal truthmakers. So (M) is to be rejected.

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[1] I do not have space to properly discuss the metaphysics of ground. See (Fine 2001, 2012; Rosen 2010; Schaffer 2009) and the papers in (Correia & Schnieder 2012). The grounding relation is typically regarded as irreflexive, asymmetric (or anti-symmetric) and transitive. So, if x grounds y, y does not ground x; if x grounds y, and y grounds z, then x grounds z; x cannot ground x. It is also useful to distinguish between partial and full grounds. Such principles and subtleties may be disputed; however I do not take sides on these issues.

[2] I refer to propositions, following Schaffer, using italics and sometimes using angle brackets, e.g., the proposition that p is written as <p>.

[3] In what follows I assume, along with Schaffer, truthmaker maximalism, the view that *every* truth needs a truthmaker. This assumption does not affect the discussion.

[4] See (Schaffer 2010a, 344; 2010c, 42). My discussion of priority monism is restricted to its use as part of a theory of truthmaking. I work with the following definitions of prior part and posterior part: x is a prior part of y iff x is a proper part of y and x (partially) grounds y; x is a posterior part of y iff x is a proper part of y and y grounds x.

[5] There is the view that nothing is fundamental. Due to space, I bracket this thesis. As a result, when I speak of theories about *what is* fundamental I assume there is at least one thing that is fundamental. For an argument in favour of the view that there is nothing fundamental, see (Anderson 1962, 48-9).

2 The Partiality Objection

We should understand partial truthmakers by first analysing the notion of a minimal truthmaker since the latter is more commonly employed (see, for example, Fox 1987, 190) and an important variety of the former. Following Schaffer, I take a minimal truthmaker as 'the smallest partial truthmaker' (2010b, 313). But as a first pass let us analyse minimal truthmakers as follows:

> Min. Entity t is a minimal truthmaker for p iff t makes p true and t has no proper part that makes p true.

To illustrate, it is true that there are mice in my kitchen. It is made true by my aging apartment complex. But if we subtract certain parts of my apartment complex, such as the flat next to mine, the truth that there are mice in my kitchen is made true by the remainder. If we subtract the mice or my kitchen, the truth would no longer be true. Those crafty critters in my kitchen are *prima facie* the minimal truthmaker for this inconvenient truth. Strictly speaking, we require boundary facts about the mice in my kitchen related to what goes on immediately around them and my kitchen to properly ground this truth. The situation of the mice, my kitchen and these boundary facts all related in the right way is technically the minimal truthmaker. But the intuitive point remains: we do not *need* the cosmos to ground this truth.

We can understand partial truthmakers in a similar way. Begin with the claim that there are truths about certain parts of the world. The truth that there are penguins in South Africa is about a certain portion of reality, namely, Cape Peninsula. Intuitively, the penguins of Cape Peninsula are sufficient truthmakers for <there are penguins in South Africa>. So, the penguins of Cape Peninsula are partial truthmakers. They are a portion of reality that suffices for the truth of <there are penguins in South Africa>. But it is possible that <there are penguins in South Africa> has other truthmakers such as the entire world (independent of the world being fundamental or a sum of fundamental entities). We thus have the following analysis of a partial truthmaker:

> Par. Entity t is a partial truthmaker for p iff t makes p true and t is a proper part of s which also makes p true.

A partial truthmaker is a sufficient truthmaker for a truth which is part of a truthmaker that makes the same truth true. The entire world makes it true that there are penguins in South Africa. But, assuming the penguins of Cape Peninsula are proper parts of the world, they count as partial truthmakers for <there are penguins in South Africa>. To be clear, a partial truthmaker does not *partially make true* a proposition. For an entity to be a truthmaker it must possess some kind of sufficiency such that it *suffices for the truth* of a given proposition.

Our analysis of minimal truthmakers according to (Min) is insufficient to mount a direct objection against (M) for (Min) is compatible with (M) as follows. According to (M), and given (Min), our world is a minimal truthmaker. For instance, suppose <I exist> is true. Assuming (M), it is made true by our world and no proper part of our world makes <I exist> true since no other entity besides our world is a truthmaker. So, the world is a minimal truthmaker for <I exist>. (Min) and (M) are compatible in this respect. Hence, we need a more precise definition of minimal truthmakers that explic-

itly renders them the smallest partial truthmakers and therefore a variety of partial truthmakers:

> Sma1. Entity t is the smallest partial truthmaker for p iff t is a partial truthmaker for p and t has no proper part that makes p true.

Now we say minimal truthmakers just are the smallest partial truthmakers and dismiss (Min):

> Min2. Entity t is a minimal truthmaker for p iff t is the smallest partial truthmaker for p.

The mice in my kitchen are proper parts of my aging apartment complex. The mice in my kitchen and my aging apartment complex make true <there are mice in my kitchen>. But, the mice in my kitchen have no proper parts that make this truth true. Therefore, they are the smallest partial truthmakers for the truth that there are mice in my kitchen and also its minimal truthmaker.

Given this understanding of partial and minimal truthmakers, let us state (what I call) the partiality objection against (M). If (M) is true, truthmaking omits partial (including minimal) truthmakers because (M) entails that no proper part of the world is a sufficient truthmaker. But, truthmaking should not omit partial truthmakers because intuitively truths are about portions of reality and those portions of reality should be sufficient truthmakers for those truths. The truth that there are penguins in South Africa should have as a sufficient truthmaker the penguins of Cape Peninsula. Therefore, (M) is false.[6]

Schaffer puts the core of the objection as follows with the specific intent of subsuming minimal truthmakers under partial truthmakers:

> … [S]upposing that shape is an intrinsic property, and that this carpet in my living room is square, it may be objected that the truthmakers for <this carpet is square> include not just the world, but also the earth, my house, and this carpet. Indeed, this carpet may be singled out as a *minimal* truthmaker (the smallest partial truthmaker included in all the other truthmakers) … (Schaffer 2010b, 313, his italics).

The thrust behind the partiality objection is that if the world makes true every truth, we lose the intimate connection between a truth and *its* truthmaker. Intuitively, <X exists> is about X's existence. If <X exists> is to have a truthmaker, it should *at least* be made true by the existence of X (although <X exists> could have other truthmakers). Hence, the truthmaking relation is intuitively a particular kind of intimate connection between a truth and its truthmaker. The mice in my kitchen *qua* truthmakers are more intimately connected to the truth that there are mice in my kitchen than the cosmos. So, the world as the only truthmaker for every truth is not intimate enough to account for the truthmaking relation.

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[6] Elsewhere, Schaffer accepts the intuition behind this objection: 'the existence of a contingently sitting me seems to be positing reality enough to ground the truth of <I am sitting>' (Schaffer 2008b, 12).

3 Replies to Partiality

Schaffer's response to the partiality objection is that it is not the case that our theory of truthmaking should include partial truthmakers. Schaffer argues that there are no partial truthmakers because there are no 'fundamental *partialia*' (2010b, 315). Presumably, fundamental *partialia* are ungrounded entities that exist independent of each other. To illustrate, suppose in *w* there exist *a*, *b*, and *c* such that *a*, *b*, and *c* are fundamental and independent of each other. They are partial because each of them is a separate portion of *w* that could exist without the other fundamental entities of *w* and as such they are partial truthmakers. If *a* is a sufficient truthmaker for *p*, then *a* is a partial truthmaker. However, if the cosmos is the only fundamental entity, then partial truthmakers are impossible because the candidate *partialia* are not fundamental. So, according to Schaffer, not only penguins but also fundamental *partialia* fail to be partial truthmakers. He writes, 'many of the candidate partial truthmakers (such as this carpet, and my living room) are not fundamental on anyone's ontology, and so cannot possibly serve as grounds' (Schaffer 2010b, 314).

Admittedly, the idea of fundamental *partialia* expresses a distinct notion of 'partiality' from what is expressed in (Par). The kind of partiality at work in the idea of fundamental *partialia* suggests that a partial truthmaker is like an independent fragment which makes certain truths true whereas (Par) is about the proper parts of objects making true the same truths that are made true by their wholes. Let us call the fundamental *partialia* that are purported to be truthmakers *fragmented truthmakers*. They are partial truthmakers in this fragmented sense. But the point behind Schaffer's rejection of partial truthmakers such as the mice in my kitchen and fundamental *partialia* remains: they are both nonfundamental and therefore fail to be truthmakers.

There are two problems with Schaffer's reply. First, friends of partial truthmakers can reply that fundamental entities do serve as sufficient truthmakers because there are in fact fundamental *partialia*. So, there are fragmented truthmakers. But for this reply to work friends of partial or fragmented truthmakers require the truth of pluralism, the very thesis Schaffer denies when rejecting partial or fragmented truthmakers. On the other hand, a defence of (M) requires priority monism. In this respect, no objection against (M) and no argument in favour of it will be on non-question-begging terms. This line of dispute is merely question-begging and should be abandoned.

Second, Schaffer's argument requires the premise that if truthmakers are not fundamental, they 'cannot possibly serve as grounds' (Schaffer 2010b, 314). The premise follows from (A5) since Schaffer defines a substance as a fundamental entity and (A5) says that the truthmaking relation is the relation of grounding between substance and truth. But why think that truthmakers must be fundamental entities? Schaffer says fundamental entities must be the ground of truth for there is no other way to get to the ground i.e., *the root* (2010b, 319). Such a suggestion merely tells us that the ground of something must be, according to Schaffer's definition, fundamental. We need an explanation for why the root is the only thing that can serve as the ground.

One possible explanation is that it is a *conceptual truth* that the ground of truth must be fundamental. But this restriction does not fall out of our concept of ground. If *x* grounds *p*'s truth, it does not follow that *x* *must* be fundamental. It is possible that highly derivative phenomena such as life can ground truths. This possibility is bolstered by the idea of *direct* or *immediate* grounding (see Batchelor 2010; Cameron

2008b; Fine 2012). The fact that p and the fact that q are the immediate grounds for the (conjunctive) fact that p and q, while Socrates is the immediate ground for his unit set and the mice in my kitchen are the immediate grounds for the truth that there are mice in my kitchen. Nothing in our concept of ground, I say, rules this out. So, it cannot be a conceptual truth that the ground of truth must be fundamental. Nonfundamental entities *can* be immediate grounds for certain truths.

Another possible justification for the ban would be to argue that the truthmaker intuition—the intuition that truth is grounded in being—expresses this restriction. Schaffer interprets Armstrong as saying that the truthmaker intuition expresses the idea that truth must be grounded in fundamental entities: 'The intuition that truth requires grounding in the fundamental is implicit in Armstrong's question 'Must there not be something about the world that makes it to be the case, that serves as the ontological ground, for this truth?' (Schaffer 2010b, 310, n. 8). So it seems anyone who accepts the truthmaker intuition must accept the restriction.

But this is just wrong. The intuition as espoused by Armstrong is such that a truth must depend on some entity in the world that serves as a truthmaker *tout court*. Armstrong is open about whether second-class or conjunctive states of affairs could be truthmakers. And while he thinks most truthmakers are states of affairs, he accepts that any constituent of a state of affairs such as a universal *can* be a truthmaker (Armstrong 2004, 18). He says, 'each simple property is a minimal truthmaker for the truth <there exist simple properties>' (2004, 21) and that 'this property is a truthmaker for the truth that this property exists' (2004, 20). Since Armstrong endorses minimal truthmakers and believes that immanent universals can be truthmakers (a sensible claim to make), he must think that the truthmaker intuition is *not* restricted to fundamental entities. Schaffer's interpretation makes Armstrong appear glaringly inconsistent. The truthmaker intuition does not have this built-in restriction to fundamental entities.

There are further counter-intuitive consequences that follow from this *ex ante* ban on certain truthmakers. Alan Rhoda (2009) posits the memories of God as entities for truths about the past. Ideas in the mind of God are most likely *modes* of God's thought. But if Schaffer is right, God's memories are not even eligible candidates for being truthmakers because they are abstract and nonfundamental. Surely this view is on the table at the outset of metaphysical inquiry.

In sum, (A5) is not motivated by our concept of ground. It fails to accurately capture the truthmaker intuition and is not a tenable *starting* assumption of our general account of truthmaking. We should instead accept (if truthmaking is grounding):

A5*. *Truthmaking is truthgrounding*: the truthmaking relation is the relation of grounding between entity and truth.[7]

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[7] (A5*) is not to be confused with the claim that truthmaking is *relative priority* or *relative fundamentality* where the truthmaking relation is understood in terms of some entity being *more fundamental than* some truth. Relative priority or relative fundamentality is too coarse-grained for our purposes since if x is more fundamental than y, it does not follow that x grounds y. The entity y could be grounded in some z while x is more fundamental than y. In addition, the grounding relation is primitive and not to be analysed in terms of relative priority or relative fundamentality (cf. Schaffer 2009, 364).

This is what Armstrong and others mean when they claim that truth must be grounded in reality. The idea is that there are entities in the world of whatever description or kind which make true certain propositions. In no way is this intuition solely about substances *qua* fundamental/ungrounded entities. Truth *can* be grounded without being grounded in something fundamental. Moreover, we ought to be *prima facie* liberal in what entities may count as truthmakers. Friends of partial truthmakers have no reason to accept the claim that only fundamental entities can serve as sufficient truthmakers. Friends of partial truthmakers should endorse:

> T*. For all propositions p and all worlds w: if p is true at w, then for any entity x such that p's truth at w is grounded in x, $x = w$ or x is grounded in w or grounded in some y such that y is grounded in w or grounded in some z such that z is grounded in y and y is grounded in w, or grounded in z_n …, or …, and so on.[8]

According to (T*), it is possible that <there are penguins in South Africa> is grounded in the penguins of Cape Peninsula and they (i.e., the penguins) are grounded (eventually) in the cosmos.[9] Therefore, the penguins of Cape Peninsula can serve as sufficient truthmakers for certain truths. Now the transitivity of ground entails that if t grounds p and s grounds t, then s grounds p. If s is fundamental, then p is grounded in something fundamental (if we accept that grounding is transitive). This is not a vindication of (A5) however because if truths are ultimately grounded in the fundamental, derivative entities can still ground truths by standing in the grounding relation to certain truths. This is precisely what (M) denies.

To properly realise liberalism we should embrace nonfundamental entities as partial truthmakers. So we should accept:

> Par2. Entity t is a partial truthmaker for p iff t makes p true and t is a posterior part of s which also makes p true.

If the cosmos is the only fundamental entity, then given (Par2) and (T*) the cosmos has many posterior parts that are sufficient truthmakers and thus partial truthmakers. For example, if w makes <I exist> true at w, some posterior part of w, say, me can also make true <I exist>. I am therefore a partial truthmaker for <I exist>. Thus, (Par2) and (T*) are compatible with priority monism. We do not beg the question against the priority monist—a significant dialectical result. And faithful priority monists can believe in partial truthmakers.

4 Minimality

We need minimal truthmakers, the smallest of the partial truthmakers—as per (Min2). For they play many theoretical roles in our theory of truthmaking. One significant role is that of constraining ontology. To illustrate, suppose <this carpet is square> is true. Given (T*) and (Par2), this carpet along with some of its properties (but let us bracket

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[8] To ensure that we adhere to (A5*) 'for any entity x' is to be concerned with every kind of entity *except* truths. (A5*) entails that the truthmaking relation relates truth to entity and not truth to truth (*mutatis mutandis* for (A5)). Dependence relations between truths are irrelevant here.

[9] Compare (Schaffer 2008a, 310) where Schaffer provides a 'two-stage' process of truth depending on reality such that <there are no hobbits> is true because there are no hobbits and there are no hobbits because the wave-function of the universe is such-and-so. We discuss negative truths in section 5.

the properties in what follows) is a sufficient truthmaker for this truth. Since our ontology is constituted by the truthmakers we posit, this carpet is an element of our ontology. However, this carpet plus Santa Claus (an entity distinct from this carpet) also makes this truth true. Therefore, this carpet plus Santa Claus is an element of our ontology. If we are ontologically committed to this carpet plus Santa Claus, we are committed to the existence of Santa Claus; a somewhat dubious entity to believe in, notwithstanding the charm he brings during end-of-year festivities. If we introduce the notion of a minimal truthmaker, the minimal truthmakers are the entities that constitute our ontology and as such constrain it appropriately (see Schaffer 2010b, 315). This carpet plus Santa Claus—although a sufficient truthmaker for the truth that this carpet is square—is not *the* minimal truthmaker (the term 'the' can be used in the singular or plural). Rather this carpet is the minimal truthmaker. So we are only committed to this carpet.

Schaffer argues that (M) can likewise play the role of constraining ontology. If the world is the only truthmaker, this carpet plus Santa Claus is ruled out as a truthmaker for <this carpet is square>. For if the world is the only truthmaker, this carpet plus Santa Claus is not a truthmaker. By contrast, the fact that this carpet is the minimal truthmaker explains why this carpet plus Santa Claus is not an appropriate entity to include in our ontology. So (M) is a rival candidate for occupying the constraining role. We must choose between (M) or minimal truthmakers. Which occupant should we accept?

I object that (M) is the superior occupant as follows. In order for (M) to fill this role we require the truth of priority monism because if pluralism is true, certain parts of the world such as this carpet suffice for the truth that this carpet is square. Thus, we have no reason to accept (M) and no reason to say that this carpet plus Santa Claus is not a truthmaker. (M) only plays the constraining role if priority monism is true.

But we should prefer a theory-neutral notion with respect to what is fundamental, if such a notion is available. A theory-neutral notion is desirable where possible because 1) we would otherwise beg the question against metaphysicians who reject the theory we are presupposing (as we saw with Schaffer's first reply to the partiality objection) and 2) it does not thrust upon us unwanted or highly controversial metaphysical baggage. A commitment to (M) forces us to embrace the radical doctrine of priority monism, something many of us do not wish to welcome with open arms.

The notion of a minimal truthmaker is neutral towards what is fundamental because it is compatible with pluralism and priority monism. To see this, consider the original motivation for positing minimal truthmakers. The motivation derives from concerns that the world given pluralism makes every truth true. To illustrate, suppose pluralism is true and that the world is the sum of all sufficient truthmakers. Call this sum 'Don'. If Don is the only truthmaker for every truth, we trivialise our theory of truthmaking because it is a trivial matter to state that each truth has a truthmaker by means of positing Don. To get around Don making every truth true in this way, we posit minimal truthmakers. Since Don has parts which are sufficient truthmakers for certain truths, they are the minimal truthmakers. We then say it is the minimal truthmakers that are the significant entities of our ontology. The fact that minimal truthmakers are special is grounded in the fact that they are prior parts of Don (note x is a

prior part of y iff x is a proper part of y and x (partially) grounds y). So we have a refined definition of minimal truthmakers, i.e., the smallest of partial truthmakers:

> Min3. Entity t is a minimal truthmaker for p iff t makes p true, t has no prior part that makes p true, and t is a prior part of s or s is a posterior part of t which also makes p true.

Given (Min3) and pluralism, minimal truthmakers are the entities that have no prior parts which make the same truth true but (partially) ground their wholes which do in fact make the same truth true. Some minimal truthmakers *could* have prior parts so long as their prior parts are not truthmakers for the truths they make true. It depends in part on what truth is being made true. For example, the mice in my kitchen are the minimal truthmaker for the truth that there are mice in my kitchen. The mice have prior parts if either priority monism or pluralism is true. And if pluralism is true the mice partially ground my aging apartment complex which is a partial truthmaker for the truth that there are mice in my kitchen. Fundamental entities insofar as they are the only entities that lack prior parts are also minimal truthmakers. While they have no prior parts, they can be prior parts of other objects. In many cases, it seems, the posterior and prior parts of an object make the same truth true.

Now if we reject pluralism, the need for positing minimal truthmakers is not undermined. If priority monism is true, our conception of the world is such that Don is prior to his parts. And given (Min3), Don is the only minimal truthmaker because Don lacks prior parts and all of his parts are posterior to him.[10] Therefore, the notion of a minimal truthmaker demarcates what is special about certain truthmakers independent of pluralism or priority monism. Since we should adopt a theory-neutral notion of fundamentality (if available) as the relevant concept that helps us fill the constraining role, we should embrace minimal truthmakers and reject (M).

You might object that minimal truthmakers are not theory-neutral because the denial of (M) is not theory-neutral and the acceptance of some of my premises requires taking a stand on certain metaphysical issues.[11] I have two replies. First, I am not saying that minimal truthmakers are theory-neutral *simpliciter*. My argument is only concerned about whether certain notions are neutral towards what is fundamental. The debate here is between minimal truthmakers and (M) *qua* metametaphysical theses about the components of our general theory of truthmaking and the theoretical roles they fill. Second, I am not arguing that the notion of a minimal truthmaker has fewer commitments. Friends of minimal truthmakers need a theory of fundamentality. I am arguing that minimal truthmakers do not *make* us adopt certain (and perhaps controversial) commitments about fundamentality. The notion of a minimal truthmaker is neutral with respect to what theory of fundamentality we should adopt. We are free to choose (and argue for) which theory of fundamentality we think is best.[12]

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[10] For the argument that quantum entanglement leads to Don being the only minimal truthmaker, see (Forrest 2000).

[11] For instance, you might object that my account of truthmaking is not theory-neutral because I am committed to the existence of this carpet and so taking a stand about the composition of material objects. My theory appears incompatible with eliminativism about material objects. (Reply: the carpet underneath my feet was really used for illustrative purposes only.)

[12] An argumentative analogy might help. Suppose a resemblance nominalist is battling it out with a realist about universals in the ontology room. Further suppose that the resemblance nominalism on offer is

There is one relevant objection that Schaffer employs to undermine the need for minimal truthmakers. Schaffer argues that since there are truths that lack minimal truthmakers such as <there are denumerably many electrons>,[13] minimal truthmakers do not always fill the constraining role (Schaffer 2010b, 314). If they do not always fill the role, they should be rejected (for they aren't doing the work they are supposed to do). I reply that this argument is a red herring since the debate is between accepting and omitting minimal truthmakers outright. If there is a small class of marginal truths which lack minimal truthmakers, we are nonetheless committed to minimal truthmakers. So, (M) is still false. In addition, friends of minimal truthmakers can say that truths which lack minimal truthmakers are not the sorts of truths that guide us to fundamental ontology. We can infer they are degenerate or peculiarly defective for this purpose. Assuming either pluralism or priority monism, friends of minimal truthmakers will find truths made true by minimal truthmakers. The fact that the notion of a minimal truthmaker does not help us to always fill the constraining role does not undermine the fact that it helps us fill the role *in most cases*. For this objection to have any force it needs to prove that minimal truthmakers fail to fill the constraining role completely. This is something the objection does not establish.

5 Negative Truths

There are other roles besides the constraining role that we need our best theories of truthmaking to account for. One important role, perhaps the holy grail of truthmaking, is the problem of finding truthmakers for negative truths (hereafter, the problem of negative existentials). It is plausible to suppose that <kangaroos exist> is made true by kangaroos. But there are truths that say certain things do not exist. It is (contingently) true that bunyips do not exist.[14] If all truths have truthmakers, <bunyips do not exist> needs a truthmaker.

So what makes it true that there are no bunyips? The fact that there are no bunyips is one candidate. But this solution commits us to the existence of negative facts, entities which are typically regarded as metaphysically repugnant. Another candidate is the fact that in this world these are all the first-order facts that there are, which entails that there are no bunyips (Armstrong 2004, ch. 6). But this solution commits us to totality facts, entities which are abstract (Martin 1996, 57) and regarded as a desperate and reluctant posit.

Schaffer's package deal provides a solution to the problem of negative existentials that he thinks does not 'introduce negative or general entities, dredge up positive proxies, involve extrinsic properties, invoke essential properties, implicate counterparts, or retreat to supervenience' (Schaffer 2010b, 322). As stated at the outset, this is an attractive feature of his view. The problem of negative existentials is arguably the biggest

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committed to modal realism, whereas the realism about universals on offer is neutral on what theory of modality we should adopt. Clearly, the latter *forces* upon us *less* metaphysical commitments (about modality) because we can plug in, what we think, is the best theory of modality. The latter is theory-neutral with respect of modality.

[13] More precisely, if there is a denumerable infinity of electrons, then the totality of electrons makes true <there are denumerably many electrons>, but so does the sub-totality of every third electron and every fifth *ad infinitum*. So we never find a minimal truthmaker (Armstrong 2004, 21-2).

[14] Bunyips are mythical creatures that allegedly lurk in the billabongs and creeks of Australia.

problem that haunts the defenders of truthmaking. Truthmaker theorists want to solve this problem appropriately.[15] If the only way to solve it appropriately is to accept (M) and its other commitments, we have strong reason to embrace (M). If we embrace (M), we must reject minimal and partial truthmakers. Is this a good argument?

According to Schaffer's package deal, only fundamental entities are truthmakers (as per (A5)), truthmakers ground the truths they make true (as per (T)), there is only one fundamental entity (as per priority monism), and so only one truthmaker at a world (as per (M)). If <bunyips do not exist> is true at w, then, given (T), its truth is grounded in w at w, or grounded in some entity which is identical to w. So, w is the truthmaker for <bunyips do not exist>. But we need an explanation for why w grounds <bunyips do not exist> independent of these assumptions. We need to explain how <bunyips do not exist>, as Schaffer puts it, 'has found ground' (2010b, 321).

His explanation is as follows. Suppose at w, w is the only fundamental entity. If so, then w is uniquely the one fundamental entity at w for nothing else is fundamental. In Schaffer's terms, w is the 'unique fundament' at w (2010b, 321). If w is the unique fundament at w, it is impossible for w to be *the* fundament of some expanded world which has w as a prior or posterior part. To illustrate, suppose we expand our world by adding bunyips in such a way that the fundament of the expanded world makes a bunyip or that the expanded world has a bunyip part. It follows that the fundament at our world *cannot* be the unique fundament at the expanded world because the expanded world really has our fundament as just another prior part or as a posterior part. So, the way we find ground for certain truths in a world is to say that at each world it is *in virtue of* that world having a unique fundament that it grounds each and every truth, including negative existentials (Schaffer 2010b, 321-2); see also (Schaffer 2008a, 312-3).

I object that Schaffer's solution as offered by his package deal is unique. So his solution cannot be used in an argument for accepting his package deal or any of its components. First, (T) is not doing any unique work in Schaffer's solution that couldn't be done with the standard alternative:

N. For all propositions p and all worlds w: if p is true at w, then there exists some x in w such that necessarily, if x exists then p is true.[16]

According to (N), truthmakers *necessitate* the truths they make true. Put differently, if t makes p true, then it is impossible for t to exist and p be false. (N) in place of (T) yields the same solution to the problem of negative existentials. Suppose (N) and priority monism is true and we revise (A5) to say that the truthmaking relation is the relation of necessitation that holds between substance and truth. Given priority monism, the actual world has a unique fundament for nothing else is fundamental. The actual world as a big object does not contain bunyips. The unique fundament as it is in the actual world cannot exist in any other world besides this one. Hence, there are no worlds in which the fundament of the actual world exists and <bunyips do not exist> is false, which just means in all worlds where this fundament exists <bunyips do not

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exist> is true. If <bunyips do not exist> were false, the unique fundament of the actual world as it is would not exist. If there had been bunyips, the fundament of the actual world would not have existed. So, it is impossible for the fundament of the actual world to exist and <bunyips do not exist> be false. So the unique fundament of our world necessitates (and makes true, given (N)) the truth of <bunyips do not exist>.

Second, Schaffer's solution involves some false advertising. It is not the case that essential properties are not invoked in his solution. If the unique fundament of every world is such that it cannot exist as it is in some other world, then the fundament of each world is essentially a certain way. Each world has the property of *being essentially such that it has one unique fundament*. More importantly, each world has this essential property independent of pluralism and priority monism. As Schaffer admits, 'the solution under consideration requires that there is some *fixed finite number* of truthmakers. The number need not be one (2010b, 322, his italics). This is a serious concession. For the pluralist *can* say that each world has its own unique fundament—the way each world fundamentally is as it is at that world. To illustrate, suppose at w there are three fundamental entities. At w, they are the *only* fundamental entities. Therefore, by Schaffer's reasoning, these three fundamental entities are the unique fundament at w. An expanded world might contain these three entities but they will not be the unique fundament since further fundamental entities will exist such that a new fundamental base constitutes the unique fundament of the expanded world. If pluralism is true in the actual world, we can still find ground for the absence of bunyips as follows.

If pluralism is true, the multitude of fundamental *partialia* in w existing as they are constitutes a unique fundament. This multitude fixes the rest of reality. It ensures that there are no bunyips. So the truth that bunyips do not exist could not be false unless at least one of the *partialia* did not exist. If there had been bunyips, then the fundament and its grounding relations would have had to have been different, which entails a different fundament. To make <bunyips do not exist> false a different fundament would have had to exist. Hence, it is in virtue of actuality having a unique fundament of several entities that we find ground for negative existentials. So we can have Schaffer's solution without priority monism.[17]

Third, we can have Schaffer's solution without (M). If priority monism is true and we accept (Par2), (Min3) and (T*), there is only one absolute and minimal truthmaker but nonetheless many derivative truthmakers which are partial truthmakers. If w is the only fundamental entity at w, then w is the unique fundament. If pluralism is true, there are several absolute and minimal truthmakers and many other derivative truthmakers which are also partial truthmakers.[18] If a, b, and c are the only fundamental entities at w, they are the unique fundament at w. The posterior parts of w given priority monism or pluralism will be fixed by the fundament. Given (T*), if either pluralism

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[17] Schaffer rightly points out that the pluralist's mistake (e.g., Armstrong and Russell's) was to *assume* that the number of fundamental entities is open-ended. My point is that Schaffer provides the resources for the pluralist to learn from their mistake. There is no reason for the pluralist to not say each world has a unique fundament.

[18] The fact that we admit partial truthmakers entails that there are truthmakers which are either fundamental or nonfundamental. We can call the truthmakers that are fundamental *absolute truthmakers*, and the truthmakers that are nonfundamental *relative truthmakers*.

or priority monism is true, there is a unique fundament at w that grounds the truth that there are no bunyips.

Schaffer's argument is really an argument in support of a 'general method' for solving the problem of negative existentials that a pluralist or priority monist and the friend or foe of partial truthmakers can adopt. This general method, I think, is the best strategy for solving the problem of negative existentials. But the honours for this insight go to Colin Cheyne and Charles Pigden (2006). They argue that (assuming (N)) the truthmaker for the truth that there are mice in my kitchen is the mice existing as they (actually) do in my kitchen. For Cheyne and Pigden, the mice existing as they (actually) do in my kitchen necessitates the truth that there are mice in my kitchen because it is impossible for the mice to be existing as they (actually) do and the truth that there are mice in my kitchen be false (Cheyne & Pigden 2006, 253). If the truth that there are mice in my kitchen were false, then the mice existing as they do in my kitchen would not exist. They further argue that *the world existing as it does with all its relations holding between any entities existing as they do* is the truthmaker for the truth that bunyips do not exist (Cheyne & Pigden 2006, 257-8). It is impossible for the world taken as a big positive fact existing as it is or the world as a collection of facts existing as they (actually) are to exist and <bunyips do not exist> be false. If we replace necessitation with grounding, we obtain the same result. The fundament of w existing as it does grounds the truth that there are no bunyips. The way the fundament of the actual world is makes it true that bunyips do not exist.

We do not need (M) to reach Schaffer's solution. The fact that (M) *can* play the role of solving this problem is not an overwhelming reason for us to accept it. What Schaffer's argument needs here is the claim that we *must* accept (M) to obtain this solution. I have argued that this is false. We also have no argumentative passage to navigate towards his specific package deal over other combinations. We can adopt (Par2), (T*), and (A5*) and solve the problem in the same way. So, the debate over (M) and partial truthmakers will not be won by a victory in the battle for the holy grail of truthmaking.

I am for the moment non-committal about accepting priority monism or pluralism. If I am right, we can appeal to either theory to solve the problem of negative existentials. And if we accept my account of minimal and partial truthmakers, we have the freedom to endorse either theory since the notion of a minimal truthmaker is neutral with respect to what is fundamental.

6 Conclusion

If we are serious about accounting for the intimate connection between a truth and its truthmaker, we should accept (T*) and (Par2) because they capture the fact that truths have an intimate connection with their truthmakers. The mice in my kitchen—the derivative beings that they are—are intuitively a more intimate truthmaker for the truth that there are mice in my kitchen than the cosmos. If priority monism is true, the smallest partial truthmaker is the cosmos. But in saying this we admit the notion of a minimal truthmaker and should appeal to (Min3) to properly understand the hypothesis. If we admit partial and minimal truthmakers, the world is *not* the one and only truthmaker. So (M) is false. Moreover, the fact that (M) is used as part of Schaffer's

solution to the problem of negative existentials does not force us to accept (M) lest the problem remains unsolved. We can adopt the general method behind his solution and accept partial truthmakers.

References

Anderson, John. 1962. Realism and Some of Its Critics. In *Studies in Empirical Philosophy*, ed. J. Anderson. Sydney: Angus and Robertson.

Armstrong, D. M. 1997. *A World of States of Affairs*. Cambridge ; New York: Cambridge University Press.

—. 2004. *Truth and Truthmakers*. Cambridge: Cambridge University Press.

Batchelor, Roderick. 2010. Grounds and Consequences. *Grazer Philosophische Studien* 80(1): 65-77.

Cameron, Ross P. 2008a. Truthmakers, Realism and Ontology. In *Being: Developments in Contemporary Metaphysics*, ed. R. Le Poidevin. Cambridge: Cambridge University Press.

—. 2008b. Turtles All the Way Down: Regress, Priority and Fundamentality. *Philosophical Quarterly* 58(230): 1-14.

Cheyne, Colin, and Pigden, Charles. 2006. Negative Truths from Positive Facts. *Australasian Journal of Philosophy* 84(2): 249-65.

Correia, Fabrice, and Schnieder, Benjamin. 2012. *Metaphysical Grounding: Understanding the Structure of Reality*. Cambridge: Cambridge University Press.

Fine, Kit. 2001. The Question of Realism. *Philosophers' Imprint* 1(1): 1-30.

—. 2012. Guide to Ground. In *Metaphysical Grounding: Understanding the Structure of Reality*, ed. F. Correia and B. Schnieder. Cambridge: Cambridge University Press.

Forrest, Peter. 2000. The Entanglement of Truth-Makers. *Logique et Analyse* 43(169-170): 185-94.

Fox, John. 1987. Truthmaker. *Australasian Journal of Philosophy* 65(2): 188-207.

Martin, C. B. 1996. How It Is: Entities, absences and voids. *Australasian Journal of Philosophy* 74(1): 57-65.

Molnar, George. 2000. Truthmakers for Negative Truths. *Australasian Journal of Philosophy* 78(1): 72-86.

Mulligan, Kevin, Simons, Peter, and Smith, Barry. 1984. Truth-Makers. *Philosophy and Phenomenological Research* 44(3): 287-321.

Rhoda, Alan. 2009. Presentism, Truthmakers and God. *Pacific Philosophical Quarterly* 90(1): 41-62.

Rosen, Gideon. 2010. Metaphysical Dependence: Grounding and Reduction. In *Modality: Metaphysics, Logic, and Epistemology*, ed. B. Hale and A. Hoffman. Oxford: Clarendon Press.

Schaffer, Jonathan. 2008a. Truth and Fundamentality. *Philosophical Books* 49(4): 302-16.

—. 2008b. Truthmaker Commitments. *Philosophical Studies* 141(1): 7-19.

—. 2009. On What Grounds What. In *Metametaphysics: New Essays on the Foundations of Ontology*, ed. D. Chalmers, D. Manley and R. Wasserman. Oxford: Clarendon Press.

—. 2010a. The Internal Relatedness of All Things. *Mind* 119(474): 341-76.

—. 2010b. The Least Discerning and Most Promiscuous Truthmaker. *Philosophical Quarterly* 60(239): 307-24.

—. 2010c. Monism: The Priority of the Whole. *Philosophical Review* 119(1): 31-76.