

Unstable Truthmaking^{*}

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Abstract

Recent discussion of the problem of negative existentials for truthmaker theory suggests a modest solution to the problem: fully general negative truths like <there are no unicorns> do not require truthmakers, whereas partially general negative truths like <there are no unicorns in the Sydney Opera House> do. This modest solution provides a third alternative to the two standard solutions to the problem of negative existentials: the endorsement of truthmaker gaps, and the appeal to contentious ontological posits. We argue that this modest, middle-ground position is inconsistent with certain plausible general principles for truthmaking. The only stable positions are to treat all negative truths as requiring truthmakers, or admit that no negative truths require truthmakers. Along the way, we explore some previously unaddressed questions for non-maximalist truthmaker theory.

1. Introduction

No issue is more hotly contested in truthmaker theory than the problem of negative truths, particularly those truths that are about what does not exist (e.g., Molnar 2000). For propositions like <there are no unicorns>, questions arise as to what it is that makes them true. Typically, truthmakers are thought to be entities that (at least) necessitate the truth of propositions. The trouble with negative truths is that there does not appear to be anything that necessitates the truth of negative claims. Take all the animals in the world. Their existence, taken collectively, does not guarantee the truth of <there are no unicorns>, for it's possible that all

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those animals could have existed alongside unicorns, had the world developed differently. Philosophers who maintain that negative truths require truthmakers thus appear to be forced into positing the existence of metaphysically contentious entities such as negative facts (Russell 1985), totality states of affairs (Armstrong 2004), or absences (Martin 1996) in order to necessitate the truth of negative claims. Others argue that negative propositions do not require truthmakers, and thus accept that there are *truthmaker gaps*, truths without truthmakers (Bigelow 1988, Lewis 2001).

Some hope to strike a path between these two options. According to such philosophers, we can find truthmakers for negative truths without the need for contentious ontological posits (e.g., Cameron 2008). One instance of this strategy is defended by Cheyne and Pigden (2006), who contend that there is an uncontentious fact that exists—*the way the universe actually is*—that necessitates the truth of <there are no unicorns>. This object—call it ‘Way’—cannot co-exist with unicorns, Cheyne and Pigden say, for “the universe would have to be a different way for unicorns to exist” (2006: 257). The universe would indeed have to be different: there would have to be unicorns. However, though the universe would have to be different, it need not follow that Way would not exist. Here we may appreciate the thrust of Parsons’ (2006) critique of Cheyne and Pigden’s view.¹ For imagine a world composed of two island universes: Way, and some other universe in which unicorns do exist. In this scenario, Way exists, though <there are no unicorns> is false. Because Way fails to necessitate the truth of <there are no unicorns>, it cannot make it true.

Parsons concludes that Cheyne and Pigden’s strategy cannot recover a truthmaker for <there are no unicorns>, and—for independent reasons—judges truths of this sort to be truthmaker gaps. But Parsons does concede that Cheyne and Pigden’s strategy is effective in certain cases. Parsons distinguishes between *fully general* negative truths and *partially general* negative truths. A fully general negative truth is a true proposition that denies the existence of certain sorts of entities in any corner of the universe, at any place or time. <There are no unicorns> is an example, as it would be false if there were a unicorn in at least one location of space or time. Partially general negative truths deny the existence of certain sorts of entities in a restricted sense. <There are no unicorns in the Sydney Opera House> is an example of this kind. Parsons grants that Cheyne and Pigden’s strategy works for partially general negative truths, but not for fully general negative truths. For instance, *the way the Sydney Opera House actually is* guarantees the truth of <there are no unicorns in the Sydney Opera House>. Cheyne and Pigden’s ‘ways’ couldn’t exist, and yet there be unicorns in the Opera House. We therefore

¹ Pagès (2009) defends Cheyne and Pigden against Parsons.

appear to have a *modest* solution to the problem of negative existentials, a solution that successfully navigates between truthmaker gaps and controversial ontology: only partially general negative truths require truthmakers. This appears to be progress: a great many of the negative existentials that we take to be true can be accounted for without the need for truthmaker gaps or contentious ontological posits. Indeed, one might even take the modest solution further by adopting a paraphrastic strategy, whereby general negative existentials such as <there are no unicorns> are paraphrased in terms of partial claims in the neighborhood, such as <there are no unicorns on Earth>. Since truthmakers can be found for these claims, one appears to have the resources to accommodate most of our everyday talk of things not existing, which is no small matter.

It is this modest solution to the problem of negative existentials that we aim to challenge. We argue that the modest solution that Parsons appears to endorse is theoretically unstable, as it puts some plausible theses about truthmaking into conflict with one another. We go on to show that the truthmakers posited for partially general negative truths, ‘ways’, are contentious after all and thus that a modest solution to the problem of negative existentials of this kind fails to strike a path between endorsing truthmaker gaps on the one hand, and accepting contentious ontological posits on the other.

2. Some Truthmaking Principles

Truthmaker theory takes a stand on various theoretical questions: Do all or only some truths have truthmakers? What is the truthmaking relation? What sorts of objects serve as truthmakers? What are some of the general principles of truthmaking? Our concern is with this last question since, as we shall now show, the modest solution leads to problematic consequences when viewed in light of otherwise plausible principles about truthmaking.

The principles we have in mind are the following:

- (P₁) If T makes p true, then T makes true anything entailed by p .
- (P₂) If p requires no truthmaker, then anything entailed by p requires no truthmaker.

P₁ is Armstrong’s *entailment principle* (2004: 10-12). As Armstrong notes, it is an open question as to the nature of the kind of entailment behind the principle. If one resists the thought that necessary truths are made true by each and every existing thing, the entailment cannot be classical logical entailment. The entailment needs, instead, to involve hyperintensionality

(Schaffer 2010) or, perhaps, relevance (Restall 1996). Although important, this topic will be set aside for present purposes, as our particular concerns do not turn on exactly how we should understand the entailment at issue.

P_1 is compelling, in part, because it conforms to some of the basic ideas behind truthmaker theory.² Truthmaker theory is about proper ontological accounting; propositions are true because the world is a certain way. Now, whereas truthmakers *make* propositions true, entailment *preserves* the truth of propositions. Suppose that p entails q . Because p entails q , if you have p , you get q for free: given p , q is a sort of ‘logical’ free lunch. We think that the logical free lunch becomes a free lunch of another kind when applied to truthmaking. If, when you have p , you get q for free, then when you have a *truthmaker* for p , you get a *truthmaker* for q for free as well.

To put the point another way, entailment from p to q holds only when q doesn’t ‘go beyond’ where p goes. We understand this talk of ‘going beyond’ as follows. When we commit to the truth of p , we rule out a class of worlds (the not- p worlds) as not being actual. If p entails q , then a commitment to q doesn’t make any further ontological impact: commitment to q given a commitment to p rules out no world not already ruled out by p . Arguably, what secures the inference from p to q is the fact that q involves no ‘content’ that isn’t in some sense already contained within or guaranteed by p .

Because q goes no further than p , it’s plausible to suppose that what makes p true effectively makes q true as well. In fact, that q goes no further than p helps to explain why the truthmaker lunch is free: because we have ‘paid’ for p by accepting a truthmaker for p into our ontology, and because q goes no further than p , we have already ‘paid’ for q as well.

P_1 is a familiar principle in truthmaker theory. P_2 is less familiar, since it belongs to non-maximalist truthmaker theory—truthmaker theory that rejects the claim that all truths have truthmakers—which has not been as thoroughly spelled out and defended as maximalist truthmaker theory. Nevertheless, P_2 can be motivated in a similar way to P_1 . But first, we need to clarify just what P_2 says. By “requires no truthmaker” we mean that a proposition can be true in spite of there being no object in existence that makes it true. <There are unicorns>, being false, has no truthmaker. But it does require one, because if it were true, it would need a truthmaker (namely, a unicorn). The non-maximalist idea is that only certain truths require no truthmakers, negative existentials being the paradigm case.

² P_1 has been challenged by Rodriguez-Pereyra 2006. For responses, see Jago 2009 and López de Sa 2009, and in turn Rodriguez-Pereyra 2009.

The motivation for P_2 parallels the motivation for P_1 . Where p entails q , q does not ‘go beyond’ p ; q can introduce no implication not already captured by p . So there’s nothing extra to be found in q , logically or ontologically speaking, that isn’t already in p . Suppose, then, that p can be true without the benefit of a truthmaker. Accordingly, there can be nothing in q that requires any accounting, for there is nothing in q that is not already accounted for by p . Hence, if p gets along without a truthmaker, so too does q . Or, to put the point another way, consider P_1 . By P_1 , if p entails q then by making p true you get the truthmaker for q for free. So whatever you need to make p true, that same thing is sufficient for q ’s truth. But conversely, if nothing is needed to make p true but p is true nonetheless, then because you get q for free with p ’s truth, it appears that nothing is needed to make q true either.

3. Against the Modest Solution

P_2 poses a problem for the modest solution to the problem of negative existentials. First, notice a logical point about negative claims: fully general negative claims entail partially general negative claims, but not the other way around. <There are no unicorns> entails <there are no unicorns in the Sydney Opera House>, but not vice versa. The corresponding positive claims behave in the opposite manner: <there were dinosaurs on Mars in 1776> entails <there were dinosaurs>, but not vice versa.

Now, on the modest view, <there are no unicorns> requires no truthmaker because it’s fully general. And so, by P_2 , <there are no unicorns in the Sydney Opera House> requires no truthmaker either. But partially general truths *do* require truthmakers, according to the modest solution. What makes <there are no unicorns in the Sydney Opera House> true is the object Cheyne and Pigden would call “the way the Sydney Opera House actually is”. So if the proponents of the modest view accept P_2 , then they must be committed to the view that propositions like <there are no unicorns in the Sydney Opera House> both *do* and *do not* require truthmakers, an obvious contradiction. If they reject that principle, however, they must reject a basic constraint on respectable truthmaker theory, one that enjoys the same plausibility and acceptability as P_1 .

Thus, the modest solution to the problem of negative existentials leads to either contradiction or unstable truthmaker theory. To restore consistency and stability, we need to treat fully general and partially general negative truths alike. Either both require truthmakers, or neither does.

Furthermore, if we do continue the search for truthmakers for negative truths, then we cannot make use of Cheyne and Pigden's ways, not even in part. We have granted that Parsons is correct that the 'ways' strategy offered by Cheyne and Pigden cannot fully solve the problem of negative truths. *The way the universe actually is*, even supposing it exists, does not necessitate the truth of fully general negative truths. But taking *the way the Sydney Opera House actually is* to be the truthmaker for the corresponding partially general negative truth leads to unstable truthmaker theory. Notice, however, that if such entities exist, then they ought to be truthmakers for the negative truths in question. As Cheyne and Pigden show (and Parsons agrees), such entities would necessitate the truth of the partially general propositions in question. Furthermore, *the way the Sydney Opera House actually is* is appropriately related to propositions involving what is or is not inside the Sydney Opera House. Hence, if these 'ways' exist, then they are truthmakers for partially general negative truths, and if they are the truthmakers for partially general negative truths, then unstable or even contradictory truthmaking results. Thus, these 'ways' do not in fact exist. They are not sound ontological posits. So we are, once again, faced with an uncomfortable choice: we must either reject the maximalist demand for truthmakers for all negative truths, or posit contentious entities to satisfy it.

4. Objections and Replies

We envision two lines of response to our argument.

4.1. P_2 is false.

Above, we canvassed some independent support for P_2 , and saw how it is motivated by some of the underlying ideas behind truthmaker theory. But in spite of its initial plausibility, perhaps P_2 is, at the end of the day, false. Many compelling principles turn out, upon reflection, to have counterexamples. Does P_2 ?

Finding counterexamples to P_2 is somewhat contentious, given that it is controversial as to which truths can be thought to lack truthmakers. One kind of truthmaker gap that has been defended in the truthmaking literature is contingent predication, such as <Socrates is a philosopher> (Lewis 2001). Given that Socrates himself doesn't guarantee that it's true that Socrates is a philosopher (for he might have pursued a different way of life), Socrates can't be a truthmaker for <Socrates is a philosopher>. Hence, truthmaker theorists have posited the existence of states of affairs (Armstrong 2004) or tropes (Cameron 2008) to serve as truthmakers

for contingent predications. Others, like Lewis, believe that such ontological posits are metaphysically gratuitous, and opt for restricting the scope of truthmaking instead.

If contingent predications are legitimate truthmaker gaps, then we need to refine P_2 somewhat. For $\langle \text{Socrates is a philosopher} \rangle$ entails $\langle \text{Socrates exists} \rangle$, a paradigm case of a truth that requires a truthmaker. So here we have a potential counterexample to P_2 . In response, we concede that P_2 requires some refining. To see what is called for, we must gain a more subtle understanding of truthmaker gaps. A truth without a truthmaker need not be some sort of truth that “hangs free of reality”, or whose truth is a metaphysical mystery. We can explain perfectly well why contingent predications (and negative existentials) are true; the explanation even proceeds in the purely metaphysical terms of what does and doesn’t exist, and what properties those things have. It’s just that the explanation is thought not to require positing the existence of some sort of entity that necessitates the truth of the claim in question.

Hence we see Bigelow and Lewis trade in truthmaker maximalism for weaker supervenience theses. In so doing, they show us how there can be a difference between a truth’s having a truthmaker and a truth’s having certain ontological implications. On Lewis’s view, there is no entity (such as a trope or state of affairs) that necessitates the truth of $\langle \text{Socrates is a philosopher} \rangle$; but that is not to say that the proposition has no “ontological requirements”, that no ontology at all is needed in order to account for its truth. $\langle \text{Socrates is a philosopher} \rangle$ cannot be true unless Socrates exists. And, unsurprisingly, Socrates is also the needed truthmaker for $\langle \text{Socrates exists} \rangle$. So again, we see that in a case where p entails q , the ontological requirements for p being true guarantee the truth of q . What we won’t find are cases where p entails q , and the ontological requirements for q surpass those for p .

In the language of supervenience, even those truths that lack truthmakers must have an appropriate supervenience base. The truth of $\langle \text{there are no unicorns} \rangle$ supervenes on what exists, for if the proposition were false, the base would have to be different—there would have to be unicorns within it. Similarly, the truth of $\langle \text{Socrates is a philosopher} \rangle$ supervenes on what exists, and how those things exist. Had the proposition been false then something that exists, namely, Socrates, would have to have been different. So a supervenience theorist might rework P_2 as follows:

- (P_2^*) If p requires no truthmaker because its supervenience base B is sufficient to account for its truth, then the truth of anything entailed by p is also accounted for by B .

It's the absence of unicorns in B that accounts for the truth of <there are no unicorns>, and that will also account for the truth of <there are no unicorns in the Sydney Opera House>. What accounts for the truth of <Socrates is a philosopher> is the presence of Socrates in B, and his having certain properties and standing in certain relations. That base is therefore sufficient to account for <Socrates exists>. Even though we have revised the letter of P_2 , the spirit remains intact. When we move from p to q via entailment, we can't thereby *increase* the ontological requirements involved, regardless of whether those are to be cashed out in terms of truthmakers or supervenience bases.

Our revision of P_2 does not undermine our case against the modest proposal. The truth of <there are no unicorns> is provided by a supervenience base lacking any unicorns, and that same base accounts for the truth of <there are no unicorns in the Sydney Opera House>. There is no need to introduce a necessitating truthmaker in addition to the supervenience base in order to account for the latter's truth. Hence, our original claim remains in force. Given that fully general negative truths entail partially general negative truths, but not vice versa, the ontological requirements can never be greater for the latter than the former. But that is precisely what the modest solution requires. On the modest solution, partially general negative truths require truthmakers, but fully general negative truths do not.

4.2. *<There are no penguins in the Sydney Opera House> doesn't require a truthmaker, though in fact it has one.*

An alternative way to resist our argument is to hold that while partially general negative truths do not *require* truthmakers, they nonetheless sometimes have them. In the case of many truths, a single truth may have multiple truthmakers. <There are penguins> is made true by each and every penguin, for example. However, there's no problem with having *too many* truthmakers; the real worry is having *too few* (i.e., none at all). So the situation that we have identified, goes the objection, is of the former, innocuous kind. <There are no penguins in the Sydney Opera House> does not need a truthmaker—its truth does not require there to be some entity in existence that necessitates its truth—but it has one anyway. Here we have a superfluous truthmaker, but that is no objection. The only worrisome cases are truths that do require truthmakers, but where we have difficulty finding them.

We reply by calling into question the analogy between the case at hand and the case of multiple truthmakers. The truth of <there are penguins> boasts an embarrassment of truthmakers. The proposition's truth does not depend on any particular penguin, but it does

depend on there being some penguin or other. In essence: the truth of <there are penguins> needs to be necessitated in a particular way, though there are many instances of that way that will suffice. For instance, the truth of that proposition can be explained in terms of the existence of Opus the penguin, Emily the penguin, or any other penguin. But these explanations are all of a kind, and some explanation of this kind must be available in order to account for the proposition's truth.

Thus, in the case of <there are penguins>, we have a proposition that is true in virtue of a certain kind of presence (though which particular presence that is remains open) and this is unproblematic. The case of partially general negative existentials is different. On the one hand, <there are no penguins in the Sydney Opera House> is claimed not to require a truthmaker (given that it follows from something that requires no truthmaker). Indeed, the truth of that proposition isn't the kind of thing to depend on the existence of certain kinds of entities. Its truth depends instead on there *not* being certain kinds of entities. On the other hand, <there are no penguins in the Sydney Opera House> is claimed to be made true by something that does exist, namely, *the way the Sydney Opera House actually is*. Because that way exists, the proposition is true. Notice, then, that the proposition is claimed to be true in virtue of an absence, *and also to be true in virtue of a presence*. Here we have two distinct explanations that couldn't be more different, metaphysically speaking. We are dealing with a proposition whose truth is claimed to be accounted for in vastly different ways. And it's simply not at all clear that this should be possible. What sort of proposition admits of two equally good but diametrically opposed explanations? Hence, we see a worrying tension in the view that allows for partially general negative truths to have truthmakers in spite of not requiring them.

5. Conclusion

We conclude that the modest solution to the problem of negative existentials endorsed by Parsons is untenable, as is Cheyne and Pigden's original suggestion. Either *all* negative existentials have truthmakers, or *none* of them do. Which option is the better course to take is a question we shall have to take up another day. But if we accept that negative truths do have truthmakers, we can gain no traction on the problem by starting down Cheyne and Pigden's road of 'ways', as any support for the existence of these 'ways' is negated by how they upset general principles of truthmaking.

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