Truthmaker Monism

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Abstract

Monism is a metaphysical view according to which there is only one fundamental object. This paper will explore monism within the context of truthmaker theory, or *Truthmaker Monism*, a view rarely discussed in literature. Although few truthmaker theorists defend monism, at least explicitly, some theories seem to share the spirit of monism to some extent. Interestingly, they are proposed as solutions for the same problem, called *the problem of negative truth*. A close examination will show that while each of these solutions can account for the problem, they are unsatisfactory for different reasons. This paper will suggest a novel solution to the problem of negative truth which preserves the advantages of existing solutions while avoiding the difficulties with which they are faced.

Key words: monism, truthmaker, actuality, duplicate, the Humean denial of necessary connections

Introduction

Monism is a metaphysical view according to which there is only one fundamental object. Recent discussions of monism in analytic metaphysics began with the seminal paper by Jonathan Schaffer (2010*b*).[1] Although his view is undoubtedly one speculative metaphysics, the arguments raised in his paper invoke not only the standard apparatus of metaphysics such as mereology and possible worlds, but also the history of philosophy (Aristotle, Spinoza, and Hegel, among other great figures) and contemporary physics (and particularly the phenomenon of entanglement in quantum

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[1] Schaffer (2010*b*) distinguishes two kinds of monism, priority monism and existence monism. We ignore this distinction for the sake of argument.

mechanics). We should consider monism in broader subfields of philosophy for that reason.

This paper will explore monism in truthmaker theory, or *Truthmaker Monism*, a view rarely discussed in literature.[2] Although few truthmaker theorists defend monism, at least explicitly, some theories seem to share the spirit of monism to some extent. Interestingly, these theories are proposed as solutions for the same problem, called *the problem of negative truth*. A close examination will show that while each theory can account for this problem, they are unsatisfactory for different reasons. This paper will suggest a novel solution to the problem of negative truth, preserving the advantages of existing theories while avoiding their shortcomings.

This paper is organized as follows: As a preliminary, a broad explanation of the notion of truthmaker is given in section 1, a thesis of the orthodox truthmaker theory that is presupposed in the dispute regarding the problem of negative truth, *Truthmaker Maximalism*, is also given. Section 2 discusses the problem of negative truth, and its standard solution to this problem is also examined. Section 3 discusses monistic views, which are supposed to account for the problem of negative truth; according to our analysis, however, this perspective may pose a dilemma. Section 4 proposes a novel solution, and finally, Section 5 explores Truthmaker Monism.

1.   What is Truthmaker?

In this section, we give a rough overview of truthmaker theory.[3] Two concepts are essential to the argument below: the idea of a necessary condition for truthmaking, and what is known as Truthmaker Maximalism.

Truthmaker theorists contend that there exist concrete entities that are grounds for (at least most) contingent truths. The proposition that Socrates exists, for example, is contingently true and Socrates himself is a concrete entity for the truth. In other words, because Socrates exists, the proposition that he exists is true; if he does not exist, it is not true. We call these concrete entities truthmakers because they are seen to make contingent truths true. Truthmaker theory is an ontological inquiry based on the notion of truthmaker.

While the concept of a truthmaker is difficult to define, very few theorists deny the need for a necessary condition, according to which, if an entity is a truthmaker for a proposition, it necessitates the proposition's truth (Rodriguez-Pereyra, 2006).[4]

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[2] Roughly speaking, Truthmaker Monism is the view that the world is the only truth-maker for every truth. Some argue that Truthmaker Monism could render truthmaker theory trivial. However, Schaffer (2010*a*) defends Truthmaker Monism from these objections.

[3] For the topics discussed within the context of truthmaker theory, see MacBride (2020).

[4] For truthmaker theorists who deny the need for the necessary condition, see Bar-

Conversely, if it is possible that an entity exists while the proposition is false, the entity is not a truthmaker for the proposition. Athens is not a truthmaker for the existence of Socrates, nor are some of the molecules that constituted Socrates.

Some truthmaker theorists claim that all contingent truths have truthmakers (Rami, 2009), a position that is referred to as *Truthmaker Maximalism*. We assume this position.[5]. The problem of negative truth, our focus in this paper, is essentially an objection against Truthmaker Maximalism in literature. Our novel solution to this problem, proposed in Section 4, is the most valuable for the proponents of Truthmaker Maximalism.

2.   The Problem of Negative Truth

The problem of negative truth can be traced back to Russell (1919). He claimed there exist negative facts, such as the fact that Socrates is not alive, as well as positive facts. His reasoning can be followed in the context of truthmaker theory. What is the truthmaker for the negative truth that there are no unicorns? For the positive case we considered in the previous section, Socrates himself is the truthmaker. He is no doubt indispensable for the truth. Similarly, for other positive cases, say, the truth that there are horses, any horse can be the truthmaker for it. However, for negative cases such as the fact that there are no unicorns, it appears that nothing can be a truthmaker. Obviously, a unicorn cannot be the truthmaker because if the unicorn exists, the proposition is not true, and therefore, is not a fact. However, Russell identified what he called *negative facts*, which, if they exist at all, can make the proposition that there are no unicorns true (and thereby necessitate that truth).[6]

Although introducing negative facts into our ontology, as Russell did, can solve the problem of negative truth, the concept has also received heavy criticism. Negative facts have bizarre characteristics compared with positive ones. We focus on three characteristics in particular. The first is *constituency*. It is unclear what constituents a negative fact is made of (Rodriguez-Pereyra, 2006), and because one cannot perceive a negative fact, it is difficult to specify its components. The problem is that although it seems easy to distinguish the fact that there are no unicorns from other negative facts, such as there are no dragons, it would be quite difficult to specify how they differ without referring to their components. The second characteristic is connected to *perceivability*. Negative facts are not directly perceivable (Molnar, 2000, sec. VI). Perception is the relation between the perceiver and the perceived. When the latter

celó Aspeitia (2015); Briggs (2012); Griffith (2015).

[5] Note that we take Truthmaker Maximalism as a thesis about the actual world (Molnar, 2000, p, 72) Accordingly, truths involving other worlds are not our concern.

[6] More precisely, as one can easily see, the problem is about negative existential truths.

does not exist, it does not hold or at least it is mysterious how the perceiver can perceive it. Some claim that we can perceive a negative fact in an ordinary context, but only by comparison with a positive fact. Without comparison with an appropriate positive counterpart, one cannot perceive a negative fact. The third characteristic of negative facts is related to *causal efficacy.* Negative facts are causally ineffective (Molnar, 2000, sec. V). According to the so-called Eleatic principle, causal efficacy is the mark of a real existent. However, a causal relationship is usually one between actual events or entities, such as striking a billiard ball as the cause and the collision with another ball as the effect. If there is no striking, no specific effect will occur.

Obviously, these characteristics of negative facts are interrelated, and one could deny the validity of any or all three. For instance, some might reject the claim that negative facts are causally ineffective. In fact, some negative facts are believed to be causes in ordinary contexts. The fact that I am not at my house would imply a cause of theft. However, if one takes the scenario at face value, there would be too many causes and effects present. I am not at my house, at my office, at my parents' house, and other places. These other negative facts could cause events that are too small to notice. Also, there are many other things that I am not doing, which would be the cause of still other effects. Many unnoticeable causations seem disastrous for our causal understanding. We believe that striking a ball is the cause of the collision. If there were many other causes unnoticeable to us, such as no one stopping the ball, the striking would be only a part of the cause. This is a case of underdetermination, in which the alleged cause is insufficient for the effect. Or, there would be other causes independent from the alleged cause. This is a case of overdetermination, in which the alleged cause doesn't exclude other causes, unlike mental and physical causations arguably exclude each other. Either way, our understanding of ordinary causation is extremely defective.

Most theorists agree that the precise reason why negative facts have such problems is that they are *negative.* Positive facts are those with which we are familiar and that have none of the problems discussed above. They are causally effective and directly perceptible. There are also theories regarding the components of positive facts. According to the standard theory, a positive fact consists of appropriately combined particulars and universals (e.g., Armstrong, 2004). Therefore, we call for a different solution that does not involve any negative entities. A solution that requires negative entities seems at most a last resort.

3.   Putative Solutions

As discussed in the previous section, introducing negative entities into our ontology provides a solution for the problem of negative truth, but also raises serious issues. Other solutions have been proposed, two of which are discussed in detail in this

section. The first is the solution proposed by Cameron (2008), and the second is by Cheyne and Pigden (2006). They are worth considering because they are monistic.[7]

3.1. The Actual World: Cameron's Solution

Ross Cameron proposed a solution for the truthmaker of negative truth. According to Cameron, the truthmaker for negative truth is *the actual world itself* (Cameron, 2008, p. 413). He does not believe that negative truths *per se* are problematic, as some theorists contend (e.g., Dodd, 2007; Molnar, 2000). His first step is to doubt the distinction between positive and negative entities in ontology. In fact, Cameron argues that the distinction is rather ambiguous, and that it is difficult to spell out exactly how they may be distinguished from the other. The fact that I am not home is surely negative, but the fact that I am absent is positive, at least grammatically, even though the latter represents the same situation as the former. According to Cameron, the distinction between positive and negative is *representational* (Cameron, 2008, p. 412). One can represent a single situation, either as positive or negative. Taking the distinction as representational does not lead to a solution to the negative truth problem, but it does suggest that the truthmakers for negative and positive truths are *of an ontologically similar kind*. However, is there anything that can be a truthmaker for a negative truth and of the same ontological kind as the usual truthmakers for positive truths, such as Socrates and horses? According to Cameron, the answer is affirmative. *The actual world itself*, the sum of everything in the actual world,[8] can be the truthmaker for negative truths. This is ontologically no different from Socrates and horses since they are simply parts of the actual world itself.

The claim that the actual world is the truthmaker for negative truths might sound implausible. However, note that the proposition that there are no unicorns is logically equivalent to the proposition that everything is not a unicorn. A negative existential truth, like the proposition that there are no unicorns, is also a universally quantified negative truth, and the latter is about *everything in the world*. We must decrease the implausibility of the world as a truthmaker for negative truths if the equivalence is to be appreciated.

3.1.1. Advantages of Cameron's Solution

Cameron's solution can avoid the three issues of, *constituency*, *perceivability*, and *causal efficacy*. As for *constituency*, the actual world is the sum of actual concrete

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[7] These two solutions don't imply Truthmaker Monism, and vice versa. But these solutions are available for Truthmaker Monism because they don't appeal to any particulars but world to handle the problem. Cameron (2010) claims that the combination of Truthmaker Maximalism and the Humean doctrine implies monism.

[8] We follow the standard mereological definition of the world as the mereologically maximal sum of everything in the world. See, among others, Lewis (1986).

objects such as Socrates and horses, so that the constituents of the world are obviously things in the world. As for *perceivability* and *causal efficacy*, all constituents of the world are at least in principle, perceivable and causally effective because they are concrete, and the world is a mere sum of them.

Furthermore, Cameron's solution avoids another problem. David Lewis' (1999) argument against truthmaker theory involves a modal connection: he criticizes the theory because it violates Hume's famous denial of the necessary connection between distinct entities. The truthmaker for the proposition that Socrates is a philosopher necessarily coexists with Socrates. The truthmaker in this case is not Socrates himself, since he might not be a philosopher, but the proposition still implies that Socrates exists. Therefore, if the truthmaker exists in a possible world, Socrates always exists there. The two distinct entities, the truthmaker and Socrates, have a necessary connection. Cameron rejects this criticism. According to Lewis' notorious modal realism, nothing can be in two distinct worlds (Lewis, 1986). For Lewis, then, the Humean doctrine is not about distinct entities themselves, but rather about their *duplicates*. The duplicate of the truthmaker for the proposition can exist in a possible world without the duplicate of Socrates. His counterpart that is not a duplicate will suffice for the role of truthmaker.

However, negative facts do violate even the precise version of the doctrine. A duplicate of the negative fact that there are no unicorns cannot coexist with a duplicate of a unicorn in any possible world. Because the negative fact is characterized by some property that excludes unicorns, (a duplicate of) the negative fact is incompatible with (a duplicate of) the corresponding positive fact that a unicorn exists. A duplicate of the negative fact and a unicorn are distinct entities, but they exclude each other. If they do not, it is possible that the fact obtains but the proposition that there are no unicorns is false, which means that the negative fact would not suffice the necessary condition of truthmakers.

In contrast, duplicates of the world can exist even if there is a unicorn. There might be a possible world in which a duplicate of the entire actual world exists (or the duplicate is a proper part of the world). Since the world is the sum of everything in the world, a possible world can contain a duplicate of the actual world entirely as a proper part. Even though the duplicate excludes a unicorn, the world that contains it does not.

3.1.2. The Expanded World Counterexample

Seemingly, the view that the actual world is the truthmaker for negative truths did not receive serious consideration before Cameron proposed it. The reason might be that the necessary condition of the truthmaker mentioned in Section 1 appears to cause the following problem. Suppose that the actual world is the truthmaker for negative truths, as Cameron argues. If the world is the truthmaker for the truth

that there are no unicorns, then its existence necessitates the truth by the necessary condition.

However, the following possibility seems to be a counterexample: Consider the actual world, @, and a world, w, in which a duplicate of @ exists (or, the duplicate is a proper part of w). Call the duplicate @'. @' is a counterpart of @ at w in the sense of the counterpart theory of modal predication (see Lewis, 1968). Suppose that there is a unicorn in w, but not in @'. Then, the proposition that there are no unicorns is false at w, but the proposition that @ exists is true at w since @', a putative counterpart of @, exists. Hence, while the proposition that @ exists is true at both worlds, the proposition that there are no unicorns is possibly false at @, since there is a world at which the proposition that there are no unicorns is false. In other words, the actual world fails to necessitate the truth, so it does not meet the necessary condition for truthmaker.

We can handle this putative counterexample. In fact, Cameron offers a restriction on the counterpart relation of @ (Cameron, 2008, p. 414). If the counterpart of @ is only @ itself, it is the only world in which the proposition that @ exists is true. Consequently, it is necessary that if the proposition that @ exists is true, then the proposition that there are no unicorns is true, simply because @ does not contain any unicorns. Surely @' exists in w, but there is no *counterpart* of @ in w because of the restriction of the counterpart relation. Because @' is a duplicate of @, all intrinsic properties of @' are precisely the same, but @' is not a counterpart of @ at all. If the restriction is granted, the putative counterexample will vanish.

However, such a restriction brings about an unintuitive consequence. We have an intuition that possibly there is a unicorn in this world (for what reason is it impossible?), although the restriction Cameron proposed does not seem to allow for this. It is impossible that @ contains a unicorn under the restriction because, as Cameron put it, "it has all its properties essentially" (Cameron, 2008, p. 415). One can defend the restriction, considering a different kind of possibility in the following way. The intuition requires nearby worlds in which a unicorn exists, which may mean that these worlds are counterparts of @. Counterparts represent possibilities as objects, that is, *de re* possibility. Accordingly, Cameron's solution conflicts with the intuition if the relevant nearby worlds with no unicorns represent *de re* possibility of @. But it may be a different kind of possibility, that is, *de dicto* possibility, the possibility represented by worlds that are not a counterpart of @, and the solution does not conflict with the latter possibility. Since it is not obvious what intuitions we have about *de re* possibility of @, it is also not clear at all if Cameron's solution conflicts with the intuition, or so one can argue. However, even if the restriction does not conflict with the *de dicto* possibility of unicorns, it still does so with the *de re* possibility. What is worse is that the conflict can be wildly generalized. @ has no *de re* alternative possibility about all contingent truths. There cannot exist unicorns or dragons; my

house cannot be located at an only slightly different place; Socrates cannot be taller than he was, and so on (Akiba, 2011, p. 129). Surely, this is another unintuitive consequence. Accordingly, it is difficult to say if Cameron's solution is satisfactory.[9]

In summary, Cameron's solution is very attractive. It allows for a truthmaker for negative truths without introducing negative entities into ontology, namely the world itself — the mereologically maximal sum of everything in the world. The world does not have the problems that negative facts face: causal efficacy, perceivability, and constituency. It also avoid another problem posed by Lewis as it does not violate the Humean doctrine of the denial of necessary connection. However, Cameron's solution has a counterexample. In an expanded world that contains a duplicate of the actual world, negative truth may be false, so that the world does not meet the necessary condition of the truthmaker. Cameron's attempt to escape from the counterexample invites unintuitive consequences.

3.2. The Way That the World Actually Is: Cheyne and Pigden's Solution

Another attempt to solve the problem of negative truth that we will discuss here is that of Cheyne and Pigden (2006). It is especially worth considering for the same reason that Cameron's is, which is that it is also a monistic solution. According to Cheyne and Pigden's solution, the truthmaker for negative truths is *the way that the world actually is.*[10] Their truthmaker is a very complex positive fact, a composite of all facts obtained in the actual world, i.e., a maximal composite. The difference between Cheyne and Pigden's truthmaker and that of Cameron is small. Cameron's is the maximally mereological sum in the world, whereas Cheyne and Pigden's is the maximal composite of the facts. However, just like Cameron's, theirs avoids the trouble associated with negative facts. Obviously the composite is made of each fact obtained in the actual world. Facts are supposed to be perceivable and causally effective, so is the maximal composite of them (at least there is no reason to deny it). Nevertheless, Cheyne and Pigden's solution does not have a counterexample to the expanded world.

Consider, again, the expanded world, w, in which @', a duplicate and counterpart of the actual world @, exists. Suppose there is a unicorn in w but not in @', then the proposition that there are no unicorns is false at w. However, the proposition that @ exists is true at w since the counterpart of @ exists there; hence, @ fails to necessitate the truth of the proposition that there are no unicorns. In contrast, Cheyne

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[9] For a proposal to defend Cameron's solution, see Kitamura (2016).

[10] Note that we follow Cheyne and Pigden only to the extent needed to contrast with Cameron's solution. In fact, there are differences between what is presented here and the original presentation. For example, their own wording is "the way the universe actually is"; they do not use the word "composite" to express their truthmaker, at least explicitly (Cheyne and Pigden, 2006, p. 257). However, this difference can be ignored for the present purpose.

and Pigden's truthmaker, the way that the world actually is, does not. It does not exist at w because @' is no not a duplicate of it. While @' is indeed a duplicate of @, meaning that all their intrinsic properties are the same, it is not the way that the world *actually* is because @' bears a relation that @ does not, namely the relation to the unicorn that exists in w. The way that the world actually is does not exist in w since @' is different from it regarding unicorns.

Cheyne and Pigden's solution has a problem that Cameron's solution avoid. As stated above, Cameron's solution evade the objection posed by Lewis within the context of the Humean doctrine. Cheyne and Pigden's solution cannot follow Cameron's in this respect. As argued above, the way that the world actually is excludes unicorns *in every possible world*. While this is the very reason for which their solution does not have a counterexample, exclusion in every possible world is also a modal connection the Humean doctrine denies. Some might think that it is simply because the truthmaker is exceptional. It is the most significant fact, the maximal composite of the facts obtained in the actual world. Unfortunately, smaller facts similarly exclude something. For example, the way that Socrates actually is requires Plato, since Socrates cannot be the way that he actually is without Plato. For any possible world, if the way that Socrates actually is exists, Plato coexists there. This is due to the term "actually," just like the usual actuality operator in modal logic causes serious problems (see, among others, Hazen, 1979). For any x, the way that x actually is requires or excludes some other distinct things, in any possible world in which it exists, to accord with the actual world.

Comparing Cheyne and Pigden's solution with Cameron's, it seems that the greatest difference between them is that the former can evade the counterexample of the expanded world while the latter cannot, and that the latter can evade the Lewisian objection of the Humean doctrine while the former cannot. Here, perhaps, is the dilemma: to abandon the Humean doctrine or to accept counterintuitive conclusions. It might be easy to do the former for some who do not find the doctrine plausible: Hume is simply wrong about modality, so we would recommend disregarding the doctrine; I conjecture that most truthmaker theorists follow this course of thought. However, Lewis and his followers would decisively refuse it. For those who believe other Humean ideas, such as Humean supervenience, the doctrine is not one that can be easily endorsed, but a critical part of all Humean metaphysics.

One may think that the upshot is that the truthmaker theory itself is incompatible with Humean metaphysics. This seems reasonable because it may be the reason Lewis raised his objection. However, we argue that they are compatible. This is an important implication of our novel solution that we will discuss in the next section.

4. A New Solution

The novel solution presented in this section is based on Cheyne and Pigden's solution. They are right that the truthmaker for negative truths is the way that the world actually is. However, they seem to overlook the potential of their own solutions. To see this potential, we must note two points. First, the way that x actually is does not have to include external relations, in contrast to the discussion in the previous section. While it is possible to *define* it in this way, it may also be defined differently, by including *only (intrinsic) properties and relations between its parts.* There is no reason to believe that the actual way must include external relations. If construed without external relations, we can maintain the Humean doctrine. For the way that Socrates actually is would no longer require Plato, a *relatum* of external relations that Socrates actually bears. It remains the same without Plato. Similarly, the way that the world actually is would be the same if a unicorn exists in the expanded world, but located outside the duplicate of the actual world.

To maintain the Humean doctrine is to accept unintuitive conclusions, such as the *de re* impossibility of the existence of unicorns, according to the dilemma discussed in the previous section. Once again, to make apparent the potential of Cheyne and Pigden's solutions, we must note a second point. The problem is raised by negative *existential* truths, and existential truths (positive or negative) depend upon their *scopes.*[11] There are Kangaroos *in* Australia, but not *in* Austria. If the scope of the proposition that there are Kangaroos is Australia, it is true, but false if the scope is Austria. The scope can also include both countries, as is the case with the proposition that there are Kangaroos in Austria or Australia, or that there are Kangaroos in the world.[12] Returning to our example of the negative truth, there are no unicorns. To be sure it is true in the actual world, and it would also be true in some non-actual possible worlds but false in others. The possibility of the existence of unicorns would make sense only if we consider the proposition with its scope. Therefore, properly speaking, the relevant proposition is not that there are no unicorns, but *that there are no unicorns in @.*[13]

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[11] We choose the world "scope" to avoid discussing related notions such as topic, aboutness, the subject matter, the domain of quantification, and so on. We do not deny that the notion of scope can be explained in term of some of those notions.

[12] One might wonder if there is an existential proposition without scope, that Kangaroos exist, full stop. If there is one, it might be called an existential truth *simpliciter*. Some who believe that ontology is about existence *simpliciter* might think that such scoped existential truths are not worth considering. We do not agree. Unfortunately, this will not be discussed here mostly because of space limitations.

[13] An anonymous referee suggested that the relevant proposition might well be that there are no unicorns in the actual world, where "the actual world" is understood as designating something constituted from @. We think his/her suggestion is valid.

Consider the latter proposition that there are no unicorns in @. Our truthmaker, the way that the world actually is, interpreted without external relations, can necessitate the proposition. In any possible worlds in which (a duplicate of) @ exists, it is true that there are no unicorns in @. It is so even in the expanded world, w, which includes a duplicate of @ and a unicorn outside because the unicorn is not in (the duplicate of) @. Surely, it is false that there are no unicorns in w. However, our truthmaker does not affect it, just like the truthmaker for the truth that there are no Kangaroos in Austria does not affect the falsity that there are no Kangaroos in the world.

What about the truthmaker for the truth that there are unicorns in w? It is also a contingent truth and there is the truthmaker for it, according to Truthmaker Maximalism. Fortunately, whatever the truthmaker is, no doubt it does not exist in the actual world. It seems there is no need to say more than that it would exist in w, probably somewhere other than the duplicate of @.

Compare our solution with Cheyne and Pigden's to highlght the difference. Their truthmaker excludes unicorns: there are no worlds in which the truthmaker and unicorns coexist, therefore it violates the Humean doctrine. In contrast, our truthmaker only exclude unicorns *within*: there are worlds where they coexist, if unicorns are located outside of it. There are no worlds where a unicorn exists within the truthmaker, but it does not violate the doctrine just as Cameron's truthmaker does not.[14] Compared to his solution, Cameron's truthmaker excludes unicorns by the restriction of counterpart relation, or put it differently, it does so essentially. The difference is that ours has no need for essential properties. That is the reason why our solution faces no unintuitive consequences the way Cameron's does, that the actual world has no alternative possibilities about contingent truths because it essentially has all of its properties.

Let us take stock. According to the novel solution proposed here, the truthmaker for the negative truth is the way that the world actually is, the same as Cheyne and Pigden's solution, but interpreted without external relations, in contrast to the original. Because it includes no external relations, we can maintain the Humean doctrine. It also does not have unintuitive consequences that Cameron's solution faces: the impossibility of the existence of unicorns. By taking the truth with its scope, what is impossible is the actual existence of unicorn. It is possible that there are unicorns

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However, we focus on the proposition with "in @" hereafter. For present purposes, it would suffice that our truthmaker can necessitate this proposition.

[14] Precisely speaking, as an anonymous referee correctly pointed out, our truthmaker has a necessary connection to the world, @, so that it does violate the doctrine. However, our solution is still at least on a par with the solution known as the most Humean, i.e., Cameron's solution, regarding respecting Humeanism. For his solution uses essential property, while our solution have only one exception of the doctrine.

in the world, if it means that there is a possible world that is not a duplicate of our world, different from it such that it includes unicorns.

5.   Concluding Remarks

In this paper, we examined three solutions for the problem of negative truth: That of Cameron's, Cheyne and Pigden's, and our own, the last of which, we argue, avoids problems that the other two solutions do not. The reason for which these three solutions in particular are worth considering is that they all are variants of Truthmaker Monism. In this final section, we explore the implications that our solution has for the nature of Truthmaker Monism.

First, Truthmaker Monism is not the view that there is only one truthmaker.[15] It allows truthmakers other than the actual world or the way that the world actually is. Those others include *minimal* truthmakers, the kind that cannot be subtracted without being a truthmaker, and are "of quite special importance for metaphysics"(Armstrong, 2004, p. 19). Truthmaker Monism can allow parts of the world or way for minimal truthmakers. Even so, the world or way is the most basic truthmaker: no other truthmaker is necessary as grounds for all contingent truths, whether positive or negative. In this sense, Truthmaker Monism is a version of *Priority* Monism rather than Existence Monism.[16] It should be noted that truthmaker theory is an ontological inquiry, but not necessarily all truthmakers are equally basic.

Because of the non-egalitarianism of truthmakers, Truthmaker Monists tend to accept some Aristotelian notions, such as grounding and ontological priority.[17] Priority Monism itself would not stand without the notion of priority. There is an exception: Cameron's solution does not invoke any notions in a similar vein. It is rather Humean; it endorses the Humean doctrine of the denial of the necessary connection between distinct entities. For those who find Cameron's solution untenable, Truthmaker monists cannot but be Aristotelian. However, our solution maintains the Humean doctrine. It should be conceded that the notion of priority is still required for minimal truthmakers. However, it does not invoke any Aristotelian notions to evade the problem that Cameron's solution faces. We can conclude that our solution is the most Humean Truthmaker Monism, even if not perfectly Humean.

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[15] See Schaffer (2010*a*), sec. II.

[16] For the distinction between Priority and Existence Monism, see Schaffer (2010*b*), sec. 3.

[17] Other monistic solutions also invoke Aristotelian notions. See Schaffer (2010*a*) and Kitamura (2016).

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