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TRUTHMAKING

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Truthmaking

Elements in Metaphysics

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Abstract: Truthmaking is the metaphysical exploration of the idea that what is true depends upon what exists. Truthmaker theorists argue about what the truthmaking relation involves, which truths require truthmakers, and what those truthmakers are. This Element covers the dominant views on these core issues in truthmaking. It also explores some key metaphysical topics and debates that are usefully approached by employing the tools of truthmaker theory: the debate between presentists and eternalists over the existence of entities from the past, and the debate between actualists and possibilists over merely possible states of affairs. In the final section, the Element explores how to think about truthmakers for truths involving social constructions.

Keywords: truth, truthmaking, presentism, eternalism, modality, possibility, social construction, metaphysics, ontology

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1 Introduction

Metaphysics is the philosophical study of reality, and truthmaking is the bridge connecting two aspects of it. On one side is the *stuff* of reality: the things that populate the universe, the objects we bump into, think about, and engage on a daily basis. *Ontology* is the branch of metaphysics that argues about what is included in the inventory of the universe. Do numbers exist? Objective moral values? God? On the other side are the *truths* about reality, those claims that accurately describe it. Echidnas can swim. Two is a prime number. If the Chicxulub asteroid hadn't collided with Earth, it wouldn't have caused a mass extinction. Truthmaking is the study of how these two dimensions of reality – what exists, and what is true – are related.

A common way of describing the relationship between what exists and what is true is in terms of dependence: what is true depends upon what exists, but not vice versa. Aristotle (1984: 22) captured the basic idea with an example along the following lines. Consider the island of Tasmania. The island belongs to the ontological inventory of the world: it's a real place, not a mere fiction. Furthermore, the sentence "Tasmania exists" is true. If the island didn't exist, the sentence wouldn't be true. And if the sentence weren't true, the island wouldn't exist. So this tiny bit of existence and truth go hand in hand; you can't have one without the other. Yet there is also an asymmetry between them. The island doesn't exist because the sentence about it is true. The sentence's being true isn't what accounts for or explains the existence of the island. (Consult a geologist for a better answer.) Instead, the sentence is true because the island exists. The sentence says that Tasmania exists, and so Tasmania itself is directly responsible for the truth of the sentence. The island, in other words, makes the sentence true: it is its truthmaker. In this way, existing objects are prior to, or more fundamental than, the truth of the claims involving those objects. Truth depends on being is thus a useful slogan for truthmaker theory.

Slogans are fine (and I imagine few would disagree with this one), but the real promise of truthmaker theory lies in its ability to deepen our understanding of truth, ontology, and the relationship between them. I contend that truthmaking can be wielded in a way that advances ontological debates and captures the metaphysical underpinnings of the various domains of our thought. This Element develops those goals, and thereby defends the utility of truthmaking. It first covers some foundational issues for truthmaking. Section 2 introduces the dominant perspectives on what truthmaking is, and Section 3 tackles the contentious issue of whether all truths have truthmakers. Truthmaking is then put to work. Section 4 explores the debate between presentism and eternalism over the reality of the past and future, showing how truthmaking is central to

that dispute. Section 5 covers some truthmaking issues raised by nonactual possibilities. Finally, Section 6 connects truthmaking to social constructions, exploring how truthmaking relates to questions of race and gender.

2 Truthmakers and Truthmaking

Imagine you are the creator of a universe and have hired an accountancy firm to organize the inevitable loads of paperwork involved. Before you activate the universe, bringing it into being by snapping your omnipotent fingers, you meticulously plan it out in advance. As you draw up and revise your plans, your new accountants keep a comprehensive record of your universe. The firm's ontology department is charged with keeping track of all the things you've created within the universe. If something exists in the universe, it belongs on the ontology department's master inventory. Meanwhile, the clerks over in the truth department are busy compiling all the truths for the universe. As you add to the universe and rearrange your creation, the truth department is constantly updating its work. Their goal is to write the master book of your universe, which collects everything true about it.

Notice that these two departments need to work together. Suppose you decide to create an orca and name her "Oriana." The ontology department adds Oriana to their database, and the truth department adds "Oriana exists," "Oriana is an orca," and others to their manuscript. If you change your mind about including Sharko and remove him from your blueprints, the ontology department will strike him from their records and the truth department will erase "Sharko is one of the sharks" from its book. In general, any time the ontology needs adjusting, so too will the truths. (Whether the converse is true is more contentious.)

Truthmaking is, at least at a minimum, the project of developing the correct equilibrium between the ontology and truth departments. Sometimes that task is straightforward; if you create two sharks for your world, you've added "There are two sharks" as a truth about it. Similarly, if you want it to be true that there are at least seven red pandas, you'll need to create at least seven red pandas. But suppose you want your world to be one where copper conducts electricity, the square of three is nine, and the moral arc of the universe bends toward justice. You instruct the truth department to add these to the list. What, if anything, does the ontology department need to do in response? The answer isn't obvious; it requires philosophical argument. Engaging in such argument is engaging in truthmaking.

As with most philosophy, there is little that truthmaker theorists agree on, even with respect to the foundational issues for truthmaking. Differences over the nuts and bolts of truthmaking can have dramatic consequences when it

comes to the ontological implications we should draw from a certain body of truths. In the remainder of this section I'll cover some of the basic questions that any truthmaker theorist must consider.

2.1 What Are Truthmakers?

Suppose the ontology department has finished its accounting. It has produced an exhaustive list of all the "furniture" of your universe. All the truthmakers for your universe are found on that list. Something can't *be* a truthmaker if it has no *being*. But is everything on the list a truthmaker?

Some say "no." On this view, truthmakers are a special or specific kind of entity. For example, it has been claimed that truthmakers must be *fundamental* entities: something is a truthmaker only if it is fundamental (Cameron 2008c, Schaffer 2010, Rettler 2016). What counts as fundamental is highly disputed. Perhaps the smallest pieces of the universe (elementary particles, say) constitute the fundamental, or perhaps the largest object of all – the entire cosmos – is singlehandedly the fundament (Schaffer 2010). Other views find the fundamental somewhere in the "middle" (see Inman 2017 and Bernstein 2021). In any event, the tape dispenser on my desk isn't a fundamental element of reality on anyone's view, and therefore doesn't make anything true, not even "The tape dispenser on my desk exists." What makes it true instead are whatever pieces of fundamental reality are responsible for the tape dispenser.

Some say "yes," and I believe that is the better answer. Ontology is the study of what exists, and there's more to existence than just the fundamental. Metaphysicians are *also* concerned with fundamental ontology, but that doesn't mean they are not concerned with the derivative, nonfundamental features of reality (cf. Barnes 2014). Likewise, particle physics may be the fundamental science, but chemistry, biology, and psychology remain indispensable to the scientific enterprise. Most of the truths that we believe do not concern the fundamental dimensions of reality, and the ontologically curious wonder how those truths line up with nonfundamental reality. Section 6, for instance, investigates the ontology behind social constructions, which – being *constructions* – are not fundamental.

Hence, I argue that literally everything in the universe is a truthmaker. For any object φ , it is a truthmaker for at least one sentence, namely, " φ exists." Truthmakers, then, are not a distinctive subset of what there is. One advantage of this perspective is that it demonstrates that the notion of a truthmaker is ontologically neutral. Regardless of what kinds of objects you have in your

¹ See Asay 2020a: 22–24 and Schipper 2021.

² See Tahko 2021 on the relationships between the sciences vis-à-vis fundamentality.

ontology, you have an ontology filled with truthmakers. Truthmaking can thus be utilized regardless of one's antecedent ontological views. All are invited to the truthmaking table: realists and anti-realists, nominalists and Platonists, rationalists and empiricists. Signing up for truthmaking is not signing up for distinctive, theoretically optional entities called "truthmakers."

Everything may be a truthmaker, but that doesn't begin to settle the question of what falls under "everything." Do we need natural laws, numbers, and deities within our ontologies? Truthmaker theorists argue over what we do and don't need to include within our ontological inventories in order to arrive at an equilibrium between our beliefs about what is true and our beliefs about what exists. Crucial to those arguments is a perspective on the relationship between a truth and its truthmaker. Suppose Opal is, unlike Oriana, an actual orca. She is a truthmaker because there are some truths she makes true, such as "Opal exists" and "There are orcas." But that she makes *some* claims true doesn't mean she makes *every* true claim true. She is a truthmaker, but not for "Bucharest is the capital of Romania." What, then, accounts for which truths an object makes true?

2.2 What Is Truthmaking?

Opal is a truthmaker for "There are orcas" but not "There are sharks." Why? The explanation turns on the nature of the truthmaking relationship: if some object φ is a truthmaker for some sentence S, then they stand in the truthmaking relation. If we knew what that relation was, we could make a start at determining which objects are related to which truths via truthmaking.

2.2.1 Necessitation

As we've seen, the basic idea behind truthmaking is that sentences are true because of the objects that exist in the world. Truthmakers are the entities that are in some sense "responsible" for the truth of sentences. One way to unpack this metaphor is to imagine what the world would have been like had certain things not existed, or certain sentences not been true. In the actual world, Opal

³ I have chosen to restrict my discussion of truthmaking to sentences. This is solely for simplicity. True sentences are only one kind of truth: There are also true beliefs, true statements, true propositions, etc. (assuming, of course, that there are such things as beliefs, statements, and propositions). Truthmaker theorists sometimes argue about which *truth-bearers* are required for or fundamental to truthmaking; see Asay 2020a: 19–22. While sentences are less ontologically controversial than, say, propositions, they do involve a further complication. If a sentence could have meant something other than what it does mean, the full account of the truthmaker for the *sentence* (but not the proposition it expresses) will require an accounting of what makes it true that the sentence means what it does. I shall set aside that further complication in what follows; the topic of what makes sentences mean what they do will arise again in Section 6.1.

exists and "There are sharks" is true. But it's possible (though incredibly unlikely) that sharks could go extinct during Opal's lifetime. If they did, Opal would still exist, but "There are sharks" would be false. This possibility undermines the idea that Opal makes true "There are sharks," since her existence is compatible with the sentence being false. Opal's being in the world offers no guarantee that "There are sharks" is true. Something else, then, would seem to be responsible for the truth of the sentence (cf. Armstrong 2004: 6–7). By contrast, so long as Opal exists, "There are orcas" will be true. If we presume that being an orca is *essential* to Opal (such that she couldn't have been born an iguana, say), then it's impossible for Opal to exist without "There are orcas" being true.

The takeaway from these observations is that truthmaking involves *necessitation*. A truthmaker is an alethic guarantor: a truthmaker guarantees the truth of any sentence it makes true. Formally put, an object φ is a truthmaker for a sentence S only if it's necessary that if φ exists, S is true. This condition states that necessitation is a *necessary* condition on truthmaking; it must be in place if there is to be any truthmaking. Whether it is a *sufficient* condition on truthmaking is a further question I broach in Section 2.2.2.

Taking necessitation to be a necessary condition for truthmaking is incredibly common; it's been referred to as truthmaking "orthodoxy" (e.g., Merricks 2007: 5). But not everyone agrees (e.g., Briggs 2012). Oftentimes the dispute depends on how some particularly thorny cases should be handled. Suppose that Bobo was the very last dodo. Shortly before he died, "There is exactly one dodo" was true. Bobo doesn't necessitate this sentence because it was false when he was born, as there were still other dodos around (such as his mother). The question is whether Bobo, near the end of his species, is nonetheless the truthmaker for "There is exactly one dodo." If he is, then his status as its truthmaker is contingent on the fact that no other dodos are around. That is, Bobo is a truthmaker for "There is exactly one dodo" only if "There are no dodos besides Bobo" is true. Bobo, presumably, isn't a truthmaker for that latter claim – he's not responsible for the near demise of his species. In response, the orthodox view maintains that the real truthmaker for "There is exactly one dodo" is Bobo *plus* whatever makes true "There are no dodos besides Bobo."

2.2.2 Explanation

The language of truthmakers being "responsible" for their truths suggests that there is more to truthmaking than just necessitation. I have said that sentences

⁴ I argue (Asay 2016a) that this fact is problematic for the view, as it raises further truthmaking questions that the orthodox view doesn't face.

are true *because of*, or because they *depend on*, their truthmakers. Oftentimes the point is made that truths are true *in virtue of* their truthmakers (e.g., Rodriguez-Pereyra 2005). Many truthmaker theorists have argued that underlying this language is the idea that truthmaking is *explanatory*: what it is to make something true is to explain why it is true (e.g., Griffith 2013: 305).

Necessitation doesn't appear to be sufficient for explanation. Here are two classic kinds of cases. Is it possible that you could have existed without your parents ever having existed? Many think not: if your parents hadn't existed, then neither would have the particular gametes essential to *you*. Perhaps a person very similar could have existed, but if they had a different genetic origin than you, that person wouldn't be you. If so, then you necessitate the truth of "Your parents exist(ed)": your existence guarantees that your parents existed. But *you* don't explain the truths about your parents' existence. *They* do. If you necessitate truths about your parents without making them true, then necessitation by itself is insufficient for truthmaking.

The other common example involves necessary truths. It's necessary that if Mount Vesuvius exists, then the Pythagorean theorem is true. That's another way of saying that it's impossible for Mount Vesuvius to exist and the Pythagorean theorem to be false. Because it's necessary, it's impossible for the Pythagorean theorem to be false, and so it's impossible for the Pythagorean theorem to be false and for Mount Vesuvius to exist. Trivially, then, any existing object necessitates the truth of any necessary truth. But the existence of Italian volcanoes doesn't explain Euclidean geometry, and the truth of "2 + 2 = 4" doesn't depend upon the existence of my favorite whiteboard marker. These sorts of cases, then, also suggest that necessitation is not sufficient for truthmaking.

These examples aim to show that there is more to the truthmaking relationship than just necessitation. Even if some sentence must be true if a certain object exists, that doesn't mean that the object is a truthmaker for that sentence. Philosophers, therefore, often describe truthmaking as being a *hyperintensional* relationship (e.g., Schaffer 2008). This means that there is more to an object making something true than just that object guaranteeing, with necessity, the truth in question. The idea is that although two things might necessarily occur together, that doesn't suffice to show that they are relevant to each other, or that one explains or causes the other. A world with Koko the gorilla is a world where "Either there are pangolins or there aren't any pangolins" is true, but that doesn't reveal that Koko has any relevance to the question of why that disjunction is true.

⁵ See Smith 1999 and Restall 1996, respectively.

To say that necessitation is not enough for truthmaking is not to say what is. Thus, the notion of explanation is frequently invoked to bridge the gap between necessitation and truthmaking. Koko doesn't explain why "Either there are pangolins or there aren't any pangolins" is true, but she does explain the truth of "Koko exists." Similarly, my existence doesn't account for why "My parents exist" is true, though it perfectly accounts for why "I exist" is true. The notion of aboutness is often appealed to here (e.g., Merricks 2007 and Schipper 2020). "My parents exist" isn't about me, so I can serve no role in explaining its truth. "I exist," by contrast, is, so I am a suitable truthmaker for it. Though the notions of aboutness and explanation are philosophically fraught, and are themselves the subject of enormous theoretical controversy, they both appear to be hyperintensional notions. (For example, the sentences "Triangles have three sides" and "2 is prime" are necessarily equivalent in that it's impossible for one of them to be true and the other false, yet they are about different things.) If they are part of the truthmaking relation, they can be used to explain why necessitation is not sufficient for truthmaking.6

Putting together necessitation and explanation, we arrive at a dominant perspective in truthmaker theory:

For any object φ and sentence S, φ is a truthmaker for S if and only if it's necessary that if φ exists, S is true, and the truth of S is explained by φ .

This account can be used to maintain that Koko is a truthmaker for "There are gorillas" but not "There are sharks" or "2 + 2 = 4."

Another reason to include a hyperintensional dimension to truthmaking is to account for that basic slogan of truthmaker theory: truth depends on being, but not vice versa. Sometimes necessitation runs in both directions. The existence of Koko guarantees that "Koko exists" is true, and the truth of "Koko exists" guarantees the existence of Koko. If the truthmaking relation itself is to account for the asymmetry between truth and being, then necessitation alone is inadequate. Explanation, however, is an asymmetric relation. If α explains β , then β doesn't explain α . So an explanatory account of the truthmaking relation is better positioned for capturing the dependency between truth and being.

The main impetus for believing that there is a hyperintensional dimension to the truthmaking relation is dealing with the counterexamples considered above, and accounting for how truth depends on being. The main challenge for such accounts is spelling out the relevant notion of explanation (or any other hyperintensional notion deployed). For instance, Jonathan Tallant (2018) wields the

⁶ A related hyperintensional notion is *grounding*, which has also been employed to show what separates truthmaking from necessitation (e.g., Schaffer 2008 and Jago 2018).

notion of explanation *against* truthmaking. He agrees with the view that the purpose of providing truthmakers is to provide explanations of truth. But, Tallant claims, providing explanations of truth is very easy. The reason why "Sichuan peppercorns are numbing" is true is that Sichuan peppercorns are numbing. In general, any true sentence "S" is true because S. Because providing explanations for truth is ridiculously easy (one need only "disquote" the sentence in question), there is no point to exploring the sorts of challenging ontological questions like those pursued in this Element.

I agree with Tallant that an explanation-focused approach to truthmaking leads to trouble, precisely because of the teeming availability of explanations (see Asay 2018). I disagree with Tallant that truthmaking is first and foremost an exercise in explanation. Moreover, as I've argued elsewhere, truthmaking needn't incorporate any hyperintensional notion at all: necessitation is necessary and sufficient for truthmaking (Asay 2020a: chapter 3). This means that I accept, for example, that I am a truthmaker for both "My parents exist" and "7 + 3 = 10." It might sound strange to say that I make it true that my parents exist, and that 7 and 3 are 10; but remember that "truthmaking" is a term of art, employed for a certain theoretical purpose within metaphysics. And the purpose of truthmaking, as I've articulated it, is developing a proper harmony between one's "ontology department" and "truth department." Admitting that I make true certain truths involving my parents doesn't show that my parents won't end up in my ontology; there are at least some truths involving them for which they, but not I, will be required (e.g., "My parents were married in 1972"). Whether it's tolerable to admit that everything in the universe, trivially, is a truthmaker for every necessary truth may well depend on one's background views about how substantive or trivial necessary truths themselves are, and one's view about the ontological status of things like numbers (see Asay 2020a: chapter 11). Even Restall, who initiated the concern about truthmaking and necessary truth, writes that "There is something quite touching in the view that every particle in the universe (and everything else besides!) is witness to all necessary truths" (Restall 1996: 333).

Ultimately, how one understands the purported counterexamples – and thus whether one regards truthmaking to be hyperintensional or not – turns on some big-picture questions about the fundamental theoretical motivations behind truthmaking. Truthmaking understood as "ontological accounting," as the project of maintaining a proper balance between what one takes to exist and what one takes to be true, is not obviously beholden to any hyperintensional notion.

⁷ Others, meanwhile, deny that "'S' is true because S" is any sort of explanation at all (e.g., Lewis 2001b: 611–612 and Rodriguez-Pereyra 2022).

If there is more to truthmaking than necessitation, if it needs to capture an important explanatory relationship between a truth and its truthmaker, then truthmaking includes some kind of hyperintensional component, to be spelled out in terms of explanation, grounding, aboutness, or something similar. By going beyond the goal of ontological accountability, this perspective takes the truth of a sentence to itself be something in need of explanation.⁸

2.3 Truthmaking at Work

Having considered some central theoretical questions for the notion of truthmaking, it will be useful to consider some classic examples of how truthmaking has implications for ontology. So far I have relied on some very basic examples, like Opal is a truthmaker for "There are orcas." Even this case is not entirely straightforward. Some might dispute it if they require truthmakers to be fundamental objects, and don't think that Opal is such a thing. Furthermore, those who require truthmaking to be hyperintensional need to explain in what sense the sentence is about *Opal*, or explained by her. The sentence, after all, isn't about Opal in particular. But supposing Opal really is a truthmaker for "There are orcas," we can learn a few more things about truthmaking. For one, although the existence of truthmakers are sufficient conditions for the truth of the sentences they make true, they are not *necessary* conditions. Opal's existence guarantees that the sentence is true. But the sentence being true doesn't guarantee that *Opal* exists: it only ensures that some orca or other exists. So although Opal is a truthmaker for "There are orcas," her existence is not required for it to be true. Second, the example reveals that truthmaking is not a "one-one" relation. That means that there is not a unique truthmaker for each truth. A truth like "There are orcas" can have many truthmakers: each individual orca, for example. And any individual object can be a truthmaker for many truths. Opal makes true both "Opal exists" and "Orcas exist," among (infinitely) many others.

Most everyone can agree that orcas, great white sharks, oceans, and glaciers exist. 10 Where truthmaking becomes theoretically interesting is with more

⁸ I've argued elsewhere against relying on the notion of explanation in explicating truthmaker theory. See Asay 2016b, 2018, and 2020a: chapters 2, 3, and 6. But see also Griffith 2022, Kitamura 2022, and Rodriguez-Pereyra 2022 for the opposing view.

⁹ By contrast, Smith and Simon (2007: 93) argue that truthmakers are both necessary and sufficient for their truths, and so they reject Opal as a candidate truthmaker for "There are orcas."

But not everyone – this is metaphysics after all. Mereological nihilists (e.g., Merricks 2001) argue that no compound object – no object with parts – exists. (Some, like Merricks, make exceptions for living organisms.) So they deny that oceans and glaciers exist, since, if they do, they are composite objects built out of billions upon billions of H₂O molecules. Because these philosophers argue that "Oceans exist" and "Glaciers exist" are false, they don't need to provide them with a truthmaker.

contentious cases. Opal is a truthmaker for "Orcas exist" only because being an orca is *essential* to Opal. If she could have been a chimpanzee, her existence wouldn't guarantee the truth of "Orcas exist." But not all of our properties are essential to us. Kierkegaard was Danish, yet that fact isn't essential to him: it's an "accidental" or contingent feature. Kierkegaard's parents could have immigrated to the United States, say, while he was still in the womb, and acquired citizenship there. So it's possible for Kierkegaard to have existed and not had the property of being Danish. Kierkegaard himself, then, was not a necessitator for "Kierkegaard was Danish." Nor is Kierkegaard *plus* the property *being Danish*. For those two things could exist without "Kierkegaard was Danish" being true: just imagine that Kierkegaard ended up American, but somebody else was Danish. So while Kierkegaard is a truthmaker for many truths involving him, he's not a truthmaker for all of them.

Reflection on cases like these – what are called *contingent* or *accidental predi*cations - leads to what is perhaps the most famous ontological argument in truthmaker theory, and it's due to David Armstrong (1997: 115). First some terminology. A compound object – an object with parts – is *mereologically* composed by those parts when there is nothing more to the whole than the existence of its parts. A mereological sum, then, is just the sum of its parts and nothing more. It exists so long as the parts do. A compound object is non-mereologically composed by its parts when there is more to it than just the parts. Suppose you've just received a Lego space shuttle set as a gift, and have yet to put it together. The collection of Lego bricks – the set – exists already; it's just the mereological sum combining each of the individual bricks. But the *model* doesn't exist yet, even though all its parts do. The model, once put together, is a non-mereological composite of the bricks – the bricks plus their being properly arranged. So the set and the model have all the same parts, but there is more to the model (but not the set) than just the existence of the parts. That's why the set endures, but not the model, when it takes a tumble to the ground and the pieces fly everywhere. 11

Armstrong's argument is that when an object possesses a property nonessentially, neither the object nor the property is a necessitator for the truth that the object possesses that property. Nor is the mereological sum composed by the object and the property, since that sum could exist even if the object in question doesn't have the property (but some other object does). So there must be another object, a compound object composed by the object and property, but in a non-mereological way: an object that consists in the "coming together" of object and property. This sort of entity – what Armstrong calls a "state of affairs" – exists if

Everything I've said in this paragraph is controversial. For overviews of some of the issues involved, see Hudson 2007, McDaniel 2010, and Paul 2010.

and only if a property is instantiated by an object. So in any case where an object instantiates a property, there are two distinct objects that have that object and property as parts. First, there is a mereological sum, such as that composed by Kierkegaard and the property being Danish (which I'll denote by "Kierkegaard + being Danish"). This object exists just so long as Kierkegaard exists and someone or other (but not necessarily Kierkegaard) is Danish. 12 Second, there is a state of affairs non-mereologically composed by Kierkegaard and being Danish (which I'll denote by "{being Danish (Kierkegaard)}"). This object exists only if Kierkegaard instantiates being Danish. Only the non-mereological sum necessitates the truth of "Kierkegaard is Danish," and so only it is fit to be a truthmaker for it. Had Kierkegaard been American, that state of affairs wouldn't have existed; instead, there would have been the state of affairs {being American (Kierkegaard). States of affairs exist only when objects and properties come together, and so are appropriate truthmakers for truths about which properties objects possess.

In this way, Armstrong uses the idea of truthmaking to defend an ontological conclusion: in addition to ordinary objects and properties, there are also states of affairs. An alternative view respects the spirit of Armstrong's argument, but derives a different ontological conclusion. It agrees with Armstrong that contingent predications need truthmakers. But that doesn't settle the case for states of affairs. Armstrong thinks of properties as universals: objects that can exist multiply instantiated, across a diverse set of objects. But a competing perspective treats properties as nonrepeated individuals, sometimes called tropes. Suppose Opal and Opie are both Icelandic: they share the property of being Icelandic. The defender of universals takes this claim literally: there is an entity, the property being Icelandic, that is shared by the distinct objects Opal and Opie. The trope theorist interprets the claim differently. There isn't one thing that Opal and Opie share by being Icelandic. Instead, they possess individual tropes of being Icelandic. These tropes are similar to one another in all relevant respects, and account for one way in which Opal and Opie are the same. But they are nonetheless distinct individuals: Opal's being-Icelandic trope is a separate entity from Opie's being-Icelandic trope. Moreover, these tropes couldn't have belonged to anyone else. Opal's being-Icelandic trope couldn't

This sentence makes two major presuppositions. First, it assumes that properties exist whenever they are instantiated, and that they are distinct from the objects that possess them. See Armstrong 1989 and Maurin 2022 for introductions to the metaphysical debate over the existence of properties. Second, it assumes that if any objects x and y exist, then there is automatically a mereological sum composed by them: x + y. This is the doctrine known as mereological universalism or unrestricted composition, and it is highly controversial. See Lewis 1991 for a defense, and van Inwagen 1990 for the case against.

have been Opie's. As a result, the existence of Opal's being-Icelandic trope guarantees that "Opal is Icelandic" is true. So tropes, too, can be offered as truthmakers for contingent predications.

Being a truthmaker theorist, then, does not by itself settle the dispute between defenders of states of affairs and defenders of tropes. ¹³ The role of truthmaking arguments is not to settle ontological disputes once and for all, but rather to recognize their importance and offer a framework for formulating and defending ontological positions. They are a call for ontological accountability – of making sure our ontologies and beliefs are properly aligned.

3 Maximalism

Let's return to the plans you've drawn up for your universe. After careful reflection, you've decided against including any unicorns. You've informed the ontology department not to include any unicorns, and told the truth department to add "Unicorns don't exist" to their manuscript. Your accounting appears to be in order. Given the absence of any unicorns from your universe, "Unicorns don't exist" is true. And given that "Unicorns don't exist" is true, no unicorn belongs in your ontological inventory. Is everything settled vis-à-vis truthmaking?

The answers to this question turn out to reflect the most fundamental theoretical divide between truthmaker theorists. Suppose that necessitation is required for truthmaking. (Whether it's also sufficient doesn't matter for the current discussion.) If "Unicorns don't exist" has a truthmaker, then some combination of things from your ontological inventory must necessitate its truth. Furthermore, whatever those things are, you need to remove them should you change your mind and want to add a unicorn after all. It's not enough simply to add the unicorn; you also need to subtract something else. If there is a truthmaker for "Unicorns don't exist" – let's call it "Abby" – then the existence of Abby guarantees that "Unicorns don't exist" is true. So if you decide to add a unicorn, it can't coexist with Abby. The unicorn guarantees that "Unicorns exist" is true, and Abby guarantees that "Unicorns don't exist" is true. If they both existed, a contradiction would be true. That's impossible, so your universe can have Abby, or a unicorn, but not both.

Hence, if there is a truthmaker for "Unicorns don't exist," it can't be any of the other things in your universe that can coexist with unicorns, such as horses, elephants, echidnas, blocks of gold, creeks, cumulus clouds, and whatever else is in your universe. It can't even be the sum total of all those things.

See Armstrong 1989 for an introduction to the issue of tropes and universals (and other nearby views). For an alternative truthmaking account for contingent predications, see Lewis 2003.

Imagine a tiny toy universe with just two horses, say. In that universe, it's true that unicorns don't exist, but the existence of those two horses doesn't guarantee that: if you added a unicorn to the universe, the horses would still exist although "Unicorns don't exist" would now be false. If things like Abby exist, they are not the familiar sorts of things we normally encounter.

Truthmaker *maximalism* is the thesis that all truths have truthmakers. It entails that the accounting I described in the opening paragraph of this section is incomplete. If you want "Unicorns don't exist" to be true, it's not enough for the ontology department to do *nothing*. They need to have something on hand like Abby, something that guarantees the truth of "Unicorns don't exist." *Non-maximalism*, by contrast, is the thesis that not all truths have truthmakers. Some sentences are true, but nothing exists that necessitates their truth. Such sentences, if there are any, I call *truthmaker gaps*.

Much of the debate between maximalism and non-maximalism involves whether truths like negative existentials (i.e., truths about what doesn't exist) have truthmakers. If they don't, non-maximalism is correct. If they do, one has to defend a view as to what they are. In this section, I cover the central motivations both for and against maximalism, and show how this debate aligns with the previous debate from Section 2.2.2 regarding whether truthmaking has an ontological or explanatory focus.

3.1 Arguments for Maximalism

Maximalism is a bold ontological thesis. It maintains that in addition to horses, United Nations member states, and Atlanta, there are also excluders for unicorns, the Illuminati, and Atlantis. Infamously, the philosopher most responsible for developing and popularizing the idea of truthmaking – David Armstrong – admits that he does "not have any direct argument" for maximalism, and hopes that "philosophers of realist inclinations will be immediately attracted to the idea that a truth, any truth, should depend for its truth [on] something 'outside' it, in virtue of which it is true" (Armstrong 2004: 7). Nevertheless, some arguments for maximalism have surfaced over the years; I consider two here.¹⁴

3.1.1 The Unity of Truth

One argument for maximalism turns on the claim that those who reject it are thereby saddled with a disunified account of truth. What it is for some sentences to be true is that they have a truthmaker; what it is for some other sentences to be true is something else. A theory of truth that posits truthmakers for some, but not

¹⁴ For others, see Asay 2020a: 71–79 and Jago 2020.

for others, is unfortunate. It turns truth itself into a disjointed, heterogeneous phenomenon. Put another way, it posits two different properties of truth. One is *being made true*, and the other is *something else*. Other things being equal, a unified account of truth is preferable (especially when one of the options is *something else*), and so maximalism bears a significant advantage over non-maximalism.¹⁵

For this argument to succeed, one must presuppose that by offering a theory of truthmakers one is also offering a theory of truth. On this view, what it is for the sentence "There are orcas" to have the property of truth is for it to have a truthmaker. Truth is defined in terms of truthmaking. Many philosophers, however, have argued that this perspective is backward. If anything, truthmaking should be defined in terms of truth. Hence, any attempt to define truth in terms of truthmaking is circular. ¹⁶ Note, for example, how the necessitation and explanation conditions on truthmaking discussed in Section 2 are both defined in terms of truth. To be a truthmaker is to be a guarantor (and perhaps also) explainer of *truth*.

Furthermore, there are many dualities among the *truths*. There are those that are known, and those that are unknown. There are those favored by Frank, and those not favored by Frank. There are those found in this book, and those found elsewhere. None of these suggests a duality within the nature of *truth* itself. Similarly, the class of truths may be divided into those with truthmakers, and those without, and this needn't have any implications for what one says about the property of truth. As on deflationary accounts (e.g., Horwich 1998), it may be that all there is to the property of truth is that it is the property that a sentence "p" has if and only if p. The question nevertheless remains: Given that "p" is in the truth department's manuscript, what does the ontology department need to add or subtract from its logs?

The unity argument, therefore, depends upon the claim that truthmaking must be put to use in the service of defining truth. That task may be impossible – if indeed truthmaking must already be defined in terms of truth – and is optional at best. Nothing about truthmaking's ontological aims is furthered by coupling it with the project of defining truth.

3.1.2 Jago's Dilemma

Another argument for maximalism has been offered by Mark Jago (2012, 2018). As we have seen, negative truths (such as those about what doesn't exist) have

¹⁵ See, for example, Armstrong 2005: 272, Barker and Jago 2012: 136, Griffith 2015b, Jago 2018: 89, and Saenz 2020.

¹⁶ See Merricks 2007: 15, David 2009: 144, Schulte 2011: 420, and Asay 2020a: 111–122.

been offered as counterexamples to truthmaker maximalism. A natural thought, then, is to divide the truths into the positive and the negative. Positive truths are about the way the world is, and so are true in virtue of that existing world. Negative truths, by contrast, are about the way the world isn't, and so aren't fit to be made true by the way the world is. If only positive truths need truthmakers, then there appears to be no need for an ontology with unfamiliar entities such as excluders like Abby.

Jago offers a dilemma against this sort of view. If the non-maximalist divides the truths into the positive and the negative, they will find that some of those positive truths require exactly the same truthmaking treatment that maximalists give to negative truths. If non-maximalists offer excluding entities like Abby as truthmakers for these positive claims, then they are no better off, ontologically speaking, than the maximalist, and may as well posit excluders for negative truths as well. If non-maximalists claim that the positive truths in question have more straightforward truthmakers that don't involve exotic excluders like Abby, then maximalists can claim the same for negative truths: they don't require strange entities after all. Either way, the non-maximalist has earned no ontological advantage over the maximalist.

The truths Jago has in mind involve knowledge of negative truths. George R. R. Martin knows that White Walkers don't exist. This would seem to be a positive truth, a truth about the way the world (specifically, Martin's epistemic state) is. Because of the necessitation requirement on truthmaking, any truthmaker it has must guarantee that "George R. R. Martin knows that White Walkers don't exist" is true. But then any such truthmaker will also guarantee the truth of "White Walkers don't exist," since anything known must be true. Any truthmaker for the knowledge claim must therefore be an excluder of White Walkers: its existence is incompatible with the existence of any White Walker. Non-maximalists now face the same dialectical situation faced by the maximalists: either accept these excluding entities into your ontology, or show how they're not necessary after all.

Jago's argument, in my view, effectively shuts down the kind of non-maximalism he envisions. ¹⁷ But it doesn't put a stop to non-maximalism across the board. Rather, it counters attempts to cleanly divide the truths with truth-makers from the truthmaker gaps. Dividing truths into positive and negative is fraught terrain. Just consider the fact that any (seemingly positive) universal generalization – that all ravens are black – is logically equivalent to a negative existential: there are no nonblack ravens. Furthermore, any claim about the way

¹⁷ For less concessive responses, see Simpson 2014 and Skiles 2014.

the world *isn't* is still a claim about the way the world *is*. Reality is such that there aren't unicorns.

Jago's dilemma, then, shows how *not* to be a non-maximalist. Perhaps the best argument for maximalism itself begins here. Anyone who thinks that some, but not all, truths have truthmakers has some explaining to do. What accounts for the difference? This question is not an easy one to address, and Jago's argument shows how unsatisfactory a straightforward answer to it is. Maximalism enjoys a theoretical advantage precisely because it doesn't have to answer this question. I turn to how one should be a non-maximalist in Section 3.3. But before I do, let's consider the options maximalists have explored when it comes to identifying the excluders needed to make negative existentials true.

3.2 Truthmakers for Negative Existentials

The predominant challenge for non-maximalists is answering the question why some but not all truths have truthmakers. The predominant challenge for maximalists is answering the question concerning what makes true negative truths such as negative existentials. In this section I canvass some of the familiar attempts to offer truthmakers for negatives.¹⁹

3.2.1 Totalities

At the start of this section, I asked you to imagine a toy universe with just two horses. But if maximalism is true, that wasn't really possible. In that universe, "Whales don't exist" is true, but neither of the horses necessitate its truth. It's possible for a horse to exist and "Whales don't exist" to be false (i.e., it's possible for horses and whales to coexist, as the actual world demonstrates), and so no horse is a candidate truthmaker for the claim that whales don't exist. So something else must exist in that universe, something that is an excluder of whales (and perhaps everything else that doesn't exist in the universe).

One view about what that thing is, long defended by David Armstrong (e.g., Armstrong 1997: chapter 13, 2004: chapter 6), is that there is a totality

¹⁸ For some attempts to answer it, see Saenz 2014 and Schipper 2018.

For more on these and other attempts see, for example, Rodriguez-Pereyra 2006b: 194–198, Asay 2014, section 3, Jago 2018, chapter 5, and MacBride 2020, section 2.1. One salient view I do not discuss here is the "incompatibility" view that maintains that truthmakers for truths about the various properties objects have also serve as truthmakers for truths about the various properties objects don't have (because those properties are incompatible with the object's actual properties). Discussion of this sort of account commences with Demos 1917; it has more recently been defended by Veber 2008.

state of affairs that makes true negative truths (and, moreover, all other truths at the same time). We saw in Section 2.3 how Armstrong understands states of affairs. They are entities non-mereologically composed by objects and properties. Because states of affairs are themselves objects, they can partially compose higher-order states of affairs: states of affairs that bring together lower-order states of affairs with properties. Higher-order states of affairs can, in turn, be posited to serve as truthmakers for negative truths.

Return to our two horses; let's call them "Thelma" and "Louise." Suppose they're both brown, and nonessentially so. So "All horses are brown" is true in this universe, as is the logically equivalent negative existential: "There are no nonbrown horses." Thelma and Louise don't make this claim true. They can coexist with a black horse, and so they are not excluders of nonbrown horses. Furthermore, neither Thelma nor Louise are truthmakers for "Thelma is brown" and "Louise is brown," since they might have been some other color. So in addition to Thelma, Louise, and being brown, this universe also contains the states of affairs {being brown (Thelma)} and {being brown (Louise)}. These states of affairs make true the claims about the horses' color, but they don't make the general and negative existential claims true. The issue is that Thelma and Louise themselves, alongside the states of affairs that involve them, don't guarantee that they are all the horses. But they are all the horses: this looks to be a property that they possess in this universe. That is to say, the mereological sum Thelma + Louise enjoys the property of being all the horses. This is a contingent fact about this small universe; Thelma + Louise wouldn't have the property if a third horse, Brad, entered the scene. But they do have the property in this universe, and Armstrong harnesses this fact to find a truthmaker for general and negative truths.

Armstrong's totality states of affairs take the following form. They involve a special relation, which I'll call *exhausts*. (Armstrong uses "totals.") Relations are like properties, but are instantiated by multiple objects, not just a single one. (*Being prime* is a property of 7, while *being greater than* is a relation that 7 stands in with respect to 6 and others.) The idea is that *exhausts* is a two-place relation that is inhabited by (1) the sum of everything that instantiates a certain property, and (2) that property. Thus, in the toy universe the mereological sum Thelma + Louise stands in the *exhausts* relation to the property *being a horse*. They don't stand in this relation to *being a horse* in the universe with Brad; in that case, Thelma + Louise + Brad is what exhausts *being a horse*. In the two-horse universe, there is the state of affairs {*exhausts* (Thelma + Louise, *being a horse*)}. The existence of this state of affairs guarantees that Thelma and Louise are all the horses.

The last two paragraphs identify three states of affairs. One guarantees that Thelma is brown, one guarantees that Louise is brown, and one guarantees that

Thelma and Louise are all the horses. Together, then, these three states of affairs guarantee that all horses are brown. Now consider the fact that there are no whales. Within Armstrong's metaphysics, there are no uninstantiated properties; if nothing is a whale, then being a whale doesn't exist. So there cannot be an exhausts-based state of affairs that involves being a whale. But notice that if none of the first-order states of affairs involve being a whale, then there aren't any whales. (If there were a whale, then there would be a state of affairs composed of the whale and being a whale.) Hence, we need a state of affairs that establishes that all the first-order states of affairs (none of which involves being a whale) are all the first-order states of affairs. This state of affairs has the mereological sum of all the first-order states of affairs exhausting the property being a first-order state of affairs. This second-order totality state of affairs guarantees that none of the first-order states of affairs involves being a whale, and so guarantees that "There are no whales" is true. Moreover, this totality state of affairs would seem to make everything true. For example, one part of the totality state of affairs is {being brown (Thelma)}, which makes true "Thelma is brown." The totality state of affairs "inherits" all the truthmaking abilities from its parts, and its parts exhaust all there is. ²⁰ So the totality state of affairs that is composed by all the first-order states of affairs exhausting being a first-order state of affairs is, in Armstrong's turn of phrase, the "least discerning" and "most promiscuous" truthmaker of all (Armstrong 2004: 19; see Schaffer 2010 for a novel take on this feature).

Armstrong needs just the one totality state of affairs to provide a truthmaker for all negative truths (and, moreover, all positive truths). This would seem to be a striking case of ontological economy: by positing merely *one* entity, he vindicates truthmaker maximalism. Yet totality states of affairs have come in for abundant criticism.

One prominent critic is David Lewis. Lewis adopts a strict Humean metaphysics that rejects the existence of necessary connections between completely distinct objects. From this perspective, anything can coexist with anything else. Hence, excluders are problematic for the Humean metaphysician; the totality state of affairs, Lewis (2001b: 611) writes, "would be objectionable because its

This sentence presupposes that if some object φ is a truthmaker for S, then any entity that includes φ as a part will also be a truthmaker for S. For example, Koko + Luxembourg is a truthmaker for "There are gorillas" because Koko by herself is. This principle (that truthmaking is, in effect, *monotonic*) has been disputed (e.g., Rodriguez-Pereyra 2006c). It's indisputable that if some object φ is a *necessitator* for S, then any entity that includes φ as a part will be a necessitator for S as well. But one might think that the truth in question isn't true in virtue of the larger object, only the smaller one. "There are gorillas" isn't made true by Koko + Luxembourg; *that* entity has nothing to do with it. I've argued (Asay 2020a: 34–36) that this perspective falsely presupposes the idea that truthmaking is fundamentally an exercise in the explanation of truth, rather than ontological accountability.

raison d'être would require it to be involved in mysterious necessary connections." In the actual world, because the totality state of affairs exists, other things like unicorns and hobbits and wookies can't exist. (Likewise, had there been unicorns or hobbits or wookies, then the actual totality state of affairs couldn't have existed.) Lewis finds this metaphysically suspicious: How can one entity somehow constrain the existence of something else?²¹

Another objection to totality states of affairs also derives from a certain set of antecedent metaphysical scruples. In his framing of the problem of negative truths, George Molnar (2000: 84–85) advances the following (conditionally) inconsistent tetrad:

- (i) The world is everything that exists.
- (ii) Everything that exists is positive.
- (iii) Some negative claims about the world are true.
- (iv) Every true claim about the world is made true by something that exists.

These four theses are inconsistent if "positive" entities cannot be truthmakers for negative truths, as Molnar believed. The first and third theses seem beyond reproach.²² The fourth is maximalism, and so rejected by many, as we have seen. Totality states of affairs violate (ii): they are in some sense a "negative" entity: they dictate what there can't be by establishing that what there is is *all* there is (see Armstrong 2004: 81–82).²³

Philosophers suspicious of necessary connections between distinct existences and negative entities will therefore be wary of positing a totality state of affairs. Jago (2018: 148–149) offers a different kind of argument that directly argues against the existence of totality states. The *exhausts* relation holds between a property on the one hand, and the sum of all the individuals instantiating that property on the other. The totality state of affairs is a higher-order state of affairs because it brings together all the *first-order* states of affairs. There can't be a state of affairs that exhausts all the states of affairs (of every order), since in that case the totality state of affairs would have to include *itself* as a part, and that's impossible. ²⁴ Thus, there can be no state of affairs that exhausts the property *being a state of affairs*. But, by definition, the *exhausts* relation *just is* the relation that holds between a property and everything that instantiates it.

²¹ Lewis offers an account of maximalist truthmaking consistent with his own metaphysics in Lewis and Rosen 2003.

²² But see Mumford 2007, which rejects (iii).

²³ Gale (1976: 43) thus calls it a "Porky the Pig" fact: that's all folks! See also Cheyne and Pigden 2006.

²⁴ By contrast, Kukso (2006: 27) detects an infinite regress lurking here.

Thus, there is no such property. But if there is no *exhausts* relation, there are no totality states of affairs.

3.2.2 Negative States of Affairs

Armstrong's hope is that by positing the existence of a single totality state of affairs, he does minimal damage to the idea that reality is predominantly "positive" in nature. Indeed, the desire to avoid any "negative" ontology drives much of the debate over maximalism. Over a century ago, Bertrand Russell (1919a: 4) wrote: "There is implanted in the human breast an almost unquenchable desire to find some way of avoiding the admission that negative facts are as ultimate as those that are positive." Russell, nevertheless, found a way to vanquish his desire, and ultimately defended the existence of negative states of affairs. This in turn "nearly produced a riot" when he shared his findings during a lecture to some (apparently quite metaphysically uppity) students (Russell 1919b: 42).

Following Russell's lead, Barker and Jago (2012) have developed an account of the nature of negative states of affairs, and argue that they are just as palatable as positive states of affairs. They build on Armstrong's account of states of affairs, according to which they are complex objects non-mereologically composed by particular objects and the properties and relations they instantiate. Barker and Jago's idea is that there are two kinds of non-mereological composition. Thelma is brown, but not blue. On Armstrong's account, what makes "Thelma is brown" true is the state of affairs {being brown (Thelma)}. But there is no property of not being blue, 25 so Armstrong employs his totality state of affairs to make true "Thelma is not blue." By contrast, Barker and Jago argue that first-order states of affairs are sufficient in both cases. The state of affairs {being brown (Thelma)} is bound by a certain kind of non-mereological composition; I'll indicate that by referring to it by "{being brown (Thelma)}⁺." This kind of composition is a form of *instantiation*; it exists when Thelma instantiates being brown. But there is another kind of nonmereological composition: anti-instantiation. This is the kind of composition that brings together Thelma and being blue, because Thelma doesn't instantiate being blue. So there is another state of affairs – {being blue (Thelma)} – that makes "Thelma is not blue" true, since this state of affairs guarantees that Thelma does not instantiate blueness.²⁶

²⁵ This is due to Armstrong's defending a *sparse* account of universals. See, for example, Armstrong 1997: 44.

²⁶ See Beall 2000 for a similar view. Compare also Martin 1996 and Kukso 2006 on absences.

Negative states of affairs can serve as truthmakers for negative existentials such as "There are no unicorns." According to Barker and Jago, in addition to there being an instantiation-based form of composition, there is also a property of *being instantiated*. This property is possessed by other properties when they have instances. Negative existentials concern properties that aren't instantiated. So *being a unicorn*, for instance, anti-instantiates *being instantiated*. Hence, there is a state of affairs {*being instantiated* (*being a unicorn*)}⁻. This state of affairs guarantees that nothing instantiates the property of being a unicorn, and hence makes true "There are no unicorns."

Those (like Armstrong) who embrace positive states of affairs manifest their willingness to accept non-mereological composition into their worldview. So why not, argue Barker and Jago, embrace a second form of it, and thereby obviate the need for totality states of affairs and the problems they incur?²⁷ One reply is that the costs of negative states of affairs are not limited to just the second type of non-mereological composition. According to Armstrong's "modest" form of realism about properties, they exist only when instantiated. Thus, while there are properties such as *being blue* and *being a horse*, properties like *being a unicorn* and *being a vampire* don't exist. But Barker and Jago need such properties, for their not being instantiated is necessary to make true their corresponding negative existentials. The stock of extra properties required to build all the needed negative states of affairs is, then, far less modest than Armstrong's positing of just the *exhausts* relation. (But recall Jago's argument that there is no such relation.)²⁸

3.2.3 The World

Here is one final account of what makes negative existentials true. Recall that Armstrong's totality state of affairs is the "most promiscuous and least discerning" truthmaker in that it is a truthmaker for every last truth, including negative existentials. Other truthmaker theorists have similarly argued that in some sense, the entire world can serve as a truthmaker for negative existentials. But – crucially – not in a way that is committed to Armstrong's totalities.

Ross Cameron (2008a) develops this idea, arguing that the world can serve as a truthmaker for negative existentials, provided that it has all of its features essentially. Opal is essentially an orca, but Icelandic only accidentally.

²⁷ Jago (2018: 154–160) argues that some but not all accounts of positive facts can be extended to negative facts.

²⁸ Tallant (2018: 74–81) offers a thoroughgoing critique of negative facts.

Other views that in some way or other put the whole world to work as a truthmaker for negative existentials include Lewis and Rosen 2003, Cheyne and Pigden 2006, Schaffer 2010, and Griffith 2015a. I am inclined to include Armstrong's totality view here as well, since he may as well

Thus, she can be a truthmaker for "Opal is an orca" but not "Opal is Icelandic." The World (I capitalize it to emphasize that we are thinking of it as a single, unified entity – the biggest entity there is) is such that there are no unicorns. If this were an essential feature of the World, then it would be impossible for it to exist and "There are no unicorns" to be false, just as it's impossible for Opal to exist and "Opal is an orca" to be false. It doesn't follow that "There are no unicorns" is necessarily true. Rather, had there been unicorns, then the World would not have existed. Something very similar to the World – something that includes all its parts plus a unicorn, say – might have existed instead.

The salient benefit of Cameron's account is supposed to be that its truthmaker is something we already believe in: the World. (For this reason Jago [2013] calls it a "parsimonious" solution to the problem of negative existentials.) We just need to update one of our beliefs about it – that in all its respects it is the way it is essentially so. However, it seems to me that the World is no more familiar an entity than totality or negative states of affairs (cf. Saenz 2014: 87). In fact, I now argue that the World is best understood as just being a totality state of affairs.

Consider again the Thelma and Louise universe with just two brown horses. Here, "There are no kinkajous" is true. On Cameron's view, the truthmaker for this claim is not the World – it exists only in the actual world – but a parallel entity I'll christen "Cosmo." From the perspective of the toy universe, Cosmo is the world. It's part of the essence of Cosmo that if it exists, there are no kinkajous. So what is Cosmo? Cameron (2008a: 417) tells us that "The world is the biggest thing. It is a world because there is nothing bigger than it that it is a proper part of." Cosmo, then, is the biggest thing in the universe. What Cosmo cannot be is the mereological sum of all the parts we've identified in the universe. For example, Cosmo cannot be Thelma + Louise + being brown + being a horse. That complex can coexist alongside kinkajous. If there are (firstorder) states of affairs, we can add those to the mix, but we still won't end up with a sum that necessitates the absence of kinkajous. So Cosmo must be something above and beyond all the parts of the universe.

Cosmo needs to be the largest object in our tiny universe, something that guarantees an absence of kinkajous, and something that cannot exist in any other possible universe. Cosmo cannot be any mereological sum of the various parts of the universe. What Cosmo *can* be is a totality state of affairs. A totality state of affairs is composed by all the first-order states of affairs, which are in turn composed by all the particular objects and properties that exist in the

identify the world with the totality state of affairs (see Armstrong 1997: 197). See Griffith 2013, Jago 2013, and Saenz 2014 for objections to some of these views.

universe. So it has claim to being the largest object, since everything else that exists is part of it. By design, totalities exclude the existence of all the objects that don't figure in their first-order states of affairs. Finally, no totality state of affairs can exist in any other possible universe. Suppose there are four first-order states of affairs – A, B, C, and D – that establish that Thelma and Louise are both brown horses. A + B + C + D exhausts being a first-order state of affairs, giving rise to the existence of the totality state of affairs I'll dub "Kosmo." Kosmo can't exist anywhere else, because in no other universe does A + B + C + D exhaust all the first-order states of affairs, 30 and Kosmo just is the state of affairs composed by A + B + C + D exhausting all the first-order states of affairs. I submit that, given the kind of thing that Cosmo needs to be, Cosmo is Kosmo. If so, Cameron's advocacy of the World is no advance beyond Armstrong's totality state of affairs.

3.3 Non-Maximalism

A chief advantage for non-maximalism is that it need not engage in the defense of or fight between the views surveyed in Section 3.2. Non-maximalists can maintain that negative existentials are truthmaker gaps: truths without a truthmaker. But that advantage would amount to nothing if non-maximalism is, as many have held, a nonstarter for truthmaker theory.

There are two basic views regarding non-maximalism, only one of which finds it to be at all tenable. One maintains that in some sense maximalism is the default position in truthmaker theory, such that adopting non-maximalism amounts to "ontological frivolity" (Molnar 2000: 85) or giving up "as soon as the going gets hard" (Armstrong 2004: 70). This perspective is defensible only if something about the nature of truth itself requires that truths have truthmakers. Cameron (2008a: 412), for instance, writes: "Truthmaker theory is a theory about *what it is* for a proposition to be true; it's just not the kind of theory that can apply only in a restricted domain. What possible reason could one have for thinking of some propositions that they need to be grounded in what there is that doesn't apply to all propositions?" A straightforward reply to Cameron's question is that because truths are grounded by what they're about, and negative existentials are not about the things that exist, they are not fit to be made true by what there is. Hence, they're not fit to be made true at all. ³¹ Furthermore, Cameron claims that truthmaker theory is also a theory of the

³⁰ I'm bracketing the issue of indiscernible universes here – two universes that are qualitatively exactly similar but nevertheless distinct. Their existence is relevant only in the context of concrete modal realism (e.g., Lewis 1986) that takes nonactual universes to be real.

³¹ Schipper (2018) provides a systematic development of this idea.

nature of truth, but we have already seen that this claim is both optional and contentious – it risks adopting a circular theory of truth.³²

The other perspective on non-maximalism promotes the attitude that it can be independently motivated, and so is in no way just a metaphysical fallback position. Here is Peter Simons (2005: 255): "Maximalism is a theoretical position extrapolating from a fundamental insight, it is not itself a fundamental insight." To say that some truths owe their truth to the things that exist in the world is about as incontrovertible as anything in philosophy. To say that *all* truths owe their truth to existing objects is a further and substantive metaphysical claim, one with dramatic ontological implications, as we have seen. And, of course, one that flies in the face of the non-maximalist's position that truths concerning what *doesn't* exist aren't fit to be made true by what *does*. Look again at the first paragraph of this section. If truthmaking is an exercise in ontological accounting, then the right response to the truth of a negative existential is to ensure that the relevant things are *excluded* from one's ontology, not to ensure that some other thing is included.

One theoretically appealing feature of maximalism is its simplicity: all truths, without exception, possess truthmakers. Non-maximalism, by nature, must be more complicated. At best, it can offer a restricted kind of maximalism: maximalism with respect to contingent truths (Armstrong 1989: 88), synthetic truths, ³³ atomic truths (Mulligan, Simons, and Smith 1984), or positive truths (but see Jago 2012). For my own part, I agree with Rodriguez-Pereyra's (2005: 18) assertion that truthmakers are to be found for "the members of an important class of synthetic true propositions," but only because it's so open-ended. On my view (see Asay 2020a), there is no simple, straightforward way of dividing up the truths with truthmakers from those without. One must approach the question of which truths have truthmakers on a case-by-case basis.

Negative existentials are the most commonly cited candidate truthmaker gaps, but there are other potential cases. Analytic truths, such as "All bachelors are unmarried," have been offered as truthmaker gaps. ³⁴ If analyticities are "true solely in virtue of meaning," then giving them an *ontological* grounding would be inappropriate. For to say that analyticities are ontologically grounded by their meanings is to say that their truth depends upon the existence of those meanings. And that entails, falsely, that had the meanings of the words "bachelor" and "unmarried" never come about (or just been different), bachelors wouldn't have been unmarried. ³⁵ Another example (which might also be a case of both an

 $[\]overline{}^{32}$ See the references in note 16.

³³ Rodriguez-Pereyra (2005: 31) comes close to endorsing synthetic maximalism.

³⁴ See, for example, Rodriguez-Pereyra 2005, Schulte 2011: 428, and Asay 2020b.

Boghossian (1996) uses this observation to undermine all "metaphysical" forms of analyticity. I use it to motivate a better form of metaphysical analyticity (Asay 2020b).

analyticity and a negative existential) is "This sentence has no truthmaker." If this sentence were false, it would have a truthmaker, and therefore be true. That's inconsistent, so it must be true. And since it's true, it has no truthmaker. Therefore, "This sentence has no truthmaker" is provably a truthmaker gap. 37

Regardless of what the truthmaker gaps are, it is vital to recognize that admitting their existence need not be an exercise in ontological frivolity, or nothing more than an ad hoc commitment to maintain one's metaphysical scruples. One final way to appreciate this fact is to consider a perspective that, while being non-maximalist about truthmakers, is still in some sense maximalist about the relationship between truth and ontology. This perspective finds its articulation in the work of John Bigelow (1988: 121–127). For Bigelow, everything that is true must (at least) *supervene* on what exists. That is, *all* truths are such that their failing to be true would have resulted in some difference in the world's ontology, even if all truths are not necessitated by something in that ontology. Negative existentials clearly satisfy this principle, even if they don't satisfy maximalism. For had "There are no unicorns" failed to be true, the world's ontology would have been different: it would have included unicorns. Hence, Bigelow's supervenience principle can be seen as an alternative to maximalism when it comes to articulating the basic insight that truthmaker theory intends to capture.

A familiar rebuttal to this proposal is that the supervenience of truth on being is insufficient to capture the idea of truthmaking because ontology also supervenes on truth (had the world's ontology been different, so too would the world's stock of truths), and truthmaking is intended to be an asymmetrical notion.³⁹ Answering this objection takes us back to the differing overall perspectives on truthmaking explored in Section 2, and whether or not the truthmaking relation itself needs to be analyzed in terms of an asymmetric, explanatory relation.

4 The Past

The previous sections have explored some fundamental questions about what truthmaking is, why we should care about it, and how wide its scope is. My focus now changes: how can we put truthmaking to work in metaphysics? This section tackles one of truthmaker theory's most expansive

³⁶ See Khlentzos 2000: 122–123 and Milne 2005.

³⁷ Rodriguez-Pereyra (2006a) argues that this sentence doesn't pose a problem for maximalism since maximalists will treat the sentence as paradoxical, akin to the liar sentence "This sentence is not true." And however one handles that paradox, one can handle the truthmaking case in parallel fashion.

³⁸ See also Armstrong 1969: 23. Lewis (2001b) considers an even weaker supervenience claim.

³⁹ See, for example, Armstrong 2004: 8 and Rodriguez-Pereyra 2005: 19. Merricks (2007, chapter 4) offers a sustained critique of supervenience-based theories of truthmaking.

topics: the implications that truths about the past have for the debate between presentism and eternalism.

There are three basic positions in the ontology of time. *Presentism* is the view that only present things exist. *Eternalism* is the view that past and future things exist alongside present things. *Growing Blockism* is the view that only past and present things exist, such that the universe grows larger each moment as the present merges into the past. Presentism has long faced a truthmaking-based objection. Uncontroversially, there are truths that concern the past. ⁴⁰ Dinosaurs existed. Caesar crossed the Rubicon. Geraldo didn't find anything in Capone's vault. ⁴¹ But dinosaurs, Caesar, and Geraldo's live television broadcast don't exist anymore. If what is true depends on what exists, then it appears that presentism is false: it doesn't provide any ontology to ground truths about the past. ⁴²

There are two straightforward presentist responses to this objection. First, the presentist can identify presently existing objects that serve as ontological grounds for truths about the past. Second, the presentist can argue that truths about the past don't need such grounds (but that this fact doesn't involve a wholesale rejection of the impetus behind truthmaking). After considering the options and challenges for these two perspectives, I offer an objection against both routes.

4.1 The Upstanding Easy Road

The first response to the truthmaking objection to presentism is to identify objects that exist in the present that can serve as truthmakers for truths concerning the past. Such responses have been variously labeled as "upstanding" approaches to the objection (e.g., Tallant and Ingram 2015) or as the "easy road" to presentism (Asay and Baron 2014). In many ways, these views resemble the defenses of maximalism when it comes to negative existentials. The entities that are posited in the name of maximalism (totality states of affairs, negative facts, absences) are defended by way of their theoretical merits – their ability to satisfy maximalism – not their antecedent, independent plausibility. Similarly, the entities that presentists have offered to solve the truthmaking objection earn their keep mostly by way of their ability to answer the objection,

⁴⁰ But see Dawson 2021, which denies this. I'm not sure how to dialectically engage a view that is committed to denying that it was ever formulated.

⁴¹ More controversially: there are contingent truths that concern the future. Because the status of future contingent claims (e.g., "Humans will walk on Mars by 2050") is of greater dispute, whether there is a parallel challenge for growing blockism is likewise more contentious.

⁴² There are many presentations of the objection and surveys of the possible responses. See, for example, Armstrong 2004: chapter 11, Caplan and Sanson 2011, Tallant 2013: 369–372, and Griffith 2021.

which raises the concern that they are posited on a strictly ad hoc basis. Here it is important to keep in mind the dialectical significance of the objection. The point is not to show that presentists *can't* commit to entities that satisfy their truthmaking commitments; no objection could demonstrate that. Rather, the objection shows that eternalists have the upper hand as compared to easy road presentists concerning their shared goal of providing truthmakers for truths about the past.

Still, consider some of the options that have been explored. John Bigelow (1996), taking his cue from the ancient Roman Epicurean Lucretius, advocates the existence of *tensed world properties*, temporally imbued properties that are possessed by the totality of things that exist.⁴³ Consider "Einstein used to be a German citizen." This sentence became true in March 1933 when Einstein surrendered his German passport and renounced his citizenship. At that moment, the world gained a new property, the property *being such that Einstein used to be a German citizen*, and it has continued to carry this property ever since. This property (or perhaps the state of affairs that joins it to the world) makes it true that Einstein used to be a German citizen. (An eternalist, by contrast, might instead cite the event of the renunciation as the truthmaker, since they remain committed to its existence.)

There are some familiar worries about these kinds of properties. One is that they are intrinsically problematic due to their "hypothetical" nature, which is to say that they are not possessed by objects solely in virtue of the way those things are (e.g., Sider 2001: 41). If the world has tensed properties, that is because of what used to exist, not because of how it is today.⁴⁴ Another objection is that they fail to be properly relevant to the truths in question, or fail to be properly explanatory (e.g., Merricks 2007: 137; Rhoda 2009: 48–49; Sanson and Caplan 2010: 30–31). A sentence about Einstein's past citizenship is about *Einstein*, not the totality of the world (which, for presentists, doesn't even include Einstein) having a certain property. So, tensed world properties can't provide the right kind of explanation for the sentence's truth.

Other paths along the easy road to presentism create a similar dialectic. Certain present-tense entities are proposed to be past-truth truthmakers, and are then charged with being nonexplanatory, irrelevant, ad hoc, or all of the above. Eternalists, meanwhile, contend that their proposed truthmakers face none of these challenges, and so are preferable overall. If we start out neutral on presentism versus eternalism, the latter appears to have the upper hand when it

⁴³ See Tallant and Ingram 2020 for a recent defense.

⁴⁴ Kierland and Monton (2007: 494) dismiss this objection as "sheer metaphysical prejudice."

Other easy road views include Kierland and Monton 2007, Rhoda 2009, and Cameron 2011. Critics include Sanson and Caplan 2010, Baron 2013a, 2013b, and Tallant and Ingram 2015.

comes to truthmaking for the past. But there remains a third camp in the debate, which retains presentism but posits none of easy road presentism's ontological suggestions. Simultaneously, it claims to do complete justice to the ontological accounting pursued by truthmaker theory. Is such a path really available?

4.2 The Nefarious Hard Road

The basic position of this third view – variously labeled "nefarious presentism" (Tallant and Ingram 2015), "hard road presentism" (Asay and Baron 2014), and "ostrich presentism" (Torrengo 2014) – is that truths about the past are truth-maker gaps. They are not made true, and are in no need of being made true. There is, thus, no reason to accept the eternalist's inflated ontology (or the easy road presentist's, for that matter). The nefarious presentist still offers *explanations* for truths about the past, but insists that these accompany no ontological implications.

"Nefarious presentists," claim Tallant and Ingram (2015: 370), "argue that truths about the past are true because of how things were, where no analysis of this primitive, past-tensed claim is given." For example, "Socrates existed" is true. Although there is nothing in the world to make this true, the world *used to be* such that Socrates existed. And "Socrates existed" is true because Socrates existed. The nefarious presentist, then, maintains that truths about the past are grounded in how the world used to be, where how the world used to be is an ontologically empty commitment: one can have infinitely many beliefs about what the past was like and what existed without incurring a single ontological commitment. 46

One objection against nefarious presentism is that it fails to accomplish its own explanatory ambitions. Notice that it makes use of explanations of the form "p" is true because p." Such explanations posit an explanatory relationship between a "semantically ascended" truth – an ascription of truth to a truth-bearer – and the truth from which the former ascends. Hence, the truth of "Socrates existed" is true" is explained by the truth of "Socrates existed." But this just pushes back the main question: What is the explanation for the truth of "Socrates existed"? Answering this question by citing the fact that Socrates existed is to offer the smallest possible explanatory circle.

Another problem for nefarious presentism is that its acceptance of the "because" explanations above undermine what is distinctive about presentism. The presentist's main idea is that the present is ontologically privileged: present things, and only present things, make up the world. Yet at the same time,

⁴⁶ See Sanson and Caplan 2010 for a similar view.

⁴⁷ Recall the discussion of these purported explanations in Section 2.2.2.

nefarious presentists accept that the "because" explanations are sufficient to address the ontological concerns raised by truthmaker theorists. As a result, nefarious presentists should also accept that such explanations are perfectly adequate ontological explanations when it comes to truths concerning the present as well. "If I were to heat this water to 373 Kelvin it would boil" is true because if I were to heat this water to 373 Kelvin it would boil. If this is all one needs to say when thinking about the truthmakers for counterfactuals, then truthmaker theory is moot across the board, not just for truths about the past. Nefarious attitudes about truthmaking for presentism instantly seep into a nefarious attitude about truthmaking full stop. ⁴⁸

Baia (2012) advocates a similar form of presentism. On his view, truths about the past don't require truthmakers. What is required instead is that they *used* to have truthmakers. Though nothing currently grounds "Socrates existed," there used to be something that grounded the truth "Socrates exists," namely, Socrates. Baia's presentist might therefore claim to be upholding the idea of ontological accounting that underwrites truthmaking; it's just that truths about the past need to be accounted for by *past* ontology, which doesn't exist anymore.

Baia's presentism requires an unstable understanding of ontology. What is the significance of ontology for this kind of presentism? How does it understand what it is to be ontologically committed to something? The truthmaking idea is that our ontological commitments are guided by our ontological accounting. If Baia stresses that presentists are not ontologically committed to the entities of the past, then they have literally nothing to appeal to when doing their accounting. One can't settle the books with assets one doesn't have. Alternatively, Baia could stress that his view does provide ontological accounting. It does take seriously the ontology of the past in some sense; it just recognizes that it doesn't presently exist. But if presentists appeal to the past to account for past truth, they are, for all intents and purposes, ontologically committing themselves to past ontology. Put another way: to maintain their accounting (for they don't want to deny that "Socrates exists" at least used to have a truthmaker), they need to take past ontology to be just as relevant to ontological accounting as present ontology. In effect, the nefarious form of presentism wants things both ways. It wants to ontologically account for past and present truth in parallel fashion (thereby not treating present ontology as ontologically special), but also insist that present and past ontology are not similar at all: only the former exists! In this way, the nefarious presentist divorces ontology from ontological accounting. As a result, it's left unclear what the philosophical significance is for the project of

⁴⁸ For other criticisms of this presentist tactic, see Asay 2020a: 209–212, Asay and Baron 2020, and Rodriguez-Perevra 2022.

ontology in the eyes of the nefarious presentist. Like the eternalist, they seem committed to the task of using past existents (like dinosaurs) for ontological accounting, and agree that dinosaurs don't exist in the present. (Eternalists agree that dinosaurs went extinct.) Hence, there is no clear *ontological* disagreement between the eternalist and nefarious presentist; at best there appears to be a disagreement about how to use the words "ontology" and "ontological commitment." Perhaps present ontology is still metaphysically special in some way. But denying the reality of the past is not the only way of securing what's special about the present (see, for instance, Cameron's [2015] version of the "moving spotlight" theory).

4.3 History and Fiction

In the last section I noted that while the nefarious presentist denies that truths about the past require truthmakers, they typically accept that such claims *used* to have truthmakers (back when they weren't truths about the past). After all, they believe there are facts about the way the world used to be. Dinosaurs used to exist. Someone who thought the opposite would be wrong, though this disagreement would have no ontological implications for nefarious presentists. Neither the claim that dinosaurs existed, nor the claim that dinosaurs never existed, has any immediate ontological implications for nefarious presentists. That is to say, they think that they could change their minds about which of these claims is true without having to revise their ontologies with respect to it.

But this disagreement about the truth of "Dinosaurs used to exist" should an ontological disagreement about dinosaurs. After all, it is a straightforward claim about the existence of dinosaurs. One way to probe this objection is to consider the difference between history and fiction. From the perspective of presentism, history and fiction are ontologically indiscriminate. Creatures of fiction don't exist; but neither do creatures of history. Chinese hopping vampires are no less real than the emperors of the Qing dynasty. All presentists agree to this. Nefarious presentists who disagreed about which of these things belonged to history and which to myth need not have any ontological disagreement with one another. By placing the fictional and the historical on an ontological par, presentists offer an impoverished perspective on what ontology as a philosophical enterprise accomplishes. In terms of ontological accounting, it gives you nothing beyond the present moment. But ontology ought to have more comprehensive ambitions; we want a total ontological accounting for the whole universe, in all its spatiotemporal glory. We care about what's over there, not just what's here. So too with time: ontology should be concerned with what was, just as it is concerned with what is. But taking on

board a comprehensive ontological accounting that covers the past, present, and future is to concede eternalism, the thesis that no special moment of time is exclusively real.

Consider again the metaphor of the accounting departments. The ontology department will act differently when it learns that "In 2023, it is true that dinosaurs used to exist" is in the truth department's records, compared to if it had learned that "Dinosaurs are fictional" is there instead. The ontology department needs to *act* in the former case on dinosaurs, and that means that dinosaurs *are* relevant to ontology, even after they've gone extinct. It may need to act in the latter case as well (see Asay 2020a: chapter 12, on truthmaking and fiction), but it won't be adding any dinosaurs. (Maybe it will need to add a story about dinosaurs.) An ontology department that doesn't add dinosaurs to its rosters for a world where dinosaurs are extinct, not made-up, is failing at its job.

5 The Possible

Some truths are about what is possible, about how things might have been. Some truths are about what would have been the case, had things been different. I might have been a chemist, or perhaps a journalist. If I had remembered to fill the ice cube tray last night, there would have been ice cubes this morning. In one sense, these claims concern ways that the world *isn't*. I'm not a chemist, I'm not a journalist, and I didn't remember to fill the ice cube tray last night. In another sense, they do concern the way the world is. The actual world really is the kind of place where I could have been a chemist or a journalist. (The actual world is not such that I could have been a platypus.) And while it's true that my freezer would have frozen the water in the trays overnight, this too is due to the actual features of the world. Had the world been very different – with different laws of physics, say – then maybe the freezer wouldn't have frozen the ice.

Truths about possibilities and ways the world could have been provide an interesting case study for truthmaker theory. (I will sometimes refer to them as "modal truths," since they explicitly evoke concerns with the metaphysics of modality.) Many modal claims involve how the actual world isn't, but still seem to be true in virtue of the way the actual world is. The truthmaking question for metaphysicians is what kinds of ontological commitments these truths press upon us.

In this section I explore two broad outlooks on this question. First, I consider the "expansionist" strategy of *possibilists*, those philosophers who look beyond the actual world to find truthmakers for the truths about what might have been. Then I look to the "repurposing" strategy of *actualists* who argue that truths about possibilities can be handled by the same sorts of actual-world things that

make true truths about actualities. I finish with some brief remarks about the truthmakers for counterfactual conditionals. 49

5.1 Expansion

The expansion strategy is perhaps best exemplified by David Lewis. Lewis (1986) defends "concrete modal realism," the infamous ontological thesis that there are infinitely many concrete possible worlds, each as real as our own. These worlds are causally and spatiotemporally isolated from our own; each way that our world could be literally is a way that one of those other worlds is. Lewis puts his modal realism to work in order to offer, among other things, a reduction of modality, an analysis of the truth-conditions for counterfactuals, and accounts of what properties and propositions are. It would be anachronistic to say that Lewis develops his view in order to provide an account of the truthmakers for truths about possibilities. Lewis's development of modal realism predates the recent resurgence of truthmaking, and his own contributions to the truthmaking literature (Lewis 1992, 1998, 2001a, 2001b) are intentionally neutral regarding his own controversial metaphysical stance. (The exception is Lewis 2003, in which he shows how incorporating at least some amount of counterpart theory can solve certain outstanding problems for truthmaking.) Nevertheless, by committing himself to a plurality of concrete possible worlds, Lewis does provide himself with an answer to many questions about the ontological grounds for truths about possibilities.

Start with Lewis's (1986) own first example: "On the Plurality of Worlds might have been finished on schedule." According to the modal realist, in another possible world resides a philosopher quite similar to David Lewis, and who in fact is more similar to David Lewis than is anything else in that world. This Lewis counterpart is the author of On the Plurality of Worlds (or a counterpart of the book), but submits the manuscript on time to his publisher. In that world, "On the Plurality of Worlds was finished on schedule" is true; its truthmaker, presuming it has one, is also the truthmaker for the true modal claim in our world, that On the Plurality of Worlds might have been finished on schedule. In general, for any claim "It is possible that p" that is true in the actual world, any truthmaker for "p" in some possible world also serves as a truthmaker for "It is possible that p" in the actual world. As a result, the Lewisian can grant that the truths of one world are made true by the objects of another; but this is no shocking consequence for the Lewisian, as the modal realist happily ontologically commits to the objects of all possible worlds.

For a pessimistic take on truthmaking and modal truth that aims to avoid all the strategies considered here, see Thomasson 2020.

The overall merits of Lewis's view are remarkable, and the criticisms that have been brought against it are familiar. My focus concerns its merits and flaws specifically as a theory of modal truthmakers. When it comes to this issue, Lewis's view is far from appealing. Perhaps it is ultimately worth its many theoretical costs on other grounds, but not solely on the basis of its utility for the theory of ontological grounds.

The most salient concern with the view is its extreme ontological price tag. In order to account for the modal truths of the actual world, infinitely more worlds are brought into the fold. Lewis is quick to note that while his possible worlds involve infinitely many new ontological commitments, at least they only involve *more of the same*. Lewis isn't positing new *kinds* of entities, just more of the same sorts of entities we find in the actual world. Nevertheless, Lewis's view is still chock-full of ontological commitments, and there is no doubt that accepting it comes with a great loss of parsimony. As Armstrong (2004: 83) puts the point, Lewis is "bringing in giants to do a boy's work."

A second objection is epistemological in nature. On Lewis's view, the truthmakers for statements of possibility turn out to be, at least in some cases, the concrete entities of other possible worlds. But these are entities with which, ex hypothesi, we have no causal interaction. Supposing that knowledge of truths typically involves some sort of relation to what makes those truths true, one wonders how we can have any modal knowledge at all. 50 It's true that On the Plurality of Worlds could have been submitted on time only if Lewis's counterpart does submit it on time. What epistemic access do we have to such an event taking place? I seem to have no better evidence as to what's going on in some other possible world than I do as to what's going on at some distant planet. Hence, if I don't have justification for asserting that in some distant galaxy there's a philosopher who looks a lot like David Lewis and is punctually turning in a manuscript that looks a lot like On the Plurality of Worlds (and I don't), then I don't have justification for asserting that in some other possible world there's a philosopher who looks a lot like David Lewis and is punctually turning in a manuscript that looks a lot like On the Plurality of Worlds. Modal realism leads to modal skepticism.

Lewis (1986: 108–115) brings up this style of objection himself and deals with it at length. One of his strategies is to stage a "partners in crime" defense with mathematical truth. Mathematics, too, is a field in which we seem to have knowledge in spite of having no causal access to the things that that knowledge concerns, that is, numbers. The strength of this response turns on the strength of

For more on the relationship between truthmaking and epistemology, see, for example, Sorensen 2001; chapter 11 and Heathcote 2006.

the analogy between modal and mathematical truth. And part of Lewis's own view undermines the analogy – his possible objects in other possible worlds are supposed to be just like their counterparts in the actual world, not more like abstract entities such as numbers (that, admittedly, raise genuine epistemic concerns).

Lewis also challenges the idea that knowledge of otherworldly entities is just like knowledge of actual-worldly entities. Lewis believes that there is a crucial difference. That the actual world contains a tardy author of *On the Plurality of Worlds* is a contingent matter; that some world or other contains a timely author of *On the Plurality of Worlds* is not contingent. Causal acquaintance is required for knowledge only of contingent matters, according to Lewis. I find this response puzzling. On what grounds, given the modal realist perspective, can we say that it is not contingent that some world or other contains a timely author of *On the Plurality of Worlds*? If one world contains the timely author, then it's possible that the manuscript is turned in on time. If no world contains the timely author, then it's not possible, our suspicions to the contrary notwithstanding. For all I know, there is no world out there where the manuscript is submitted on time; I have no more guarantee that it's out there than I have a guarantee that in this world, in some galaxy far, far away, some Lewis-like creature is submitting a defense of modal realism to his publisher on time.

Lewis's view requires that the space of what we take to be the possibilities is completely filled in; but the epistemological objection wonders how we could ever know that. For example, it's supposedly possible that I could have been a chemist. For Lewis, for that to be true there must be a world out there where I have a counterpart who is a chemist. But perhaps there just isn't one of those worlds. If so, then it turns out I couldn't have been a chemist. One way to think about the objection is that the contingent/noncontingent distinction to which Lewis appeals does not help. For his noncontingent modal truths are still deeply *synthetic*: true in virtue of what's going on in the worlds themselves. And given that possible worlds are just things that happen to exist, like our world, there is no a priori guarantee as to which ones do.

The final objection to modal realism of particular interest to truthmaker theory is a variant of Kripke's (1972: 344–345, footnote 13) famous "Humphrey" objection. It's possible that I might have been a chemist. Since I'm not a chemist, this claim must be true in virtue of the career pursuits of one of my counterparts. But none of those counterparts is identical to me – they're no more identical to me than they are to any actual chemist. The fact that lots of people other than me are chemists seems to be irrelevant to *my* possibly being a chemist. The objection is the familiar one of irrelevance. My counterparts are not identical to me – the modal realist rejects the idea of "trans-world identity" – and so facts

about them do not make true facts about me. That some other person is a chemist is irrelevant to whether or not I could have been a chemist. Objects must be relevant to the truths they make true; by inserting counterparts into the picture, modal realism inaccurately pairs actual modal truths with otherworldly truthmakers that the modal truths are in no way about and do not concern.

5.2 Repurposing

Lewis's concrete modal realism hopes to offer an elegant account of truth-makers for the truths about possibilities that runs fully parallel to accounts of truthmakers for truths about actualities. (In this way, the account is similar to how eternalists, but not presentists, posit the same kinds of truthmakers for truths, regardless of their temporal status; see Dyke 2007.) But the ontological and theoretical costs are severe. Hence, it will be worthwhile to consider the options for a nonexpanding ontology to provide ontological coverage for modal truths.

David Armstrong's approach to modal truthmakers fits the current mold.⁵¹ His basic strategy is to argue that "truthmakers for a contingent truth... are also truthmakers for the unactualized possibility of the contradictory of that truth" (Armstrong 2006: 247). It's false that I am a chemist. But I might have been. Suppose that what makes it true that I'm not a chemist is some object T. T contingently exists. After all, "I am not a chemist" is contingently true, so if T were a necessary being "I am not a chemist" would be a necessary truth. Now, T's existence isn't tied to anything else in the world. In a "lonely" world with just T, it's true that I'm not a chemist. But it's also true of the lonely world that *it's contingent that* I am not a chemist, and nothing else but T is around to make that true. And since "It's contingently true that I am not a chemist" entails "It's possible that I am a chemist," then, by the entailment principle (the principle that if p entails q, then any truthmaker for p is a truthmaker for q), T is a truthmaker for the latter.⁵² The truthmakers for "I am not a chemist" and "I might have been a chemist" are one and the same.

I applaud Armstrong's argument for its aim to maximize ontological economy. It suggests that we don't need to reach beyond the actual world to ground modal truth. Objects and their properties together ground not only what is, but what could have been. Armstrong's argument, however, does face criticism.

See Armstrong 2000: 154–159, 2003, 2004: 83–111, 2005: 271–272, 2006: 247, and 2007. For criticism, see Simons 2005, Keller 2007, Cameron 2008b, Kalhat 2008, and Pawl 2010. Armstrong's argument for his view evolves, but his basic stance remains consistent. See Pawl 2010 for discussion of how Armstrong's view develops.

⁵² This principle is controversial within truthmaker theory. See Restall 1996, Armstrong 2004: 10–12, and Rodriguez-Pereyra 2006c.

Timothy Pawl (2010: 423–426) raises two central objections. First, he thinks it relies on the false generalization that for any object x, if x is contingent then x is a truthmaker for "x is contingent." Take the state of affairs {being composed by N atoms (Armstrong)}, where the number in question is in the billions. This state of affairs makes true "Something is composed by more than fifty atoms," a contingent truth. Therefore, by Armstrong's reasoning, it also makes true "It's possible that nothing is composed by more than fifty atoms." In reaction to this consequence, Pawl writes:

But this is false! Armstrong's being composed of ten billion atoms has nothing to do with whether or not it could be the case that nothing is composed of more than fifty atoms. At the very least, it is not clear that Armstrong's being composed of ten billion atoms is a truthmaker for that claim; we need an argument for this. (Pawl 2010: 424).

Second, Pawl points out that Armstrong's argument entails that in a "lonely" world with just one object lying around, it must be the truthmaker for all modal truths. Armstrong claimed that in a world with just T – that is, the truthmaker for "I am not a chemist" – T must also be a truthmaker for "T is contingent," since nothing else is around. But so too must T be a truthmaker for other modal truths, such as "Chemists might never have existed at all" or "Al Gore might have won the US presidency in 2000." These truths, by Armstrong's lights, are necessary truths, and so are true in the world with just T. So T must make them true. As a result, Armstrong's account "sins" against the relevance requirement that Armstrong himself and others impose upon truthmaker theory.

The second problem, it seems to me, is more serious than the first. The first is also a relevance problem, and the problem with relevance objections is that it's unclear how to argue for them. Pawl no more offers an argument for his judgments about relevance than does Armstrong. Adjudicating these kinds of standoffs is no straightforward matter.⁵³ But the second objection goes beyond relevance and lands on triviality. Essentially, every object ends up being a truthmaker for all modal truths. This is a consequence with which Armstrong (2004: 8) should not be content, as it is out of sync with his own goal of defending nontrivial truthmaker maximalism.

Beyond Armstrong's view, there is another repurposing view currently being defended. This account grounds modal truth in the actual properties of actual objects. In Jacobs's (2010: 234) telling of the view, "the properties-based view grounds all of modality in properties and their inter-connections, however

⁵³ On my view, they are best handled by adopting the ontology-first approach, as I discussed in Section 2.2.2.

properties are conceived." It's true that I could have been a chemist. Why? Presumably because I'm human, know how to read and write, could have chosen to major in chemistry, etc. By possessing these properties, I gained the ability to be a chemist, and so they make true the fact that I could have been a chemist. Modal claims involve the way the world could have been, and the properties objects possess account for not just the way things are, but how they could be. Given the properties I have (such as being essentially human), I couldn't have been a banjo-playing puppet frog, but I could have been a bluegrass legend.

The properties view is plausible enough. It need not disagree with Armstrong's own account in many cases, given Armstrong's own commitment to universals and their substantive role as truthmakers in his philosophy. Furthermore, it need not invoke any kind of ontological addition, supposing anyway that one is already ontologically committed to properties for other reasons (such as grounding nonmodal truths). I would be suspicious of a view that posited properties *only* because of modal truths, but I don't know that anyone takes that particular approach (nor would it then qualify as a repurposing view).⁵⁴

In fact, the properties view (broadly speaking, and perhaps in conjunction with elements of Armstrong's view) is the most appropriate view for handling *contingent* modal truths. The modal status of modal claims is not uncontroversial, but it will make a difference in one's overall truthmaking view. To get a handle on the relevant kind of cases, consider this line of reasoning from David Lewis:

An ape can't speak a human language – say, Finnish – but I can. Facts about the anatomy and operation of the ape's larynx and nervous system are not compossible with his speaking Finnish. The corresponding facts about my larynx and nervous system are compossible with my speaking Finnish. But don't take me along to Helsinki as your interpreter: I can't speak Finnish. My speaking Finnish is compossible with the facts considered so far, but not with further facts about my lack of training. What I can do, relative to one set of facts, I cannot do, relative to another, more inclusive, set. (Lewis 1976: 150)

Here, Lewis is addressing the context-sensitivity of modal claims, in the efforts of deconstructing the appearance of contradiction between apparently conflicting modal claims. There are a whole host of modal claims to be found – and sometimes expressed with the very same language – and they may well differ on their modal status.

Another option to consider is that there are dispositional properties in addition to categorical ones, and that the former are needed for various truthmaking purposes. See Austin 2015 for discussion and criticism of this view.

On the one hand, I could not have been a chemist: I chose to go to graduate school in philosophy. So "I could have been a chemist," while false, might have been true had I chosen a different academic path. Hence, it is a contingent falsehood that I could have been a chemist. On the other hand, I could have been a chemist. There's no incoherence in the very idea of my being in that line of work; the world would have had to have gone differently for me to have ended up that way, but the world going that way is entirely consistent with the basic laws of the universe, however understood. Understood in this light, it's unclear how it might have failed to be the case that I could have been a chemist. Perhaps it wouldn't be true that I could have been a chemist had I failed to exist. But as long as I'm around, it seems little else, if anything, also needs to be around in order to ground the possibility of my being a chemist.

The lesson I draw from these considerations is that we use our modal language to communicate various nuanced claims about the world, and our views about the ontological grounds for those claims need to be similarly nuanced. As a first pass, what makes it true that I couldn't have been a chemist is whatever makes it true that I lack the training to be one. This might be best ontologically cashed out as an absence (of any relevant credential, say) or totality (of actual chemists, a set to which I do not belong). What matters is that my modal claim here does make an ontological difference to the world – I'm trying to communicate something whose truth depends on contingently existing reality, something that could have turned out otherwise had different things existed. The sense in which "I could have been a chemist" is true requires less, ontologically speaking. Again as a first pass, what makes this true is my essence, as there's no incoherence in the idea of my being a chemist. I'm the sort of thing that can do the kind of activity that is constitutive of being a chemist. I take away from this observation the idea that what makes it true is mainly me and my features. It's consistent with my essence that I could have ended up a chemist.

Hence, truthmaking for contingent modal claims is not really that different from truthmaking for contingent nonmodal claims. How much ontology is required for our modal claims depends on what we are trying to communicate with our modal language. Getting clearer on the truthmakers for these modal claims can help us get clearer on what modal claim it is that we're trying to express, and vice versa. Hence, I see myself in broad agreement with repurposing modal truthmaker theorists, at least when it comes to modal truths of a contingent variety. I would hesitate to make a general claim, such as Jacobs's, that it's always *properties* that are modal truthmakers. Truthmakers, even in the modal realm, will belong to various ontological categories. After all, everything is a truthmaker for some truth or other. And every truth entails

a modal truth (e.g., "p" entails "Possibly, p"). So everything is a truthmaker for some modal truth or other.

5.3 Counterfactuals

Counterfactual conditionals take the form "If it were the case that p, then it would be the case that q," where "p" is something contrary to fact. Counterfactuals, from the beginning, have played a critical role in motivating the broader truthmaking project. As Armstrong (2004: 1-3) tells the tale, ontologically averse philosophers of an earlier age took refuge in counterfactual analyses of notions that threatened their desert landscapes. Phenomenalism, the view that there are only presently existing sense perceptions, provides a tidy ontological inventory. But how can truths about unperceived objects be explained? No empirically respectable theory can deny that there might be planets deep in the universe with flourishing ecosystems that no one has yet perceived. But such possibilities appear to be incoherent by phenomenalist standards: a planet full of unperceived perceptions! To make sense of such claims, phenomenalists might take up the retreat to counterfactuals: it's not that there are unperceived ecosystems, it's that if one were to travel to such-and-such corner of the universe, one would have an ecosystem-like experience. That may be true, of course, but it leaves unanswered the question of what ontologically grounds that counterfactual. Lacking, at least, the relevant idea in the mind of a supernatural being (à la Berkeley 1999), it seems that the counterfactual must be accepted as a brute truth, a fundamental fact of the universe that in no way depends upon what does or doesn't exist. Better to leave the phenomenalist desert altogether than fill it with brute facts.

Truthmaker theorists do not rest content with accepting the truth of counterfactual conditionals: they instead offer accounts of what makes them true. That said, it seems to me that a systematic account of truthmaking for counterfactuals is ill-conceived. In other words, there is no reason to expect a special account of truthmakers that applies uniquely to counterfactuals. Hence, the truthmakers for, say, ethical counterfactuals are probably more similar to the truthmakers for ethical noncounterfactuals than they are to, say, counterfactuals about political states of affairs. For this reason, investigating the truthmakers for counterfactuals is not like taking up Nelson Goodman's "problem of counterfactual conditionals." In *Fact, Fiction, and Forecast*, Goodman (1983: 8) explores the difficulties in giving an account of "what sentences are meant to be taken in conjunction with an antecedent as a basis for inferring the consequent," and then accounting for the nature of the connection between them, since it's usually not a logical one. This project is fundamentally one of giving something in the

neighborhood of truth-conditions for counterfactuals – an attempt to say what counterfactuals say, but not in a counterfactual way. So Goodman's project is not the ontological one in which I am interested. Perhaps it would be a useful addition, if the resulting analysis of Goodman's project yielded truths whose truthmakers were more perspicuous. In any event, even if a uniform semantics for counterfactuals is forthcoming, that is no reason to expect a uniform theory of truthmaking for them. ⁵⁵

To see why, consider the great variety of counterfactuals. If someone were to utter a never-before-expressed truth, then he or she would have spoken truly. That's a true counterfactual, but a trivially true one. It's also true that if Obama had lost the 2012 US presidential election, then Romney would have won. Spelling out a truthmaker for this claim would be a dizzyingly complex affair, incorporating Obama and Romney themselves, what makes true the facts about Romney's candidacy and eligibility, the dispositions in the minds of voters, and perhaps, among many other things, the truthmakers for other relevant facts about the US electoral system. It's true that if I were to kick a dog for fun, my doing so would be wrong. This truth is presumably due to the various mental states of the dog (that dispose it to feel pain when kicked), plus states of my physical body (which make me able to cause pain in the dog). Finally, it's true that if I were to place a glass of water into the freezer, the water would turn to ice within a few hours. What makes this true will involve the water, my freezer, and perhaps – importantly – various laws of nature.

The point is that we shouldn't expect a straightforwardly uniform account of the truthmakers for counterfactuals, since the class of counterfactuals does not constitute, metaphysically speaking, a straightforwardly uniform class. Counterfactual truths can arise in any intellectual domain, can be contingent or necessary, and are as subject to context as any other kind of truth. So, in general, I do not think that counterfactuals qua counterfactuals introduce any particularly distinctive element to truthmaker theory.

6 The Socially Constructed

Truthmaker theorists study the relationship between what is true and what exists. One topic where this relationship is particularly fraught is social construction. On the one hand, ideas about some domain being socially constructed can conjure up thoughts that truth is irrelevant in the domain, or that it concerns that which isn't real. ⁵⁶ On the other hand, the idea that something is socially

⁵⁵ I detect something like the view I'm resisting in Jacobs 2011.

⁵⁶ Here is Thomasson (2009: 545): "The fact that social entities depend on human beliefs and intentions for their existence raises metaphysical questions about them that do not arise for mere natural objects. If we in some sense just make these things up, should we consider them to be

constructed implies that *something* has indeed been *constructed*. If this is the case, then social constructions do involve real (albeit constructed) things, and so, presumably, lots of truths concerning them. It will be productive, therefore, to approach the topic of social construction with the theory of truthmaking in mind.⁵⁷ This, I maintain, will help us to think more critically about the ontological and alethic implications of social constructions.

6.1 Preliminaries

In Plato's dialogue *Cratylus*, Socrates joins a conversation between Hermogenes and Cratylus, who represent, respectively, "conventionalist" and "naturalist" accounts of language. Here is Hermogenes describing his opponent's view: "There is a correctness of name for each thing, one that belongs to it by nature. A thing's name isn't whatever people agree to call it – some bit of their native language that applies to it – but there is a natural correctness of names, which is the same for everyone, Greek or foreigner" (Plato 1997: 102; 383a–b). Hermogenes's view, by contrast, rejects this perspective: "No one is able to persuade me that the correctness of names is determined by anything besides convention and agreement. I believe that any name you give a thing is its correct name. If you change its name and give it another, the new one is as correct as the old" (Plato 1997: 103; 384 c–d).

Hermogenes and Cratylus disagree over whether or not language is a socially constructed (as opposed to a natural) phenomenon. The claim that some phenomenon is a social construction can be controversial, but I think there are plenty of mundane examples, language being among them.⁵⁸ The concern is a distinctly *metaphysical* one: What is it that *determines* the correctness of names? Because of its metaphysical nature, the claim that some phenomenon is a social construction can be understood from the perspective of truthmaker theory: What are the ontological grounds for the truths related to social constructions?

Consider some elated new parents who decide to name their baby daughter "Sophia." It's now true that the baby's name is Sophia. What is the truthmaker for "The baby's name is 'Sophia'"? The straightforward answer begins (and may well end) with the parents' intentions, decisions, and behaviors. In short, the baby's name is "Sophia" because that's what the parents have chosen, and

genuine parts of our world at all – or should we consider them just as illusory as the creatures in the stories we make up?"

⁵⁷ For work connecting social constructions and the metaphysical topic of grounding, see Griffith 2018a, 2018b, and 2020b.

⁵⁸ See Hacking 1999: 1 for a laundry list of phenomena that have been claimed to be socially constructed.

it's *up to them* what the baby's name is.⁵⁹ The parents didn't need to *discover* what the baby's name is; they needed to *decide* what it was. And that decision, more or less, provides the ontological grounds for the facts about the baby's name.

This example centers on a *semantic* truth: that "Sophia" is the name of a particular individual. Other semantic truths – such as that "dogs" refers to dogs, and that "snow" (in English) and "Schnee" (in German) mean the same thing – are, historically speaking, harder to pin down. But ultimately the grounds for these truths will settle on the decisions, intentions, and practices of the people who use these words. There may not have been a definitive linguistic "baptism" for the English "snow," similar to the way that "Sophia" came to refer to the new baby. Yet it remains the case that what makes it true that "snow" means snow is the set of practices, conventions, and intentions of those who speak English. Getting clear on which of those practices and conventions matter, and what, precisely, those things come to, ontologically speaking, is the task for thoroughgoing investigation into the truthmakers for semantic facts.

If the semantic facts that ultimately constitute a language (e.g., that "water" in English means the stuff out in the ocean and that "smoke" in English refers to the gaseous product of fires) are made true by the linguistic conventions of English speakers, then we have a plausible case for the claim that language is a social convention. The community of English speakers is a social group, ⁶¹ and they "construct" and sustain the English language and all the facts about it. The markings "snow" wouldn't mean anything if people didn't confer meaning on it, just like how "shnuzzybuggle" is meaningless. The markings and sounds that constitute our languages have no meaning prior to the social practices that give rise to and sustain them.

The claim that a particular phenomenon is a social construction, then, can be supported by way of identifying the truthmakers for the truths associated with that phenomenon. It is because a certain set of truths are made true by a distinctively social ontology that those truths constitute a socially constructed phenomenon. ⁶² Those who disagree about the social nature of that phenomenon

⁵⁹ The answer might be more elaborate if names are thought of in a way that requires institutional approval, such that acts like the filing of particular kinds of paperwork, satisfying institutionally approved lists of names, etc., are also part of the process.

⁶⁰ But presumably there was a more definitive baptism for "neĝo," the word for snow in the planned language Esperanto.

⁶¹ See Epstein 2015 for a thorough investigation into the ontology of social groups.

This claim shouldn't be taken as an analysis of what it is to be socially constructed, as it at best offers a necessary condition on being a social construction. The idea is that a phenomenon, such as the naming of people, is a social construction because the truths concerning that phenomenon are made true by social conventions. But not all truths made true by social conventions are

will, in turn, identify a very different account of truthmaking for those truths; the truthmakers they identify will, presumably, turn to "natural" things as opposed to "social" things.⁶³ So a debate over whether or not some phenomenon is a social construct will reflect differing views about the ontological grounds for the truths about that phenomenon. But notice just how much may be held in common by the interlocutors in such a debate. They can agree that there are truths (i.e., facts of the matter) about the phenomenon, and that they are made true by perfectly *real* things (even if those things are "social" in nature). These truths (as well as their truthmakers) might even be highly "objective," even if they are socially constructed.

In Sections 6.2 and 6.3, I take up the examples of race and gender, and show how the debates over their nature have implications for how we think about truthmaking for the truths about race and gender. My goal is not to defend any particular view about the nature of race and gender, but rather to demonstrate how the metaphysical questions that concern them fit perfectly within the framework of truthmaking.

6.2 Race

The use of racial classifications is widespread across contemporary societies, and their implications can have profound and ubiquitous effects on nearly every aspect of a person's life. A person's race – in conjunction with others' perceptions of their race – has consequences for their educational and employment opportunities, susceptibility to violence, access to important social and political goods (such as voting), and countless others matters.

Metaphysical interest in the topic of race begins with the question of whether or not race is real.⁶⁴ Do people actually have racial properties, and thereby belong to racial groups? Or is race an illusion, such that there are no racial

2015, 2017, Schaffer 2017, and Taylor (in press) for further discussion.

socially constructed. For example, "The baby's name is Sophia" is a socially constructed fact because it's made true by a decision of the parents, and a disposition within the community to recognize that decision. But those things also make true "The parents made a decision" and "The community is disposed to accept the parents' decision," and *those* claims, presumably, aren't socially constructed facts.

The word "natural" is extremely slippery in these contexts. Consider: "Hermogenes defends the view that language is a social (as opposed to natural) phenomenon. That is to say, while it is perfectly natural that humans go about inventing languages, the choices they settle on (e.g., that those animals over there are to be called "zebras") are ultimately metaphysically arbitrary: there's no right or wrong to what a thing is to be called prior to some decision (however collective) being made. This is equally true of both natural languages like English and Cantonese and artificially constructed languages like Quenya and Esperanto." Note how "natural" means something different in each instance, evoking a distinct contrast class in each case.
Barnes (2014, 2016) argues that some approaches in contemporary metaphysics are unable to recognize the value in studying the ontology of socially constructed phenomena. See Mikkola

groups, and no one belongs to any racial category whatsoever? Regardless of how one answers these questions, they are tangled up with issues concerning truthmaking. If races don't exist, and sentences like "Martin Luther King, Jr. is Black" aren't true, why not? What is "missing" from the world that would be needed for there to be such truths? But if races do exist, and there are truths about what races people belong to, what is it in the world that is responsible for such truths? Getting clearer on these answers enables us to better understand the notion of race, and whether or not it is an inevitable element of human societies.

First consider "anti-realist" views about race that deny that race is real. On these views, racial groups don't exist. No one is Black, White, American Indian, Asian, or Pacific Islander (to use the five categories currently employed by the US Census Bureau). It's important to note that anti-realism about race doesn't deny that *racialization* is a very real phenomenon. People identify (or don't) with various racial categories and make judgments about others' races as well. Governmental institutions collect data on racial identification and produce legislation that depends upon it. In short, people have plenty of beliefs about what races people belong to (beliefs that go on to inform their behavior in explicit and implicit ways), but anti-realists maintain that these beliefs are for the most part false.

Given that race at least seems to play a hugely dramatic and consequential role in people's lives, what is the basis for denying its reality? Naomi Zack (1998: 10) provides a succinct presentation of the basic argument: "To say that race in the physical sense has no foundation in science is to say that race in the physical sense is not real. Since by race, most Americans mean something physical, the lack of a foundation in science means that race is not real. Period." The argument begins with a claim about what sorts of presuppositions are built into people's concept of race (the concept that is then expressed by the word "race"). The claim is that the concept of race is inextricably caught up with "biologically essentialist" ideas. Ron Mallon (2006: 528–529) provides a helpful summary of such theses: "Races were believed to share biobehavioral essences: underlying natural (and perhaps genetic) properties that (1) are heritable, biological features, (2) are shared by all and only the members of a race,

Note that Mills (1998: 49), a social constructionist about race, identifies his view as a form of anti-realism. Haslanger (2019: 8, footnote 4) and Jeffers (2019) reserve "anti-realism" for views that deny that races exist. This point is merely terminological. (On my view, it's ultimately up to the partisans in a debate about realism to decide which views are best labeled "realist" or not; see Asay 2020a: 159–160.) Mills's choice reflects his interest in distancing himself from mind-independent accounts of race, whereas Haslanger's and Jeffers's choice reflects their emphasis that race does indeed exist.

And where race-based beliefs are true, they are often true for unsuspecting reasons. Someone's belief that Martin Luther King, Jr. isn't Asian is true. But according to anti-realism, that belief is true because no one is (racially) Asian, not because King belongs to a different race.

and (3) explain behavioral, characterological, and cultural predispositions of individual persons and racial groups." Hence, what it is to be a member of a race is to possess one of those biobehavioral essences that are distinctive of the different racial groups. But, as we have discovered, those sets of traits do not exist: there is no biological basis for thinking that the groups of people classified together on the basis of race share any such essence. Thus, there are no races for anyone to belong to. As Kwame Anthony Appiah (1992: 45) puts the point, "there is nothing in the world that can do all we ask race to do for us." We conceive of race in biologically essentialist terms, and because those biological essences don't exist, neither do races. ⁶⁷

What underlies this anti-realist perspective on race is a view about the ontological grounds, or truthmakers, for claims about race: for a sentence like "S belongs to racial group R" to be true, there must, in the world, be a set of identifiable biological features shared by the members of the supposed racial group. Realists about race, therefore, must disagree with the anti-realist either about the nonexistence of those biobehavioral essences, or their view as to what the truthmakers need to be for there to be genuine facts about race. Either way, the dispute turns on competing views concerning the truthmakers for claims about race.

Support for the first kind of realism – that agrees with the anti-realist about what is needed to ground claims about race, but believes that such grounds do exist – is hard to come by these days, and is unsupported by contemporary biology. The second kind of realism, by contrast, challenges the truthmaking account offered by the anti-realists. For these realists, the world *does* provide the needed material for there to be truths about race. Some of these realists still opt for a nonsocial understanding of race, albeit one that rejects the biologically essentialist account. But my remaining focus will be on those who advance a social constructionist perspective on race, which we can now understand as the view that the ontological grounds for the truths about race are found in the distinctively social corners of ontology.

A key question facing social constructionists is what it is about social reality in virtue of which the facts about race obtain. One prominent view is Sally Haslanger's (2000, 2012, 2019) sociopolitical account.⁷⁰ According to

⁶⁷ For more on racial anti-realism (sometimes called "error theory") see, for example, Zack 1993, Blum 2002, and Glasgow 2009.

⁶⁸ See Mallon 2006: 529 and the sources cited within.

⁶⁹ See, for example, Andreasen's (2000) "cladism," Glasgow and Woodward's (2015) "basic racial realism," Hardimon's (2017) "deflationary realism," and Spencer's (2019a) "ancestralism". Note also Spencer's (2019b) pluralist approach that takes there to be multiple notions at work in racial discourse, and Outlaw's (1996) view that understands race to be a "cluster" concept that combines biological, geographical, and social elements.

⁷⁰ See also Mills 1997, 1998 and Taylor 2013.

Haslanger, a person's race is a function of the systematic subordination or privilege they are dealt in virtue of their belonging to a group that is singled out on the basis of its perceived ancestry. More formally, she presents the view as follows:

A group G is *racialized* relative to context C iff_{df} members of G are (all and only) those:

- (i) who are observed or imagined to have certain bodily features presumed in C to be evidence of ancestral links to a certain geographical region (or regions);
- (ii) whose having (or being imagined to have) these features marks them within the context of the background ideology in C as appropriately occupying certain kinds of social position that are in fact either subordinate or privileged (and so motivates and justifies their occupying such a position); and
- (iii) whose satisfying (i) and (ii) plays (or would play) a role in their systematic subordination or privilege in C, i.e., who are along some dimension systematically subordinated or privileged when in C, and satisfying (i) and (ii) plays (or would play) a role in that dimension of privilege or subordination.

(Haslanger 2000: 44)

Haslanger is pointing to the existence of efficacious social hierarchies based on perceived ancestry as what constitutes a person's race. The basic idea is that groups of people are imagined (correctly or incorrectly) to share a particular ancestry on the basis of their bodily traits, and those groups are then positioned within a social hierarchy such that people enjoy particular privileges or are subject to forms of oppression in virtue of their place in that hierarchy. So what it is to be of a particular race is to be subject to some form of privilege or oppression in virtue of your perceived ancestry.

In short, then, according to sociopolitical constructionists like Haslanger, social hierarchies predicated upon perceived ancestry are the ontological grounds for the facts about race. The ontology of such hierarchies is a difficult question on its own. ⁷¹ But that they exist, and provide the grounds for facts about race, are central commitments for social constructionists about race. Racial anti-realists might agree that the social hierarchies exist, and provide the grounds for facts about *racialization*. (For example, the hierarchies make it true that people [falsely] identified as of a particular race are subject to certain forms of privilege or oppression.) But they would deny that they make it true that people, in fact, belong to racial categories.

One way to critically engage the social constructionist view is to consider the implications of its commitments when it comes to race and truthmaking.

⁷¹ See, for example, Thomasson 2003, 2009 and Haslanger 2012, 2016.

First, consider the contextual nature of Haslanger's account. People don't have races simpliciter. They have races relative to contexts. Having a race is belonging to a group racialized in a particular way, and groups can be racialized (or not) in different ways at different times in different parts of the world. There are multiple social hierarchies in the world, and they confer oppression and privilege in different ways, and onto different divisions of people. Thus people can have multiple races. Is that correct?

Consider an example. Take a person, Alpha, who is racialized in a particular way in a particular sociopolitical context, C_1 , alongside Beta and Gamma. These three form a racialized group G_1 , and as a result all belong to the race R_1 relative to C_1 . Now suppose that in a different sociopolitical context, C_2 , these three are not racialized in the same way. Perhaps in C_1 all three are ethnic minorities, but in C_2 Gamma is not an ethnic minority. Consequently, there is no racialized group in C_2 that includes Alpha, Beta, and Gamma, and so these three do not share the same race in C_2 , though they do in C_1 .

As a result, Haslanger's view entails that many, if not all, people belong to multiple races, and that you can share your race with a person in some contexts, but not others. Is this consequence a feature or a flaw? The social constructionist sees an advantage here. People *are* racialized in different ways in different contexts, and this account captures that fact. Opponents, however, will argue that while racialization is context-sensitive, race isn't. Thus, being racialized (i.e., being treated differentially on the basis of one's perceived ancestry) is not the same thing as belonging to a race.

A second consequence of Haslanger's kind of view pertains to the subjunctive conditionals that it entails. Because social hierarchies are the truthmakers for the facts about race (and, presumably, nothing else in the world is), their disappearance would entail the disappearance of race. Hence, if all race-based social hierarchies were razed, then no one would belong to any race. "Racial equality," then, is a contradiction in terms for sociopolitical social constructionists. The existence of race implies the existence of inequality, so those who fight against racial inequality are, at the same time, fighting against the very existence of race.

Again we can ask: Is this an acceptable consequence of Haslanger's view? She believes that it is. One point that Haslanger stresses is that her view has a normative dimension. Although she recognizes that she is "asking us to use an old term in a new way," she stresses that her goal is to ask "us to understand ourselves and those around us as deeply molded by injustice and to draw the appropriate prescriptive inference" (Haslanger 2000: 48). By beginning to think

⁷² See Glasgow 2009: 120, 2019: 131–134 and Jeffers 2013: 421.

about race in a way that treats it as inherently unjust, we are better able to pay attention to and fight that injustice. Opposing views (e.g., Outlaw 1996: 36) will again stress that one can fight against unjust racialization without at the same time fighting against the very existence of race.

Other social constructionist accounts take issue with Haslanger on this point as well. On these views, while race is socially constructed, what does the constructing is not, fundamentally, unjust social hierarchies. Taking his inspiration from W. E. B. Du Bois (1897), Chike Jeffers defends a *cultural* form of social constructionism: "In speaking of the impact of race on our lives, we necessarily speak of the shaping of our lives by our socialization into particular ways of life where being this or that race is among the modes of identification that influence how we think and act. Race must therefore also be understood as a cultural phenomenon" (Jeffers 2013: 420). If there are cultural underpinnings to race (in place of or in addition to the political underpinnings), then race could continue to exist even in the absence of racism.

On Jeffers's view, race has political and cultural foundations. The question that I want to probe – and that is better appreciated by approaching the view from the perspective of truthmaker theory – is whether or not one of these dimensions takes metaphysical priority. Jeffers inclines toward a view that respects both, but doesn't put an inherent priority on either dimension. He writes:

Race is fundamentally social, in my view, but I do not take either politics or culture to be more fundamental in the sense of being what is essential for the social reality of race. Culture cannot be essential in this way if, as I hold, race is political at its origin. Politics cannot be essential if, as I believe, a future in which race is merely cultural is possible. (Jeffers 2019: 58)

Central to Jeffers's view is an important asymmetry when it comes to race and its relation to politics and culture. He agrees with political constructionists that race needs a political *origin*. However, he disagrees with political constructionists that race must be *sustained* by those political forces from which it came to be. Racism breathes life into race, but culture carries it along.

If neither politics nor culture takes priority when it comes to the ontological grounds of race, there are two possibilities. First, race could be a metaphysically *disjunctive* notion, such that all it takes for there to be races is for there to be either the political or cultural forces that constructionists identify. (Or both: there's no problem with there being more than enough truthmakers for a given set of truths.) Second, race could be *conjunctive*, in the sense that the truths about race need to be made true by political and cultural factors working in tandem. Either way, politics and culture are on the same footing. They're either both necessary for race, or both able to handle race on their own.

However, it seems to me that neither account will work for Jeffers: contrary to his intentions, Jeffers is committed to political forces being ontologically required for race in a way that cultural forces aren't. For Jeffers, the "racial timeline" of the actual world runs as follows. At some point, an ancestry-based social hierarchy came to be, and consequently established the existence of races. Over time, that hierarchy, which has continued to exist, has given rise to various new cultural phenomena that have attached themselves to the hierarchy's racial categories, and has had effects on preexisting cultures as well. That brings us to today, where the hierarchy is still in full force.

What reveals Jeffers's commitments vis-à-vis truthmaking are his commitments to some crucial subjunctive conditionals. Most important is his claim that if the hierarchy were to disappear, race wouldn't disappear with it because of the cultural forces still in play.⁷³ This suggests the above "disjunctive" view that you need either the political or the cultural forces to have race, but not necessarily both. But this can't be correct, given the aforementioned asymmetry that Jeffers introduces. Suppose that humanity achieves racial equality by 2123, such that the social hierarchies that have fueled racism for centuries have finally broken down. Jeffers's view is that the cultural practices in place in 2123, that is, the "participation in distinctive ways of life" that constitute cultural diversity (Jeffers 2019: 50), are enough to continue making it true that race still exists. But now imagine a very different timeline for our world, a "utopian" one. In this timeline, the social hierarchies never existed in the first place, but we ended up, culturally speaking, much the same. The world is full of cultural diversity, in a way similar to the post-racist cultural landscape of our hoped-for 2123, but is one in which these different ways of life are not systematically arranged into hierarchies of privilege and oppression. I gather that Jeffers is committed to saying that in this timeline, race doesn't exist. This is the force of his claim that he agrees with political constructionists that hierarchies are necessary for the establishment of race (Jeffers 2019: 57). Race and racism are like children and their parents. One can survive the other, but never would have come to be without it. So the people in the utopian timeline don't belong to any race, even though the same cultural phenomena that sustain race in our hoped-for 2123 exist there as well. This implies that for it to be true that a person belongs to a race, a racializing social hierarchy must have existed at some point, even if it exists no longer.

By contrast, consider a "dull" timeline in which an ancestry-based social hierarchy is established, but cultural diversity never flourishes. The world is

⁷³ I refer to this as a subjunctive conditional rather than a counterfactual because I hold out hope that its antecedent is true! (Counterfactuals are subjunctive conditionals with false antecedents.)

a monocultural place, though one that doles out oppression and privilege as a function of perceived ancestral heritage. I take it that Jeffers would say this *is* a world with race, given his stress on its political origins. Culture's role in the story of race comes later, and can continue after the politics dissolves away. If so, then the cultural phenomena that can keep race going after the collapse of racist social hierarchies are not themselves necessary for race, as race can exist independently of them. Furthermore, if, on the dull timeline, the social hierarchy were to disappear, so too would race, as there isn't any cultural diversity around to sustain it.

What emerges, then, is a view where even a cultural constructionist like Jeffers is committed to a kind of metaphysical priority for the political grounds of race. For it to be true that a person belongs to a race, there *must* be (or have been) an ancestry-based social hierarchy that systematically subjects that person to a network of privilege and oppression. Sometimes cultural phenomena have no truthmaking role to play in race, but are required in certain cases. In those cases where they are required, they will work in conjunction with the social hierarchy (even if it is now relegated to the past) in order to be racial truthmakers

Hence, Jeffers's view ends up very similar to the political constructionists' in terms of what is most important for the existence of race. Both views maintain that sociopolitical hierarchies are *always* necessary for there to be truths about race; what separates them is that the cultural constructionist adds on an additional claim that cultural phenomena can take on a race-bearing load should those hierarchies collapse. The advantage for Jeffers is that he can maintain the possible existence of racial harmony, and the preservation of facts about people's races in the face of the hierarchies' demise. The disadvantage is the more complicated metaphysical story required; perhaps the political constructionist will see the proffered truthmaking role for cultural phenomena as being ad hoc. Why are cultural phenomena able to sustain the existence of race, but not originate it? In response, Jeffers could reply that since race is a social construction, it's ultimately up to us what sort of concept we end up constructing, and there's no reason we couldn't have constructed one with a somewhat complicated metaphysical structure.

This brief tour into truthmaking and race isn't intended to settle the questions about the metaphysics of race, but my hope is that it does bring into relief some of the dimensions of the ontological debates concerning race. A fully developed metaphysical account of race needs to properly align a defensible ontology with what it takes to be true with respect to race. Oftentimes, the focus of truthmaking arguments is on disagreements over the correct ontology for a mutually agreed upon set of truths. Interestingly, the case is different here. Many of the opposing

metaphysical views agree on much of the ontology – the absence of biobehavioral essences, the existence of racializing social hierarchies – but disagree on what these things make true, such that there are severe disagreements about what is true in the realm of race. Regardless, though, of whether one "starts" with a set of truths or a set of truthmakers, the duty to keep them aligned that is the fundamental duty of truthmaker theory is fully intact when it comes to the metaphysics of race.

6.3 Gender

The metaphysics of gender is frequently thought to share a structural similarity with the metaphysics of race. From a social constructionist point of view, race is the product of socially significant patterns of privilege and oppression founded upon perceived ancestral status: the "social meaning of color" as Haslanger (2000: 43) puts it. Analogously, gender is the product of socially significant patterns of privilege and oppression founded on perceived reproductive role: the "social meaning of sex." For Haslanger, to be a *man* (where this term is taken strictly to express gender alone) is to reap certain privileges in virtue of being perceived to play the *male* (where this term is taken strictly to express biological sex alone) role in reproduction. To be a *woman* is to face certain forms of oppression in virtue of being perceived to play the *female* role in reproduction.

Because of these similarities, the same sorts of objections and replies that arose in the section on race arise here as well.⁷⁵ Is gender equality conceptually impossible? Should the goal of feminism be the elimination of women? Would people have multiple genders if there happens to be a very different reproduction-based social hierarchy (a true matriarchal society, say) somewhere in the world?⁷⁶

⁷⁴ Of course, the views disagree on the ontology of race itself, given their competing accounts of what grounds the facts about race.

Put there may also be potent dissimilarities between the two cases. The social constructionist thinks race is a social construct, but not, presumably, the things that race is founded upon: ancestry, skin color, etc. And while some social constructionists may think that gender is likewise a social construct based upon something not socially constructed (biological sex), others argue that biological sex is itself socially constructed (e.g., Butler 1990 and Ásta 2018).

This not clear to me how Haslanger would understand a matriarchal society where individuals receive privilege in virtue of being perceived to be playing the female reproductive role (and perhaps, in addition, are subject to oppression in virtue of being perceived to be playing the male reproductive role, as depicted in, say, Eléonore Pourriat's short film Majorité Opprimée). Such people are gendered (in that they receive privileges in virtue of their perceived reproductive role), but they aren't women (since for Haslanger women are those who are oppressed in virtue of being perceived to play the female reproductive role specifically) or men (since men are those who are privileged in virtue of being perceived to play the male reproductive role). Another concern for Haslanger's view involves whether it can classify transwomen as women; see Jenkins 2016.

Instead of revisiting these structurally similar questions, in this section I consider a different approach to social construction, the *conferralist* account defended by Ásta (2018).⁷⁷ The main idea behind Ásta's approach is that gender is a communal property conferred onto individuals by others with appropriate standing in a given context on the basis of their perception of the individual's possessing certain relevant properties. A person has the gender properties they do in various contexts in virtue of others' perceptions of certain of their socially relevant traits. The account is "radically context dependent" in that a person's gender is sensitive to context, where the contexts can be particularly finegrained (Ásta 2018: 73). Ásta offers this example:

Consider this scenario: you work as a coder in San Francisco. You go into your office where you are one of the guys. After work, you tag along with some friends at work to a bar. It is a very heteronormative space, and you are neither a guy nor a gal. You are an other. You walk up the street to another bar where you are a butch and expected to buy drinks for the femmes. Then you head home to your grandmother's eightieth birthday party, where you help out in the kitchen with the other women while the men smoke cigars. (Ásta 2018: 73)

The example provides four different contexts that a person might be in during some given day, and where that person's gender is distinct in each context. In each context, there are individuals who carry *standing*, a status that enables them to be "in charge" of how gender functions in that context (much like how an umpire in baseball has the standing to confer the properties of *being a strike* and *being a ball* onto pitches). A person's gender is determined by the perception of those with standing as to whether a given person possesses a certain *base property*, where the relevant base property can itself change from context to context. As Ásta emphasizes, the relevant base property for gender is highly variable. It could be one's "role in biological reproduction" or a "person's role in societal organization of various kinds, sexual engagement, bodily presentation, preparation of food at family gatherings, self-identification, and so on" (Ásta 2018: 75). Hence, in a given context, gender is conferred onto a person by those with standing on the basis of whether they perceive that person to possess the relevant base property for gender for that context.

Ásta's account naturally fits into the truthmaking framework. She writes: "Acts of conferral always result in a new feature being bestowed on something, and new facts come into being as a result" (Ásta 2018: 13). Conferrals, therefore, make new truths about social categories. Absent any conferring, no statement of the form "In context C person P is gender G" is true. When such

Other social constructionist views on gender include Alcoff 2006 and Witt 2011.

⁷⁸ At least when supplemented by the truthmakers for facts about standing, as detailed below.

claims are true, they are made true by conferrals. Which conferrals are the relevant truthmakers depends on the context. I might be able to confer certain properties onto a baseball pitch (some aesthetical properties, perhaps), but I can't confer *being a strike* onto it because I'm not the umpire. The conferrals that serve as truthmakers for the facts about gender must be made by those with the relevant standing, and concerning the base properties that are relevant in the context. If no such conferrals take place, then no sentence of the form "In context C person P is gender G" is true, which is precisely what the social constructionist maintains. There is no gender in the world if there is no social reality creating it.

The basic thesis of Asta's account, that the facts about gender are made true by conferrals, is straightforward. The details, less so. Notice, for instance, how Ásta's account has an extra layer of variability as compared to, say, Haslanger's account. On both views, gender is relative, and dependent on context. But for Haslanger, gender is always the social meaning of sex; it's just that the social meaning can vary from context to context. For Asta, gender is the social meaning of something, where that something can vary widely: reproductive role here, washing up role there. One question for Asta, then, is what, if anything, constrains the range of base properties that are relevant to gender. Not all socially meaningful base properties are relevant to gender. For example, when it comes to institutional racial properties (such as those employed by government bodies), Asta (2018: 99) holds that the relevant base property is "supposed actual geographic ancestry." Conferrals made by those with standing on the basis of their perceptions of someone's geographic ancestry do not create any facts about gender; they create facts about race. Since multiple base properties can be the basis for gender properties, what is it that makes them gender-relevant properties?

Framed in terms of truthmaking, the question for Ásta is this: Why is a given conferral a truthmaker for a fact about gender, rather than a fact about some other socially constructed property? Let's examine the account in detail, drawing on Ásta's example of the coder, whom I'll name "Cody." In C_{HB} – the context of the heteronormative bar – it's not the case that Cody is a woman. In C_{GK} – the context of the grandmother's kitchen – it is the case that Cody is a woman. To further simplify things, let's suppose that in each context there is one person who has standing (Stan in C_{HB} and Stanley in C_{GK}), and one relevant base property: having traditionally feminine bodily appearance in the former, and doing the dishes in the latter. The conferral that matters in the bar is Stan's perception that Cody lacks traditional feminine bodily appearance. ⁷⁹ This mental state – call it M_{HB} – does not,

Note, then, that what matters is that Cody is perceived to have the base property, not that Cody has it. Ásta argues against competing accounts – "constitutive accounts" such as Searle's (1995) – that require the person in question to possess the base property.

by itself, necessitate that Cody is not a woman in C_{HB} , because it's possible that Stan could have had this perception but failed to have standing. So the full truth-maker for the fact that Cody is not a woman in C_{HB} is M_{HB} taken together with whatever makes it true that Stan has standing with respect to gender in C_{HB} . Stan has other perceptions, and Cody has other socially meaningful properties, but they are irrelevant to the facts concerning Cody's gender. Meanwhile, Stanley has M_{GK} , a perception that Cody is doing the dishes. M_{GK} , taken together with whatever makes it true that Stanley has standing regarding gender in C_{GK} , makes it true that Cody is a woman in C_{GK} .

What is it about M_{HB} and M_{GK} that makes them truthmakers for the facts about gender? These mental states create women (or nonwomen) – not prime ministers, Catholics, or ombudspeople. Furthermore, they can create other things, too. Suppose that in Grandma's kitchen, doing the dishes is also a base property for the social property *being a mensch* (and that Stanley has standing with respect to this, too). So Stanley's perception that Cody is doing the dishes – M_{GK} again – is a (partial) truthmaker for "In C_{GK} , Cody is a mensch." But this is not a fact about Cody's gender; it's a fact about the social recognition of Cody's character. What's the difference, then, between being a woman and being a mensch in this context? Looking to the metaphysics involved can't answer that question, since in certain contexts the metaphysics may be exactly the same.

A prominent feature of Ásta's account, then, is that it is flexible enough to account for the fact that anything can be socially meaningful in any particular way. The social significance of having red hair can vary widely across different contexts. In some contexts it may have multiple meanings, and in others no social meaning at all. Moreover, Asta can maintain that what makes someone a woman is highly dependent on context. The metaphysics of gender can be highly variable. But this flexibility is a double-edged sword, as it may foreclose on the ability to find some kind of unity behind the variability. A person's gender may differ in different contexts, and what perceptions make someone a particular gender can differ across contexts as well. But presumably the gender itself is something stable. There is something significant in common between women in C_{HB} and women in C_{GK}. These aren't two distinct genders; there are just two distinct metaphysical pathways to acquiring that one gender. Hence, what makes one a woman in a given context is distinct from what it is to be a woman. What it is to be a mensch is distinct from what it is to be a woman, even if others' perceptions of you doing the dishes is what makes you both in a given context.

Ásta's metaphysical account of gender, then, seems to leave an important question open. What is it to be *gendered*, given that one can be gendered in radically disjunctive ways? For someone like Haslanger, the metaphysics seems

to answer this question. What it is to be gendered is to have one's perceived role in reproduction be socially meaningful. The hierarchies that provide that social meaning are what make it true that someone is or isn't a woman. For Ásta, one can be gendered even in contexts where reproductive role is not socially meaningful, and the same property that is the basis for gender in one context can be the basis for a nongendered property in another. So what distinguishes gender from other socially meaningful categories?⁸⁰

Ásta does observe that on her view, a social property (like *being a woman*) "is fleshed out in terms of the constraints and enablements, institutional or communal, on a person's behavior and action. To have the status in question *just is* to have the constraints and enablements in question" (Ásta 2018: 29). But if being a woman is identical with being subject to various institutional and communal constraints and enablements, then it's unclear why *those* things — which sound very much like the forms of privilege and oppression central to Haslanger's view — aren't the truthmakers for the facts about gender (or at least an important component of the full truthmaking account).

Approaching Ásta's views with a focus on truthmakers also makes salient some other implications of her view. Cody's being a woman in the context of her grandmother's kitchen depends upon Stanley's perception of her doing the dishes. What happens if Stanley leaves the room, or turns his attention to something else? Does Cody stop being a woman, simply because Stanley is focused on something else? The concern, then, is that conferrals may not be enough to *sustain* the facts about gender, even if they manage to bring them about.⁸¹

Ásta might reply by pointing out that in the example, none of the features that are socially significant vis-à-vis gender are of any significance, since those with standing are paying no attention to the base properties. So it's appropriate that there isn't any gender in the scenario. After all, on any social constructionist view, if some feature stops being socially significant, the socially constructed property goes away. (Similarly, when umpires go on strike, there are no more strikes.) Given how significant gender is in the actual world, it's hard to imagine genuine contexts in which gender-related conferrals really don't exist at all. (On Witt's [2011: 10–11] view, for instance, gender is *uniessential*: "the numerous social positions that we occupy are systematically unified by our gender.") Of course, the case where Stanley stops paying attention isn't a case where his *disposition* to attach social significance to doing the dishes goes away. And one might think that so long as the dispositions to attach significance are there, so

⁸⁰ I see a similar line of thought in Roth (2021). For Ásta's response see her 2021.

⁸¹ See also Griffith's (2020a) concerns about Ásta's individualistic methodology.

too is the social significance. And that is to shift the metaphysical burden away from the conferrals themselves and onto something else: a disposition to confer in certain ways in certain contexts. In any event, the project of articulating what we take to be true when it comes to gender, and what sustains it, must accompany our attention to what's needed in our ontology to make these claims true.

7 Conclusion

Theorizing about truthmaking isn't the only way to explore metaphysical and ontological questions. Lewis's modal realism, Haslanger's social constructionism, and Asta's conferralism are all metaphysical views formulated without explicit attention to truthmaking as such. But this doesn't mean, of course, that their views have no implications for truthmaking. What truthmaker theory provides is a systematic and uniform perspective from which to interrogate ontological questions, wherever they may arise. Importantly, this perspective allows us to explore the metaphysical dimensions of the social side of reality in exactly the same way as we can explore the metaphysical dimensions of the nonsocial side of reality. As a result, truthmaker theory avoids Barnes's (2014) charge against other metaphysical programs that they cannot regard social metaphysics as a substantive source of inquiry. Within any domain where we can find truth – realist or not, social or not – there are important questions concerning what the ontological grounds are for those truths. Metaphysics and ontology aren't limited to the realm of the fundamental, and neither is truthmaking.

My goal in this Element has been to introduce the fundamental questions that all truthmaker theorists must engage, and then highlight how truthmaking arguments can be put to work in various domains. I explored three – time, modality, and social construction – but truthmaker theory can tackle ontological questions in any arena. Recent work on truthmaking has explored, for example, mathematics (Donaldson 2020), causality (Anjum and Mumford 2014), metaethics (Akhlaghi 2022), and emergence (Morris 2018). What ties each of these inquiries together is a commitment to the idea that by probing the thesis that truth depends on reality, we can arrive at a more perspicuous perspective on ontology and how it connects to what we take to be true.

References

- Akhlaghi, Farbod. 2022. Non-realist cognitivism, truthmaking, and ontological cheating. *Ethics* 132: 291–321. https://doi.org/10.1086/716872.
- Alcoff, Linda Martín. 2006. *Visible Identities: Race, Gender, and the Self.* Oxford: Oxford University Press. https://doi.org/10.1093/0195137345.001.0001.
- Andreasen, Robin O. 2000. Race: biological reality or social construct? *Philosophy of Science* 67 (Supplement): S653–S666. https://doi.org/10.1086/392853.
- Anjum, Rani Lill, and Stephen Mumford. 2014. Powers as causal truthmakers. *Disputatio* 4: 5–31.
- Appiah, Kwame Anthony. 1992. *In My Father's House: Africa in the Philosophy of Culture*. New York: Oxford University Press.
- Aristotle. 1984. *Categories*, trans. J. L. Ackrill. In *The Complete Works of Aristotle, Volume One*, ed. Jonathan Barnes, 3–24. Princeton, NJ: Princeton University Press. https://doi.org/10.1515/9781400835843.
- Armstrong, David M. 1969. Dispositions are causes. *Analysis* 30: 23–26. https://doi.org/10.1093/analys/30.1.23.
 - 1989. *Universals: An Opinionated Introduction*. Boulder, CO: Westview Press. https://doi.org/10.4324/9780429492617.
 - 1997. *A World of States of Affairs*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511583308.
 - 2000. Difficult cases in the theory of truthmaking. *The Monist* 83: 150–160. https://doi.org/10.5840/monist200083112.
 - 2003. Truthmakers for modal truths. In *Real Metaphysics: Essays in Honour of D. H. Mellor*, eds. Hallvard Lillehammer and Gonzalo Rodriguez-Pereyra, 12–24. London: Routledge. https://doi.org/10.4324/9780203164297.
 - 2004. *Truth and Truthmakers*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511487552.
 - 2005. Reply to Simons and Mumford. *Australasian Journal of Philosophy* 83: 271–276. https://doi.org/10.1080/00048400500111196.
 - 2006. Reply to Heil. *Australasian Journal of Philosophy* 84: 245–247. https://doi.org/10.1080/00048400600759084.
 - 2007. Truthmakers for negative truths, and for truths of mere possibility. In *Metaphysics and Truthmakers*, ed. Jean-Maurice Monnoyer, 99–104. Frankfurt: Ontos Verlag. https://doi.org/10.1515/9783110326918.99.
- Asay, Jamin. 2014. Truthmaker theory. In *Internet Encyclopedia of Philosophy*, eds. James Fieser and Bradley Dowden. www.iep.utm.edu/truth-ma.

- 2016a. The facts about truthmaking: an argument for truthmaking necessitarianism. *Ergo* 3: 493–500. https://doi.org/10.3998/ergo.1240 5314.0003.018.
- 2016b. Logic and/of truthmaking. In Structural Analysis of Non-Classical Logics: The Proceedings of the Second Taiwan Philosophical Logic Colloquium, eds. Syraya Chin-Mu Yang, Duen-Min Deng, and Hanti Lin, 37–55. Heidelberg: Springer. https://doi.org/10.1007/978-3-662-48357-2 3.
- 2018. We don't need no explanation. *Philosophical Studies* 175: 903–921. https://doi.org/10.1007/s11098-017-0898-1.
- 2020a. A Theory of Truthmaking: Metaphysics, Ontology, and Reality. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108 759465.
- 2020b. Truth(making) by convention. *American Philosophical Quarterly* 57: 117–127. www.jstor.org/stable/48570842.
- Asay, Jamin, and Sam Baron. 2014. The hard road to presentism. *Pacific Philosophical Quarterly* 95: 314–335. https://doi.org/10.1111/papq.12029.
 - 2020. Deflating deflationary truthmaking. *Philosophical Quarterly* 70: 1–21. https://doi.org/10.1093/pq/pqz036.
- Ásta. 2018. Categories We Live By: The Construction of Sex, Gender, Race, and Other Social Categories. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190256791.001.0001.
 - 2021. *Categories We Live By*: reply to Alcoff, Butler, and Roth. *European Journal of Philosophy*. https://doi.org/10.1111/ejop.12744.
- Austin, Christopher J. 2015. The truthmaking argument against dispositionalism. *Ratio* 28: 271–285. https://doi.org/10.1111/rati.12071.
- Baia, Alex. 2012. Presentism and the grounding of truth. *Philosophical Studies* 159: 341–356. https://doi.org/10.1007/s11098-011-9711-8.
- Barker, Stephen, and Mark Jago. 2012. Being positive about negative facts. *Philosophy and Phenomenological Research* 85: 117–138. https://doi.org/10.1111/j.1933-1592.2010.00479.x.
- Barnes, Elizabeth. 2014. Going beyond the fundamental: feminism in contemporary metaphysics. *Proceedings of the Aristotelian Society* 114: 335–351. https://doi.org/10.1111/j.1467-9264.2014.00376.x.
 - 2016. Realism and social structure. *Philosophical Studies* 174: 2417–2433. https://doi.org/10.1007/s11098-016-0743-y.
- Baron, Sam. 2013a. Presentism, truth and supervenience. *Ratio* 26: 3–18. https://doi.org/10.1111/j.1467-9329.2011.00523.x.
 - 2013b. Talking about the past. *Erkenntnis* 78: 547–560. https://doi.org/10 .1007/s10670-013-9434-7.

- Beall, JC. 2000. On truthmakers for negative truths. *Australasian Journal of Philosophy* 78: 264–268. https://doi.org/10.1080/00048400012349551.
- Berkeley, George. 1999. *Principles of Human Knowledge and Three Dialogues*. Ed. Howard Robinson. Oxford: Oxford University Press.
- Bernstein, Sara. 2021. Could a middle level be the most fundamental? *Philosophical Studies* 178: 1065–1078. https://doi.org/10.1007/s11098-020-01484-1.
- Bigelow, John. 1988. *The Reality of Numbers: A Physicalist's Philosophy of Mathematics*. Oxford: Clarendon Press.
 - 1996. Presentism and properties. *Philosophical Perspectives* 10: 35–52. https://doi.org/10.2307/2216235.
- Blum, Lawrence. 2002. "I'm Not a Racist, But ...": The Moral Quandary of Race. Ithaca, NY: Cornell University Press. https://doi.org/10.7591/9781501701962.
- Boghossian, Paul Artin. 1996. Analyticity reconsidered. *Noûs* 30: 360–391. https://doi.org/10.2307/2216275.
- Briggs, R. A. 2012. Truthmaking without necessitation. *Synthese* 189: 11–28. https://doi.org/10.1007/s11229-012-0093-z.
- Butler, Judith. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge. https://doi.org/10.4324/9780203824979.
- Cameron, Ross Paul. 2008a. How to be a truthmaker maximalist. *Noûs* 42: 410–421. https://doi.org/10.1111/j.1468-0068.2008.00687.x.
 - 2008b. Truthmakers and modality. *Synthese* 164: 261–280. https://doi.org/10.1007/s11229-007-9225-2.
 - 2008c. Truthmakers and ontological commitment: or how to deal with complex objects and mathematical ontology without getting into trouble. *Philosophical Studies* 140: 1–18. https://doi.org/10.1007/s11098-008-9223-3.
 - 2011. Truthmaking for presentists. In *Oxford Studies in Metaphysics, Volume 6*, eds. Karen Bennett and Dean W. Zimmerman, 55–100. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199603039.003.0002.
 - 2015. The Moving Spotlight: An Essay on Time and Ontology. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/978019871 3296.001.0001.
- Caplan, Ben, and David Sanson. 2011. Presentism and truthmaking. *Philosophy Compass* 6: 196–208. https://doi.org/10.1111/j.1747-9991.2010.00380.x.

- Cheyne, Colin, and Charles Pigden. 2006. Negative truths from positive facts. *Australasian Journal of Philosophy* 84: 249–265. http://dx.doi.org/10.1080/00048400600759092.
- David, Marian. 2009. Truth-making and correspondence. In *Truth and Truth-Making*, eds. E. J. Lowe and A. Rami, 137–157. Stocksfield: Acumen. https://doi.org/10.4324/9781315711683.
- Dawson, Patrick. 2021. Hard presentism. *Synthese* 198: 8433–8461. https://doi.org/10.1007/s11229-020-02580-9.
- Demos, Raphael. 1917. A discussion of a certain type of negative proposition. *Mind* 26: 188–196. https://doi.org/10.1093/mind/XXVI.1.188.
- Donaldson, Thomas M. E. 2020. David Armstrong on the metaphysics of mathematics. *Dialectica* 74: 113–136. https://doi.org/10.48106/dial.v74.i4.05.
- Du Bois, William Edward Burghardt. 1897. *The Conservation of Races*. Washington, DC: The American Negro Academy.
- Dyke, Heather. 2007. Tenseless/non-modal truthmakers for tensed/modal truths. *Logique et Analyse* 50: 269–287. www.jstor.org/stable/44084866.
- Epstein, Brian. 2015. *The Ant Trap: Rebuilding the Foundations of the Social Sciences*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199381104.001.0001.
- Gale, Richard M. 1976. Negation and Non-Being. Oxford: Blackwell.
- Glasgow, Joshua. 2009. *A Theory of Race*. New York: Routledge. https://doi.org/ 10.4324/9780203880951.
 - 2019. Is race an illusion or a (very) basic reality? In *What Is Race? Four Philosophical Perspectives*, by Joshua Glasgow, Sally Haslanger, Chike Jeffers, and Quayshawn Spencer, 111–149. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190610173.003.0005.
- Glasgow, Joshua, and Jonathan M. Woodward. 2015. Basic racial realism. *Journal of the American Philosophical Association* 1: 449–466. https://doi.org/10.1017/apa.2015.7.
- Goodman, Nelson. 1983. *Fact, Fiction, and Forecast*. Fourth edition. Cambridge, MA: Harvard University Press.
- Griffith, Aaron M. 2013. On some alleged truthmakers for negatives. *Thought* 1: 301–308. https://doi.org/10.1002/tht3.52.
 - 2015a. How negative truths are made true. *Synthese* 192: 317–335. https://doi.org/10.1007/s11229-014-0570-7.
 - 2015b. Towards a pluralist theory of truthmaking. *Erkenntnis* 80: 1157–1173. https://doi.org/10.1007/s10670-014-9717-7.
 - 2018a. Social construction: big-G grounding, small-g realization. *Philosophical Studies* 175: 241–260. https://doi.org/10.1007/s11098-017-0865-x.

- 2018b. Social construction and grounding. *Philosophy and Phenomenological Research* 97: 393–409. https://doi.org/10.1111/phpr.12376.
- 2020a. Individualistic and structural explanations in Ásta's *Categories We Live By. Journal of Social Ontology* 5: 251–260. https://doi.org/10.1515/jso-2020-2003.
- 2020b. Realizing race. *Philosophical Studies* 177: 1919–1934. https://doi.org/10.1007/s11098-019-01291-3.
- 2021. Presentism, truthmaking, and the nature of truth. *Analytic Philosophy*. https://doi.org/10.1111/phib.12226.
- 2022. The dependence of truth on being in Asay's *A Theory of Truthmaking*. *Asian Journal of Philosophy* 1(2): 1–6. https://doi.org/10.1007/s44204-021-00007-x.
- Hacking, Ian. 1999. *The Social Construction of What?* Cambridge, MA: Harvard University Press.
- Hardimon, Michael O. 2017. *Rethinking Race: The Case for Deflationary Realism*. Cambridge, MA: Harvard University Press.
- Haslanger, Sally. 2000. Gender and race: (What) are they? (What) do we want them to be? *Noûs* 34: 31–55. https://doi.org/10.1111/0029-4624.00201.
 - 2012. Resisting Reality: Social Construction and Social Critique. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/97801998 92631.001.0001.
 - 2016. What is a (social) structural explanation? *Philosophical Studies* 173: 113–130. https://doi.org/10.1007/s11098-014-0434-5.
 - 2019. Tracing the sociopolitical reality of race. In *What Is Race? Four Philosophical Perspectives*, by Joshua Glasgow, Sally Haslanger, Chike Jeffers, and Quayshawn Spencer, 4–37. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190610173.003.0002.
- Heathcote, Adrian. 2006. Truthmaking and the Gettier problem. In *Aspects of Knowing: Epistemological Essays*, ed. Stephen Hetherington, 151–167. Amsterdam: Elsevier.
- Horwich, Paul. 1998. *Truth*. Second edition. Oxford: Clarendon Press. https://doi.org/10.1093/0198752237.001.0001
- Hudson, Hud. 2007. Simples and gunk. *Philosophy Compass* 2: 291–302. https://doi.org/10.1111/j.1747-9991.2007.00068.x.
- Inman, Ross D. 2017. Substance and the Fundamentality of the Familiar: A Neo-Aristotelian Mereology. New York: Routledge.
- Jacobs, Jonathan D. 2010. A powers theory of modality: or, how I learned to stop worrying and reject possible worlds. *Philosophical Studies* 151: 227–248. https://doi.org/10.1007/s11098-009-9427-1.

- 2011. Powerful qualities, not pure powers. *The Monist* 94: 81–102. https://doi.org/10.5840/monist20119415.
- Jago, Mark. 2012. The truthmaker non-maximalist's dilemma. *Mind* 121: 903–918. https://doi.org/10.1093/mind/fzs124.
 - 2013. The cost of truthmaker maximalism. *Canadian Journal of Philosophy* 43: 460–474. https://doi.org/10.1080/00455091.2013.849059.
 - 2018. What Truth Is. Oxford: Oxford University Press. https://doi.org/ 10.1093/oso/9780198823810.001.0001.
 - 2020. A short argument for truthmaker maximalism. *Analysis* 80: 40–44. https://doi.org/10.1093/analys/anz064.
- Jeffers, Chike. 2013. The cultural theory of race: yet another look at Du Bois's "The Conservation of Races." *Ethics* 123: 403–426. https://doi.org/10.1086/669566.
 - 2019. Cultural constructionism. In *What Is Race? Four Philosophical Perspectives*, by Joshua Glasgow, Sally Haslanger, Chike Jeffers, and Quayshawn Spencer, 38–72. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190610173.003.0003.
- Jenkins, Katharine. 2016. Amelioration and inclusion: gender identity and the concept of *woman*. *Ethics* 126: 394–421. https://doi.org/10.1086/683535.
- Kalhat, Javier. 2008. A critique of Armstrong's truthmaking account of possibility. *Acta Analytica* 23: 161–176. https://doi.org/10.1007/s12136-008-0027-z.
- Keller, Phillipp. 2007. A world of truthmakers. In *Metaphysics and Truthmakers*, ed. J. Monnoyer, 105–156. Frankfurt: Ontos Verlag. https://doi.org/10.1515/9783110326918.
- Khlentzos, Drew. 2000. "What in the world could correspond to truth?" *Logique et Analyse* 43: 109–144. www.jstor.org/stable/44074521.
- Kierland, Brian, and Bradley Monton. 2007. Presentism and the objection from being-supervenience. *Australasian Journal of Philosophy* 85: 485–497. https://doi.org/10.1080/00048400701572279.
- Kitamura, Naoaki. 2022. In defense of explanation-first truthmaking. *Asian Journal of Philosophy* 1(23): 1–9. https://doi.org/10.1007/s44204-022-00026-2.
- Kripke, Saul A. 1972. Naming and necessity. In *Semantics of Natural Language*, eds. Donald Davidson and Gilbert Harman, 253–355. Dordrecht: D. Reidel.
- Kukso, Boris. 2006. The reality of absences. *Australasian Journal of Philosophy* 84: 21–37. https://doi.org/10.1080/00048400600571679.
- Lewis, David. 1976. The paradoxes of time travel. *American Philosophical Quarterly* 13: 145–152. www.jstor.org/stable/20009616.
 - 1986. On the Plurality of Worlds. Oxford: Basil Blackwell.
 - 1991. Parts of Classes. Oxford: Basil Blackwell.

- 1992. Critical notice [of D. M. Armstrong, *A Combinatorial Theory of Possibility*]. *Australasian Journal of Philosophy* 70: 211–224. https://doi.org/10.1080/00048409212345101.
- 1998. The truthmakers. Times Literary Supplement 4950: 30–33.
- 2001a. Forget about the "correspondence theory of truth." *Analysis* 61: 275–280. https://doi.org/10.1111/1467-8284.00305.
- 2001b. Truthmaking and difference-making. *Noûs* 35: 602–615. https://doi.org/10.1111/0029-4624.00354.
- 2003. Things qua truthmakers. In *Real Metaphysics: Essays in Honour of D. H. Mellor*, eds. Hallvard Lillehammer and Gonzalo Rodriguez-Pereyra, 25–42. London: Routledge. https://doi.org/10.4324/9780203164297
- Lewis, David, and Gideon Rosen. 2003. Postscript to "Things qua truthmakers": negative existentials. In *Real Metaphysics: Essays in Honour of D. H. Mellor*, eds. Hallvard Lillehammer and Gonzalo Rodriguez-Pereyra, 39–42. London: Routledge. https://doi.org/10.4324/9780203164297
- MacBride, Fraser. 2020. Truthmakers. In *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), ed. Edward N. Zalta. https://plato.stanford.edu/archives/spr2020/entries/truthmakers.
- Mallon, Ron. 2006. 'Race': normative, not metaphysical or semantic. *Ethics* 116: 525–551. https://doi.org/10.1086/500495.
- Martin, C. B. 1996. How it is: entities, absences and voids. *Australasian Journal of Philosophy* 74: 57–65. https://doi.org/10.1080/00048409612347061.
- Maurin, Anna-Sofia. 2022. *Properties* (Elements in Metaphysics). Cambridge: Cambridge University Press. https://doi.org/10.1017/9781009008938.
- McDaniel, Kris. 2010. Parts and wholes. *Philosophy Compass* 5: 412–425. https://doi.org/10.1111/j.1747-9991.2009.00238.x.
- Merricks, Trenton. 2001. *Objects and Persons*. Oxford: Clarendon Press. https://doi.org/10.1093/0199245363.001.0001.
 - 2007. *Truth and Ontology*. Oxford: Clarendon Press. https://doi.org/10.1093/acprof:oso/9780199205233.001.0001.
- Mikkola, Mari. 2015. Doing ontology and doing justice: what feminist philosophy can teach us about meta-metaphysics. *Inquiry* 58: 780–805. https://doi.org/10.1080/0020174X.2015.1083469.
 - 2017. On the apparent antagonism between feminist and mainstream metaphysics. *Philosophical Studies* 174: 2435–2448. https://doi.org/10.1007/s11098-016-0732-1.
- Mills, Charles W. 1997. *The Racial Contract*. Ithaca, NY: Cornell University Press.
 - 1998. *Blackness Visible: Essays on Philosophy and Race*. Ithaca, NY: Cornell University Press. https://doi.org/10.7591/9781501702952.

- Milne, Peter. 2005. Not every truth has a truthmaker. *Analysis* 65: 221–224. https://doi.org/10.1093/analys/65.3.221.
- Molnar, George. 2000. Truthmakers for negative truths. *Australasian Journal of Philosophy* 78: 72–86. http://dx.doi.org/10.1080/00048400012349361.
- Morris, Kevin. 2018. Truthmaking and the mysteries of emergence. In *Brute Facts*, eds. Elly Vintiadis and Constantinos Mekios, 113–129. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198758600.003.0007.
- Mulligan, Kevin, Peter Simons, and Barry Smith. 1984. Truth-makers. *Philosophy and Phenomenological Research* 44: 287–321. https://doi.org/10.2307/2107686.
- Mumford, Stephen. 2007. Negative truth and falsehood. *Proceedings of the Aristotelian Society* 107 (Part 1): 45–71. https://doi.org/10.1111/j.1467-9264.2007.00211.x.
- Outlaw, Lucius. 1996. "Conserve" races? In defense of W. E. B. Du Bois. In W. E. B. Du Bois on Race and Culture: Philosophy, Politics, and Poetics, eds. Bernard W. Bell, Emily Grosholz, and James B. Stewart, 15–37. New York: Routledge. https://doi.org/10.4324/9780203379509.
- Paul, L. A. 2010. The puzzles of material constitution. *Philosophy Compass* 5: 579–590. https://doi.org/10.1111/j.1747-9991.2010.00302.x.
- Pawl, Timothy. 2010. The possibility principle and the truthmakers for modal truths. *Australasian Journal of Philosophy* 88: 417–428. https://doi.org/10.1080/00048400903193353.
- Plato. 1997. Cratylus. In *Complete Works*, trans. C. D. C. Reeve, ed. John M. Cooper, associate ed. D. S. Hutchinson, 101–156. Indianapolis, IN: Hackett Publishing Company.
- Restall, Greg. 1996. Truthmakers, entailment and necessity. *Australasian Journal of Philosophy* 74: 331–340. https://doi.org/10.1080/00048409612347331.
- Rettler, Bradley. 2016. The General Truthmaker View of ontological commitment. *Philosophical Studies* 173: 1405–1425. https://doi.org/10.1007/s11098-015-0526-x.
- Rhoda, Alan R. 2009. Presentism, truthmakers, and God. *Pacific Philosophical Quarterly* 90: 41–62. https://doi.org/10.1111/j.1468-0114.2009.01328.x.
- Rodriguez-Pereyra, Gonzalo. 2005. Why truthmakers. In *Truthmakers: The Contemporary Debate*, eds. Helen Beebee and Julian Dodd, 17–31. Oxford: Clarendon Press. https://doi.org/10.1093/acprof:oso/9780199283569.003.0002.
 - 2006a. Truthmaker Maximalism defended. *Analysis* 66: 260–264. https://doi.org/10.1093/analys/66.3.260.
 - 2006b. Truthmakers. *Philosophy Compass* 1: 186–200. https://doi.org/10 .1111/j.1747-9991.2006.00018.x.

- 2006c. Truthmaking, entailment, and the conjunction thesis. *Mind* 115: 957–982. https://doi.org/10.1093/mind/fz1957.
- 2022. A defense of explanation-first truthmaking: some thoughts on Jamin Asay's *A Theory of Truthmaking*. *Asian Journal of Philosophy* 1(4): 1–6. https://doi.org/10.1007/s44204-022-00008-4.
- Roth, Abraham Sesshu. 2021. The stability of social categories. *European Journal of Philosophy*. https://doi.org/10.1111/ejop.12746.
- Russell, Bertrand. 1919a. On propositions: what they are and how they mean. *Proceedings of the Aristotelian Society Supplementary Volume* 2(1): 1–43. https://doi.org/10.1093/aristoteliansupp/2.1.1.
 - 1919b. The philosophy of logical atomism [lectures 3–4]. *The Monist* 29: 32–63. https://doi.org/10.5840/monist191929120.
- Saenz, Noël Blas. 2014. The world and truth about what is not. *Philosophical Quarterly* 64: 82–98. https://doi.org/10.1093/pq/pqt015.
 - 2020. An account of truthmaking. *Synthese* 197: 3413–3435. https://doi.org/10.1007/s11229-018-1894-5.
- Sanson, David, and Ben Caplan. 2010. The way things were. *Philosophy and Phenomenological Research* 81: 24–39. https://doi.org/10.1111/j.1933-1592.2010.00357.x.
- Schaffer, Jonathan. 2008. Truthmaker commitments. *Philosophical Studies* 141: 7-19. https://doi.org/10.1007/s11098-008-9260-y.
 - 2010. The least discerning and most promiscuous truthmaker. *Philosophical Quarterly* 60: 307–324. https://doi.org/10.1111/j.1467-9213.2009.612.x.
 - 2017. Social construction as grounding; or: fundamentality for feminists, a reply to Barnes and Mikkola. *Philosophical Studies* 174: 2449–2465. https://doi.org/10.1007/s11098-016-0738-8.
- Schipper, Arthur. 2018. Aboutness and negative truths: a modest strategy for truthmaker theorists. *Synthese* 195: 3685–3722. https://doi.org/10.1007/s11229-017-1396-x.
 - 2020. Aboutness and ontology: a modest approach to truthmakers. *Philosophical Studies* 177: 505–533. https://doi.org/10.1007/s11098-018-1192-6.
 - 2021. Fundamental truthmakers and non-fundamental truths. *Synthese* 198: 3073–3098. https://doi.org/10.1007/s11229-019-02266-x.
- Schulte, Peter. 2011. Truthmakers: a tale of two explanatory projects. *Synthese* 181: 413–431. https://doi.org/10.1007/s11229-010-9716-4.
- Searle, John R. 1995. *The Construction of Social Reality*. New York: Free Press.
- Sider, Theodore. 2001. Four-Dimensionalism: An Ontology of Persistence and Time. Oxford: Clarendon Press. https://doi.org/10.1093/01992444 3X.001.0001.

- Simons, Peter. 2005. Negatives, numbers, and necessity: some worries about Armstrong's version of truthmaking. *Australasian Journal of Philosophy* 83: 253–261. https://doi.org/10.1080/00048400500111162.
- Simpson, Matthew. 2014. Defending truthmaker non-maximalism. *Thought* 3: 288–291. https://doi.org/10.1002/tht3.144.
- Skiles, Alexander. 2014. Is there a dilemma for the truthmaker non-maximalist? *Synthese* 191: 3649–3659. https://doi.org/10.1007/s11229-014-0485-3.
- Smith, Barry. 1999. Truthmaker realism. *Australasian Journal of Philosophy* 77: 274–291. https://doi.org/10.1080/00048409912349041.
- Smith, Barry, and Jonathan Simon. 2007. Truthmaker explanations. In *Metaphysics and Truthmakers*, ed. Jean-Maurice Monnoyer, 79–98. Frankfurt: Ontos Verlag. https://doi.org/10.1515/9783110326918.
- Sorensen, Roy. 2001. Vagueness and Contradiction. Oxford: Clarendon Press.
- Spencer, Quayshawn. 2019a. How to be a biological racial realist. In *What Is Race?* Four Philosophical Perspectives, by Joshua Glasgow, Sally Haslanger, Chike Jeffers, and Quayshawn Spencer, 73–110. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190610173.003.0004.
 - 2019b. Spencer's reply to Glasgow, Haslanger, and Jeffers. In *What Is Race?* Four Philosophical Perspectives, by Joshua Glasgow, Sally Haslanger, Chike Jeffers, and Quayshawn Spencer, 203–244. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190610173.003.0008.
- Tahko, Tuomas E. 2021. *Unity of Science* (Elements in the Philosophy of Science). Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108581417.
- Tallant, Jonathan. 2013. Time. *Analysis* 73: 369–379. https://doi.org/10.1093/analys/ant022.
 - 2018. *Truth and the World: An Explanationist Theory*. London: Routledge. https://doi.org/10.4324/9781315143491.
- Tallant, Jonathan, and David Ingram. 2015. Nefarious presentism. *Philosophical Quarterly* 65: 355–371. https://doi.org/10.1093/pq/pqu095.
 - 2020. A defence of Lucretian presentism. *Australasian Journal of Philosophy* 98: 675–690. https://doi.org/10.1080/00048402.2019.1697709.
- Taylor, Elanor. In press. Substantive social metaphysics. *Philosophers' Imprint*. https://doi.org/10.3998/phimp.1972.
- Taylor, Paul C. 2013. Race: A Philosophical Introduction. Second edition. Cambridge: Polity.
- Thomasson, Amie L. 2003. Foundations for a social ontology. *ProtoSociology* 18/19: 269–290. https://doi.org/10.5840/protosociology200318/199.
 - 2009. Social entities. In *The Routledge Companion to Metaphysics*, eds. Robin Le Poidevin, Peter Simons, Andrew McGonigal, and Ross

- P. Cameron, 545–554. London: Routledge. https://doi.org/10.4324/9780203879306.
- 2020. *Norms and Necessity*. Oxford: Oxford University Press. https://doi.org/ 10.1093/oso/9780190098193.001.0001.
- Torrengo, Giuliano. 2014. Ostrich presentism. *Philosophical Studies* 170: 255–276. https://doi.org/10.1007/s11098-013-0211-x.
- van Inwagen, Peter. 1990. *Material Beings*. Ithaca, NY: Cornell University Press. https://doi.org/10.7591/9781501713033.
- Veber, Michael. 2008. How to derive a "not" from an "is": a defense of the incompatibility view of negative truths. *Metaphysica* 9: 79–91. https://doi.org/10.1007/s12133-008-0024-0.
- Witt, Charlotte. 2011. *The Metaphysics of Gender*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199740413.001.0001.
- Zack, Naomi. 1993. *Race and Mixed Race*. Philadelphia, PA: Temple University Press.
 - 1998. Thinking about Race. Belmont, CA: Wadsworth.

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