

The General Truthmaker View of ontological commitment

Bradley Rettler¹

Published online: 26 July 2015

© Springer Science+Business Media Dordrecht 2015

Abstract In this paper, I articulate and argue for a new truthmaker view of ontological commitment, which I call the "General Truthmaker View": when one affirms a sentence, one is ontologically committed to there being something (or some things) that makes (or make) true the proposition expressed by the sentence. This view comes apart from Quinean orthodoxy in that we are not ontologically committed to the things over which we quantify, and it comes apart from extant truthmaker views of ontological commitment in that we are not ontologically committed to the truthmakers of our sentences.

Keywords Truthmaking · Ontological commitment · Ontology

1 Introduction

Truthmaker views, let us say, are views that say that truthmaking has something to do with ontological commitment. I hold a truthmaker view; on the truthmaker view I hold, when one affirms a sentence, one is ontologically committed to there being something (or some things) that makes (or make) true the sentence; I call this the 'General Truthmaker View'. Another truthmaker view is the view that when one

Department of Philosophy, Baylor University, One Bear Place #97273, Waco, TX 76798, USA



¹ For more on truthmaking, see Beebee and Dodd (2005).

² Though I'll speak in terms of sentences being the bearers of truth and falsity, one can freely substitute whatever she takes to be the bearers of truth and falsity.

³ I think that all true sentences have truthmakers, which earns me the label 'truthmaker maximalist'. But there are those who think that some true sentences have truthmakers, and other true sentences do not —

affirms a sentence, one is ontologically committed to whatever happens to make true the sentence; I call this the 'Specific Truthmaker View'. ⁴ I begin the paper by giving a characterization of ontological commitment; this is to forestall the charge that truthmaker views of ontological commitment are analytically false because to ontologically commit to something *just means* to believe or accept that it exists. I then develop the General Truthmaker View of ontological commitment and argue that it has significant advantages over its Quinean rival. I conclude by arguing that it also has significant advantages over the Specific Truthmaker View.

2 The ontological question

Ontology is often characterized as an attempt to answer a question — "the ontological question". Because there is no agreed-upon ontological question, and each ontologist is attempting to answer that which she considers the ontological question, ontologists are not all doing the same thing. Some are in the business of saying what there is, or what kinds of things there are. 5 Some are trying to give an account of the structure of reality. 6 Some are trying to tell the deep story of the world. 7 What an ontologist thinks the ontological question ought to be will determine what she's up to when she does ontology.

Quine (1948) thought the ontological question was, "What is there?" So Quine was in the business of saying what things there are. He didn't do so by listing them all, but by figuring out the predicates of our best theories. The extensions of those predicates are sets, and the members of those sets are the things there are. Recently, Schaffer (2009) has argued that the ontological question is "What grounds what?" So when Schaffer does ontology, he is trying to say what things are the grounds, and what things those things ground. Fine (2009) argues that the ontological question is "What is real?" So when he does ontology, he is trying to list the things that are real; there are, according to him, fewer real things than things there are. (Sider 2011, p viii) thinks "the goal of metaphysics is to give a fundamental description of the world"; this suggests that for him the ontological question is, "What things show up in the fundamental description of the world?"

Footnote 3 continued

negative existentials, perhaps. There is a danger for such people in accepting the General Truthmaker View. They would want to modify it in some way like the following: "If one affirms a sentence, then if the sentence has a truthmaker, then one is ontologically committed to there being something or some things that makes or make it true". This is problematic, not in the least because one doesn't occur any ontological commitments by uttering false sentences. I cannot think of an obviously unobjectionable modification.

⁸ In his words: "[The ontological question] is rather: "Are there Fs?" where 'there are' is understood as having a fundamental sense." (Sider 2011, 175)



⁴ More on this view in §6.1.

⁵ See Quine (1948) and its many descendants.

⁶ See Sider (2011).

⁷ See Heil (2003).

There is disagreement over what the ontological question is. For the rest of this paper, I shall take it for granted that it is at least an open question whether "what is there?" is the ontological question, or whether some other question deserves (or should deserve) that distinction. This implies that "the ontological question" doesn't *mean* "the question of what there is".

3 Ontological commitment

One's *ontology* is one's answer to the ontological question—whatever one takes that question to be. So, since Quine thought the ontological question is, "What is there?", Quine's ontology is the things he thought there are. Since Schaffer thinks the ontological question is, "What grounds what?", Schaffer's ontology is what he thinks the grounds are and what he thinks is grounded. Since Fine thinks the ontological question is, "What is real?", Fine's ontology is what he takes to be real. And so on. So, where one takes the ontological question to be a substitution instance of "What satisfies *O*?", one's ontology is the thing(s) one takes to satisfy what she substitutes for *O*.9

One's ontological commitments are broader than just one's ontology. One's ontological commitments are one's ontology (which we might call "explicit ontological commitments"), plus some more things—what we might call one's "implicit ontological commitments". But to which things are our implicit ontological commitments? One thought is that S's implicit ontological commitments are the things that S's answer to the ontological question entails satisfy what one substitutes for O. That is, where S substitutes "P" for O and thus takes the ontological question to be, "What satisfies P?" and S answers the ontological question with "Fs and Gs satisfy P", then S is explicitly ontologically committed to Fs and Gs, and S is implicitly ontologically committed to any Fs such that it is impossible that Fs and Gs satisfy F and Fs not satisfy F.

But this characterization of implicit ontological commitment will not do. If the classical theist is right, then God is a necessary being and the ultimate ground of everything and has more reality than anything else. So if the classical theist is right, it is necessary that God satisfies what Quine and Schaffer and Fine substitute for *O*. But if ontological commitments are what the above paragraph says and the classical theist is right, then Quine and Schaffer and Fine are ontologically committed to God. But Quine and Schaffer and Fine are not even implicitly ontologically committed to God. So implicit ontological commitment must be something else.

A better thought is that one's implicit ontological commitments are to the things that her answer to the ontological question *obviously entails* satisfy what she substitutes for O. Quine, Schaffer, and Fine would disagree that their answers to their ontological questions entail that God satisfies what they substitute for O. And it

Obviously it's tricky to spell out what it means for an entailment to be "obvious", but I trust the notion is familiar enough and close enough to accurate to be helpful.



⁹ Generally 'O' would be thought of as a predicate; but many people think the ontological question is, "what exists?", and many think that 'exists' isn't a predicate.

is not *obvious* that they are wrong. So, they are not ontologically committed to God. But we do want to say that they are committed to any things ('the Fs') such that it is *obvious* that it is impossible that the things they take to satisfy their substitutions of O do satisfy O and yet the Fs don't satisfy O.¹¹ This is the understanding of ontological commitment with which I'll operate in this paper.

I think that the existential quantifiers express existence, and that what one thinks exists can therefore be read off of one's literal, serious quantificational claims; Schaffer and Quine say the same. But I think that figuring out what one thinks exists isn't an interesting question for an ontologist to answer; Schaffer and Fine say the same. I also think that ontological commitments are to the things with which you answer the ontological question, whatever you take it to be; Schaffer denies this. ¹² I take the ontological question to be "what are the truthmakers for our sentences?", so I hold a truthmaker view of ontological commitment. On my view, ontological commitment does not have to do with what there is, or what we quantify over. Rather, it has to do with truthmaking.

Quine's characterization of the ontological question and ontological commitment is metaphysical orthodoxy. The General Truthmaker View is a foe of the Quinean view, which tells us that our ontological commitments are to the things that the ordinary English sentences we accept (in our most reflective and philosophical moods as being strictly and literally true) say *exist*. And the things that our sentences say exist are the values of the variables in the scope of the existential quantifiers occurring in our translations of our sentences into first-order logic. The proponent of a truthmaker view (hereafter 'a truthmaker theorist') responds that some ordinary English sentences that we accept in our most reflective and philosophical moods as being strictly and literally true might say "Fs exist", and our translation of that into first-order logic might be " $\exists xFx$ ", and yet we are not ontologically committed to Fs. That is, we might think Fs exist, and quantify over Fs, yet not be ontologically committed to Fs.

One might respond, "But to 'ontologically commit' to something just *means* to say that it exists." The truthmaker theorist responds in the voice of Cameron:

... 'ontological commitment' is a technical term, and there are a bunch of claims we associate with it: the ontological commitments of a theory are what must exist if it is true; the ontological commitments of a theory are what counts against it when judging it for ontological parsimony; the ontological commitments of a theory are those things whose existence its truth entails that have real being. For the Quinean, of course, these don't come apart; but if we think they do come apart, we must make a decision about how to use the term

¹³ I speak throughout the paper of English sentences and quantifiers and the like. The point generalizes, of course, to French and German and all other non-fundamental languages.



 $^{^{11}}$ e.g., If one thinks that up quarks and down quarks satisfy O, then one is implicitly ontologically committed to quarks.

¹² See Schaffer (2008), where Schaffer says that one's ontological commitments are to what one says exists, despite thinking that grounded entities are an ontological free lunch.

'ontological commitment'. I think they come apart: what has real being - what there really is - is what makes the true theory of the world true. (2010, p. 250)

Quine thought it was "obvious and trivial" that we are ontologically committed to the values of the bound variables of the translations of our theories into first-order logic. 14 But ontological commitment does have the other associations Cameron claims, so an argument is required to show that quantification—being the value of a variable—has all of them as well. Given the above discussion of 'ontological commitment', it is at least not an analytic truth that a person's ontological commitments are the things over which she quantifies when her sentences are translated into first-order logic. After all, it's become a matter of debate of late as to what the ontological question is; it's not an analytic truth that Quine is right and Schaffer and Fine and Sider and I are wrong.

Introducing some new terminology will help make this idea clearer. Let us say that *S* is *existentially committed* to *Fs* just in the case that an *F* is the value of a bound variable of the most logically perspicuous statement of one of *S*'s beliefs (or would be the value of a bound variable of the most logically perspicuous statement of one of *S*'s beliefs, if that belief were true). Let us say that *S* is *metaphysically committed* to *Fs* just in the case an *F* makes true the most logically perspicuous statement of at least one of *S*'s beliefs (or would make true the most logically perspicuous statement of at least one of *S*'s beliefs, if that belief were true). Is I take it that the answer to the following question is not settled: are *S*'s ontological commitments co-extensive with her existential commitments, her metaphysical commitments, or neither?

If an opponent thinks that this is a settled question, I am happy to give up the term "ontological commitment" and conduct the rest of the paper in terms of "metaphysical commitment". But in that case, I'll think that metaphysical commitments are more important than ontological commitments—a person's metaphysical commitments are the things that must exist if her sentences are to be true, a person's metaphysical commitments are the things that make true her sentences, a person's metaphysical commitments are to the fundamental things in virtue of which the things she says exist exist, a theory's metaphysical commitments are what must be taken into account when deciding whether to accept or reject the theory, and a theory's metaphysical commitments are what count against it when thinking about parsimony. On this construal, ontological commitments are just what things one quantifies over; but given that such things don't play any other role in a metaphysical theory (at least, not simply in virtue of being quantified over), ontological commitment is not important.

Surely there must be *some* room here for disagreement. I want to sever the link between ontological commitment and quantification; if one insists that that link is analytic, then I shall sever the one between ontological commitment and theory judgment. In other words, I assume that not all of the following can be analytic truths:

¹⁵ This is not the same sense of metaphysical commitment as in Mackie (1993), though it is similar.



¹⁴ See Quine (1992, p. 25–27).

- 1. If S quantifies over Fs, then S thinks Fs exists. 16
- 2. If S thinks Fs exists, then S is ontologically committed to Fs.
- 3. If S is ontologically committed to Fs, then (i) Fs must exist for S's sentences to be true, (ii) S's theory must be judged for parsimony on the basis of Fs, and (iii) Fs must make true the sentences of S's theory.
- 4. Therefore: if S quantifies over Fs, then (i) Fs must exist for S's sentences to be true, (ii) S's theory must be judged for parsimony on the basis of Fs, and (iii) Fs must make true the sentences of S's theory. (1,2,3, hypothetical syllogism)

The truthmaker theorist denies (4), so she must deny either (1), (2), or (3). I sought to deny (2), but if one were to maintain that (2) is an analytic truth, I would deny (3). Then I would introduce the term "metaphysical commitment" as above. I would deny this conditional: if S says that Fs exist, S is metaphysically committed to Fs, and I would say that (3) is true when "metaphysical commitment" replaces "ontological commitment" in the antecedent. And given the General Truthmaker View of Metaphysical Commitment, when one utters a sentence, one is metaphysically committed to there being an x such that that x makes that sentence true.

For the rest of the paper I'll assume that the link between quantification and ontological commitment is not analytic, that there is room to disagree about whether a theory is ontologically committed to the things over which it quantifies, and that I am objecting to (2). But those who think I'm objecting to an analytic truth may substitute "metaphysical commitments" for "ontological commitments" in the remainder of the paper and classify me as objecting to (3).

4 Two ways of understanding truthmaker views

The truthmaker theorist says that one can affirm "statues exist" without being ontologically committed to statues. There are (at least) two ways to justify this. The best way of bringing out the distinction between the two is to look at the following argument against truthmaker views:

- 1. If S affirms "statues exist", then S believes that statues exist.
- 2. If S believes that statues exist, then S is ontologically committed to statues.
- 3. Therefore, if S affirms "statues exist", then S is ontologically committed to statues. (from 1, 2)

The truthmaker theorist wants to deny (3), since she thinks our ontological commitments are to there being truthmakers for "Statues exist", and the truthmakers might not be statues. Since the above argument is clearly valid, the

 $^{^{16}}$ Where "S quantifies over Fs" means that S accepts (in her most reflective and philosophical moods) a sentence such that her translation of that sentence into first-order logic contains a bound variable of which F is predicated.



truthmaker theorist must deny (1) or (2). In this section, I shall discuss each of these options.

4.1 Denying (1)

One way of understanding truthmaker views is as a claim about the relationship between sentences—ones that seemingly express the existence of a thing—and the existence of a thing. One could put this in different ways. One way would be to say that the disquotational principle—if a subject S assents to "p", then S believes that p—fails, either in general or just in the case of sentences that ascribe existence to something. There are well-known problems with the disquotational principle, so it might not be so bad if the truthmaker theorist has to deny it. ¹⁷ But I do not think truthmaker views should rise or fall with the truth of the disquotational principle. And a better argument can be run a bit differently.

One could also accept the disquotational principle above but reject a closely related principle: For any sentence S, if $\lceil S \rceil$ is true, then S. This is one direction of the Tarskian biconditional (For any sentence S: $\lceil \lceil S \rceil$ is true iff $S \rceil$). One might think that if one affirms "statues exist", then one believes that "statues exist" is true (accepting the disquotational principle), but deny that "statues exist" is true if and only if if statues exist.

Denying the T-schema has some appeal for the truthmaker theorist inasmuch as it allows her to deny (1), which is a premise in an argument against a truthmaker view of ontological commitment. And she might independently motivate the denial of the T-schema by pointing to the liar paradox (is "this sentence is not true" true?) and suggesting that we need to re-interpret our understanding of truth-conditions anyway. This is an interesting avenue, but I will not pursue it for two reasons. First, I do not think that the truthmaker view rises or falls with the truth of the T-schema. Second, I think there is a better response to the argument—deny (2).

4.2 Denying (2)

On my view, the truthmaker theorist ought to deny (2): if S believes that statues exist, then S is ontologically committed to statues. She should think that existence claims come apart from ontological commitments, rather than thinking that seeming existence claims aren't in fact existence claims. The best way to deny (2) is to think that we are only ontologically committed to the fundamental, and that all and only the truthmakers are fundamental.

Talk of fundamentality, fundamental things, and fundamental language (or languages) has taken center stage in metaphysics in recent years. A number of

¹⁸ Quine (1970) famously used "'S" is true if and only if S" as a "theory" of truth, but one needn't do so to endorse the T-schema—one can endorse it and think that neither the conditional nor the biconditional tell us what truth *is*.



¹⁷ The principle was named by Kripke in his (1979), and he poses the most famous problem for it as well; namely, that a person might believe "Londres est jolie" and "London is not pretty", and therefore that London is pretty and that London is not pretty.

metaphysicians have defended the view that what matters in ontology is not the question of what exists, but rather the question of what is fundamental.¹⁹ For some, the answer to the question is mereological simples.²⁰ For others, it's the world.²¹ Nobody says that tables are fundamental, but all agree that they exist. The truthmaker theorist thinks that there are many things that our English sentences say exist, but these things aren't the truthmakers for those sentences. Rather, some other things makes those sentences true, and those things—the truthmakers—are the fundamental things, in virtue of which true English sentences are true; this is the version of the truthmaker view that I accept.²²

We can introduce a quantifier that ranges over all and only the truthmakers. Since I take it that the fundamental things are the truthmakers, I shall call the quantifier that ranges over them 'the fundamental quantifier'. Shall use ' \exists_F ' for the fundamental existential quantifier, and ' \exists_E ' for the English existential quantifier. The truthmaker theorist thinks that what is fundamental are the truthmakers. So, \exists_F has in its domain all and only the truthmakers of true English sentences. Since all and only the truthmakers exist_F and in order to be ontologically committed to something one must think it exists_F, we can use \exists_F as the quantifier of ontological commitment. In order to show that something x exists_F, we have to show that x exists_E, and that it does some truthmaking work—perhaps by being the best or only candidate for making true the English sentence "x exists".

The truthmaker theorist thinks that at least some sentences with 'exists' or 'there are' aren't made true by the objects quantified over, and that "there are tables" is one such sentence. The logical form of the sentence is ' $\exists_E x(Table)x$ '. This sentence quantifies over tables. So, the one who affirms the sentence affirms the existence E of tables. So according to the Quinean, the one who affirms the sentence is ontologically committed to tables. But some truthmaker theorists think that in

²⁶ This entails that it's not the case that there is $_F$ a truthmaker for some sentence that isn't ranged over by the English quantifier. I defend this claim in [Rettler (MS)].



¹⁹ See eg Schaffer (2009). Fine (2001) says we should investigate the question of what really exists.

²⁰ See Cameron (2008, 2010), and Sider (2013).

²¹ See Schaffer (2010).

 $^{^{22}}$ Again, the truthmaker theorist might deny this, saying that "there are Fs" is made true by things that are neither fundamental nor F. That project strikes me as much more difficult to motivate.

²³ Most who think there is a fundamental quantifier think that it cannot be a restriction on the ordinary English quantifier (' \exists_E '). Presumably their reason is that when we do ontology, we want to talk about *everything* (wave the hands wildly for emphasis), and restricted quantifiers don't range over everything. McDaniel (2010) is a notable exception, though he thinks there are multiple fundamental quantifiers. I also disagree, but for different reasons; I defend the view in Rettler (MS).

²⁴ I shall affix the subscript ' $_E$ ' to quantificational expressions to denote ordinary English quantification, and affix the subscript ' $_F$ ' to quantificational expressions to denote fundamental quantification. I'll continue to use 'exists' and ' \exists ', and I intend them to be ambiguous between ' \exists_F ', \exists_E ', or some other existential quantifier.

²⁵ My usage of 'the fundamental quantifier' may differ from that of Sider (2011) and others, since they think that fundamentality is primarily a property of ideology. Saying that "in the fundamental sense of the word 'exists', only fundamental things exist" is a substantive thesis; I defend it in [Rettler (MS)], but Sider and others deny it.

affirming sentences with 'exists_E', we aren't ontologically committed to the things in the domain of \exists_E ; we are just committed to whatever makes the sentence true. And the general truthmaker theorist thinks that in affirming sentences with \exists_E , we are just committed to there existing_F something (or some things) that makes (or make) them true. We need an additional argument that it has to be tables.

So then, what allows us to say that tables exist_E ? In short: tables do exist ; just look around you! To say more, the sentence "tables exist" is true, and it's made true by something (or some things). Since it's true, tables are in the domain of \exists_E . Since it's made true, whatever makes it true is (or are) in the domain of \exists_F . What enables one to say that tables and chairs do not exist_F ? It's that tables don't make true "tables exist "; rather, something (or some things) more fundamental than tables do. In our English assertions we quantify over tables, and our assertions are true, but in the fundamental language we won't need to. The fundamental quantifier ranges over only the fundamental things, the fundamental things are the truthmakers for our English sentences, and tables are not truthmakers or fundamental things. This is why they don't exist_F .

5 Advantages of truthmaker views

There are three main advantages of truthmaker views. The first is that we can say that sentences that quantify over tables and the like are strictly and literally true without populating our ontology with what some consider untoward entities. We can say that "tables exist" is true, but not be ontologically committed to tables; and if we're not ontologically committed to tables, our ontology doesn't contain tables. This is because, on the General Truthmaker View, we are only ontologically committed to there existing something (or some things) that makes (or make) true the sentence "tables exist". Cameron puts the point nicely: "...the nihilist is right about the ontology but the universalist is right about what sentences are true" (2008). In other words: the nihilist is right about what exists $_F$, but the universalist is right about what exists $_E$. Or Sider: "We're trying to find our way in a world with a minimal ontology, and we don't know much about particle physics" (Sider MS). The principle thought is that we've introduced words, some of them quantificational, to describe the world around us. And we've said true things, even when describing what things there are. But what exists $_F$ are the things that make those sentences true.

I think "there are tables" need not made true by tables. But my view leaves open the question of what the truthmaker(s) for the sentence "there are tables" is/are. It could very well be tables, or it could be simples.²⁹ But we are not able to distinguish between whether tables or simples-arranged-tablewise are the truthmakers for

²⁹ It could not, of course, be three-legged unicorns; there is a limit as to what can do the truthmaking for sentences. This seems obvious, but you might wonder why it's true. If we don't say anything about what the truthmakers are, what eliminates unicorns as candidates? The answer is that I don't have an argument against unicorns making true sentences about tables. And if you were to press me on the point, I would



²⁷ This assumes that tables are not fundamental. If the reader thinks they are, she is invited to pick as an example something else that exists but is not fundamental.

²⁸ Of course, not certain sentences, like "nihilism is false". Just sentences about what exists.

sentences about tables. And our ontological commitments are to there being $_F$ truthmakers. So instead of arguing about whether or not tables exist (since all it takes for tables to exist is for "tables exist $_E$ " to be true), metaphysicians ought to argue about whether simples make true sentences about tables.

Truthmaker theorists think that Quineans rely too much on the surface form of language in determining someone's ontological commitments. The second advantage of truthmaker views is that they allow us to resolve ontological questions by doing metaphysics, and not by investigating our use of language. We say that the sentence "tables exist" is true. The logical form of this sentence is $\exists x (Table)x$. Therefore, there are tables; that is, tables number among the things in the world. According to the Quinean view, the only way to avoid this ontological commitment is to paraphrase the sentence into one that doesn't quantify over tables. If we can't do so, we're stuck with an ontological commitment to tables. But the paraphrase is still being done at the level of sentences. Why think that English sentences are ontologically perspicuous? And why think that the truth of those sentences ontologically commit us to tables? In order to answer these questions, the Quinean must make more substantive assumptions about the relationship between sentences and truth (and I daresay truthmaking) than the truthmaker theorist—something like the surface form of the sentences indicating their nature, and the surface form of the sentence determining what makes it true if it is true.

The third advantage can be brought out by modifying a story authored by Ted Sider (2013, p. 8). Sider describes a world created by a god named Nihilo. When Nihilo created the world, he created only simples *ex nihilo*. Then he moved them around in certain ways; but none of them composed anything. Eventually he got lonely and moved some simples around around in ways to get them to be arranged in such a way as to look and behave much like us. He then taught them metaphysics, so they could talk precisely about the world around them.³⁰ But they were not intelligent, and they had a hard time talking this way. So Nihilo taught them shortcuts; when they see simples-arranged-tablewise, they say "there's a table". And so on for other simples-arranged-certain-ways. They are now no longer speaking Nihilo's language (which we suppose is the fundamental language), but some other language.³¹ So, they are not speaking metaphorically or non-strictly; they intend their sentences to be true in the their language. Here are two questions we might be interested in answering: Do they speak truly? Are they ontologically committed to composite objects that are tables?

Let's add to the story as follows: Nihilo continues to converse with his minions, and he does so using the new shortcut words, in order that his minions might understand him. He says things to his minions like "There are three tables in the next room". Here are two questions we might be interested in answering: Does he speak truly? Is he ontologically committed to composite objects that are tables?

³¹ Normally we can introduce new words into a language, but this isn't the case with the fundamental language.



Footnote 29 continued

respond happily. After all, the truthmaker theorist thinks that this is just the sort of debate we should be having—not over whether "there are unicorns" is true, but about whether unicorns do any truthmaking.

³⁰ Take 'them' and 'they' to be referring to a plurality of pluralities.

Suppose that after a while Nihilo gets bored with his minions and stops talking to them, and then leaves them alone for a few thousand years. They get a bit smarter, but not too much, and they continue to talk in the shortcut way he has taught them, saying things like "there are three tables in the next room", vaguely aware because of their oral mythology that a god once tried to teach them to speak more precisely. Again, two questions: Are their sentences true? Are they ontologically committed to composite objects that are tables?

Suppose that after a few billion years the minions get way, way smarter, and they stop believing that simples ever compose anything. But they're used to talking a certain way and it's a whole lot shorter and their children catch on easier, so they keep saying "there are three tables in the next room" and the like. Again the two questions: Are their sentences true? Are they ontologically committed to composite objects that are tables?³²

I want to say "yes" and "no" respectively to all four sets of questions; the minions are speaking truly, and they are not ontologically committed to tables. I hope many readers think it would be nice if we could answer the questions that way. Truthmaker views provide a principled reason for doing so.

Quineanism answers the questions exactly opposite. Quineanism says that if one of the minions asserts "there are three tables in the next room", the minion speaks falsely (given the description of the world as containing no composites). Quineanism also says that if anyone affirms 'there are three tables in the next room' as strictly and literally true, she is ontologically committed to tables. But what if the sentence is true, but it's not made true by tables? The Quinean thinks this is impossible. Perhaps it's because she thinks tables are *required* to make true our sentence "there are three tables in the next room"; and if one isn't ontologically committed to tables, then one can't provide a truthmaker for "there are three tables in the next room". But if we were in a world like Nihilo's, "there are three tables in the next room" would be true, and the truthmaker(s) wouldn't be a table or some tables. The moral of the story, then, is that some quantificational sentences are *true*, but they're not made true by the things quantified over. Thus, one who asserts one of them isn't and needn't be ontologically committed to the things over which she quantifies. This suggests that the Quinean criterion for ontological commitment is false.

To sum up: the Quinean thinks that the existence claims of the theory *must* be made true (if they're made true at all) by the things quantified over; if she thought "Ps exist" could be true and made true by things other than Ps, then she would not insist that one

³³ Perhaps she would claim not to understand "makes true" or "truthmaker", and might resist phrasing her view in this way. But the thought would be something like what I've characterized her as thinking. Quine thought that "nothing is true but reality makes it so" (1970, p. 50), but modern Quineans tend not to talk much about truthmaking.



³² Sider says it's an open question whether the minions speak truly in the first case (though he thinks they don't), and since in his story Nihilo doesn't speak, he doesn't discuss whether Nihilo would speak truly were he to talk about tables. He also says the minions certainly speak *correctly*, where 'correctly' is a technical term for something that is either (i) true or (ii) close to true and also useful or advantageous or something. I shall avoid this, because I don't know what it means. If we can give a theory whereby the sentences are true, I think that theory is better—it has fewer primitives and respects the intuition that the minions are doing something right.

has to be ontologically committed to Ps if one says they exist. The truthmaker theorist thinks that this needn't be the case: "there are Ps" can be made true by things that aren't Ps. So, "Ps exist" is true (as the theory says), but saying so doesn't ontologically commit us to Ps, only to there being truthmakers for "there are Ps".

The Quinean responds, "If that's the case, you must paraphrase away your commitment to Ps." To quote Quine:

When we say that some zoological species are cross-fertile we are committing ourselves to recognizing as entities the several species themselves, abstract though they are. We remain so committed at least until we devise some way of so paraphrasing the statement as to show that seeming reference to species on the part of our bound variable was an avoidable *manner of speaking*. (Quine (1948), 13, emphasis mine)

The natural way of reading "at least until" is that Quine is saying that providing a paraphrase is both necessary and sufficient to avoid ontological commitment. If you say some sentences, and in so doing you quantify over Ps, then you had better paraphrase your sentence into one that doesn't quantify over Ps. If you do so, and there are no more sentences you affirm that either quantify over Ps or obviously entail sentences that quantify over Ps, then you are not ontologically committed to Ps; this is the sufficiency of paraphrase to avoid ontological commitment. If you don't paraphrase, you remain ontologically committed to Ps; this is the necessity of paraphrase to avoid ontological commitment.

The truthmaker theorist thinks that paraphrase is not necessary for avoiding ontological commitment; she need take no stance on its sufficiency.³⁷

When paraphrasing away existence claims, say about Fs, one gives another English sentence which doesn't seem to require the existence of Fs, or a translation into first-order logic which doesn't have a quantifier binding a variable that has F predicated of it. The classic example is the mereological nihilist who denies the existence of tables but feels free to assert sentences like "this table is white" in some contexts. If pressed, she would give one of a number of responses. One response is that she was asserting a sentence that is ontologically neutral, so to speak. She would then paraphrase, "There are some simples here arranged

³⁸ She might also say that what she said wasn't in fact true, but quasi-true, or correct, or something else indicating falsehood but usefulness. But I'm less interested in these responses as in ones that maintain the truth of the assertion.



³⁴ Compare "there are water molecules" being made true by two hydrogen atoms covalently bonded to a single oxygen atom.

³⁵ Thanks to an anonymous referee for making this distinction, which helped me clarify my response to this quotation.

³⁶ See also (van Inwagen 1998, 246ff).

³⁷ Though I think the sufficiency thesis is also false. There are ingenious proposals to paraphrase our sentences in a way that's consistent with ontological nihlism—the view that nothing exists—and the non-existence of all women. (See Hawthorne and Cortens (1995) and Turner (2011) on the former, and Church (1958) on the latter.) Ontological nihilists and women denialists should not be considered to have more ontologically parsimonious theories just because they've come up with some linguistic and logical tricks to avoid affirming the existence of certain things (or anything).

tablewise and whitewise", or say, "The correct translation of my sentence into first-order logic is $\exists xs(Txs \land Wxs)$ ". In this way, the Quinean story goes, the nihilist dodges an ontological commitment to tables. But we should not rest so much on the surface form of language, even first-order logic, nor should we care about whether we're clever enough to avoid speaking a certain way. Those who recognize the power of the arguments for mereological nihilism but do not have the vocabulary required to invent paraphrases for sentences about tables should not be saddled with ontological commitment to tables in virtue of their lack of creativity.

Suppose someone (call him 'Tom') says, "The average family has 2.4 children". The Quinean responds, "You think there is an average family? Well, then you're ontologically committed to an average family." What if Tom is not sufficiently clever enough to think of a way to paraphrase the sentence so that it doesn't quantify over average families? He may very well know that there's no such thing as an average family (since he knows that it's impossible to have 2.4 children), but he knows he's saying something true, so he affirms the sentence. And since he doesn't have a paraphrase but he knows it true, he affirms it as being strictly and literally true. 41

After all, if a Quinean says, "You think the average family has 2.4 children. So you think there are such things as average families?" Tom might respond, "Yes", to which the Quinean says, "So there is something that is an average family?" Tom ought to say no, because he knows what's coming, and he knows that there's no family that has 2.4 children. So he retraces his steps and says that there are no average families. But then the Quinean wants to know what Tom means by saying, "The average family has 2.4 children." Tom knows he's saying something true, and he knows that it doesn't entail that there's a family with 2.4 children. But he's not sure exactly how to paraphrase it. The Quinean says that he must either take it back, or supply a paraphrase. He's not inclined to do either. 42

So the Quinean is forced to say that Tom is ontologically committed to an average family. The general truthmaker theory says that the nihilist and the no-average-familyist needn't be able to paraphrase their sentences in order to avoid ontological commitment to tables or average families; by saying "there are three tables in the next room" and "the average family has 2.4 children", she is just committed to those sentences being true!⁴³ The nihilist is ontologically committed, then, to there being something that makes it true that this table is brown—it may or

⁴³ The specific truthmaker theory also says that she needn't paraphrase (or be able to paraphrase) her sentence; she is just committed to the existence of the truthmaker.



³⁹ For more on the shortcomings of semantics in determining ontological commitment, see Ritchie (forthcoming).

⁴⁰ It's not as easy as it seems.

⁴¹ For more on this, see Melia (1995).

⁴² Perhaps the Quinean would say that Tom isn't smart enough to ontologically commit to anything. But this would require a modification of the Quinean position in the form of an additional condition that a person must satisfy in order to be ontologically committed; e.g., "S must understand the sentence she affirms". But of course Tom understands "the average family has 2.4 children", and he really believes that it's true. It seems unfair that he can dodge the commitment with which the rest of us are saddled by virtue of not being intelligent enough. I can't see what the Quinean would want to add that would allow Tom to dodge commitment to average families that wouldn't unacceptably generalize.

may not be a table. The good neo-Quinean nihilist thinks it's simples, so she paraphrases her table-sentence into a simple-sentence, thus allowing her to ontologically commit only to simples, and not tables. And the no-average-familyist is ontologically committed to there being something that makes it true that the average family has 2.4 children—it may or may not be an average family. The neo-Quinean no-average-familyist thinks it's simples or people and some facts about numbers, so the intelligent neo-Quinean no-average-familyist offers a paraphrase: "The total number of children had by families divided by the total number of families is 2.4." But the less intelligent neo-Quinean no-average-familyists are stuck being ontologically committed to an average family. All this work is unnecessary, on the general truthmaker theory.

6 Other truthmaker views

Thus far I have explained and argued for the General Truthmaker View of ontological commitment, and made clear its advantages over the Quinean view. But the General Truthmaker View is not the only truthmaker view on offer, and many of the advantages of the General Truthmaker View are shared by other truthmaker views. However, there are other reasons to prefer the General Truthmaker View to other truthmaker views. I'll spend the remainder of the paper explaining and critiquing other truthmaker views, and showing the advantages that the General Truthmaker View has over them.

6.1 The Specific Truthmaker View

The Specific Truthmaker View says that when one affirms a sentence, one is ontologically committed to whatever happens to make true the sentence. I am not sure if anyone holds the Specific Truthmaker View, because proponents of truthmaker views have not yet filled in enough details; they have never made clear just what they take our ontological commitments to be. They talk about our ontological commitments being to the truthmakers, but that's not the General Truthmaker View. First, people ought to incur *some* ontological commitment by uttering false sentences. On the Specific Truthmaker View, someone who says, "There are \aleph_0 unicorns" occurs no ontological commitment, because the sentence is false and thus has no truthmaker. But most of us want to say that they do incur some ontological commitment. If our ontological commitments are to the truthmakers the sentence *would have* if it were true, then what about necessarily false sentences? For example, what are my ontological commitments when I affirm "There are \aleph_0 unicorns and 2+2=5"? Again, it seems I ought to incur some ontological commitment, but on the Specific Truthmaker View I do not.

⁴⁴ And now it looks like she's ontologically committed to total numbers! Though in comparison they seem relatively easy to paraphrase away.



Second, suppose Jonathan Schaffer (2010) is right; truthmaker monism is true, and the truthmaker is the world.⁴⁵ The Specific Truthmaker View says that we are ontologically committed, then, to the world—and this is the case even if we think that the truthmakers are simples, or ordinary objects, or we don't believe in truthmakers at all. I disagree. We are not ontologically committed to the world when we say "tables exist" and when we say "there are a few colors", especially if we emphatically deny that the world is the truthmaker for those sentences. But that's what proponents of the Specific Truthmaker View are committed to. I like the general view — we're only committed to *there being* truthmakers. So, by saying "tables exist", we're not ontologically committed to the truthmakers; we're just committed to there being truthmakers. Namely, we're committed to the sentence being true and having a truthmaker (or several). This sounds eminently reasonable to me, and it is good reason to prefer the General Truthmaker View to the Specific Truthmaker View.

There are not many who have held truthmaker views. Though contemporary talk of truthmaking has its origins in 1984, 46 most of the discussion of truthmaking has been attempts to formulate an adequate truthmaker principle, discussions of which ontological category truthmakers belong to, and accusations that certain people (e.g. nominalists, presentists, actualists) cannot provide truthmakers for the sentences they so freely affirm. 47 It is widely thought that John Heil was the first to accept a truthmaker view of ontological commitment, and he has been followed by David Armstrong; unfortunately, neither of the two of them said enough about ontological commitment to glean a particular theory from their work. But recently Ross Cameron has articulated a own truthmaker view in a series of papers. 48 In the next section I'll distinguish my view from Cameron's by arguing that he accepts the Specific Truthmaker View, and raise a few objections to his particular version.

6.2 Ross Cameron's truthmaker view

Ross Cameron has offered the most sustained explication and defense of a truthmaker view. He sees an ancestor of his truthmaker view in Heil, and in his two recent papers (2008 and 2010), he develops the view in much greater detail.⁴⁹ However, while he clarifies a lot about the view, he fails to distinguish between the General Truthmaker View and the Specific Truthmaker View. This is not a criticism; his aim was to distinguish truthmaker views from Quineanism and fend off objections to them. But the result is that he seems to slide back and forth between the General Truthmaker View and the Specific Truthmaker View, as if there is no difference. I think there is a difference, and I've highlighted that

⁴⁹ For other discussions of Cameron's view, see Brogaard (2008) and Schaffer (2008).



⁴⁵ Truthmaker monism is the view that there is one truthmaker. According to Schaffer (2010), the leading (and perhaps only) proponent of the view, the one truthmaker is the world.

⁴⁶ The paper to which I'm referring is Mulligan et al. (1984), who cite as inspiration the *Tractatus*.

⁴⁷ For such discussion, see Beebee and Dodd (2005).

⁴⁸ See Heil (2003) and Heil (2012, §8.5), Armstrong (2004, §2.14), and Cameron (2008, 2010).

difference above. In this section, I'll attempt to show that Cameron should be interpreted as holding the Specific Truthmaker View, and pose a few objections to some particular things he says.

Cameron states the view in the first paper: "I am a truthmaker theorist: I hold that the ontological commitments of a theory are just those things that must exist to make true the sentences of that theory." (Cameron 2008, 4). And in the second paper: "...the ontological commitments of a sentence S are, on my view, exactly those entities needed to ground the truth of S." (Cameron 2010, 251)

As I see it, there are three ways one can understand Cameron's view:

- 1. It's not the case that tables must exist for the sentence "tables exist" is to be true; rather, some other things exist and make it true.
- 2. Of course tables must exist for the sentence "tables exist" to be true, but tables aren't the truthmakers for the sentence, and thus the theory is not ontologically committed to them; it's only ontologically committed to what makes it true that tables exist.
- 3. Tables must exist for the sentence "tables exist" to be true, but the theory isn't ontologically committed to them—it's only ontologically committed to there being something that makes "tables exist" true.

(1) is the most natural way to read the 2008 formulation, but I do not think it's what Cameron intends. I think he intends the view to be (2). He makes a distinction between existence and "real being", and says that tables must exist for "tables exist" to be true, but tables don't have to have *real being* for "tables exist" to be true; and we're only ontologically committed to things we think have *real being*. On that basis, I think we can rule out (1). (3) is the General Truthmaker View. But Cameron thinks we're committed to the things that *must* exist, or those entities *needed*, for the sentence to be true. We're committed to those very things. Since (3) doesn't say we're committed to those very things, just some things or other, (3) is out. Cameron, I think, would accept (2).

A natural question arises about what 'must' and 'needed' mean in this context. Is it that the ontological commitments are to things that *entail* the truth? Or the things that *in fact* make it true? The most natural reading is that 'must' here is a modal operator. But in that case our ontological commitments might very well be disjunctive, if a sentence has different truthmakers in different worlds. If "tables exist" is true but has different truthmakers in different worlds, then no particular thing *must* exist to make it true. What *must* exist is: either this table or that table or some merely possible table or this bunch of simples or the Cosmos or...So if some sentences are made true by different things in different worlds, then the most natural reading of Cameron's view is as a Specific Truthmaker View, but of a modal sort; we're ontologically committed to: this table at W_1 , that table at W_2 , these simples at W_3 ...

⁵⁰ Compare the following two quotations, which seem to be in tension: "I hold that the ontological commitments of a theory are just those things that must *exist* to make true the sentences of that theory" (Cameron 2008, 4) and "what has real being—what there *really* is—is what makes the true theory of the world true, and this is a proper subset of the things that theory says there are" (Cameron 2010, 250).



There is one point at which one might wonder whether Cameron holds the General Truthmaker View: "We should make a distinction, as indeed anyone must, between a sentence bringing an ontological commitment to some particular thing(s), and it ontologically committing you to some things or other. I say that a sentence *S* commits you to some *particular* thing *A* when *A has* to make *S* true if it is true; that *S* commits you to there being some things or other amongst the Xs when it *has* to be the case that some things or other amongst the Xs make *S* true if it is true" (2010, p. 253). But here Cameron is thinking of things like disjunctions, for example, "A is F or B is G". He thinks that in affirming this one isn't ontologically committed to the state of affairs of A's being F, or the state of affairs of B's being G. But he does think that anyone who affirms "A is F or B is G" is ontologically committed to *one or other* of those states of affairs. The General Truthmaker View differs, saying that when one asserts "A is F or B is G", one is ontologically committed to there being something or some things that make it true. Perhaps it's one of the aforementioned states of affairs, but perhaps it's the Cosmos, or God, or just A, or Gness.

Cameron also says, "If you want to hold that 'there are Xs' is strictly and literally true whilst resisting ontological commitment to the Xs, you should show that one can provide grounds for the truth of such claims without appealing to the Xs..." (2010, p. 249). While I agree that you should eventually show (or at least argue) that something else can make true sentences about Xs if you don't want to be ontologically committed to Xs, the proponent of the General Truthmaker View thinks that you don't have to. That is, you needn't show that you can provide grounds for "there are Xs" in order to maintain that 'there are Xs' is strictly and literally true while not ontologically committing to Xs. Cameron seems to disagree; he also says, "To resist commitment to tables I do not need to reject the truth of table-talk but rather show that table-talk can be made true by something other than tables" (2010, p. 250, emphasis mine). Saying, "I don't need to X, but rather Y" implies that "I need to Y". If that's true, then Cameron thinks that to resist commitment to tables, he needs to show that table-talk can be made true by something other than tables. This is, of course, a nice advance over Quineanism, which says that he needs to paraphrase his sentence into one that doesn't quantify over tables; Cameron just says he needs to provide truthmakers that aren't tables.

But the spirit of the demand for truthmakers is very much the same as the demand for paraphrase. The proponent of the General Truthmaker View says that not only does Cameron not have to show what the truthmakers could be, he doesn't even have to say what he takes them to be. He ought to, *qua metaphysician*, be in the business of investigating what the truthmakers are/must be/could be for various sentences. But it's not the case that *the only way* to resist ontological commitment to *F*s is by offering a different truthmaker for sentences about *F*s. It's not clear what Cameron thinks about this. He talks about resisting ontological commitment to tables when we say "tables exist" because simples are all that's required to make it true. What if we had no idea that simples exist? Would we then be ontologically committed to tables? I say no—we're just committed to the sentences having truthmakers, and it's the metaphysician's job to find out what they are. Perhaps it's the world, perhaps simples, perhaps tables...Every time Cameron says, "We aren't committed to *X*s", he immediately supplies a truthmaker, "All that sentences about



*X*s commit us to are *Y*s". But on my view, we are not committed to *X*s if we cannot supply *Y*s as candidate truthmakers.

There are things with which the proponent of the General Truthmaker View disagrees even more strongly. Cameron says that "if "there are denumerably many electrons" is true, then we aren't committed to a particular plurality of electrons, but rather some denumerable plurality of electrons" (2010, p. 254). This seems starkly at odds with any truthmaker view of ontological commitment. Why are we committed to some denumerable plurality of electrons, rather than to the truthmakers of that sentence, or there being some truthmakers? After all, what if I believe that "there are denumerably many composite objects" is true? Am I ontologically committed to some denumerable plurality of composite objects? The truthmaker theorist wants to say no; "there are denumerably many composite objects" might be made true by denumerably many other things. Or maybe just one—the Cosmos, or God. So why not with electrons? If we're only ontologically committed to the truthmakers (or to there being truthmakers), why are we committed to some denumerable plurality of electrons by uttering "there are denumerably many electrons" but not some denumerable plurality of composite objects by uttering "there are denumerably many composite objects"?

I'll conclude this section with a prime example of Cameron's seeming commitment to the Specific Truthmaker View: "Perhaps what makes it true that there is a one-to-one correspondence between the Fs and the Gs are numbers; but in that case the stipulation of Hume's Principle isn't bringing about any *new* commitment—we were *already* committed to the existence of numbers in claiming such a one-to-one correspondence" (2008, p. 12).

The proponent of the General Truthmaker View disagrees. In saying, "there is a one-to-one correspondence between the Fs and the Gs", we were committed to there being a truthmaker for that sentence. Perhaps numbers, perhaps some particular function mapping the Fs to the Gs, perhaps the world...But we are not ontologically committed to any of those particular things, even if it turns out that the numbers make it true that there is a one-to-one correspondence between the Fs and the Gs.

Perhaps these are not representative quotes, and I've misunderstood Cameron or cherry-picked quotations. But I think it's clear that Cameron was not sensitive to a distinction between the General Truthmaker View and the Specific Truthmaker View, and that his view is most naturally understood as the Specific Truthmaker View. I have offered a different option, the General Truthmaker View, and reasons to prefer it to the Specific Truthmaker View.

7 Objection: theory choice

I'll conclude by articulating and responding to a natural objection to the General Truthmaker View. Obviously, according to the General Truthmaker View, ontological commitments can no longer be read off of quantificational sentences, and indeed they can't be read off of sentences at all. So the objection is that if the General Truthmaker View is true, we cannot evaluate theories for their ontological



commitment.⁵¹ It used to be that we could look at the values of the variables bound by existential quantifiers; but the General Truthmaker View divorces ontological commitment from existential quantification, and indeed from all language and sentence usage. So if one aspect of theory choice is ontological commitment, how do we choose theories?

The answer is that, it's true, just looking at the sentences will no longer tell you which theory wins the day with respect to parsimony of ontological commitments. But it never should have. In order to know the *ontological* commitments of a theory, one must do metaphysics. In particular, one must think about the conditions those sentences make on the world. Namely, what the world has to be like in order for the sentences to be true. That is to say, one must think about truthmaking. What is or are the truthmaker or truthmakers for my sentence "there are water molecules"? Is it water molecules? Does it have to be, or could it be atoms or quarks or even smaller things? On the General Truthmaker View, accepting "there are water molecules" doesn't commit us to water molecules, even if they do make it true, and even if they are necessary to make it true. Of course, one shouldn't accept it if one doesn't think it's true, or if one doesn't want to be ontologically committed to there being some truthmakers for it. But in order to be ontologically committed, one can't just say what there is—one must also say what makes her sentences true.

Another case study: suppose you are a priority monist and a truthmaker monist—you think the Cosmos grounds everything and is the only truthmaker. The Quinean tells you that, regardless of these views, you are ontologically committed to trains when you say, "There's a train that runs from Rome to Hamburg", and to elements when you accept "There are 118 elements in the periodic table". But you clearly think that both of these are made true by the Cosmos. So thinking those sentences are true, and true in virtue of the Cosmos, shouldn't make trains count against your ontology. Accepting those sentences doesn't ontologically commit you to anything other than there being truthmakers for them. And accepting "the Cosmos makes true the sentence 'There's a train that runs from Rome to Hamburg" ontologically commits you to there being a truthmaker for that sentence. And so on; for each sentence you utter, you are ontologically committed to there being a truthmaker (or some truthmakers) for it.

This means that theories are incomplete with respect to their ontological commitments if they don't give an account of what makes the sentences in them true. Of course, the account will be given with more sentences, and the ontological commitments of those sentences will still be to there being some things that make them true. Suppose one's theory contains these three sentences: "There are electrons." "There are water molecules." "Electrons are the truthmakers for 'there are water molecules'." This theory is committed to these sentences being true, and ontologically committed to there being truthmakers for them. If things other than electrons are the truthmakers for "There are water molecules", then "Electrons are the truthmakers for 'there are water molecules" is not true. If one wants to argue that it is true, one must provide a truthmaker for "It is not the case that electrons are

⁵¹ Thanks to an anonymous referee for this worry; I had thought a great deal about something like it, but the referee framed it very well, which helped me know how to respond.



the truthmakers for 'there are water molecules' and electrons are the truthmakers for 'there are water molecules'". Presumably there is no truthmaker for that, because it's a contradiction. So in virtue of being committed to the truth of "Electrons are the truthmakers for 'there are water molecules", one is committed to there being F electrons.

8 Conclusion

On the General Truthmaker View, one's ontological commitments are to there being_F entities which make true the sentences one affirms. The sentences one affirms will include sentences like "a exists", "Ps exist", and the like. So, the everyday English quantifier, \exists_E , has in its domain a, things that are P, and the like. One's ontological commitments are to there being_F entities that make those sentences true.

There are three advantages the General Truthmaker View. One is that it allows us to make sense of cases like the Nihilo case. Another is that it allows us to rely less on language to determine what we ought to be ontologically committed to. And a third is that it allows us to say that English sentences that nearly everyone accepts are true, but without the ontological baggage that the Quinean view requires. These are good reasons to accept the General Truthmaker View. There are putative reasons not to accept the General Truthmaker View, but I hope to have shown why they are not good reasons. Truthmaker views are better than the Quinean view, and the General Truthmaker View is the best of the truthmaker views.

References

Armstrong, D. M. (2004). Truth and truthmakers. Cambridge: Cambridge University Press.

Beebee, H., & Dodd, J (Eds.). (2005). *Truthmakers: The contemporary debate*. Oxford: Clarendon Press. Brogaard, B. (2008). Inscrutability and ontological commitment. *Philosophical Studies*, 141, 21–42.

Cameron, R. (2008). Truthmakers and ontological commitment: Or how to deal with complex objects and mathematical ontology without getting into trouble. *Philosophical Studies*, 140, 1–18.

Cameron, R. (2010). How to have a radically minimal ontology. *Philosophical Studies*, 151, 249–264.
Church, A. (1958). The ontological status of women and abstract entities. *Unpublished lecture delivered to Harvard University*.

Fine, K. (2001). "The question of realism." Philosopher's Imprint 1.

Fine, K. (2009). The question of ontology. In David Chalmers, David Manley, & Ryan Wasserman (Eds.), Metametaphysics. Oxford: Oxford University Press.

Heil, J. (2003). From an ontological point of view. Oxford: Oxford University Press.

Heil, J. (2012). The universe as we find it. Oxford: Oxford University Press.

Kripke, S. (1979). A puzzle about belief. In Margalit, A. (Ed.), Meaning and use (pp. 239–283). Dordrecht: Reidel.

Mackie, P. (1993). Ordinary language and metaphysical commitment. Analysis, 53, 243-251.

McDaniel, K. (2010). Being and almost nothingness. Noûs, 44, 628-649.

Melia, J. (1995). On what there's not. Analysis, 55, 223-229.

Mulligan, K, Simons, P, & Smith, B. (1984). Truth-makers. *Philosophy and Phenomenological Research*, 44, 287–321.



O' Leary-Hawthorne, J., & Cortens, A. (1995). Towards ontological nihilism. *Philosophical Studies*, 79, 143–165.

Quine, W. V. O. (1948). On what there is. Review of Metaphysics, 2, 21-38.

Quine, W. V. O. (1970). Philosophy of logic. Cambridge, Mass.: Harvard University Press. Second edition, 1986.

Quine, W. V. O. (1992). The pursuit of truth. Cambridge: Harvard University Press.

Rettler, B. (MS). Quantification in the ontology room.

Ritchie, K. (forthcoming). "Can semantics guide ontology?" Australasian Journal of Philosophy.

Schaffer, J. (2008). Truthmaker commitments. Philosophical Studies, 141, 7-19.

Schaffer, J. (2009). On what grounds what. In D. C., D. M., & R. W. (Eds.), *Metametaphysics*. Oxford: Oxford University Press.

Schaffer, J. (2010). The least discerning and most promiscuous truthmaker. The Philosophical Quarterly, 60, 307–324.

Sider, T. (2011). Writing the book of the world. Oxford: Oxford University Press.

Sider, T. (2013). Against parthood. In K. Bennett & D. W. Zimmerman (Eds.), Oxford studies in metaphysics (Vol. 8). Oxford: Oxford University Press.

Turner, J. (2011). Ontological nihilism. In D. W. Zimmerman & K. Bennett (Eds.), Oxford studies in metaphysics (Vol. 6, pp. 3–55). Oxford: Oxford University Press.

van Inwagen, P. (1998). Meta-ontology. Erkenntnis, 48, 233-250.

