Ways of Truthmaking[1]
E Barnes

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Truthmaker theorists tend to believe in strange things. Their justification for this is a two-step: firstly, that truthmaker theory is essential to any serious realist metaphysics, and secondly, that a complicated ontology is essential to the success of truthmaker theory. In this paper, I present a version of truthmaker theory which calls this justification into question. The first part of the justification I'll grant the truthmaker theorist for the sake of argument. It's the second part I want to question. In what follows, I outline a version of truthmaker theory which meets all the desiderata of standard truthmaker theory, but which retains a sparse ontology. If this version of truthmaker theory is a viable option, then the standard justifications given by the truthmaker theorists for adopting complex ontologies become problematic. Moreover, seeing why the justification for these complex ontologies is problematic puts pressure on the truthmaker theorist's central claim that explanation should stop only at existence facts.

I begin by (1) introducing truthmaker theory and discussing some of the methodological principles which typically constrain it. I then (2) outline a version of truthmaker theory which uses 'ways of being' to do truthmaking. I conclude (3) by showing why the viability of this theory is a problem for standard truthmaker theory.

1. Truthmaker theory: some background

1.1. The truthmaker principle
Truthmaker theory, in its orthodox presentation[2], involves commitment to something called the 'truthmaker principle', which I'll state as:

(TM): $\forall p$ (p is true $\rightarrow \exists x \ \Box$ (x exists $\rightarrow$ p is true))[3]

That is, for every true proposition, something exists such that that thing can't exist without the proposition being true – the very existence of that thing *makes* the proposition true.

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[1] Many thanks to John Divers, Stephan Kraemer, Jason Turner, Robbie Williams, audiences at the University of Leeds and the University of Toronto, and especially to Ross Cameron.

[2] I'm taking DM Armstrong's theory as the paradigm of truthmaker theory. See, inter alia, Armstrong (1997), (2003), (2004), and (2005).

[3] (TM) is written this way for convenience – formulations of the same basic principle can be given without recourse to existence and truth predicates, but these are, of course, more complicated.

(TM) states the strongest version of truthmaker theory – namely, truthmaker *maximalism*. Some truthmaker theorists argue that not every truth needs a truthmaker (negative existentials or necessary truths are commonly cited exceptions).[4] These defenders of truthmaker theory modify (TM) accordingly.

But this debate aside, the basic idea behind truthmaker theory is simply that every truth must be grounded in being. That is, for every true proposition, we must be able to point to something in our ontology in virtue of which that proposition is true (something which *makes* that proposition true).

1.2 Some methodological constraints
But this requirement is, by itself, very easy to meet. I can simply stipulate that some object (perhaps something important to me, like my dog) plays the role of the Actualizer: the object that makes all and only the true propositions true. That is, I could adopt a theory according to which my dog has a very strict modal profile – she couldn't exist were any actually true proposition false. And I adopt this surprising theory of my dog's essence because if it's true there's an object which satisfies the crucial criterion – (TM) – which the truthmaker theorist tells me must be met. Presto: my truthmaking work is done.[5] But surely a theory according to which everything is made true by my dog isn't a theory which meets the desiderata we were trying to capture by saying that truth must be 'grounded in being'.

The moral here is that a principle like (TM) is not enough to make truthmaker theory interesting or substantial. There must be methodological guidelines in place which constrict how (TM) is used. Perhaps the most prevalent articulation of such guidelines is that truthmaker theory is constrained by the primary goal of *catching cheaters*.[6]

That is, we need the constraint of truthmaker theory in order to identify theories which are claiming that certain propositions are true, but which can give us no appropriate grounding for their truth. Behaviorism doesn't work as a theory of mind, in the most famous example, because it requires ungrounded dispositional facts about mentality – truths without anything that *makes* them true. But behaviorism wouldn't be any better if those dispositional facts were grounded, but grounded by the existence of electrons in the rings of Saturn. The idea is that truth can't be free-floating (the way the behaviorist, and many others, need it to be). Nor can it be grounded by something which is wholly irrelevant to it. If you say some proposition P is true, you had better be able to point to some thing, x, in your ontology such that it's *principled* to say that x *makes* P true. Otherwise, you're cheating.

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[4] See, e.g., Simons (2005) and Mellor (2003) for discussion.

[5] See Cameron (2008).

[6] See Sider (2001) and Cameron (2008).

1.3 Complex ontologies

But once we've got these constraints in place – an ontological grounding for every true proposition (ruling out ungrounded truths like those countenanced by behaviorism) and a requirement that these groundings be principled (ruling out trivial versions of truthmaker theory like the Actualizer) – the project of truthmaker theory becomes a very substantial one. To see why this is the case, consider what could serve as the truthmaker for a simple proposition like 'This rose is red'. It's tempting, at first glance, to say that the rose is what makes this true. But the rose itself isn't enough – the rose could exist but be white instead of red, so the rose could exist without the proposition being true.[7] We could propose that the truthmaker is the rose plus the property of redness, but this won't do either – the rose could exist and the property of redness could exist without the rose being red (if, say, the rose were white and some other object, a carnation, has the property of redness). We need something that ties this particular rose together with redness in order to ensure the truth of the proposition 'This rose is red'. Otherwise, we don't have something that counts as a truth*maker* by the lights of (TM).

But in order to do this, says the truthmaker theorist, we're going to have to complicate our ontology. We're going to have to include some thing or things in our theory of what there is which can necessitate truths like 'This rose is red'. There are various options here – states of affairs, tropes, etc – and truthmaker theorists argue over which is best. They agree, however, that truthmaker theory requires some such ontological complication.[8]

A complicated ontology is a cost for any theory, but according to the truthmaker theorist the cost in this case is justified. We can only get truthmaker theory by complicating our ontology, and truthmaker theory is essential for grounding truth and catching cheaters. Complicating our ontology in this case is a cost, but it's a cost that's staved off by other benefits.

Moreover, the complication in ontology is balanced by a resulting sparsity in *ideology*.[9] In order for the truthmaker theorist to explain the truth of all true propositions, all she has to do is make a complete list of what exists. That's it. An ontological inventory

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[7] This problem arises on the assumption that the truthmaking relation is one of necessitation. For arguments that it is not, see Heil (2003) and Parsons (1999).

[8] Melia (2005) gives an excellent overview of why this is the case, before arguing that truth*makers* should be abandoned for a more minimal notion of truth*making*.

[9] I will be employing the distinction between *ontology* and *ideology* outlined in Quine (1951). See especially Bennett (2009) for general discussion.

exhaustively explains the truth of all true propositions. So while the truthmaker theorist's ontological commitments are robust, her ideological ones are minimal.[10]

1.4 Lewisian truthmaker theory

Not everyone agrees with the truthmaker theorist, however, that the additions she must make to her ontology are justified. Faced with a choice between ontological parsimony and truthmaker theory, we can always opt for ontological parsimony. David Lewis did exactly this.[11] Lewis has little time for truthmaker theory, favoring a sparse ontology instead. As we'll see, though, this qualitative ontological parsimony comes at a cost – to adopt a Lewis-style version of truthmaker theory, we must either believe in a quantitatively extravagant ontology (as Lewis himself did), or we must complicate our ideology.

Lewis did eventually adopt truthmakers in his (2003), but the theory of truthmaking he presents – 'things *qua* truthmakers' – is very much in the spirit of his earlier rejection of the truthmaker project.[12] To account for the truth of a proposition, says Lewis, we must incorporate not just what objects there are, but *how those objects are*. The truth of 'This rose is red' is, according to Lewis, made true by the rose. Not the rose instantiating the property of redness or the state of affairs of the rose being red or the rose having an individuated trope of redness – it's made true just by the rose. To say otherwise, Lewis argues, would be to needlessly overcomplicate one's ontology. Of course, the rose could have been white rather than red. But when we say that the rose is the truthmaker for 'This rose is red', we are referring to the rose *qua red thing*.[13] It is the rose *qua red* that makes it true that the rose is red. And the rose qua red could not have been white. So, for Lewis, ordinary objects serve as truthmakers (rose-qua-red is just the rose), and they are capable of doing so because we can refer to them qua specific predications.

Lewis' account of truthmaking is ontologically parsimonious in terms of what *kinds* of entities he believes in – he does not need to add rarefied entities like states of affairs or an instantiation relation to his ontology. All he needs are individuals and sets. Likewise, his ideology is parsimonious. He only needs the ideology of set theory – the membership relation, the predicates 'member' and 'set', etc. But, familiarly, all this comes at an

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[10] Nolan (2008), for example, shows how the Armstrongian truthmaker theorist can do away with primitive instantiation (by reducing instantiation to facts about states of affairs). The truthmaker theorist's ontology is elaborate enough to allow her to get by with a very minimal ideology – see Cameron (2008).

[11] See especially Lewis (1999) and (2001).

[12] See especially MacBride (2005)

[13] What this means, for Lewis, is that we're making salient the rose's similarity to other red things. By doing this, we can invoke a counterpart relation according to which all the rose's counterparts are red. In this context, the rose is essentially red (and thus necessarily red). So referring to the rose *qua red* specifies a context in which the rose could not have failed to be red, and thus a context in which its true that the rose necessitates 'This rose is red'.

extreme price for Lewis. He can have a qualitatively parsimonious ontology and a minimal ideology because he believes in an *enormous* amount of things – the Lewisian multiverse. He can avoid extra ideology to express predication and the counterpart relation – the key elements of his truthmaker theory – because he reduces properties and relations to sets of possible individuals and sets of sets of possible individuals, respectively.

Familiarly, though, many philosophers want to accept theories which are broadly Lewisian without accepting the commitment to modal realism. This is certainly an option for Lewis' truthmaker theory. Predicates and the counterpart relation don't need to be analyzed in terms of sets of individuals at worlds in order for Lewis' truthmaker theory to work. But if we reject Lewis' extravagant ontology, we have to make up the cost somewhere. A Lewisian theory of truthmakers without modal realism (hereafter, simply 'Lewisian') becomes *ideologically* heavyweight. The Lewisian does not accept Lewis' possibilist ontology, and so cannot accept his reduction of predicates, instantiation, the counterpart relation, etc, to sets of individuals. She thus has to accept these as primitive, and include them in her theory's ideology. Her ideology will thus, for example, contain a massive (perhaps infinite) array of predicates, plus facts about how these predicates are applied in specific contexts. If she forgoes commitment to the multiverse, the Lewisian must incorporate complicated ideology (sets, contexts, primitive predicates, etc) to do the work that Lewis' concrete possible worlds do in his theory.

1.5 The Lewisian v. Armstrong
We can now contrast three quite different forms of truthmaker theory. Standard truthmaker theory use an elaborate actualist ontology with a minimal ideology. Lewis's uses an elaborate possiblist ontology with a minimal ideology. The Lewisian uses an minimal actualist ontology with an elaborate ideology. In the following discussion, I'll largely leave Lewis' own view to the side, since I take it that very few people other than Lewis himself want to do truthmaker theory via modal realism. The more illustrative contrast, I think, is between Armstrong and the Lewisian.

The Lewisian version of truthmaking allow for a contrast between two basic paradigms of truthmaker theory. One the one hand we have the Lewisian, keeping ontology sparse and complicating ideology in order to account for truthmaking. As the exemplar of the opposing paradigm I'll consider Armstrong. Armstrong complicates his ontology by reifying states of affairs and including a higher-order 'totality fact'[14], but he keeps his ideology minimal (no need for predicates, a counterpart relation, the machinery of set theory, etc).

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[14] This is the second-order state of affairs which says that the first-order states of affairs which actually exist are all the first-order states of affairs there are. Armstrong needs this in order to account for the truth of negative existentials like 'There are no unicorns'. No first-order state of affairs by itself makes this true (since none of them talk about unicorns), but all the states of affairs (none of which include unicorns) combined by the totality fact does make it true.

Orthodox truthmaker theory has tended to follow the Armstrongian paradigm, rather than the Lewisian one. Indeed, proponents of truthmaker theory have almost universally rejected the Lewisian version of it.[15] The worry with the Lewisian picture seems to be that it cannot do what it advertises: that is, that truthmaker theory can't be done successfully with a minimal ontology compensated by a complicated ideology.[16]

Lewis says we should look not only at what exists (roses, redness, etc) but at how things are. It's enough to make true 'This rose is red', on Lewis' view, that the rose exists redly – by which he means that there's a salient context in which we can truly refer to the rose as being essentially red. But for someone attracted to truthmaker theory, this account is problematic – whether or not some portion of reality grounds the truth of some proposition shouldn't, according to someone tempted by (TM), depend on context.

On the Lewisian model, truthmaking rests on salient similarities: we make salient the similiarity between this rose and other red things, thus invoking a counterpart relation according to which all the rose's counterparts are red, thus singling out a context in which it's true that the rose is *essentially* red. The notion of 'salient similarity' here could be construed either as objective similarity made salient or subjective facts about our inclinations to judge things as similar. For Lewis, similarity is understood in the latter way, but it's worth briefly considering the former.

If there are objective similarities out there in the world, waiting to be made (appropriately) salient, then Lewis' truthmaker theory seems to get its direction of explanation wrong. If we assume that there's a context in which it's appropriate to refer to x-qua-F, then that is to assume that facts about the world are sufficient to ground talk of x's being F. But if that's the case, then surely whatever those facts are, they are what the truthmakers should be (i.e., the truthmakers should invoke that *there are* these similarities which we can then make salient, rather than simply that we make these similarities salient, and this salience allows us to do truthmaking). If there have to *be* objective similarities in the world in order to ground our talk of similarities, then it's the facts that ground these similarities that should ground the predications about them, rather than vice verse.

For Lewis, however, similarity and the appropriateness of contexts we can invoke based on it are not objective matters.[17] This also looks problematic, because it makes truthmaking all too easy to come by – all you'd have to do to find out whether a

[15] Note also that much of the criticism that follows – i.e., objections to making truthmakers dependent on context – apply as much to Lewis himself as to the non-modal realist version of his theory.

[16] See Armstrong (2004), chp. 2 for exactly this criticism.

[17] Lewis does think that there are objective similarities – it's just that he doesn't require objectivity in the similarities which ground truthmaking.

proposition like 'This rose is red' has a truthmaker would be to determine if there's a context in which you can appropriately refer to the rose as red. But formulated like this, truthmaker theory no longer looks capable of catching cheaters. The worry is that contexts are cheap and easy to gerrymander. Consider again the famous example of behaviorism. It's likely that, for some unmanifested behavioral disposition Φ of person x, we can force a context in which it's appropriate to refer to x as being Φ. That's enough, on the Lewisian picture, to make 'x is Φ' true, even if there's no x-related *ontology* we can point to which grounds its truth.

Here is the gist of the objection: the truthmaker principle is meant to be an ontological principle about what *grounds* truth, whereas the Lewisian story makes it a psychological matter. To successfully invoke a context in which a is necessarily F, all we need to do is make certain similarities *salient*. And what similarities are salient is a fact about our own mental states, not about how the world is. Whether or not Ryle is cheating when he says that x is Φ (for some unmanifested Φ) shouldn't depend on whether or not there's a similarity relation linking x to other things which are Φ which happens to matter to us at the moment we're considering the question. Ryle is cheating if he can't ground his claims in ontology. And that's independent of whether there are relations of similarity which are salient to us.

The basic truthmaker principle – (TM) – looks open, on its own, to accusations of vacuity. Why can't I just believe in something like the Actualizer which trivially meets the requirements of (TM)? So the truthmaker theorist, if she thinks that truthmaker theory places substantial requirements on the world, must think that (TM) is governed by methodological guidelines. A key such guideline is that we need truthmaker theory to be able to catch cheaters – to show which theories don't appropriately ground truth in ontology. But the Lewisian view is poorly equipped to do this. By making truthmaking heavily dependent on predication and context, rather than simply on what exists, it's far from obvious how Lewisian truthmaker theory can identify which theories appropriately ground truth in ontology and which don't. The Lewisian view – whatever its other virtues – looks poorly suited to the main task of truthmaker theory: it can't catch cheaters.

Armstrong-style truthmaker theorists can then point to this problem with the Lewisian version to justify their more complicated ontology. A complicated ontology is a cost, but the truthmaker theorist claims that cost is justified because it enables you to ground truth in ontology (the project of truthmaker theory). The cost is *only* justified, however, if you can't account for truthmakers without it. Lewisian truthmaker theory, if successful, would show that you can account for truthmakers with a simple ontology, and thus would undermine the Armstrongian claim that a more complicated ontology is justified (or at least shift the debate to whether it is better to complicate ontology and leave ideology minimal, or complicate ideology and leave ontology minimal). But the Armstrongian truthmaker theorist says that Lewisian truthmaker theory is not successful. It isn't suitable for catching cheaters, precisely because it places too much weight on ideology

and not enough on ontology. The *only* way to successfully catch cheaters, says the Armstrongian truthmaker theorist, is to explain truthmaking via ontology. And so you must complicate your ontology if you want to be a truthmaker theorist.

2. Ways of being, ways of truthmaking

In what follows, I will present a version of truthmaker theory which I think undermines this claim. It is a version of truthmaker theory which is Lewisian in spirit – it keeps ontology sparse. Yet I will argue that it avoids the major criticisms faced by Lewisian truthmaker theory. It is, in a sense, an ontologically robust version of the 'things-qua-truthmakers' idea. I should make very clear that I don't intend to defend the view I'll outline here. The point of elucidating the position is a purely dialectical one. If the orthodox truthmaker theorist – the Armstrongian – is to be justified in adopting a complex (and often counterintuitive) ontology, she must be able to claim that truthmaker theory cannot be done without such ontological plenitude. A version of truthmaker theory which uses only sparse ontology is thus a major challenge, methodologically, to the Armstrongian truthmaker theorist.

To put it succinctly, the view I'll outline is a very strange one. But then, standard truthmaker theory is very strange as well. If the view explained here successfully meets the desiderata of truthmaker theory, then the standard truthmaker theorist needs to be able to say why we should prefer her strange view to this strange view.

2.1 Ways of being

The view I'm interested makes appeal to *ways of being*. That there are ways of being is the idea, defended in recent work by Kris McDaniel[18] and Jason Turner[19], that being or existence is not univocal – different objects can exist in different ways. Put like this, the idea is obviously a murky one, and it's one which has largely been considered incoherent since the early parts of the 20th century (though it has strong historical foundation). McDaniel and Turner, however, have done a great deal to show how we can make sense of it.

They argue, very persuasively, that there could be multiple natural (in the Lewis-Sider sense of 'natural'[20]) meanings for the existential quantifier. The existential quantifier, '∃', could have multiple domains, each of which are equally good candidates for the meaning of 'exists' (without there being some further, special domain which is the *best* meaning for '∃'). That is, there could be different existential quantifiers that '∃' is ambiguous among, such that either each quantifier is perfectly natural or all are very

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[18] McDaniel (2009). (forthcoming), (MS)

[19] Turner (forthcoming)

[20] As in: 'carves the world at its joints'. See especially Sider (2009).

natural and none is more natural than all the others. McDaniel interprets this as the idea that there could be 'ways of being'.

If, for example, abstract and concrete objects represent two separate, perfectly natural domains for the existential quantifier, the idea would be that both numbers and tables exist, but they exist in different ways. Numbers are just as real as tables, but it's a different thing to exist as a number than it is to exist as a table – numbers exist abstractly and tables exist concretely. So when we say 'there is a number', we're saying something of the form '$\exists_{abstract}$ x (x is a number)' and when we say 'there is a table' we're saying something of the form '$\exists_{concrete}$ x (x is a table)'. There will still be a generic sense of 'exists' – the quantifier whose domain is the union of the domains of $\exists_{abstract}$ and $\exists_{concrete}$ quantifiers (assuming, for the sake of the example, that concrete and abstract are the only two ways of being). The distinctive claim is simply that this generic quantifier is not *more natural* than either of the restricted quantifiers which pick out 'ways of being'. That is, if being abstract is a way of being, it is not more natural to say that something exists simpliciter than to say it exists abstractly. The ways of being quantifiers are 'restricted' only in the sense that they can have fewer things in their domains than the generic '$\exists$'; their meanings are not analyzed in terms of a restriction on the generic quantifier, but rather the generic quantifier is analyzed in terms of their union.

I am not, in this paper, going to rehearse the arguments for ways of being. These have been covered in depth and detail elsewhere. I will simply assume that ways of being (i.e., multiple natural meanings for the existential quantifier) is a *coherent* philosophical thesis. That is, I'll assume it's an option on the table.

2.2 Lewisian truthmaker theory, with ways of being
The examples of ways of being given by McDaniel involve only a few varieties of meaning for the existential quantifier: there might be, for example, concrete existence, abstract existence, fictional existence, merely possible existence, etc. But there seems to be no requirement, given the arguments that multiple natural meanings of the quantifier are possible, that the number of candidate perfectly natural meanings be small.

The proposal here is that we accept (for the sake of argument) plentiful ways of being, and use them to do truthmaker theory. I'll argue that this allows for the construction of a more 'ontologically serious' version of Lewisian truthmaker theory, which does not face the same objections that Lewis' own theory does. Again, I haven't argued that ways of being are plausible, or that we should accept them. And for the purposes here I don't need to. I merely need the assumption – which I think work by McDaniel and Turner more than adequately supports – that ways of being are *coherent*. If that assumption is correct, then I think that the view I'm presenting is at least an option on the table for truthmaker theory. And as such, it presents a serious dialectical challenge to the standard truthmaker theorist.

Allow a way of being for *at least* every intrinsic monadic predicate.[21] If we do this, we have a story to tell about what makes true propositions like 'This rose is red': the mere fact that the rose exists (in the generic sense of exists) isn't enough to guarantee its truth, but that the rose exists *redly* is. That is, that the rose exists in a red way – has a red way of being – can serve as the truthmaker for 'This rose is red'.

This thought is, of course, very similar to the Lewisian idea. For the Lewisian, the truthmaker for 'This rose is red' is just the rose. But it's the rose *qua* red thing. On the ways of being picture, the truthmaker is also just the rose. But it's the rose *existing redly*. The difference is an important one. The rose *qua* red thing is, for the Lewisian, an ideological matter – the rose is necessarily red if we can make salient a rose-qua-red context in which predication of redness to the rose is essential to it. Contrast this to the ways of being model. That the rose exists redly is a matter of ontology if anything is; ontology is the question of what exists, and on a ways of being picture that the rose exists redly is as or more fundamental than that it exists simpliciter.

In this sense, ways of being allows for a more ontologically robust version of Lewis' truthmaker theory. The basic idea – that a truthmaker for 'x is F' can just be x, if we consider x-as-F – remains largely the same. But ways of being presents an ontologically inflationary reading of x-as-F (x existing F-ly), whereas Lewis characterizes x-as-F via predication and context. On the ways of being picture, whether an entity makes a proposition true is a fact about the world (and nothing to do with us); for Lewis it is a fact about how we're thinking about an entity that determines whether that entity makes a given proposition true.

But at what cost do we get this more ontologically heavyweight reading of Lewis? Ways of being are strange enough, but to multiply them to the point where we have one for each intrinsic monadic predicate surely starts to push the borders of extravagance. Well, not obviously. True, the picture sketched here requires elaborate multiplication of the basic ways of being picture. This expands the theory's ideological commitments. But to what extent it expands them is questionable.

Firstly, it's tempting to think that once we have admitted ways of being *per se* into a theory, it's not too drastic a step to admit *lots* of ways of being. McDaniel suggests motivation for positing a way of being can be either intuitive appeal, theoretical utility, or some combination of both. The picture I present requires a plenitude of ways of being. It seems plausible to me that intuitive motivation could be used to justify the initial move from thinking of being as univocal to positing ways of being (the move from one to two natural meanings for the existential quantifier is surely the biggest). That is, when weighing theoretical costs, the difference between one and two perfectly natural

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[21] This will require that the domains of the different existential quantifiers can overlap – i.e., that a single object can have more than one way of being. McDaniel (2009) and Turner (forthcoming) both concede this as a viable option.

meanings for the existential quantifier is much greater than the difference between two and n, for some relatively high n. Once you're committed to more than one, you've bitten the major bullet. After that – once you've got ways of being in your ideology, that is – the question of how many to have becomes one of theoretical utility. So if a plenitude of ways of being can do significant theoretical work (e.g., truthmaking) it's not obviously a mark against it that such a plenitude of ways of being isn't intuitive.

Moreover, the large number of ways of being are not merely theoretical excess baggage. By allowing ways of being for each intrinsic monadic predicate, we can replace Lewisian predicates with ways of being. Lewis needs an ideology of predicates to help explain the truth of propositions like 'This rose is red'. But this truth is explicable, using ways of being, by the rose's existing redly. We can thus replace predicates with specified quantifiers and identity by using the 'generic' quantifier (call this '∃*') combined with the primitive natural quantifiers: '∃x(x is red)' becomes '∃*x∃$_{red}$ y(y=x)'. So by complicating one component of ideology (natural meanings for the existential quantifier) we can eliminate the need for another (primitive predicates). This looks, at least to me, like a balanced trade-off.

Let's now take a step back and see how Lewisian truthmaker theory compares with truthmaking via ways of being. In both cases, we can have an ultra-sparse ontology: just individuals and sets. There's no need, at least from truthmaker theory to complicate this, because individuals (rather than states of affairs, instantiations, etc) are doing the truthmaking. Individuals (and nothing more complicated) can serve as truthmakers, because while the ontology is minimal the ideology is quite elaborate. And it's the ideology that does most of the work. The main component of Lewisian ideology is a plenitude of primitive predicates. The main component of the ways of being ideology is a plenitude of ways of being. The ways of being picture presented here is thus very Lewisian in spirit – it keeps Lewisian actualist ontology, it keeps the majority of the truthmaking work at the level of ideology, and it has a plentiful ideology similar in scope (though with a different central element) to the Lewisian.

2.3 Ways of being and standard truthmaker theory
Comparisons to the Lewisian aside, though, how does the ways of being model fare as a theory of truthmaking? Basic cases like 'This rose is red' are handled straightforwardly – the existence of the rose makes this true, because existence on the ways of being model is more specified then the generic sense of existence we usually employ. The rose doesn't simply exist, it *exists redly*. That is, it has a specific way of being – a red way of being. It's impossible that the rose could exist in this way – have this way of being – and yet not be red. So that the rose exists redly necessitates the truth of 'This rose is red'.

Orthodox truthmaker theory as stated above, however, includes a commitment to truthmaker maximalism – the claim that all truths (not just the monadic or positive ones)

have truthmakers. So in addition to truthmakers for propositions like 'This rose is red', we need truthmakers for relational truths like 'This rose is next to this that tulip' and negative truths like 'There are no 1,000kg roses'. To be an option for standard truthmaker theory, the ways of being model needs to be able to account for these truths as well.

There are several ways one might do this, but since I'm interested in giving a reinterpretation, via ways of being, of Lewis, I'll follow Lewis' own solution to the same problem.[22] For Lewis, the truthmaker for 'There are no 1,000kg roses' is the world – the world *qua* unaccompanied by 1,000kg roses. An analogous solution for the way of being theory is this: allow that the world itself has a way of being (that is, allow that there are ways of being corresponding to maximal world properties). The truthmaker for 'There are no 1,000kg roses' can then be the world. The world has a particular way of being – call it *w* – which makes it true that there are no 1,000kg roses. That the world exists in a w-way, rather than a w*-way or a w′-way settles the negative facts about the world.

In the same way, we can provide truthmakers for relational facts. Even with a plenitude of ways of being, it looks uncomfortable to allow that things like 'being next to a tulip' are ways of being (just as it looks uncomfortable for Lewis to admit that the rose exists *qua* next to a tulip[23]). So if 'This rose is next to the tulip' is true, we need a way to ground this truth that's somewhat different than the grounding for 'This rose is red'. Admitting a way of being for the world itself solves this problem. That the world exists in way *w* settles location facts (e.g., where the rose is) as well as relational facts (e.g, that the rose is next to the tulip). The world couldn't have existed in way *w* without the rose and the tulip being where they are, and thus without the rose being next to the tulip.

Solving the problem of negative existentials and relational facts this way does mean allowing for a way of being which is extrinsic (that is, a way of being such that something's existing in that way necessitates facts about its surroundings). But any theory that wants to capture the full extent of truthmaker maximalism has to admit *some* costs to do so. The truthmaker theorist can either give up maximalism and accept a weaker version of truthmaker theory, or accept the costs as outweighed by the theoretical benefits of maximalism.

But the traditional truthmaker theorist may protest that the ways of being theorist cannot stop simply with a story about how to give truthmakers for negative existentials. She also needs to tell what truthmakes propositions like 'x has way of being F'. On this picture of ways of being, things have their ways of being contingently (the rose exists red-ly, but it could've existed white-ly). They may also have their ways of being temporarily (the rose exists red-ly at t_1, but exists brown-ly at t_2) – things can change what way of being they

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[22] See Lewis and Rosen (2003)

[23] See MacBride (2005)

have.[24] Given this, surely the ways of being theorist should give truthmakers for objects having the particular ways of being they have.

If we're simply after a ways of being reformulation of standard truthmaker theory, however, this objection should be resisted. The basic thought behind truthmaker theory is that explanation should stop at existence (and no sooner). Truth must be grounded in being – but once it's grounded in being the task of truthmaker theory is finished. And for the ways of being theorist, facts like 'x exists F-ly' are the most primitive, fundamental existence facts there are. That x exists F-ly is as or more fundamental than that x exists simpliciter. So facts like 'x exists F-ly' are exactly the sort of facts – basic existence facts – at which, according to the truthmaker theorist, explanation should stop. Asking for further explanation (i.e., a further truthmaker) for 'x exists F-ly' is equivalent to asking the standard truthmaker theorist for further explanation of 'x exists'. By the truthmaker theorist's own lights, this is exactly the point at which explanation comes to an end.

We now have the outline of a reformulation of Lewisian truthmaker theory via ways of being. Simple intrinsic predications – like 'This rose is red' – are made true simply by objects. Objects can serve as truthmakers for these facts because they exist in specified ways of being (and couldn't exist in that particular way of being without the fact being true). More complex facts – conjunction, disjunction, etc – will follow the standard rules. Problem cases like negative existentials and relational facts are made true by the world (which itself has a particular way of being).[25]

We thus get all the results of standard truthmaker theory. Importantly, though, the ways of being picture does require a restatement of (TM).[26] The truthmaking principle, as given above, was:

> (TM): $\forall p \,\forall p$ (p is true $\rightarrow \exists x \,\Box$ (x exists $\rightarrow$ p is true))

whereas on the ways of being model the truthmaker principle will instead be:

> (TM)*: $\forall p$ (p is true $\rightarrow (\exists_1 x \,\Box$ (x exists$_1 \rightarrow$ p is true) v $\exists_2 x \,\Box$ (x exists$_2$ $\rightarrow$ p is true) v $\exists_3 x \,\Box$ (x exists$_3 \rightarrow$ p is true). . .))

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[24] Though there is precedent for this. McDaniel suggests in his (MS) a difference between objects which exist presently and those which exist pastly. Since what now exists pastly used to exist presently, this view requires that objects can change their way of being.

[25] There will, of course, be a further problem of how to handle truthmakers for modal truths, but modal truths are a problem for *all* truthmaker theories – they don't pose a particular challenge to the ways of being theorist.

[26] Indeed, (TM), since it uses the generic '$\exists$' is false on the ways of being picture. There's no object that exists, in the generic sense of 'exists', and necessitates the truth of 'This rose is red'. The rose makes that sentence true, but the rose could exist (in the generic sense) and that sentence be false.

The traditional truthmaker theorist might protest that any restatement of (TM) means standard truthmaker has been abandoned, and thus that no theory which requires such restatement should count as capturing the commitments of standard truthmaker theory. This doesn't seem right, though, in the context of discussing ways of being. (TM) involves existential quantification. Standard truthmaker theory assumes that there is a single most natural existential quantifier. A believer in ways of being denies this – she thinks there are many perfectly natural existential quantifiers. Thus we should expect that a principle like (TM) – one that involves existential quantification – will need to be reformulated slightly if we assume ways of being. It's not that the idea behind truthmaking is different according to (TM)* than it is according to (TM). It's just that (TM)* is how you express the idea captured by (TM) once you have more than one perfectly natural existential quantifier.

The *reasons* for positing something like (TM) – that is, the reasons for adopting standard truthmaker theory – were along the following lines: we need truth to be grounded in being, we need explanation to stop at existence but no sooner, we need to be able to catch cheaters, etc. These are the basic desiderata of truthmaker theory. (TM)* does as good a job at capturing those commitments, by *the lights of the person who is committed to ways of being*, as (TM) does for the standard truthmaker theorist. So it should be no objection to the ways of being model that it rejects the truthmaker principle. It rejects the standard formulation of the truthmaker principle. But if we consider the aim of the truthmaker principle to be capturing the basic commitments of truthmaker theory, then (TM)* *is* the truthmaker principle for the person who believes in ways of being.

3. The Challenge

3.1 Ways of being v. Armstrong

The proceeding sections have given a rudimentary outline of a version of truthmaker theory which invokes ways of being, and shown how this theory can naturally be understood as a more ontologically robust reformulation of Lewisian truthmaker theory. Let's now compare it to the paradigm truthmaker theory – Armstrong's theory of universals.

For Armstrong, the truthmaker for 'This rose is red' is the state of affairs of the rose being red. The rose could exist without being red (it could be white), and both the rose and redness could exist without the rose being red (the rose could be white and poppies could

be red). But Armstrong's ontology includes states of affairs[27] (which are the same thing as facts, for Armstrong), and these states of affairs entails truths that individuals and universals, by themselves, can't. The state of affairs of the rose being red necessitates the truth of 'This rose is red' – it's not possible for that state of affairs to exist but the proposition to be false. To handle negative existentials, Armstrong must also admit a higher-order 'totality fact' – the fact that all the actual states of affairs are all the states of affairs there are.

The ways of being theorist has a much simpler ontology – only individuals.[28] She does not require that her ontology build in facts, or include strange entities like states of affairs. The truthmaker for 'x is F' is just x. She can do this because she commits to a heavyweight *ideology* – a multitude of perfectly natural meanings for the existential quantifier (that is, a multitude of *ways of being*). Because x doesn't just exist simpliciter – it exists F-ly – the existence of F by itself can serve as a truthmaker. No ontological complication is needed.[29]

3.2 Why ways of being catches cheaters
Armstrong-style truthmaker theorists complained that Lewisian truthmaker theory wasn't ontologically robust enough to fulfill the purpose of truthmaker theory. Because it grounded truthmaking in ideology rather than ontology, it couldn't catch cheaters. The ways of being model, though, presents a truthmaker theory which is Lewisian, but which isn't subject to a similar objection. Truthmaking, for the ways of being theorist, doesn't depend on predication, context, or any other such portion of ideology to which the truthmaker theorist might object. Truthmaking depends on what exists – end of story.

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[27] It's very unclear, from Armstrong's own writing, what the relationship between universals, particulars, and states of affairs should be. Sometimes he speaks as though universals and particulars are combined in a compositional or quasi-compositional relation to produce states of affairs. At other times, he speaks as though states of affairs are the fundamental entities, and the existence of universals and particulars is in some sense derived from the existence of the states of affairs. Some remarks even suggest that states of affairs and their constituents (universals and particulars) are mutually dependent. Cameron (forthcoming) discusses this unclarity and suggests that the Armstrongian truthmaker theorist ought to adopt the view that states of affairs are fundamental (with the existence of universals and particulars derived from them) if his theory is to be successful.

[28] And perhaps sets, if she needs sets for the domains of her quantifiers.

[29] It's worth noting that, as a result, the ways of being theorist can avoid Lewis' argument that truthmaker theory is objectionable because it violates the Humean denial of necessary connections between distinct existents. Or at least she can avoid this objection on one translation of the denial of necessary connections into the ways of being framework. If it's objectionable merely that the existence in the generic sense of an object should necessitate the existence of any other object (again in the generic sense), then the ways of being model avoids the worry – it involves no such connections. If what's objectionable is something stronger – that an object existing F-ly entails the existence of an object existing G-ly, or an object existing in the generic sense – then the ways of being model will violate the constraint. But it's hard to see why the believer in ways of being should think these kinds of connections are objectionable – they aren't really connections between *distinct* existences of the kind Lewis had in mind. See Lewis (1999) for the objection to the truthmaker theory.

The standard truthmaker theorist may object, at this point, that on the ways of being model truthmaking does not in fact depend merely on what exists – it depends on what exists *and* how it exists. For the standard truthmaker theorist, facts like 'x exists' don't stand in need of further explanation, whereas facts of the form 'x is red' do require such explanation. Explanation can stop at existence, but nowhere else. The standard truthmaker theorist may thus object that any notion of existence which builds in *how* things are – in addition to *that* they are – is not an acceptable notion of existence, insofar as it's not an acceptable place for explanation to stop. Existence, in the generic sense, can be primitive, but no more specific sense of existence can be primitive.

Yet from the perspective of believer in ways of being, we should expect the opposite: generic existence cannot be taken as primitive, because it needs to be explained by the (more fundamental) non-generic existential quantifiers. The standard truthmaker theorist stipulates that it's appropriate to halt explanation at (and only at) a certain kind of fact – namely, a generic existence facts. She owes the defender of ways of being an explanation of why these sorts of facts are somehow better, or more explanatorily privileged, than those taken as fundamental on the ways of being model. The defender of ways of being also halts explanation at existence – and grounds all truths in existence facts – but thinks that how a thing exists is fundamentally built in to that thing's existence.

The ways of being theorist's ideology enables her to say this, because her (elaborate) ideology sets up a structure in which there are multiple ways for a thing to exist. But truthmaking itself is done by ontology – by existence facts – exactly as the standard truthmaker theorist demands. So the ways of being theorist – like Lewis – accounts for truthmakers with a simple ontology and a complex ideology. But the way she does this is not open to the standard objections lobbied at the Lewisian.

To illustrate, consider again the famous case of behaviorism. The behaviorist requires that, for some mental agent x and some unmanifested disposition F, it can be true that 'x is F'. What grounds this truth? Not inner-state mentality. Not behavior (since the disposition is never manifested). So the worry is that *nothing* grounds it – unacceptable, by the lights of truthmaker theory. The subsequent worry for Lewisian truthmaker theory is that it cannot call the behaviorist out for cheating – so long as we can refer, in some context, to x qua F, then 'x is F' is made true. No such objection applies to the ways of being theorist. Forget predication, context, reference, etc: for 'x is F' to be true, x must exist F-ly. And, according to the ways of being model, that's as ontologically robust a fact as any truthmaker theorist could demand.

3.3 Why it matters
So the ways of being model shows how we can give an ontologically robust version of truthmaker theory – one which meets the desiderata laid out by the standard truthmaker theorist – *without expanding ontology*. The ways of being model grounds truth in existence, and it does so in a manner capable of catching cheaters – exactly what the

standard truthmaker theorist says a successful truthmaker theory has to do. But it nevertheless manages to keep an ultra-sparse, Lewisian ontology.

This is at the expense, of course, of a highly complex ideology. But the salient point here is that this is exactly what the standard truthmaker theorist has said truthmaker theory cannot do: it cannot minimize ontology by complicating ideology. That is, standard truthmaker theory maintains that you *must* complicate your ontology if you want to be a truthmaker theorist. Doing so is the only way to ensure that truth is sufficiently grounded in existence.

The ways of being model shows why this is not the case. There are ways of doing truthmaker theory with a simple ontology and a complex ideology that remain, by the truthmaker theorist's own lights, 'ontologically robust' enough. Just because complex ideology *allows* for truthmaking does not mean that the ideology rather than the ontology is what makes things true.

By why should the standard truthmaker theorist care about any of this, if the ways of being model presented here is only a fringe view? The point is a dialectical one. Truthmaker theory, in its many forms, tends to commit to extravagant and rarefied ontologies. Such ontological commitments are a heavy theoretical cost. But the standard truthmaker theorist says that this cost is justified, because truthmaker theory can *only* be done successfully if we complicate ontology. If – as the ways of being model shows – a theory can coherently (even if implausibly) meet the requirements of standard truthmaker theory without complicating ontology, then the justification given by the standard truthmaker theorist is called into question. Nothing *forces* you to complicate ontology in order to fulfill the desiderata of truthmaker theory. Given that, why is complicating your ontology justified? Why not favor a sparse ontology complemented by a more complex ideology, since such a combination does equally well for truthmaking?

Outlining the ways of being model forces the truthmaking theorist to bolster their justification for their outlandish ontologies. They need to say why an extravagant ontology is better than a minimal ontology with an extravagant ideology. Or, perhaps, they need to articulate some further desiderata of truthmaker theory not met by the ways of being model. The key point is simply that if the ways of being model can account for truthmaking – even if it does so rather strangely – this poses a challenge to standard truthmaker theory.

Works Cited

Armstrong, David, (1997), *A World of States of Affairs*, Cambridge: Cambridge
      University Press.
---. (2003), 'Truthmakers for Modal Truths', in Lillehammer and Rodriguez-
      Pereyra (eds) *Real Metaphysics*, London: Routledge, p 12–24.
---. (2004), *Truth and Truthmakers*, Cambridge: Cambridge University Press.
Bennett, Karen (2009): 'Composition, Colocaiton, and Metaontology' in Chalmers, et al
      (eds) *Metametaphysics*. Oxford: OUP.
Cameron, Ross (2008): 'Truthmakers, Realism, and Ontology' in Robin Le Poidevan
(ed.)
      Being: Contemporary Devlepments in Metaphysics. Royal Institute of Philosophy
      Supplement (83), p. 107-28.
---. (forthcoming): 'From Humean Truthmaker Theory to Priority Monism'. *Nous*.
Heil, John (2003): From an Ontological Point of View. Oxford: OUP.
Lewis, D. (1999). A world of truthmakers? In D. Lewis (Ed.), *Papers in Metaphysics and
      Epistemology*. Cambridge: Cambridge University Press. 215-220.
---. (2001). Truthmaking and difference-making. *Nous, 35*(4), 602–615.
---. (2003). Things qua truthmakers. In H. Lillehammer, & G. Rodriguez-Pereyra (Eds.),
      Real Metaphysics (pp. 25–38). London: Routledge.
Lewis, D., & Rosen, G. (2003). Postscript to things qua truthmakers. In H. Lillehammer,
      & G. Rodriguez-Pereyra (Eds.), *Real metaphysics* (pp. 39–42). London:
      Routledge.
MacBride, Fraser (2005): 'Lewis's Animadversions on the Truthmaker Principle' in
      Beebee and Dodd (eds.) *Truthmakers: The Contemporary Debate*. Oxford: OUP.
      117-140.
McDaniel, Kristopher (2009): 'Ways of Being' in Chalmers, et al (eds.) *Metametaphysics*.
      Oxford: OUP.
---. (forthcoming): 'Being and Almost Nothingness'. Nous.
---. (MS): 'Ways of Being and Time'.
Melia, Joseph (2005): 'Truth without Truthmakers' in Beebee and Dodd (eds.)
      Truthmakers: The Contemporary Debate. Oxford: OUP. 67-84.
Mellor, D.H., (2003), 'Real Metaphysics: Replies', in Lillehammer and
      Rodriguez-Pereyra (eds) (2003), p 212–238.
Nolan, Daniel (2008): 'Truthmakers and Predication'. *Oxford Studies in Metaphysics* (4),
      p. 171-191.
Parsons, Josh, (1999), 'There is no truthmaker argument against nominalism',
      Australasian Journal of Philosophy 77(3), p 325–334.
Quine, WVO (1951): 'Ontology and Ideology'. Philosophical Studies 2 (1)., p. 11-15.
Sider, Theodore (2001): *Four-Dimensionalism*. Oxford: OUP.
---. (2009): 'Ontological Realism' in Chalmers, et al (eds.) *Metametaphysics*. Oxford:
      OUP.
Simons, Peter, (2005) 'Negatives, Numbers and Necessity: Some Worries

About Armstrong's Version of Truthmaking', Australasian Journal of
Philosophy 83(2), p 253–261.

Turner, Jason (forthcoming): 'Ontological Pluralism'. *Journal of Philosophy*.