From Truth Pluralism to Ontological Pluralism
…and Back

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1 Introduction

Ontological pluralism holds that there are different ways of being. Truth pluralism holds that there are different ways of being true. Both views have received a growing amount of attention in recent literature, but, at present, there has been very little discussion of the connections between the views, or how work on one might inform work on the other. In this paper we aim to undertake some investigations in this direction. We begin by suggesting that interesting motivations for ontological pluralism can be developed by noting the similarities between the ways that debates about truth and debates about existence have developed, and that the motivations typically given for truth pluralism plausibly have analogues to provide motivations for ontological pluralism (§2). We then go on to consider in more detail the precise relations between truth pluralism and ontological pluralism (§§3–4). We argue that, whilst there are no entailments from truth pluralism to ontological pluralism, nor vice versa, those who hold one view and wish to hold the other will find routes by which to do so. In the final part of the paper we identify some disanalogies between the views, by considering whether certain 'mixed' problems commonly pressed against truth pluralism — namely the problems of mixed inferences and mixed compounds — have analogues for ontological pluralism (§5). We argue that, while there are many similarities in the literatures, there are also some surprising dissimilarities between the views, and some of the most pressing mixing problems for truth pluralism turn out to not to be problems for ontological pluralism.

2   Motivations

Ontological pluralism, as it is to be understood here, is the thesis that there are different ways of being an object: that things exist in different ways. This is a view that has been explored in some detail in recent work in metaphysics, but it is fair to say that there may still be some degree of puzzlement over what the motivations for the view are. The purpose of this section is consider whether there are motivations for the view which spring from considerations concerning the project of giving an analysis of the nature of existence. In particular, we will argue that there are striking parallels between debates about existence and debates about truth, and that these parallels suggest that an ontological pluralist would do well to consider the corresponding motivations for truth pluralism when motivating their view. This will also, as we will see, have some implications for the way in which ontological pluralism ought to be formulated if we are to take these motivations seriously.

The strategy we are considering for the ontological pluralist to pursue is one in which they ask the following question: "What can't we do if we don't admit different ways of being?", and give the following answer: "We cannot provide a satisfactory account of existence." If it turns out that ontological pluralism is required in order to give a satisfactory account of existence, then evidently that will count in favour of the view. This is our strategy in this section: to try to show that there is a distinctive and attractive account of the nature of existence that ontological pluralism can provide.

2.1   The Deflationary Trend

Let us take perhaps the most obvious issue here head-on. Of course, one might wonder whether there is not a perfectly serviceable account of existence that removes the need to think about these questions. In particular, one might think that Quine's contribution to the notion of existence tells us all we need to know.

Quine's Dictum   To be is to be the value of a variable.

As influential as an account of existential commitments as this has been, it is important to note that QUINE'S DICTUM does *not* offer an analysis of existence in the traditional sense, as Quine himself acknowledged. What is at issue here is not *existence*, but rather what it is for a theory to be *committed* to the existence of an entity. As Quine notes,

> We look to bound variables in connection with ontology not in order to know what there is, but in order to know what a given remark or doctrine, ours or someone else's, says there is; and this much is quite properly a problem involving language. But what there is is another question. (Quine [25, p. 15])

Evidently, Quine notices a separation between what a theory says exists, and what the extension of 'exists' is, but we can also extend the point to a separation between what a theory says exists, and what *existence* itself is. At least on the pre-Quinean understanding of existence, what it is to exist is not simply a problem involving language, and not simply reducible to the question of what it is to be committed to the existence of an entity. However, despite this, QUINE'S DICTUM had radical consequences for work on existence. There was a substantial shift in interest towards issues of quantification and ontological commitment, and work on existence was just considered to be work on the relevant quantifiers and their behaviour. As a consequence, relatively little attention has been given since to the kinds of questions about the nature of existence we began with.

The prevalence of the existential quantifier in contemporary discussions of existence reflects this trend. As Kit Fine puts it:

> [T]he commonly accepted view …is that ontological questions are quantificational questions. (Fine [14, p. 158])

Moreover, even contemporary ontological pluralists tend to define their position in terms of the view that there are multiple quantifiers, such as, for example, Turner:

> To put ontological pluralism in a nutshell: the true fundamental theory uses multiple existential quantifiers. (Turner [38, p. 9])

According to this view, existence is captured by the existential quantifier in a fundamental language, and if there are multiple existential quantifiers in the fundamental language, then existence is plural.

There is a striking parallel here with debates about truth, and this is perhaps no surprise given Quine's work in that field too. In the mid-to-late 20th Century, lofty debates about the metaphysical nature of truth began to be ignored in favour of a view which held that what is really of interest is the behaviour and uses of the truth *predicate*, and that once those are fully understood, there really is no further nature of truth to uncover. Quine's book *The Pursuit of Truth* was a leading proposal in this direction, summing up the position nicely in the following quote:

Instead of saying that

'Snow is white' is true if and only if it is a fact that snow is white.

we can simply delete 'it is a fact that' as vacuous, and therewith facts themselves:

'Snow is white' is true if and only if snow is white.

To ascribe truth to the sentence is to ascribe whiteness to snow; such is the correspondence, in this example. Ascription of truth just cancels the quotation marks. Truth is disquotation. (Quine [26, p. 80])

This *deflationary* trend completely shifted the focus of debates about truth. In particular, it promised to free us from the misconceptions of the lofty debates: we do not need to think about the nature of truth, because there isn't one, or so the deflationary trend contests.

Returning to existence, we can note that the shift from thinking about the nature of existence to thinking about the behaviour of the quantifiers — in line with the general linguistic turn at that time — would have been similarly satisfying to those who favoured the general deflationary move. We see that there is a parallel method of dissolving mysterious metaphysical questions, and learning that the real issues of interest in the area are issues primarily of language and logic. Thus we can construct a route to deflation in the existence case, in that once the quantificational issues are resolved, there really is no more to say about the nature of existence.

In the case of truth, there has been somewhat of a backlash against the deflationary trend in recent times. These responses typically do not deny that the deflationists do something right in focusing on the various uses of the truth predicate, but that they are wrong to think that there is no corresponding nature of truth. The reasons for this typically focus on the things that cannot be done without positing a substantial nature of truth (e.g. Lynch [17]), or the claim that the deflationist's denial of a substantial nature of truth is inconsistent with its claims about the uses of the truth predicate (e.g. Wright [44]).

In the case of existence, anti-deflationary voices are harder to come by, but we can find some thoughts in the general direction. Kit Fine [14], for example, having distinguished what he calls 'ontological' questions from quantification questions, argues that the former are not reducible to the latter:

> [M]y broader point is that these excursions into the semantics of quantification, whatever their independent interest, are largely irrelevant to the understanding of ontology …The critical and distinctive aspect of ontological claims lies not in the use of the quantifier, but in the appeal to a certain concept of what is real;[1] and it is only by focusing on on this concept, rather than on our understanding of quantification, that further clarification is to be achieved …(Fine [14, p. 171])

Nathan Salmon also gives expression to anti-deflationary thoughts in response to the Quinean movement:

> Quine gave substance to the idea that what exists is what is covered by the universal quantifier with his equally famous slogan 'To be is to be a value of a variable'. Taken as a response to the question 'What is existence?', Quine's slogan seems at least extensionally correct. Every existing individual is indeed the value of some variable or other, under some cooperative assignment of values to variables, and it would seem that everything that is assigned to a variable as its value is "one of everything", i.e., it exists. But it

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[1]Fine uses 'real' for a 'thick' sense of 'existence'.

cannot be seriously maintained that *being*, in the sense of 'existence', simply is the state

or condition of *being the value of a variable, under some assignment of values to variables*.

When Hamlet (pretending the play were non-fictitous) agonized over the question

of whether to be or not to be, he was preoccupied with weightier matters than the

question of whether or not to be the value of a variable. (Salmon [27, p. 51])

Salmon suggests that there is some pre-existing interest in the nature of existence that cannot be satisfied by talk of quantifiers and variables.[2] Whilst (as we will see later on) we may think that quantifiers and variables are part of the story, they cannot be the whole story, as they leave the weighty question of *what it is to exist* completely untouched. Indeed, this should come as no surprise, given that it seems that Quine himself noticed this. However, the issue is whether taking the Quinean view on board removes the need to ask the question of what the nature of existence is.

2.2   *The Scope Problem for Truth*

Mere suspicion of metaphysical matters is no longer good reason to reject the question of the nature of existence, so we need some independent motivation to think that it does not need an answer. In the case of truth, the deflationary trend is partly motivated by the failure of any particular theory of truth to provide a satisfactory account. This failure, the deflationists contend, is evidence that there is no nature to be had. In the case of truth, this can be demonstrated by the *Scope Problem*, which we can briefly outline here.[3] Take the correspondence theory of truth, which holds that to be true is to correspond to the facts. It is often noted that such a view seems plausible for the truth of beliefs about objects in the material world, such as tables and chairs, but is poorly suited to account for the truth of mathematical or moral beliefs. This is due to the fact that correspondence is generally understood in broadly causal terms as a relation between an observer and a mind-independent realm of objects and properties. In the mathematical case, it seems implausible that

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[2]Salmon himself goes on to define existence in terms of identity: to exist is to be identical to something. Ironically, one may think that this account is just as minimal as the Quinean account.

[3]This is given its most definitive statement in Lynch [17]. It is also referred to as the 'disunity problem' by Sher [31].

the truth of mathematical beliefs consists in a *causal* relation between an individual and a fact, whereas in the moral case problems often arise when we conceive of the facts in question as *mind-independent*. On the other side of the coin we have more broadly anti-realist accounts of truth, such as the idea that to be true is to be superwarranted, with superwarrant understood as having warrant to believe a proposition that will be maintained during all future stages of inquiry, with possession of a mathematical proof perhaps being the clearest example.[4] Whilst this account may serve reasonably well for mathematical truth (and perhaps even moral truth), it is often thought to be poor as an account of truths about the material world. After all, truths about the nature and state of the material world depend on the material world itself, as opposed to what we have warrant to believe about it.

In light of these concerns, it is hard to see how we can have a substantive account of the nature of truth which will hold across the board, provided of course that we want to maintain that beliefs in all the areas noted above can be true. This led some to pursue the deflationary option we have mentioned, but it is important to note that these concerns also provide motivation for thinking about truth *plurally*. That is, the way to respond to these concerns is not to give up on the project of accounting for the nature of truth but rather to embrace the idea that there may be different things to say about the nature of truth in different cases, or different 'domains of discourse'. This opens up the idea that truth may best be thought of as correspondence for discourse about the nature and state of the material world, but understood differently — perhaps in terms of superwarrant — for discourse about mathematics or ethics. So there is a way to turn the failures of the traditional debates into positive directions for the analysis of the nature of truth *by thinking of truth plurally* which avoids the slip into the deflationary trend.

2.3 *The Scope Problem for Existence*

Might we find the same thing with existence? It is plausible to think that we can. We might think of correspondence truth and superwarrant truth as representing broadly *realist* and *anti-realist* ways

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[4]For more on superwarrant, and the associated notion of superassertibility, see Lynch [17] and Wright [44].

of thinking, respectively, and we can note that there are parallels in the study of existence.

Let us take the realist account first. This approach is summed up by *Alexander's Dictum*:

Alexander's Dictum To exist is to have causal powers.[5]

This reflects a broadly naturalistic worldview: it is the job of science to tell us what things exist, and these things will be the things that participate in the push-and-pull of spatiotemporal life. However, it should be clear that this account will fare badly when it comes to accounting for the existence of abstract objects, such as numbers. Abstract objects are usually *defined* as the very kind of entities which lack causal powers, and spatiotemporal location, and, as a result ALEXANDER'S DICTUM cannot serve as an adequate account of their existence. Of course, the favourer of ALEXANDER'S DICTUM as a general account of existence is free to deny that there exist any such entities on the grounds that they fail the satisfy the criterion. But this seems to lead to a fairly radical nominalism that might best be otherwise avoided.

Coming at things from the other direction, let us look at an alternative account of existence, which we can think of as the development of a broadly anti-realist approach. This account is a development of Berkeley's famous principle:

Esse est Percipi The existence of an object consists in its being perceived.[6]

Modern applications of this principle have been developed in the intuitionist program in the philosophy of mathematics, where there the broad thought is:

Intuitionist Principle To be is to be constructed.[7]

The thought here is that mathematical practice consists in the development of proofs, and the existence of mathematical objects, and the properties they have, comes about by way of proof.

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[5]So-called because of the work of Samuel Alexander. The guiding thought behind the principle can be traced back to the 'Eleatic Stranger' in Plato's *The Sophist*, which has led some, including Armstrong [2] to refer to this kind of principle as the 'Eleatic Principle'.

[6]Berkeley, of course, said that the existence of an *idea* consists in its being perceived. But, given that he took objects to be ideas, we feel licensed to give this more general formulation here.

[7]See, for example, Shapiro [28, p. 180], and Pedersen [23].

We can develop this idea further by looking at the 'Neo-Fregean' work of Hale and Wright. They substantiate the intuitionist thesis by offering the following principle:

Neo-Fregean Principle To be is to be the referent of a singular term that appears in a true sentence.

Of course, this approach began as an attempt to ground the existence of mathematical objects in a broadly anti-realist (and empiricist-friendly) way. But it has generally been applied as a global account of existence.[8]

> The lynch-pin of Frege's platonism, according to our interpretation, is the syntactic priority thesis: the category of objects …is to be explained as comprising everything which might be referred to by a singular term, where it is understood that possession of reference is imposed on a singular term by its occurrence in true statements of an appropriate type. (Wright [43, p. 53])

> [O]bjects, as distinct from entities of other types (properties, relations, or, more generally, functions of different types and levels), just are what (actual and possible) singular terms refer to. (Hale and Wright [15, p. 171])

The basic idea is that we can secure reference to a mathematical object — the number 5, say — by noticing that its associated singular term appears in at least one true sentence. Thus, the truth of the sentence 'the number 5 is prime' is sufficient to secure the existence of a referent for the singular term 'the number 5': the number 5. It should be clear on this model that truth is understood in terms of proof, and that what makes the sentence 'the number 5 is prime' true is the availability of a proof for the claim that the number 5 is prime (i.e. a proof which shows that the number 5 is divisible only by 1 or itself).

Now, whatever the prospects for the NEO-FREGEAN PRINCIPLE as an account of the existence of mathematical objects (and perhaps even abstract objects in general), it should be clear that it has some serious limitations. Consider material objects like tables, chairs, and the Eiffel Tower. Is it

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[8]See Sider [33], Hawley [16], and Eklund [13].

plausible that the existence of the Eiffel Tower consists in the truth of a sentence which contains its associated singular term, such as 'the Eiffel Tower is in Paris'? It seems not, and, indeed, such a view would seem like an even more extreme version of the ESSE EST PERCIPI principle; for the existence of the Eiffel Tower is supposed not simply to consist in its being perceived, but rather in the appearance of a singular term in a true sentence. But surely, the existence of the Eiffel tower is not, in any sense, *grounded* in the singular term of some true sentence. In short, whilst the NEO-FREGEAN PRINCIPLE seems like it may be a promising approach for the existence of abstract objects, it seems to be radically implausible for concrete objects.

Such problems suggest that we can construct an analogue to the *Scope Problem* for existence. Indeed, this should hardly be surprising, as it is very natural to pair the accounts of existence we have considered with the accounts of truth we have considered. For instance, ALEXANDER'S DICTUM fits well with the correspondence theory of truth, with the thought being that everything that exists has causal powers, and the truth of a belief consists in there being certain corresponding causal relations between the believer and the existent objects and properties. Likewise, the superwarrant account of truth fits nicely with the NEO-FREGEAN PRINCIPLE; truth is connected intimately with proof, and the existence of objects is secured via proof.

Of course, the connections do not stop there. As in the case of truth, one could take these findings about existence as motivations for the deflationary position: there really is not much to say about the nature of existence after all, as the failures of past accounts show. And alternatively, we can take these findings as support for a *pluralist* account of existence: that there is more to say about the nature of existence, it is just that what there is to be said varies from one kind of object to the next — abstract and concrete objects, in this case. This is indeed the conclusion we saw that some have drawn in the parallel case of truth, where the *Scope Problem* is taken to show that we need to think of truth differently in different domains of discourse. The pluralist's approach is the direction we suggest here. Taking the pluralist route can offer some assistance to those who want to maintain the project of investigating the nature of existence. In fact, we are also open to the stronger claim

that pluralism offers the most plausible route for those who both want to investigate the nature of existence and also want to be open to the idea that both abstract and concrete objects exist.

2.4 Formulating Ontological Pluralism

The basic thought, then, is that we can find some substantive motivations for ontological pluralism by considering what it can offer in the project of analysing existence, and that these motivations are somewhat analogous to the motivations for another form of pluralism: truth pluralism. If we want to take these motivations seriously, this may have some impact on the way in which we formulate ontological pluralism.

The motivations we have given are distinctly metaphysical, that is, they provide motivations for ontological pluralism that depend on taking the metaphysical project of giving an account of the nature of existence seriously. In particular, they depend on some dissatisfaction with the deflationary trend towards taking questions of existence to be questions of quantification. However, as was noted above, many contemporary discussions of ontological pluralism *do* take questions of quantification to be primary, and as a result formulate ontological pluralism as the thesis that there are multiple existential quantifiers.[9] What implications might the motivations we have sketched have for such discussions?

The answer is that they need not have a detrimental effect, provided the relevant parties are willing to take certain things on board. As we will note below, there is no harm in thinking that ontological pluralists are committed to there being multiple existential quantifiers, and that there are things that need explaining about their behaviour as a result. The key thing to take on board is that this will not be the end of the story, and that the fact that there are different quantifiers does not get to the heart of the view. The heart of the view will be that different things constitute existence in different cases, and this is what is required to meet the anti-deflationary motivations of the view. That this gives rise to multiple quantifiers may be a *consequence* of the main thesis, but it is not *itself*

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[9]See e.g. Turner [38, 40]. McDaniel [20, 19] states that it is optional for ontological pluralists to look deeper than the multiple quantifiers, but, if what we have said is correct, this is not optional: they *must* look deeper.

the main thesis. Ontological pluralism is about more than quantifiers, as existence is about more than quantifiers. Or, at least, that is what a form of ontological pluralism that wishes to use these motivations should contend.

3   From Truth Pluralism to Ontological Pluralism

To get a better handle on the relations between the two kinds of pluralisms we have been trying to motivate, we want to consider the ways in which the adoption of one view might have consequences for adopting the other. A natural question arises: Does truth pluralism *entail* ontological pluralism (of the sort we have been urging above)? Does ontological pluralism *entail* truth pluralism?

To answer these questions, we need to delve deeper into the logical structure of truth attributions and existence claims. To prefigure: our answer will be 'no' — there is (as far as we can see) no entailment in either direction. However, when supplemented with natural assumptions stemming from the motivations developed in §2, there are straightforward routes from one to the other.

3.1   From Truth Pluralism to Truth-of Pluralism

So what is the link between truth attributions and existence claims? A natural place to start is the *satisfaction* relation — the relation that holds when a predicate is 'true-of' an object. Truth-of pluralism (T-OP) is the idea that different satisfaction relations exist for each domain of inquiry.

Truth Pluralism (TP) There are different ways being true.

Ontological Pluralism (OP) There are different ways of being an object.

Truth-Of Pluralism (T-OP) There are different ways for predicates to be true-of an object.

Informally, truth-of pluralism encapsulates the idea that objects are thought to satisfy predicates in different ways depending on the kinds of predicates you are using (alternatively, what kind of objects you are talking about).

The idea is not new: Shapiro [29, 30] suggests that truth-of pluralism (i.e. satisfaction pluralism) is *required* in order to handle the truth of generalisations.

> I suggest that the overall [pluralist] theory be re-written as a functionalist account of satisfaction, a relation between sequences of objects and relations. […] For what it is worth, I don't see any other way of bringing mathematics and science into the fold. Since truth can be defined in terms of satisfaction, a functionalist pluralism about satisfaction would be a functionalist pluralism about truth. ([29])

Sher likewise, suggests such a view when she writes:

> According to this approach, the plurality of truth is rooted not in differences between complete propositions but in differences between sub-propositional units: names, predicates, and functions. As a result, the plurality of truth is reduced to a plurality of reference, satisfaction, and fulfilment. ([32, p. 322])

Notice that Shapiro writes as if truth is always and everywhere "defined in terms of satisfaction". Likewise, Sher claims that "truth is reduced" to satisfaction. The assumption of the reduction of truth to satisfaction is extremely widespread; it is the basis of the Tarskian model-theoretic semantics for first-order logic, and is the dominant paradigm. Granted this assumption, there is a quick argument from truth pluralism to truth-of pluralism.

Here's the classic way to represent 'truth-of' for atomic sentences:[10]

T–iff–T-O '$F(t)$' is true iff 'F' is true-of the object denoted by 't'.

Notice that Shapiro and Sher are presupposing this biconditional is to be read with an order of priority. The left-hand side is meant to be *grounded* in (or be *reducible* to) the right-hand side in every case. If so, we can reason as follows:

1. Suppose TRUE$_1$ is not identical TRUE$_2$.   [TP]

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[10]We will use unary predicates for ease of presentation. Obviously, we intend to include *n*-ary relations, and hence satisfaction should be defined via sequences of objects.

2. TRUE$_1$ (e.g. correspondence) reduces to TRUE-OF$_i$.   [Premise]

3. TRUE$_2$ (e.g. superwarrant) reduces to TRUE-OF$_j$.   [Premise]

4. Then TRUE-OF$_i$ is not identical to TRUE-OF$_j$.   [1,2,3]

But the conclusion just is T-OP, and hence the argument from truth pluralism to truth-of pluralism is complete. Even though the assumption is widespread, we do not merely assume that truth reduces to truth-of. The biconditional T–IFF–T-O has two possible priority directions; we need a reason for thinking that, for all truth properties, the left-to-right direction is the correct explanatory relation. But is that the case?

Certainly, for the usual physical sentences the left-to-right direction is natural. "The ball is round" is true$_1$ because there is an object that is the denotation of 'ball' and it has the property of *being round*. But for other domains, this is less natural. Is it the case that "3 is prime" is true$_2$ *because* there is an object that is the denotation of '3' and it has the property of *being prime*? This order of explanation seems to read in some fairly heavyweight Platonism about mathematical entities. Perhaps, the reason we countenance a referent for '3' and properties like primeness is *because* we count sentences like "3 is prime" as true. It would seem the more anti-realist right-to-left direction may be more plausible in such cases.[11]

If that is the case, then the above argument from TP to T-OP is far too quick. However, there are other reasons why T-OP might still be needed.

3.2 *From Truth-of Pluralism to Ontological Pluralism*

We have been saying things like 'TRUE$_1$ reduces to TRUE-OF$_i$', which ignores the role that reference plays in the right-hand side of T–IFF–T-O. Basically, one assumes there is such an object (or objects) being referred to. But things are not so straightforward as that. There are really two broad

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[11]Ball [3] advances this line of thought, focusing on reference. But the idea has an early formulation in Lynch [17, ch. 7 §3].

approaches to reference one might take: (i) reference is necessary for truth, or (ii) truth is sufficient for reference.[12]

As suggested in §1, the natural way of reading the NEO-FREGEAN PRINCIPLE is that the existence of an object denoted by 'a' depends on the truth of the relevant sentence. That is, TRUE$_2$ also determines reference — the priority runs along the right-to-left direction. On ALEXANDER'S DICTUM, it would seem obvious that we'd first need to establish the existence of the referent of 'a' in order for the sentence to be a candidate for TRUE$_1$. That is, the priority runs along the left-to-right direction. In a slogan, on the NEO-FREGEAN criterion, *being* supervenes on truth; while on ALEXANDER'S, truth supervenes on *being*.

Now the picture here is there is a notion of existence, (call it BEING$_1$) that is coordinated with TRUE$_1$ and TRUE-OF$_1$ under a broadly *realist* framework. It is 'bottom-up'; one starts with physically respectable (i.e. causal) entities, and qualitative properties, and tests to see if the object *exemplifies* that property. If so, the predicate expressing that property is TRUE-OF$_1$ it. And this yields the sentence being TRUE$_1$, which is the correspondence truth property.

By contrast, for non-causal mathematical or moral properties, the picture is reversed. There is additionally an anti-realist notion of existence (call it BEING$_2$) that with TRUE$_2$ and TRUE-OF$_2$ are all coordinated under a broadly *anti-realist* framework. It is 'top-down'; one starts with TRUE$_2$ claims which all have the *superwarrant* truth property, and pulls them apart seeing that there is a (metaphysically thin) property that is TRUE-OF$_2$ an 'object'. But the 'object' has a kind of being (BEING$_2$) that is dependent on or *grounded* in the truth$_2$ of the relevant sentence.

But how, precisely, do these distinct notions of existence arise? Let us dive into this thought in more detail. In order to do so, we will appeal to our neutral and broadly deflationary approach to ontological commitment based on the Quinean approach. We need to get a bit clearer as to what is meant by *being the value of a variable*.

The usual thought behind the Quinean idea is that the existential quantifier ∃ is ontologically committing. But, it is natural to ask, why? The expression plays two distinct roles: it quantifies

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[12]See again Ball [3].

(i.e. tells us how many things there are), and it binds variables (i.e. turns open sentences into closed ones).[13]

Lambda abstraction languages are convenient because they *separate* these two roles. They include a variable binder, λx; and separate symbols to play the pure quantificational role, $\hat{\exists}$ and $\hat{\forall}$. To see how this works, consider the usual interpretation of first-order sentences:

- '$\exists x(\ldots x \ldots)$' means: there is something that is an x such that $\ldots x \ldots$.

- '$\forall x(\ldots x \ldots)$' means: everything is an x such that $\ldots x \ldots$

But in lambda abstraction languages, we have quantifiers 'there is something', $\hat{\exists}$, and 'everything', $\hat{\forall}$, in addition to a variable binder λx. This latter can be interpreted in English in the following way.

- '$\lambda x(\ldots x \ldots)$' means: is an x such that $\ldots x \ldots$.

The process or converting an open sentence to a closed one int this way is called λ-abstraction.

λ-**abstraction** If φ is a formula with just x free, then '$\lambda x \varphi$' expresses a property.

So, for example, $\lambda x(\text{loves}(x, \text{Heloise}))$ expresses the property of *loving Heloise*. While $\lambda x(\text{loves}(\text{Heloise}, x))$ expresses the property of *being loved by Heloise*. For the 'application' of such a predicate to an object, we will write by concatenation. Thus, $\lambda x(\ldots x \ldots)a$ is the application of the predicate to a. This application has a result; we call the process λ-conversion.

λ-**conversion** $\lambda x(\varphi)a$ iff $\varphi[x/a]$.

where $\varphi[x/a]$ is the result of substiting a for all free occurrence of x in φ. Conversion is a two-way rule that allows one to go from an application like '$\lambda x(\text{loves}(x, \text{Heloise}))\text{Abelard}$' to a sentence 'loves(Abelard, Heloise)' and vice versa.

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[13]This insight (and the presentation of it that follows) is indebted to Turner [39].

We can now ask about ontological commitment and particularly QUINE'S DICTUM. It seems right that variable binding *per se* does not commit one to anything ontologically speaking.[14] So, presumably it must be the quantificational behaviour of $\exists$ that is ontologically committing. There is, however, an additional wrinkle. One might also see the truth of an *application* of a λ-term to an object as ontologically committing as well. This is all consistent with Quine's thought that it is being the *value* of a bound variable that commits us, rather than the binding itself. (That is to say, while the range of existential quantification comprises our ontological commitments, the existential quantifier is not the *only* only way we might be committed to an entity.)

We can see that the conversion rule is exactly like the our above notions of 'truth-of' or satisfaction. In fact, it's going to be always be the case that:

'$\varphi[x/a]$' is TRUE$_i$ iff $\lambda x(\varphi)$ is TRUE-OF$_i$ the object denoted by 'a'

How does this connect with existential quantification? Well, it follows from our earlier claims that different ways of being TRUE-OF will correspond to different ways of an existential claim being true.

$\exists x\varphi$ is TRUE$_i$ iff $\lambda x(\varphi)$ is TRUE-OF$_i$ some o

And now we can see that this biconditional (derived from the neutral Quinean criterion of ontological commitment) may be read with two different directions of priority. The key question: is it the existence of the object in right-hand side that grounds the truth of the existential claim on the left-hand side, or is it the truth of the existential claim that grounds the object? We have been urging that for concreta, it appears to be the former, whereas for abstracta, it appears to be the latter. And it is this insight that allows us to move from the Quinean approach to a fully-fledged ontological pluralism.

LRD '$\exists x\varphi$' is TRUE$_1$ *in virtue of* '$\lambda x(\varphi)$' being TRUE-OF$_1$ some o.

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[14]Here we agree with Turner [39].

RLD '$\lambda x(\varphi)$' is TRUE-OF$_2$ some *o in virtue of* '$\exists x\varphi$' being TRUE$_2$.

Given the difference in priority relations, we can see how our different notions of BEING$_1$ and BE-ING$_2$ emerge. For BEING$_1$, the things that $\exists_1$ are exactly those things that $\lambda x(\varphi)$ are TRUE-OF$_1$, for all suitably open φ. For BEING$_2$, it is the TRUTH$_2$ of $\exists_2$ claims that generate exactly those things that $\lambda x(\varphi)$ are TRUE-OF$_2$, for all suitably open φ. These domains of quantification will inevitably be different.

Thus, our journey from truth pluralism to ontological pluralism (with a small detour through truth-of pluralism) is complete. From some very natural assumptions about the direction of priority between truth attributions and satisfaction we have a straightforward route to ontological pluralism. The motivations for truth pluralism can thus be converted into a reasonably well-motivated approach to ontological pluralism.

4   *From Ontological Pluralism to Truth Pluralism*

We have been urging a certain picture of TRUTH, TRUTH-OF, and BEING such that they are plural. This hinges on understanding those notions as depending on each other in converse ways.

To bring things full circle, we want to argue that if one understands BEING$_1$ and BEING$_2$ as above, then one has a natural route to truth pluralism. So we suggest that accepting both ALEXAN-DER'S DICTUM and NEO-FREGEAN PRINCIPLE as criteria for existence (so interpreted) leads fairly straightforwardly to pluralism about truth.

4.1   *The Argument From Grounding*

A simple route from ontological pluralism to pluralism about truth can be achieved by the following argument. As we will see, the argument explicitly invokes different priority or grounding relations between the relevant notions.

1. BEING$_1$ is not identical to BEING$_2$; and they are equi-fundamental. [Ontological Pluralism]

2. BEING$_1$ grounds TRUTH$_i$.   [premise]

3. TRUTH$_j$ grounds BEING$_2$.   [premise]

4. TRUTH$_i$ is identical to TRUTH$_j$.   [Truth Monism]

5. BEING$_1$ grounds BEING$_2$.   [1, 2, 3, trans. of grounding]

6. Nothing fundamental is grounded in anything else.   [by def. of grounding]

7. So BEING$_2$ is not fundamental.   [4,5]

8. Contradiction.   [1, 5]

9. So, TRUTH$_i$ is distinct from TRUTH$_j$.   [RAA, 4, 6]

The conclusion of this argument is: either truth pluralism is true, or we must deny one of the premises. The salient options are the assumption of ontological pluralism in premise (1), or the grounding claims in premises (2) and (3). Clearly, a rejection of premise (1) will not rebut our conclusion. So it appears the only real options are rejecting premise (2) and/or (3). At first glance, these premises appear to simply make explicit the way we are understanding the kind of ontological pluralism motivated in §2. To reject these premises would also fail to constitute an objection to the advertised claim — that OP *as motivated* in the way we have been considering yields TP.

But let us be more careful. One might object that, on the current conception of BEING$_2$, it is grounded in TRUTH$_2$ and so isn't fundamental either. So, the objection goes, this conception isn't really a form of ontological pluralism after all. In response, we should be clearer about the role of fundamentality in these discussions. In our view, ontological pluralism needn't be committed to BEING$_1$ and BEING$_2$ as fundamental; all that is required is that they be equi-fundamental — that is, one must not be grounded in the other. We shouldn't be able to reduce one sort of being to another.

A better objection to the argument is as follows. One might claim that no one who accepts truth monism will accept premises (2) and (3) in conjunction — and it is question-begging to assume as much. At most, what a truth monist should admit to is:

2*. BEING$_1$ partly grounds TRUTH.

3*. BEING$_2$ is partly grounded in TRUTH.

This approach alleges that the truth property isn't fully determined or grounded one way or another. Some sentences are true in virtue of what there is, but other sentences determine or ground what there is. This way of thinking about the grounding relations does seem to get the spirit of our version of ontological pluralism correct, without the commitment to truth pluralism. An immediate question, however, is this: what sort of property could a sentence have that requires it to be grounded in reality? Any answer, we take it, will be along broadly *realist* lines — in particular, of the *correspondence* variety. Likewise, the answer to the question as to what property sentences could have that would ground the existence of objects will have to proceed along broadly *anti-realist* lines, for which we think *superwarrant* is a viable notion. But these properties that tell us which sentences get grounded in which ways are precisely what the pluralists call 'truth properties'. We do not wish to get embroiled in debates about whether a certain property counts as a 'truth' property or not. There are available lines of response in the truth pluralism literature. But at this point in the dialectic, it would appear the debate is about terminology rather than about substance.

A variant of the above objection might proceed as follows.[15] Instead of presuming that the relevant grounding facts involve the various kinds of *being* and *truth*, we might rather say that the relevant grounding facts all involve true sentences (or propositions) and the objects they involve. So, the ontological pluralist might endorse:

2*. An object's having BEING$_1$ (partly) grounds the TRUTH$_1$ of a sentence that makes reference to it.

3*. An object's having BEING$_2$ is (partly) grounded in the TRUTH$_2$ of a sentence that makes reference to it.

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[15]Thanks to Carrie Jenkins for this objection.

By locating the grounding relation primarily in the instances, rather than in the general properties themselves, the ontological pluralist might be able to avoid the argument above. But we might feel a bit dissatisfied. Again we may ask why it is that instances of certain types have an certain order of priority, while instances of another type have the converse order. The objector will have nothing further to say in response.[16]

We think this shows that ontological pluralism of the above sort has a natural route to truth pluralism. Now to reiterate, we do not want to claim that all forms of ontological pluralism are committed to truth pluralism. (Nor do we wish to claim that truth pluralists of any stripe are committed to ontological pluralism.) There were various choice points along the way, any of which might well be rejected. But at least there are some interesting views that connect TP and OP in a philosophically fruitful way.

4.2   Modelling The View

In this section we consider a simple way to model ontological pluralism formally.[17] As an added benefit, it also allows us to see how it might give rise to truth pluralism in a very straightforward way. The initial idea is to approximate some of first-order quantification by reinterpreting propositional modal logic.[18]

We assume familiarity with Kripke semantics for modal logic (particularly, $S5$). Ordinarily, sentence variables of a modal language (p, q, r, . . .) are intended as sentences expressing propositions. Instead, we think of formulae as one-place predicates expressing monadic properties. Similarly, points in a modal frame are ordinarily conceived of as 'worlds'. Instead, we think of points as objects. So, instead of thinking about a proposition being true at a world, we are thinking correspondingly of an object instantiating a monadic property. This re-conceptualization works because the underlying

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[16]To draw another connection: this is parallel to the deflationism/inflationism debate over truth. Inflationists suggest that deflationists cannot explain certain general normative facts about true sentences (e.g. that they are the worth believing). The deflationist says that they can explain these general facts by virtue of their instances (e.g. "Snow is white" is worth believing *because* snow is white) without adverting to the nature truth.

[17]For another (more detailed) proposal, see Turner [40].

[18]This idea was pioneered by van Benthem [41] et al [1].

formal structure is identical: propositions are sets of worlds, properties are sets of objects. Now, in standard modal languages we have modal operators that behave exactly like quantifiers over (accessible) points. Since we are thinking of points as objects, $\Box$ roughly models $\forall$ and $\Diamond$ models $\exists$.

Now, how does this help? Here is where accessibility relations come into play. Imagine, as the ontological pluralist might, that domains corresponding to each kind of being are individuated via collections of objects. The accessibility relation in our models, then, expresses the relation of *being the same kind of object*. Indeed, it makes sense to impose that accessibility is an equivalence relation, effectively partitioning our set of objects into their appropriate 'domains'.

To be more explicit, we will interpret our language S via Kripke models: $\langle D, R, \nu \rangle$. D is a non-empty set of objects $o_1, \ldots, o_n$. $R \subseteq D \times D$ is a reflexive, symmetric, and transitive accessibility relation. ν is a valuation function $\nu : S \to \wp(D)$. ν that takes a predicate to a set of objects. You can think of ν as telling us when a predicate is 'true of' an object.

We then define when a model M satisfies a sentence α relative to an object o; written $M, o \vDash \alpha$ by giving semantic clauses for atomics and for the logical connectives (including domain-relative quantifiers $\Box$ and $\Diamond$) are as follows.

- $M, o \vDash p$ iff $o \in \nu(p)$.

- $M, o \vDash \neg A$ iff $M, o \nvDash A$.

- $M, o \vDash A \wedge B$ iff $M, o \vDash A$ and $M, o \vDash B$.

- $M, o \vDash A \vee B$ iff $M, o \vDash A$ or $M, o \vDash B$.

- $M, o \vDash \Box A$ iff for all o' such that oRo', $M, o' \vDash A$.

- $M, o \vDash \Diamond A$ iff for some o' such that oRo', $M, o' \vDash A$.

It is is clear by the restriction to accessible objects, these quantifiers range only over the accessible objects. So when quantifying over these objects, one always stays within the same equivalence class

— stays within a domain.

To make things more perspicuous, we can introduce a translation scheme for our modal language into first-order logic.[19] For each modal formula α we assign a first-order formula $(\alpha)^\tau$ in the following way:

- For each propositional variable p_i, let $(p_i)^\tau = P_i(x)$ where P_i is a monadic predicate symbol.

- $(\neg\alpha)^\tau = \neg(\alpha^\tau)$

- $(\alpha \wedge \beta)^\tau = \alpha^\tau \wedge \beta^\tau$

- $(\Box\alpha)^\tau = \forall y(x \sim y \rightarrow \alpha^\tau[y/x])$

- $(\Diamond\alpha)^\tau = \exists y(x \sim y \wedge \alpha^\tau[y/x])$

Here again $[y/x]$ is the result of substituting y in for x in α^τ (so long as y doesn't already occur in α^τ — if it does, pick a new variable). Now we can interpret these formulas using our frames $M = \langle D, R, \nu \rangle$ so that the interpretation of $\sim$ is R, and the interpretations of P_i is just $\nu(p_i)$. It is easy to show that

$$M, o \Vdash \alpha \text{ iff } M \Vdash \alpha^\tau[x \mapsto o]$$

where '$[x \mapsto o]$' means that we assign o to the free variable x.

Notice that on the above models, different ontological domains corresponding to BEING$_i$ are modelled by equivalence classes of objects (i.e. subsets of D). Call each of them D_i.

We can now say explicitly what it is for a sentence to be TRUE$_i$:

true$_i$ α is true$_i$-in-M iff $M \Vdash \alpha^\tau[x \mapsto o]$ and $o \in D_i$.

So ontological pluralism gives rise to truth pluralism in a straightforward manner. There are a few open issues with this formal picture. First, the account so far only works for restricted quantifiers. Can it be extended to an unrestricted quantifier of the Quinean sort? Second, the account so far

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[19]This is what is called the 'standard translation'; see Blackburn and van Benthem [5, §2.2].

only works for monadic properties. Can it be extended to *n*-ary relations? Further considerations of these limits are beyond the scope of this paper. However, one limitation is worth highlighting: the approach utilises the Shaprio/Sher definition of each true$_i$ property in terms of the model-theoretic 'truth-of' (i.e. satisfaction) relation, $\Vdash$. This is merely an unintended aspect of the model, however. We should think of the true$_i$ biconditionals above as having different metaphysical explanatory directions.

5   Mixing Problems

In the final section of the paper, we wish to examine the extent to which there might be further analogies between truth pluralism and ontological pluralism. Is ontological pluralism is subject to the same kinds of problems as truth pluralism? In particular, we focus on the 'mixed' problems that have been prominent in recent literature: the problems of mixed inferences and mixed compounds. Interestingly, we find that this is one point of disanalogy between the views, as — for the most part — ontological pluralism is not subject to the existing forms of these problems.

5.1   Mixed Inferences

Mixing problems of various forms are well-known in the literature on truth pluralism. The first is Tappolet's [36] PROBLEM OF MIXED INFERENCES. Roughly, if the premises of an argument can have different truth properties, in what sense is validity necessary truth preservation?

Let us begin with the PROBLEM OF MIXED INFERENCES which suggests that truth pluralists cannot account for the validity of arguments such as the following:

Torture causes pain.

What causes pain is wrong.

Therefore, torture is wrong.

This can be brought out in two ways, depending on one's formulation of truth pluralism. If we explicitly attach truth predicates to the premises and conclusion, we get:

'Torture causes pain' is true.

'What causes pain is wrong' is true.

Therefore, 'torture is wrong' is true.

This threatens to be invalid because of equivocation on the word 'true', if we take the word to have different meanings. Alternatively, if we have a view where the meaning of 'true' is univocal but refers to different properties, then the problem kicks in at the level of reference: what property is preserved across the inference? There are various responses available, but we will not discuss them in detail here.[20]

Turner [38] discusses a problem which appears to be parallel to the mixed inference case for ontological pluralism. He considers the following inference:

There are chairs.

There are numbers.

Therefore, there are numbers and chairs.

If the meaning of 'there are' is not held constant — as Turner supposes it is not according to ontological pluralism — then there is a danger of this argument coming out as invalid due to equivocation on 'there are'. Even though Turner attempts to provide a solution to this problem involving local and global reading, we are not convinced that there really is a problem here at all.

There would be an analogue PROBLEM OF MIXED INFERENCES if the argument had the following form:

$$\exists_1 x(\text{Chair}(x))$$

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[20]See Beall [4], Pedersen [21], and Cotnoir [9] for pluralist responses which do not appeal to a general truth property. See Lynch [17] and Wright [45] for pluralist responses that do require a general truth property.

$$\exists_2 x (\text{Number}(x))$$

$$\therefore\ \exists_? x (\text{Number}(x) \wedge \text{Chair}(x))$$

We would have a problem as it would not be clear which quantifier applied to the conclusion, and, moreover that there would be a danger of equivocation. But, for this to be the correct logical form of the argument, we would need to interpret the conclusion as saying that there is one thing that is both a table and a number. But this is not what the original argument says. The correct form of the argument is rather:

$$\exists_1 x (\text{Chair}(x))$$

$$\exists_2 x (\text{Number}(x))$$

$$\therefore\ \exists_2 x (\text{Number}(x)) \wedge \exists_1 x (\text{Chair}(x))$$

This argument seems perfectly fine, and the conclusion is just a conjunction of two different quantified statements. The fact that each employs a different quantifier ought not to be a problem: indeed, it seems to follow directly from the premises.

We can thus identify one disanalogy between truth pluralism and ontological pluralism: whilst truth pluralists need to provide an answer to a mixed inference problem, there appears to be no equivalent problem for ontological pluralists.

5.2   Mixed Compounds

The problem of mixed inferences is not the only mixed problem that truth pluralism faces. There is a second related, but slightly less discussed, PROBLEM OF MIXED COMPOUNDS.[21] If propositions can receive different truth properties, what truth property is had by a compound proposition formed from them?

The first to consider is the PROBLEM OF MIXED CONJUNCTIONS. Consider the following conjunction:

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[21]This problem is so-named due to Tappolet [37], but first put forward by Williamson [42].

Torture is painful and it is wrong.

The first conjunct is a claim about the material world, and the second conjunct is a moral claim. We standardly take it that a conjunction is true just when its conjuncts are true, but if the first conjunct is true in one way, and the second true in a different way, in what way is the conjunction as a whole true?

This is the challenge posed by the PROBLEM OF MIXED CONJUNCTIONS, and there has been a fair amount of discussion of the problem in recent literature.[22] Here we are not interested in discussing the problem further, but rather whether an equivalent problem surfaces for ontological pluralism. Turner [38, §3] seems to think that it does, and indeed phrases the argument we considered above as a problem of conjunction. However, for the same reasons we noted above, it looks like it should not be a problem. When we get compounds which include existence claims pertaining to two different kinds of object, we do not get the same problems we get with truth. This is because mixed statements, such as:

There are numbers and chairs.

can be broken down into conjunctions of two different existence statements: $\exists_2 x(\text{Number}(x)) \wedge \exists_1 x(\text{Chair}(x))$. As we noted above, there is no problem here. There is a disanalogy: in the truth case, it seems as though we need a general notion of truth which applies to the conjunction as a whole, whereas in the existence case, we do not need some general notion of existence that applies to the conjunction as a whole. Everything that needs to be said can be said using the two different existential quantifiers. The only way to generate an equivalent problem would be to find a single object which seemed to fall under the range of both of the two different quantifiers. In that case, we would have a genuine problem where it would not be clear in what sense the object in question existed. However, this is not provided by the problem as stated, and indeed seems to be a very difficult case to plausibly generate.

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[22]See Edwards [10, 11], Cotnoir [7], and Cook [6].

So much for mixed conjunctions, but what about mixed disjunctions? A version of this problem has been raised in the ontological pluralism literature — what Turner [38, §2] calls the 'disjunctive quantifier argument'. Suppose that ontological pluralism is committed to the idea that there are different quantifiers applying to concrete and abstract objects. Surely, one might think, even with this idea in play, we can say things like the following:

If something exists, it either exists concretely or abstractly.

The basic though here is that we can say that, if existing concretely or abstractly exhaust the ways there are to be, then, for any existing thing, it will either exist concretely or abstractly. We can represent this as follows:

$$\forall_? y\big(\exists_1 x(x = y) \vee \exists_2 x(x = y)\big)$$

The worry should now be clear: what is the first quantifier that is in use? It seems to be a more general quantifier than either of the two we had previously identified, and it seems to range over all the objects that those two quantifiers range over. If this is the case, why exactly do we need those two quantifiers at all?

The PROBLEM OF MIXED DISJUNCTIONS has seen less discussion in the truth pluralism literature, since it appears plausible that a disjunction is true in whatever way its true disjunct is true (and true in both ways if both disjuncts are true).[23] However, Pedersen [22] considers the following variant for truth pluralism. Suppose we have two truth properties, true$_1$ and true$_2$. Can we not simply construct a disjunctive truth property, true$_D$, which will be possessed by all propositions that are either true$_1$ or true$_2$? And, if so, if we have this general truth property, why do we need the plural truth properties?[24] Although — as we note below — the cases are in one way disanalogous, we think that the ontological pluralist can adopt the reply Pedersen gives to this worry. There are two dimensions to this reply. The first is to point out that, for reasons of property sparseness, we may

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[23]Cotnoir [7] uses this thought and De Morgan facts about negation to suggest a solution to the PROBLEM OF MIXED CONJUNCTIONS.

[24]Pedersen and Wright [24] have recently endorsed a disjunctive account of general truth. On the other hand, Cotnoir [8] argues that the semantic paradoxes suggest that such a definition is not available on pain of contradiction.

not want to admit that the disjunctive truth property is a property, on the grounds that on a sparse conception of properties it fails to exhibit the necessary features of a property. Likewise, if we can make sense of quantifier sparseness (or *quantifier naturalness*, as Sider [34, 35] puts it), we might question whether the disjunctive quantifier has the necessary credentials to be a quantifier in the first place. This is perhaps too strong a position to take as we may have independent reasons for rejecting a purely sparse conception of properties or quantifiers, but it points to the second, more important, aspect of the reply.

In the truth case, the disjunctive truth property does not render the plural truth properties obsolete, as it is a property that is *dependent* on those properties, both for its existence and for its instantiation. The disjunctive truth property would not exist if it were not for the plurality of truth properties that compose it, and it depends on them for its instantiation in that the only way a proposition gets to possess it is by possessing one of the plural truth properties (with some qualifications, see below). As a consequence, even if we admit the disjunctive truth property it does not harm the truth pluralist's thesis, as the plural ways of being true are ontologically prior to the disjunctive truth property. Likewise, the ontological pluralist even if they wish to admit the disjunctive quantifier can note that it is a derivative quantifier, dependent on the plural quantifiers in much the same way as the disjunctive truth property is dependent on the plural truth properties. It is dependent on them for its existence, for the disjunctive quantifier would not exist if it were not for the plurality of quantifiers that form its disjuncts, and the entities that fall within its range only do so *because* they fall under the range of one of the plural quantifiers. So if we do admit the general quantifier, it will not render the plural quantifiers obsolete; far from it, for it will be dependent on the plural quantifiers. (Indeed McDaniel [18, pp. 300–305] offers a similar line of argument.)

So, there are some similarities in regard to disjunctive quantifiers and disjunctive truth properties. However, it is important to note that there is a further disanalogy between truth pluralism and ontological pluralism that we have been ignoring.[25] In the existence case, it will simply be enough for an object to fall under the range of the disjunctive quantifier for it to fall under the

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[25]We are grateful to Crispin Wright for discussion here.

range of one of the original quantifiers. Thus, for example, if an object has causal powers, or if its associated singular term appears in a true sentence, it will also immediately fall under the range of the disjunctive quantifier. As noted in Edwards [12, pp. 202–204], this does not happen in the truth case. There, the different domain-specific truth properties are properties of propositions in general, that can be possessed by propositions in any domain, even in those domains where the properties in question are not truth properties. For example, there is no bar to a proposition in the material world domain being superwarranted, even if it does not correspond to the facts; it is just that its being superwarranted will not be enough for it to be true. What this means is that we cannot simply move from the possession of *one of* the truth properties to the general disjunctive truth property, because otherwise our candidate material world proposition that is superwarranted but that does not correspond to the facts would come out as true by virtue of possessing *one of* the domain-specific truth properties. What is needed instead is a more nuanced account that states that a proposition gets the disjunctive property just when it is true in the very way that propositions in its domain are true. This is not necessary in the ontological case, however, as we cannot have a case where an object has causal powers yet fails to exist, or has its associated singular term appear in a true sentence, yet fail to exist. The truth case trades on the idea that propositions can have a certain property yet not be true, whereas this idea does not seem intelligible in the existence case, as it seems that nothing can have a property without thereby existing. This makes for another disanalogy between ontological pluralism and truth pluralism.

6   Summary

To summarise, we have aimed to provide reasons to think that fruitful connections can be drawn between ontological pluralism and truth pluralism. In particular, that it is plausible to think that the motivations for truth pluralism have analogues to provide motivations for ontological pluralism, and that those who hold one of the two views have accessible routes to the other, should they wish to hold both. We have also highlighted some disanalogies between the two views in terms

of the problems they face. These disanalogies suggest that, whilst there are connections between different kinds of pluralisms, there are still interesting differences, and these differences are often due to the differences between the natures of the things that are being pluralised. This, we think, is an important lesson for the development of pluralism as a general methodological proposal: that whilst there are often similarities between debates which suggest that an application of the pluralist method may be useful, for the project to properly proceed one must also bear in mind the differences between the kinds of phenomena under investigation, and that accordingly the precise challenges one pluralist proposal faces may well be different from those another faces.[26]

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