

**A SEMANTIC ARGUMENT AGAINST THE EXISTENCE
OF UNIVERSALLY HELD REAL PROPERTIES**

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*“Language may be a distorting mirror, but it is the only mirror we have” (M. Dummett, *Origins of Analytical Philosophy* (Cambridge: Harvard University Press, 1993), 6)*

Abstract

In this paper I propose a semantic argument against the existence of universally held real properties. A semantic argument is a deductive argument from one or more premises about meaning. Real properties are properties that add something to (or modify) their bearers, such as being red, being triangular or knowing that $1+1=2$. They are typically contrasted with Cambridge properties. A property is universally held if and only if everything that exists has it. The semantic argument is set within a neo-Fregean linguistic framework that distinguishes meaning from reference. Although, as Frege argued, meaning and reference do not coincide, they are quite closely related. The argument is premised on an identity criterion for (definite) meanings in terms of their reference characteristics. According to this criterion two meanings are identical if and only if their reference sets coincide. The notion of a reference set of a meaning will be made more precise in the paper. The semantic argument's conclusion that there are no universally held real properties has interesting ontological corollaries, such as 'There is an immaterial thing', 'There is a necessary thing', 'There is an uncaused thing', 'There is a simple thing' and 'There is a composite thing'. Given corollaries such as these, the argument seems relevant for debates within metaphysics and philosophy of religion.

1. Introduction

In this paper, I propose a semantic argument for the ontological claim that there are no real properties that are universally held. I will do so in two stages. First, after having put forward some preliminary definitions in the next section, I present and defend in section 3 a specific neo-Fregean theory of meaning. This theory amounts to an identity criterion for (positive determinate or positive definite) meanings in terms of their reference characteristics. It is this identity criterion on which the semantic argument is premised.

The second phase starts with section 4, in which I discuss the argument. I show how the conclusion that there are no universally held real properties is logically entailed by the argument's core premise, i.e. the aforementioned identity criterion for meanings. As said, the argument's core premise is a premise about meaning, whereas the conclusion of the argument is ontological. Therefore, the argument moves from the semantic to the ontological plane. It is an a priori argument to the extent that the criterion is a priori justified.

In section 5 I derive a number of interesting further ontological corollaries from the semantic argument's ontological conclusion that there are no universally held real properties. Examples of these ontological corollaries include, but are certainly not limited to, 'There is an immaterial thing', 'There is a (metaphysically) necessarily existing thing', 'There is an uncaused thing', 'There is a (mereologically) simple thing' and 'There is a (mereologically) complex thing'. Given such corollaries, the semantic argument is relevant for contemporary debates within metaphysics, mereology and philosophy of religion. Subsequently, in section 6 and 7 I defend the argument against a number of general and specific objections. Section 8 concludes the paper.

2. Preliminaries

Before I present the argument, a few terminological caveats are in order. As mentioned, the argument that I will propose is a semantic argument. A semantic argument is a deductive argument for some (ontological or other) conclusion from some theory of meaning. In other words, the conclusion of a semantic argument is logically entailed by one or more premises about meaning. The argument that I propose is based on a single premise about meaning, namely the aforementioned identity criterion for (positive definite or positive determinate) meanings. For my argument, I leave the notion of property undefined. That is to say, I will not attempt to spell out exactly what a property is, but what I say is compatible with most popular theories of properties, such as properties as universals, properties as universal instances, properties as Aristotelian accidental and substantial forms, or properties as tropes. The argument stays entirely neutral on this matter. The reader may thus pick his or her own favorite theory of properties.

Now, surely, in any case there are different kinds or types of properties. A property is universally held if and only if everything has it. Equivalently, one could say that a property is universally held if and only if everything that exists has it, since I take it that it is a conceptual truth that there are no things that do not exist. In other words, what exists is precisely what there is. This Frege-Russell-Quine view of existence is nowadays often referred to as quantificationalism. Hence, the conclusion of my semantic argument can be formally rendered in second order predicate logic as follows: $\forall P(\text{Real}(P) \rightarrow \exists x \neg P(x))$.

Further, a property is real if and only if it adds something to (or is a modification of) its bearer. A real property that adds something to a thing can be said to be owned by that

thing. An additive real property is that which a thing has.¹ Properties that are not real will be referred to as Cambridge properties.² Examples of real properties include: *being red*, *being triangular*, *being a man*, *being a table*, *being material*, *being contingent*, *being in love* and *knowing that $1+1=2$* . Examples of Cambridge properties, negatively defined as properties that are not real, are: *being not-red*, *being the only thing in the world*, *being to the sought of Paris*, *being loved by Brigitte*, *being thought of by Mark*, *being self-identical* and *being such that $1+1=2$* . In the literature a Cambridge property is often more narrowly defined as a property whose loss or gain doesn't involve a real change in its bearer. According to this more narrow definition *being not-red* and *being self-identical* would not count as Cambridge properties. Therefore, my definition of Cambridge properties, i.e. properties that are not real, is more inclusive. Further, since real properties add something to (or modify) their bearer in a genuine ontological sense, disjunctive properties such as *being red or blue* or *being red or non-red* are not real. With respect to Nelson Goodman's grue-like properties³ such as *being green until 1 January 3000 and blue thereafter*, it seems to me that they also don't add to (or modify) their bearer in an ontological sense, such as in the case of the properties *being green* and *being blue*. Therefore, grue-like properties seem to me not real either. Yet, as shall

¹ John Haugeland makes use of the notions 'owning' and 'having' to characterize a specific class of properties (cf. John Haugeland, *Having Thought* (Harvard: Harvard University Press, 1998), 280).

² I borrow the name 'Cambridge property' from Barry Miller (cf. Barry Miller, *The Fullness of Being* (Notre Dame: University of Notre Dame Press, 2002), 18). He introduces the notion as a simple extension of Peter Geach's use of 'Cambridge change' (cf. Peter Geach, *God and the Soul* (London: Routledge, 1969)). Yet, my definition of Cambridge property is broader than Miller's. For me any non-real property counts as a Cambridge property, whereas Miller limits the notion of Cambridge property to those properties whose loss or gain does not involve a real change. Thus, for me and not for Miller *being not-red* is a Cambridge property.

³ Cf. Nelson Goodman, *Fact, Fiction, and Forecast* (Cambridge: Harvard University Press, 1955)

become clear in the remainder of the paper, my semantic argument does not rely upon this assertion. For it would impose no problem for the argument if it turns out at some point in time that grue-like properties are to be considered real after all.

Further, the distinction between real and non-real properties is clearly not to be conflated with the distinction between essential and accidental properties. As properties such as *being red* or *knowing that $1+1=2$* are real and yet accidental, whereas a property such as *being self-identical* is essential and yet Cambridge. Neither should we identify real properties with David Lewis' perfectly natural properties, since real properties such as *wearing a hat* or *being tired* are plausibly not one of those fundamental properties that carve nature at the joints. Another well-known distinction in the literature is that between intrinsic and extrinsic properties. A way to introduce the distinction is by platitudes. Says David Lewis: 'A sentence or statement or proposition that ascribes intrinsic properties to something is entirely about that thing; whereas an ascription of extrinsic properties to something is not entirely about that thing, though it may well be about some larger whole which includes that thing as part. A thing has its intrinsic properties in virtue of the way that thing itself, and nothing else, is. Not so for extrinsic properties, though a thing may well have these in virtue of the way some larger whole is'.⁴ Now, does the difference between real and non-real properties amount to the difference between intrinsic and extrinsic properties? I take the answer to this question to be negative. For, as an example, *being self-identical* and *having longer legs than arms* are plausibly intrinsic but they do not add to (or modify) their bearers, that is to say, these properties are intrinsic but not real.

Let me briefly say a bit more about the notion of adding something to (or modifying) a bearer. In the case of real properties such as *being red*, *having brown hair* and *wearing trousers* it seems clear how to understand the additive nature of these properties. Similarly, in

⁴ Cf. David Lewis, "Extrinsic Properties", *Philosophical Studies* 44 (1983), 197-200.

the case of real properties such as *being bended*, *being in pain* and *bicycling* it seems evident that something is modified. Yet, there are cases where the additive or modificatory nature of the property in question is less straightforward. Take the property of *being physical*. Should we say that it adds to or modifies its bearer? I think that *being physical* adds to its bearer. For, say, a statue is physical because it is made of marble. In other words, the statue is a physical thing by virtue of having the property *being made of marble*. It is in this sense that I would hold that *being made of marble* is ontologically additive. The property of *being broken* would on the other hand not be additive. It does not add to the statue, but merely modifies it. Surely, there are cases where it is perhaps not sufficiently clear whether the real property in question is an addition or modification. Nevertheless, as long as the notion of real property is fleshed out sufficiently by exemplary or paradigmatic examples, there being vague cases does not by itself constitute a problem for the semantic argument that I shall present in this paper.

Now, the class of linguistic expressions includes terms. There are two kinds of terms: (1) singular terms, such as proper names (e.g., *John*) and definite descriptions (e.g. *president of the United States* or *kind of the Netherlands*), and (2) general terms, such as *man*, *table*, *red* and *gold*. As Frege famously pointed out, *evening star* and *morning star* refer to the same thing without having the same meaning. The same holds for many other cases, such as *Obama* and *president of the United States*. So, in (neo-)Fregean linguistics, a distinction is made between the meaning (intension, conceptual content, mode of presentation) and the reference (extension, designation) of that term. A term expresses its meaning and designates its reference.

Now, there are also cases in which two different terms have the same meaning and the same reference. Take for example Jo. Jo decides to assign the terms *abc* and *xyz* as proper names for his iPhone. In these cases of ostensive definition, the meaning of the term *abc* is (the singleton set containing) Jo's iPhone. For the linguistic knowledge of how to use the

term *abc* amounts to nothing more than knowing that *abc* designates Jo's iPhone. And the same holds for the term *xyz*. Moreover, both terms refer to Jo's iPhone. So, indeed, in Kripkean initial baptism acts such as these, the meaning and the reference of both terms are the same.⁵ Also, in such cases the meaning of a term clearly fixes its reference. Nevertheless, the same holds for the above mentioned cases of *morning star* and *evening star*, and *Obama* and *president of the United States*. So, the Fregean principle that meaning fixes reference holds in fact for both types of cases.

3. An identity criterion for meanings

Consider terms that are either, (1) singular (e.g., *Jo*, *Kim*, *king of the Netherlands*, *president of the United States*), or (2) generic and stand for⁶ a real property (e.g., *red*, *material*, *unicorn*, *triangular*), or (3) generic and stand for everything (e.g., *being*, *existent*, *thing*, *object*, *entity*).⁷ Plausibly, these terms express a positive determinate or positive definite meaning. The adjectives 'determinate' and 'definite' point here to the existence of limits or bounds. The relevant contrast class contains negative terms like *not-red* and *not-human*.

⁵ I do not claim that I follow Frege here. One might want to argue that according to Frege the terms *abc* and *xyz* do have a referent, but lack a meaning. So, while my theory of meaning is neo-Fregean in character, it does not follow that I am committed to Frege's analysis in all its different aspects.

⁶ One may ask how the meanings of these terms relate to the properties these terms stand for. For the remainder of the paper I hold that each of these terms has the meaning it has by virtue of the property it stands for. The term *red* has the meaning *red* by virtue of standing for the property of *being red*.

⁷ If *being* is a real property, then (3) is subsumed under (2). As part of my semantic argument I shall argue that in fact *being* is not a real property. The reasoning that I will provide for this claim is not new. It can be found in the literature, for example in Miller 2002.

Although these negative terms surely can be assumed to have a clearly defined meaning, they are not limited or bounded. In other words, they are not positive, such as *red* and *human*.

My appeal to the qualification ‘determinate’ or ‘definite’ is also to rule out ambiguous terms. An ambiguous term is a term whose meaning is in some way unclear, either because it is too imprecise (e.g. *bright*) or because it has multiple meanings (e.g. *arm* or *bat*). In what follows I take it that the meaning of all terms is unambiguous in both senses. Yet, I concede that in many cases it will be not entirely clear whether a term is or isn’t ambiguous. Often it seems to be more a matter of degree than a binary judgment. It seems to me though that this general phenomenon of ambiguousness is not a serious worry for the specific semantic argument that I present and defend in this paper.

Further, positive determinate or definite meanings are plausibly composed of positive determinate or definite meaning elements. Meaning elements are the constitutive parts of meanings. Instead of a formal definition, I clarify the notion of meaning element by providing a number of clarifying examples. The meaning elements of a definite description such as *king of the Netherlands* are *king* and *the Netherlands*. More precisely, the meaning elements of the meaning expressed by the term *king of the Netherlands* are the meanings expressed by the term *king* and the term *the Netherlands*. In what follows I shall often use the former shorthand description. As a similar example, the meanings elements of *president of the United States* are *president* and *United States*.

As another example, take the meaning expressed by the complex term *unicorn*. The meaning elements of this meaning are amongst others *horn*, *forehead*, *tail* and *horseshoe*. Or take the complex term *bachelor*. Its meaning elements are *single* and *man*. The meaning elements of terms such as *evening star* and *morning star* are respectively *evening* and *star*, and *morning* and *star*. What about proper names? Take for example the proper name *Alvin Plantinga*. Now, I’m going to push a bit further than perhaps expected by asserting that the

meaning elements of *Alvin Plantinga* are *Alvin* and *Plantinga*. Hence I construe the notion of meaning elements in such a way that even the meanings of some proper names break down into multiple constituent meaning elements. Note again that I do not claim to follow Frege in this specific matter. I'm neutral on whether Frege himself would accept this specific claim.

The last example concerns the meaning of simple (non-complex) terms like *being*, *red*, *abc* and *Kim*. Now, the meaning elements of the meanings of simple terms are the simple meanings themselves. So, in this example the meanings elements of *being*, *red*, *abc* and *Kim* are respectively *being*, *red*, *abc* and *Kim* as well.

I shall now introduce the notion of a reference set. First, each positive definite meaning element has a reference set. For example, the reference set of *red* is the set of all red things, the reference set of *John* is the set of all John's, the reference set of *being* is everything that exists, and the reference set of *abc* is Jo's iPhone.

Second, more generally, each positive definite meaning has a reference set. I define the notion of a reference set as follows. The reference set $\text{RefSet}(M)$ of a positive determinate meaning M is the union of the reference sets of M 's meaning elements. In formal set theory this can be rendered as: $\text{RefSet}(M) = \cup \{ \text{RefSet}(M_i) \mid M_i \text{ is a meaning element of } M \}$. Note that a meaning element can itself be composed of constitutive meaning elements. The meaning element *iPhone* in the meaning expressed by the term *John's iPhone* has for example the meanings elements *battery*, *display*, *memory* and *application* as parts. The definition of reference set is therefore recursive. The reference set of a positive determinate meaning is the union of the reference sets of its meaning elements, the reference sets of the meaning elements of these meaning elements, the reference sets of the meaning elements of the meaning elements of those meaning elements, and so on.

Let us consider a number of examples to get a grasp of the notion of a reference set of a positive definite meaning. The reference set of the meaning expressed by the term *unicorn*

is the union of the reference sets of its meaning elements. Now, the meaning elements of unicorn are *horn, forehead, tail, horseshoe*, etc. Therefore, the reference set of *unicorn* is the set of all horns, all foreheads, all tails, all horseshoe's, etc. And one can recursively proceed at this point, by extending this union with the reference sets of the meaning elements of the meaning elements of *unicorn*. Subsequently, one might even extend further by taking into account the reference sets of the meaning elements of the meaning elements of the meaning elements of *unicorn*, and so on. From now on I shall leave the recursive potential of the definition of reference set implicit.

As another example, take the meaning expressed by *president of the United States*. The reference set of that meaning is the set of all presidents (of any country having a president and thus not only the United States) and this single country, the United States. Or consider the meaning expressed by *evening star*. The reference set of that meaning is the set of all evenings and all stars. As a further example, consider the meaning expressed by *abc*. The reference set of that meaning is the singleton set that has Jo's iPhone as its member.

Now, although meaning and reference surely do not coincide⁸, meaning and reference are, plausibly, closely related. For, the things 'out there' is what meaning is all about. This holds in fact in a two-fold sense. First, the things 'out there' is what meaning is all *about*. But, perhaps more importantly, the things 'out there' is what meaning *is all about*. Meanings are in the end just devices for referring – and therefore, plausibly, analyzable in terms of reference.

⁸ In fact, we know that the following weaker claim is not true either: Let M_1 and M_2 be two positive definite meanings, then $M_1 = M_2$ if and only if $\text{Reference}(M_1) = \text{Reference}(M_2)$, where $\text{Reference}(\cdot)$ maps meanings to their references, e.g. *morning star* to the planet Venus and *red* to all red things.

Following these considerations I posit the following identity criterion for positive determinate or definite meanings. Let M_1 and M_2 be two positive definite meanings, then $M_1 = M_2$ if and only if $\text{RefSet}(M_1) = \text{RefSet}(M_2)$. Note that this criterion does not entail that positive definite meanings just are reference sets. Indeed, the assertion that for all positive definite meanings M it is that case that $M = \text{RefSet}(M)$ is much stronger. It clearly logically entails the identity criterion but not vice versa. So, the posited identity criterion is not to be understood as an ontological or explanatory reduction of meaning to reference sets. It doesn't say that positive determinate meanings are ontologically nothing above and beyond their reference sets. Neither does it say that we can explain all positive determinate meaning phenomena fully in terms of reference sets and their set-theoretical features. The criterion merely provides a necessary and sufficient condition for two positive meanings to be the same. That is to say, it offers a characterization of those meanings. And by doing this it leaves the question what meanings ultimately are unanswered. So my argument is compatible with both, say, Platonic and non-Platonic (e.g., conceptualist or even materialist) ontological accounts of the nature of meanings. Nevertheless, friends of reductive accounts of meaning in terms of allegedly less mysterious notions such as 'reference patterns', seem to have a good reason to find the criterion at least initially reasonable.

Now, apart from this consideration, let us see whether there are good grounds for accepting the identity criterion. The 'only if' part seems obvious. Because meaning fixes reference, it follows that the reference sets of two identical meanings coincide. Yet, the 'if' part of the identity condition is not trivial and requires further justification. I'll offer reasons to support it. First, the aforementioned remarks on the close relationship between meaning and reference indicate that the 'if' part of the identity criterion is intuitively quite reasonable. If there is a deep fit between reference and meaning, if meaning is ultimately comprehensible in terms of reference patterns, then identical reference patterns, that is, entirely similar

recursive reference bundles ‘all the way down’ plausibly reveal identical meanings. In other words, if the reference sets of two meanings coincide, then these meanings are completely indistinguishable in what their meaning elements, all the way down to their most elementary parts, refer to. Both meanings are thus completely similar in how they ‘touch’ the world. But then, given that the nature of meaning ultimately amounts to patterns of reference, i.e., patterns of ‘reaching out’ to the world, these meanings are plausibly themselves identical.

Second, the identity criterion receives substantial inductive support. In what follows I provide a variety of examples that accord with the criterion. As long as we aren’t given an example that conflicts with the criterion, an inductive generalization to all pairs of positive definite meanings seems warranted.

As a first example consider *Obama* and *president of the United States*. The meaning of *Obama* is not the same as the meaning of *president of the United States*. And indeed, their reference sets are not the same either. For the reference set of *Obama* consists of a single individual, namely Obama, whereas the reference set of *president of the United States* consists of all presidents and this single country, the United States. Or take *morning star* and *evening star*. These terms have a different meaning. And indeed the reference sets of these meanings do not coincide. For, the reference set of *morning star* is the set of all mornings and all stars, whereas the reference set of *evening star* is the set of all evenings and all stars. Or take *abc* and *xyz*, the names Jo ostensibly gave to his iPhone. Clearly, *abc* and *xyz* have the same meaning, namely (the singleton set consisting of) Jo’s iPhone. And the reference sets of both meanings are indeed identical as well, namely the aforementioned set consisting only of Jo’s iPhone.

One might object that *abc* and *xyz* cannot have the same meaning. For, “Brigitte knows that Jo’s iPhone is called *abc*” does not entail “Brigitte knows that Jo’s iPhone is called *xyz*”. The first sentence could be true and the second false. But then these sentences do

not have the same meaning. Given the semantic principle of composition⁹, according to which the semantic value or interpretation of an expression is a function of the semantic values or interpretations of its constituent parts, it seems to follow that *abc* and *xyz* do not have the same meaning. However, in both sentences *abc* and *xyz* are mentioned and not used. Hence it does not follow that both sentences have the same semantic interpretation – and therefore the example still holds as a further confirmation of the criterion.

Take as another example *three-sided* and *three-cornered*. Although *three-sided* entails *three-cornered* and vice versa, the entailment is not immediate. One requires for example an appeal to specific Euclidian geometrical theses. So it would be incorrect to say that the meaning expressed by *three-sided* and the meaning expressed by *three-cornered* are identical. This is in accordance with the identity criterion, since the reference sets of *three-sided* and *three-cornered* do not coincide. For, the reference set of *three-sided* contains all sides and the reference set of *three-cornered* contains all corners, which are clearly distinct from sides.

But what about *being* and *self-identical*? Both meanings are simple. So their meaning elements are respectively *being* and *self-identical* as well. The reference sets of *being* and *self-identical* are therefore respectively everything that exists and everything that is identical to itself. Now, clearly, everything that exists is identical to itself (since the existence of a thing that is not self-identical would violate the law of non-contradiction) and everything that is identical to itself exists (since one need to exist in order to have properties). But then the reference sets of *being* and *self-identical* coincide. Would this violate the identity criterion? I take it that this is not the case. For, the terms *being* and *being self-identical* do in fact have

⁹ The principle of compositionality is often called Frege's principle, by those who consider his work as its locus classicus. Yet, it has been disputed whether this principle can in fact be ascribed to Frege (cf. Francis Pelletier, "Did Frege believe Frege's principle?", *Journal of Logic, Language, and Information* 10 (2001), 87-114).

the same meaning. Given that the entailment from *being* to being *self-identical* is immediate, and vice versa, *being* amounts to nothing more or less than being *self-identical*. But then in both cases the mode of presentation, and therefore the meaning, is identical, which is in accordance with the proposed identity criterion.¹⁰

As a last example consider *water* and H_2O . The mode of presentation of both terms differs, even if we follow Kripke and take it that it is metaphysically necessary that *water* is H_2O . Therefore the meaning of *water* is not the same as the meaning of H_2O . But what about their reference sets? Well, the meaning expressed by the term *water* contains meaning elements such as *liquid*, *transparent*, *drinkable*, etc., whereas the meaning expressed by the term H_2O contains the meaning elements *hydrogen* and *oxygen* as its parts. But then the reference set of *water* (being the set of all liquids, etc.) is not the same as the reference set of H_2O (being the set of all hydrogen atoms, etc.). And this is in accordance with the proposed criterion of identity for definite positive meanings.

So, I conclude that, in the absence of counterexamples, these and other examples provide sufficient inductive support for the proposed identity criterion.

4. The argument

With the above theory of meaning in place, we are now in a position to state the semantic argument. We need to show that there are no universally held real properties, that is to say, that the following assertion is true: $\forall P(\text{Real}(P) \rightarrow \exists x \neg P(x))$.

Suppose *for reductio ad absurdum* that there is a real property that is universally held, i.e., $\exists P(\text{Real}(P) \wedge \forall x P(x))$. That property is either complex or simple (e.g., *red* is simple and

¹⁰ A similar assessment would apply in the case of the property of *being one*. For I take it that it follows *immediately* that every thing is one thing, and that some thing that is one does exist.

unicorn is complex). If it is simple call it P . If it is complex, it has a simple property as constituent. Call that P . It follows that P is a simple universally held real property.

Since P is simple, $\text{RefSet}(\text{Meaning}(P))$ is the set of all P 's. Since P is universally held, everything that exists is P . Hence, $\text{RefSet}(\text{Meaning}(P))$ is everything that exists. Now, clearly the reference set of the meaning expressed by *being* is everything that exists as well, that is to say, $\text{RefSet}(\text{Meaning}(\textit{being}))$ is everything. So it follows that $\text{RefSet}(\text{Meaning}(P)) = \text{RefSet}(\text{Meaning}(\textit{being}))$. But then the criterion of identity for positive definite meanings entails that $\text{Meaning}(P) = \text{Meaning}(\textit{being})$.

Now, since P means *being* and P is a real property, it follows that *being* is also a real property. Note that one could even argue that $\text{Meaning}(P) = \text{Meaning}(\textit{being})$ directly entails that $P = \textit{being}$. I show how. The proposition 'Everything is P ' or 'Every being is P ' is an a priori conceptual truth (i.e., analytic) in case P and *being* have the same meaning. But 'Every being is P ' can only be analytic in case $P = \textit{being}$. It thus follows that $P = \textit{being}$. But if $P = \textit{being}$ and P is a real property, it follows as well that *being* is a real property. So there are basically two ways of arriving at the conclusion that *being* is a real property.

But *being* is not a real property. Real properties, such as *red*, add something to things that already exist.¹¹ So, if *being* is a real property, it should add existence to already existing things, which is impossible. In other words, if *being* would be a real property, then it should add being to its bearer. But this is impossible since bearers are prior to their real properties in respect of existence. Indeed, if the bearer is not already a being, there is nothing for *being* to attach itself to, i.e., there is nothing for *being* to be a property of. Therefore *being* cannot add

¹¹ I have defined a real property as a property that adds to (or modifies) its bearer. The argument that I offer for the claim that *being* is not a real property is limited to showing that *being* is not additive. But an entirely analogous argument can be given for the claim that *being* is not modificatory either.

existence and thus it cannot be a real property, contrary to the earlier derived conclusion that it is in fact a real property.

We arrive at a contradiction, for it is logically impossible for *being* (or for that matter anything else) to be a real and not a real property. Therefore, we have to reject our reductio assumption. It thus follows that there are no universally held real properties, which is the conclusion of the semantic argument.

Note that the semantic argument does not require a commitment to the stronger Frege-Russell-Quine viewpoint that *being* is not a property of things. For as far the argument is concerned, *being* might still be a Cambridge property of things. Yet, since my argument does presume the earlier mentioned Frege-Russell-Quine view of existence (there are no things that do not exist) I am in fact committed to the conditional claim that if *being* is a property, everything has it. In short, because what exists is what there is, it follows that if *being* is a property, it must be universally held. But this is surely unproblematic for the argument. For the semantic argument doesn't exclude there being universally held Cambridge properties, such as *being such that $1+1=2$* , being *self-identical* and *being* (if *being* is a property).¹²

¹² Barry Miller argues that if *being* is a property, it must be a real. He writes: 'The referent of 'exists' in 'Nelson Mandela exists' (namely, his existence) is [...] not a relational one. Therefore, it is not a Cambridge property' (Miller 2002, 64). Hence, as Miller has it, if *being* is a property, it must be real. However, I am not convinced that '*being* is not relational' entails '*being* is real'. After all, *not-red* is not relational either, but from this it doesn't follow that *not-red* is real. And indeed, on my definition of Cambridge property, not all Cambridge properties are relational. For again, the property *not-red* is an obvious counter-example: it is a non-relational Cambridge property. Thus, on my definition of Cambridge property, '*being* is not relational' does not entail '*being* is not Cambridge'.

Further, for the argument to work, we actually do not need the identity criterion to hold for all singular terms and all general terms (standing either for a real property or everything). It is sufficient that the criterion merely holds for the two types of general terms. Nevertheless, it adds to the plausibility of the criterion that it appears to hold for (positive definite meanings expressed by) singular terms as well. That justifies their inclusion in the formulation of the criterion. And I could have opted for an even broader scope of the criterion. Let a relational expression be an expression that stands for a relationship, such as ‘__ is larger than__’. The criterion appears to hold also for (positive definite meanings expressed by) relational expressions. So the scope of the criterion can be enlarged even more by including relationships. And this, I would maintain, adds further to its plausibility.

Take as an example the relational expressions ‘__ is parent of __’ and ‘__ is child of __’. The positive definite meanings expressed by both expressions are clearly not identical. And since not every child is a parent, the reference sets of both meanings are different as well, which is in accordance with the extended identity criterion. Or take the expressions ‘__ is larger than __’ and ‘__ is shorter than __’. They clearly do not express the same meanings. And, in accordance with the criterion, it follows again that their reference sets do not coincide. For the ordered pair (Eiffel Tower, Obama) is part of the former and not the latter set.¹³ Other examples lead to similar results, indicating that the scope of the identity criterion can indeed be further extended to include (positive definite meanings expressed by) expressions that stand for relationships.

5. Corollaries

¹³ Note that the reference set for a two-place relation can be taken to include ordered pairs of objects.

I'll now point at a number of interesting ontological corollaries of the argument's conclusion. Consider properties like being made of *water*, being made of *fire*, being made of *air* and being made of *earth*. These properties are clearly real and thus, according to the conclusion of the semantic argument, not universally held. But then it follows, contra the Presocratic philosophers, that not everything is made of water (fire, air, earth). Surely, this might not strike us as interesting corollaries. Yet, it shows how the argument's conclusion has immediate ontological consequences. And there is more to come.

Consider properties like being *material*, being *physical* and being *natural*.¹⁴ Plausibly, these properties are real as well, and thus not universally held. But then not everything is material (physical, natural). Therefore it follows, contra materialism, that there is at least one immaterial thing. It also follows, contra physicalism, that there is at least one non-physical thing. Further, contra naturalism, it follows that there is at least one non-natural and therefore supernatural thing. And if the property of being *immaterial* is real as well, it also follows that not everything is immaterial. There is, contra idealism, at least one material thing.

Moreover, the property of being *contingent* is plausibly real as well. So not everything is contingent. There is at least one non-contingent thing. In other words, there is at least one metaphysically necessarily existing thing. The property of being necessary seems plausibly real as well. If so, it follows that not everything is necessary. There is at least one contingent thing, which refutes the fatalistic claim that the whole of reality exists necessarily.

Similarly, if being *caused* is a real property, it follows that not everything is caused. So there must be at least one uncaused thing. Also, since being *composite* is a real property, not everything is composite. So, contra the mereological thesis of infinite divisibility, there is at least one mereologically simple thing. But at the same time, since being *simple* is a real

¹⁴ On one definition of 'natural' something is natural (part of nature) in case it exists in space-time. Nature is then taken to be the whole of space-time including all its material and immaterial content.

property as well, not everything is simple. So there is, contra mereological nihilism, at least one mereologically complex or composite thing. Is being *finite* a real property? If so, then not everything is finite. There is at least one infinite thing. Or take the property of being *morally deficient* (incomplete, inadequate). If that is a real property, then there is at least something that is not morally incomplete or inadequate. Thus there is at least something that is morally entirely complete or adequate. Such an entity could plausibly be called morally perfect.

What about second order properties, such as being a *property*? If being a *property* is a real second order property, it follows that not everything is a property. There are things that are not a property, which seems to indicate that there are substances apart from properties, refuting Humean bundle theories of things.

These entailments already show that the semantic argument's conclusion has many interesting corollaries, relevant for various contemporary debates in metaphysics, mereology and philosophy of religion. And many more consequences than the aforementioned can quite easily be derived. In fact, the argument's conclusion that there are no universally held real properties seems to resemble something like a fundamental or foundational metaphysical principle from which many different facts about the nature of reality can be deduced.

6. General objections

Let us now consider various objections that might be leveled against the semantic argument. We'll get to specific objections in the following sections, but in this section I want to look at a general methodological objection. Someone might object that ontological consequences simply cannot be deduced from claims, however plausible, about semantics. Any attempt to slide from the semantical to the ontological plane is by its very nature not permissible. To this objection or worry I propose a two-fold response. First, although the core premise of the

argument is indeed entirely about semantics, the argument actually also deploys an auxiliary premise, namely that *being* is not a real property. And this auxiliary premise is clearly not about semantics. It is ontological by nature. So, the conclusion of the argument is in fact not solely derived from semantic considerations, which at least partially seems to accommodate the worry.

Second, even if the conclusion of the argument would have been derived entirely from claims about semantics, it does not follow that this is by itself a problem for the semantic argument. Let me explain. It seems reasonable to hold that the categorical structure of language reflects at least to some extent the categorical structure of the world. If this is so, linguistic categories provide us with insight into the world's categorical structure. That is to say, a logical analysis of the linguistic categories of language gives us clues on the type of entities that the world contains. For example, proper names and definite descriptions reflect the ontological category of objects, and (first-level, second-level, etc...) predicates reflect the category of (first-level, second-level, etc...) second-level properties.

By maintaining that the categories of language reflect the categories of reality, I'm not committed to the radical position that the categorical structure of reality is determined by the categorical structure of language.¹⁵ Thus, I do not claim that, e.g., there are objects precisely

¹⁵ Miller accepts this radical position and holds that Frege accepted it as well: 'In seeking to describe something of the actual categorical structure of the world, I shall be following Frege in maintaining the priority of linguistic categories over ontological ones. This is simply the claim that the categories of the things we talk about are to be determined by the linguistic categories of the language we employ to speak about them' (Miller 2002, 67-68). This view is shared by other contemporary metaphysicians, such as Thomas Hofweber, who argues that metaphysical inquiry should consist of analyzing linguistic expressions, and Amie Thomasson, who holds that metaphysical questions are to be answered by analyzing the application conditions of the terms of our language (cf. David J.

because there are proper names. Neither do I commit myself to the even more radical position that, e.g., there are objects by virtue of their being proper names. Instead, I merely assert that the fact that language contains proper names, indicates (gives us a good reason to hold) that there are objects in the world. And this seems quite reasonable.

Moreover, language not only reflects reality's categories, it also reflects many of reality's ontological patterns. Take the ontological categories of object and property. As mentioned the linguistic structure of language reveals these categories by containing proper names, definite descriptions and predicates. But language also reveals the ontological pattern of objects having properties. After all, in language predicates are attached to proper names and definite descriptions. Now, if it is reasonable to hold that language mirrors both reality's categories and patterns, then performing a logical analysis of language's linguistic structure provides us insight into the categories and patterns of the world. That is, from the logical structure of language ontological consequences can be derived. But then, given that semantics is clearly part of the logical analysis of language, it follows that a theory of meaning can have ontological consequences. From this perspective the semantic argument is merely an example of such a theory having ontological consequences.¹⁶ I conclude that the general objection is

Chalmers, David Manley and Ryan Wasserman (eds.), *Metametaphysics: New Essays on the Foundations of Ontology* (Oxford University Press, 2009)). But as said, I stay neutral on this matter. I do not hold that metaphysical inquiry reduces to linguistic analysis. But I do think that it helps the metaphysician in some (and perhaps many) cases, such as for my semantic argument.

¹⁶ Another example would be an argument for fatalism (the claim that whatever will happen in the future is already unavoidable) from the principle of bivalence - a fundamental principle of semantics according to which every proposition (including those about the future) are either true or false. I do not endorse such an argument, but merely mention it as an example of how philosophers use certain semantic principles to argue for specific ontological claims. And there are many other examples.

not sufficiently convincing. We do not have strong reasons to reject the semantic argument based on the above mentioned general methodological worry.

7. Specific objections

Let us now look at a number of more specific objections. A specific objection could be of four different types. First, it could be a parody objection, showing that the argument, if valid, forces us to accept similar arguments having absurd or otherwise unacceptable consequences. Second, it could be a parity objection, showing that a similar type of argument can be given for the negation of the conclusion. Third, it could attack one of the premises by giving counter examples or rejecting the grounds provided in support of the premise. Fourth, it could aim to show that the conclusion of the argument does not follow logically from its premises.

Since the argument is logically valid and does not allow for parity cases, we are left with objections of either the first or third type. In what follows I shall consider some specific objections of the first type. Take the following objection. Doesn't the conclusion of the argument commit us to the claim that not everything is non-unicorn? If so, then not everything is not a unicorn. So it follows that there is at least one thing that is not not a unicorn. In other words, there is at least one unicorn. Similarly, it would follow that there is at least one flying teapot around mars, at least one spaghetti monster, at least one blue barbapapa, etc. This is clearly absurd and therefore the argument must be refuted, as the objection goes. Nevertheless, this specific objection fails. For the meaning expressed by the term *not-unicorn* is not a positive definite or positive determinate meaning. But then $\text{RefSet}(\text{Meaning}(\textit{not-unicorn}))$ is not defined. And thus the conclusion that not everything is a non-unicorn does not follow. The same holds for flying teapots around mars, spaghetti monsters, and other examples. There is actually a more swift refutation of this objection: the

property of being a *non-unicorn* is not a real property. So the conclusion of the semantic argument doesn't commit us to the claim that not everything is a non-unicorn. But then indeed this objection fails.

But what about the property of being *self-identical*? Wouldn't the conclusion of the argument commit us to the claim that not everything is *self-identical*? If so, it follows that there is a thing that is not identical to itself. But that would be absurd. How could something be not identical to itself. That seems logically impossible. If there is a thing not identical to itself we have to give up one of our most fundamental logical principles, namely the law of non-contradiction. Since this would effectively lead to a collapse of logic, there must clearly be something wrong with the semantic argument. However, this doesn't follow either, since being *self-identical* is a relational property and thus a Cambridge property instead of a real property. Indeed, the property of being *self-identical* is not real, since it does not add anything to its bearer. Nor does it modify its bearer. This objection therefore fails as well.¹⁷

As a third specific objection, consider the property of being *knowable*. Wouldn't it follow from the argument that not everything is knowable? But then there must be at least one thing that is unknowable? Now, if *knowable* is a real property, this is indeed a consequence of the argument. But, similar as before, if *knowable* is a Cambridge property, it does not follow that not everything is unknowable. I do in fact think that *knowable* is a Cambridge property. Therefore I am not committed to accept the claim that there are unknowable things.

But what if knowable is actually a real property? In that case there are unknowable things. Wouldn't that reject the first premise of my modal-epistemic argument for the

¹⁷ The property of *being one* isn't real either since it also doesn't add to or modify its bearer. So the semantic argument does not entail the suspect proposition that there is a thing that is not one thing.

existence of God?¹⁸ No, for the refined version of the modal-epistemic argument is compatible with there possibly being unknowable facts, such as *John left Amsterdam and nobody knows it*. Besides, it would not count as a successful objection against my semantic argument. We would merely have to accept that there are unknowable things, which does not seem absurd. In short, if being *knowable* is a real property, then it doesn't affect my semantic and modal epistemic argument.

8. Closing remarks

In this paper I presented a semantic argument against the existence of universally held real properties, derived some interesting consequences from this conclusion, and argued that various types of challenges against the argument's conclusion can be met. Now, until and unless other objections are proposed and shown convincing, I conclude that the argument is sound. Since I take it that the prior plausibility of the proposed identity criterion for positive definite meanings on which the argument is premised is higher than the prior plausibility of the proposition that there exist a supernatural (non-physical, immaterial) being, the proposed argument makes genuine progress in lowering the likelihood of naturalism (physicalism,

¹⁸ Cf. Emanuel Rutten, "A modal-epistemic argument for the existence of God", *Faith and Philosophy* (Forthcoming).

materialism).¹⁹ Moreover, as shown, the semantic argument has similar effects for claims in other contemporary debates within metaphysics, mereology and philosophy of religion.²⁰

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¹⁹ As discussed, another interesting corollary of the semantic argument is the existence of a metaphysically necessary being. The existence of such a being is often considered problematic for naturalism. If so, the argument further raises the likelihood of supernaturalism over naturalism.

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