

Review of "Ontology and the Ambitions of Metaphysics" by Thomas Hofweber  
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Are there are numbers, propositions, or properties? These are questions that are traditionally at the heart of metaphysics. But they appear to have depressingly easy answers. Each of the following *innocent* statements appears to entail an affirmative answer to a metaphysical question:

The number of moons of Jupiter is four.  
It is true that Madagascar is in Africa.  
Fido has the property of being a dog.

This is because each entails the *metaphysically loaded* claim that there is a number, a truth, or a property. The innocent statements are not particularly controversial. Everyone agrees that Jupiter has four moons, that Madagascar is in Africa, and that Fido is a dog. Metaphysics has a reputation as an obscure and (at best) difficult discipline. But it appears to be remarkably easy, if the loaded statements are answers to central metaphysical questions, and are settled by ordinary innocent facts. (20 ff)

These arguments are not unfamiliar. One might expect that all of the main responses, and the considerations for and against them, to be well-known. In *Ontology and the Ambitions of Metaphysics*, Thomas Hofweber a refreshing new take, supported by subtle considerations not only from within traditional metaphysics, but also linguistics and psychology.

Hofweber's central claim is that innocent statements do entail what we called their "metaphysically loaded" counterparts, but these counterparts are not, in fact, metaphysically loaded. When we say that there is a number of moons that Jupiter has, these are statements with a quantifier in natural language. But there are, according to Hofweber, two readings of this sentence.

One reading of the quantifier (expressed by the determiner 'a'), is what Hofweber dubs the *domain conditions* reading of the quantifier. It asserts that, among the domain of objects, one of them is the number of moons of Jupiter. (59)

The other is the *inferential-role* reading. Its meaning is determined, as its name suggests, solely by the role it plays in stating generalizations. Any true sentence of the form

*t* is *F*

where the term  $t$  occupies the grammatical position of a subject entails

something is  $F$

where the quantifier has its inferential-role reading. Moreover when the quantified sentence is true on its inferential-role reading, it follows that there is some true sentence of English of the form  $t$  is  $F$ . (72)

Obviously it matters a great deal to Hofweber that the domain conditions and inferential-role readings of the quantifier are not equivalent. So Hofweber argues for this. One case involves empty names. It is true that Santa Claus gives presents. But does it follow that someone gives presents? Only on the inferential-role reading: this follows from the semantics of 'someone' on its inferential-role reading, plus the fact that 'Santa Claus' is a term of English in subject position. But not on the domain conditions reading of the quantifier: there is no one in the domain of objects who is Santa Claus. (68)

The more interesting case for metaphysics involves terms in subject-position that are not even in the business of trying to refer to something. This is the situation with number-terms like 'four', Hofweber argues. These are not, in English, proper names which attempt to refer to an object: witness cases where 'four' cannot be replaced with the referring expression 'the number four' while preserving grammaticality. (115) Nevertheless our innocent statement with 'four' in subject position will entail that there is some number of moons which Jupiter has—so long as we use the inferential-role quantifier.

The upshot is that, on one reading, it is *true* that there is a number. But this is the inferential-role reading and, for a variety of reasons, this does not tell us anything about ontology. (109)

Parts of this picture are hard to dispute. But one wonders how much of a role the non-referential character of number-terms has to do with the force of the arguments from innocent to loaded statements. Presumably we *could* have spoken a language where number-terms behave syntactically just like proper names. In this case they would be in the business of referring. And it is natural to think that we would still find the inferences to quantified, apparently loaded statements compelling. (Few would want to say that we find these inferences compelling only because of some tacit awareness of the non-referential character of number-terms in English). Perhaps we should pause to ask how heavily a solution to ontological questions should rely on the linguistic peculiarities of English.

If we follow this far, Hofweber invites us to accept an additional conclusion that, if correct, is striking. This is the claim that there are no numbers on the domain conditions

reading. And this follows from the fact that these loaded statements are true on the inferential-role reading of the quantifier.

This is striking because we started with a claim about polysemy in the quantifier to the effect that it has multiple non-equivalent readings. We should not expect, in general, for an affirmative answer to one reading of a question containing a polysemous term to imply a negative answer to that question on a different reading. For instance 'man' is polysemous, designating either the species *homo sapiens* (as in 'mankind'), or adult male humans. But we would not ordinarily infer from the claim that Seamus is a man (in the first sense) that Seamus is not a man (in the second sense).

However Hofweber has an argument that we should make the analogous inference about loaded statements on the two readings of the quantifier. He applies this in detail to loaded statements about numbers (110), but the same point applies to loaded statements about properties and propositions.

Here is the argument, in summary form. Number-terms, like 'the number 2', are not referring expressions. A domain-conditions reading of the statement 'there are numbers' is true only if there are numbers in the domain of quantification. But: "since 'the number 2' does not pick out or denote any object, whatever objects there may be, none of them is the number 2. So among all the objects, none is the number 2." (111)

Notably, the central premise in this argument is linguistic: it concerns the semantic function of number-terms, which Hofweber argues for at length. The conclusion is metaphysical: the domain of quantification (unrestrictedly) contains no numbers. Of course, the linguistic premise won't rule out the an ontology of unnamed (in English) number-like entities, but the argument is one worth pondering.

There is, on this view, a close relationship between existence (in the sense conveyed by the domain-conditions quantifier) and expressibility. Hofweber is sensitive to this. Chapter 9 is dedicated to this type of quantification over properties we don't have a term for.

The stock of terms in the language we actually speak is pretty impoverished. Perhaps there is a grad student in some lab who is right now whose sole focus is investigating how to make a drink that has the property of tasting better than Diet Pepsi. So we can truly say that there is a property the grad student is investigating, namely the property of tasting better than Diet Pepsi. But a speaker of Ancient Greek—Jimmy, say—would not speak a language that contains a term for Diet Pepsi. It appears that Jimmy will not be able to truly say, with an inferential-role quantifier, a sentence that means the same as our sentence 'there is a property the grad student is investigating'. Presumably we present-day English speakers are in the same position with respect to some other properties. (233)

Ancient Greek may not have a term for Diet Pepsi, but this does not mean that there is no sense in which Jimmy's inferential-role quantifier generalizes over *being Diet Pepsi*. There is an extension of the Jimmy's language which includes variables ranging over everything that exists at some time—including the Diet Pepsi in the vending machine outside my office. I could walk to the vending machine and point to the Diet Pepsi, saying 'the grad student is investigating the property of tasting better than *this*', and thereby say the same thing as an English sentence containing 'Diet Pepsi'. Hofweber's extension of the Greek's language, which is supplemented with variables ranging over objects, is supposed to have the same expressive power. (235) Similar extensions allegedly allow for inferential-role quantifiers to generalize over all the properties we could conceivably want to talk about.

It is not clear that this is so. Merely by demonstrating a Diet Pepsi and saying 'tasting better than *this*' I do not thereby express the property of tasting better than a Diet Pepsi. (For instance if I take a sip from an expired bottle of Diet Pepsi, I not commenting on Diet Pepsis in general if I say 'anything else would have the property of tasting better than *this*'.) Nor will we arrive at adequate truth conditions for the inferential-role quantifier by simply adding further references to additional Diet Pepsis. (The expression 'being either this, or this, or this, ...' where one demonstrates every Diet Pepsi that ever has or will come into existence, will not necessarily be equivalent to 'being a Diet Pepsi'.)

The method of extending impoverished languages to include variables ranging over existing objects is not an incidental component of Hofweber's overall view. He accepts an ontology of ordinary objects, and hence domain-conditions quantification over objects (Chapter 7). But since he wishes to deny domain-conditions quantification over numbers, properties, and propositions, he needs to specify adequate truth conditions for an inferential-role quantifier over them, using only domain-conditions quantification over objects. This is a difficult task. The overall ambitions of his project place restrictions on the resources he has to make inferential-role quantifiers do the job he has employed them for.

Readers of *Ontology and the Ambitions of Metaphysics* will nonetheless be treated to a constant flow of useful insights about important philosophical questions concerning ontology and quantification (Chapters 1-4). These are followed by careful argumentation geared toward providing Hofweber's own answers and solutions (Chapters 5-11). The book closes with reflections on metametaphysical issues (Chapters 12-13), situating his preferred solutions to the metaphysical puzzles in his book with alongside other fashionable approaches to these same issues. Hofweber might not succeed in dissuading metaphysicians from plying their trade with the notions of 'fundamentality' and 'ground', convincing them instead that they should do ontology in the old-school way, with first-order quantifiers souped up with Hofweberian distinctions between different

readings. But he has certainly provided a sparse alternative that deserves to be taken seriously, even by those who do not share his skepticism.