

## Numbers, Properties and Propositions on the Cheap?

In “A Puzzle about Ontology” (Nous 39:2, pp. 256-283, 2005) Thomas Hofweber presents us with what he takes to be a puzzle about ontology. The puzzle, says Hofweber, consists in the fact that on one hand, the question:<sup>1</sup>

Q1 Are there numbers?

seems to have a proper significance for ontology and to be “hard” to answer, while on the other hand it seems to be neither: it seems to receive a straightforward positive answer which does not seem to have any ontological significance.

Hofweber proposes to solve the puzzle by distinguishing between two readings of the English existential quantifier ‘there are’ and its variants, the *internal* reading and the *external* reading. The solution simply consists in arguing that Q1 is properly ontological and hard to answer on its external reading, while it is not ontological and true on its internal reading.

In this piece we will take issue with Hofweber’s argument that Q1 receives a straightforward positive answer on the internal reading and argue that, on the contrary, if his argument is bound to work, the “hard” ontological question will receive an easy answer as well, namely, that there are no numbers.

In a nutshell Hofweber’s argument proceeds via the following steps:

1. Jupiter has four moons;
2. The number of moons of Jupiter is four;
3. There is a number that is the number of moons of Jupiter;
4. There are numbers.

We will grant Hofweber the inferences from 1. to 2. and 3. to 4. However we think that the inference from 2. to 3. is not sound even under the internal reading of the quantifier. Since what can be inferred via application of existential generalization to 2. is not 3. but

- 3’. There is something that is the number of moons of Jupiter.

In short Hofweber needs a further premises in order to infer 3. from 2. or 4. from 3’. This premises need not only be true but also non ontological. Otherwise, it would not be guaranteed that the answer to Q1 understood internally, namely 4, is not ontological and Hofweber’s answer to the puzzle would break down. But we argue that any defense of a premises capable of fixing the argument will likewise be a defense of the number neutrality of the sentence ‘4 is a number’. We then show that if the number neutrality of this sentence can be established this will have the unfortunate consequence that Q1 understood externally, i.e. ontologically, will receive a negative answer and hence Q1 even understood in it’s proper ontological way is not “hard” to answer.

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<sup>1</sup>Actually, Hofweber raises the same question for properties and proposition and argues that parallel puzzles arise to which his solution applies likewise.