

Jody Azzouni, *Deflating Existential Consequence: a case for nominalism*.

New York: Oxford University Press, 2004. viii + 241 pp.

Jody Azzouni's book covers a variety of topics in metaphysics, the philosophy of science and the philosophy of mathematics. At its core, however, is a radical and original proposal about ontology and how to settle questions of ontological commitment. It is this part that makes the book unique and that will either make you love it as liberating or hate it as deeply confused. I have encountered both reactions to this book in conversations with various philosophers, and I think it is fair to say that this book is one of the most divisive in the field in recent years. Any book that gets such strong reactions is either getting something profoundly right, or profoundly wrong. Of course, usually it is a bit of both, and this is the case here as well.

In this review I will focus on Azzouni's radical proposal about ontological commitment, thereby neglecting a variety of other topics and discussions in the book which are well deserving of closer attention. But given what Azzouni says in the middle of the book, one can't help but neglect the beginning and the end.

The general outline of the Azzouni's book is quite straightforward. The first two chapters discuss whether or not we have to accept the theorems of mathematics as being literally true, as opposed to, say, being merely true in a fiction. Azzouni concludes that there is no way around this and that various attempts to accept mathematics while rejecting the literal truth of its results are flawed in some way or other. Chapters three to five are the heart of the book. They address the question whether the literal truth of various mathematical statements settles whether we are ontologically committed to numbers. Azzouni argues that this is so if we accept that ontological commitment is tied to what quantifiers range over, i.e. Quine's criterion of ontological commitment, but that in fact there is no good argument for this criterion. Azzouni instead rejects Quine's criterion and proposes a different one, one mostly tied to a special notion of independence. In the latter chapters of the book Azzouni investigates the ontological commitments of various scientific theories and of mathematics, in light of his proposal about ontological commitment. He concludes that nominalism is defensible. Nominalism can be saved, while the literal truth of mathematics is preserved. If Azzouni is right then all nominalist

programs that tried to do substantial work in the philosophy of mathematics by reformulating mathematics, or denying its literal truth, were mistaken. Mathematics is to be accepted at face value as literally true, but doing this is compatible with nominalism. Even though it is literally true that there are numbers, that numbers exist, and so on, we are not ontologically committed to numbers. This is Azzouni's *separation thesis*. The literal truth of statements that say that numbers exist has to be separated from the issue of ontological commitment. Incoherent, or a deep insight?

Azzouni's book mainly deals with the philosophical problem of ontological commitment. A philosophical problem usually has two sides. First there is the question what the question is, then there is the question what the answer is. Philosophical problems are hard in that the answers don't come easy, but they are also hard because the questions don't come easy either. Often philosophical treatises focus more on the answer than on the question they try to answer, and I think Azzouni's book does just that. Central parts of his book are concerned with what ontological commitment is and what it isn't, but he does not say much about what this question comes down to. After all, "ontological commitment" is a term of art, and not the basic expression of what is puzzling in this area, and what we are trying to figure out. According to Azzouni, when we are asking what we are committed to we are not simply asking what there is (according to our best theory, or the like), nor what exists. But what then is the question? It is hard to evaluate the answers Azzouni proposes or rejects without being clearer on what the question is, and I wish he would have said more about this. In effect, he says quite a bit about what the question isn't and what it can't be. But when we are wondering about the ontology of numbers, then we must be wondering about the answer to some question, call this *the ontological question* (about numbers). What is that question? Azzouni in effect holds a strikingly radical view about this, which we could call the *semantic inexpressibility thesis*: there is no English sentence whose semantic content is the answer to an ontological question. In particular this seems to imply that there is no English sentence whose content is such that having an interrogative attitude towards that content is asking an ontological question. But Azzouni still holds that we can ask such questions, and answer them, or at least commit to answers to them. Ontological issues are not beyond

our expressive powers, and ontological dispute makes sense, as it must if his book is to make sense. And so Azzouni holds that we can “get at” (p. 119) such contents even though no sentence semantically has them as contents. Presumably we should think of getting at these contents as a pragmatic process, or some form of filling in the semantic contents of our sentences, but the book remains largely silent on how this is supposed to go. Azzouni suggest that “rhetorical enhancers” like ‘really’ play a role in this (p. 119), but this answer is at best suggestive. But all this is rather central for evaluating the answer Azzouni proposes to the ontological question. Even if the semantic content of “Do numbers exist?” does not express the ontological question, do ordinary utterances of this quoted sentence nonetheless express it? And even if the truth of the sentence “Numbers exist.” does not guarantee an answer to the ontological question, does the truth of ordinary utterances of this sentence answer it? How does adding ‘really’ change the content of such sentences or utterances? This is crucial for evaluating how radical the separation thesis really is. If the truth and acceptance of a sentence like “Numbers exist.” does not settle whether or not we are committed to numbers, is this merely because of a view about the rather thin semantic content of sentences like this, or does it carry over to the truth and acceptance of (ordinary) utterances of the same sentences? Furthermore, does the role of mathematics in science only establish the truth of the sentences, or also the truth of (ordinary) utterances of these sentences? Most importantly, what are we asking when we are asking what we are ontologically committed to?

I take this point to be the biggest weak spot of the book, but it also closely relates to one of its most interesting insights. Azzouni does make a good case that ontological commitment isn’t as clearly and directly tied to the things we commonly take it to be tied to. Quantification is more complex than a Quinean might think, and so is talk about existence. How then should we ask the ontological questions? If Azzouni is right this is not an easy question, but unless we find out how to ask the ontological question we can’t tell whether or not we have answered it. Azzouni focuses on the answer while neglecting the question. One lesson from his radical answer is that we have to think about the question.

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