Jody Azzouni

Ontology without Borders

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by Delia Belleri

In his book *Ontology without Borders*, Jody Azzouni engages in a project of "pure deflationary metaphysics" that consists of two parts. In the first part, a position called *quantifier neutralism* is defended, whereby existential quantifiers in formal and natural languages do not require ontological commitments; they are "ontologically neutral". In the second part, a view called *object projectivism* is defended, whereby there are no ontological "borders" between objects, and there is no ontological "stuff"; there are only "features", or ways for the world to be. Quantifier neutralism and object projectivism are two sides of the same coin. The former is a semantic thesis about the meaning and the theoretical implications tied to certain linguistic devices. The latter is a metaphysical thesis about the nature of reality. According to Azzouni, reality contains no "objects" that could constitute the "domains" of quantifiers. Consequently, ontology is not – as the Quinean orthodoxy tells us – about endorsing existentially quantified sentences and committing to the objects that act as the values of variables.

Part I argues in support of two main tenets of Azzouni's theory: first, that the first-order quantifiers of any language range over a single domain (*quantifier transcendence*). And second, that first-order quantifiers and several natural language expressions usually linked to ontological debates are *ontologically neutral*.

Azzouni starts chapter 1 with an important distinction: that between *quantifier immanence* and *quantifier transcendence*. Quantifier immanence is the view that the unrestricted first-order quantifiers of different languages range over different domains. Quantifier transcendence is the view that there is only one domain, and that the unrestricted first-order quantifiers of different languages all range over such domain. Azzouni links immanence to Carnap's linguistic frameworks and transcendence to Quine's idea that there is no "cosmic exile". Furthermore, he links immanence to Eli Hirsch's *quantifier variance*, given that Hirsch envisages ontologists as speaking different languages, whose unrestricted quantifiers each range on a different domain. Azzouni critiques

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Hirsch's position arguing that, if the different domains determine different meanings for "reference" and "existence", then ontological debates cannot get off the ground (25-26). If ontologists are to disagree, they are to disagree about a common domain. Therefore, for ontological disputes to even be possible, immanence (and quantifier variance) is to be rejected (29).

The notion of transcendence takes centre stage in chapter 2, in which Azzouni argues that the natural language term "exist" is transcendent (i.e., it ranges over one domain) when used to assert or deny ontological commitment. To this end, Azzouni contends that terms like "exist", "object" or "thing" are *criterion-transcendent*. They are used with a single, although rather open-ended and flexible, meaning. Evidence for this claim comes mainly from the observation that, whenever someone puts forward an ontological claim like "Fs exist" or "Fs do not exist", it seems odd to interpret them as proposing a change in the meaning of "exist"; intuitively, they are making a claim about what (really) lies in the extension of "exist", in one single sense of this word (43). This marks a step towards showing that English speakers treat "exist" as having a single domain and meaning.

The next step is for Azzouni to show that use of the existential quantifier, as well as of natural language expressions like "there is" and "some", is *ontologically neutral*. Semantic theories presuppose that sentences have a "discourse universe" as their background domain, which in turn provides the (restricted) domains for quantifiers, extensions for nouns and predicates, and so on. Azzouni's claim in chapter 3 is that such domain need not contain anything that *exists*. First, linguistic evidence indicates that we utter sentences that we take to be true, but whose background discourse contains nothing (for instance, "A dragon is a frightening thing"). Second, further linguistic evidence suggests the neutrality of the expressions typically used to undertake or deny ontological commitment (for example, "there is" and "some"). These expressions are sometimes used to talk about things that don't exist, sometimes about a mix of things that exist and things that do not exist, sometimes about things that exist. In the latter case, these expressions *do become* ontologically committing. Yet, as Azzouni stresses (63), that is a matter of *pragmatics*: it depends on the conversation's subject-matter, context and aims. Moreover, if speakers wish to address strictly ontological questions, they can coin a bespoke existence predicate, *Exist*$^{\$}$ (70-72). With the help of this expression, they can debate whether certain entities – over which they may both quantify – *exist*$^{\$}$ or *do not exist*$^{\$}$. The applicability of *Exist*$^{\$}$ will play a central role in chapter 5.

If existential quantification is ontologically neutral, some sentences can quantify over, or refer to, objects that do not exist. Azzouni calls these sentences *ontically unsaturated* (74). Chapter 4 is devoted to clarifying how on-

tically unsaturated questions can be true. An ontically unsaturated sentence like "Mickey Mouse is depicted as a mouse" cannot be true by *correspondence* – since the name "Mickey Mouse" is non-referring. In Azzouni's view, what induces the truth of this sentence is a holistic network of inferential interrelations including representations (Mickey Mouse cartoons), social and verbal practices, and so on (79-80). These representations and practices have to be *coherent*, i.e. obey classical logical principles. Azzouni thus embraces a deflationary view of truth. The predicate "true" is a device for semantic ascent governed by principles, like Tarsky's Convention T, that are ontologically neutral. The ascription of truth, however, can be induced by correspondence considerations or by coherence considerations (78). When coherence considerations are invoked in truth-evaluation, we may lack the information needed to ascribe determinate truth or falsity. In these cases, we simply "don't know" whether the sentence in question is true or false; yet, this epistemic lacuna need not be a threat to bivalence (85-86).

Thanks to quantifier neutrality and the specially coined predicate *Exist*$^{\$}$, it is possible to make sense of a host of ontologically relevant debates that occur in philosophy and in science. Azzouni reviews several such debates in chapter 5. The platonist and the nominalist about mathematical entities, for example, can both agree that there are certain indispensable truths involving quantification over numbers. Yet, they can disagree over whether the objects that have the property "being a number" *exist*$^{\$}$. In formal terms: "The nominalist claims $(x)(Nx \rightarrow \neg\, Exist^{\$}x)$; the Platonist claims $(x)\ (Nx \rightarrow Exist^{\$}x)$" (101). Similar remarks hold for disagreements about the existence of composite material objects (102), of God (104), and of scientific posits such as point masses (109-111). Quantifier neutrality also accounts for the fact that we can talk about fictional entities in a way that "scopes out" of pretence operators, as in the sentence "Sherlock Holmes, as he is depicted in the Conan Doyle stories, is smarter than Trump actually is" (114). Furthermore, Azzouni explains how subjects can apparently think about "the same" non-existent objects (e.g. Hob and Nob can think about the same witch): the identity of non-existent objects is established (as detailed in chapter 4) by means of coherence considerations (127).

The remainder of the book, consisting of chapters 6-9, which make up Part II of *Ontology without Borders*, is devoted to outlining and defending *object projectivism*, the view whereby "(i) there are no worldly ontological borders between purported objects; … and (ii) we project object boundaries onto the world" (143).

In chapter 6, Azzouni's master argument in support of object projectivism starts with the following disjunction: either ontological borders are brute and additional to objects' properties and relations; or they are a subset of said prop-

erties and relations. Yet, we cannot make metaphysical sense of the first option, because talk about border-shifts seems derivative with respect to talk about properties- or relations-shifts (145). We cannot make metaphysical sense of the second option either, for we would have to single out a subset of "special" border-inducing properties or relations. Our best chance would be that these "special" properties are *projected* properties – but that establishes object projectivism (148). One could reply that object borders are detected by perception (149), or by our best scientific theories (158). Yet, neither of these sources of evidence really entitles one to infer that there are *any* specific borders, because alternative (incompatible but equivalent) ways of perceiving and theorizing are available. That such alternatives are available supports the conclusion that object borders are projected.

Over what are object borders projected? According to Azzouni, borders are projected over a base of worldly "features". Chapter 7 develops the details of a feature-based ontology and a feature-based language. Features are not themselves objects, properties, or relations. Rather, they can be captured by a coordinate system that represents a feature-arrangement or "feature presentation". Coordinate systems can be chosen arbitrarily, though, so no coordinate system is metaphysically privileged. For example, one can start with space-time points and describe colours as being "at" ("@") those space-time points; but one can also start with colour coordinates and describe space-time points as being "at" ("@") those colours (178-179, 182). Describing a coordinate as being "at" another coordinate is not tantamount to predicating a property of an object, because the feature-placing symbol ("@") does not imply ontological commitment to either properties or objects (179). Moreover, quantification in the feature-placing language is also ontologically neutral (183). The debate between border realists and border projectivists can be expressed by coining the non-logical predicate "B" (which stands for "being a border"). For the border projectivist, some features exhibited by space-time portions can be *real*, but in *no case* would they determine a border (187).

An ontology based on features and feature-presentations allows one to "dissolve" what are commonly thought of as substantive metaphysical questions. In chapter 8, Azzouni focusses especially on issues pertaining to the reality of composition. Are "macro-objects" real, or are only the "micro-objects" that compose them real? If there are only features, Azzouni contends, macro-objects and micro-objects are simply ways of "chopping up" a feature presentation, with different degrees of "granularity" and "scales" (197). The metaphysical problem vanishes. Someone may oppose this claim by insisting that, if macro-objects *reduce* to micro-objects, only the latter are *real*. So, *there is* a metaphysical question here (206). In response, Azzouni develops a lengthy

argument to show that talk of macro-objects and of the laws that govern them simply "leaves out" some aspects of the feature presentation. Yet, this does not have any metaphysical significance (223).

Chapter 9 discusses the ways in which we construct, or project, objects and their boundaries. First, we infer, and posit, objects and properties based on *induction*. These inferences are not totally unconstrained, though. It's not the case that "anything goes". Ontologies can be better or worse depending on which theoretical virtues they promote, especially as regards the complexity of the laws (227). Still, even when an ontology posits object-borders that optimally meet our theoretical needs, it does not follow that these borders are *worldly*. The chapter's final sections cover methods used by philosophers for "creating" objects, with special attention paid to how this affects these objects' *identity*. With regard to mathematical abstracta, it seems like Azzouni's nominalism can simply leave some questions related to their identity open (237). With regard to artifacts, such as the statue (Goliath) made out of the clay-lump (Lump), Azzouni's view (that there are no boundaries) implies that it is both metaphysically and logically okay to talk about Goliath and Lump as two objects (240).

Ontology without Borders runs against the contemporary ontological orthodoxy in more than one way. First, it questions the ontological import of quantification and reference. Second, it radically re-conceives the basic elements of reality, by dropping the categories of object and property, and by introducing the notion of feature. Feature not being an object, it need not be "quantified over" or "referred to". As a result, many ontological debates can be seen as simply concerning different (more or less theoretically and practically advantageous) ways of carving up the feature-presentation. If ontologists want to talk about existence, they cannot treat first-order quantification as existentially charged. Instead, they should coin special terms, like the predicate $Exist^{\$}$.

As disruptive and fascinating as this picture looks, it leaves many questions open. First of all, how are we supposed to understand $Exist^{\$}$? What prevents different ontologists from understanding $Exist^{\$}$ each in a different way, thus giving rise to merely verbal disputes? For example, nothing seems to prevent a situation wherein the compositional nihilist denies that tables $Exist^{\$}$, in a *nihilist sense* of $Exist^{\$}$, while the universalist states that tables $Exist^{\$}$, in a *universalist sense* of $Exist^{\$}$. The possibility of such a verbal dispute seems to defeat the advertised benefits of quantifier neutrality. After all, quantifier onticity, namely the doctrine that relates quantification to ontological commitment, ties existence to a *formal* device, which arguably has a univocal semantics. This seems to give us better prospects for escaping the sense proliferation of the existence predicate that has just been foreshadowed. This also highlights one possible

way in which the Quinean doctrine is useful and not to be abandoned unless there are *really good* reasons to do so.

A second open question, this time focussing on Part II, is how to make "metaphysical sense" of features. Features seem to escape a clear and univocal description. Describing them as objects or properties is wrong, but if that's so, we seem to run out of expressive means to properly talk about features. This comment may be shrugged off by Azzouni as a simple complaint about the *unfamiliarity* of feature-talk (254). This may be so. Yet, I think there is a dialectical point in the vicinity, which the book does not properly address. Azzouni builds his anti-borders arguments on the idea that we cannot make "metaphysical sense" of object borders. Yet, if the alternative, a feature-based ontology, can hardly be made "metaphysical sense" of too, why should we believe the non-orthodox alternative and shed the more familiar (objects- and properties-based) option? Azzouni seems to think that the more familiar ontology is too defective; so defective, indeed, that it is suspicious. When trying to make sense of objects and properties, we keep running up against puzzles. As Azzouni sees it, "[r]unning up against perennial puzzles is what always happens when we're in the presence of a myth: *Something* doesn't add up. (And it keeps on not adding up. Forever.)" (255). Even so, one might feel hesitant to trade a puzzling, but familiar ontology for an ontology that is both unfamiliar and not clearly less puzzling.

Leaving aside these reservations, *Ontology without Borders* is certainly a thought-provoking work that no scholar interested in metaontology and metametaphysics can reasonably neglect. The questions it poses and the views it defends deserve full consideration and in-depth discussion, insofar as they gesture towards another possible way of posing ontological questions, and of practicing ontology itself.

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