Review

Semantic Perception: How the Illusion of a Common Language Arises and Persists, Jody Azzouni. New York: Oxford University Press, 2013. ISBN 9780199967407. 2015. ISBN 9780190275549.

Ontology Without Borders, Jody Azzouni. New York, NY: Oxford University Press. ISBN 9780190622558.

It is worth noting, at the outset, that classification and semantics share a type of genealogy. The founder of the modern study of semantics, Michel Bréal, in addition to inaugurating the modern marathon run in Olympic competition, worked with manuscripts in the National Library of France prior to his professorial appointment in linguistics at the Collège de France. Any engagement with semantics requires a commitment analogous to the stamina required of a marathon runner. Its complexity, its convoluted argument, is much like the hardest race athletes run (while there is no dehydration from the study of semantics it is just possible that blood pressure will rise in the course of inquiry).

The Greek term, *sēmantikós,* means "significant" and while we often think of semantics as the study of meaning, its relation to questions of why and how words, phrases and symbols denote a relationship of signifier and signified is crucial to appraising the broader questions the field encompasses. Study of semantics has been grounded in a range of approaches, from linguistic study (how sense, reference and truth relate through relationships of smaller and larger linguistic units or texts) to logical modalities (parsing sentences using rules of logic to arrive at a predicate) winding up in a veritable hotchpot of cognitive science orientations that look in some way to brain function to free the understanding of the use of language units from uncritical links to mechanisms (be they characteristics of languages-as-tools or of our socialization-as-speakers-and-hearers). Writing in 1995, the neurobiologist Gerhard Roth was able to help make clear that the search for a naturalistic theory of meaning, one that located "the origin of semantics in the brain," was gaining traction (Roth 1995, 1 emphasis original):

> Until very recently, such an endeavor was seen by almost every scientist and philosopher as vain from the very beginning. The brain was viewed by neuro-physiologists and neurochemists as a purely physico-chemical system and the processes going on inside the brain as nothing but electrochemical events. What can be measured are action potentials and transmitter release, but no meaning. The behaviorist dogma was that this was sufficient to explain behavior and cognitive acts. On the other hand, psychologists, philosophers and computer scientists believed and to a large extent still believe that meaning or "information" constitutes a domain in itself, with its own laws and phenomena that can be described and understood *independently* of brain processes.

It might reasonably be said that the analytic tradition in philosophy has had a very close relationship with scientific inquiry, such as that alluded to by Roth above, but also that many of its broader characteristics have emerged out of the prioritization of the philosophy of language, which emerged in the nineteenth-century from Gottlob Frege's development of first-order logic in his *Concept Script* and as later adopted by Bertrand Russell. This first-order, or predicate, logic was thought to offer real promise in solving problems through substituting symbols for words and helping to uncover different aspects of meaning expressed through language. Of note here, also, is Frege's Principle, the principle of semantic compositionality. This is "the principle that the meaning of a (syntactically complex) whole is a function only of the meanings of its (syntactic) parts together with the manner in which these parts were combined" (Pelletier 1994, 11).

Philosophy of language developed further, through Ludwig Wittgenstein's *Tractatus Logico-Philosophicus,* and many readers will have come across the propositions below distilled therefrom:

1. The world is everything that is the case.
2. What is the case (a fact) is the existence of states of affairs.
3. A logical picture of facts is a thought.
4. A thought is a proposition with a sense.
5. A proposition is a truth-function of elementary propositions. (An elementary proposition is a truth-function of itself).
6. The general form of a proposition is the general form of a truth function, which is: $[p, \xi, N(\xi)]$. This is the general form of a proposition.
7. Whereof one cannot speak, thereof one must be silent.

According to G. H. Von Wright (1955, 538), Wittgenstein's later work "abandoned the picture-theory of language, the doctrine that all significant propulsions are truth-functions of elementary propositions, and the doctrine of the unspeakable." Other scholars, such as James Conant, see a consistency at work from the earlier to the later work such that they advocate a reading in which (Conant 2006, 182):

> the *Tractatus* has no general story about what makes something nonsense … [and] moments of recognition that a reader is called upon (in TLP 6.54) to attain must come one step at a time. This is contrary to the spirit of most standard readings, according to which there can be a possible moment in a reader's assimilation of the doctrines of the book when the theory (once it has been fully digested by the reader) can be brought to bear wholesale on all of the (putatively nonsensical) propositions that make up the work.

This reading of Wittgenstein's work, as a unified whole, rests on how so-called "resolute readers" interpret this phrase (at 6.54) (Wittgenstein 1922, 90):

> My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly.

The gap between this approach and Russell's introduction to the *Tractatus*, in which he refers to Wittgenstein's aim as being to elicit "the conditions which would have to be fulfilled by a logically perfect language" (1922, 7), should be obvious. Wittgenstein's death in 1951 was a watershed in the sense that logical positivists continued to take a cue from the early work, seeking certainty through system building while at the same time a coterie of philosophers (led by J. L. Austin and Gilbert Ryle), working within the "meaning is use" premise articulated by Wittgenstein in *Logical Investigations*, began a systematic focus on how language is used in ordinary, everyday ways and how philosophical problems can be interpreted with regard to this knowledge base—but also how they interpolate on linguistic analysis, creating separate domains of meaning. While we can easily see how relations of synonymy can be made to fit words "less often than not," it is not quite as straightforward with regards to "the semantical equivalence of whole sentences" (Quine 1979, 2). So, while "a word is synonymous to a word or phrase if the substitu-

tion of the one for the other in a sentence always yields an equivalent sentence" we can only say that for sentences "they are equivalent if their use is the same … they are equivalent if their utterance would be prompted by the same stimulatory situations" (Quine 1979, 2).

Most book reviews do not require such a preface, and if they did, few would read them and even fewer would write them. In the case of Jody Azzouni's *Semantic Perception*, it is respectful and necessary to take some time linking author to review reader. The work claims to show how we experience the meaning-properties of language independent of intentions and to reveal that (Azzouni 2015, 1 emphasis original):

> human beings *involuntarily* experience certain physical items, certain products of human action, and certain human actions themselves, as having monadic meaning-properties: for example, as possessing meanings, as referring, or as having (or being capable of having) truth values … we (human beings) involuntarily see uttered words, among other things, as possessing certain monadic meaning-properties, and that we involuntarily see uttered sentences as possessing other (but related) monadic meaning-properties.

While many of us have an idea of what a monad might be, from the Greek *monas*, "singularity," it is unlikely that most of us would see Azzouni's technical meaning for "monadic meaning-properties" as straightforward. On my reading, meaning-properties is meaning amenable to analysis in chunks, so to speak, while monadic modifies this with regards to units of perceptual reality. In a sense, it would seem that he refers to "specifically real meaning units." These are experienced "as properties of uttered words and sentences similar to how we perceive ordinary objects to have … shape and colour" (1) and they are neither contextual nor interactional; meaning is experienced independently of speaker intention. It is the agglomeration of "a large class of physical objects and human actions as possessing monadic meaning properties" (2) that forms what Azzouni calls the semantic perception view.

Simply put, it is this view which Azzouni seeks to contrast against Paul Grice's (H. P. Grice) work on meaning that relates to propositional-attitude psychology. Chris Daly provides an explanation of how we deal with words or sentences and psychological states in terms of meaning (2013, 7): "You have to read or hear words or sentences in order to understand them. But you do not have to visualize or hear thoughts in your head in order to understand them." He points to John Searle's distinction relating to "the derivative meaning of words and sentences and the intrinsic meaning of thoughts" and how it is that

the quality of derivativeness is that they "get their meaning by being interpreted by someone." Thoughts, on the other hand, "do not get their meaning by being interpreted by someone, and, more generally, they do not get their meaning from anything else." What is of concern in the issue between Gricean approaches and Azzouni's is how to better unravel the relations between different kinds of meaning and what, if any, priorities might take place between the two.

While the nuances of Grice's work cannot be explored here, more should be said about what it is that Azzouni is seeking to clarify or reposition. Michael Morris is helpful, he notes (Morris 2007, 249-250)

> Grice's ultimate aim is … to understand the everyday notion of meaning, which has much wider application than just to linguistic expressions. He begins by making a division within this general notion of meaning, between what he calls natural and what he calls non-natural meaning. As an example of natural meaning, we might suggest this: (1) Those spots mean that she has measles. And as an example of non-natural meaning, we might suggest this: (2) Three rings on the bell mean that the bus is full. Despite the similarity in form of these two statements of meaning, Grice thinks that there's something fundamentally different going on in them .… Here, slightly differently put, are the basic marks of difference Grice finds:
>> (i) In the case of natural meaning, "X means that p" implies that it is true that p (in our case, (1) implies that she really does have measles); this does not hold for non-natural meaning (so, in the case of (2), the bell might have been rung three times by mistake);
>> (ii) In the case of non-natural meaning, what follows "means that" could be put in quotation marks (the rings meant "the bus is full"); this is not possible with natural meaning;
>> (iii) Natural meaning can be understood as the significance of certain facts (such as the fact that she has spots), whereas non-natural meaning is concerned with the significance of certain objects or features of objects…
>> (iv) Statements of non-natural meaning of the form "X means that p" imply that somebody meant that p by X (in the case of (2), that somebody meant that the bus was full by three rings on the bell); but this is not the case with natural meaning.

Morris states that what we see here developing is teleological (goal-oriented); in the distinction is (2007, 250):

> an intuitive argument for [Grice's] account of linguistic meaning .… The kind of meaning involved in (2) is the meaning of something which is supposed to show something, in some sense: those three rings of the bell are there in order to show that the bus is full .… The fact that something is supposed to show that the bus is full allows that it can be faulty—in our example, that it can be produced even when the bus is not full. This same point explains why it is natural to express the meaning in quotation: the quotation isolates what seems to be shown from the actual facts. And it is objects, or features of objects, which have purposes—not facts.

As a non-expert, I hope I am right to say that it is at about this point that Azzouni begins to part company with the neo-Griceans who claim that public languages do not contain objects or events with monadic meaning-properties. He does not agree that language tokens used in communication are meaning inert and that they "are derived entirely from the intentions and mutual knowledge of their users" (2015, 3-4). Azzouni does not differ from the Griceans that "the apparent meaning-properties of public language entities must be derived from human psychology," but he differs in how the derivation is explained, specifically "which psychological traits of human beings are relevant to understanding the effortless communication events we engage in"—both see the pure physicality of the written word or spoken sentence. Azzouni asks that we try to understand that the semantic perception view differs from all forms of Gricean analysis in that it holds that we involuntarily experience these things as having monadic meaning-properties and this sense of experience is "as items that refer, and that are meaningful." Azzouni argues that it is not necessary to systematically deploy communicative intentions and expectations or notions of mutual knowledge "because if two people involuntarily experience an uttered sentence as monadically meaning something, then that perceived meaning is the default experience of what that uttered sentence means … the uttered sentence is experienced as meaning what it's perceived to mean by virtue of its own meaning-properties."

Azzouni self-declaredly seeks to modify the semantic-pragmatic apparatus, specifically "what is said" and "implicature" (2015, 4):

> to show how Gricean assumptions about the centrality of mutual knowledge and communicative intentions to the phenomena of perceived meaning-properties, badly distort the ordinary folk-psychological attributions of intentions, beliefs and expec-

tations, as well as, ordinary intuitions about what is said [and] what is not said.

The semantic perception view "explains and sustains the ordinary phenomenology of the experience of understanding language, whereas Gricean and neo-Gricean views instead consistently distort or attempt to explain away this phenomenology." On top of this, intentions and expectations of speakers "play a constitutive role in [the] experience of meaning" for Griceans while Azzouni's approach sees these as just "ancillary" (5).

Azzouni's general metaphysical approach here is nominalist, and this leads to a denial of the common-sense proposition that we speak a common language, such as English. His view is that this would imply the existence of types and there are no types. As he makes clear, ontologically speaking "all they are—are specific communication events: actions taken by people during which they produce noises and experience an understanding of one another" (a range of artifacts accompanies this). He also buttresses his arguments with the notion that "there are no physical objects in the world with meaning-properties of any kind" or an object cannot mean "some other thing in the way that we experience words to so mean what they refer to"—reference relationships are projections "by persons who so experience words as so referring to things."

The semantic perception view rests on at least a partial requirement to agree with Azzouni that ordinary people have a "psychologically involuntary misapprehension" (6); as a result of "how they involuntarily experience language phenomena, they are impelled to think the words and sentences of their language have an interlocked system of properties that words and sentences don't have." Our experience of objects and events is one "endowed with monadic properties that they don't have." Finally, Azzouni explains the "disconnect" he has identified between the experience of language objects and events and "the meaning properties that our subpersonal language faculties project onto those objects and events." Both are projections (lacking meaning-properties), but the projections emerge from "different 'faculties' of mind" (7).

Interspersed within *Semantic Perceptions* are helpful methodological interludes. The first makes broader connections to the central question of how to, or how we might better, understand the notion of "what is said" and "what is implicated" in the transaction of coming to grips with what is said. Variations of Gricean theories that seek to "reveal the operations of certain psychological mechanisms in the participants of language transactions" (167) and the effect these have on a subject's transactional experience and why they take on unique forms are supposed to be scientific. They should allow

for changes in parameters to change resulting phenomena. For Azzouni, the variations on Gricean approaches that claim to deal adequately with "our experiences of what's meant by our sentences and by us when we utter those sentences" need to locate "the mechanisms that make differences in those specific experiences" (168). Description of the phenomena in question is crucial, as is locating the relationship between measurable regularities and appropriate laws for physical effect, but the phenomena themselves, the appearance, also must be saved. This connects with the systematic regularities that are of concern to theorising, they save a given phenomenon's appearance, which may include aspects that do not reinforce or sustain the theory. Azzouni's example is of a phenomenon that is due to interaction of multiples forces, "as one gets a workable theory of the effect of certain forces, the remaining unexplained aspects of the phenomenon become evidence for the nature of the remaining forces" (169n). The Gricean literature on communicative transactions departs from the need for explanation of what "relatively robust regularities" require characterization in theory development, according to Azzouni. These regularities are "what speaker-hearers experience what they say to one another to mean as well as their various usage patterns" (169).

Azzouni claims that it is possible to show how meaningfulness can "be induced by the sheer shape of designs, despite the knowledge that no agents are involved" and that this undermines approaches that centralize speaker intentions as bases for "factors inducing meaningfulness" (170). So-called cherry-picking approaches to semantic warrant, where "what he said was …" approaches are taken as indicative of "what is said" ignores that the latter is, in Azzouni's view, always characterized as the locus of what is said, and it is not the individual who produces the event. Context shifting arguments (Cappelen and Lepore's method that intuitions appealed to are semantic and that context sensitivity of expressions are a part of our language and are non-obvious) "ignore stark intuitive differences between what is said and what is implicated," or, they see context in what is said as fairly uncontroversially "unbounded"—essentially ignoring empirical experience and phenomena.

For Azzouni, what is said is experienced involuntarily and while contextual factors play a part, the speaker-hearer is usually oblivious to this, their effects having a limited range. Speaker-hearers do not "experience what is said as due to the intentions of the speaker" but rather as something from which intentions can be inferred. Contextual factors, like gestures, aid recognition of speaker intentions "as a constitutive part of what is implicated" (171). In the consciously accessible of what is said and implicated, data associated with the evaluation must re-

main open; it is not only the favourable that should contribute to building the groundwork of theory on semantic transaction and meaning. Azzouni believes there are problems with how semantics and pragmatics relate to cognitive processing theories. Linguistic phenomena, he says, can fall under both categories and examples such as "John has had nine girlfriends" allow for readings associated with "at least nine" (semantic) or "exactly nine" (through conversational implicature a pragmaticist reading). This emerges from a tendency to semantically treat the sentence as ambiguous and to seek a parsimonious outcome. Whether semantic or pragmaticist in orientation there is a related cognitivist demarcation of territory that aligns with both, a further brain-body distinction emerges in turn and semantics and pragmatics demarcate different capacities.

Semantic approaches are not necessarily simpler, because Azzouni claims this assumes one predefines a result that "can only be empirically established" (172); he sees recourse to an Occamite "theoretical virtue" as emblematic of a more tainted approach, one that ignores how evolutionary theory (172):

> has shown that the engineering virtues of simple designs that straightforwardly handle various functions are almost never exemplified by biologically evolved designs ... instead [we find] peculiarly complex designs that manifest all sorts of unneeded complications, the reasons for the presence of which are explained by contingent historical developments.

Demarcation over whether what is said is semantic or has a pragmaticist component is finding less neurophysiological justification (*novi scientiam*), according to Azzouni, than explanatory weight in theory-virtues which are, in turn, characterised by their own methodological inadequacy related to their trade in simplicity and, by extension, foundationalism.

Azzouni does not object to the efficacy of these methodological tools. That they have clear warrant to be applied shows, it seems, that semantics and pragmatics reflect the hermeneutic rather than the "genuine neurocognitive-neurophysiological aspects of us" (172). Azzouni takes us on another journey, based on the assumption just elucidated; we must consider how, when the same phenomena are classified as either semantic or pragmatic, "the only relevant factor to how a linguistic phenomenon is to be classified is whether the resulting pair of theories manifest certain user-friendly virtues." Any attempt at a common-sense attribution of a particular phenomenon as a semantic or pragmaticist type from the neurocognitive-neurophysiological point of view is a Quixotic endeavor. Tractable theories of what is said have a tendency to derail at a level of analysis of, for instance, the semantic property of a particular class of language types or when restricted to truth conditional context; capturing regularities is problematic and indicative of how the linguistic framework struggles for explanatory fruitfulness. Azzouni transfers his wager to how cognitive science might better characterise "various modularized cognitive processes specific to language" (174).

We suffer from a tendency to allow our primitive referential intuitions, say to a stick figure or a smiley face, to be easily triggered as real "but not" socially ontological, as constitutively recognizable in "who's smiling?" (that face) "but not" of "who's that" (it's not a being it's a drawing). Azzouni asks we acknowledge how these intuitions conflict with the sensible treatment of reference where it arises semantically-pragmatically or when "reference is always to items in domains of discourse of some sort (such as mental spaces or resource situations) that are given contextually or otherwise." It is not possible to find the intuitional within the semantic-pragmatic model as something as simple as a shape can trigger the referential intuition and can do so "in the absence of any contextual or semantic elements that justify the involvement of a domain of discourse" (174).

Azzouni argues that use content in conversation has an involuntary character (in rapid conversation) such that what is said "appears as a monadic property of the uttered expression" (175) while the implication is a machination, a site of recognition and inference to our interlocutor's "ingenuity" and "agenda." Rather than being a semantic or pragmatics-oriented problem, Azzouni bets on it having a basis in "central as opposed to cognitive processing" as context has so little influence on what is said (in his construction).

Azzouni claims that we can conceive of semantic-pragmatics theories as "top-down autonomous special-science theories," which do not need us to "account for all the phenomena that arise" but perhaps only to situations in which "the triggering of reference intuitions is accompanied by an appropriate domain of discourse." An explanation is offered such that referential figures (like the stick man or smiley face) can be included in a semantic-pragmatics theory that allows these to be "referred to despite the absence of a domain of discourse" in support. Reference is likely to, as a theoretical construct, require at least a changed formulation from "a collection of objects referred to" (175). We then expunge such cases as reference (for ease) as reference has special (and appropriate) meaning in semantics. We hold still to the possibility though, in this framework, to how "this particular carving out of the data is one that wouldn't be respected as a certain cognitive processing level if it were discovered that

there is a kind of module that (on the basis of certain inputs) generates 'reference'" (176). Azzouni claims that at this point reference becomes the term appropriate to the underlying cognitive science. He claims that references might be processed, cognitively, with "referents" finding their place, as a result, in a domain of discourse. Where we cannot position or apportion to a domain of discourse the "intuitions of reference would 'idle'" he says, and this is similar to how questions of who is the stick man or who is the smiley face languish as bizarre formulations without resolution. Semantic notions of reference are, for Azzouni, "echoed by a corresponding term in the underlying science … [they] can be characterised as reference plus additional conditions."

David Manley describes metametaphysics as inquiry into a range of unknowns, such as whether "questions of metaphysics really have answers … are these answers substantive or just a matter of how we use words? And what is the best procedure for arriving at them—common sense? Conceptual analysis? Or assessing competing hypotheses with quasi-scientific criteria?" (2009, 1). Jody Azzouni's latest work, *Ontology Without Borders*, is a work that contrasts these questions with more traditional metaphysical questions relating to ontology.

One of the more interesting things found *ex vulgus scientia* in undertaking this review was that as of December 2018 there was no Google record for "relationship of ontology to metaphysics" and neither is there one for "relationship of metaphysics to ontology." The subject matter of the search query is, however, not foreign to the world encompassed by Google (just semantically distant); we get in search *relata* that ontology is a sub-field of metaphysics and that the former encompasses existence, while the latter encompasses reality. Achille C. Varzi is helpful in laying out how Quine's approach to this question has become standard, it says (2011, 407)

> ontology is concerned with the question of what entities exist (a task that is often identified with that of drafting a "complete inventory" of the universe) whereas metaphysics seeks to explain, of those entities, what they are (i.e., to specify the "ultimate nature" of the items included in the inventory).

Azzouni expects readers to have significant knowledge of the debates within philosophy of language and, as a result, like *Semantic Perception*, this is not a work for novices unless they intend to engage in some reasonably extensive contextual background reading with the text. Readers are asked, once more, to be patient with the reviewer for a short digression which, hopefully, will aid in a clearer overview. In "On What There Is," Quine (1948, 21) pointed out that while an answer to the question "what is

there" is reasonably answered as "everything" this is not to settle disagreement over cases. What has become Quine's "ontological commitment" (Bricker 2014, 1.1)

> allowed one to measure the ontological cost of theories, an important component in deciding which theories to accept; it thus provided a partial foundation for theory choice. Moreover, once one had settled on a total theory, it allowed one to determine which components of the theory were responsible for its ontological costs. [It also] played a polemical role. It could be used to argue that opponents' theories were more costly than the theorists admitted … [and] it could be used to advance a traditional nominalist agenda because, as Quine saw it, ordinary subject-predicate sentences carry no ontological commitment to properties or universals.

Bricker outlines Quine's central claim made in "On What There Is"—it is that a "theory is committed to those and only those entities to which the bound variables of the theory must be capable of referring in order that the affirmations made in the theory be true" (1948, 33). As briefly as possible, Bricker's explanation is summarised below (Bricker 2014, 1.1 emphasis original):

> The criterion should be understood as applying to theories primarily, and to persons derivatively by way of the theories they accept .… It is important to note at the start that Quine's criterion is descriptive; it should not be confused with the *prescriptive* account of ontological commitment that is part of his general method of ontology. That method, roughly, is this: first, regiment the competing theories in first-order predicate logic; second, determine which of these theories is epistemically best (where what counts as "epistemically best" depends in part on pragmatic features such as simplicity and fruitfulness); third, choose the epistemically best theory. We can then say: one is *ontologically committed* to those entities that are needed as values of the bound variables for this chosen epistemically best theory to be true. Put like this, the account may seem circular: ontological commitment depends on what theories are best, which depends in part on the simplicity, and so the ontological commitments, of those theories. But there is no circularity in Quine's ontological method. The above account of ontological commitment is prescriptive, and applies to persons, not to theories. What entities *we ought to commit ourselves to* depends on a prior descriptive account of what entities *theories are committed to*.

In an earlier work, "Freeing Talk of Nothing from the Cognitive Illusion of Aboutness," Azzouni claims that rejecting Quine's criterion "yields the neutralist interpretation of the quantifiers" (2014, 443). Uzquiano describes what quantifiers are (Uzquiano 2018, Introduction):

> Quantifier expressions are marks of generality. They come in a variety of syntactic categories in English, but determiners like "all," "each," "some," "many," "most," and "few," provide some of the most common examples of quantification. In English, they combine with singular or plural nouns, sometimes qualified by adjectives or relative clauses, to form explicitly restricted quantifier phrases such as "some apples," "every material object," or "most planets." These quantifier phrases may in turn combine with predicates in order to form sentences such as "some apples are delicious," "every material object is extended," or "most planets are visible to the naked eye."

Azzouni takes an opposing view to Quine's criterion resulting in what he says is the only possible conclusion, that quantifiers have a neutral interpretation (in natural language and formal senses). In this interpretation, "all quantifiers, regardless of the semantics they are endowed with, are open to being additionally supplemented with various metaphysical conditions" (2014, 443). Furthermore, he states, "quantifier neutralism allows into logical space a position that describes our use of quantifiers (and our accompanying thought) as operating in a more pure metaphysically-deflated way. This is that, despite appearances, there is *nothing* that terms and the quantifiers linked to those terms are *about*" (444).

For all of us with an interest in knowledge organization, questions of aboutness sit high in the pantheon of topical subjects for investigation. Quantifier neutralism and the associated nominalist positions that scholarship, such as Azzouni's, seems to support offers a promising area of interdisciplinary inquiry that with few exceptions (Aparecida Moura 2014; Budd 2011; Dahlberg 1992; Hjørland 1998, 2008; Holma 2005; Jaeneeke 1998; Lingard 2012; Mazzocchi, Tiberi, De Santis and Plini 2007; Mazzocchi and Tiberi 2009; Silva Saldanha 2014; Scheibe 1996) has not developed in any real autochthonous mode to date within information science. While the detailed disputes of philosophers of language, logicians and their linguistics interlocutors will be a bridge too far (an act of overreach) for most IS theorists, there is a lot to be learned even at the foundational level that can help to promote work across, within and through classification, thesauri development, folksonomy, abstraction, knowledge representation and domain analysis. As Quine (1979, 1) noted ironically, "semantics … or the theory of meaning, is a vitally important subject, despite the disreputable character of its ostensible subject matter." We would all be better off, or at least we should be less-dogmatic reasoners, with a more attuned knowledge of semantics and its encompassing and derivative fields. This cannot ever be a bad thing: " ¬ (P →Q)."

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