*Meaning: A Slim Guide to Semantics*, by Paul Elbourne. Oxford: Oxford University Press, 2011. Pp. viii + 192. H/b £44.99, P/b £13.50.

Contemporary semantics is not the most approachable of subjects. The usual vector of introduction — designed to give students enough technical literacy to work through a journal article-involves two semesters of coursework centered around textbooks that present successively richer fragments of natural language along with the increasingly complex notations, techniques, and problem sets required for their analysis. (The best textbooks of this kind are Semantics in Generative Grammar by Irene Heim and Angelika Kratzer (Oxford and Malden, MA: Blackwell Publishing, 1998) and its underground sequel, Kai von Fintel and Irene Heim's Intensional Semantics, which is still unpublished but available at: http://web.mit.edu/fintel/fintel-heimintensional.pdf, accessed 10 June 2015.) A year-long initiation is necessary because semantics has spent the last half-century maturing around a proprietary battery of mathematical tools that enable its precision and increasingly impressive empirical reach. But the resulting barrier to entry raises serious problems, particularly as its technical notions make their way into more distant areas of philosophy that include epistemology, metaethics, and political philosophy. On one hand: where should we send semantics-curious outsiders looking to get the gist without slogging through thick textbooks? On the other hand: what can pre-empt the impression that semantics is little more than an inscrutable and empirically unmoored collection of technical gizmos? The most important fact about Paul Elbourne's short monograph, Meaning: A Slim Guide to Semantics, is that it represents the best answer we now have to both of these questions.

The book is made up of eight chapters averaging twenty pages each, a twopage concluding chapter, and a useful appendix pointing curious newcomers toward more thorough discussions of the topics covered. The main chapters trace a gradual path away from commonsensical ideas about linguistic meaning toward more esoteric territory by way of admirably clear expositions of some of the main problems and solutions of contemporary semantics. Chapter one begins with—and then patiently debunks—the hypothesis that word meanings are definitions, which will seem a reasonable starting point to anyone who thinks of meanings as residing in dictionaries. In the second chapter, Elbourne offers a cost-benefit analysis weighing simple versions of referentialism and internalism about word meaning. After one more chapter on word meaning, in which he discusses synonymy, lexical ambiguity, and vagueness, Elbourne devotes a pair of chapters to sentence meaning, covering the basics of Russellian propositions, possible worlds semantics, situation semantics, entailment, presupposition, logical form, and structural ambiguity. Chapter six fits a remarkably solid introduction to compositionality into a concise twelve pages. Chapter seven offers brief but informative overviews of some current ideas about context-sensitivity and indexicals, the various

semantic functions of pronouns, implicit content and the semantics-pragmatics interface, and Grice's theory implicature. Chapter eight summarizes some recent findings about the influence of language on thought.

Along the way, Elbourne weaves in digestible fragments of set theory, syntax, first-order logic, lambda notation, and other new concepts-only as needed, and always accompanied by clear explanations of the explanatory work to be thereby accomplished. In the last ten pages of chapter four, for example, Elbourne justifies the identification of sentence meanings with sets of possible worlds or situations by showing how this hypothesis enables broad and precise empirical generalizations about the distribution of negative polarity items in embedded sentences and verb phrases. This passage is driven by thirty-two example sentences, which motivate the introduction and manipulation of several new technical notions, including some set theory, the idea of a downward entailing context, and the concept of a one-place sentence functor. Thus, as esoteric techniques are articulated, their empirical rationales are kept steadily in focus. The same strategy is used to great effect throughout the book, whose overall structure and narrative are designed to gradually dilate the reader's comfort zone, making difficult and potentially unintuitive ideas seem to arise naturally.

Elbourne's book puts more emphasis on foundational issues than textbooks do, and spends fewer pages on systematic coverage of the standard results of compositional semantics. Many pages are devoted to metaphysical and epistemological concerns, for example, but Elbourne does not attempt to offer sophisticated articulations of (e.g.) generalized quantifiers, variable binding, or the problems that arise from semantic-type mismatches. These priorities make a lot of sense given Elbourne's goals, which are to demystify and rationalize rather than indoctrinate. He does a better job of motivating the underlying assumptions of semantics than most textbooks, which typically devote a single chapter or less to explaining their approach before beginning to build out their mathematical apparatus. (Heim and Kratzer are particularly terse: they dispense with philosophical preliminaries in a mere two pages before plunging into set theory.)

The book's most significant weaknesses lie in Elbourne's expositions of some of the philosophical views he discusses. Officially, he remains neutral about several foundational matters of controversy, including the question of whether expressions' meanings are their referents ('referentialism') or the concepts they encode ('internalism'). Elbourne makes no bones about his preference for internalism, however, and this partiality taints his discussion of views that he rejects. In chapter one, he objects to the proposal that 'gold' be defined as 'the element with atomic number 79' on the ground that since most English speakers do not know gold's atomic number, the proposal 'would imply that most competent English speakers do not know the meaning of the word *gold*', and this would prevent an explanation of 'how it is that they use it to talk quite successfully about gold' (p. 9). Later, in the context of

an objection to referentialism, Elbourne argues it is redundant to posit extramental meanings because even referentialists would have to agree that 'people must have mental representations of word meanings in order to function linguistically' (p. 30). Both of these arguments seem to ignore the possibility of the kind of semantic externalism defended by, most famously, Tyler Burge, Saul Kripke, and Hilary Putnum, all of whom have argued that a speaker may be semantically competent with certain expressions even if the speaker's corresponding mental representations are not rich enough to individuate those expressions' meanings. Given this tenet of semantic externalism, I could be semantically competent with 'gold' and fail to know its definition even if words' meanings are their definitions, so long as I stand in the relevant causal or social relation to the definition-so long as I defer to experts who do know the correct definition, for example. And if my mental representations are not sufficiently rich to individuate the meaning of a word with which I am competent, then it is not redundant to posit meanings over and above my mental representations of them; indeed, we are forced to do so. Thus Putnam's well-known slogan that "meanings" just ain't in the head' (Hilary Putnam, 'The Meaning of "Meaning"', Mind, Language, and Reality, Cambridge: Cambridge University Press, 1975, p. 227). By failing to address these issues, which will be familiar to most philosophers, Elbourne begs the question on behalf of internalism by failing to fully articulate the most respectable and widely-held versions of its opponents.

Elbourne also objects to referentialism on ontological grounds, arguing that since many of the meanings posited by referentialists are abstract objects, we are left without an explanation of how speakers can make cognitive contact with them (p. 30). But it is unclear how Elbourne's positive proposals escape this objection. The two candidates for sentence meanings that he considers are Russellian structured propositions and sets of worlds or situations, both of which are abstract objects. Chapter two ends with Elbourne favoring the idea that word meanings are concepts, which he construes as mental particulars. But the only theory of concepts he considers is the prototype theory, which he does not adopt, in part because it cannot account for compositionality (pp. 28-9). And when it comes time to explain compositionality, Elbourne models most word meanings as functions-yet more abstracta (Ch. 6). How can Elbourne reconcile this methodology with his nominalistic objection to referentialism? His answer is that whereas referentialists are free to identify meanings with the abstract objects with which he models meanings, internalists can treat them as mere mathematical models of the mental entities that are the real meanings (pp. 46, 110). If Elbourne is right, linguistic meanings 'are just part of our heads' (p. 47), but we can harmlessly go about the business of semantics as if they were the objects, properties, functions, and set-theoretic constructs that referentialists take them to be. But I fear that this arrangement is too good to be true. If nominalist scruples prevent us from identifying meanings with abstracta, then it is not easy to see how we can get away with theorizing about those very same abstracta for the purpose of mathematically modeling parts of speakers' heads. After all, either option appears to involve humans — either language users or semanticists — making cognitive contact with abstracta. A possible response to this complaint would be to advocate full-blown nominalism about mathematics. But even from a perspective of unchecked optimism about the prospects of this kind of nominalism, we would be left with the following question: if we were to discover a nominalistically kosher way of reconstruing Elbourne's talk of the mathematical objects he uses to model meanings-in-the-head, then why could we not use the same technique (whatever it turns out to be) to provide a nominalist-friendly reconstrual of referentialists' talk of those same objects? In other words: if we could make putative talk of sets, functions, and possible worlds safe for Elbourne, then why would we not have also made it safe for referentialists?

These philosophical shortcomings are mostly forgivable byproducts of Elbourne's attempt to lay out deliberately and carefully simplified theories without shying away from the metaphysical and epistemological questions they raise. The overall result provides an unintimidating and admirable entry-point into both the technical and the philosophical dimensions of semantics. It will not supplant standard semantics textbooks as an avenue to full technical literacy, though it could be right for the semantics portion of a broad introduction to linguistics. Nor can it be recommended as an unaccompanied textbook for a philosophy of language course, although it could work well if combined with readings that expand on the issues it raises and balance out some of Elbourne's predilections. My strongest recommendation is to pass along Elbourne's *Slim Guide* to anyone who is curious about, intimidated by, or scepical of contemporary semantics, but who is not ready for the full Heim-and-Kratzer treatment. Having a book to fill this niche is a relief.

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Dominic Gregory's *Showing*, *Sensing*, *and Seeming* offers an intriguing theory of 'distinctively sensory representations'—a category which Gregory takes to include photographs, pictures, audio recordings, films, mental images (e.g. a