Fodor, Jerry A., *LOT 2: The Language of Thought Revisited*, Oxford: Oxford University Press, 2008, pp. 228, US$37.95 (cloth).

According to the official narrative, Jerry Fodor’s latest book, *LOT 2*, updates the views first presented in his seminal 1975 work, *The Language of Thought* (*LOT 1*, hereafter). In this regard, *LOT 2* lives up to its billing. It is no retread, however. Many of *LOT 2*’s arguments and theses extend well beyond the contents of *LOT 1*; and as a result, *LOT 2* reads more like a career retrospective—an integrated survey of much of the research Fodor has done in the past thirty-five years.

The presentation is quintessential Fodor. High-culture references and pithy quips abound. For instance, Fodor has little more to say about the instrumentalist view of mental states than this: ‘For better or worse, the ontology of the theories one accepts is *ipso facto* the ontology to which one is committed. Whatever theory it may be, the charge for liking it is lumping it’ [5]. A view that employs mental states for causal-explanatory purposes, while denying that mental states *really* exist, is a cheat; enough said. One also encounters the Fodorean interlocutor, albeit in a new guise. In place of familiar family members (Aunty and Granny—who have apparently gone on holiday or retired), the reader regularly hears from one Snark. Some philosophers may chafe at Fodor’s witticisms and stylistic eccentricities: in my view these devices allow Fodor to get at the meat of issues without the circuitous ado often entailed by an attempt to cover all scholarly bases.

What is the meat of the debate? According to Fodor, much has remained the same since *LOT 1*. Nevertheless, there are some important new twists. Now the assault on pragmatism takes centre stage: ‘So, one of the ways in which *LOT 2* differs from *LOT 1* is in the single-mindedness with which it identifies pragmatism as the enemy par excellence of Cartesian realism about mental states’ [12]. Perhaps as importantly, Fodor now takes concerns about compositionality to be fundamental: ‘*LOT 1* failed, just about entirely, to recognize the centrality of compositionality in constraining theories about the semantics of mental representations’ [17]. As should be clear, then, the concern with compositionality bears heavily on a further issue that plays a key role in *LOT 2* (and about which *LOT 1* had little to say): the semantics of mental representations.

The introductory chapter previews the preceding themes, and chapter two develops them in greater detail. Here we find arguments of a well-worn sort, but often with new emphases. At least in standard cases, the semantic content of a compound mental representation must compose: it must be a
straightforward function of the semantic values of the compound string’s component mental representations. Abilities don’t compose. So, pragmatism is false. Or, our best explanation of the execution of behaviour (or the following of a rule) presupposes intentional content, and thus intentional content cannot be constituted by patterns of behaviour or dispositions to behave in certain ways. Moreover, the content of our mental representations cannot be inferential roles; if acts of inferring are not to accord merely accidentally with rules, acts of inferring must themselves be guided by representations of rules and are thus not constitutive of rule-following.

Chapter 3 addresses Frege cases, which typically motivate the introduction of senses (or their kin). Fodor’s naturalistic response rests on a view that has appeared only more recently in Fodor’s corpus: that mental content is purely referential and that the phenomena associated with Frege cases are best explained by adverting to Mentalese syntax (including brute relations of difference among primitive symbols). Fodor’s strategy seems satisfactory in many ways, although one might worry that too much explanatory work has been shunted off to the non-intentional level. There is a risk that so much human behaviour will be explained by facts about syntax or the properties of realizers that there is not much work left for an intentional psychology to do. He seems to concede as much [86, n. 56], but his doing so does not square very well with the defence of folk psychology (and its vindication by a scientific psychology) for which he is well known [Fodor 1987]. In Fodor’s defence, he now focuses on the information-gathering role of content-attributions in folk psychology [86, cf. Fodor 1994, lecture 4], for example, the use of beliefs about others’ beliefs to find out about the world; purely referential content seems well suited to this purpose, even if it does not very effectively support the prediction and explanation of behaviour.

Chapter 4 raises concerns about the scope of computationalism. Here Fodor rehearses the worry—present in LOT 1 and a number of later works—that holistic aspects of cognitive processing preclude a fully computational account of the mind. Fodor is so frequently identified as a leading advocate for computational approaches to cognition that it may seem odd to many readers that he should question its power. His argument seems straightforward enough, though: computation is a local affair; the updating of beliefs (for example) is sensitive to global properties of large chunks of one’s set of beliefs; thus, a computational account of such processes cannot be given. In my opinion, the jury is still out with regard to the scope of computational modelling: powerful forms of computational learning (machine learning, for example) are being actively explored and may yet do the trick. Even if, as Fodor thinks, the overall simplicity of a belief set is partly a function of the beliefs’ contents (something not amenable to syntactic treatment), this does not preclude a computational system’s use of reliable proxies for simplicity to mimic (or implement) human-style belief-updating. After all, if the contents of human concepts are purely referential, then, in order that cognitive processing be sensitive to thought-content, processing must frequently rely on locally available proxies for content.
Part I of _LOT 2_ consists of the four chapters described above. Part II turns to issues of nativism, non-conceptual (or ‘pre-conceptual’) content, and causal-informational semantics for terms in Mentalese. The first of these chapters covers Fodor’s views about innateness. These views are well represented in his work; they do seem widely misunderstood, however, so their inclusion here is worthwhile. Moreover, Fodor makes some movement in his discussion of innateness. He now approvingly entertains neurological and dynamical-systems-based accounts of the realizers of Mentalese terms—so as to allow for an integrated story of (a) the appearance of such terms in the cognitive system, (b) the sense in which they’re innate, and (c) how they come to have content (qua realizers of LOT terms). From my standpoint, this is genuine progress.

Chapter 6 consists largely in a reprinting of Fodor [2007]. Here Fodor homes in on and pursues the important questions. What would show that there is non-conceptual content? The existence of iconic, as opposed to discursive, mental representations. What would show that there are iconic representations? Evidence of representations that do not exhibit an item effect—that is, representations that do not have built into them a principle of individuation that determines the number of items being represented. Fodor then adduces empirical results (from Sperling and Julesz) to support the view that some content is non-conceptual, results best explained by assuming that early visual processing and structures in short-term memory buffers fail to exhibit an item effect.

The final substantive chapter addresses two common objections to a naturalistic theory of referential content for mental representations. Fodor responds briefly to worries about normativity and the disjunction problem, and, given the aims of _LOT 2_, these brief responses suffice. He then turns to a less widely discussed problem. A mentalese term is meant to refer to the item on which its activation causally depends, and yet there are many such items: on a given occasion, the tokening of a subject’s mental representation SNAKE, for instance, will have been caused by a snake, by the light arriving at the subject’s eye, by the subject’s retinal cells that the light stimulates, etc. A principled relation must determine ‘which link in the causal chain’ is the right one [205].

Fodor appeals to counterfactuals. If I am in visual contact with a snake and my mental representation SNAKE is thereby activated, the content-relevant cause is determined by the answer to the following question: if a duplicate of me were, say, three feet to my right and were to have the same mental representation activated, which causal contributor to the actual activation of SNAKE would also be present in the causal chain activating my duplicate’s SNAKE? The two causal chains intersect at the snake, so the snake is the content-relevant cause. Some other causal contributors might be shared—the retinal firings, for example—but the idea seems to be this: if my duplicate and I were in the same world, the retinal firings would be only type identical; the snake, as causal contributor, would be one and the same snake. It is this stronger sense of being shared that, I think, Fodor requires for the content-relevance of the cause.
I end this review with some remarks on the relation between language and thought. To close LOT 2, Fodor [215–19] helpfully lists eleven theses he has advanced or important implications thereof. According to his Point 8 [218], ‘There is no reason to suppose that “how you think” or “what you can think about” depends on what language you speak.’ I agree with Fodor that, generally speaking, thought is prior to language. I am, however, inclined to think he is being too dogmatic about this. Careful, non-ideologically motivated cognitive psychologists and linguists have shown a renewed interest in weak versions of the Whorfian hypothesis (that is, that one’s public language somehow determines what one thinks). The results here do not, in my estimation, support any of the more radical interpretations of the Whorfian view; they do, however, suggest more modest forms of causal dependence. Take the use of spatial terms. Which orientations are treated by a subject as similar depends on which kind of spatial terms (absolute versus relative) appear in the subject’s native public language [Majid, Bowerman, Kita, Haun, and Levinson 2004]. Of course, the explanation of this behaviour runs through the concepts acquired as a result of speaking a given language, but this is precisely the point. Which concepts the subject has available to govern her cognitive processing depends on which language she speaks; encounters with language makes certain concepts more salient, in the sense that they control cognitive processing in normal conditions. Thus, I recommend a more nuanced view of the connection between public language and thought. This isn’t a terribly serious criticism, as I suspect that Fodor can accommodate the nuanced view without compromising general principles. His emphasis on compositionality, the claim that referential content exhausts mental content, his anti-pragmatism, his causal-informational theory of mental content, and his nativism could all be left untouched by such adjustment.

LOT 2 takes the reader on a delightful tour through Fodor’s world, a world filled with keen, no-nonsense, naturalistically oriented observations about the mind. This is not simply a good book for philosophers of mind, though. Many of the views Fodor takes to task are widely held in the academic world and have implications far beyond the sub-discipline. For this reason and others, virtually everyone in the humanities and social and cognitive sciences should read this book.

Robert D. Rupert
University of Colorado, Boulder

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