

Jerry A. Fodor, *Psychosemantics, The Problem of Meaning in the Philosophy of Mind*. A Bradford Book, The MIT Press, Cambridge, Mass. and London, 1987. 171+xiii pp. First published in *Erkenntnis*, 33, No. 2, September 1990, pp. 251-59.

In J.A. Fodor's *Psychosemantics*, contemporary cognitive science and the computer model of the mind begin to come to grips with their semantic presuppositions and the philosophical problem of meaning as bequeathed by Quine. This confrontation has been threatening for some years now, and it promises to continue brewing for a considerable time to come. However much Quine's influence has been resisted in the past,—usually in the name of a Chomskian rationalism—it seems clear that the central focus of this book has been engendered by Quine's skepticism and critique of traditional philosophic theories of meaning. Fodor's aim is to sketch an exposition and defense of his representational theory of mind and draw out a semantic theory to meet its needs. We find little sign of the old comfortable reliance on the analytic/synthetic distinction here. Rather, the can of worms of semantic theory and its relevance to empirical psychology has been opened in earnest. With some typical expressions of distaste, Fodor sets about the task of taming semantic theory in the interest of empirical psychology. All in all, these efforts are to be applauded, though doubtlessly they will also be disputed.

Fodor takes intentional content seriously. "It appears increasingly," he says in his Preface, "that the main joint business of the philosophy of language and the philosophy of mind is the problem of representation itself." We want an answer to a basic question: "How can anything manage to be about anything; and why is it that only thoughts and symbols succeed?" (p. xi). In order to answer such questions, Fodor advances a "naturalized theory of meaning." This will be a necessary part of any genuinely scientific vindication of commonsense psychological explanations given in terms of desires, beliefs and other propositional attitudes—as proposed in the RTM.

One will expect opposition to Fodor's standpoint both from those who lament anything resembling "hard" sciences in an approach to understanding what is distinctively human, and from those who insist upon rigorous science but are skeptical that a scientific psychology could end up looking very much like our commonsense picture of ourselves. While certainly aware of the former, Fodor concerns himself in this book chiefly with the latter sort of opposition. Still, it is important to locate Fodor's views more generally and see them at the juncture of our "two cultures" if one is going to understand how controversial this book could be. There is an unlikely alliance of opposites which Fodor opposes here, and, I think, any eventual evaluation will need to ignore some of the likely fireworks.

The first chapter emphasizes that commonsense psychology does work remarkably well, and it argues against the common philosophical view that the generalizations employed must be either trivial or false. Fodor attempts to account for the possibility of exceptions to psychological generalizations, and the consistency of this with genuine predictive power, by portraying psychology as one among other "special sciences" such as geology. Exceptions or *ceteris paribus* clauses attaching to the generalizations of the special sciences are to be accounted for by going outside the vocabulary of the science in question to see how its governing idealizations have been violated. The ontology of intentional psychology is then no more suspect in relation to that of biology or chemistry or physics than is the ontology of geology suspect in relation to more basic sciences. Fodor's work on the notion of special sciences is certainly among his most interesting.

Propositional attitudes, then, are to have a place in scientific psychology. "Holding onto the attitudes—vindicating commonsense psychology—means showing how you could have (or, at a minimum, showing that you could have) a respectable science whose ontology explicitly acknowledges states that exhibit the sorts of properties that common sense attributes to the attitudes" (p.10). Such states are "semantically evaluable," i.e. they have semantic content, but they are also to have causal powers, and "the implicit generalizations of commonsense belief/desire psychology are largely true of them" (*ibid.*). How much of a vindication of commonsense psychology to expect, then, depends upon just which implicit generalizations turn out true.

“Computers,” Fodor argues, “show us how to connect semantical with causal properties for symbols. So, if having a propositional attitude involves tokening a symbol, then we can get some leverage on connecting semantical properties with causal ones for thoughts” (p. 18). For, we can suppose that the causal powers of symbols are dependent upon their syntax (that syntax is somehow physically realized) and that there is a correspondence between syntax and semantics—“we know from modern logic that certain of the semantic relations among symbols can be, as it were, ‘mimicked’ by their syntactic relations.” This points in the direction of a theory of how “there could be non-arbitrary content relations among causally related thoughts” (p. 19). Yet, all of this will require a theory which quantifies over mental contents, and this in turn sets the goal of making sense out of the great battle ground of the theory of meaning. Fodor’s RTM is partly a semantic thesis. We will need to settle on identity conditions for meanings. Thus, Fodor comes to pick up the Quinean gauntlet. Toward the end of the first chapter, Fodor strengthens the connections between RTM and the computer model of mind by considering anti-realist objections including one from Dennett’s instrumentalism.

In the second chapter, the author sets out to give a solution to Putnam’s Twin-Earth problem and other similar puzzles: a solution which will be consistent with the realistic principle that the psychological is supervenient upon the physiological. This is to say that brains must differ whenever minds differ. “Mind/brain supervenience (and/or mind/brain identity) is,” Fodor remarks, “the best idea that anyone has had so far about how mental causation is possible” (p. 30). Given that Twin-Earth is “just like here except that they’ve got XYZ where we’ve got H₂O,” and that Fodor’s twin is, then, just like Fodor, down to his neurological microstructure, it would seem that ‘water is wet’ means something different on Twin-Earth—simply because the extension of ‘water’ is different even though everything else is the same. The point of such stories, of course, is to raise some difficult questions about the identity conditions of meanings or contents and about the relation between meaning and referential notions. How, then, are we to individuate contents? Many see in the Twin-Earth puzzles a demonstration of the thesis that commonsense individuation of contents violates supervenience, (“meanings are not in the head”) but Fodor disputes this. He argues that “the considerations that militate for the non-relational individuation of mental states (hence, for preserving supervenience at the cost of violating the commonsense taxonomy) are no different from the ones that militate for the non-relational individuation of brain states, molecular states and such” (p. 32). He makes a good case. Whatever reasons we have to think that living on Twin-Earth makes no difference to brain states is equally good reason to think it makes no difference to mental states, since such differences as there are (“water” turns out to be XYZ rather than H₂O) are “irrelevant to their causal powers; hence, irrelevant to scientific taxonomy.” (p. 34)

The Twin-Earth puzzles appear to create serious difficulties, because they appear to violate the traditional principle that content determines extension. Without this principle or something quite similar, we are at a loss to say anything on the individuation of contents. “It was a test for the identity of content that the extensions had to come out the same. And that was the best test we had” (p. 46). Fodor concludes in the end that “The Twin-Earth examples don’t break the connection between content and extension; they just relativize it to context.” He thus introduces a distinction between narrow and broad contents, where broad content is relativized to environmental context. In terms of this distinction, “my Twin’s ‘water’ thoughts are intentionally identical to my water thoughts; they have the same contents even though, since their contexts are de facto different, they differ, de facto, in their truth conditions.” However, “the ‘broad content’ of a thought, by contrast, is what you can semantically evaluate, its what you get when you specify a narrow content and fix a context” (p. 48).

But what does it mean to specify a narrow content here? Assuming that the results Fodor wants from a solution are in fact desirable—preserving supervenience in particular—, and however popular this sort of solution between narrow and broad content may be, one might well be left wondering what makes the narrow contents semantic at all. Fodor has it that “narrow

contents aren't semantically evaluable; only wide contents have conditions of satisfaction" (p. 83). The original desiderata of vindicating commonsense psychology seem to have been seriously compromised here. In particular, does it remain true, on this dual content theory, that "if you know what the content of a belief is, then you know what it is about the world that determines the semantic evaluation of this belief"? (p. 11). Or, does this stressed claim from the first chapter now appear ambiguous? How could we specify a narrow content without use of some semantic vocabulary? But would not use of such semantic vocabulary bring along with it some sort of semantic evaluation? Moreover, if the contents which are semantically evaluable do not agree with the causal taxonomy, has Fodor not given up commonsense psychology after all? Has Fodor solved the Twin-Earth puzzles, or has he merely shifted them elsewhere?

"The hard problems start in chapter 3," as Fodor sees it; this is the chapter devoted to an examination and critique of the notion of meaning holism. The author is particularly concerned to block arguments from meaning holism to anti-realist conclusions regarding intentional contents. "Meaning holism," according to Fodor, "is the idea that the identity —specifically, the intentional content—of a propositional attitude is determined by the totality of its epistemic liaisons." We are told, further, that P is an epistemic liaison of Q, "when an intentional system takes the semantic value of P to be relevant to the semantic evaluation of Q (for that system at that time)" (p.56). The danger to intentional psychology is that in accordance with meaning holism, Fodor fears that "no two people will ever get subsumed by the same intentional generalizations." For, "people quite generally differ in their estimates of epistemic relevance, and if we follow meaning holism and individuate intentional states by the totality of their epistemic liaisons, its going to turn out that no two people...ever are in the same intentional states" (p. 57). But, if so, then intentional psychology will end up without any real predictive power.

Nor can we treat identity of contents as an idealization which will render generalizations more useful the more nearly the idealization of a community with uniform beliefs is approximated. This will not work because, according to Fodor, a view based on meaning holism cannot even say "what it is like to believe that P in the ideal case" (p. 59). It does seem clear that this version of meaning holism, with individuation based on epistemic liaisons, slices things too thin. But does this not serve to indicate the need to investigate some more reasonable versions?

Fodor does not investigate possible varieties of meaning holism, but rather he goes directly from his initial criticisms to a lengthy attempt to block various arguments for meaning holism. Thus, the advocate of this type of viewpoint is likely to remain unconvinced, though this is far from saying that there is no value to Fodor's critical exercises here. For, a sympathetic reader will certainly find this work suggestive of reasonable constraints on any viable version of meaning holism—even in spite of Fodor's protests that this is a "crazy doctrine." The author sets about disputing a Quinean type argument from confirmation holism to meaning holism (where Quine turns out portrayed as a "meaning nihilist," though without attention to Quine's more constructive comments on Davidson's work, e.g.), arguments from psycho-functionalism to meaning holism, and an examination of links between functional role semantics and meaning holism. Toward the end of the chapter, Fodor discusses objections to his own denotational semantics, and this topic is the major focus of the final chapter.

The problem of the last chapter, on "Meaning and the World Order," is to sketch a "naturalized theory of meaning; a theory that articulates, in non-semantic and non-intentional terms, sufficient conditions for one bit of the world to be about (to express, represent, or be true of) another bit." Fodor is primarily interested in the semantic properties of mental states or mental representations, and "its the interpretation of the primitive non-logical vocabulary of Mentalese that's at the bottom of the pile..." For, given this much, we "can proceed by means which, though certainly not unproblematic, are at least familiar; viz., by the construction of a truth definition" (p. 98). Interpretation of primitive non-logical vocabulary, in Fodor's hands, becomes a matter of stating causal conditions relating properties (or instances of properties) and tokenings of (mental) symbols. What underlies the "Crude Causal Theory" is the intuition that the semantic interpreta-

tions of mental symbols are determined by law-like causal relations. Errors in the Crude Causal Theory have to do with misrepresentation, and the interesting discussion of such problems serves to remind us that Fodor is, after all, centrally concerned with the classical problem of intentionality. These discussions lead on to a Slightly Less Crude Causal Theory of content, according to which it is a sufficient condition for 'A's to express A, that (1) it is "nomologically necessary" that "All instances of A's cause 'A's" when (a) "the A's are causally responsible for psychophysical traces to which (b) the organism stands in a psychophysically optimal relation;" and (2) "If non-A's cause 'A's, then their doing so is asymmetrically dependent upon A's causing 'A's" (p. 126). The view is surely complex and sophisticated; one would not expect classical objections against causal theories to be telling here—at least not in any very simple way.

Although Fodor allows that theories "mediate symbol/world connections," this does not lead him on to holism. This is because the content of the theory "does not determine the meanings of the terms whose connections to the world the theory mediates." Rather, their meanings depend upon "which things in the world the theory connects them to" (p. 125). But notice that Fodor has here a proliferation of "things in the world" (properties)—which are called for by his semantic theory. Yet it seems a reasonable principle that a semantic theory for a given bit of theory or discourse should only minimally extend the ontology of the object language theory or discourse. In any semantics one must talk about expressions and have vocabulary for relating the expressions to the objects of the object language theory/discourse, but one wants to avoid adding to the ontology of the object level much beyond these basics. Thus, if our talk (or thought) is not about properties, then our talk about such talk (or thought) should not call them in. This seems especially important here because of a lurking suspicion that a denotational theory of meaning will be only too quick to populate the world with denotata to make its wheels turn—when such disorderly elements are otherwise neither welcome nor desired. This is to suggest that clinging more closely to extensionalistic semantics, following Davidson, could prove a useful discipline here. If, and to the extent that a denotational theory of contents attempts to simulate, or reconstruct talk of intentional content, within standard referential semantics, such efforts are to be welcomed indeed. But Fodor's use of properties as denotata blurs the picture. What, after all, are the identity conditions of properties?

This is to say that the worry concerning the holistic relevance of the theory to the interpretation of terms runs deeper. In the end it is our theories about the world which tell us what there is for our terms to denote, so that interpretation of terms seems only to make sense relative to an embedding theory. Since different theories have different ontologies, this seems to require differing interpretations of terms as employed in different theories. What are we to make of the idea that observational and theoretical vocabulary of a theory are "theory-laden." How could it be, as Fodor has it, that the interpretation of a term—its meaning—is independent of what the theory says making use of the term?

Let us suppose that rain, i.e., precipitation of liquid H₂O from the atmosphere, causes tokenings of 'rain,' that this relationship is "nomologically necessary," that Fodor's conditions are satisfied. It would appear, then, that 'rain' means rain, as expected and desired. But since rain just is precipitation of liquid H₂O from the atmosphere, it would appear that 'rain' means (or expresses) precipitation of liquid H₂O from the atmosphere. But clearly we can imagine a community of speakers who understand 'rain' and yet have no ideas concerning 'precipitation' and 'H₂O'—so, 'rain' does not mean precipitation of liquid H₂O from the atmosphere in this community. (It makes no essential difference to this example that the one term is complex while the other is not, since we could as well imagine that we have a single short word which means the same as 'precipitation of liquid H₂O from the atmosphere.')

What is important here is that there seems to be no way to distinguish the meanings of 'rain' and 'precipitation of liquid H₂O from the atmosphere' merely in terms of denotata, and the problem could well be posed as an empirical problem concerning a newly discovered linguistic community—a problem of radical translation. Seeing the problem so, it seems obvious that we are not going to be able to decide between two

such interpretations of a native expression merely by detecting the denotata. Rather, we would have to find out what further sentences they hold true making use of the term in question. So it is not just that there seems no way for Fodor to state the difference in meaning merely in terms of denotata. But he does seem to have this problem as well—unless, of course, there are different properties involved and the fact that an event has the property of being rain, e.g., is what causes the tokenings of ‘rain.’ But, then, are not these different properties, the properties called for by Fodor’s account, merely (unnecessary) posits reflecting the different sentences held true? Obviously, the questions and problems are far too complex to be treated in sufficient detail here.

The book is filled out with an interesting little epilogue titled “Creation Myth,” and there is also a longer appendix on “Why There Still Has to Be a Language of Thought.” This latter presents an outline argument for the author’s Language of Thought hypothesis—which is a specific form of intentional realism. In spite of the considerable complexities to be found in this little book, the reader can count on the author’s clarity and frankness concerning his own views. One senses a proper scientific fallibilism here—something to be grateful for since it facilitates further work and evaluation. Fodor’s characteristic rhetorical style is a reminder and expression of this. Seriousness of intent is never incompatible with the good humor which invites the reader to try his hand—if he really has a better idea. The author’s considerable philosophic talents and philosophic conscience show themselves in this book. They sometimes even war (politely) in public. Would that some of our too serious philosophers might find a model for public debate in this. Granny is such a nice person to have as a conscience —though surely, she tolerates no non-sense.

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