BOOK REVIEW

M. J. Cresswell, *Language in the World. A Philosophical Enquiry*, Cambridge University Press, Cambridge, 1994, x + 160 pp., £27.95 (cloth).

The book addresses the question of what it is that makes a particular interpretation the correct one for a given natural language. The author holds that semantic facts supervene on physical facts. This is not a very controversial thesis, at least among materialist-oriented philosophers. So what does he claim specifically about the relation between meaning and physical fact? Very little. But this caution is to be contrasted with the views of others who claim more and can be seen as an indirect critique of their views. Especially the last four chapters may be seen as an attack on David Lewis' philosophy of mind and language. Lewis thinks that a *reduction* of semantical facts to social facts and facts about propositional attitudes is feasible which in turn he holds to be reducible to facts about behaviour. The author agrees with Lewis that semantical facts and facts about attitudes supervene (ultimately) on physical facts, but he says that no reduction may be possible. His own, weaker claim constitutes a naturalistic account of semantics as well but seems to be preferable in the light of the problems the reductionist program faces and which the author tries to expound. Still the author could have been less reticent on the central question. For example, in Chapter 7, Lewis' attempted reduction of the semantical to social facts and facts about attitudes encounters the objection that it produces too much indeterminacy of meaning. But is Lewis locating the facts that determine semantical facts in the right place? I think the author should have committed himself to some more definite answer than simply a "maybe". Despite these misgivings the book is to be recommended to everyone working in philosophy of language, and, as we will see shortly, especially in philosophy of mind. The book covers quite a lot of literature and contains extensive discussions of works of, e.g., Putnam, Stalnaker, Schiffer and Field.

A lengthy excursion is devoted to the metaphysical background. The specification of a possible-worlds-semantics for first-order-logic with possibilist quantification usually begins like this: "Let there be a set of possible worlds W, and a set of individuals D". Now this is almost all which, accord-

ing to Cresswell, a possible-worlds-metaphysics should say. (It is *almost* all, because his metaphysics says also that n-place properties are identified with functions from worlds into sets of n-place pairs of individuals.)

This is not much. Many questions which are usually treated as metaphysical now turn out to be non-metaphysical, e.g., the question of transworld-identity. According to Cresswell, metaphysical theories which decide on such questions sin against the "principle of metaphysical weakness", which he thinks is even more important than Occam's razor – I think there is a *substantial metaphysics* besides the formal metaphysics Cresswell offers us. His formal metaphysics consists in saying how the ontology of an arbitrary model of our language has to look. To do substantial metaphysics is to be concerned with the ontology of the one right model. When Cresswell says his own metaphysics is weaker than Lewis' he is comparing a formal and a substantial metaphysics, that is apples and oranges. Interestingly, Cresswell doesn't commit himself to the view that there is one right model. He only commits himself to the view that there is one relative to a particular interpretation of the metalanguage. But even if "substantial" is defined relative to a particular interpretation of the metalanguage in which the comparison is made, it still holds that the comparison should be made between metaphysical theories of the same kind.

The last three chapters are mainly devoted to the philosophy of mind and this is where I see the main contribution of the book. Although most of my remarks will be critical I have to say I'm very sympathetic with the overall view. Lewis thinks that mental states are "causally efficacious". Cresswell says that they only figure in certain because-sentences and that this is not the same thing. Accordingly Chapter 8 tries to give an account of because-sentences which focuses on their practical rôle and not on causal links. Formally, the account still uses Lewis' definition of causation. There are considerable difficulties with this as a definition of "because", which the author admits. Therefore, I simply cannot understand why he claims it's a success and serves to justify possible-worlds semantics. Hopefully, possible-worlds semantics needs no such justification.

Chapter 9 culminates in an attack on Lewis' treatment of the content of belief. The argument is, I think, incorrect in an interesting way, so let me have a closer look at it. According to Lewis, to ascribe a a certain system of belief and desire is justified only if the system in question allows to give a rational justification of a's behaviour. Suppose a waves. Then, a system of belief and desire fits a's behaviour only if it predicts

(A)   By waving a serves his desires according to his beliefs.

Now Lewis' implementation of (A) in possible-worlds semantics comes down to

(B) a believes that to wave would realize his desires.

Cresswell remarks that this is a bit of a mouthful because nearly never people believe that all of their desires come true just by a wave of a hand. He therefore recommends to use a notion of comparative desirability of worlds. In the following I will develop, step by step, an analysis based on comparative desirability and compare the final outcome with what Cresswell says.

I think a formal analysis of (A) should render it equivalent to

(C) a believes that to wave would be more desirable than not to wave,

or, to make the conditional element in (C) more perspicuous:

(D) a believes that if he waves the world will accord more to his desires than if he doesn't wave.

The next step is to spell this out in possible-worlds terms. Using Stalnaker's analysis of counterfactuals, (D) may be spelled out as:

(E)   For every world w*, if w* is a belief-world of a in w: the closest world to w* in which a waves is better than the closest world to w* in which a does not wave. (Suppose w is the actual world.)

Now suppose that we know a's preferences in all worlds and his behaviour in w. With the help of (E) we are able to narrow down the class of candidates for a's belief worlds. For example, it holds that:

(F)   If w_1 is the closest world to w* in which a waves and w_1 is better than the closest world to w* in which a does not wave, then if a does not wave in w, w* is not one of a's belief worlds in w.

Compare (F) with Cresswell's own try at a sufficient condition for throwing out w*:

(G)   "If w* is the closest world to w in which a waves, and if w* is better than any world in which a does not wave, then if a does not wave, w* is not one of a's belief worlds in w". (136f.)

(G) is defective in two respects: first, the closest world is reached from w, instead of w*. But we don't want to know whether, if a were to wave, then . . . . but only whether *a believes that* if he were to wave, then . . . . Certainly, closer proofreading would have detected that mistake. But second, and more importantly, in (C) comparison of the closest waving world is made with *all* non-waving worlds instead of only with the *closest* non-waving worlds. Now it is just this feature of (C) on which Cresswell builds his critique:

whatever world we pick, unless it is one of the worlds which realizes all of a's desires, if it is a waving world there will almost certainly be *some* better non-waving world, and if it is a non-waving world there will almost certainly be *some* better waving world. For that reason it seems likely that there will be no real life occasions on which we are presented with a w* that we can test against behaviour. (p. 137)

To a given waving world w_1, there will most certainly be some world in which a would prefer to be in although he does not wave there. But a world w_2 in which, say, a does not wave but wins the lottery instead (suppose he would prefer to be in w_2) will not normally count as the non-waving world closest to the actual world. Therefore, w_2's existence poses no threat to the applicability of (F). (Arguably, this still holds if we switch to Lewis' truthcondition for counterfactuals.)

Chapter 10 finally attacks some of the central tenets of Lewis' version of "analytic functionalism" (the view that a mental state S should be identified with the physical state which plays the rôle belief-desire psychology ascribes to S). Specifically Cresswell argues against narrow content, against the view that mental states should be "causally efficacious", and against the idea that there has to be a theory in which "belief" figures as one of the theoretical terms at all. He suspects that it is the phenomenon of knowledge of one's own attitudes that motivates the insistence on such a theory. But, according to Cresswell, such knowledge is *direct knowledge*, not mediated by any theory. If belief supervenes on complex patterns in the brain it might very well be that we are simply sensitive to such complex patterns, such that coming to know what you believe is just like chicken-sexing. The same holds, he thinks, for semantic knowledge: if we understand a sentence, we know its truthconditions directly. There does not have to be a theory which justifies to ascribe the conditions we do. Thus, the author argues for "the autonomy of semantics". As a semanticist, I like this consequence.

University of Konstanz   MANFRED KUPFFER