

editors' excellent introductory survey of the field, the best papers in the collection indicate clearly the potentiality which philosophical psychopathology has to contribute both to general philosophical discussion and to the advancement of psychiatric theory and practice.

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Dispositions: a Debate. BY D.M. ARMSTRONG, C.B. MARTIN AND U.T. PLACE. EDITED WITH AN INTRODUCTION BY TIM CRANE. (London: Routledge, 1996. Pp. viii + 197. Price £40.00.)

Before this book, the debate concerning how we are to understand such ascriptions as 'fragile', 'malleable' and 'dormitive' has been spread over scattered journal articles and a couple of obscure and inadequate monographs. *Dispositions: a Debate* exhibits three influential philosophers discussing a host of connected problems. Although the nature and place of dispositional properties is the main focus, the debate takes us through the surrounding issues of causation, universals and laws of nature. A number of innovations are forthcoming that should be of interest to any contemporary metaphysician. For anyone who has not come across the issue before, Crane's introduction is helpful.

The book has eleven chapters, three written by Martin and four each by Armstrong and Place. It is structured as an on-going debate, where initial positions are stated, criticized, defended and developed. The reader thus gets a sense of philosophy as an active process.

Differing ontologies are presented by the protagonists. Place takes it that the world is populated by two different kinds of properties, dispositional and categorical. Dispositions stand out as being emergent, 'modal' properties, that 'consist in their possible future and past counterfactual manifestations' (p. 60). Significantly, he offers intentionality as the mark of the dispositional rather than as the mark of the mental. There is, unfortunately, little justification offered for why we should accept that non-mental states in the world are capable of being directed at, or aiming towards, one set of preferred events rather than another. Armstrong, in contrast, urges that we need only categorical properties, plus the laws of nature, to account for all the possibilities for which Place would posit distinct dispositions. Armstrong recommends that we identify each disposition with its categorical basis, and thus reduce dispositions away. Place has a number of arguments against such a reduction, but his main commitment which prohibits this is that the categorical basis *causes* the dispositions of a particular, and, because causal relations exist only between distinct existences, dispositions are not identical with their bases.

Martin's *limit view* is in sharp contrast to Place's position. To begin with, he strongly disagrees with Place's characterization of dispositions as modal properties consisting in past and future manifestations. This, he thinks, is symptomatic of the empiricist confusion of a disposition with its manifestation. Dispositions can be possessed when they are not manifested, but their existence cannot straightforwardly be understood in counterfactual terms, as Armstrong and Place both begin by

assuming. Martin demonstrates this point with his notorious *electro-fink* example. We may think that a wire is live (a dispositional state) if and only if it will pass current if touched by a conductor. However, this counterfactual will be false if the wire is connected to an electro-fink, which is a device that detects the presence of a conductor and instantaneously renders a live wire dead or a dead wire live. This means that a disposition ascription can be true though the associated conditional is false. Dispositions must therefore be understood as real properties, but not distinct from categorical properties, as Place suggests. The limit view is that all properties contain potencies as well as categoricity, or 'qualitativity' as Martin prefers. The dispositional and qualitative are two aspects of the same property, and to speak of a property as purely categorical or purely dispositional is philosophical artifice. These are the two end-limits of a scale, and all properties are somewhere in between. Place's argument that dispositions are caused by their categorical bases, and thus must be distinct from them, is dismissed. Bases do not cause dispositions; they *constitute* them.

On the issue of dispositions, Martin is thus closer to Armstrong in being against a dualism of properties, though the position is not explicitly stated in such terms. The differences between Armstrong and Martin are in the surrounding issues. Armstrong supports traditional positions on universals, on the causal role of dispositions and on laws of nature, whereas Martin provides more innovation. Armstrong is a realist about universals and sees the laws of nature as real causal connections between real universals. Martin criticizes these views in detail and offers something in their place. He sees properties as particulars (property instances or tropes) where the necessities in nature are grounded in the singular causal acts of particular things rather than general truths. When Martin presents his views on causation, however, we see that his ontology is even more radical. He proposes to replace the inadequate philosophical notion of causation with talk of 'mutual manifestation of reciprocal disposition partners'. The accepted language of cause and effect is another philosophical artifice. What is cause and what is effect when sugar dissolves in water? Does the sugar cause a change in the water or the water cause a change in the sugar? Martin sees these as unanswerable questions based on inadequate concepts. The dissolution of sugar in water is a mutual manifestation of the sugar and water which are reciprocal disposition partners. This compels Martin to defend the view that there is reciprocity in all supposed causal interactions. He defends this against an apparent counter-example from Armstrong of the continuing existence of an isolated electron (p. 151). There is causation, the earlier states of the electron causing later existence, but no reciprocity. Martin replies 'A previous state X of a thing a at t_1 has innumerable reciprocal disposition partners in other states of a at t_1 for the continuance of state X of a at t_2 ' (p. 186).

Martin comes best out of the debate. Indeed it is somewhat disappointing when Armstrong finishes his contribution by admitting of his and Martin's rival ontologies that both are 'in rather good shape' (p. 151). It seems a climb-down on Armstrong's part to concede that Martin's position and his own can be split only by carefully weighing the advantages and disadvantages of each. He does identify one possible problem for Martin's particularism: how, without general laws, can Martin account

for the uniformity evident in nature where particulars of each kind have their own 'idiosyncratic sets of powers' (p. 152)? This is a question Martin does not answer clearly enough, though I think a plausible answer could be provided within his ontology. He could adopt a version of dispositional essentialism where particulars of certain fundamental kinds behave in a uniform manner because it is in virtue of having that set of dispositions that the particular belongs to the kind. Hence anything which did not behave in that way would not be a member of that kind.

A more general comment about the debate format of the book is that there are times where the reader is frustrated by the frequent misunderstandings which the authors exhibit of one another's work. There are a number of places where the accusation of misinterpretation is made (pp. 111 and 132, to name but two examples), and this gives a sense of covering the same ground numerous times and slowing down the discussion. However, this is perhaps an inevitable consequence of the approach adopted, for which there is adequate compensation in witnessing the debate in action. There is no doubt that this work makes a significant contribution to the development of its subject.

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The Facts of Causation. BY D.H. MELLOR. (International Library of Philosophy. London: Routledge, 1995. Pp. xii + 251. Price £35.00.)

At the core of Mellor's theory of causation are two principles: causation primarily links facts (rather than events or other particulars); and causes must raise the chances of their effects. In this impressive book, Mellor argues for these claims and incorporates them in a realist account of the nature of causation and its links with probability, laws of nature, universals and time. This is accomplished in seventeen chapters of detailed argument. Although Mellor has argued for his two principal claims in previous publications, much of the development of the theory presented here is new.

Four chapters (9–12) concern the status of facts and events as causes and effects. According to Mellor, causal links between facts can be reported by statements of the form 'E because C', such as 'Don dies because he falls', or, equivalently, by statements of the form 'C causes E', treated as shorthand for 'the fact that C causes it to be a fact that E' (pp. 11–14). After defending the legitimacy of treating facts as causes and effects (ch. 9), Mellor argues that although events can also be causes and effects, they inherit this status from causal links between facts (chs 11–12). The derivation of event-causation statements from fact-causation statements is complicated, but not precluded, by the potential opacity of 'E because C' (ch. 11 §3; ch. 12 §§4–7). An important feature of the account is that, according to Mellor's usage, to say that P is a fact is to say no more than that 'P' is true (pp. 8–9, 161). This means that facts cannot serve as the truth-makers for statements, a role that Mellor assigns to what he calls 'facta' (ch. 1 §2; ch. 13 §4). This is part of the reason for his superficially paradoxical thesis that although facts are causes and effects, causation is not a genuine relation (a real universal) that links causes and effects (ch. 13).