

But one can feel confident without having an effective method within the meaning given to effective—*i.e.* programmable into a Turing machine. Effectiveness is being used in a very strong sense when it is being explicated in terms of computability. But then it is not necessary that all reasoning must in this sense be effective. And in the sense in which reasoning might be necessarily effective, effectiveness does not imply computability.

In spite of these criticisms, Webb has advanced the argument. He may not carry conviction in his advocacy of Church's thesis and Turing's thesis, but has helped to make clear what is at stake, and what the considerations are on either side.

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BHASKAR, ROY [1979]: *The Possibility of Naturalism*. Brighton: Harvester. Hardback: £13.50. Paperback: £4.95. Pp. x + 228.

There are four chapters in Bhaskar's book: 'Transcendental Realism and the Problem of Naturalism', 'Societies', 'Agency', and 'Philosophies'.

1 Bhaskar starts by announcing his overall thesis: there is an essential (though not total) unity of method between the natural and the social sciences, notwithstanding the ontological distinction between their subject matters. But his main concern in this initial chapter is to situate himself metaphilosophically, to identify the intellectual standpoint from which such pronouncements about first-order science are possible.

Bhaskar rejects Kantian transcendentalism for its absolutism and idealism. But he argues that if philosophy is to have any kind of distinctive role, if it is not to collapse into naturalised epistemology, *some* kind of transcendental position is necessary. He opts for a 'transcendental realism', which begins with the conception of some particular scientific practice, and proceeds by considering what the world must be like for such a science to be possible. The deduction here is *a priori*, but the substance of the analysis is real rather than ideal, for it begins not with individual experience but with some actual scientific practice.

Bhaskar's conception of a transcendental analysis is clear enough. But what is not so clear is what the import of such an analysis is supposed to be. The conclusion will be conditional on the possibility of some scientific practice rather than on the possibility of experience in general. But Bhaskar urges that both history and first principles leave room for a variety of scientific practices. Different scientific practices will presumably indicate different conclusions about the nature of reality. How then is the conclusion of a transcendental analysis to be detached? And if it cannot be, what is the point of the exercise in the first place?

Perhaps the idea is that we are at any time already somehow pre-rationally committed to a certain version of scientific practice, and therewith to the conclusion of the transcendental argument starting from that practice. Alternatively, it might be that we are supposed to start with some independent hold on what the world in general is like, and then use the transcendental analysis to infer what kind of scientific practice will be viable.

The brief illustration Bhaskar gives at the end of the first chapter seems to conform to the former pattern. This is the rather unfortunate argument, originally put forward in Bhaskar's earlier *A Realist Theory of Science*, as to why causes must be more than constant conjunctions. It runs as follows. Experimentation is essential to natural science; this is because the closed systems necessary for constant conjunctions of events are scarcely ever found outside laboratories; thus in effect scientists create constant conjunctions; but of course they don't create causes, but discover them; so causes aren't constant conjunctions; so instead they must be powers inherent in the structures behind the observable phenomena.

No doubt there are good grounds for some such non-Humean view of causation. But Bhaskar's quick way with closed systems scarcely provides them. Apart from anything else, it is surely open to a Humean to dispute the conception of scientific practice from which Bhaskar's 'transcendental argument' begins, and to argue instead that experimentation is no more than a useful short-cut to which passive observation and patience would provide a perfectly satisfactory alternative.

2 The second chapter returns us to the puzzle about Bhaskar's transcendental strategy. In this chapter Bhaskar apparently wants to run the transcendental argument in the other direction. The first four sections are a direct discussion of the nature of social reality, arguing against individualism and for some kind of holism. Only after the nature of social reality is thus decided are questions of social scientific practice raised, the procedure then being to infer methodological morals from the conclusions already arrived at. Thus Bhaskar argues that because closed systems cannot even be engineered in the social realm, social science is essentially explanatory and non-predictive; that the conceptual aspect of social science's subject matter requires 'precision of meaning' rather than 'accuracy in measurement'; that while the social sciences have to deal with the proto-scientific ideas of the agents under study, they need not endorse them.

Bhaskar explains why the transcendental analysis has to go backwards in the social scientific context. Different ways of practising social science are 'the subject of substantive theoretical controversy; and presuppose different and conflicting conceptions of society' (pp. 17-18). Indeed. But with this admission one might well wonder whether there is anything distinctively transcendental about Bhaskar's reflections on social science after all. It is of course perfectly reasonable to design methodologies in the light of conclusions about the nature of the reality under study. But if different

views of reality are *a priori* possible, is this not simply a matter of drawing practical conclusions from what in the end can only be empirical theories, albeit highly abstract ones? In the final analysis it is quite unclear whether Bhaskar's epistemology of the social sciences can avoid being naturalised.

Apart from doubts about Bhaskar's claims to transcendence, there are in any case difficulties with the discussion of social reality with which he starts the chapter. He takes the observation that 'the predicates designating properties special to persons all presuppose a social context for their employment' (p. 35) to be enough to discredit individualism, and proceeds forthwith to the question of exactly how the social sciences are irreducible to psychology. Here he places himself between Weber ('social objects are . . . the results of (or . . . constituted by) . . . human behaviour' pp. 39–40) and Durkheim (social objects possess 'a life of their own, external to and coercing the individual' p. 40), and advocates a 'transformational model' of social reality, in which 'society stands to individuals . . . as something that they never make, but that exists only in virtue of their activity' (p. 42).

One difficulty in understanding Bhaskar's position here is that he often seems to confuse the question of whether society consists of people with the questions of whether they affect it and it affects them. He definitely (and reasonably enough) wants to answer both of the latter questions in the affirmative, but his position on the former, and logically prior, question is less easy to interpret.

While he is unequivocally against any kind of reduction of the social sciences to psychology, he is also against Durkheim's reification of society, on the grounds that social facts 'are all ultimately embodiments of human subjectivity' (p. 41). This would seem to suggest some sociopsychological analogue of Davidsonian psychophysical anomalous monism: all social events are identical to (sums of) individual psychological events, but social predicates cannot be defined in terms of psychological predicates.

But this does not tally with Bhaskar's ascription of causal powers to social facts as such (pp. 49–52), nor with his denial of the supervenience of social on psychological facts (see later (p. 127): there can be 'multiple social correlates' of psychological states of affairs).

The general question of what makes events described in one language identical with events described in another is currently a matter of some controversy. Some writers seem to require little or no positive grounds for such identity claims. But even so I doubt whether anybody would wish to maintain the identity of social and psychological events if social facts are (a) causally autonomous of psychological facts and (b) not even supervenient of them. Given what he says on these matters, it is difficult to see why Bhaskar continues to resist Durkheimian reification and to deny the existence of an ontologically independent social reality.

3 On the relation between the mental and the physical Bhaskar takes a slightly different line. Here again he is against reduction, holding that

mental predicates are not definable in terms of physical ones, that the mental has independent causal powers, and that the mental does not even supervene on the physical.

But in this case he does not take it back by ruling out the possibility of a distinct mental substance. Not that he is definitely for such a substance. But he does regard it as an open question whether, in addition to matter, there is an immaterial level of reality in which mental powers inhere.

Why Bhaskar regards it as obvious that there is no distinct level of social reality but allows the possibility of a distinct mental substance is something of a puzzle. There is a footnote (footnote 46 to chapter 3) which suggests that Bhaskar attaches some weight to the familiar intuitions about the logical possibility of disembodied minds and mindless brains. And at one point he suggests that non-material minds are 'indicated . . . by work on paranormal phenomena' (p. 125).

But perhaps I am asking the wrong question. If causal autonomy and non-supervenience suffice for non-identity of substance, as I suggested above, then the puzzle is not so much Bhaskar's toying with mind-body dualism as his unargued insistence on sociopsychological monism.

A growing body of recent philosophical literature has been designed to clarify the issues involved in ontological reduction. The views Bhaskar wants to adopt on the relations between society and mind, and mind and body, are obviously complex and sophisticated ones. It is a pity he does not define his position in relation to such recent work as G. Hellman and F. Thompson's [1975]. The lack of such precision prevents him from communicating coherent views, even if he has succeeded in formulating them.

4 In his final chapter Bhaskar turns from the exposition of his own transcendental realism to a critique of rival philosophies of social science. Positivism (to the right of him) and hermeneutics (to the left) are singled out for special attention. In discussing positivism he focuses in particular on the issue of causation, and points out the difficulties encountered by those committed to the view that social explanations require constant conjunctions. Hermeneutics is then argued to be a kind of mirror image of positivism, implicitly sharing Humean views about causation and natural reality, and differing only in denying the applicability of those views in the social realm.

The sections on the hermeneutic approach are rather imbalanced. Two sections (26 pages) devoted to Peter Winch are followed by a final section (9 pages) on the hermeneutical circle, Gadamer, Habermas and the logic of emancipation. Much of the discussion of Winch is a detailed dissection of the view that all action is rule-governed, and one wonders why Bhaskar spends so much space on points familiar to generations of sociology undergraduates ('Is there a right and a wrong way to go for a walk?', 'How can existing rules explain social change?', . . .) when the subsequent

discussion of the hermeneutic tradition is dense to the point of incomprehensibility. (For instance on pages 195–6 Bhaskar says we should distinguish four hermeneutical circles, C_1, \dots, C_4 , and tells us that if ' C_1 ' is represented as " C of I " and C_2 as " C of C ", C_3 might be represented as " C of $I(C)$ ", and a bit later, that C_4 'could be represented as " C of $I(T)$ ". What T might stand for here, or indeed what any of these expressions mean, is left quite unexplained.)

Indeed excessive density of exposition is a recurrent problem throughout this book. Bhaskar's use of labels and references to other writers to identify positions, his lack of illustrative examples, and his quick way with opposing views make this an extremely difficult book to read. The style confidently lays claim to the rigorousness of the arguments presented, but on closer examination it characteristically turns out that such claims will have to be taken on faith. Perhaps Bhaskar should be given the benefit of the doubt. Despite the clogged style, the positions he ends up adopting are by and large sound ones. But, even so, anybody who wants to have the arguments for those positions laid out in a readable way would do better to look elsewhere.

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REFERENCE

- HELLMAN, G. P. and THOMPSON, F. W. [1975]: 'Physicalism: Ontology, Determination, and Reduction', *Journal of Philosophy*, 72, pp. 551–64.