## Illusion in ascent

Peter J. Bowler

**Taking Darwin Seriously: A Naturalistic Approach to Philosophy.** By Michael Ruse. *Basil Blackwell: 1986. Pp.303.* £22.50, \$24.95.

MICHAEL Ruse believes that scarcely anyone has taken Darwin seriously up to now. Efforts to apply evolutionism to the problems of philosophy have failed, largely because of a refusal to acknowledge the central tenet of Darwinism: the non-progressive character of natural selection. Whatever one's opinion of Darwinism (Ruse, of course, accepts it as the basis of all legitimate evolutionary thinking), the claim that the theory has seldom been taken seriously can certainly be endorsed by the historian. To depict the growth of evolution theory as a simple ascent from Darwinism to the Modern Synthesis is to fall into the worst kind of Whig history, ignoring the large number of thinkers, including scientists, who have found the principles of natural selection unacceptable. As Ruse points out, modern Darwinists from Julian Huxley to E.O. Wilson have also found it difficult to accept the non-progressionist character of the theory.

Ruse's purpose here is to address the philosophical, not the historical issues. He criticizes evolutionary approaches to the problem of knowledge, from Herbert Spencer to Karl Popper. Drawing a simple analogy between evolution and the growth of science does not work, he says, because science is progressive and evolution is not. He looks instead at the kind of reasoning that we might expect natural selection to have programmed into our ancestors so that they could deal successfully with the real world. We believe that an effect must follow its cause, because any of our ancestors who did not have this mental reinforcement to back up their perception of causal regularities would soon have disappeared. The intellectual ancestor of this approach is David Hume, who realized that we read necessity into nature even though we have no philosophically satisfactory guarantee that there is anything corresponding to that necessity "out there". If the analytical philosophers are not satisfied with this, Ruse tells them that they will have to go away disappointed. The philosophers will presumably not be happy with a viewpoint that threatens to put them out of work, but anyone who has lost patience with the apparently endless wrangling of academic philosophy can only applaud.

On the question of morality, Ruse is critical of "social Darwinism" and other efforts to deduce ethical standards from evolution, precisely because they invariably assume that nature is progressing towards some ultimate good. His own approach starts from the principles of sociobiology, but attempts to purge the remnants of progressionism from the work of Wilson and others. Natural selection will have endowed us with epigenetic rules inclining us to behave in a socially responsible manner, when this is to our (reproductive) advantage. The special status we accord to moral laws is nature's way of ensuring that we have a strong tendency to obey them even when they violate our immediate preferences. As a result, we feel that moral laws are objective - and our desire to live in an orderly society ensures that we have no interest in rejecting the laws even when we realize that this feeling is an illusion. Once again, Ruse identifies Hume as the philosophical progenitor of this position.

It will be interesting to see how the opponents of sociobiology respond to this book. Far from justifying a harsh social policy, Ruse explains why we feel so strongly about traditional moral values. Those who wish to argue that human beings are infinitely malleable by culture will object to this - but in so doing they will have to accept that we have no built-in moral values at all. If we concede that our evolutionary heritage may have imposed at least some constraints on how we think and behave, Ruse offers us a way of trying to understand the character of such restraints. As we move into a world that differs ever more radically from that in which our ancestors evolved, such insights may help us to come to terms with the philosophical problems that confront

Peter J. Bowler is a Lecturer in the Department of History and Philosophy of Science, Queen's University of Belfast, Belfast BT7 1NN, UK.

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Work of worms — section through a fallen Druidical stone at Stonehenge, indicating how much it has sunk into the ground through the undermining action of earthworms. Depth of the stone is c. 30 cm. The illustration is taken from a new paperback edition of Charles Darwin's The Formation of Vegetable Mould, through the Action of Worms (1881), published by University of Chicago Press. Price is \$12, £10.25. For review see Nature 24, 553–556 (1881).

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(iii) the main language used is English.

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