

More long arguments

Christopher Wills

Evolution Extended: Biological Debates on the Meaning of Life. Edited by Connie Barlow. MIT Press: 1994. Pp. 333. \$24.95, £22. 50.

CONNIE Barlow has followed her successful anthology *From Gaia to Selfish Genes* with another handsomely designed volume of writings by distinguished evolutionists, ranging from Charles Darwin through Julian Huxley to E. O. Wilson. In this compendium she traces their attempts to wrestle with the ineffable in order to find a larger meaning in their work. The ineffable wins, two falls out of three, but in general the evolutionists put up a brave battle.

The book will provide the student or interested lay reader with a valuable introduction to many old controversies and a few new ones. Prefacing the various extracts with well-constructed comments, Barlow presents the essential kernels of various arguments about such ineffabilities as evolutionary progress, higher-order and cosmic evolution and the interaction between evolution and religion. Interesting pictures dot the book as well, although she uses rather too many drawings by Gustave Dore of soulful chaps floating about in nightshirts.

The student and lay reader wandering through these pages will find tantalizing fragments of ideas that will jar him or her into further thought. Jacob Bronowski, for

example, is represented by his idea of stratified stability — that evolution cannot go from higher to lower levels of complexity because of a kind of ratchet effect. Mutations that reduce the complexity of the individual might not destroy the individual, but might damage the complex set of associations of which the individual is a part. This is an interesting attempt to explain the ever-increasing ecological complexity that is a hallmark of the history of life.

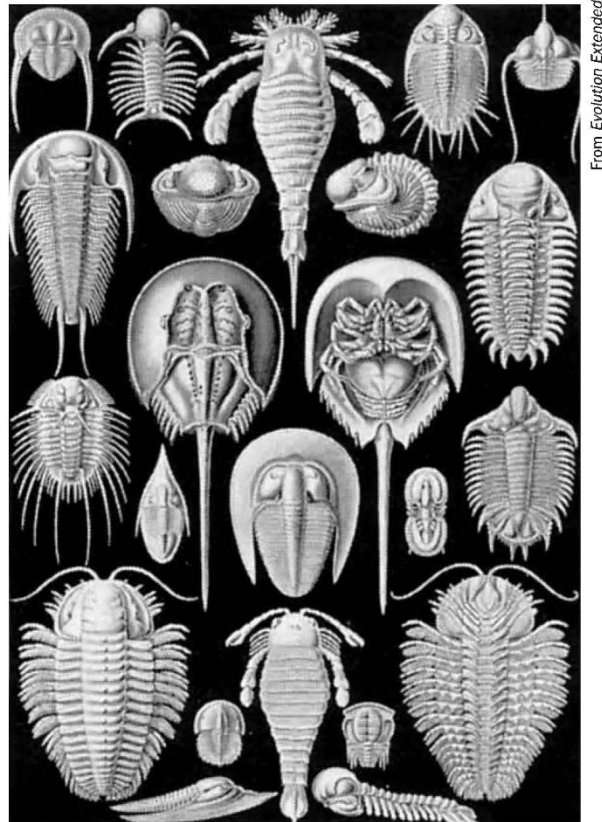
Sometimes, alas, the ruminations of evolutionists are not helpful in closing the intellectual gaps in our society. Creationist Henry Morris makes an appearance with a gleeful diatribe against Julian Huxley, who had innocently suggested that UNESCO (United Nations Educational, Scientific, and Cultural Organization) should embrace the principles of humanism. Morris accuses Huxley of trying to establish humanism as a worldwide secular religion, hardly what Huxley had in mind. And the less liberal tendencies of evolutionists are on display as well, unfortunately. Peter Medawar, patrician nostrils flaring, inveighs against “a large population of people, often with well developed scholarly and literary tastes, who have been educated far beyond their capacity to undertake analytical thought”. But generally the scientists come off pretty well in comparison to the nonscientists. The most appalling excerpt in the book is taken from Justice Scalia’s dissent from the US Supreme Court decision that invalidated the Louisiana Creationism Act. I have not read enough legal prose to know whether such tendentiousness is the norm—if it is, then Mr Bumble was surely right.

These readings provide a valuable glimpse into the thinking of past decades about these large questions, but there is little included about the greater meaning of the latest startling advances in our understanding of evolution and how it works. This is not surprising. As William Provine points out in a remark included in the book, there seems to be no new generation of deeply religious and thoughtfully philosophical scientists to take the place of Teilhard

de Chardin, Dobzhansky and Fisher. The increasing secularization of science has been driven by its very success—if one can do an experiment that used only to be in the province of God then where does that leave God? Of course, when these miracle working scientists have passed through their philosophypause, we will find out whether this secularization is reversible.

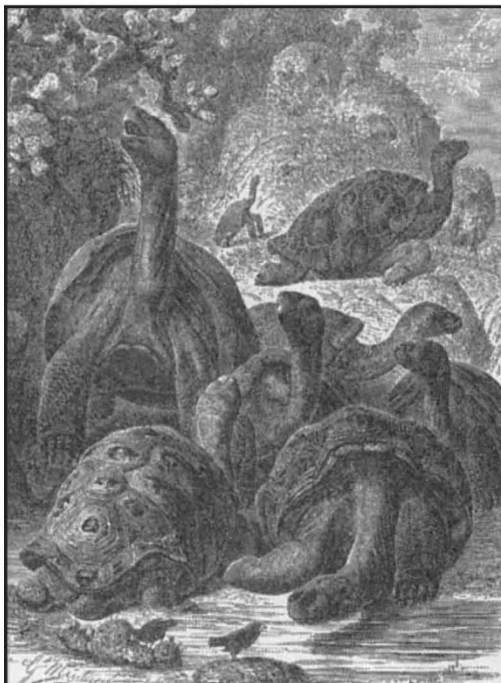
Things got too fuzzy for me towards the end of the book, which deals with the transformation of science into myth. But many of the themes covered earlier are worth reading in abbreviated form even by busy scientists. For example, there is no doubt that our growing understanding of the Universe is the only thing that keeps our overcrowded society from collapsing. Is there a way to combine this knowledge with an ethical system? Perhaps, although the efforts in this direction by Teilhard, Julian Huxley and others have hardly swept through the world with the force of revelation. By following these scientists’ tortuous apologetics, the book shows vividly why building an ethical system based on evolutionary principles is difficult. After all, Leo Szilard’s maxim “Do not destroy what you cannot create” is just as difficult to follow in practice as Jesus’s maxim “Love thy neighbour as thyself”. □

Christopher Wills is in the Department of Biology, University of California, San Diego, 9500 Gilman Drive, La Jolla, California 92093-0116, USA.



Trilobites, eurypterids and horseshoe crabs, from Ernst Haeckel’s *Art Forms in Nature* (1904).

From Evolution Extended



Galapagos tortoises and finches, from Alfred E. Brehm’s *Merveilles de la nature* (1893).

FROM EVOLUTION EXTENDED