Book Reviews

Evolution from Molecules to Men

Edited by D.S. Bendall

Cambridge University Press; London, New York, 1985

594 pages. £12.95, \$19.95 (paperback)

A century after Darwin's death, scientists and scholars feel it necessary to meet again and again and debate on the chances of survival of Darwin's major theory. The Darwin college, in Cambridge, managed to bring together, in 1982, within its auditoriums, dining-rooms and dormitories, one of the most superb collections of evolutionist specimens one can dream of: Mayr, Lewontin, Gould, Maynard Smith and many other stars. The colloquium gave birth to a book, 'Evolution from Molecules to Men' of which the worst could be apprehended. Those prominent men, of whom one had read the theses one hundred times, would they dare say something new? Whether by chance or merit, the book outlived its competitors, and here it is in paperback.

The book opens with a historical section, agreeable and well informed. One is reminded that Darwin was an occasional Lamarckian, and that his theory of pangenesis was a negative contribution to the field.

It is not for the molecular biology section that the book can be recommended. Several articles there are mere accumulation of facts, with no effort to distil from these any coherent evolutionary thinking.

With the population genetics section, the debate takes life. Ayala refutes Gould who refutes Dawkins who refutes The Creator. Does Natural Selection act upon genes, organisms or species? An individual is not a mere bag of independent molecules. Physiology, development and behaviour are organized in rules, and there are rules for changing the rules so that Natural Selection may act at several hierarchical levels.

On the whole, this book offers a balanced photography of contemporary Darwinian thinking. It is recommended as a tranquilizer to all those who worry about a possible decline in the adaptive value of Darwinism.

Jacques Ninio

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