486

----- Book reviews --

Aoki, K.; Ishii, S.; Morita, H. (eds.): Animal Behavior. Neurophysiological and Ethological Approaches. Tokyo: Jpn Scientific Societies Press/Berlin, Heidelberg, New York, Tokyo: Springer 1984. xx+274 pp., several figs. and tabs. Hard bound DM 98,-.

This book is the outcome of a series of five symposia featuring the following topics: approaches for neuroethology (research in crickets, grasshoppers, swallowtails, loaches, anemone fish, and lizards), genetic and developmental analysis of invertebrates (Paramecium and Drosophila), neuroethological analysis of invertebrates (Drosophila, blowflies, and crayfish), neural mechanisms underlying signal identification of vertebrates (turtles, toads, electric fish, monkeys, and bats), analysis of hormonal control (silkworms, quail, and various other vertebrates), and the role of the pineal body in circadian rhythms (lampreys, newts, and chickens). The material is arranged in 21 chapters, several of which are extremely short. The volume strikes the reader as a rather haphazard collection of research papers which are probably of interest to a wide variety of specialists. It is doubtful, however, whether the design of this book can serve the aim of providing an introduction for young researchers and students "... to ways of developing their own studies". The author index is not an index as one should expect in such a book but merely a list of contributors of papers.

J. H. F. van Abeelen, Nijmegen

Mayr, E.: The Growth of Biological Thought. Diversity, Evolution and Inheritance. London: Harvard University Press 1982. 974 pp., 3 figs. Hard bound £ 21.00.

There should be more in the mind of the geneticist than the present-day advancement of his or her discipline. (S)he might want some philosophical and historical insight in the origin and development of concepts, methods and aims of his (her) filed of study. Although only a fourth of the work is devoted to "Variation and its inheritance", Mayr's book is a good source of information on the subject. The rest of the publication treats "Diversity of Life" and "Evolution", fields with close ties to genetics. Mayr, a biologist, starts with a few introductory chapters aimed at the non-historian and the nonphilosopher, and provides a glossary for the non-biologist.

As can be seen from the title, Mayr sheds light on the growth of thoughts. He not only includes theories and hypotheses that have made it until present day, he also reviews a number of "losers", as well as pointing out problems that have not yet found a fitting concept. The molecular approach is not forgotten – we meet the peas of Mendel, as well as the *De generatione* of Aristotle. We obtain insight into the puzzles around the double helix. And most of all, we are forced to scrutinize the growth of our own thoughts on science and the place it occupies in our lives.

A. van Bronswijk, Utrecht