

The basic problem with this text may be its assumption that a unified discipline of developmental psychology exists with its own explanatory concepts and body of facts that can be presented in an introductory text in the same manner as would a physics text. In reality, developmental psychology is an interdisciplinary field, strongly concerned with practical applications. It focuses on the description of the course of development, and is still groping towards theoretical concepts which will make explanation possible.

Developmental Psychology, by Liebert and Wicks-Nelson, is the third edition of a comprehensive and successful text that should be even more successful in this new version. The authors view developmental psychology as a branch of science that is both basic and applied; they believe that students can best understand practical applications in the light of the theory and research on which they are based.

The authors and publisher have responded to competition by producing a book with every pedagogical aid imaginable, from an outline at the beginning and a summary at the end of each chapter, to coloured and italicized marking of important concepts and terms. The figures are especially effective.

The quality of the writing is probably the book's most outstanding trait. It has fewer details, and is more readable, than a similar, widely used book by Hetherington and Parke. Students are introduced to basic research with as little pain as possible; interest is gained by discussion of practical topics (for instance, various childbirth methods). The sense of controversy and uncertainty in developmental psychology is almost entirely missing from this book, but this may well be pedagogically necessary.

While many teachers may find LaBarba's book full of fascinating information useful in the preparation of lectures, they are more likely to assign Liebert and Wicks-Nelson's book to their students. □

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Merit in a minefield

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Behavior Genetics and Evolution. By Lee Ehrman and Peter A. Parsons. Pp.450. ISBN 0-07-019276-6. (McGraw-Hill: 1981.) \$31.50, £17.50.

AS A focus of intellectual excitement, the genetics of behaviour is rivalled only by pursuit of an understanding of the genetics of differentiation and development. Since it requires an interdisciplinary approach in integrating biology and genetics with social sciences, it is also a minefield for

misunderstanding, and requires a nice balance of scholarship and careful judgement in any who would venture a good textbook for teaching. Here is just such a text. *Behavior Genetics and Evolution* is a revised and updated edition of *The Genetics of Behavior* published a few years ago by the same authors. It gives a comprehensive account of the principles and methods used to study the genetics of behaviour and stresses the point that greater understanding of the genetic architecture of complex behavioural traits necessitates subdividing them into discrete components prior to genetic analysis. Separate chapters are devoted to reviewing the genetics of behaviour of human beings, small mammals and fruit flies, together with a range of other organisms including some less familiar invertebrates and domesticated species.

The authors give a balanced account of the genetics of human behaviour and, rightly in my opinion, emphasize the need for concentration less on the current obsession with IQ differences than on the genetic analysis of more accessible human sensory, perceptual and motor skills — although, in view of the difficulties

inherent in interpreting EEG wave patterns, speculation about their possible significance with regard to deviant or criminal behaviour should be treated with caution. Particularly valuable is the discussion of the complications caused by cultural transmission in relation to the inheritance of human behavioural characteristics. In the later chapters the special merits of the book emerge in a synthesis discussing the genetic architecture of behaviours in relation to niche breadth of species, habitat selection, population structure and mechanisms of evolution. Relatively little attention is given to kin selection and the evolution of altruistic behaviour, which is surprising in view of the widespread current interest in this topic.

The book is directed towards undergraduate and postgraduate students in biology and psychology, and should also be valuable to those professionally involved in the social sciences, agriculture or medicine who require a comprehensive treatment of the subject. □

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Two views of evolutionary genetics

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Basic Population Genetics. By Bruce Wallace. Pp.688. ISBN 0-231-05042-9. (Columbia University Press: 1981.) \$26, £12.95. *Introduction to Quantitative Genetics*, 2nd Edn. By D.S. Falconer. Pp.340. ISBN 0-582-44195-1. (Longman: 1981.) £9.95, \$23.

THE old controversies about Darwinism have made their periodic return to the public stage. In modern terms, evolution is nothing more than a change in gene frequencies. Here are two books dealing with genes in populations; one, that of Wallace, is concerned largely with natural populations, the other mainly with genetic responses of populations in the laboratory or on the farm.

Wallace's substantial work surveys many aspects of population genetics. After a chapter on the usefulness of models (which are used throughout the book, but always at a level which should be accessible to undergraduates), he considers attempts to measure genetic variation, the effects of migration and assortative mating on population structure, the influence of inbreeding and mutation, and modes of selection in field and laboratory. An account of genetic load (a term which has lost much of its earlier prominence) leads into a treatment of heterozygote advantage, which is considered in the context of "hard" natural selection (which depends on the rigid application of

environmental challenges) versus "soft" selection (in which fitness depends as much on the frequency of competing genotypes as on the rigours of the environment). The book concludes with a discussion of coadaptation and population differentiation. Wallace's treatment is biased towards the familiar laboratory species of *Drosophila* — organisms which are unique in the extent of our knowledge of their genetics and our ignorance of their ecology. There is little mention of the classics of ecological genetics such as industrial melanism, mimicry or heavy metal tolerance in plants.

In later chapters Wallace enters into speculation and polemic which, although always entertaining, means that in some ways the book belies its title; this text is much more than an account of the basics of evolutionary genetics.

Falconer has produced a new edition of a book which has for 20 years been the basis for almost all introductory courses in quantitative genetics. His second edition looks as durable as the first. It gives a clear and complete account of the inheritance of continuous characters, many of which are of considerable practical importance. Falconer does not hesitate to discuss the relevance of research on laboratory populations to cattle milk yield or corn production, so that his book will have a wide audience. Two-thirds of the references cited have appeared since the