Book Reviews

Remarkable Facts in Human Albinism and Leukism. By D. J. Waardenburg. (Pp. viii+103; illustrations. Fl. 6.37.) Assen: Van Gorcum and Co. 1970.

The first and larger of the two sections of this monograph is devoted to albinism. Waardenburg includes in this albinoidism, by which he understands incomplete (general) albinism and ocular albinism. This section is largely an expanded and up to date version of the chapter on this subject of Vol. 1 of his 'Genetics and ophthalmology' (pp. 714–741). Several issues are stressed: the genetic complexity of complete albinism, the heterogeneity of incomplete albinism, diasclerae with translucency as evidence of the carrier state, our colour vision in relation to both complete albinism and albinoidism.

Piebaldism is dealt with in the second section. This is a useful survey of the literature on the classical and non-pathological variety and of the more newly recognized forms of patchy depigmentation (with occasional areas of hyperpigmentation) of the skin and their pathological associations.

The classification used by Waardenburg is not widely employed now, but his authoritative survey of the literature is a substantial help towards a better synthesis than we have at present.

ARNOLD SORSBY

Developmental Processes in Higher Vertebrates. By Ruth Bellairs. (Pp. xiv+366; figures+tables. £6·00.) London: Logos Press. 1971.

This book is a critical account of developmental processes in reptiles, birds, and mammals. It is written as an attempt to collect together information about these groups in a manner that will enable the reader to compare various developmental mechanisms in the amniotes. In this, it succeeds admirably.

The book opens with a clear and useful introduction in which various terms used in developmental biology and embryology are well defined. Concepts of current interest in experimental embryology are also considered. Subsequent chapters advance chronologically through fertilization and development. Later chapters are included on biochemical aspects of development, growth control and tetratology and immunity. The chapter on tetratology contains an excellent discussion on the importance of comparative placental studies in this science, a point neglected by many authors.

There are some criticisms; the section on immunity is weak, and positional information theory is dealt with only briefly. The section relating to cell and organ size in the chapter on growth control (p. 267) is also rather brief.

These faults are minor, and are compensated for by a splendid (up-to-date) bibliography and excellent author and subject indices. The illustrations are of high quality throughout and are made more valuable by lucid captions which amplify the text.

One typographical error, an extra line in a summary (p. 256) produced a disorientation in the reviewer, who found no other serious errors not included in the publishers 'Errata'.

The book will be of value to all interested in developmental biology.

C. L. BERRY

Genetics of the Evolutionary Process. By Theodosius Dobzhansky. (Pp. ix+505; figures+tables. £4·95. London: Columbia University Press. 1970.

This book was originally intended as a new edition of the author's classic work 'Genetics and the origin of species'. However, as Professor Dobzhansky points out, with the considerable advances in knowledge since the publication of the original book such an undertaking proved impossible. Nevertheless, this new book is as wide ranging in its coverage as the original classic. What is different is that much of the evidence for the statements and conclusions is much less detailed. The author relies on extensive references to support him so that the reader has to do a great deal of outside reading if he wishes to pursue the subject matter further.

As a consequence of Professor Dobzhansky's approach the book is extremely readable and a first-class book for the university student. However, the rather superficial treatment of many subjects is not very satisfying to the research worker and on occasion the reviewer has wished that some of the subjects covered had been omitted, and that Professor Dobzhansky had used his great intellect and vast experience to deal with others in much more depth. Then he could have pointed out not only the evidence on which new discoveries have been made but also their significance to our understanding of evolution. It would have been particularly helpful to have a fuller discussion on protein evolution, the evolution of altruistic behaviour and a general discussion on inter versus intra population selection. As it is these topics, although discussed, are not dealt with in sufficient detail for the advanced student.

'The genetics of the evolutionary process' will certainly be an important contribution to teaching at