Studies on the Piriform Lobe

By F. Valverde. Pp. vii+131. (Cambridge, Mass.: Harvard University Press; London: Oxford University Press, 1965.) 60s. net.

WITHIN the term 'piriform lobe', Dr. Valverde includes the olfactory bulb, parolfactory structures, piriform cortex and amygdala, together with their projection systems. The first part of this work consists of several experiments with lesions in various parts of the forebrain and the resulting degeneration stained by the Nauta method. The second part comprises Golgi studies of the relevant areas.

Attempting, as it does, to provide comprehensive coverage of the whole system of central olfactory connexions, Dr. Valverde's monograph achieves considerable unity of purpose, although there are inevitably many places where important topics are only superficially treated. No one familiar with neuroanatomical techniques can fail to recognize the enormous amount of painstaking observation which has gone into both the fibre degeneration experiments and also the Golgi studies, and it is notable that there are few workers in this field who have attempted a combined investigation using these two methods.

In the first part of this work, dealing with the degeneration studies, it must be admitted that a certain amount of coherence is lacking. It is not at all clear why the experiments are presented in the order in which they appear, and the text is made difficult to follow by the somewhat unnecessary fragmentation of the amygdaloid projection, and also by the detailed account of degeneration in unrelated systems.

The second part, comprising the Golgi material, is far more coherent, and the central olfactory connexions are followed serially from the olfactory bulb through the olfactory tubercle and piriform cortex to the amygdala and medial forebrain bundle. The very lucid descriptions are complemented by an outstandingly clear set of illustrations, covering every point mentioned in the text —a comment which applies equally to the first part of the book.

On the whole, *Studies on the Piriform Lobe* clearly summarizes present knowledge on this area, while adding further information at several points. It should be welcome at a time when the attention of research workers in many different fields is being directed once again to the phylogenetically older parts of the forebrain.

G. RAISMAN

Hypnotic Susceptibility

By Ernest R. Hilgard. Pp. xiii+434. (New York: Harcourt, Brace and World, Inc., 1965.) 9.50 dollars.

A LARGE number of studies designed to investigate various hypnotic phenomena have been carried out by Ernest Hilgard and his co-workers on a considerable number of college students during the past eight years. Individual differences in 'hypnotizability' have been a major area of interest and in the course of their investigations several scales were developed for the quantitative assessment of hypnotic susceptibility. This book is the outcome of these investigations, and is primarily concerned with a description of the various scales, together with a discussion of the data obtained from their use.

There are three general purpose scales and a scale for yielding profiles of hypnotic ability. Convincing statistical evidence is given concerning their validity and reliability. The items used in the construction of these scales and the resulting data provide the basis for an excellent and comprehensive discussion of many of the major hypnotic phenomena. Indeed, the whole subject of hypnosis is most carefully examined.

The latter part of the book is concerned with the relation of hypnotic susceptibility to a number of personality variables such as age, sex, intelligence, psychiatric diagnoses, attitudes to hypnosis and responses to various personality inventories. Although some significant correlations do emerge, they are insufficient to characterize the hypnotizable person clearly. One of the final chapters is written by the wife of the author, who makes some very interesting inferences from clinical case studies.

The presentation of these susceptibility scales is the central point of the book. However, it also provides a comprehensive and up-to-date review of present-day knowledge on this ill-understood subject. It is a valuable book not only to those concerned with the more academic aspects of psychology, but also to those who make use of hypnosis in the clinical field. A considerable amount of space is given to statistical procedures, which does tend to make it heavy reading for those not specifically interested in this aspect, but a brief and succinct summary is given at the end of each chapter. A. L. PARKER

## **Readings in Animal Behaviour**

Edited by Prof. Thomas E. McGill. Pp. x + 592. (New York and London: Holt, Rinehart and Winston, 1965.) 96s.

'HIS book is intended as a survey of research in the broad field of animal behaviour, presented in the form of fifty-five representative research papers and reviews, of which all but three were published within the past ten years. It is intended for advanced students of zoology and postgraduates. The contributions are fairly equally balanced between behavioural genetics; the neural and hormonal control of behaviour; the development of behaviour and imprinting; sensory processes, communication and orientation; learning and motivation; and studies of social behaviour, ethology and evolution. Thus there are some seven or eight articles covering each of these areas of research. Very sensibly, less than a fifth of these papers is theoretical. The student to whom the book is addressed, then, receives a handsome collection of original sources which have been chosen to illustrate not only a number of different approaches to the analysis of animal behaviour, but also several strategies in the dissemination of the results of behavioural research.

Probably this approach is of more value in the United States, where the pressures on library facilities for students are greater than they are in Britain, but the editor is to be congratulated on his happy choice of readings. Reviews by F. A. Beach, R. A. Hinde, W. H. Thorpe, N. Tinbergen and others accompany texts by V. G. Dethier, K. von Frisch, H. F. Harlow, H. Lissman, D. S. Lehrman and T. C. Schneirla, to mention only a few of the selected authors. Although the research which is represented is of varying fundamental importance, almost all of it is of high quality; most comparative psychologists will find it pleasant to have this collection on their shelves.

A. D. Blest

Polychaeta of the Far Eastern Seas of the U.S.S.R. By P. V. Ushakov. (Keys to the Fauna of the U.S.S.R., No. 56.) Translated from the Russian by Jean Salkind. Edited by Rae Finesilver. Pp. xxvi+419. (Jerusalem: Israel Program for Scientific Translations; London: Oldbourne Press, 1965.) 121s. 6d.

THIS is an exact translation of Prof. Ushakov's important book as it appeared in 1955. Most of the text consists of keys and brief diagnoses of the forms, but there are introductory chapters on the biology of the polychaeta and the zoogeography of the Far Eastern forms. Users of the translation would be wise to bear in mind the warning given by Prof. Ushakov in his preface, that his work is an interim report on a rapidly developing field: "All the families inhabiting U.S.S.R. seas should be largely revised in the near future". The latest reference in the extensive bibliography is dated 1953, and valuable studies of Far Eastern polychaeta, including taxonomic revisions with zoogeographical implications, have appeared since then. G. P. WELLS