be recommended to anyone interested in the mathematical analysis of nervous activity.

RENAL FAILURE IN PARAPLEGIA By C. R. Tribe (with additional material by J. R. Silver) (Pp. ix + 107; illustrated, 70s.) Pitman Medical Publishing: London. 1969. This book is a valuable record of the pathological changes leading to renal failure in paraplegic patients. It is mainly for pathologists but there is a section on diagnostic tests for urinary tract disease in chronic paraplegics by the Director of the Liverpool Regional Paraplegic Centre. Both writers were formerly at the National Spinal Injury Centre, Stoke Mandeville Hospital, and write with authority on their subjects, drawing their material from both units.

The type of presentation—a statistical review with comments on unique cases—makes for difficult reading and tends to be repetitive. This book will be a valuable source of reference for many who look after paraplegics in one way or another, but the general neurologist will find it worth glancing over the chapter summaries for a reminder that the most important late cause of death in paraplegia, of whatever cause, is urinary infection with its many complications.

Dr. Tribe has made valuable contributions to the study of amyloidosis leading to a nephrotic syndrome in paraplegics. The many causes of hypertension in the paraplegic are discussed briefly. The book is not concerned with special techniques of radiology, treatment of renal failure or infection, or with the management of the paraplegic bladder; all subjects which should be better understood in neurological and neurosurgical departments.

J. A. SIMPSON

THE ROOTS OF INDIVIDUALITY By Sibylle K. Escalona. (Pp. x + 547; illustrated. 100s.) Tavistock Publications: London. 1968.

This important book is the result of Dr. Escalona's work over a span of 20 years. She tries to relate the early life experiences and behaviour of young infants with the behavioural characteristics which they manifest in later childhood.

The book is divided into three parts. In the first of these she discusses the theoretical basis of her research and reviews a massive amount of literature on the subject of handling of young infants and the effect this has on their later behaviour development. She provides a detailed description of the theoretical basis of her work. The description is intense, complicated, and accompanied by very numerous footnotes in which references are given to a large amount of pertinent literature.

The second part is devoted to a description of the activities of infants aged between 4 and 32 weeks showing that even at this early age very different patterns of behaviour can be identified and described. She examined, with colleagues, 128 normal infants and describes their behaviour at rest, in contact with their mothers, and in other different situations.

In the third part Dr. Escalona examines the correlation between earlier life experiences and their later behaviour in the family and the larger socio-cultural setting in which they live. As she says herself 'case presentations,

therefore, had to be very specific; yet they had to conceal identifying information'. In fact, each case is described in great detail according to the child's behaviour in certain specified situations.

The author talks of an 'adaptation syndrome' which determines the later adjustment to social circumstances of individual children. Dr. Escalona's approach to the study of infant behaviour is a broadly based one. She bases her theories on those of the psycho-analytic school and on Jean Piaget and his disciples.

It is a difficult book to read, for the author's style is at once intense and convoluted. For example, on page 25 a footnote reads 'Bergman and Escalona (1949) reported on a group of children who in early infancy showed marked hyposensitivity and who in childhood developed psychiatric illness or deviant development. They suggested that such infants lacked an effective "stimulus barrier" so that ordinary levels of stimulation proved overwhelming to them. In speaking of high and low perceptual sensitivity in the present context we refer only to variations within the normal range'. This makes sense after one has read it once or twice in the context of the text but reading is never easy and though the book contains a mass of information about studies of infant behaviour, it imposes considerable demands upon its readers.

The book is well produced, contains a mass of useful references and has a good index. At £5, its price cannot be considered high in present-day conditions.

T.T.S. INGRAM

SENSE AND SYMBOL: A TEXT BOOK OF HUMAN BEHAVIOURAL SCIENCE By Paul R. Miller. (Pp. xviii + 398; illustrated 65s.) Staples Press: London. 1969.

This book covers, in under 400 pages, an extremely wide field, and is packed with information. The English in which it is written is economical and efficient; it uses more special technical words than are really necessary, but in a textbook this is hardly a defect, since students must learn the jargon in which, for good or ill, most research papers are written, and in Dr. Miller's book it is not only used, but well explained. The views expressed are those of one author throughout, the plan is orderly, and there are excellent indexes.

Sense and Symbol is about the psychology of normal human behaviour. The core of this subject necessarily consists of observations such as anybody without special training can make in everyday life; thus any work that sticks closely to the core runs the risk of seeming to be a mere assembly of anecdotes. Some writers try to avoid this risk by digressing extensively in borderline fields (ethology, experimental psychology, abnormal psychology, neuropsychology) that are less subject to it. Dr. Miller does not, on the whole, take this easy way out. He does, I think, digress too far into neuropsychology, which occupies about a sixth of his book (most of chapters 4, 5, and 6). Here he is often uncritical, and far too apt to quote general theoretical statements that have no precise meaning, but will suggest to the inexperienced reader a rough meaning that is ill supported by the facts. The omission of these statements—for example, on the reticular activating system, the limbic lobe, electro-

chemical fields, and the functions of feedback—would have been wholly beneficial, since nothing in the main part of the book rests on whether they are meaningful or true. The other digressions into borderline subjects seem to me well judged. Observations in ethology are mentioned in the contexts where it is customary to suppose them to be relevant, but little space is wasted on them. Dr. Miller seems to hold the commonsense view that human behaviour can be better studied in man than in monkeys. Abnormal psychology is mentioned here and there in illustration, but not overstressed. Observations made by the techniques of experimental psychology contribute very little to the text, but I think good justification for this apparent neglect can be found.

Apart from all digressions, there remain nearly 300 pages that describe and discuss normal—that is, non-psychotic—human behaviour, and these escape remarkably well the danger of anecdotalism. This they do partly by their orderly arrangement, and partly by the skeleton of theory to which the facts, generalizations, and illustrative case-histories are attached. The theory is eclectic. It owes a good deal—as does the selection of facts and manner of their presentation—to Freudian psychoanalysis, but neither accepts all psycho-analytical ideas nor neglects others. It never outrages common sense; on the other hand it is not often so platitudinous as to be annoying. Dr. Miller rarely attempts to argue about theoretical assertions. Those with which he agrees, he merely states. In a few places he mentions one with which he disagrees, and then he always gives good reasons for disagreeing.

G. S. BRINDLEY

DEPRESSION: CLINICAL, EXPERIMENTAL AND THEORETICAL ASPECTS. By Aaron Beck. (Pp. xvi + 370; illustrated, with Tables. 65s.) Staples Press: London. 1969.

The name of the author of this volume is associated with an eponymous 'depression inventory' which was developed to undertake a small group of American studies some years ago. A detailed account of this inventory and the research connected with it—all of which have appeared elsewhere—make up the middle section under the title of 'A Systematic Investigation of Depression'. It is flanked by partial and not very authoritative reviews of the clinical, experimental, theoretical, and therapeutic aspects of depression. The book was published in the United States by Harper and Row in 1967 and is now published, apparently unchanged, in Great Britain two years later. It is difficult to know why.

PSYCHOPHARMACOLOGY By Thomas Ban. (Pp. xiv + 485; 21 figures; £6 15s.) E. & S. Livingstone: Edinburgh. 1969.

This is an excellent textbook of psychopharmacology that should prove most useful for clinical psychiatrists, to whom it is directed.

The main section (Part II) consists of a systematic review of the large number of drugs used in psychiatry, with a brief account of what is known of their mechanism of action, their metabolism, and their behavioural studies. This is followed by a detailed account of their clinical usage.

Part I of the book consists of a general review of the methodology of human and clinical psychopharmacology with much useful information about drug trials, rating scales, and placebo problems.

There is a shorter section on animal matters and a useful chapter on legal and ethical considerations. The last chapter and the appendix give a guide to the use of the drugs in particular diseases.

The book is accurate and the writing clear and succinct. It can be unhesitatingly recommended for psychiatrists, general practitioners, and medical students. It should also prove helpful for pharmacologists and psychologists who wish to gain an overall grasp of a most complex subject, and to appreciate 'the many problems existing at the interface between research and clinical application of the results of research' as Dr. Lehmann says in his introduction.

J. R. SMYTHIES

THE PSYCHOPHARMACOLOGY OF THE NORMAL HUMAN Edited by Wayne O. Evans and Nathan S. Kline. (Pp. xi + 252; illustrated with tables. \$11.50.) Thomas: Springfield, Illinois. 1969.

It is difficult to present an overall opinion on this expensive volume, the main feature of which is the diversity of presentation and contents. It ranges from a largely philosophical discussion on the nature of normality to a detailed comment on the quantitation of EEG records. This approach is justified in the preface as 'providing a sampling of some of the types of research underway', but in the absence of a real attempt to edit the material and to provide a clear central theme, it seems more appropriate for a journal than a single volume. Individual contributions, however, will be of value to the specialist reader—for example, the comprehensive review of the effect of anti-anxiety tranquillizers and the group of articles describing the effect of amphetamines in the normal subject.

GEORGE W. ASHCROFT

NOTICES

2ND INTERNATIONAL CONFERENCE ON PSYCHOSURGERY

This will take place in Copenhagen, 24-26 August 1970. The main theme will be: selection of patients, surgical techniques, and results. The number of participants will be limited and applications should be received before 28 February 1970, preferably indicating the theme chosen for presentation of a possible paper. Applications to Mr. E. R. Hitchcock, Department of Surgical Neurology, Royal Infirmary, Edinburgh, Scotland, or Dr. K. Vaernet, Department of Neurosurgery, Rigshospitalet, 2200 Copenhagen N., Denmark.

FEDERATION OF WESTERN SOCIETIES OF NEUROLOGICAL SCIENCE

The next meeting will be held in Phoenix, Arizona, U.S.A. on 5-8 March, 1970. Details may be obtained from the Secretary Treasurer: Dr. Charles W. Elkins, 601 N. Wilmot Rd., Tucson, Arizona, U.S.A.