Book reviews

EEG Technology, 3rd ed. By R Cooper, JW Osselson, and JC Shaw. (Pp 344; £16.00.) Sevenoaks: Butterworths, 1980.

The third edition of this now classic work has expanded substantially to cover every important new area succinctly and with judgement. The technology and techniques of clinical neurophysiology have broadened and matured remarkably in the last decade. Innovative methods of signal acquisition, analysis and statistical treatment have won clinical recognition, especially in the field of event-related (evoked) potential.

This volume contains basic chapters on the origin of the EEG, electrodes, connection of electrodes to amplifiers, recording systems (how can any manufacturer now fail to make good equipment!), operational techniques and visual analysis of EEG. Rather more explicit instruction on how to perform many routine procedures would be helpful to students starting to study as physiological measurement technicians. Newer material is mainly found in chapters on special techniques, event-related potentials (described with particular clarity) and an excellent review of EEG signal analysis. Appendices range from homely recipes for electrode jellies and pastes, via a factual report on a long pull-out sample for a fascinatingly complex EEG of a child with epilepsy, to source derivation and Fourier analysis.

New readers will find this a helpful and workmanlike volume having perhaps too concentrated a style for guiding those at a distance from the basic sciences but stimulating those with more expert knowledge. Errors, infelicities and omissions are minimal and one would recommend all those working with or applying neurophysiological techniques to read and re-read this volume from cover to cover.

PAMELA PRIOR

Current Trends in Treatment in Psychiatry. Edited by TG Tennent. (Pp 258; £19.00.) Tunbridge Wells: Pitman Medical Ltd, 1980.

In the midst of a large number of edited books from proceedings of conferences, this volume stands out for its attempt to present a different format. A main author has two commentaries to his paper and is then permitted a final response to these commentaries. While restricting the number of topics that can actually be covered

in a book of manageable size it leads to far greater exploration of the issues, and leads to a more balanced viewpoint than would occur if one author only was allowed to have his say.

The two most outstanding chapters are the ones by Marks on Current Trends in Behaviour Therapy and by Grahame-Smith on Neuropharmacology and Psychopharmacology. The former presents an up-to-date account of the present state of the art, dissecting out clearly those areas where behaviour therapy is of value. The commentaries emphasise in particular the gap that remains between the theory and practice of such techniques. The section on psychotherapy concentrates mainly on personal construct theories (Fransella) although Trick presents an uncritical descriptive pot-pourri of some newer therapies ranging from the Rogerian to the Primal Scream. For some reason this section on psychotherapy wanders from the format of the rest of the book, being without commentaries. The sections on the treatment of schizophrenia and depression are adequate, although surprisingly fail to discuss any of the new second generation antidepressants that have become available for use in the past few years. The final section covers sexual therapy and will be of interest to those currently engaged in the management of such problems.

Overall the book is nicely produced and well-edited and practising psychiatrists will not be disappointed if they allocate to it some of their time.

MICHAEL TRIMBLE

Advances in Neurology Volume 30. Diagnosis and Treatment of Brain Ischemia: CT brain blood flow, Brain hemodynamics, Carotid and vertebral artery surgery. Edited by Andrew L Carney and Evelyn M Anderson. (Pp 401; \$67.32. New York: Raven Press, 1981.

The current status of research in cerebrovascular disease is reflected in the fact that three-quarters of this book is devoted to technical advances. Positron emission tomography with its great potential for the study of cerebral metabolism inevitably dominates the scene. But the contributions on the use of the CT scanner in the dynamic mode (because of the wide availability of this machine) will be of interest to a wider readership. Wider coverage of rheological aspects of cerebral

blood flow would not have come amiss though there is a useful article on shear stress injury to arterial walls. Even in the clinical section technology obtrudes, the two articles on cardiac evaluation being concerned with automated physiological assessment and nuclear medicine procedures. There is however an interesting chapter on vertebral artery surgery and one on central vestibular signs.

The dust cover claim that "this volume provides the first comprehensive guide to the diagnosis and management of problems resulting from brain ischaemia" is so exaggerated that I concluded it had been mistakenly transferred from another book. But as a survey of some aspects of current progress in cerebrovascular disease it is a very useful volume.

JOHN MARSHALL

Brain Edema. Edited by Marinus de Vlieger, Samuel A de Lange, Jan WF Beks. (Pp 176; £22.75.) Chichester: John Wiley, 1981

There has been a remarkable increase in the amount of basic and clinical research on development and resolution of brain oedema in recent years. The pioneering work of Klatzo and the definition of acceptably separate types of brain oedema, cytotoxic and vasogenic, has proved of great value in stimulating further investigation, although subsequent work has tended to blur this didactic differentiation. This and the dynamic concepts of tissue gradients, of bulk transfer of fluid through tissue and correlation of oedema with a variety of clinically evident pathology, is well stated in this little book. The authors disclaim it as a mere publication of a symposium, but such was undoubtedly its foundation, and it is fortunate that several, though regrettably not all, the authors have thought it worthwhile to elaborate short communications into carefully annotated chapters which are well worthy of perusal by anyone interested in the subject. The book is of course patchy, as one might expect, but it is worth buying for the chapters of Hochwald, Reulen and Miller alone, and for the careful annotation of literature present in a number of other chapters, notably that of Bruce and his colleagues on brain oedema in children. One has become used to monographs costing over £20, and this one is just over that figure, but that is by no means an excessive sum

to pay for what is quite a valuable little book of reference. I enjoyed it.

LINDSAY SYMON

Epilepsy—A Window to Brain Mechanisms. Edited by Joan S Lockard, Arthur A. Ward, Jr. (Pp 300; \$35.36.) New York: Raven Press. 1980.

This excellent volume is the record of a remarkable achievement. It is the fruit of 30 years devoted by Arthur Ward to establishing within the Department of Neurological Surgery of the University of Washington in Seattle, a multidisciplinary group researching into the basic phenomena of epilepsy in man and animals. This has led to highly important advances in our understanding of the abnormal firing patterns of single neurons in and around an epileptic focus, in knowledge of the cellular pathology of human and experimental foci, in the pharmacokinetics and dynamics and anticonvulsant drugs . . . and very much more. Throughout these endeavours Arthur Ward and his colleagues have shown a remarkable ability to dissect out basic mechanisms while never moving far from the everyday clinical problems of epilepsy. They have succeeded by a very skilful choice of animal models and by maintaining the clinical and experimental studies in a state of constant mutual interaction.

Arthur Ward and his thirteen colleagues provide us in the seventeen chapters of this volume a summary of the main lines of research that have originated in the Department in Seattle. The result is an extremely informative and stimulating book. It admirably demonstrates that studying the mechanisms of epilepsy can provide a unique insight into the organisation and pathophysiology of the brain. The achievements of Dr Ward's group make a convincing case for an academic department devoted to research on epilepsy. Neurophysiological, pharmacological, surgical, biochemical and histological techniques are all required to solve the problems of epilepsy—as is expertise in the field of epilepsy.

This volume will advance the time when there are as many University Departments of Epileptology as of Oncology or Radiology.

BS MELDRUM

Brain Failure. By Barry Reisberg. (Pp 198; \$19.95.) New York: The Free Press, 1981.

"Lucid and comprehensive, *Brain Failure* will emerge as *the* (sic) authoritative guide to all facets of senility—from diagnosis to treatment—and will be essential reading for all health care and human service professionals concerned with the needs of our ever-growing aged population."

Any medical book that sets out to achieve these goals in 198 pages is either grandiose or otiose. This book is certainly disappointing and if considered as a scientific statement, extremely disappointing. Where is the detailed historical background from which the concept of brain failure has naturally evolved? Where, indeed, is the proper definition of brain failure that should have heralded the rest of the work? Why devise a new term ("cognitive abulia") for "intellectual weakness" and then present it on page 2 (!)? Does this not merely add confusion to the synonym of senility while claiming support from the prop of severe brain failure? Other questions too numerous to mention also arise but in summary this work appears superficial, discursive, and trivial.

Could the publishers (a division of Macmillan Publishing Company) have helped? Perhaps—by making available to the author a copy of William Strunk's *The Elements of Style* (The Macmillan Company gave this ten printings in New York between 1959 and 1960) and by drawing attention to hint number 9 on page fifty-nine, "Do not affect a breezy manner".

BRIAN LIVESLEY

Advances in Epileptology. XII Epilepsy International Symposium. Edited by Mogens Dam, Lennart Gram and J Kiffin Penry. (Pp 717; \$102.) New York: Raven Press. 1981.

This volume derives from the twelfth Epilepsy International Symposium held in Copenhagen in September 1980. It does not suffer from the major faults frequently shown by preceding volumes. The contributions have been admirably edited and the book is beautifully printed and bound.

The 95 chapters are from 4-11 pages long and represent the principal invited contributions and a few selected volunteer papers. There is thus an effective thematic grouping, with a strong emphasis on drug therapy, especially the preclinical development of new drugs (12 papers), controlled

trials (11 papers), clinical pharmacology (7 papers) and drug side effects (4 papers). Other topics covered by specific symposia include education and rehabilitation (13 papers), differential diagnosis (18 papers), endocrine aspects (7 papers) and folates (7 papers). Broadly, this volume reflects the diversity of problems currently occupying the energies and compassionate concern of physicians and researchers. However, the latter group will probably find that basic science is underrepresented. Personally I would prefer a volume with fewer papers, treating their topics in greater detail.

In summary, the editors and publishers can take pride in the speed and skill with which they have given us this resumé of current activity.

BS MELDRUM

Neuroendocrinology of Reproduction, Physiology and Behavior. Edited by Norman T. Adler. (Pp 555; \$42.00.) New York: Plenum Press, 1981.

With the rise of neuroendocrinology as a scientific discipline, the appearance of monographs devoted to a single aspect of the subject became inevitable. This primer is particularly welcome, for it provides an excellent survey of a topic of great significance in clinical and social medicine, and successfully achieves its aim of leading the interested reader from the chemical and biological foundations of neuroendocrinology, through the evolutionary and embryological development of reproductive systems in animals, to the physiological and biochemical control of reproductive neuroendocrinology in the adult. Considerable effort has been devoted to clarity of exposition and the delineation of principles, as illustrated by the rueful comment of HH Feder that it is unlikely that neuroendocrinologists will derive a sense of excitement from a chapter describing the structure, reactions, synthesis and measurement of steroids, although the material provides a basis for deeper appreciation of currently enthralling work on the influence of steroids upon reproductive physiology and behaviour.

The effects of hormones upon the brain are of particular interest to the neurologist and psychiatrist and the effect of steroids on the organisation of sexual behaviour, and its neurochemical control are very well covered. The cellular