tists developing an interest in the dementia of Down's syndrome. It also serves to identify established researchers in this area. There is better literature for those whose primary interest is Alzheimer's disease.

WRG GIBB

Clinical Electromyography 2nd Edition. Edited by W M BROWN and CHARLES F BOLTON. (Pp 810 Illustrated; Price: £120.00). 1993. Oxford, Butterworth-Heinemann. ISBN 0-7506-9204-9.

This multi authored book follows the 1st edition in 1987. The contributors are from a number of countries and generally represent experts in their particular subjects. The book is one third longer than the previous edition and a number of chapters are written by new authors. The layout of the book differs from the usual electromyographic text by considering subjects such as central electromyography and tremor, in the first chapters, before the first chapter on diseases of the peripheral nervous system (chapter seven).

There are particular subjects discussed in the book which are well written and of great interest such as positive and negative aspects of neurofibre dysfunction, autonomic nervous system, atypical motor neurone diseases, ischaemic neuropathy and critical care neuropathy. A number of the chapters contain normal values.

This monograph is well balanced for a multi-authored text. There are definite advantages in recruiting new authors for different editions as it provides a fresh approach to the problems discussed rather than minimal updating which all too frequently occurs. The illustrations are well produced and the chapters adequately referenced. The book functions as a reference book rather than as a manual for novices. The authors have produced an excellent book which is well indexed and easy to handle; it is highly recommended.

MS SCHWARTZ

Vision. By PIERRE BUSER and MICHEL IMBERT (Translated by RH KAY). (Pp 559; Price: £40.50). 1992. London, The MIT Press. ISBN 0-262-02336-9.

The study of the neural basis of vision is one of the fastest growing areas in neuroscience yet there are surprisingly few texts written for senior undergraduates and postgraduates in the basic and clinical neurosciences. This book, originally published in French by the authors in 1987, has been expertly translated by Dr R. H. Kay and possesses none of the usual idiosyncratic language usage which is usually associated with such translations. The book is divided into five sections which cover the structure and function of the retina, the physical characteristics of visual stimuli, the psychophysical laws of visual sensation, genesis and elaboration of signals in the retina, and mechanisms in the central visual pathways.

The text, which is clearly and logically written, is supplemented by almost two hundred and fifty illustrations, usually from the original literature. However one of the

slightly irritating features of the book is an inconsistent approach to giving references to support statements. At this level it is obviously inappropriate to overburden the text with excessive citations but some important areas e.g. cortical colour vision are surprisingly bereft of citations, whereas others e.g. cortical motion processing, abound. In future editions sections might usefully end with lists of key original references and reviews. Because of the inevitable delay due to translation the references which are quoted extend only to the mid 1980's.

Although the main text deals with mammals a useful comparative approach is provided by the numerous short sections summarising data from non-mammalian species. This is particularly illuminating in the section on cortical visual processing.

This book would therefore serve as a useful starting point for undergraduates taking courses in visual neuroscience, psychophysics or perception. Graduate students in these areas will probably require more advance texts which are better referenced. For the non biologists interested in visual perception, such as those working in artificial intelligence and computational vision, the book will provide a very adequate background to the problems to be elucidated.

CHRISTOPHER KENNARD

The Neuropathology of HIV Infection. Edited by FRANCESCO SCARAVILLI. (Pp 270 Illustrated; Price: DM398.00). 1993. Heidelberg, Springer-Verlag. ISBN 3-540-19739-7.

This book is a welcome addition to the already existing, substantial literature on the subject. Professor F Scaravilli of the Institute of Neurology has been most successful in assembling a group of internationally leading experts as authors to produce a book of high standard. The title is somewhat misleading, since it covers much wider fields than strictly defined neuropathology. Of the 13 chapters only seven deal with various aspects of neuropathology, whilst the other six cover other, relevant and complementary areas of AIDS. The chapters are organised in a logical fashion providing the reader with a coherent account of the subject rather than a haphazard selection of chapters.

The first four chapters give a succinct review of the molecular biology and pathogenesis, epidemiology and natural history, neurological complications and neuroradiological imaging. There is an exemplary chapter on general pathology, followed by neuropathology of the central nervous system. These two chapters form the backbone of the book, comprising 40% of its volume. While the former chapter gives an account of diseases of the various organ systems, the chapter on neuropathology reviews opportunistic infections, neoplasms, vascular disorders and a host of miscellaneous disorders. It is both informative and copiously illustrated. Other diseases, however, which are now considered to be caused by HIV-1 are reviewed separately together with HIV-associated dementia. The involvement of the spinal cord, and the neuropathology of AIDS in children, are reviewed in two concise, excellent chapters. The strength of

the chapter on diseases of peripheral nerves and muscles is based on a sound clinico-pathological approach. Separate chapters are devoted to the role of macrophages in HIV encephalitis, and to immunohistochemical and *in situ* hybridisation study of the same disease. The concluding overview brings in two additional, important topics, treatments and animal models, and summarises the outstanding questions which require clarification.

There are shortcomings for which neither the Editor, nor the Authors can be blamed. Research in AIDS is a fast-moving field and most references are from the second half of the last decade. This delay in publication adversely affects those chapters in which there have been recent developments. It is a pity that there are so few coloured pictures, some of the illustrations of immunohistochemistry should have been reproduced in colour. Finally, the price of the book is excessive. Yet, this is a book worth having.

PL LANTOS

Brain Surgery: Complication Avoidance and Management (2 vols). Edited by MICHAEL J AFUZZO. (Pp 2366 Illustrated; Price: £350.00). 1993. Edinburgh, Churchill Livingstone. ISBN 0-443-08709-1.

Over the last two decades text books of operative neurosurgery have proliferated and have become bigger and more comprehensive. However, this book represents a departure from the standard pattern of such text books. Its scope is limited to the brain alone and, although it describes comprehensively diagnosis and operative technique, it is sharply focussed, as the sub-title suggests, on ways to minimise the risks and consequences of complications in neurosurgery.

The definition of what constitutes a complication in neurosurgical management is itself debated in the book, with consideration of evidence from a poll by questionnaire of practising neurosurgeons. The shortest workable definition, is of an unexpected and undesirable event associated with neurosurgical management. It is clear that one very important route to improved patient care is an awareness of the range of complications so that thought may be applied to avoiding or treating them. It is also clear that avoidance of complications in neurosurgery is generally about reducing morbidity and mortality in the perioperative period rather than, in most instances, considering the utility of neurosurgical procedures in modifying the natural history of disease. Therefore, the emphasis is on short term results rather than long term results, although clearly perioperative morbidity can affect both quality and length of long term survival.

The editor has recruited over 200 contributors, 95% of whom work in North America, to write 91 chapters. The result is a comprehensive compendium of contemporary neurosurgical practice, which runs to 2500 printed pages. The first volume is devoted to the first three of seven parts concerned with brain surgery in the supratentorial compartment. Part one covers general aspects including basic neurosurgical tech-

niques, instrumentation and neuroanaesthesia. Part two covers brain tumours, common and rare, intrinsic and extrinsic, primary and secondary, while part three is devoted to aneurysm surgery. In volume two the third part of the book is completed with a description of the management of arteriovenous malformations. Part 4, 5 and 6 cover respectively trauma, infection and congenital formations in the supratentorial compartment while part 7 provides, in a brief 70 pages, an excellent account of functional neurosurgery for pain, movement disorders, epilepsy and psychosurgery. The remaining parts of volume two are devoted mainly to neurosurgery in the infratentorial compartment. Thus, the parts 8 to 15 cover the following topics: general introduction, tumour, vascular disorders, trauma, infection, congenital malformations, developmental and degenerative disorders and functional neurosurgery for facial pain and hemifacial spasm. Part 16 is a special section devoted to skull base surgery. This part, which comprises nearly 200 pages, is itself divided into 9 chapters. Finally, there is a discussion of medico-legal aspects of neurosurgical complications as it affects practice specifically in the USA.

The standard throughout is very high and many chapters are of outstanding quality in terms not only of information provided but also in terms of the reflective thought displayed in arriving at lucidly expressed conclusions.

There is some repetition and redundancy in the text.

The book is very well produced and printed on very high grade paper. The illustrations including operative photographs, excellent line drawings, and neuroradiological plates, are well reproduced and make clear the descriptions in the text. It is a book of massive physical proportions and each volume weighs nearly three kilograms. It may be an advantage in a further edition to produce the book in 4 to 5 volumes. The index of 139 pages, is both helpful and comprehensive.

Above all it is a book for neurosurgeons, although other neuroscientists may usefully dip into it. One must hope that the inexperienced trainee neurosurgeon will not be paralysed into inactivity because of the frank descriptions of the serious hazards associated potentially with every brain operation and by lack of any universally agreed consensus about how to avoid them. Instead the trainee should take heart that so many experts have analysed the key ways to minimise neurosurgical complications and incorporate this thoughtful and critical faculty into his own developing surgical armamentarium.

The book may be recommended highly to neurosurgeons in general. Sadly, the price is expensive and this work will become an indispensable reference in all neurosurgical departmental libraries.

DGT THOMAS

Pseudo-Epileptic Seizures. Edited by L GRAM, SI JOHANNESSEN, PO OSTERMAN and M SILLANPÄÄ. (Pp 165; Price: £27.00). 1993. Petersfield, UK, Wrightson Biomedical Publishing Ltd. ISBN 1-871816-18-1.

Pseudo-epileptic seizures, originally known as hysterical seizures, are important not only because of the need to differentiate them clinically from true epileptic attacks but also because of their presumed psychogenic aetiology. It is rather too simple to describe them as paroxysmal events which bear a superficial resemblance to true epileptic seizures but lack the typical EEG epileptic changes, since in almost 50% of such attacks the patient will suffer from epilepsy. Why a patient should display such extraordinary behaviour with its similarity to epilepsy is unknown. Epileptic patients who suffer from hysteria and personality changes may perhaps develop it because of their previous experience with the real illness. Others may have a pseudo-seizure as a single isolated symptom, or more usually as part of hysteria, or as a form of malingering for compensation.

In this small book the authors, mainly from Scandinavia, attempt "to bring attention to the differential diagnosis of epileptic seizures". They consider that pseudo-epileptic seizures "are not manifestations of disordered electrical activity of the brain but usually of a complicated pathopsychological background". In a few pages, we are given views on aggression, rage and epilepsy and Münchhausen's syndrome by proxy. Psychological aspects of treatment are covered and there is a chapter on aetiological models as a basis for treatment of the individual. The inevitable chapter on pseudo-seizures and sexual abuse is included. The idea that the pseudo-epileptic attack is actually a re-enactment of being pinned down and choked during sexual abuse, is far-fetched. Furthermore, there is little science in the statement that sexual abuse is high in the causation of pseudo-seizures of the "swoon" type. It is difficult to know whom this speculative and provocative work is aimed at.

TAHIR MAJEED
PO BEHAN

Stroke: A Clinical Approach. 2nd Edition. By LOUIS R CAPLAN. (Pp 562 Illustrated; Price: £62.00). 1993. Oxford, Butterworth-Heinemann Ltd. ISBN 0-7506-9181-6.

To bring out a second and fully revised edition of a single author textbook within six years of the first denotes a man with qualities of self-discipline, conviction and optimism beyond the reach of ordinary mortals. Fortunately Louis Caplan is such a man; he is widely known and respected for his clinical studies in cerebrovascular disease and this book accurately reflects his interests and talents. Single authorship has many advantages, especially when the author's interests encompass the whole field; if not, it can be a disadvantage. Much of this book is excellent, particularly the clinical chapters, but it does lack balance and some important aspects of the subject receive scant attention.

When writing on pathogenesis or clinical diagnosis Dr Caplan is authoritarian, illuminating and wholly convincing. On contentious issues such as the significance of minor degrees of stenosis of the internal carotid artery he states clearly his current practice and explains succinctly his reasons and evidence. On the vexed question of

lacunar infarction and subcortical leucoencephalopathy his views are traditional and clear—in contrast to much of the recent literature on the subject. He avoids the confusion which has arisen from clinicians, pathologists and radiologists using the same term for different conditions and *vice versa*.

Non-atherosclerotic vascular disease is now diagnosed with increasing frequency and the chapter on the recognition and management of these conditions including traumatic lesions, vasculitis, migraine-related stroke and stroke in drug-abusers is also a model of clarity and good sense.

Only in the last three chapters, on stroke prevention, complications and rehabilitation do these high standards falter. The brevity of these chapters, the lack of discussion of controversial issues and the omission of data on epidemiological issues or clinical trials suggest that these are topics of relatively little interest to the author. This, in a condition where prevention has already made great advances and where treatment of established stroke is still disappointing must detract from the value of the book as a whole.

Nevertheless in spite of these minor sins of omission, which Dr Caplan will no doubt remedy in the next edition, this is a valuable and admirably written book which will be studied with profit and enjoyment and deserves a wide readership.

RW ROSS RUSSELL

Paul Broca: Explorer of the Brain. By FRANCIS SCHILLER. (Pp 350; Price: £15.00). 1992. Corby, Oxford University Press. ISBN 0-19-507496-3.

This is a lengthy and highly detailed biography of Paul Broca. Each of the 16 chapters is copiously referenced and there is a list of Broca's publications, which total over 500. Many associate Broca's name just with dysphasia; and whilst he made an important contribution to the localisation of the motor speech area, it is not widely appreciated how diverse were his interests and achievements. These span malignant disease, and the microscope—an emerging diagnostic aid in those days and of doubtful value according to some contemporaries. Also he studied evolution, anthropology, the muscular arrangement in club foot and the causes of rickets.

Particularly, the earlier chapters provide insight into political and medical life around 1850, a time of considerable social unrest. Medical promotion prospects were then (and now?) a combination of ability and influence. This is an outstanding, scholarly and well written work. Ideal for a good "read" on holiday!

CH HAWKES