pathogenesis of some of these conditions. In the section on slow viruses, it would have perhaps been useful to have discussed scrapie and its pathogenesis in more detail and also to have covered Visna infection of sheep.

Overall the authors have done a fine job and have produced a thoroughly worthwhile volume which is extremely well referenced. The book is not cheap, but in view of its length the price is not unreasonable. I shall certainly find this useful as a ready to hand reference source and I am sure that it deserves to be on the shelves of any good neurological library.

PGE KENNEDY

Companion to Psychiatric Studies 4th edition. Edited by R E Kendell, A K Zeally. (Pp 827; £42.50.) Edinburgh: Churchill Livingstone, 1988.

The Companion to Psychiatric Studies has for many years been the principal textbook used by postgraduate students of psychiatry, though its ascendant position has been challenged recently by the appearance of two competing textbooks from the Maudsley Hospital and Oxford. The fourth addition of the book will without doubt re-establish its position as the leader in the field.

The problems confronting the editors of any textbook of psychiatry are enormous. The subject does not have the clear boundaries as, for instance, a discipline like neurology. Knowledge of the causes of the major mental illnesses is still in its infancy, and for many conditions treated by psychiatrists there are competing and often mutually exclusive perspectives. This leads to the difficulty of how to be comprehensive without being over inclusive. The principal North American textbook of psychiatry covers three weighty volumes and exemplifies the latter problem. The *Companion*, in marked contrast, manages in less than 800 pages to give a clear and concise overview of the subject.

In this new edition the editors have introduced two completely new chapters, on psychiatric epidemiology and epilepsy, as well as re-writes, by new authors, of seven other chapters. All the remaining chapters have been substantially updated. The format of the book is as in previous editions, with the early sections focusing on the sciences and allied disciplines relevant to psychiatry. The remaining 28 chapters cover the range of problems seen in psychiatric practice including sections on mental handicap, child psychiatry, adolescent psychiatry and psychiatric disorders of child birth. Professor Kendell contributes all three chapters on the major psychoses and it would be hard to find a better summary of the current state of knowledge.

No text book can claim to be totally comprehensive and its aims should be more modest, serving as a source of basic information, as well as providing a jumping-off point for further research and study. In this respect the *Companion to Psychiatric Studies* will remain a valuable guide to postgraduate students of psychiatry, psychiatrists and other professionals seeking an accessible and sound guide to the field.

RJ DOLAN

Applied Neurophysiology. By J A Simpson, W Fitch. (Pp 358; £35.00.) Guildford: Butterworth Scientific, 1988.

This is a text book of human physiology directed specifically towards anaesthetists, who as the authors note, probably now comprise the largest hospital speciality. The authors' aim has been to provide a description of the general principles and crucial concepts necessary for a sound understanding of nervous system function. Coverage is comprehensive but with emphasis on such areas of particular relevance to anaesthetists as pain, respiration and mechanism of arousal, attention and consciousness.

The book comprises 28 chapters arranged in five groups. Part 1 is entitled *Cellular Organisation of the Nervous System* and is followed by *The Afferent Nervous System, Higher Nervous Functions, Interaction with the Environment* and finally *Regulation of the Internal Environment*. In general the text is very clearly written and much more readable than is often the case with works in this field. The title is perhaps somewhat misleading since the clinical content is rather less than I for one had anticipated. For example, although the physiology of the neuromuscular function is of course well described, there is surprisingly little on myasthenia and related disorders. The authors make a particular point of the illustrations, noting that in many publications there is over simplification, and especially omission of the connections of the mid-brain and diencephalon. Here an attempt has been made to give a truer representation but this results in some exceedingly complicated figures, not wholly remedied by the unusually lengthy figure legends. I wonder how much the addition of colour would have added to the cost of the book—shades of grey are really inadequate for figures of this complexity.

This work will be a most useful addition to the library of any department of anaesthetics or neurology and is competitively priced to be affordable by the individual; those who do buy it and who make use of it will consider the money well spent.

NMP MURRAY

Cranial Magnetic Resonance Imaging. By Allen D Elster. (Pp 420; £75.00.) Edinburgh: Churchill Livingstone 1988.

Since 1980 magnetic resonance imaging (MRI) has evolved from the research laboratory to become a routine part of diagnostic radiology and although there is a plethora of specialist journal articles and several books devoted to it, the overall place of MRI in the diagnosis of cranial disease is only now being established. Allen Elster in his latest text from the Bowman Gray School of Medicine, North Carolina, has attempted to consolidate the sum of knowledge of cranial MRI and condense this information into an easily assimilated form which he claims is more than just a book on "CT with different pictures". How far has he succeeded in explaining these concepts of biophysics and imaging strategies?

Generally, his aims are fulfilled: the book is divided into twelve chapters starting with the now obligatory descriptions of MRI machines and the physical principles of the signals produced. This is followed by a comprehensive explanation of pulse sequences with good examples of the different appearances when each parameter in turn is changed. These early sections are marred only by the incorrect underestimated values given for T1 and T2 of liquids such as CSF or urine which should have relaxation times of at least 3,000 ms and 2,500 ms respectively (pages 13, 15). This introduction leads to sections on normal anatomy, normal variants and congenital and developmental anomalies. They adequately cover the common diagnostic areas.

In the following chapters cerebral disease is described on a novel patho-anatomical basis being divided into a discussion of the ventricles and subarachnoid spaces in health and disease, neoplasms, cerebral vascular disease, infections and inflammatory diseases, degenerative diseases and abnormalities of the skull base and orbit. Chapter 10 entitled "Hemorrhage, trauma and

therapeutic change" is particularly well written with a critical analysis of the reasons for the conflicts and paradoxes found in the current body of literature on the appearance and underlying biophysics of haemorrhage and traumatic haemorrhagic tissue of different ages in different situations and imaged with different sequences at different field strengths. Commonly seen but seldom explained changes noted in routine imaging following chemotherapy or surgery are then discussed. Their practical clinical consequences are emphasised.

The main text ends with a glossary of MRI terms which although useful are not controversial, have been well described in many other books and this section is really superfluous. Two useful appendices follow: the first uses a selection of inversion recovery and spin echo sequences to display a well labelled multiplaner atlas of the brain, skull base and orbit in 30 large format illustrations. The second comprises a description of protocols found useful on a 0·5T Picker Vista MR scanner with a reference to an alternative set for other machines. These provide sensible guidelines for routine imaging and cover the majority of cranial neurodiagnostic problems including paediatric evaluation. A comprehensive integrated index to the text, tables and figures completes the book.

Overall, the quality of the illustrations is variable with most being routine clinical images rather than perfect examples of the current state of the art. Many are poorly printed with a rather reduced range of grey tones and unfortunately in one or two, labelled structures are not visible to the reader but in the majority, lesions are either obvious or clearly arrowed. In most the pulse sequence used to obtain the section is stated with only the occasional omission which the author himself warns the reader about on page 21. For example, Fig. 4–4B, page 55, is supposed to be a T1-weighted image but the grey matter is bright and the white matter dark—usually the appearance of a T2-weighted sequence despite the lipoma giving a hyperintense signal. This highlights the problem of using these terms in isolation without defining the field strength and sequence. There are occasional lapses where a lesion is described as being isointense with brain but the reader is not told whether this means grey or white matter. The general appearance of the text is marred by several poorly printed pages and multiple spelling errors which should have been corrected in the proof.

The author says that he tries to separate fact from opinion and uncorroborated data: however, this strategy is dependent on the quality and analysis of the references quoted. These are listed alphabetically at the end of each chapter but as is the case with most books, despite some additions at the proof stage, they appear dated. It is mitigated to some extent by using 1987 conference proceedings rather than referred journals but unfortunately they are often only abstracts and difficult for the reader to obtain unless he is a member of the society or has been to the conference. MRI is such a fast moving subject that up-to-date references are essential.

As a single author text it has the advantage of consistency of style and although didactic at times, it covers the subjects critically and in adequate depth to be clinically useful. A compact informative volume of 423 pages, it is an easily readable collection of facts which is good value at £75 and is pitched at a level that will prove useful to radiologists, neurologists and neurosurgeons who have just acquired MRI facilities. It covers many unusual presentations of common diseases as well as a sprinkling of rare lesions making it a good aide memoire for the more experienced. It would also be an ideal reference for any doctor who wishes to assess the significance of an MRI report on a patient with a cranial problem referred by him to a radiodiagnostic department.

DONALD M HADLEY

The American Psychiatric Press Textbook of Neuropsychiatry. Edited by Robert E Hales, Stuart C Yudofsky. (Pp 490; £35.00.) Cambridge: Cambridge University Press, 1988.

Prior to this century, psychiatrists were neuropsychiatrists, and it was axiomatic that they understood the brain and its influence in disease states. When a majority of them opted to become psychologists and social workers, the brain was left to neurology, and a Cartesian brace froze further understanding of the relationship between the brain and behaviour. In the last 20 years, neuropsychiatry has been rejuvenated, partly on account of the growing number of patients who are dissatisfied with the care that this dichotomy between neurology and psychiatry provides for them, and secondly because of the rapid expansion of the neurosciences with its explosion of knowledge regarding brain/behaviour relationships. With the backing of the American Psychiatric Association, which this book has, the discipline will be given a welcome boost, and no doubt many enthusiastic students will be encouraged to adopt this as the definitive manual for the subject.

This, however, is a disappointing book. There are other much better books on neuropsychiatry available some of which, being single authored, bring homogeneity to the discipline and to the text. It is not clear why the particular authors who wrote chapters in this text were chosen, and what their particular expertise in the field of neuropsychiatry is. However, there is much unevenness in the book, and this reviewer began to lose confidence in the expertise that was being offered. A few examples for illustration: the lack of mention of the use of the electroencephalogram in the diagnosis of delirium, and in dementia only "if there is a specific clinical indication"—Picks's disease or Creutzfeldt-Jakob disease, for example, do not appear to be included; interictal epileptic psychosis is said to have a prevalence of 10%–30% amongst patients with complex partial seizures; the starting dose for valproic acid is given as 1500 mg; in the chapter on degenerative diseases, such conditions as myaesthenia gravis, Guillain-Barré, syringomyelia and dystonia are included, etc. It is possible to go on. The style of some of the authors is simply patronising, "dementia is a disease of the brain, not of the mind, and is not a functional disorder", while others introduce neologisms that put the reader's teeth on edge, e.g. "delirogenic".

The content of the book is said to "define disease entities that should be subsumed under the rubric of neuropsychiatry", but the choice not all would agree with. Post-traumatic neurotic syndromes are not covered under head injuries, and a substantial selection of the book is given over to endocrine, vitamin and metabolic disorders which are more appropriately adumbrated with organic psychiatry, and, as with most of the conditions described here, are much better covered in Lishman's elegant text on the subject.

The best one can say of this book is that it is nicely laid out and visually satisfying. It is hoped that those that buy it will not have their interest in neuropsychiatry dampened, and that some of them will go on to gain clinical experience in the area which clearly seems to have been lacking by some of the contributors.

MICHAEL R TRIMBLE