white matter involvement, and spongiform encephalopathy preceded by chronic progressive cerebellar ataxia, resembling the Gerstmann-Sträussler syndrome. The book concludes with a useful catalogue of necropsy verified cases in Japan. Creutzfeldt-Jakob disease is very rare but, for obvious reasons, has attracted disproportionate attention and this book is a significant addition to knowledge.

It is unfortunate that the lavish publication is marred by English that is frequently ungrammatical and occasionally baffling, faults that could easily have been eliminated.

WB MATTHEWS

How to Examine the Nervous System. 2nd Ed. By R T Ross. (Pp 265; \$20.00.) New York: Medical Examination Publishing Co/Elsevier Science Publishing Co, 1985.

This work comes from the University of Manitoba and is designed to teach students and doctors how to examine the nervous system. It succeeds admirably. It also describes a number of neurological conditions characterised by specific signs and offers some help with differential diagnosis.

The simple explanations are clear and easy to follow and the actual descriptions of how to examine are printed in capitals. Some useful diagrams are given but better use could be made of more illustrations. These would have been helpful in showing the territories of peripheral nerves and roots, and in the speech areas of the brain—these last are given in the texts as numbered Brodmann's areas.

The first 109 pages, out of a total of 265, are concerned with the visual system. Many topics are well covered here and all doctors would benefit from reading these pages, particularly the sections on loss of vision, conjugate gaze palsies, eye movements and diplopia. The section on pupillary testing would have benefited from more details about the uses of pharmacological testing.

The sections on testing the remaining cranial nerves, the upper and lower limbs, reflexes, gait, sensation, the cerebellum and cortico-spinal tract cover familiar ground. They are sound and contain useful details. The pictures in *Aids to the Examination of the Peripheral Nervous System* from the MRC are superior to those found in the chapters on muscle testing in the limbs. Higher cortical function testing was rather sketchily covered. There was no discussion

of autonomic disturbances and this may reflect the omission of the anal reflex.

Despite these criticisms this is a most useful work, published as a paperback, which I can recommend to the student and doctors at all levels. I have to admit to a personal preference for Bickerstaff's *Neurological Examination in Clinical Practice* but Professor Ross's chapters on the visual system are better.

T FOWLER

Dyskinesia: Research and Treatment. (Psychopharmacology/Supplementum 2.) Edited by DE Casey, TN Chase, AV Christensen and J Gerlach. (Pp 235; DM 98-00 Reduced price for subscribers to "Psychopharmacology" DM 78-40.) Heidelberg: Springer Verlag, 1985.

Psychiatrists working at the Sct Hans Hospital in Roskilde, have contributed considerably to our recognition and understanding of neuroleptic-induced dyskinesias, and rather as in badminton, the Danes remain a force to be reckoned with in the international biological psychiatry arena. Gerlach, one of the co-editors of this book and Fog, a contributor are both on the staff of Sct Hans, and Casey another co-editor spent several sabbatical periods there. *Dyskinesia: Research and Treatment* is a compilation of all 26 presentations given at a small meeting held in Kollokulle on the outskirts of Copenhagen last year.

Tardive dyskinesia is exhaustively covered, there is a brief review of the treatment of dystonia, and a provocative account by Yves Agid on the pathophysiology of levodopa induced dyskinesias thrown in for good measure. The preclinical chapters on dopamine receptors by Seeman, Hyttel, Ungerstedt and Carlsson provide an excellent refresher for clinical readers and the rodent and monkey paradigms are fully reviewed. Clinical polarities are impartially covered from the extreme Northwick Park view that tardive dyskinesia is caused by schizophrenia rather than neuroleptics to the more conventional dogma represented by Kane that abnormal involuntary movements are three times more prevalent in neuroleptic-treated patients than aged matched controls. In fact it now seems likely that there is an element of accuracy in both notions and that antipsychotic drugs unmask cryptic dyskinesias in patients possibly with underlying structural basal ganglia

damage and that re-compensation after their discontinuation may not be possible. Certainly the single indisputable clinical observation that increasing age predisposes both the occurrence and potential irreversibility of tardive dyskinesia would marry with this view.

This is a superb book, carefully edited, well-written and up-to-date. Even those shell-shocked overburdened international travelling authorities have to a man dug out something novel and stimulating for this volume.

I can only try and explain the book's success by the careful selection of the contributors and perhaps the timing as new ideas have been thin on the ground of late. All those interested in tardive dyskinesias, even in the United States, should clutch this book to their chests during 1986.

ANDREW LEE

Principles of Neurology. 3rd ed. By Raymond Adams and Maurice Victor. (Pp 1156; £65-00.) Maidenhead: McGraw-Hill Book Company, 1985.

The third edition of Victor & Adams' *Principles of Neurology* appears to fulfil the book writer's dream: it contains something for everyone. For the clinical neurologist there is an up-to-date account in very readable style of the current state of the art in a range of topics extending from developmental neurology to the neurology of ageing. For the general physician and medical student in provides a model of how neurologists should think. In addition many sections are prefaced by a stimulating discussion of current research problems in physiology, anatomy or chemistry as they pertain to that particular topic.

The authors have adopted a structure for the book which is quite unlike any textbook known to the reviewer. The result vindicates their method triumphantly. It starts with a description of how one thinks about neurological disease and diagnosis; then goes on to a detailed description of the symptoms and signs of neurological disease together with what is known currently of the anatomical, physiological, and chemical basis underlying these symptoms and signs. There then follows a section on the various radiological and physiological tests which assist in diagnosis and the underlying principles thereof. After this, there is a description of the various syndromes of which the symptoms form a part: disorders of movement, disorders of consciousness and so on. Only

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after this is space given to consideration of (as the authors put it in their preface) "diseases which express themselves by each syndrome." Such a format necessarily implies that reference is made to individual topics in sections of the book which may be widely spaced apart. Fortunately, the index appears comprehensive.

The range of the book is quite astonishing. Apart from the topics covered in all neurological textbooks, there are fairly extensive sections on growth and development of the nervous system and the neurology of ageing; also on psychiatric aspects of neurological disease and vice versa. In a book of this range it would be impossible for any reviewer not to disagree with something: this one, to take an example, finds the author's management of status epilepticus a little out of step with current practice in the UK. The only major criticism is that many of the line drawings are too small or too detailed to illuminate the text, and need special scrutiny on their own. This is unfortunate, as they are not of a quality to invite close attention.

These quibbles apart, there can be no doubt that this book should provide a model for medical textbooks in the future, not only those in neurology. It should be indispensable to any practising neurologist, neurological department or general medical library. It is not only readable; it is also stimulating. I can think of no other textbook which one could say is hard to put down: this one is!

G HARWOOD

Notes on Psychiatry 6th Ed. Edited by IM Ingram, GC Timbury and RM Mowbray. (Pp 167; £4.95.) Edinburgh: Churchill Livingstone, 1985.

The preface states: "These notes are deliberately concise. They are suitable for revision, but as an introduction must be supplemented by lectures, clinical experience and further reading. . . . Over the years they have been found useful by undergraduates and by postgraduates requiring to revise basic psychiatry quickly for examinations."

With this I would agree. The whole of psychiatry is covered in the 169 pages of this book. Each topic is adequately dealt with, information is up to date and easily assimilable by anyone wanting to refresh the memory the night before an examination. Of necessity, some chapters are rather limited in their scope; the whole of child and adoles-

cent psychiatry, for example, is dealt with in seven pages. But as a rapid overview this too will serve to excavate half-forgotten or deeply buried knowledge. The old faithfuls of affective illness and schizophrenia are adequately covered, although I would have liked to have seen a slightly greater emphasis on the current theories of the biochemical mechanisms underlying these.

The chapters on drug and physical treatments, drug abuse, organic states and old age have been rewritten for this edition and are now in line with modern thinking. In particular I was pleased to see a more realistic attitude towards drug abuse, reflecting the current view that not everyone who abuses heroin becomes permanently addicted (in the Vietnam study, only 7% were considered to be still drug dependent after three years). Information about the legal aspects of psychiatry has also been updated and takes into account the new Mental Health Act.

A useful revision book and one I would hope to see on most students shelves.

P FENWICK

The Neuropsychology of Memory. Edited by Larry R Squire & Nelson Butters. (Pp 655; £62.50.) London: Guildford Press, 1984.

This is a collection of 54 relatively short contributions from authors actively involved in research into memory and the neural systems which are involved in remembering and forgetting. This subject area encompasses a large and varied array of topics: those included in this volume range from the purely behavioural studies of human cognitive psychology to single unit recordings and biochemical analyses of the concomitants of learning in animals. The majority of chapters focus on theoretical, clinical and methodological issues rather than on the minutiae of data presentation. The result is a collation of summary statements of position by a number of respected investigators and their surveys of the relevant literature.

The book is organised into three sections: the first deals with memory and its impairment in human subjects and the second with investigations into the neuropsychology of non-human primate memory. The third is a somewhat heterogeneous collection of chapters entitled "Studies of Memory in Non Primates: Physiology, Pharmacology and Behaviour". This organisation according to "species" has limited

usefulness; this is especially the case in the final section where there is little overlap between many of the problems and issues considered by the authors. Each section is very briefly introduced by the editors and the relevant areas of investigation are sketched out. Although this serves as a framework for subsequent reading, more detailed editorial commentary would have been of considerable use in highlighting the points of similarity, and difference between the various contributors and approaches. This is particularly the case since there is a general lack of cross referencing between contributions in the volume. Those interested in rapid reference will find the excellent index of considerable value, but the absence of abstracts and limited use of summaries at the end of chapters is likely to be a source of frustration. In general the volume is probably best considered an analogous to an extended journal "special issue" covering a wider range of topics than would be possible in many established journals rather than an integrated perspective on the current state of research into the substrate of memory.

The first section, on the neuropsychology of human memory, consists of 25 chapters the majority being written by established researchers in the field. Although this section is reasonably comprehensive there are other viewpoints which would have been welcome in a volume of this type, perhaps the most surprising omissions in this case being Squire and Butters' own views. The primary focus is on pathological conditions resulting in impaired event memory although normal memory and forgetting are also dealt with. The patterns of relative preservation, and relative loss of memory in various amnesic states are given detailed consideration and analysis and the basis of these dissociations are discussed in terms of differences in storage, process, strategy and neurochemistry. Due weight is given to the difficulties inherent in interpreting data from a heterogeneous group of patients some of whom are multiply handicapped. The second section compliments the first and discusses single unit recording and lesion studies in primates. These contributions are of uniformly high quality and document the recent progress that has been made in the fractionation and dissociation of components of "memory". These studies go somewhat beyond those reported in the section on human memory in investigating the role of cortical processing systems and their interaction with subcortical mechanisms.

In the third section a wide variety of topics is dealt with in the course of 22 chapters. They range from lesion and single unit