anatomy. Then follow sections on the neuroradiological anatomy of the ventricular system, the subarachnoid space, and the arterial supply and venous drainage. The text is very readable, and, particularly in the two sections devoted to pneumographic and angiographic analysis, distinctly practical. In addition to the main anatomical variants which might mislead the inexperienced, many other diagnostic pitfalls are noted. Contributions to the literature during the last 10 years, such as those of Ring and Waddington on the small branches of the middle cerebral artery, and Wolf and Huang on veins, have provided much new material, and there has been a 60% increase in size since the first edition. In spite of this, it is still a small book containing a remarkable amount of well illustrated information. The names of all the main structures appear in the 14 page index, and as a guide to his sources and to further reading the author provides a list of 265 references. In these days of ever earlier diagnosis, when radiological changes may be minimal, a thorough knowledge of the normal is essential to the practising neuro-radiologist, and this book should be read and digested by all students of the subject.

J. LESLIE STEVEN

NEUROLOGICAL EXAMINATION IN CLINICAL PRACTICE
3rd edn By E. R. Bickerstaff. (Pp. 361; illustrated; £6.) Blackwell: Oxford. 1973.

The third edition of this popular book retains the style of previous versions, acting as a guide to the mysteries of the neurological examination. In spite of the growing importance of ancillary tests, neurology remains a branch of medicine in which diagnosis still largely rests on the result of the history and clinical examination and on the accumulated clinical skills of the physician. This diagnostic manual, written by an acknowledged expert, is to be welcomed by all those seeking to master the techniques without having to practise them personally for 30 years.

Almost by definition the book is limited in its scope by the horizons of a busy practising neurologist. Accurate diagnosis by the quickest and most convenient route is the beginning and end of the matter. There is scarcely a word about treatment, pathogenesis, or physiology. The style is intentionally didactic, easy to read, and intensely practical but anyone expounding a complicated subject in these terms cannot expect everyone to agree with him all the time. For the sake of future editions it may be helpful to list some of the points where further qualification or clarification is required:

The recommended technique for examining ocular movements (by following) would fail to detect supranuclear gaze palsy. Not all neurologists would accept isolated 3rd nerve lesions as commonly due

to demyelination, or essential tremor as not disabling and uninfluenced by emotion, or the Holmes-Adie pupil as 'contracting briskly' with Mecholyl. Nearly all the book bears the stamp of personal observation but in a few places the suspicion is raised that an untried statement is being passed on. I wonder if the author has really observed that Argyll Robertson pupil fails to react to mydriatics (it often reacts well) or that in hypertensive encephalopathy the ophthalmic artery pressure may be raised out of proportion to systemic hypertension (whatever that means).

These are small faults in an otherwise excellent well-produced book which compresses astute observations over many years into a few short pages and is warmly recommended.

R. W. ROSS RUSSELL

MALNUTRITION AND RETARDED HUMAN DEVELOPMENT

By Sohan L. Manocha. (Pp. 382; illustrated; \$19.75.) Thomas: Springfield, Ill. 1972.

More than two-thirds of mankind is crowded into areas which cannot provide adequate food for their inhabitants. Even in wealthy countries, under-nutrition occurs in many areas.

This book discusses the effects of undernutrition on children's physical and mental development and suggests that both may suffer. The evidence is presented clearly and critically. The author recognizes the difficulty of reaching exact conclusions, because malnutrition is usually accompanied by unsatisfactory educational, sanitary, and other circumstances which may exert similar adverse effects.

It is stressed that the prevention of malnutrition requires much more than the mere provision of a suitably balanced diet and some cultural patterns which may lead to undernutrition in the presence of abundant food are described. The administrative, clinical, and educational steps which should be taken to combat malnutrition are discussed in detail.

This is an informative and easily read book about a very important subject.

W. A. MARSHALL

MULTIPLE SCLEROSIS: A REAPPRAISAL By D. McAlpine, C. E. Lumsden, and E. D. Acheson. (Pp. 653; £6.) Churchill Livingstone: Edinburgh. 1972.

Multiple Sclerosis and *Multiple Sclerosis: A Reappraisal*, have occupied a pre-eminent place in the literature of this disorder. Beliefs about the nature of any particular disease are subject to changes of fashion. The newer the fashion, the more fanatical are its adherents. This reappraisal reviews the current beliefs about the nature of multiple sclerosis and sets the more rampant and recent concepts into a prac-

tical perspective. For instance, there are only three passing references to kuru in a book of 650 pages.

This edition reflects the renewed interest in the immunological theories of multiple sclerosis. More than half the text is devoted to Professor Lumsden's analysis of the pathology and, in particular, the chemical pathology of the immune response. There is a great deal of original work devoted to the chemistry and behaviour of the immunoglobulins. Much of this appears in specialist journals and one must be grateful for the critical summary provided here. Professor Lumsden unequivocally sees the key to the problem of multiple sclerosis in the study of its immunochemistry, relegating infection by a virus or a slow virus to a quite subsidiary role.

The clinical studies drawing on wide practical experience help to get one's prejudices about the illness onto a more reasoned footing. The section on treatment is still sadly limited. Dr. McAlpine found little to add to the regime which he described in 1955.

McAlpine, Lumsden, and Acheson's reappraisal is an essential reference for the practising neurologist and the new edition makes important modification of and changes in emphasis from the edition of 1965.

I. T. DRAPER

HERPES SIMPLEX ENCEPHALITIS By L. S. Illis and J. V. T. Gostling. (Pp. 117; illustrated; £4.75.) Sciencetechnica: Bristol. 1973.

In view of the ever increasing interest in herpes simplex encephalitis, there is at present a great need for an authoritative review of current concepts of the disease. Unfortunately, I think that there is still a need for such a book, since I find this one extremely unconvincing. The chapter on the clinical features, for example, is more a catalogue of possible symptoms and signs than a realistic attempt to provide the reader with a composite picture of the clinical features of the disease. The chapter on pathology is remarkable for the fact that about as much space is devoted to experimental herpes simplex encephalitis and to the formation of inclusion bodies as to the pathology of the naturally occurring disease. The pathology of herpes simplex encephalitis in the adult at least has a highly characteristic pattern but the description given of it here is almost misleading: one is told, rightly, that there is selectively severe involvement of the temporal lobe but one could easily be left with the impression, which is quite wrong, that such involvement is unilateral. The inclusion of a brief description of acute haemorrhagic leuco-encephalitis is also not particularly helpful.

In the chapter on treatment, we are told that the bulk of the available evidence is against the use of steroids and ACTH, that the result of the use of

cytarabine in a single case is encouraging, that idoxuridine appears to be of benefit, and that 'decompressive craniotomy is of value in certain cases. If decompression is undertaken 'drug treatment indicated at the same time'—but what drugs? No one likes writing an uncomplimentary review. The book certainly contains some useful facts, commendable chapters on electroencephalography, radiological diagnosis, and differential diagnosis, and an excellent bibliography. But one feels that the authors have attempted to review a vast and rather complex literature without having much personal experience of herpes simplex encephalitis.

J. HUME ADAMS

THE SPINAL CORD 2nd edn Edited by George Austin. (Pp. 761; illustrated; \$48.50.) Thomas Springfield. 1972.

This is the second edition of a comprehensive account of the spinal cord for neurosurgeons, but including good accounts of anatomy, physiology, pharmacology, and pathology. These initial chapters, by professional basic scientists, comprise a quarter of the text. The remaining chapters deal with various conditions including trauma, disease, tumours, and so on. With 16 different authors the style and quality of the different chapters naturally varies but in most there is a disappointing lack of information from large series about the frequency of various clinical features, and there is over-much reliance on rather subjective reports of individual cases. This latter is reflected in a plethora of radiographs, in spite of which myelography with air or water-soluble media are not even mentioned, although they are widely practised in all advanced European centres. Good lists of references are given and production is of the highest quality. The book is by no means comprehensive in its clinical coverage, and has relatively little about children and nothing about syringomyelia, spondylolisthesis, or the treatment of spinal angiomas. For these reasons, and its cost, it seems likely to be a book for the library rather than the individual.

BRYAN JENNETT

THE ASSESSMENT OF APHASIA AND RELATED DISORDERS By H. Goodglass and Edith Kaplan. (Pp. 80; illustrated; £5.15.) Lea and Febiger: Philadelphia. 1972.

Clinicians are constantly aware of their deficiencies in making quantitative records of physical signs. Their methods are often highly personal and it is sometimes difficult to compare a patient's condition at different visits to the clinic. Nowhere is this more apparent than in the study of dysphasia. Students and juniors often find the commonly used test charts difficult to apply and delphic in their implications.