Book reviews

regular language, Spanish, (J Masterson *et al*), in a syllabic orthography, Kannada, (P Karanth) and in the dual writing system of Japanese (S Sasanuma) form the basis of the third section. J Masterson, CM Temple and U Frith each contribute to a section (IV) on surface dyslexia and the development of reading. The latter two chapters are particularly clearly written and complement each other: the one (by Temple) illustrating how the information processing approach can be applied to individual case studies of children and the other (by Frith) defines the progression of the different stages or strategies that occur in the acquisition of reading skills.

Section V contains two excellent reviews of normal data in relation to current models of reading (by KE Patterson and S Morton and L Henderson). In contrast T Shallice and R McCarthy draw on data from published dyslexic patients to conceptualise a multi-level model of how reading is achieved through print to sound conversion. Also included in this section is a chapter by J Deronesné and MF Beauvois who present an individual case study, not of a surface dyslexic, but a patient who has a specific deficit in their phonological reading. Their conceptualisation of the stages involved in print-sound conversion has similarities with Templin's chapter.

A neurological appendix (Part VI) presents CT scans of a number of patients described in the book.

Surface Dyslexia is definitely a specialist volume and should provide an excellent reference text for those actively involved in reading research. For the rest, however, I suspect they will have to await a more simplified summary of the field.

DM BAXTER

to provide a rationale for the use of CT in each area but most lack clinical and radiological conviction and there is no advice on whom to scan, when or especially why.

By far the largest section deals with cranio-cerebral and spinal injuries but at an elementary rather than specialist level and does not improve on the accounts available on other standard texts. Frequent references are made to the merits of the digital radiograph as a simple means of screening for injuries of the cervical spine, pelvis, abdomen and chest. In practice many body scanners as yet fail to produce digital radiographs of sufficient quality to exclude significant trauma. The chapter on abdominal and retroperitoneal injuries shows many clear pictures but failed to convince me of either the merits of CT scanning in the diagnosis of abdominal wall trauma or of the need to assess the extent of the damage surrounding an injured but functioning kidney where a therapeutic issue is not involved. The book does make well the point that CT scanning may avoid the need for an invasive technique such as angiography in many cases. The authors also suggest that peritoneal lavage should be delayed until after CT scanning of the abdomen because any residual fluid may be misinterpreted as blood. In most cases in Britain this delay, because of lack of availability of scanners, would cause more harm than good. Although the text is heavily biased towards CT scanning and tries to convince the reader of the value of scanning in limb injuries there is the rather incongruous advice that with a suitable skull fracture and clinical signs, CT scanning may not be required for an emergency life saving operation. It seems incongruous that if scanning time is available for limb injuries it may not be available to examine a critically head injured patient.

The book has little to offer the specialist within the neurosciences but it does provide a concise overview of the potential usefulness of CT scanning in trauma and will be of help to the trainee radiologist or traumatologist.

E TEASDALE

Computed Tomography of Trauma. Edited by Martin Heller, Hans-Holger Jend, Harry K Genant. (Pp 128; DM 98.00.) Stuttgart: Georg Thieme Verlag, 1986.

This inexpensive short volume provides a well illustrated comprehensive catalogue of the computed tomographic appearances of injuries in all parts of the body. The translation from German makes the English rather difficult and the text does not read easily. On the other hand each chapter is divided conveniently into easily identified sub-sections such as *anatomy*, *classification of fractures*, *examining techniques*. This facilitates the identification of aspects of special interest. Sections on "evaluation" attempt

outlined in the preface, the aim is to place advances in the neurosciences into a clinical context and this is achieved in the main. The particular emphasis in this volume being on neuromuscular disorders. As is often the case, the volume could be further improved with a more generous number of illustrations.

The rewards gleaned from any text of review articles depend on one's own interests and expertise. The initial chapters on muscular dystrophy and the molecular basis of inherited neurological diseases are of interest and serve as a helpful introduction for the uninitiated into recombinant DNA techniques, gene probes, and gene linkage. These techniques potentially will lead to isolation of the gene products responsible for various inherited disorders.

Following these chapters is an excellent contribution from Professor Newsom-Davis on myasthenia gravis and the Lambert-Eaton syndrome with explanations of how basic medical research has led to major developments in patient management. These two conditions serve as excellent models of organ-specific autoimmunity in man, and the discussion is therefore also of general application.

The physiology of calcium channel control and clinical pharmacology of calcium antagonists are reviewed by Professor Greenberg. Already well established in cardiology, neurological indications for these drugs are given with interesting prospects for potential use in ischaemia and epilepsy.

There follows a chapter on recent aspects of multiple sclerosis. In many ways I found this the least satisfactory chapter. Although genetics, immunology and imaging in multiple sclerosis are all mentioned, some of the more interesting developments are not fully covered. Magnetic resonance imaging, has made a considerable impact on the study of multiple sclerosis and promises to assist in the evaluation of therapeutic trials (a difficult area for clinical evaluation alone due to the variability in clinical course) and this technique is only briefly touched upon.

There are two chapters on movement disorders of the head and neck and neuromuscular control of speech which fit well together. The former chapter provides a simple taxonomy of the various tremors, grimaces and dystonias which affect the head and neck, a subject many find confusing. The latter chapter was perhaps less easy to immediately extrapolate to a clinical setting.

In reviewing new developments in epilepsy management the choice of drug and the surgical management of the epilepsies are stressed. The merits of anterior temporal lobectomy and amygdalohippocampectomy

Current Neurology. Vol 6. Edited by Stanley H Appel. (Pp 361; £58.00.) Chicago: Year Book Medical Publishers Inc. Distributed by Wolfe Medical Publications Ltd. 1986.

This is an excellent addition to the *Current Neurology* series and a useful text in any library, either personal or departmental. As

are discussed, reflecting the differences in practice on the two sides of the Atlantic.

Alzheimer's disease is well reviewed and generously referenced giving a comprehensive overview of the subject. Most chapters covering aspects of dementia begin by highlighting the problem posed by increasing numbers of demented due to an aging population, and this chapter is no exception.

The final section entitled *Neurobehaviour* explores hemisphere function and dominance particularly with regard to language. Aphasia, crossed aphasia, neglect and agnosia are covered. Localisation of function and the nature of the defects in agnosia are usefully discussed. The clinical sequelae of right hemisphere damage have long fascinated the neurologist and the further developments in the understanding of those sensory phenomena are of considerable interest.

Books of review articles may not be particularly innovative. However, informed authorities contributing well referenced texts on topics in which there have been recent developments provide useful and informative reading and may guide further in-depth exploration of the subject.

IEC ORMEROD

Role of the Sympathetic Nervous System in the Lower Urinary Tract: A Workshop held in London, April 1985. (Clinical Science Vol 70, Supplement No 14.) (Pp 81; £16.00.) London: Medical Research Society and the Biochemical Society. Distrib: Colchester, Essex: Biochemical Society Book Depot, 1986.

This slim volume is particularly welcome to clinicians and researchers in the field, as the contributions of the various authorities effectively pull together the available information on this most confusing area. The area is confusing both to basic scientists who find profound species differences in the physiology and pharmacology of the lower urinary tract, and to clinicians who have become aware that here the sympathetic nerves do not serve a simple function and do not work in a simple way; there are important sex differences and important cotransmitters.

Evidence has for some years been accumulating (and is here reviewed) that ACh, ATP and various peptides are released by pelvic sympathetic nerves in addition to NA, and modulate sympathetic adrenergic and parasympathetic cholinergic nerve function as well as possessing important independent actions of their own; and that the smooth muscles involved carry a range of

receptor types. Furthermore, in human material there is evidence that disorders of lower urinary function caused for example by outflow obstruction or spinal cord injury can cause significant tertiary alterations in receptor populations and autonomic nerve function. All this has important implications for practical drug therapy, particularly in disorders of urinary voiding.

Among the 12 substantive contributions there is a good balance of clinical and academic departments: five emanate from departments of urology, two each from departments of anatomy and pharmacology, and one each from a clinical MRC unit, a spinal injuries unit and Pfizers (who organised the one-day workshop in April 1985 from which the book is derived). There is not a dud amongst them, and each is of the nature of a review of an area where the authors can also contribute personal experience. The contributions are well referenced and there is an index. As is so often the case, the verbatim discussions, which were no doubt meaningful at the time, are disappointing to a reader, who will have his own questions which he cannot ask!

DN RUSHTON

Aids to the Examination of the Peripheral Nervous System. The Editorial Committee for the Guarantors of Brain. (Pp 61; £2.95.) London: Bailliere Tindall, 1986.

The Guarantors of Brain have done a great service by issuing a new edition of this classical slim monograph. The previous version, which was thoroughly revised between 1972 and 1975, has been modified and a new diagram of the lumbosacral plexus has been included. It is worth recalling the history that led to the production of this indispensable volume, that has guided neurologists for many years. One can do no better than to quote the Preface of the present volume: "In 1940 Dr George Riddoch was Consultant Neurologist to the Army. He realised the necessity of providing centres to deal with peripheral nerve injuries during the war. In collaboration with Professor Learmonth, Professor of Surgery at the University of Edinburgh, peripheral nerve injury centres were established at Gogarburn near Edinburgh and at Killearn near Glasgow. Professor Learmonth wished to have an illustrated guide on peripheral nerve injuries for the use of surgeons working in general hospitals. In collaboration with Dr Ritchie Russell, a few photographs demonstrating the testing of individual mus-

cles were taken in 1941, but Dr Ritchie Russell returned to Oxford in 1942 and was replaced by Dr McArdle, Neurologist to Scottish Command. The photographs were completed by Dr McArdle at Gogarburn with the help of the Department of Medical Illustration at the University of Edinburgh. About 20 copies in loose-leaf form were circulated to surgeons in Scotland.

In 1943 Professor Learmonth and Dr Riddoch added the diagrams illustrating the innervation of muscles by various peripheral nerves modified from Pitres and Testut, also the diagrams of cutaneous sensory distributions and dermatomes. This work was published by the Medical Research Council in 1943 as *Aids to the Investigation of Peripheral Nerve Injuries* (War Memorandum No 7). It became a standard work and over the next 30 years many thousands of copies were printed.

This new edition can be obtained from Holt-Saunders Ltd., 1 St Ann's Road, Eastbourne, East Sussex BN21 3UN UK

CD MARSDEN

Vascular Aphasia. By Joseph M Tonkonogy. (Pp 220; £29.95.) London: MIT Press, 1986.

This estimable monograph describes linguistic syndromes following stroke and is rich in clinical and pathological detail and embellished by shrewd observation clearly based on practical experience in addition to a critical command of the aphasia literature. The author uses the anatomically based Wernicke-Lichtheim model of aphasia as a framework on which to build a more linguistically detailed syndrome classification together with precise anatomical correlative data. Due emphasis is placed on the changes in language during recovery from vascular aphasia and the difficulties in correlating aspects of linguistic breakdown with lesions of the cortex, subcortex and often inevitably both.

The book has much to offer all disciplines converging on aphasiology and is equally informative to neurologists already familiar with the approach to aphasia contained in the writings of the late Norman Geschwind and Frank D Benson. The level of linguistic description is pleasingly lucid and within the competence of the neurologist who may find psycholinguistic literature a major challenge to his comprehension.

D NEARY