The title is honest and true, but will lead you astray. The author; Boris who? maybe you've heard of him. Then the declaration "Translated from the Russian by John K Young" gives you the clue. It is not just a translation of Russian work, but more a synthesis of Russian and western neurophysiology. There are about equal numbers of references to the Russian and to the western literature, the latter quaintly called "English" even though the odd one is in German. The late Professor Kotlyar was at the Department of Physiology of Higher Nervous Activity at Moscow State University and this book, highly acclaimed in Russia was completed in 1986, shortly before his death in 1990.

Most of us in the west are aware that there is a fine tradition of neurophysiological work in Russia and the east but hardly any of us have read any of it in recent years. There are a few Russian journals included in index medicus, but most scientific papers are published in the proceedings of the many regional academies of science within the CIS. There is a Russian abstracting service, The All Union Institute for Scientific Information (INTI) which is probably available in this country through the national lending library, but unless you can read Russian it is not of much help.

It is therefore valuable for us to have a book like this written by an eminent Russian neuro-scientist who has achieved a valuable synthesis of Eastern and Western literature in this book of plasticity. Plasticity is a set of increasingly important processes and phenomena but where do they happen and what makes them happen? Herein lies the value of the book in exploring plasticity from the level of the synapse and sub-synaptic membranes through neurones and reflexes to brains and behaviour. The book does not pretend to be encyclopaedic but each chapter provides a balanced synthesis of Russian and Western work. The influence of I P Pavlov, who died in 1936, is still strong; pavlovian reinforcement, inhibition, association and extinction are still with us but in a modified form more befitting to the age of the micro-electrode. You must remember that Pavlov used a salivary gland for recording nervous activity.

Brain "states" feature prominently. There is no definition of a state but it represents the particular relationship found between sets of neurones from time to time, for instance arousal, attention and drowsiness are all behavioural manifestations of states. States cannot be studied by micro-electrodes. Nevertheless these important concepts are often overlooked in Western neurophysiology. The sections on higher nervous activity bring to mind the works of Edelman and the theory neuronal group selection. One begins to feel that if Edelman knew his Pavlov as well as he knows Darwin then something really exciting might happen. Here perhaps lies a tragedy of the cold war. If Edelman and Kotlyar had been able to engage in a dialogue, a richer synthesis and a deeper understanding of processes might have been forthcoming; but they weren't and it is for future scientists to move along these lines. Kotlyar's thoughtful and scholarly views are nonetheless valuable.

This book draws back the iron curtain for us and allows us to see neuroscience on each side in a new light. The publishers, editors and translators and above all the authors of this and previous volumes are to

be congratulated. It is to be hoped that literature, databases, abstracting and translating services pick up this initiative so that Eastern neuroscience can be assimilated along with that of the west, both sides will be enriched.

EM SEDGWICK

Neurocytopathology. By J M ANDREWS and G B SCHUMANN. 1992. (Pp 325 Illustrated; Price: £96.00). London, Williams & Wilkins Ltd. ISBN 0-683-00227-9.

This is a well thought out, practical and useful book. In a brief introductory chapter, the authors clearly define their aims: to present neurocytopathology in a concise and accessible format to surgical pathologists, cytologists and clinicians, to provide relevant information to enable the practice of the more important techniques and to give further guidance both for the literature and for sources of continuing medical education. The book fulfils these rather ambitious goals remarkably well. One chapter gives a brief overview of the cellular components and histological structures of the nervous system: this hardly amounts to more than a series of short vignettes and is perhaps the weakest part of the book, although it may serve as a guide to the uninitiated. There are no fewer than four chapters dealing with methodology: general aspects of CSF cytopathology, qualitative assessment of and quantitative approach to CSF cytopathology and cytological methods applied to neural tissue biopsies and aspirates. These chapters are full of useful practical information ranging from the actual descriptions of techniques to warning on artefacts.

The backbone of the book is the two chapters which give an account of diseases: one on tumours and related conditions, the other on non-neoplastic disorders. The former covers the more frequent entities and is, by no means, comprehensive. The latter include neurodegenerative, demyelinating, vascular, infectious and inflammatory diseases, leukodystrophies and the non-neoplastic disorders of the eye and orbit. A separate chapter is devoted to pitfalls, medico-legal and diagnostic, listing 10 of the former and 190 of latter. However, the greatest single asset of the book is the collection of more than 200 good quality, colour illustrations. I warmly recommend this book.

PL LANTOS

Pediatric Neuro-oncology /3 New Trends in Clinical Research (Monographs in Clinical Pediatrics Series). Edited by R J PACKER, W A BLEYER and C POCHEDLY. (Pp 320 Illustrated; Price: Not Indicated). 1992. New York, Harwood Academic Publishers. ISBN 3-7186-0524-4.

The purpose of this series is to present in relation to a specific theme—in this case tumours of the CNS in childhood—both authoritative clinical and basic science aspects and to attempt to correlate the two. In this aim the text is successful. The volume is a compilation of some of the topics

covered at the International Symposium on Paediatric Neuro-Oncology held on 3 June 1989 in Seattle.

A strong plea is made in the preface that centralisation of care of children with CNS tumours continues and emphasises that effective management requires contributions from many paediatric sub-specialties including neurosurgery, neurology, oncology, radiotherapy, rehabilitation, psychology, endocrinology and psychiatry. Perhaps added to this list should be educationalists.

The volume covers issues of diagnosis, classification, surgical advances and chemotherapy. Specific clinical problems are discussed. An example would be the treatment of infants with brain tumours where most of what can be stated is particular difficulties rather than reporting advances.

Of particular interest is the discussion and presentation of the pathological data and the manner in which insight into the molecular phenotype of neural cells has improved understanding of the biology of brain tumours and systems of classification. Inadequacies of present systems for tumour classification based on presumed cell of origin and differentiation potential are discussed. There are excellent chapters on the investigation and clinical management of paediatric brain tumours in particular brain stem and spinal cord tumours in childhood and discussion of recent advances in management using hyperfractionated radiotherapy and high dose chemotherapy with autologous bone marrow rescue. For a comprehensive overview of the subject greater emphasis on such important issues as assessing and mitigating adverse effects of treatment would be necessary. Rehabilitation, the functioning of multi-disciplinary management team, family support and audit of an overall service are not covered.

The volume can be recommended for those involved in the day to day management of paediatric brain tumours.

MA CLARKE

Tardive Dyskinesia: A Task Force Report of The American Psychiatric Association. By JOHN KANE (Pp 282; Price: £22.50). 1992. London, The Eurospan Group. ISBN 0-89042-230-3 (H/bk).

Prolonged exposure to neuroleptic drugs causing delayed or tardive dyskinesia has been generally accepted for over 20 years. This was deduced from the observed exacerbation or first appearance of dyskinesia with cessation of treatment, the suppression of dyskinesia with reintroduction of neuroleptic, and the slow improvement in some patients after extended drug withdrawal. However, the culpability of neuroleptics has recently been questioned by growing awareness of involuntary movements indistinguishable from tardive dyskinesia occurring in drug-naïve psychotic patients and the possible involvement of basal ganglia dysfunction in psychosis. The authors of this report on tardive dyskinesia from the American Psychiatric Association state that in their view 'the consensus at the present time is that antipsychotic drugs do play a major role in producing, precipitating, or evoking abnormal involuntary movements'. The evidence is very suggestive but not compelling.

The content of the report is exclusively clinical. There is a useful chapter on differential diagnosis highlighting the need to exclude extrapyramidal disorders such as Huntington's disease and Wilson's disease which may initially present as a psychosis. The chapter on epidemiology, risk factors and outcome emphasises the methodological problems encountered in obtaining meaningful data. Other chapters deal thoughtfully with treatment, prevention and litigation issues, and the final summary is excellent.

The book can be recommended to both neurologists and psychiatrists and at £22.50 represents outstanding value.

EGS SPOKES

Peripheral Neuropathy 3rd Edition (2 vol. set). Edited by P J DYCK and P K THOMAS (Pp 1720 Illustrated; Price: £246.00 set). 1992. London, WB Saunders Co. ISBN 0-7216-3242-4 (Set).

Every 9 years Dyck, Thomas and a galaxy of co-authors rewrite their epic, two volume, *Peripheral Neuropathy*. If it were not just one of the hundreds, probably thousands, of clinical, experimental or anatomical contributions made by Peter James Dyck and Peter Kynaston Thomas to the neurosciences it would still be a gigantic undertaking. Words such as prodigious, stupendous or formidable do not quite explain the immensity of the work in size, scope or depth of detail. The editing and production are excellent. The text is well-written throughout, lavishly illustrated, with ample references, a helpful index and cross-references between sections.

The clinical section (volume 2) is a reminder of patients seen and puzzled over, one's successes, and others one might prefer to forget. I was once obliged to write up two cases of familial lumbar syringomyelia for my chief—the condition is now referred to as HSAN type I. JZ Young in his introduction states that real progress into the neurobiology of peripheral nerves started with the publication of the Medical Research Council's pamphlet (War Memorandum No 7, 1941) *Aids to the Investigation of Peripheral Nerve Injuries* prepared by a distinguished hotch-potch of specialists better known for their studies of other parts of the nervous system. My colleagues and I still carry an updated version of the MRC pamphlet and will update for special reference our edition of Dyck and Thomas.

Volume 1 covers the science of the PNS and provides an excellent bibliography for the specialist as well as a clear text for the clinician. Gross and microscopic anatomy are succeeded by propagation of the nerve impulse, peripheral sensors, muscle spindles, Golgi organs but not the motor end plate which is ignored in all aspects. Channel function in axons and support cells is discussed, as is axonal transport, but in a different section 200 pages later. The section on function devoted to the autonomic nervous system is of clinical importance as the ANS is not comprehensively discussed in volume 2. Special attention is paid to the pupil, the enteric nervous system and cardiac innervation but the lungs receive scant mention and cardiac function stops short of the sick sinus syndrome or the assessment

of syncope. The embryological section is exciting, and includes the determination of axonal calibre, though elsewhere one is reminded that no axon is of uniform calibre.

The clinical volume 2 covers disease of cranial nerves, anterior horn cells (including MND), plexuses, entrapments and neuropathies from whatever cause. There are strong supporting chapters on genetics (with an explanation of imprinting), epidemiology, toxicology, rehabilitation and pain. Clinicians will find this volume invaluable though at times the experts stop short of answering clinical problems. The percentage risk of drug induced neuropathy is rarely mentioned, there is no discussion of recurrent facial palsy, no advice on when to use plasma exchange in the Miller-Fisher syndrome. Botulinum toxin was omitted. These are admittedly quibbles. No self-respecting neuroscience department can function without the two volumes. We may note JZ Young's comments:

"Reading about the splendid developments in the 94 chapters of the new *Peripheral Neuropathy* has made me sad that I did not continue to work with peripheral nerves. They are indeed marvellous material for experiment and they allow the truly exact scientific and medical discoveries that are recounted in this book."

EMR CRITCHLEY

Motor Disorder in Psychiatry. (Towards a Neurological Psychiatry.) By DANIEL ROGERS (Pp 159; Price £24.95). 1992. Chichester, J Wiley & Sons Ltd. ISBN 0-471-93616-2.

This scholarly book, founded on Rogers' work at Friern Barnet with Dr Richard Hunter, is an outstanding historical essay rather than a practical treatment guide. It complements rather than replaces the now classic book by Lohr and Wisniewski (*Movement Disorders: a neuropsychiatric approach*: John Wiley & Sons 1987) which is a longer, bedside-orientated guide to the fascinating and complex world of tics, mannerisms, stereotypies and the like, encountered in the borderland between neurology and psychiatry.

Rogers' achievement in this book is to combine the brain-based scientific and the psychological non-scientific approach. He starts from the viewpoint of the old classic psychiatric textbooks, moves through the era of encephalitis lethargica, and ends with the review of recent studies by both psychiatrists and neurologists. This synthesis is outstanding, especially when it is as clearly written as here.

Of course there are problems. The neuroleptic malignant syndrome gets scanty mention and there is little or no discussion of practical treatment. There is no mention of cataplexy, myoclonus, or punning. Rogers appears to favour the idea that cataplexy and parkinsonism represent different degrees of the same motor disorder. There is no mention of the possible use of clozapine and related drugs in the management of psychiatric problems with levodopa. These are minor omissions. The book contains a valuable appendix of selected rating scales for motor disorder used in psychiatry. There is an intriguing description of both *mitgehen* (the "angle-poise lamp" arm, rais-

ing in response to pressure); and *hypermetamorphosis*, (randomly approaching various objects including, for example, a waste basket, rummaging in it, extracting an apple core and eating it). There are useful sections on posture, tone, abnormal eye movements and blinking as well as on disordered speech production, with 20 pages of references. A few illustrations are included, mostly from the encephalitis lethargica era, and there is a (just) adequate index which includes the condition of *schmaltzkramf*, a term used by Bleuler to describe dystonic pursing of the lips accompanying melancholic phases and disappearing during manic phases in schizophrenia. Rogers concludes by saying there is not a "psychiatric brain" and a "neurological brain". This scholarly essay is a milestone in bringing together our understanding of psychiatric disorder and cerebral function as applied to motor disorder. A good read, well worth the money.

JD PARKES

The Temporal Lobes and the Limbic System. Edited by M R TRIMBLE AND T G BOLWIG (Pp 288 Illustrated; Price: £39.50) 1992. Petersfield, Wrightson Biomedical Publishing Ltd.

This is a multi-author text which begins with a discussion of the concept of the limbic system and ends with a philosophical treatise on the brain and consciousness. The early chapters deal with essays on the anatomy, physiology and pharmacology of the hippocampus. Clinical essays relate the temporal lobes to epilepsy, psychosis and affective disorders. The contribution of new imaging techniques and quantitative neuropathology are highlighted and there are interesting discussions of the relationship of memory disorders and the "epileptic personality" or Gastaut-Geschwind syndrome. The clinical syndromes arising from cerebral vascular disease and tumours in the limbic system are described and a brief section is concerned with the aetiology of medical temporal sclerosis. The contributions arising from Europe and the USA are informative and economically presented and represent another success in building bridges between the Neurosciences Neurology and Psychiatry.

D NEARY

NOTICE

The International Society for Pediatric Neurosurgery. The annual meeting will be held in Birmingham on 25–28 September 1994. Further details from Anthony D Hockley, Neurosurgery Department, Queen Elizabeth Hospital, Birmingham B15 2TH, UK or The Secretariat (Miss Moira Wilson), Universal Conference Consultants, China Court Business Centre, Ladywell Walk, Birmingham B5 4RX, West Midlands, UK.