will find nothing about physiotherapy or occupational therapy within its pages. It is the subtitle which gives the clue to what it is about and even this must be applied more to the basic problems of strokes than to their rehabilitation.

The book opens with an excellent review of the epidemiology of cerebrovascular disease, with particular reference to the data provided by current prospective studies and the problems they pose. In general it suggests that the allegedly changing pattern of cerebrovascular disease is due more to epidemiological artefact than to changes in pathology. There follows a useful discussion of the relationship of stroke illness to conditions such as hypertension, hypercholesterolaemia, and heart disease, after which comes what might have been placed earlier—a succinct account of the current classification of strokes.

The chapter on the evaluation of a patient's potential for rehabilitation is more theoretical than practical and the chapters on vocational training are relevant mainly to the American scene. The section on aphasia is interesting and somewhat controversial. The author seems to regard apraxias and agnosias as 'transmission problems' distinct from central integrative mechanisms which are the aphasias. He does not explain how the apraxias and agnosias differ from paralysis or failure of primary sensory input. On the practical side he recommends delaying speech therapy until spontaneous recovery has achieved all it can, which is a comfort to physicians who are charged with having delayed calling the speech therapist until it is too late. He also favours the general stimulation of communication by contriving situations in relation to the patient, rather than the set-piece teaching of language which in his experience is of little value.

Overall, this is an unusual book, containing much useful information for those interested in patients with strokes.

NEUROPHYSIOLOGY OF POSTURAL MECHANISMS By T. D. M. Roberts. (Pp. xvii + 354; 104 figures. £5.) Butterworth: London. 1967.

Dr. Roberts is not only a well-known research-worker but is also a teacher of neurophysiology who is therefore constantly in contact with students and knows their doubts, inquiries, and needs. In the preface to his book he reminds us of some very pertinent facts concerning teaching: '... in the course of teaching, we learn. It often happens that the form in which a question is put by a student raises in the teacher's mind, possibly for the first time, issues of which the student himself is quite unaware. The teacher then has to probe the implications and find answers to further questions before he can reply to the first query with an explanation that is satisfactory to himself as well as to the student...'

The present book, then, is Dr. Roberts's own interpretation of the neurophysiology of postural mechanisms, which has been derived from a whole series of questionings and searchings over the years. The result is a highly individual account of these topics, approached from a mechanistic point of view and most clearly described and explained.

In the first five chapters the essential physiology of peripheral nerve and skeletal muscle is expounded, as

well as the general properties of sense organs and the coding of sensory information. These preliminary chapters lead up to Chapters 5 to 11—the main concern of the book. The text is free from references, which makes it particularly easy to read. There are a few lapses into poetic description (presumably derived from those notes, referred to in the preface, which were made in the shade of pine trees on Elba), as in the description of a motoneurone pool as a 'compact, cigar-shaped cloud', and occasionally Dr. Roberts's sense of humour sneaks out with his account of the method employed in casting a cow based on a knowledge of postural reflexes, and the special significance of the elephant's gait when fleeing from a hedgehog!

Many students should find this book invaluable, for it will answer many of their doubts and questions about postural mechanisms, and many teachers will be interested in Dr. Roberts's approach to the subject and his interpretation.

GEOFFREY RUSHWORTH

THE BASAL GANGLIA AND POSTURE By J. Purdon Martin. (Pp. xiii + 152; illustrated. 80s.) Pitman Medical Publishing Co: London. 1967.

Dr. Purdon Martin's special interest in diseases of the basal ganglia is known to all neurologists and in this small volume he brings together and amplifies some of his work in this field. One of his earliest studies was in *Brain* in 1927, 'Hemichorea resulting from a local lesion of the brain', and his interest in the extrapyramidal motor system has continued ever since. His comparatively recent observations on the abnormalities of postural responses to tilting the body in cases of Parkinsonism have drawn special attention to this aspect of the motor disorder. Dr. Martin has certainly shown that postural responses are lacking in cases with severe destruction of the putidum in post-encephalitic cases, but he then claims that all the 'negative symptoms' observed in Parkinsonism (such as bradykinesia and rigidity) 'are due to deficiencies of postural reflexes'. There is so little that is fully understood about the organization of movement control that the reviewer finds it difficult to appreciate the significance of this conclusion.

W. RITCHIE RUSSELL

SUR LA CONTROLE NERVEUX DE LA CIRCULATION SANGUINE REGIONALE DES CENTRES CEREBRAUX By L. Molnar. (Pp. 127; 41 figures.) Akademiai Kiado: Budapest. 1967.

The author has studied change in temperature in the brains of experimental animals in response to various stimuli. The temperatures have been measured with thermistors on the ends of needles, and it is argued, and evidence is adduced, that a change in temperature reflects change in blood flow. Much quicker changes can be recognized by this method than by most conventional methods of assessing brain blood flow. The author adduces evidence that rapid and considerable changes in brain blood flow can occur which are nervously, not humorally, mediated, that they are under control of brain-stem vasomotor centres, that afferent structures affecting this nervous control of the circulation of the brain include the

carotid sinus, and that the efferent pathway is not, or not solely, the cervical sympathetic nerves. The author may find that nervous control of the circulation in the brain is more widely accepted than he appears to expect, and it will be interesting to know whether his other views are confirmed as new methods for the study of brain flow become available.

J. SPALDING

SPONGY DEGENERATION OF THE BRAIN IN INFANCY By L. van Bogaert and I. Bertrand. (Pp. 178; 36 figures. 50s.) North Holland Publishing Company: Amsterdam. 1967.

The recognition of this familial disease as a distinctive pathological entity dates from the paper given by van Bogaert and Bertrand at the Paris Neurological Congress in 1949. In retrospect, it is probable that Globus and Strauss (1928) and Canavan (1931) had given earlier descriptions of the condition, but it is certainly unjustifiable to retain the term 'Canavan's disease' in present-day classifications.

This monograph contains a full account of the clinical and pathological features of the 26 examples of this disease which have so far appeared in the literature and the authors' personal cases are set out in considerable detail. Pathologists will be grateful for van Bogaert's account of many other rare encephalopathies of early life which are to be considered in differential diagnosis and the book will be a valuable source of reference both to clinicians and neuropathologists.

R. M. NORMAN

INTEGRATIVE ACTIVITY OF THE BRAIN By Jerzy Konorski. (Pp. xii + 531; illustrated. 135s.) The University of Chicago Press: Chicago and London. 1968.

Dr. Konorski's work on cerebral physiology is specially remembered for his interest in the time factors involved in the establishment of a memory trace. The student of memory mechanisms will, however, be disappointed by the pages devoted to this, for they contain only rather speculative explanations of the known facts. Thus on page 491 '... we shall hold the view that transient memory has a dynamic character depending on the activation of closed, self-reexciting chains of neurons, whereas the consolidation of memory is a quite separate and independent process whose intimate nature is still poorly understood'. The weakness of this volume is that the known facts of the problems discussed are not fully displayed to the reader, even in the realm of memory mechanisms. However, it provides a source of interesting theoretical interpretations which may provoke further useful experiment.

MYOPATHIEN IM KINDESALTER Vol. 18. Pädiatrische Fortbildungskurse für die Praxis. Edited by E. Rossi. (Pp. 142; 61 illustrations. Sw. F. 27.) S. Karger AG, Basel. 1966.

In this little volume are published a series of lectures on myopathy in childhood given in Freiburg in June 1965 as one of a series of postgraduate courses in paediatrics organized by the Children's Clinic of the University of Bern. The volume opens with a chapter by Becker on the

genetic aspects of muscle disorders in childhood, and subsequent chapters review the patho-physiology of human muscular dystrophy (Richterich), the clinical characteristics of myopathy in childhood (Demos), cardiac involvement (Weber), histopathology (Mumenthaler), electron microscopy (Mölbart), drug treatment (Beckmann), orthopaedic treatment (Taillard), and the differential diagnosis of the 'floppy infant' syndrome (Zellweger). Five of the chapters are written in German, three in French, and one in English. As a short review of current knowledge, intended for paediatricians and general physicians, the volume succeeds in its aim, but owing to the relative brevity and unevenness of the various chapters the book will be of comparatively little interest to British neurologists; to those with a particular interest in diseases of muscle a number of isolated observations in the chapters by Zellweger, Mumenthaler, and Mölbart will be of value. The remaining chapters contain little that is new and even the reviews of recent literature are somewhat incomplete; at a time when the proceedings of many large meetings and symposia devoted to muscle disease in its many aspects are being published, the appeal of this book will be very limited.

NEW CONCEPTS IN PAIN AND ITS CLINICAL MANAGEMENT

Edited by E. Leong Way. (Pp. xiv + 224; 51 figures. 64s.) Blackwell Scientific Publications: Oxford. 1967.

The title of this book is something of a misnomer, since it is not concerned with new concepts in pain so much as new applications of old concepts. The work represents the proceedings of a symposium held in San Francisco in 1966.

The first section is concerned with the anatomy and physiology of pain. Doctors Casey and Melzack present a conceptual model in which motivational and cognitive aspects of pain are emphasized rather than classical sensory mechanisms. The picture is useful, though the presentation is at times verbose.

The problem of addiction to effective analgesics looms large. Considering the history of the subject, even in recent years, many authors seem surprisingly optimistic about finding an effective non-addictive agent. Nothing new emerges in the assessment of pain relief, perhaps because the definition of pain still presents great difficulties. An essay by Dr. Bonica on the management of intractable pain is especially useful in the practical sphere. A short review of neurosurgical procedures is included.

The book will be of value to those working in pain clinics which are a growing feature in medical organization.

C. W. M. WHITTY

THE GROSS ANATOMY OF THE HUMAN BRAIN. A Manual of Dissection By W. Hewitt. (Pp. 170; 130 figures. 30s.) Pitman: London. 1967.

This students' textbook deals solely with the gross anatomy and dissection of the human brain, and though it illustrates, without explanation, some of the features of the brain-stem which may be seen by the unaided eye in unstained transverse sections, it does not consider some important pathways—for example, medial and lateral lemnisci—which may be dissected with ease. The