published by one of the author's mentors, Jean Talairach. The standard of production and illustration is uniformly high. This book will find a place in the library of all contemporary neurosurgeons who perform image directed tumour surgery and should also be acquired by general neurosurgeons who may themselves perform little or no stereotaxis but who wish to understand the value of stereotactic methods. It is a classic reference work.

DGT THOMAS

Brain Edema VIII—Proceedings of the 8th International Symposium Bern, June 17–20, 1990. Edited by J-J REULEN, A BAETHMANN, J FENSTERMACHER, A MARMAROU, M SPATZ (Pp 416; Price: DM250. Subscribers to "Acta Neurochirurgica" DM 225. 1990. Wien, Springer-Verlag. ISBN 3-211-82240-2.

This multiple author book is a compilation of papers presented at the Eighth International Symposium on Brain Edema held in June 17–20 1990 in Bern, Switzerland.

Within the Neurosciences, swelling and oedema of the brain continue to be major focal points of interest to basic scientists and clinicians. Not only because of its frequency and its association with different disease processes, but also because oedema is not a single entity and, therefore, is unlikely to be amenable to therapy from single agents. It is a common consequence of many acute and chronic forms of brain injury. Therapy, however, is dependent on full understanding of its etiology and the recognition of its different forms. The triannual meeting of the Brain Edema Group provides a forum for a free exchange of ideas about this condition in the scientific setting. This proceeding, therefore, not unexpectedly contains a wealth of information about the blood brain barrier and the development and spread of edema which will form some of the basis for hope for improved therapeutic intervention. Although the editors are to be complemented by the editing process and the rapidity with which the proceedings have been published, this book is not for the casual reader, rather for the specialist. A copy, however, should be available in the Central Libraries of all Regional and Neuroscience Units.

DI GRAHAM

Sensory-Motor Organizations and Development in Infancy and Early Childhood. Series D: Behavioural and Social Sciences—Vol 56. Edited by H BLOCH AND BI BERTENTHAL. (Pp 512; Price Dfl 240.00; US\$144.00; UK £89.00). 1990. Dordrecht, Kluwer Academic Publishers Group. ISBN 0792308131.

The study of child development has long been dominated by the figure of Jean Piaget, and it is his proposal for the existence of discrete developmental stages that has provided the framework for much of the research in this field over the last 40 years. According to Piaget, the first stage of child development involves sensory-motor processing, in which stimuli are coded solely in terms of their sensory properties and the actions that may be made to them. How

sensory data related to action, was not well specified.

"Sensory-motor organisations and development in infancy and early childhood" is a book of a Nato Workshop held in France in 1989. It contains 35 chapters detailing recent work on sensory-motor development. It attempts to specify the nature of the internal representations formed in infancy and early childhood, how the control of action develops, and how action is related to sensory information. There is a new emphasis on dynamic properties of systems, on how the environment constrains actions (as emphasised by the Gibsonian school of psychologists), on how both internal representations and actions are related to the development (the "coming on line") of different neural systems, and on the modelling of sensory-action relations in artificial neural-like networks. The field has moved a long way since Piaget's initial writing. This book presents the work of some of the leading lights behind these new developments.

The quality of the papers is quite mixed—both in content and quality. Some are straightforward empirical papers, some are reviews of the field. Some are written with admirable clarity, and express well the convergence of work from different disciplines for example, Butterworth, Johnson, von Hofsten. The book also contains a number of "discussion" chapters, in which the authors comment on the chapters by others. To my mind, these discussion chapters did not work well, lacking the kind of detached overview that would contribute usefully to the literature.

Much remains to be done. To name but one issue—authors tend not to specify the nature of the representations underlying different actions; there is little concern with the kind of co-ordinate systems involved, or how information is mapped between co-ordinate systems. These are issues that have been faced in work on computational vision, and may be incorporated into the modelling in this field.

This book provides a good view of the state of the art for researchers interested in early child development. It is most definitely a research book, and not to be dipped into lightly by those not already familiar with some of the topics. But for those who are, and want to know where research is currently headed, it provides a useful source.

GLYN W HUMPHREYS

The Neurology of Eye Movements. Edition 2. By R J LEIGH AND D S ZEE. (Pp 561; Price: £53.50). Beckenham, Quest-Meridien Ltd, 1991. ISBN 0-8036-5528-2.

This is the latest book in the Contemporary Neurology series, edited by Fred Plum from FA Davis & Co. Those of us who learned our eye movement disorders from Bing, Cogan and Walshe were grateful in 1983 for the first edition of this book, where a successful attempt was made to interpret the pathophysiology of the various disorders, an aspect of neurology not much understood nor investigated by the European Schools. The first seven chapters were and still are devoted to the neuroanatomy and neurophysiology of the oculomotor system followed by a comprehensive 179 pages addressing the individual clinical disorders, with the details of differential diagnosis and interpretation. The field is

fully covered, the text is accurate and thorough, providing not only an up to date assessment of what is now understood in ocular movements, but introducing the reader to much of the recent research in this limited but expanding field.

New material in this edition includes the gaze-holding network and its underlying substrate, the role of the otolith-ocular reflexes and the identification of a pathway for smooth pursuit. The authors also discuss the use of eye movements as a research tool in psychiatry and pharmacology.

A very useful appendix takes the clinician through a scheme for bedside examination, followed by a resumé of the common clinical methods of eye movement assessment.

This book makes a significant contribution to the Neurological literature and was generously introduced in its first edition by David Cogan. This second edition should prove equally popular.

JB FOSTER

Transient Global Amnesia and Related Disorders. Edited by H J MARKOWITSCH. (Pp 223; Price: Fr 88.– DM 98.–). Berne, Hogrefe & Huber Publishers, 1990. ISBN 3-456-81887-4.

The pathogenesis of the syndrome of abrupt but temporary cessation of remembering has teased neurologists for decades even before Fisher and Adams gave it a convenient name in 1958. Perhaps solely because Transient Global Amnesia (TGA) happens to middle-aged or elderly patients, the most popular idea is that it is a form of transient ischaemic attack (TIA), with epilepsy as a second favourite. Others have suggested that it is a form of migraine (the irritable brain syndrome), perhaps surprisingly in view of the age of onset. Hans Markowitsch has assembled a medley of reviews on and around this syndrome, some of which stray some distance from the subject. Sadly, despite the interest in this syndrome, this book is profoundly disappointing.

There are in this slim volume sections covering transient memory disturbance of nearly every cause including intracranial mass lesions (causing amnesia through epilepsy or even as a 'random association') and drugs such as benzodiazepines. The neuropsychological aspects are covered with discouraging opacity, not helped by the Harvard reference style. The latter on occasions entails inches of text being taken up by references, making the text difficult to follow. Many of the articles repeat and or contradict each other in the review of the same literature. Many are pre-scientific in their uncritical acceptance of poorly controlled clinical studies. For example to Fredericks "... it is clear that TGA is due to TIA. ..." because "... since ... we saw our first TGA patient, we have always had that impression ...". His review of the evidence that has "... only strengthened (this impression) ..." takes little account of the inconsistencies in the literature which have lead many others away from sharing this unshakeable confidence. Most of the contributors to this volume lack clarity of thought or language. In particular there is a need for clear definitions and diagnostic criteria.