influenced by Peter Bishop, and this book is a collection of review articles on many topics of current interest in the visual neurosciences. Amongst the authors are many of the most prominent names in vision research and the standard of each contribution is consistently high. The book is divided into six sections covering the retina, retinogeniculate connections, visual development, comparative visual physiology, the visual cortex and integrative aspects of vision. Each section is comprised of a number of papers reviewing aspects of these topics.

It is a tribute to the editors that there is consistency of style and presentation which greatly facilitates understanding of the sometimes difficult concepts and makes for ease of cross reference. Although this book can be used for reference, each article can be taken as telling an interesting story, outlining the development of research in for example retinal neuro anatomy and physiology, colour vision, optic nerve fibre grouping, the lateral geniculate nucleus and binocular vision amongst a host of other interesting topics. All the contributions are given by basic visual neuroscientists with the exception of one chapter by a clinical neurologist.

Despite the clear non-clinical bias of the majority of articles this book will still be of great interest to those neurologists concerned with visual physiology. In particular the sections on retina and retinogeniculate connections have the appeal of possible clinical correlation with visual evoked potential measurements and assessment of the more subtle aspects of vision such as contrast sensitivity.

At £75.00 this book is expensive but for those in this research field or interested at the clinical level this book provides many fascinating correlations and can be strongly recommended.

CJK ELLIS

Planning Strategies of Intracranial Microsurgery. By Wolfgang Seeger. (Pp 417; DM 268.00.) Vienna: Springer-Verlag, 1986.

This is a beautifully, even extravagantly, illustrated book produced in order to show the younger neurosurgeon how to approach brain lesions in the most economical and gentle way at craniotomy. It draws on the

author's personal experience, and on the data collected over several years in individual cases, to show that logical analysis of the newer imaging methods of CT and MRI scans may be transposed to the surface markings of the skull very exactly, without the benefit of stereotactic techniques. The author concentrates on the details of surgery for intrinsic brain tumours, a topic frequently neglected in standard texts of operative neurosurgery.

In the first part, general principles of surgical planning on the basis of neuro-radiology are discussed. In the second, the strategy of approaching specific examples of cerebral lesions is copiously illustrated. The English usage is slightly stilted, and there are occasional errors in spelling; however, the illustrations are so apposite that they carry the meaning eloquently. The book is a celebration of the intellectual approach to technical neurosurgery. The author, and his co-workers plan the anatomical route to be followed in such detail the day before surgery, that, as the author mentions in his foreword, there is a danger that this may be forgotten by the time of the procedure. It is a very serious work, and as well as being a training manual for junior neurosurgeons, it should be seen as a counsel of perfection for senior neurosurgeons. However, some will find it too detailed and too mechanical in its approach to neurosurgery and will favour a more intuitive approach to each individual craniotomy. The book should find a place in the library of all neurosurgical departments which believe they can employ accurate microneurosurgical operative techniques for intrinsic brain lesions.

DGT THOMAS

Electromyography for Experimentalists. By Gerald E Loeb, Carl Gans. (Pp 373; £18.75 p/b; £50.95 cloth.) London: University of Chicago Press, 1986.

When Lord Adrian recorded electromyographic activity in the 1920s he initially used a modified version of Einthoven's string galvanometer and in later experiments developed the technique of needle electromyography. The impact of electromyography on

clinical and experimental neurophysiology was not clear at that stage. Indeed, before needle electromyography, its future was by no means secure, as was suggested by Lord Adrian himself in his Oliver-Sharpey lecture, in 1925, on "The Interpretation of the Electromyogram". He began with the statement... "The subject of these lectures is not one in which striking advances have been made in the last few years. It is one which raises many more questions than it solves, and it may turn out in the end to have little or no importance in practical medicine".

Since these pioneering days there has been a veritable explosion in the number of techniques and gadgets available to measure activity within the nervous system. In spite of Lord Adrian's circumspection, many of these techniques have found a place in both clinical and experimental neurophysiological practice. This apparent level of sophistication may be misleading as the choice of experimental paradigms that will provide comprehensible answers to carefully defined questions ultimately rests with the initiative of the investigator. *Electromyography for Experimentalists* is concerned with these points. It is not so much a textbook of electromyography as a "how to do it" guide for the neurophysiologist, emphasising an understanding of basic concepts and techniques before their application. The book is primarily designed for animal neuroscientists, in particular, those about to establish a laboratory. However, all neurophysiologists will find useful information in this volume. There is much practical advice on the choice and design of equipment, recording devices and the planning and performing of experiments. The authors have not concerned themselves with specific areas of neurophysiology but have illustrated the basic principles involved in a way that will stimulate the interested reader to pursue matters further. There are clear discussions on the basic concepts of neuromuscular physiology and the measurement of electrical signals from muscles. Due emphasis also is given to muscle mechanics and the movement produced by muscle contraction. With this background detail, the basic principles that help bridge the interface between electrical engineering and biology are presented from a practical viewpoint. The book is written in an approachable and digestible style, interspersed with encouraging advice. Traditionally, such information is transmitted by word of mouth, under the watchful eyes of senior colleagues. The advice contained in this book will provide a useful adjunct to this.

PD THOMPSON

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