areas. The authors set out to relate the clinical aspects of epilepsy to the underlying abnormalities of neurophysiology and neurochemistry in the hope that an integration of data would be helpful to clinicians caring for patients with seizures. At an acceptable cost they have achieved their aim.

IAN D. MELVILLE

RECENT ADVANCES ON PAIN: PATHOPHYSIOLOGY AND CLINICAL ASPECTS Edited by J. J. Bonica, P. Procacci, and C. Pagni. (Pp. 373; illustrated; \$19.75.) Thomas: Springfield, Ill. 1974.

This is an expensive book; but all books published outside Great Britain are going to be expensive now, on account of the low value of the pound. Nevertheless, it is a lot of money to pay to have the account of a symposium. For symposia present up to date information, and so within a year or two, they will be, one hopes, out of date.

This symposium contains an important review article by Professor Iggo on pain receptors. Professor Sicuteri and his group present their views on the biochemical bases of headache and cardiac pain. There is an excellent paper on 'The appraisal of pain surgery' by Maspes and Pagni. Their review of techniques and results of the surgical division of the 5th nerve for trigeminal neuralgia brings many older, and more recent, neurosurgical and anatomical facts together; it should be read by any neurosurgeon embarking on one of these operations. Equally good is their appraisal of chemical rhizotomy. Professor Moricca gives an account of his treatment of pain in advanced cancer by neuroadenolysis. This is the injection of alcohol through the sella turcica via the transthemoidal-sphenoidal sinus route. He has now had over 10 years' experience of this method of treating generalized pain in the late stages of cancer. It is successful for all cancer pain, not only for that of hormone-dependent neoplasms. In a certain number of cases of hormone-dependent neoplasms, in addition to the relief of pain, there is regression of the neoplasm. The effect of the alcohol is not only on the pituitary, but also on the hypothalamus.

P. W. NATHAN

MONOAMINES NOYAUX GRIS CENTRAUX ET SYNDROME DE PARKINSON Edited by J. de Ajuriaguerra and G. Gauthier. (Pp. 579; illustrated; price not stated.) Georg: Geneva. 1971.

In September 1970, in Geneva, the 4th Bel-Air Symposium was held at the Clinique Psychiatrique de L'Université de Genève on monoamines and Parkinson's disease. The 50 papers presented (many in French) were published in 1971, in this volume, which at that time provided a remarkably readable

and extensive review of the field. Now, four years later, much of what was said in 1970 has a somewhat antique flavour in a field that moves so fast. For instance, carbidopa had not yet entered the therapeutic array (although the other selective extracerebral decarboxylase inhibitor, RO 4-4602, is discussed), and amantadine is only briefly mentioned. In the basic science sections it is notable that the concept of denervation supersensitivity of striatal neurones is only just appearing, but cyclic AMP was not even in the speculation. Nevertheless, there are a number of excellent reviews which have stood the test of time. Personal favourites are Fuxe, Hokfield, and Ungerstedt on the localization of monoamines in the central nervous system (a rare opportunity to obtain a full review of the work of a Swedish School); Escourolle, de Recondo, and Gray's extensive chapter of the Parisian view of basal ganglia pathology; Albe-Fessard's summary of her own experiences in basal ganglia physiology; Hoehn's studies on the epidemiology of Parkinson's disease; and de Ajuriaguerra's two essays on the psychopathology of Parkinson's disease and the notion of akinesia.

There are many other good articles on all aspects of neuropharmacology and Parkinson's disease, and this reviewer has used the book extensively as a reference volume over the past three years (but there is no index).

C. D. MARSDEN

NEUROBIOLOGICAL BASIS OF MEMORY FORMATION. 2 vols Edited by H. Matthys. (Pp. 632; illustrated; price not stated.) Volk und Gesundheit: Berlin. 1974.

This book, the Proceedings of the Fourth International Neurobiological Symposium in Magdaburg 1973, is in English, the majority of papers being translated. They vary in clarity and precision. Some quote experiments without proper protocols so that critical assessment is impossible. Few have any summary of their message. In those translated, meaning is sometimes a little serrated, as if the communication machine had a cog or two missing.

The earlier title for these biennial symposia was 'neuropharmacological'—a correct description of the majority of papers in the present volume. Of 45 contributions, only a dozen are directly concerned with memory, though most have some connection via the function of neuronal formations known or thought to subserve memory. Experimental findings are mainly in rodents, where 'learning and memory' are more readily interchanged. Some are just relevant or extrapolatable to the problems of human memory: but the difficulties of transferring work on memory (even more than on pain) from animal to man re-