Book reviews

Essays in Neurochemistry and Neuropharmacology Edited by M. B. H. Youdim, W. Lovenberg, D. F. Sharman, and J. R. Lagnado. (Pp. 174; illustrated; £8.75, \$17.50.) John Wiley and Sons: Chichester. 1977.

These are concise, readily assimilable personal essays on topical issues. The first chapter by Holman, Elliott, and Barchas discusses general problems involved in studying behaviour in relation to transmitter changes. This is a difficult field not only because of the complexities of behavioural repertoires and their many potential biochemical concomitants but also because of the different kinds of behavioural-biochemical interactions which may occur. It may be that techniques now coming into use such as in vivo voltametric measurement of transmitter release concurrently with observation of behaviour will be helpful here. Such methods are, however, hardly likely to be applicable to any great extent in the direct evaluation of the role of brain amines in human mental illness (Goodwin, Post, and Wehr). This chapter clearly summarises a large and complex literature, and would be especially helpful to new entrants to the field.

How hallucinogens act is discussed by Boarder with particular reference to LSD, for many years considered specifically in relation to serotonin but now recognised also to interact with dopamine neurones. Woods and Youdim describe some examples of the use of the isolated perfused rat brain, and critically assess the viability of such preparations. The other chapters deal with the postsynaptic importance of cyclic nucleotides (Walton) and retinal neurotransmitters (Starr).

The volume as a whole substantiates the previous indications from volume 1 that this is likely to prove a valuable series.

G. CURZON

The Anatomy of Hallucinations By Fred H. Johnson. (Pp. 240; \$16.95.) Nelson-Hall: Chicago. 1978.

Rightly contending that hallucinations represent a relatively neglected research topic, the author has produced an interesting volume. He concentrates upon

mechanisms of auditory hallucinations in particular. The material does not make for easy reading but is nevertheless very rewarding. A rambling chapter on historical aspects at the outset contains interesting references to the hallucinations of Peter the Hermit during the First Crusade, the Angel of Mons during the 1914-18 war, and the possible hallucinosis of certain modern demagogues.

The causal relevance of hallucinations to thought disorder in schizophrenia is discussed, and it is postulated that if a cognitively derived system of "treating" hallucinations could be developed, thought disorder could perhaps be alleviated. The occurrence of hallucinations in certain cerebral disorders, however, receives little mention.

The neurophysiological substrate of auditory hallucinations forms a fascinating theme in this book. "Inner speech" which can be shown to accompany thinking in the normal person is employed to create "voices" instead of for the purpose of reasoning or problem solving. Electromyographic studies have demonstrated that the muscles of vocalisation are in fact used during hallucinated inner speech. Some psychotic patients even develop skill in "tuning in" to the hallucinated speech of other persons.

Dr Johnson's work can be highly commended to psychiatrists, psychologists, neurologists, and others concerned with the phenomenology of psychotic illness, especially in the area of hallucinations, language, and thought. The volume extends rather than dismantles Schneider's concepts of schizophrenia.

A. BALFOUR SCLARE

Biochemistry of Mental Disorders. New Vistas Edited by Earl Usdin and Arnold J. Mandell. (Pp. 268; Sw frs 80.) Marcel Dekker: New York and Basel. 1978.

This book contains a collection of papers and their subsequent discussion at a symposium in 1975. The various authors tend to be well known in their own field, and often the papers are to be found in almost identical form in

other parts of the literature. The rapid rate of advance of, particularly, aspects of brain biochemistry, already date some of the communications. There are, however, notable contributions. Floyd Bloom's chapter on electrophysiology in relation to psychiatry makes the book worth while. Other chapters, such as that on CSF amine metabolites and psychosis by Goodwin *et al.*, provide a good review of the literature. On the whole this is a heterogeneous collection of essays more suitable for the general reader on this aspect of mental illness than the specialist.

D. ECCLESTON

Narcolepsy Advances in Sleep Research, Volume 3. Edited by C. Guilleminault, W. C. Dement, and P. Passouant. (Pp. 689; £27.00, \$46.00.) Spectrum Publications: New York. 1978. Narcolepsy is a fascinating and surprisingly common illness. Although described by Gelineau nearly 100 years ago, interest and advances in understanding its cause have really only gathered momentum in the last decade. This book represents the outcome of the first International Symposium on Narcolepsy organised by Pierre Passouant and William Dement (joined by Christian Guilleminault as editors) in La Grande Motte, France, in July 1975. However, it is much more than the usual conference proceedings. In fact, it provides in some 37 chapters covering as complete a monograph on the subject as one could wish.

It is impossible in the space available to review each contribution, but the standard is uniformly high, as is to be expected from the 60 authors, all of whom have made original contributions to the subject of sleep disorders. Some chapters deserve brief mention as catching the reviewer's eye. Passouant gives a delightful historical introduction classifying the nosological difficulties surrounding narcolepsy. The next nine chapters deal with the clinical symptoms of the narcoleptic tetrad. Dement, in his excellent chapter describing the range of disorders presenting as excessive daytime sleepiness to the Sleep Disorder Clinic at Stanford, emphasises the frequency of sleep apnoea as a cause