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

of this complaint, and estimates the incidence of true narcolepsy at around one in 2000 of the population. Not surprisingly, there is much discussion of REM and non-REM sleep and narcolepsy, and the physiology of sleep in general, particularly in relation to sleep paralysis, hypnagogic hallucinations, and catalepsy. Passouant and Billiard conclude that the illness is lifelong, and a number of authors consider the secondary psychological problems provoked by this disability. Sharp highlights the confusion with epilepsy because of the frequent, but little recognised, occurrence of amnesia and automatic behaviour in narcoleptic patients. Kessler reports a genetic study which suggests that the frequency of the disorder is some 20 times higher among first degree relatives of a sufferer than in the normal population. Four chapters deal with the differential diagnosis of narcolepsy. There are sections on possible animal models of the illness, and on the pharmacology of sleep control. Treatment is reviewed by Takahashi, Parkes, and Boughton and Mamelak, with emphasis on amphetamines and related drugs for sleep attacks, and tricyclics for catalepsy. The cause of the illness remains an enigma. This excellent book will remain a standard reference work to narcolepsy for many years, and should be available in all neurological and psychiatric libraries.

C. D. MARSDEN

Lithium in Medical Practice Edited by F. Neil Johnson and Susan Johnson. (Pp. 459; illustrated; £12.50.) MTP Press: Lancaster. 1978.

The book contains the full proceedings of a successful *First British Lithium Congress* held in Lancaster in July 1977. The senior editor has already edited a standard textbook on the use of lithium in psychiatry and this new book does fulfil his hope of providing a useful complementary work. Although there is a clinical section, the bulk of the content is biochemical. Much of it, however, sheds light on issues of practical interest to the clinician—such as late adverse effects of the drug, possible mechanisms of action, and pharmacokinetics.

This is the report of a conference and suspect therefore to many a library committee, but it is a useful summary

of much current research on lithium and merits a place in the psychiatric library. Since lithium is now being prescribed for one per thousand of the population perhaps for the rest of their lives, and since the drug affects many systems of the body, the book might also be a useful addition to the medical libraries of the larger general hospitals.

E. P. WORRALL

Advances in Pain Research and Therapy Volume I Edited by J. J. Bonica and D. G. Albe-Fessard. (Pp. 1056; illustrated; \$84.00.) Raven Press: New York. 1976.

This book represents a compilation of the Proceedings of the First World Congress on Pain, held in Florence in September 1975 under the auspices of the International Association for the Study of Pain. There are 18 sections in the book covering the three major components of pain—namely the physical, psychological, and social—but most emphasis is placed upon the first of these. The anatomical and physiological papers are mostly concerned with mechanisms involved in the modulation of pain ranging from the action of peripheral nociceptors and spinal cord mechanisms to analysis of the functions of central neuronal pathways. Papers in the psychological and social sections include several dealing with measurement of pain and the role of emotions in modifying pain and associated behaviour. The role of physical, psychological, and social forms of treatment in the control of pain are discussed at considerable length, and it is clear that this field is at a very early stage of development. There are also sections on the effect of cutaneous stimulation, brainstem stimulation, analgesics, psychotropic drugs, nerve blocks, and centrally applied neurosurgical techniques but with little that will be new for the pain specialist. Finally, specific problems, such as headache, orofacial pain, musculoskeletal pain, and other pain syndromes receive individual attention. This book represents the interests of research workers involved in the study of pain at the time of the conference and much new work has emerged since, especially in the fields of endorphin research and the use of psychological methods of treatment. The papers reveal wide ranging interest in pain mechanisms and pain control

but in view of the specialist nature of the vast majority of papers and the relatively small number of general ones the book is most likely to be used as a reference work.

M. R. BOND

Mental Retardation and Related Disorders By Charles F. Barlow. (Pp. 146; illustrated; \$22.00.) F. A. Davis Company: Philadelphia. 1978.

The general neurologist and the specialist in mental handicap are often bewildered by the vast amount of literature—of varying quality—on mental deficiency that has accumulated during the past 15 years. Written by the Professor of Neurology at Harvard and Director of a Mental Retardation Research Programme, this is a practical readable book written for the clinician by a clinician.

No attempt is made to discuss complex biochemistry, and an in-depth analysis of very rare conditions is avoided. Professor Barlow has aimed to bring well-balanced advice and has succeeded admirably in this. Of special interest are the sections on risk factors of infancy and childhood and the differential diagnosis of childhood dementia. The author goes on to deal with management in an equally lucid and interesting way. Each chapter is followed by a well-chosen list of references. It is particularly gratifying to read his criticisms of the trendy notion that a multidisciplinary approach offers a solution to all the problems of the retarded. This splendid book is essential reading for anyone interested in mental handicap.

RONALD C. MACGILLIVRAY

A World of Language for Deaf Children. Part I Basic Principles: A Maternal Reflective Method By A. Van Uden. (Pp. 345; illustrated; \$27.00.) Swets and Zeitlinger: Amsterdam. 1977. This third edition of van Uden's book includes an entirely new chapter on the psycholinguistic reasoning behind his particular approach to the linguistic education of deaf children. The rest is substantially the same as in the second (1970) edition. The work is strongly recommended both to teachers of the deaf and to psycholinguists.

M. K. C. MACMAHON