Book reviews

low levodopa dosage from the start can pay rich dividends in terms of good response, few side effects, and stable control for many years.

A few facts are wrong: levodopa, at least initially, decreases rather than increases rapid eye movement sleep, and bromocriptine does cause a rise in growth hormone levels in normal subjects and those with Parkinson's disease. However, with experience of levodopa dating from 1961, this is a book for all clinicians who treat Parkinson's disease. One of the world experts on the art of Breughel, stricken with Parkinson's disease, can still appreciate the glorious Kunhistorisches pictures largely due to the work of the authors of this book. Vienna is indeed a beautiful city.

JD PARKES

Advances in Pain Research & Therapy, Vol 5 (Proceedings of the Third World Congress on Pain). Edited by John J Bonica, Ulf Lindblom & Ainsley Iggo. (Pp 990; \$109.12.) New York: Raven Press, 1982.

Encompassed within this volume almost 5 cm thick and containing about 1,000 pages are the Proceedings of the Third World Congress on Pain held in Edinburgh in September 1981. The book provides an invaluable summary of what is going on in pain research and therapy, or more accurately, what was going on when the papers were prepared—now some 2 years ago. Readers interested in pain topics come from so many different fields that it is only with a book such as this that a broad view can be obtained, and there is something (or many things) for everyone. For those interested in a summary of the state of the art, the publication of 29 papers presented by invitation at the plenary sessions provides authoritative accounts by distinguished authors on many key subjects, which range from an update on opioid peptides and pain (Kosterlitz) to the effects of deafferentation (Kerr; Wall), and from neuropeptides and pain pathways (Hökfelt and colleagues) to therapies of pain due to spinal root avulsions (Wynn Parry). Every reader will come across papers of particular personal interest; this reviewer was pleased to see the clinical papers on a technique for recording somatosensory evoked potentials from within the anterolateral quadrant of the human spinal cord (Campbell and Lipton), on retrogasserian glycerol injection in the treatment of tic douloureux (Håkanson), and on selective stimulation of sensory units in man (Torebjörk and Ochoa).

Witnesses to changes of emphasis, the contributions record the rise and fall of various subjects. For instance, capsaicin did not even appear in the index of the Proceedings of the previous World Congress held in 1978, whereas in the present Proceedings three papers are now devoted to the "hot" component in peppers. Compared to the rise in interest of this selective neurotoxin, an important "fall" is documented in the contribution by Erickson and Long which deals with a 10 year follow-up of dorsal column stimulation; the authors suggest from their own experience "that the surgical implantation of dorsal column stimulators does not provide lasting pain relief".

This important book is expensive. It is however the best summary of work in the field of pain in 1981 and is well indexed and beautifully produced. Is there no way a book such as this can appear more quickly?

GD SCHOTT

Progress in Cholinergic Biology: Model Cholinergic Synapses. Edited by Israel Hanin and Alan M Goldberg. (Pp 381; \$85.56.) New York, Raven Press, 1982.

Cholinergic synapses exhibit such a diverse morphology and physiology that the participants at conferences extolling the virtues of their favourite preparation hardly seem to be speaking the same language. In principle then, a volume that attempts to compare and contrast the properties of various cholinergic preparations is to be welcomed. This book contains much useful information about several experimental systems. But there are significant gaps; does not the caudate nucleus for example, deserve to be considered as a model cholinergic tissue of functional importance?

However, my main disappointment was that the contributors have not been persuaded to try and systematise the basic information they present. For example, it is crucial for any comparison of cholinergic preparations that information about the number of terminals, their dimensions and their acetylcholine content be presented. But only a minority of contributors actually give an explicit value even for the ACh content of the tissue!

The research worker who wishes to attempt a comparison must then refer to the original papers and older reviews. This volume will help him to do that but the title promises more.

RM MARCHBANKS

Jargonaphasia. Edited by Jason W Brown. (Pp 329; \$29.50.) New York: Academic Press, 1981.

The contributors to *Jargonaphasia* include some of the world's leading researchers in this field, and the volume well reflects the advances which can be made by the multidisciplinary examination of aphasic syndromes. The 13 chapters consider the subject from the perspectives of neurology, psychiatry, psychology, phonetics, linguistics and speech-language therapy. It is therefore fitting that the volume serves as a commemoration of the eminent French neurologist, Theophilus Alajouanine, who was one of the founders of the science which now calls itself neurolinguistics, and who first established its interdisciplinary nature through his collaboration with a psychologist and a phonetician.

Five main approaches may be traced in the volume. Lecours *et al* and Brown use detailed case studies to exemplify varieties of jargon. Weinstein and Zaimov and Temp share the psychiatrist's orientation. Kertesz searches for neuroanatomical correlations. At least three chapters explore jargonaphasia in terms of psycholinguistic models (those by Buckingham, by Butterworth *et al* and by Green). The phonetic-linguistic analysis of the speech of a jargonaphasic is the topic of chapters by Perelman and Brown and by Anderson. One reason, however, why multidisciplinary collections of papers devoted to one acquired language-disorder syndrome are thin on the ground emerges early in the book, and that is the difficulty of arriving at a consensus of opinion as to the definition of the syndrome. Brown might have saved the reader some puzzlement if he had acknowledged this more clearly in his introductory chapter, rather than commenting on the challenges to his own interpretation offered by the volume's main chapters.

The dominant taxonomy of the book distinguishes four categories of jargon: (1) Phonemic jargon, consisting of the production of long, fluent strings of sounds with no recognisable words. The utterance can be segmented into word-like units, however, through intonation and other phonological and prosodic cues; (2) Semantic jargon, in which there are few non-dictionary words or neologisms, though this anomalous speech has little intelligible content; (3) Neologistic jargon, which consists of neologisms, but retains grammatical words and inflections which indicate that the majority of these neologisms occur in slots where a noun would be expected; (4) Restricted-

utterance stereotypic jargon (with accompanying apraxia of speech). In its severest form, utterances are restricted to repetition of the same consonant vowel syllable.

In the appearance of all these forms, patients are characteristically unaware of individual errors on words (a factor that distinguishes the syndrome from conduction aphasia, in which repeated attempts are made to correct aberrant pronunciations of words). However, it is clear that lack of awareness is neither a necessary nor a sufficient condition for jargon to be produced. Jargonaphasia lends itself readily therefore to the scrutiny of psycholinguistic models of how utterances are produced.

In view of the disparate theoretical backgrounds of its potential readers, the book is inexcusably scanty in its explanation of technical symbols. There is no glossary, nor list of phonetic symbols. Their absence makes for hard reading. But a more serious difficulty is the confusion of terms from different levels of reference. For instance, Perelman and Brown speculate (p.217) that phonemic jargon may be deteriorated neologistic jargon. Later, they propose that neologistic jargon subsumes a combined phonemic and semantic deficit. Difficulty in interpretation arises because "phonemic" is used in different senses in each statement. In the first case it is used as a descriptive term for the patient's language behaviour. In the second case, it is used as an interpretive term implying a breakdown at a hypothetical linguistic level where the sound of words is integrated with meaning in an internal system.

Despite these substantial obstacles to its reading, the book makes a significant contribution to the development of ideas about jargonaphasia, and attempts to narrow the gap between the psycholinguistic "diagram-maker" and the neurologist or psychiatrist. Nonetheless, the book underlines the present lack of an adequate model of the mental operations underlying language.

RUTH LESSER
JANICE KAY

Behavioural Pharmacology. 2nd ed. By Susan D Iversen and Leslie L Iversen. (Pp 305; £7.95.) Oxford: Oxford University Press, 1981.

The first edition of *Behavioral Pharmacology* was heralded as a valuable addition to the currently available texts. The second and revised edition warrants the same accolade. The major additions to the text

have been the incorporation of a section on neuropeptides and the inclusion of separate sections dealing with the actions of particular drug groups on behaviour. The text starts with the general introduction to the analysis of behaviour and to neuropharmacology in general. The following chapters deal with the determination of drug action and the effects of the various drug groups on behaviour. Each section is clearly and concisely written so that it is understandable to a general audience seeking an introduction to behavioural pharmacology. I particularly liked the critical approach adopted to the subject and to the integrated manner in which the contents of the book were assembled. Clearly much thought and effort has gone into producing a volume of this quality. Indeed I can find nothing but praise for this text and I would strongly recommend it to all interested in this area, and to my own students as an example of how to present scientific data in a clear and concise manner.

PG JENNER

The Neurology of Aphasia. Edited by Howard S Kirshner & Frank R Freeman. (Pp 224; Dgl 72.50.) Holland: Swets Publishing Service, 1982.

This American book is twelfth in a series on neurolinguistics. Neurologists need not be disheartened at this for as the title suggests it is one of the most clinical texts on aphasia with strong emphasis on anatomical localisation and pathology. It aims to "provide a summary of the information contributed by clinical neurologists and neurosurgeons to the study of language and aphasic syndromes". To this end, the chapters are written or co-written by neurologists (and one neurosurgeon).

The book is designed to appeal not only to doctors but to non-medical specialists (psychologists, linguists, speech pathologists and therapists) who abound in the US to an extent that we do not see yet in the UK. In some respects it is thorough and detailed but parts are, for the physician, pitched at a comparatively simple level (table VIII for example consists of a page of dictionary and text book definitions of aphasia). This is only a minor disadvantage and the neurologist, particularly the average British neurologist who has received little training in higher cerebral function, can find much to please him in the book. After a rather long introductory chapter a series of authors chosen for their sub-interests within aphasiology provide what are mostly good and concise reviews. The

shorter chapters are the best and the reviewer found the following particularly valuable; Kertesz (Neuroanatomical Correlation); Duncan and Mohr (Broca's aphasia); Kirshner (Wernicke's aphasia); Rubens (Transcortical aphasia); Ojemann (Subcortical aphasias); Benson (Alexias); Woods (Acquired childhood aphasia); Heilman and Bowers (Affective disorders induced by hemispheric dysfunction). Much of what is written is available elsewhere but this book provides a good up to date summary of the neurology of language under one cover.

The general presentation is satisfactory but author references are listed at the back of the book with only one initial; Hughlings Jackson, therefore appears as J. Jackson which caused a few moments confusion. Unfortunately the reviewer's first copy had groups of pages missing with others duplicated.

JC MEADOWS

Transient Ischemic Attacks. Vol 3 of Science and Practice of Surgery. Edited by Charles Warlow and Peter J Morris. (Pp 426; SFr 185.) New York: Marcel Dekker Inc, 1982.

This small but expensive book contains a number of chapters from physicians and surgeons on the problem of transient ischaemic attacks and it illustrates well the present uncertainties surrounding the management of this common and important condition, which so often precedes a major stroke. Although equally well-informed and well-expressed the contributions from physicians and surgeons reflect very different approaches to the problem. Those from physicians tend to be cautious and critical almost to a fault; the value of even long established treatments is called into question, while those of the surgeons pay insufficient attention to the natural history of the condition. Surgical reconstruction in the subclavian/vertebral system for instance is recommended solely on the basis of angiographic abnormality.

Dr Warlow is a leading exponent of the controlled clinical trial, and is currently engaged on a prospective investigation both of medical and surgical treatments in this condition. Perhaps in the second edition of the book he will be able to find a consensus between the divergent views of his contributors.

RW ROSS RUSSELL