on issues with children who present with specific conditions—eg cleft palate, congenital deafness and developmental neurological disorders. The third section is about more language-based disorders, relating to specific language learning disabilities and phonological deficits in reading and spelling disorders. Each chapter is clearly written and presented, with good references throughout. The book is aimed at the speech and language clinician, rather than at neurologists—there is little on the neuropathology of disorders, for example, but it provides a clear exposition of clinical practice and would be a suitable text for any interested professional dealing with paediatric speech and language problems.

In such a good text, it is unfair to single out specific chapters, but that by Howell and McCartney on "Approaches to Remediation" clearly outlines the problems in applying therapy "drills" or exercises to the "real world" and addresses the current issues measuring progress and reporting results. This theme is reiterated by Gibbon and Grunwell, who discuss in more detail the problem of ensuring that skills acquired in the clinical setting are generalised. They suggest factors to avoid this problem. The chapter by Albery and Russell "Cleft Palate and Orofacial Abnormalities" is refreshing in its emphasis on holistic assessment and treatment, rather than focusing on velopharyngeal incompetency in this group of children. The use of case studies in this chapter clearly indicates the importance of differential assessment and treatment.

Overall, the book is a worthy successor to Muriel Morley's text of 1957 and provides a much-needed addition to the literature on speech and language problems in children. Professor Grunwell is to be congratulated on clear indexing and on editing the text in a smooth and organised fashion with little duplication in material. I am sure that this will become a standard text in Speech Therapy undergraduate courses and will be a useful addition to clinicians working in the field of child language.

ALISON PERRY

The Clinical Relevance of Kindling. Edited by T G BOLWIG AND M R TRIMBLE. (Pp 302; Price: £40.00.) Chichester: J Wiley & Sons Ltd, 1989. ISBN 0-471-92449-0

The first published description of kindling was by Goddard in 1967, although the phenomenon had been noticed earlier without recognition of its significance. It is to address this question of significance that this book has been produced. It is the collection of manuscripts from a conference held in Denmark several years ago. As with all such compilations, there is little consistency in either style or in concept; but mixed in with contributions which advance knowledge little (indeed some chapters are thoroughly misleading) are several that are interesting and thought provoking.

The book has a psychiatric bias, and there are chapters concerned with kindling and psychopathology, kindling and behaviour, anxiety, personality, ethanol withdrawal, ECT, manic-depressive illness, addictive behaviour, and panic disorders. Clearly, there are few activities of the human mind (or that of the rat, for that matter) which cannot be attributed to this physiological phen-

omenon. The original descriptions were made in regard to epilepsy, and epilepsy features here too, with chapters on the process of epilepsy, antiepileptic drugs, prognosis, and kindling epilepsy and behaviour.

Just for fun, and not at all obscurantist, there is also a chapter on kindling and drug holidays (by Dr Fog and colleague). A feast of kindling, but what does this all add up to? This is a question to which this reviewer feels unequal. Throughout the book, attempts have been made to extrapolate from indubitable animal-experimental-physiological data to human clinical phenomenon, and yet this seems often only dubiously justified. Some stimulating chapters, some deserve to be re-read, a kindling of interest maybe, but the direct significance of kindling to clinical neurology and psychiatry still seems to me to be unproven.

SD SHORVON

Quantitative imaging: neuroreceptors, neurotransmitters, and enzymes. Edited by: J J FROST AND H N WAGNER, JR. (Pp 199; Price: \$118.00.) 1990, New York, Raven Press. ISBN 0-88167-611-X.

Positron emission tomography is an already established research procedure for specialist investigation in the use of fluoro-deoxyglucose in studies of brain metabolism. However, radioactive tracers (such as carbon 11 and fluorine 18) can also be used to label drugs extending the principles of biochemistry to the study of the human brain. Sometimes neurotransmitters such as fluorodopamine can be used, for example to study presynaptic dopaminergic function in the basal ganglia of patients with Parkinson's disease. However, the widest and most recent application comes from the use of ligands for binding to neurotransmitter receptors.

Thus the main subject of this book is receptor imaging. There are detailed discussions of mathematical modelling, radiochemistry, image processing as well as different neuroreceptor systems available for study. As indicated in the first short chapter, these exciting advances rest on basic neurochemical research emanating from the most important use of autoradiographic imaging applied to experimental and post-mortem brain (chapter 2). Some indication of the complex possibilities of chemical synthesis of tracers (e.g. [¹¹C] diprenorphine) are discussed. The practical and theoretical aspects of PET physics and instrumentation are briefly but lucidly reviewed.

This is the background for the main part of the monograph. Thus, subsequent contributors show how widely the method can be utilised to image location of neuroreceptors in the living human brain. The technology has been applied to D₁ and D₂ dopamine, serotonin, acetylcholine, histamine and opiate receptors. Indeed, changes in regional opiate receptor densities in temporal lobe epilepsy have already been used to select patients for surgery. In diagnosis, abnormalities in neurotransmitter receptor binding may be helpful in understanding the pathophysiology and treatment of diseases such as schizophrenia and depression. A novel possibility discussed in the final chapter is the use of inhibitors of monoamine oxidase (e.g.

labelled pargyline or deprenyl) to monitor brain activity *in vivo* by PET.

This is an attractive, well-written small book which can be recommended to neuroradiologists, neurologists, psychiatrists and other neuroscientists.

ALAN N DAVISON

Steroids in Diseases of the Central Nervous System. Edited by R CAPILDEO. (Pp 306; Price: £35.00.) Chichester: J Wiley & Sons Ltd. 1989. ISBN 0-471-91959-4

To the old adage "Neurologists diagnose rare eponymous diseases they cannot treat", might be added, "or treat with ever higher doses of steroids". The time is ripe for a book devoted to the use of steroids in neurological disease, reviewing the current status of steroid treatment in this area.

This 30 chapter, multi-authored text covers both theoretical and practical aspects of steroid use. There is inevitably unavoidable overlap between chapters and some on the use of steroids in cerebral tumours refer to the same basic trial data, leading to unhelpful repetition. All chapters are admirably brief, well laid out, duly make their point and provide an up to date reference source to early 1989 and the volume is a useful addition to the literature. However, the basic messages are few. Methylprednisolone is undoubtedly the most favoured steroid and less side effects are encountered in alternate day usage. Only in cerebral tumours, cranial arteritis, myasthenia gravis and some cases of polymyositis do steroids have a certain role in therapy and just how uncertain is the evidence that steroids are of value in other conditions is quite clearly shown.

The theoretical promise of the new aminosteroids now under trial in head injuries is fully detailed and the trials of frighteningly high dose steroids in spinal cord injury is discussed. This trial has led to a preliminary report based on accumulating data that recommends general use of steroids in this condition, prior to completion of the trial; although the disadvantages of such doses, especially in the elderly, may have been underestimated at this stage?

The volume undoubtedly fills a gap in the literature and does provide further evidence, if any were needed, as to just how difficult it is to achieve convincing clinical trial evidence of benefit and perhaps does not emphasise sufficiently the well known disadvantages of steroids, particularly in the high-dose schedules now recommended.

JOHN P PATTEN

Parkinson's Disease. Edited by G STERN. (Pp 688; Price £79.00) London, Chapman & Hall Medical, 1990. ISBN 0-412-26220-7.

Gerald Stern enjoys a special interest in the problem of Parkinson's disease and has written extensively on the subject and supported considerable clinical research into its problems. Here, he draws together some 41 contributors and presents us with a comprehensive consideration of many aspects of this particular disease of the basal ganglia.

The book opens with an historical review