taken up in later chapters by Majewski and Barrington and Bleakman and Miller when discussing the regulation of calcium influx and its relationship to receptor mediated secondary messenger systems.

There is increasing evidence that many neurons release more than one neurotransmitter—so-called cotransmission. The notion of neuromodulation in the context of cotransmission is well discussed by Sneddon in this book—namely, that some factors released at the synapse may function more to modify the function of another neurotransmitter rather than have a direct action itself.

The existence of inhibitory presynaptic autoreceptors at the synapse is well established but this simplistic view of synaptic modulation is in need of revision as the number and distribution of both auto- and heteroreceptors on the presynaptic nerve terminal expands. Furthermore the interplay between the two synaptic elements is becoming increasingly important, but sadly no discussion on LTP is to be found in this book; an area that currently is producing many new concepts with diffusible messengers such as nitric oxide and possibly carbon monoxide.

The classic division of the autonomic nervous system into sympathetic and parasympathetic components is now no longer tenable in the light of work demonstrating an interaction in the periphery between noradrenaline and acetylcholine. Furthermore the cholinergic system is now complicated by the fact that there is heterogeneity of nicotinic acetylcholine receptors (at least in the brain), to complement the known diversity of muscarinic receptors.

Finally many factors conventionally thought of as being hormones are increasingly being found to have a neurotransmitter function or at least an ability to modulate neuronal synaptic transmission. Such factors include the corticosteroids and adrenaline, ACTH and angiotensin. The book therefore presents much information that the clinician would find new, and which most preclinical textbooks miss out or gloss over. However, the major difficulty that this book encounters is knowing who it is primarily written for. To the scientist working in this area, most of these data are well established and not especially challenging in content. To the clinician most of it will seem irrelevant, and the clinical slant emphasised in the later chapters does not detract from the fact that this is essentially a book on the modulation of synaptic function in animal systems. To the preclinical medical student there is too much detail without enough breadth and so other books on biophysics and pharmacology will seem more attractive. However, the final year student interested in synaptic pharmacology and physiology will find this book invaluable, as will those students embarking on research in this area. But for the majority of people this book, despite its excellent clear presentation, will remain too scientific and specialist to be of interest.

ROGER BARKER

Attentional Processing. The Brain's Art of Mindfulness. By DAVID LABERGE. (Pp 262; £27.95). Published by Harvard University Press, London 1995. ISBN 0-674-05268-4.

Attention is the most pervasive but the most elusive of all our cognitive abilities. We must

select from the flood of information potentially available to awareness or, in George Eliot's memorable exaggeration, we would "hear the grass grow and the squirrel's heart beat and die of that roar that lies on the other side of silence". Were you aware of the shoe enclosing your left foot until you read this? If the focus of our attention determines our experience, the processes which direct it must be of key importance to the economy of mind and brain.

LaBerge's lucid study helpfully distinguishes the goals, expression, mechanism and control of attention. Its goals range from enhancement of the speed and accuracy of responses to maintaining a state of rapt contemplation (LaBerge remarks glumly that we "find it difficult to frame a justification for this use of attention in computational terms"). It is expressed by amplified signals in one or several brain areas, which can facilitate thoughts and actions as well as perception. Its mechanisms revolve around the superior colliculus and thalamocortical interactions. Its control resides in prefrontal areas, in particular the dorsolateral and ventrolateral prefrontal and anterior cingulate cortices.

The first half of the book is devoted to the experimental psychology of attention, the second to its neurobiology. The early chapters might have benefited from a more systematic account of the relevant experiments, and illustration of the mainly visual tasks might have spoken more clearly than text. But overall the monograph is highly informative and very readable. LaBerge does full justice to the neurobiological, behavioural and subjective complexities of attention.

ADAM ZEMAN

Colour Atlas of Paediatric Neurology. Edited by RICHARD W NEWTON. (Pp 256). Published by Times Mirror International Publishers Ltd, London 1995. ISBN 0-7234-18799.

It seemed odd at first to be asked to review a slender picture book for a neurological journal. Surely such a volume could not admit sufficient detail to appeal to serious paediatric neurologists used to large tomes filled with detail about endless genetic and metabolic abnormalities. But I was pleasantly surprised by the usefulness of this colour atlas. It is compiled by a team of paediatric neurologists, neurosurgeons, geneticists and neuroradiologists all from the Manchester area who have joined forces to produce an excellent book.

It starts with a thoughtful section on talking with families. Paediatric neurology, even more than other paediatric specialties, requires the ability to walk an emotional tightrope by providing factual and honest information whilst being sensitive to the needs of highly anxious parents. The book wisely takes its time before launching into specific disease categories. There is a good early chapter on the child with special needs which focuses on some of the early indicators that a child might be handicapped. We are all too often faced with a profoundly disabled patient for whom no formal diagnosis is ever reached. Early awareness of this situation can help to soften the blow. The "subject" chapters are well written and contain sufficient detail to act as a useful aide mémoire even to the specialist paediatric neurologist. Non-specialists will find the clear systematic approach easy to

negotiate and understand. The book will be invaluable to medical students both for the magnificent collection of illustrations and for the lack of complicating detail.

I only have one or two minor criticisms. The number of typographical errors in the text is unacceptable and in some areas whole paragraphs are either left out or duplicated. There are a few accounts of neuroradiology in which a picture would have been worth a thousand words. But these are small quibbles. Overall this is a welcome book which should appeal to a wide readership. The Manchester team deserve applause.

REBECCA AYLWARD

Trigeminal Neuralgia (MPN 28). By JOANNA M ZAKRZEWSKA. (Pp 229; £37.50). Published by WB Saunders Company Ltd, London 1995. ISBN 0-7020-1696-9.

There are a number of problems with trigeminal neuralgia. Despite evidence from surgical findings that vascular cross compression may be relevant, the full cause remains obscure. While the symptoms are usually characteristic there are many patients in whom the diagnosis may be difficult. The multiplicity of medications and surgical operations are ample evidence that there is no fully satisfactory treatment. While a fairly frequent condition in neurological practice, trigeminal neuralgia is sufficiently rare for general practitioners to see only a very few cases in a normal career.

This book clearly and succinctly expresses what is known about the condition through the personal experience of the author, whose main interest it is, and through the extensive publications cited, amounting to over seven hundred references. Either of these sources would recommend the book to those who see and treat patients with trigeminal neuralgia, or who have an interest in answering the various questions which remain. For the former there is much sound advice based on personal experience in such matters as the need to inform patients on the choices of treatment through counselling and information leaflets. For the latter there are some intriguing questions to be answered, such as why the condition is much more common on the right side than the left, which seems strange for a condition which some still regard as ideopathic. I highly recommend this book.

ROBIN ILLINGWORTH

Nerve Injuries. Edited by KLINE and HUDSON. (Pp 611; £100). Published by Harcourt Brace, London 1995. ISBN 0-7216-3264-5.

Workers in the field of surgical disorders of the peripheral nerves have been waiting for some time for a comprehensive account of the work of Dr David Kline of New Orleans and Dr Alan Hudson of Toronto. Now at last we have this considerable work from them both, concerned principally with the results of operation, and in particular with the results of operations done at Louisiana State University Medical Center and related hospitals. The authors start with a graceful dedication to the memory of Sir Sydney Sunderland. The text begins with six chapters relevant to the whole field. Then follow 11 chapters arranged topographically, six of them devoted to the brachial plexus and conditions affecting it, including thoracic