

These articles in the basic science section are concise, well written, and obviously reflect high level research efforts.

The clinical section is more variable. Andre Olivier of McGill thoroughly describes the current N.M.I. evaluation and results of patients undergoing temporal lobectomy for uncontrolled complex partial seizures. Perucca and Crema give a first class review of therapeutic monitoring of serum antiepileptic drug levels, a review which any neurologist seeing epileptic patients would find valuable. From contributions of this calibre, this section of the book descends to "Developments of Pharmacotherapy of Epilepsy" by Meinardi, Binnie, Goedhart, and Meijer of Heemstede, Holland who present a wandering disorganized account of the subject.

This is an excellent volume for clinical neurologists-epileptologists who have an interest in the basic science of epilepsy and certainly for those in the basic sciences who wish to keep abreast of developments in their fields relative to epilepsy. The neurologist who sees some epileptic patients will find certain of the clinical contributions of value.

Given the difficulty of bringing out a high quality multi-authored review in a brief period of time, the editors should be commended on this most valuable contribution.

*W.T. Blume,  
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**EPILEPSY: DIAGNOSIS AND MANAGEMENT.** First Edition. Edited by Thomas R. Browne, M.D. and Robert G. Feldman, M.D. Published by Little, Brown and Company, Boston. 376 pages. \$24.

In the preparation of this text, the editors have attempted to include the abundance of new information available over the past decade on the diagnosis and management of epilepsy. They have been entirely successful in meeting this objective and in producing a very readable, well-referenced and comprehensive textbook on epilepsy. Each major seizure type is accorded an individual chapter with definitions and accounts of pathophysiology, clinical and electroencephalographic features, differential diagnosis, management and prognosis. The comprehensive discussions of management include pharmacological principles, use of blood levels, nursing considerations, behavioral methods of seizure control and the effects of epilepsy and anticonvulsants on sexual function and pregnancy. A chapter on surgical management accurately and succinctly summarizes current thinking.

The pharmacology of current anticonvulsants is comprehensively reviewed with a chapter devoted to each drug group nicely organized with numerous headings.

An account of resources available to American epileptic patients will have little application for Canadian readers. The chapter on infantile spasm contains several tabulations which could have been summarized.

Excellent current references are provided with each chapter affording the reader an opportunity to expand information on virtually any aspect of the text.

*Donald R. McLean,  
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**THE ASSESSMENT OF APHASIA & RELATED DISORDERS.** Second Edition. Edited by H. Goodglass and E. Kaplan. Published by Lea & Febiger. 102 pages. Additional materials: A Boston Diagnostic Aphasia Examination booklet, copy bound in the book (32 pages); test stimulus cards (16); the Boston Naming Test (64 pages); Boston Naming Test scoring booklet (8 pages). \$34.50 Canadian.

The new edition of the Assessment of Aphasia and Related Disorders is a substantially revised edition of the 1972 test which has achieved the considerable popularity as the most comprehensive and sophisticated aphasia test to date.

Changes in the actual test procedure include more frequent allowances for discontinuing subtests after repeated failures. The mechanics of writing has been redefined as a new five-point scale. It is now based on the patient's entire written output. The rating scale on the narrative writing has been redesigned to give credit for the information conveyed. Other changes in the test included the visual confrontation naming of body parts being increased and the old body part naming subtest being deleted. The paraphasic errors have been relabelled and more detailed, clinical description is given. There are changes in the Supplementary Language tests, as well as the Supplementary Nonlanguage tests, which reflect some of the work done in the Boston Aphasia Research Center.

The revised score summary sheet was based on a new normative sample of 242 aphasics tested between 1976 and 1982. In edition, the Z-scores were abandoned in favour of percentiles, which alters the classification somewhat. In the final chapter on major aphasic syndromes, sections on global aphasias, mixed nonfluent aphasia and subcortical aphasias are also included. The manual contains interesting information about the test construction and a theoretical framework for aphasia as well.

The Boston Naming Test is a useful addition to the Boston Diagnostic Aphasia Examination, although it has not been standardized to the same extent.

The Boston Aphasia Examination has become an extensively used, well standardized leading aphasia test in North America. There is a considerable body of research carried out using this test. It is lengthy and complicated, and not likely used for screening purposes. This book and the test are recommended to speech pathologists and neurologists with an interest in aphasia. The price is very reasonable.

*A. Kertesz,  
London, Ontario*

**EVOLUTION OF THE NERVOUS SYSTEM.** Second Edition. By Harvey S. Sarnat and Martin G. Netsky. Published by Oxford University Press, New York, 1981. 504 pages. \$36 apx. Cdn.

This volume is a highly interesting, up-to-date survey of comparative neuroanatomy and evolutionary trends extending from protochordates via placoderms, amphibians and reptiles to mammals including *Homo sapiens*. Although the basic concept is that of classical neuroanatomy, the authors have succeeded well in animating the reading by making functional correlations between homologous systems throughout phylogeny. The chapters are also divided into functional systems making it easy

for the reader to follow progressive and regressive development patterns as the species adapt to environmental circumstances.

Reference is sometimes made to human maldevelopmental and pathological conditions, although many phylogenetically traceable entities are not dealt with.

Compared with the first edition of *Evolution of the Nervous System*, this new edition has been extensively revised and up-dated. New concepts derived from neurophysiology, histochemistry, electronmicroscopy and neurochemistry have been incorporated. Of particular interest are the discussions on bioluminescence, thermoregulation, the role of neuromelanin and the development of speech.

The book is well written and referenced and undoubtedly the best on this difficult subject. It makes exciting bedtime reading for any neuroscientist.

*Anders A.F. Sima,  
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**ANIMAL MODELS OF HUMAN BEHAVIOR: CONCEPTUAL, EVOLUTIONARY, AND NEUROBIOLOGICAL PERSPECTIVES.** Edited by Graham Davey. Published by John Wiley and Sons. 371 pages. \$68.95 Cdn.

Mark Twain was of the opinion that God created humans because he was disappointed in the monkey. In this series of papers, anthropologists, biologists, and psychologists examine the issues of whether, why, and how findings from studies of the latter, and their infra-human associates, contribute to the understanding of the structure and function of the former. A single chapter on cognitive theories of animal learning examines the heuristic value and legitimacy of extrapolations in the opposite direction.

The inspiration for this text grew out of a 1980 London symposium on "Extrapolation from animals to man in psychology". The current volume was expanded by the addition of contributions from researchers considering the problem of interspecific comparisons from the perspective of evolutionary biology, thereby complementing, or challenging, the traditional approach of comparative psychology.

In addition to its scholarly appeal, Professor Davey's book takes on added currency as the recurrent debate over the morality of animal experimentation again heats up.

The text is in three sections, each with an introduction by the editor. Section I, with the exception of a curious initial chapter on "linguistic phenomenology", comprises articles on the

historical development and conceptual status of behaviorism and its rivals as models of human and animal behavior. The contributions are well conceived and serve to illustrate how thoroughly behavioral models have informed basic research on human and infrahuman function even among those who may not espouse all of the philosophical trappings of radical behaviorism.

Section II presents a separate approach to the investigation of structure and function from that adopted by the comparative psychologist, specifically the perspective of evolutionary biology. It is a teleological perspective which addresses the issues of what function does such-and-such a behavior serve and how does behavior increase an organism's inclusive fitness, that is, its reproductive success. The rallying cry of the proponents of this approach is that no theory of behavior which is inconsistent with the findings of evolutionary biology can long endure. Although this is an eminently sensible premise, the comparative psychologist may feel ill at ease with the construction of elaborate theoretical edifices on narrow empirical bases, as suggested in Barkow's chapter on "Begged questions in behavior and evolution".

Section III has the clearest direct relevance to the interests of the neuroscientist in presenting a number of papers on interspecific brain-behavior analyses and the status of particular models of psychopathology. This section presents a well-balanced view of both the problems and the possibilities attendant upon such modeling. A fascinating chapter by Carroll and O'Callaghan on psychosurgery illustrates how the cavalier extrapolation of findings from studies of animal behavior to human behavior on the basis of superficial similarity of the two domains and through the uniquely human trait of seeing what one wants to see may have exacted a high cost in human function.

This is an interesting work and, within the limits imposed by a multi-author endeavor, a well written one. It has the further advantage of being largely free of hectoring and polemic. The chief problem it faces is in finding its audience, a problem not mitigated by the text's costs. Neither the basic scientist searching for a comprehensive review of a particular research domain nor the clinician seeking information of direct relevance to practice will find it in this text. Nevertheless, it does present an up-to-date conceptual analysis of both the possibilities and the pitfalls of extrapolation from animal to human behavior. Undoubtedly, Mark Twain would have approved.

*Michael C. King,  
Calgary, Alberta*

## Books Received

**A GUIDE TO NEUROLOGICAL AND NEUROSURGICAL NURSING, 1983.** Edited by Mariah Snyder. Published by John Wiley & Sons, New York. 613 pages. \$34.00 Cdn. approx.

**ANIMAL MODELS OF HUMAN BEHAVIOR.** Edited by Graham Davey. Published by John Wiley & Sons, New York. 371 pages. \$62 Cdn. approx.

**ATLAS OF HUMAN CROSS-SECTIONAL ANATOMY, 1984.** By Donald R. Cahill and Matthew J. Orland. Published by Lea and Febiger. 139 pages. \$37 Cdn.

**AUTONOMIC GANGLIA, 1983.** Edited by Lars-Gosta Elfvin. Published by John Wiley & Sons, New York. 527 pages. \$65 Cdn. approx.

**CLINICAL NEURO-OTOLOGY (Clinical Neurology and Neurosurgery monographs, Volume 4)** By Peter Rudge. Published by Churchill-Livingstone, Academic Press. 341 pages. \$69.50 Cdn.

**COGNITIVE PROCESSING IN THE RIGHT HEMISPHERE, 1983.** Edited by Ellen Perelman. Published by Academic Press Inc. 257 pages. \$43.75 Cdn. approx.