Unquestionably, we are in the midst of an unparalleled explosion of information in cognitive neuroscience, extending from knowledge of the molecular basis of learning, to new treatments for Alzheimer’s Disease, to a new functional neuroanatomy based on PET activation studies of normal subjects. It is no longer quite clear what portion of this data explosion ought to be distilled into a book written for clinical neuropsychologists and behavioral neurologists. This is the second edition of Dr. Mihai Botez’s popular clinical text, in which he deals reasonably successfully with this difficult question of subject matter. Drawing on thirty years’ work in behavioral neurology at the Université de Montréal, Dr. Botez has brought together experts from North America, England, and France to produce a dense text which should satisfy the clinical needs of most students of neuropsychology.

Dr. Botez’s book begins with a historical introduction to the issues of localization of cognitive function, as well as a clear briefing on the anatomy of cognition. Six chapters then deal with various methods of investigation now active in neuropsychology – the neuropsychological evaluation, information processing systems and their investigation with reaction time measures, electrophysiology (especially evoked potentials), brain imaging with CT, MRI, SPECT, and PET, and neurochemical indices of behavior. Further chapters deal with the traditional domains of neuropsychology. Localized syndromes are discussed in terms of frontal, parietal, temporal, occipital regions, along with syndromes ascribable to basal ganglia, thalamic, and cerebellar disease. Issues of functional asymmetry of the brain and callosal function are also dealt with in separate chapters. The next section deals with the “grand syndromes” in clinical neuropsychology and behavioral neurology – amnesia, apraxia, agnosia, aphasia, and alexia. Next, chapters deal with attentional impairments from Attention Deficit Disorder and head trauma, along with a set of chapters on normal aging and the various dementias.

This is a thoughtful and well-prepared book which should be on the bookshelf of anybody interested in disorders of cognition who is fluent in French. The enormous complexity of coordinating 55 experts in producing a book of uniform high quality is testament to the dedication of Dr. Botez to the field. It is a pleasure to read Dr. Botez’s chapter on the motor and non-motor role of the cerebellum; 27 years after he first claimed a role for the cerebellum in cognition, and 13 years after his first clear data on the subject, the rest of the cognitive neuroscience community has swung over to this view in the wake of undeniable imaging and lesion data. Dr. Botez’s contribution in this area is, with hindsight, undeniable.

This is a book which is enviable in its breadth. Dr. Botez has included very readable chapters covering the neuropsychology of Sleep Apnea Syndrome, epilepsy, and the amusias. There are chapters dealing in detail with emotions and behavior, as well as hallucinations and illusions. Each chapter is densely written – the aphasia chapter by Drs. Verstichel and Cambier, for instance, covers most of the material included in recent books on the subject!

In contrast, there are certain areas where one wishes there were fewer authors and more cohesion, or else fewer chapters and more detail. None of the “grand syndromes” chapters adequately incorporate recent discoveries from brain imaging studies, for instance. Discussion of such functional studies is either absent (in the case of reading) or else summarized in two pages in a chapter on PET earlier on.

This book suffers from gaps, to be sure; given the knowledge explosion, there is no choice but to condense and omit. Some of the gaps are somewhat surprising. Behavioral neurology is currently being rapidly transformed from an arcane discipline concerned with descriptions of interesting but untreatable cognitive syndromes, to a neurological subspecialty with legitimate concerns about accurate diagnosis and evidence-based evaluation of alternatives in treatment. The reader hoping to gain expertise in this growing medical side of behavioral neurology will be frustrated by Botez’s book. Here the reader will find the clinical evaluation of Normal Pressure Hydrocephalus discussed in half a page, with another half page devoted to all aspects of its treatment. The growing focus on the “non-Alzheimer’s Disease degenerative dementias” – Pick’s Disease, Lewy Body Dementia, Primary Progressive Aphasia – receives all of less than three pages out of 667. All aspects of the treatment of Alzheimer’s Disease are covered in three pages.

On the other hand, there are numerous “gems” which are surprisingly concise and illuminating. Three chapters deal with recovery from cognitive disability in all of its aspects. Barbara Wilson has written an excellent chapter on Cognitive Rehabilitation, which is perhaps the best summary of the field one can find. The chapter on Legal aspects of neuropsychological evaluation provides a unique overview of the complex issues involved in neuropsychology “expertise” evaluations, which are a growing concern in the field. Denis Phaneuf and Thérèse Botez-Marquard have written an excellent summary chapter on Chronic Fatigue Syndrome which is the first I have seen in a Behavioral Neurology text (but I doubt it will be the last!). As these patients become more common (or at least the diagnosis becomes more common), familiarity with this syndrome will become a necessary part of neurology training.

I would recommend this book to anyone interested in the details of behavioral neurology and cognitive syndromes. It will remain the standard French reference book on the subject for years to come.

Howard Cherikow
Montreal, Quebec

CENTRAL NERVOUS SYSTEM INFECTIOUS DISEASES AND THERAPY. 1997. Edited by Karen L. Roos. Published by Marcel Dekker. 784 pages. $C254.00

In the current era of emerging infectious diseases, infections of the central nervous system (CNS) and associated complications represent some of the most devastating consequences of the new epidemics. The prime example is the AIDS pandemic in which 80% of people infected with human immunodeficiency virus type-1 (HIV-1) experience some form of neurological illness during the course of infection. At the same time, there has been a resurgence of previously recognized CNS infections including tuberculosis and malaria. In addition, improved survival following transplantation or treatment of malignancies has increased the number of patients who are susceptible to CNS infections. New technologies including refined neuroimaging and molecular detection methods have made it easier to diagnose and manage patients with infectious CNS diseases. Moreover, with the plethora of new drugs and increasing patterns of resistance to many established drugs, treatment of CNS infections and their complications has become more complex. Thus, a monograph providing both clinical descriptions and treatment of CNS infections is timely.

Central Nervous System Infectious Diseases and Therapy, edited by Karen Roos, is a comprehensive textbook on this subject including sections devoted to pediatric and adult infections. The editor has