

BOOKS RECEIVED

SYSTEMATIC REVIEWS IN PAIN RESEARCH: METHODOLOGY REFINED. 2008. Edited by Henry J. McQuay, Eija Kalso, R. Andrew Moore. Published by IASP Press. 407 pages. C\$70 approx.

SLEEP AND QUALITY OF LIFE IN CLINICAL MEDICINE. 2008. Edited by Joris C. Verster, S.R. Pandi-Perumal, David L. Streiner. Published by Humana Press. 533 pages. C\$189 approx.

NEUROPATHOLOGY REVIEW. SECOND EDITION. 2008. By Richard Prayson. Published by Humana Press. 252 pages. C\$90 approx.

THE GLUTAMATE RECEPTORS. 2008. Edited by Robert W. Gereau IV, Geoffrey T. Swanson. Published by Humana Press. 576 pages. C\$149 approx.

NEW ANIMAL MODELS OF HUMAN NEUROLOGICAL DISEASES. BIOVALLEY MONOGRAPHS. VOLUME 2. 2008. Edited by Philippe Poindron, Pascale Piguet. Published by Karger. 100 pages. C\$109 approx.

THE NEUROBIOLOGY OF LEARNING AND MEMORY. 2008. By Jerry W. Rudy. Published by Sinauer Associates, Inc. 380 pages. C\$75 approx.

SURGERY OF THE PEDIATRIC SPINE. 2008. By Daniel H. Kim, Randal R. Betz, Stephen L. Huhn, Peter O. Newton. Published by Thieme. 876 pages. C\$400 approx.

BOOKS REVIEWED

CONSCIOUSNESS AND COGNITION/FRAGMENTS OF MIND AND BRAIN. 2007. Edited by Henri Cohen, Brigitte Stemmer. Published by Elsevier - Academic Press. 260 pages. Price C\$75.

There are many books on consciousness and on cognition, frequent topics for a wide range of disciplines and a favorite of philosophers and psychologists. The editors of this volume in fact succeeded in selecting scientists with a philosophical bent. This is not a conventional edited book on the topics in the title. The editors asked the contributors to do something out of the ordinary, and aim at the educated layperson as well as the scientist with a readable and witty summary of their area. The book is refreshingly different from the comprehensive reviews one is used to. The eclectic and funny (at times with a facetious self deprecation alternating with promotion) biographies of the authors are supplemented by fascinating pictures, such as Noam Chomsky chumming with Fidel Castro. The articles themselves are more casually written than expected in a scientific volume of reviews, but what seems to have been lost in scholarly exhaustiveness, was gained in readability and entertainment.

The lead article is an interestingly written paleoanthropological review of hominid skulls and artefacts, guessing that language and symbolic representation was a quantum acquisition by the Cro-Magnons, Homo Sapiens, some 50 kiloyears ago. Ian Tattersall does not tell us what they did to the Neanderthals, who disappeared at the same time, but one can imagine. The actual evolution of hominids was longer, perhaps seven million years and there are still a lot of missing links. Most Homospecies just disappeared without a continuum. Michel Corballis follows to promote the idea (and his

book) on the gestural origins of language. He believes that early Homo had fully syntactic gestures two million years ago. Just how gestures turned into speech remains a mystery, but he invokes the usual culprits, bipedalism, freeing the hands to carry and to use tools and the appearance of the FOXP2 or the "speech gene" estimated about 100 kyrs ago (this estimate is only twice as much as the one just a few pages before, but why quibble about a mere 50.0000 years?). I was told as a child it was rude to gesticulate and point and the next species may be called Homo electronicus, as textmessages replace speech, so we are evolving further.

Birds of a feather flock together, but do they have a theory of mind? It seems that they do and they do it without frontal lobes. We suspect, that crows (from classical storytellers such as Aesop to medieval Kings of Hungary who chose the raven as their heraldic symbol) and parrots have some aspects of intelligence. Songbirds and parrots even communicate, but how are they doing it with a birdbrain? According to Peter Snyder, with the development of a lateralized hyperstriatum in right footed birds on the left brain! The star pupil of avian cognition is Alex the African grey parrot who can associate sounds with meaning, even perform commands and have conceptual reasoning and abstraction. Interestingly Snyder comes to the defense of anthropomorphism in the interpretation of animal behaviour. So far the volume covers the same territory as Kristine Keneally's recent book "The First Word" among others. Then it becomes more eclectic, including self-evolving robots through modification of artificial genes, thought translation devices and similar topics surpassing even science fiction, alternating with fascinating trivia such as the cerebral dominance of holding infants

and small dogs, setting Vladimir Putin as an example. Then it is back to Darwinism with the rather obscure title “Evolutionary Setups for Off-Line Planning of Coherent Stages” and a treatise by William Calvin which explains the title. Perhaps “think before you throw” would cover it more concisely. Creativity is clearly and instructively analyzed by the philosophical paper of Steven Harnad. Pasteur’s dictum of “chance favours the prepared mind” could be modified: chance favours the prepared open mind.

Eran Zaidel and Jonas Kaplan invite you to participate in their “flashy” web-based experiments on callosal interhemispheric transfer, investigating alexithymia (the inability to express emotions by patients with callosal or right hemispheric damage). Ray Gibbs cleverly poses the age old mind-body question in a dramatic form of a conversation between a student and a prof. He takes you (and Molly the student) from mirror neurons to metaphors. Sid Segalowitz leads us onto the dangerous path of reductionistic neuroscience and determinism but makes a valiant effort to rescue free will. J. Panksepp tells us that he is ‘wed to the idea perhaps beyond reason that affect is the central compass of life well lived’. Appletree Rodden’s chapter on humor seriously lights up the whole brain (wait till you read his bio-sketch) and McCormick follows Hans Selye into the well trod field of the neuroendocrinology of stress. I liked the smell of gasoline when I was a kid, so I read with sympathy mixed with horror the chapter on petrol sniffing, sorcery and aboriginals. The best is left to the last: Noam Chomsky, answering questions posed to him by contributors to the book. The Olympian answers are complex and obscure and at times a surprising “I don’t know”. Regardless of Chomsky’s politics, or quite possibly because of it, when he speaks about language, people listen.

Each chapter is prefaced by the editors in a paragraph of a few enticing sentences. I read these after reviewing the book, so I could not be accused of lifting descriptive elements and bypassing the content. The book seems to be aimed at the general neuroscience audience without requiring any specialized knowledge. It is uniquely posed between a technical and a popular science volume and is a highly readable, entertaining and instructive one. Henri Cohen and Brigitte Stemmer, along with their contributors must be congratulated in accomplishing their aim.

*Andrew Kertsz
London, Ontario, Canada*

PROGRESS IN EPILEPTIC DISORDERS. FROM FIRST UNPROVOKED SEIZURE TO NEWLY DIAGNOSED EPILEPSY. 2007. By Philippe Ryvlin, Ettore Beghi, Peter Camfield, Dale Hesdorffer. Published by John Libby Eurotext. 220 pages. Price C\$115.

This book is a result of the participation of international experts in a workshop that took place in March, 2007. The participants were primarily from European and U.S. centres. Only one chapter is by Canadian epileptologists.

The book is divided into six sections. It is a comprehensive review of what is currently known about the first unprovoked seizure and its relation to newly diagnosed epilepsy and natural evolution.

A treatment approach to first unprovoked seizures is discussed. The authors address what types of trials and studies are needed for early treatment of epilepsy.

Although most of the chapters relate to a first unprovoked seizure, there are some chapters that are of interest, but which do not directly relate to an isolated epileptic event. There is a chapter on complex febrile seizures in epilepsy. There is a chapter on the comorbidity of epilepsy and neuropsychiatric disorders. There is a chapter on epileptic seizures and dysimmune syndromes. This chapter is of interest and is covered in 37 pages. There is a chapter on refractory epilepsy and surgical treatment.

The book is generally easy to read. It can be read in several hours. The style varies from chapter to chapter and is related to the contribution by authors from multiple countries.

The book is up-to-date and provides excellent reference material as recent as 2007. It provides an updated review on epidemiological data, review of the natural evolution of single unprovoked seizures, risk factors for the development of epilepsy and the potential for comorbid conditions. Therapeutic issues are reviewed.

The book is a clinical review. There are no basic chapters. It would have been useful to include a chapter on the pathophysiological changes of single seizures in experimental models of epilepsy. I would also have been interested in a review of a single seizure in the elderly population.

In summary, this is a readable book with concise information, which will be of interest to physicians treating children and adults with seizure disorders. It serves as an updated summary of the currently available information on an important clinical issue. It provides excellent reference material. The book is worth the cost.

*Joseph Bruni
Toronto, Ontario, Canada*

LOCKED IN. 2007. By Mike Esposito. Published by Durban House. 430 pages. Price C\$16.

So you’re attending a conference, perhaps the CNSF Congress, and you have to fly several hours to get there. You could do worse than to bring along a copy of Mike Esposito’s first novel to help bide those often dreary airplane hours. Esposito’s a neuroradiologist in Tampa and he’s written a Grishamesque thriller about neuroradiology. The book opens with Dr. John Armstrong performing a radiological feat of derring-do reminiscent of the pre-credits scene of a James Bond movie – an exciting sequence that has little to do with the rest of the story.

A group of physicians concocts a plan to falsify patient results in order to get huge kickbacks from the malpractice lawyer who’s part of their crooked team. At the center of it all is Dr. Armstrong, a neuroradiologist who’s willing to do just about anything for money. The concept is an interesting and alarming one. A weakness of the novel is Armstrong’s complete lack of any redeeming or endearing characteristics. We’re not witnessing the gradual corruption of a guy who starts out basically decent but the continuing adventures of a man who’s already a scoundrel when the book begins. In fact, pretty well every physician in the story is frighteningly unethical. Even the