

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