individual opinions, with which the editors do not always concur: the well known divergence of opinion on the value of the various surgical techniques to treat tremor, spasmodic torticollis and dystonia illustrate the enthusiasm of the neurosurgeon and the modulated scepticism of the editors.

I found this a most valuable text, controversial, up to date, and in most sections balanced and authoritative. The rather obsessively long classifications (for instance one and a half text pages on myoclonus; 18 alleged patterns of drug related fluctuations and dyskinesia) tell us that their present basis is insecure and suggest that in time they will disappear as new information brings with it simplicity. Remember the anatomical nightmares of basal ganglia pathways we had to learn in the days of stereotactic thalamotomy? If the chapters on dopamine receptors and tardive dyskinesia were too brief or too specialised to be of general help to neurologists, this is a minor criticism.

I would venture the view that this is the outstanding work on Parkinsonism and movement disorders written to-date. The editors point out that it is not totally comprehensive, but as a statement of the position in the Parkinson game, some 15 years after Cotzias's paper it is a first class compilation which I would warmly commend to all neurological departments.

JMS PEARCE

The Human Brain and Its Universe. Volume 1—The World of Natural Sciences and Its Phenomenology. By H Kuhlenbeck. Edited by J Gerlach. (Pp 281; SFr 165, DM 198, \$99.00.) Basel: S Karger AG, 1982.

The Human Brain and Its Universe by the anatomist Kuhlenbeck is a book on philosophy and not on anatomy. Kuhlenbeck possesses a vast amount of learning and a deep understanding of mathematics, physics and philosophy. The main subject matter is consciousness and the data that our consciousness gives us. Of those who have thought about these questions—and all philosophers and many neurologists and psychologists have done so—Schopenhauer is one who is commonly neglected in English-speaking countries. Kuhlenbeck here speaks up for this philosopher. He clarifies his concept by showing that Schopenhauer's use of the word "will" was a mistake. Schopenhauer used "will" to mean Kant's Ding an sich, for matter regardless of any human being

apprehending it and of any human way of apprehending it.

It is unfortunate that no English-speaking editor has helped Kuhlenbeck with his English, which is a mixture of a word-for-word translation of German and the long-winded Teutonic writing that the Americans have acquired from earlier German science and later refugees from Germany. But it is relieved every now and then by acid remarks about the author's well-known contemporaries.

PETER W NATHAN

The Human Brain and Its Universe Volume 2—The Brain and Its Mind. By H Kuhlenbeck. Edited by J Gerlach. (Pp 374; SFr 165, DM 198, \$99.00.) Basel: S Karger AG, 1982.

The two volumes, The World of Natural Sciences and Its Phenomenology and The Brain and Its Mind, overlap to such an extent that both should not have been published. Whole sentences and identical lengthy quotations appear in both of them. This book needed strict editing but clearly it got none.

The main subject of the book, as of the previous volume, is one that neurologists usually disregard: "How can material, ie physical spacetime events" produce mentation, or, "how do physical events become transmuted into consciousness, or how does matter give rise to mind?" An example is quoted by Kuhlenbeck: Ziehen wrote: "There is no pathway from the visual cortical cells that leads to the sensation of red." But Kuhlenbeck's style of writing is such that it is difficult to get his message.

Like Vol. 1, the book is mostly on philosophy; in addition, there are thoughts and facts from everywhere and anywhere, relevant and irrelevant. One cannot conceive for whom the book was written. The parts of the book on neurology are at very different levels. The reader is informed what a synapse is and told about dendrites and neurons. At the same time, he is supposed to know what "the brain stem's tegmentum" is, whereabouts the central tegmental tract is, to understand gating mechanisms, and to know what neuropeptides are. He is told that "medullated neurites ('white fibers') are coated by a laminated lipid wrapping representing the myelin sheath produced by oligodendroglia respectively by Schwann cells"; and at the same time he is presumed to understand "Cerebral grisea are not only influenced by

hormones but also to some extent produce hormones".

Kuhlenbeck makes no special contributions to the elucidation of this problem that comes from neurology and that could only have been contributed by a distinguished neuroanatomist. And so the reader loses heart as he ploughs through 346 pages of assertions on every subject in the world, occultism, spiritualism, Swedenborg, Buddhism, Berger's views on the encephalogram and philosophy, cerebral localisation, and Marx and Engels.

PETER W NATHAN

Notice

The 11th Annual Meeting of the International Neuropsychological Society will be held 2-5 February, 1983 in Mexico City, Mexico. For information write to: Dr Manfred Meier, Arrangements Coordinator, Box 390 Mayo, University of Minnesota Medical School, Minneapolis, MN 55455, USA.

Corrections

The authors of the paper "Physiological basis for enduring vestibular symptoms" (*Journal of Neurology, Neurosurgery and Psychiatry* 1972;45:126-130) were P Rudge and BR Chambers.

Matters Arising

The letter from Dr Edvard Ernst (*Journal of Neurology, Neurosurgery and Psychiatry* 1982;45:185) should have been entitled "Rheological and fibrinolytic findings in multiple sclerosis".