

faster rates of presentation severely concussed patients show increasing numbers of errors compared with the mildly concussed, and both groups do significantly worse than controls. A series of further experiments using choice reaction time, word lists, repeated partially obscured messages, masking noise and distraction, provides good evidence that the deficit is due to an increase in 'central processing time' or, using Broadbent's term, 'channel capacity'.

Together with other work from the same department (1), the present study elegantly establishes the validity of the concussed patients' claims of inability to concentrate, and provides a useful tool for their clinical management. It enables us to understand how patients who seem otherwise well may indeed not be able to work effectively unless suitable adjustment is made in the tasks or work expected of them. A possible explanation for the amnesia of the early post-traumatic period also emerges. It is that capacity is reduced below the level required to process information and simultaneously transmit it to memory storage.

Clinicians will be grateful to the authors of this written book, and experimental psychologists working on memory will find much of interest in it to discuss and evaluate. As always when a piece of work appears which is so simple and elegant, one is tempted to ask why it was not done before. As usual, the answer is probably that to achieve simplicity and directness in solving both clinical and experimental problems in psychology is far harder than it appears on the surface.

H. MERSKEY

#### REFERENCE

1. GRONWALL, D. & WRIGHTSON, P. (1974) Delayed recovery of intellectual function after minor head injury. *Lancet*, 14 Sept., *iii*, 605-9.

**Dynamic Neuroscience: Its Application to Brain Disorders.** By GEORGE O. WATTS. New York: Harper and Row. 1975. Pp viii+429. Index 22 pp. Price \$17.95.

It is all too easy in psychiatry, as in other subjects, to develop an inflexibility of attitude which makes it difficult to accept fundamentally new concepts. The brain is divided arbitrarily into 122 regions and tracts, the limbic system alone being composed of 53 regions linked by 35 tracts. It is the use of computer-adapted terminology, however, that is difficult to embrace. Since, in the author's view, schizophrenia suggests 'a split brain', the term malphrenia is preferred—to imply 'a sick brain'. Diagnostic methods for investigating schizophrenia include an oxygen encephalogram, EEG and depth electrodes, and the treatments discussed for schizophrenia are controlled

fasting, diet, multivitamin therapy and a modest reference to chemotherapy.

This book contains much that is of value to those interested in biological mechanisms, but it lacks balance and there are too many unsupported statements. There are some surprising comments as well about ECT: 'Body movements during the modified convulsion resemble those assumed during orgasm; indeed, electrical stimulation of sexual pleasure centers may be one of the most beneficial effects of ECT'.

I wish I could persuade my patients to believe that!

DESMOND KELLY

**Atlas of Neuropathology.** 2nd Edition. By NATHAN MALAMUD and ASAO HIRANO. University of California Press. 1974. Pp vii+455. Index 6 pp. Price £23.35.

This is a large, comprehensive atlas of neuropathology. The first edition was prepared by Nathan Malamud almost thirty years ago and illustrated well all the commoner and, to an exceptional extent, the rarer abnormalities of the human nervous system. The value of the present edition is greatly enhanced by the inclusion of a section by Asao Hirano. This author has illustrated and summarized, with the aid of clear-cut diagrams, the main features of the ultrastructure of normal and abnormal nervous tissue.

The standard of macroscopic photography is generally high; at times the histological pictures are less satisfactory. The electron microscopy is uniformly outstanding, and some of the full-page black-and-white illustrations of neuronal ultrastructure are curiously fascinating in their own right.

The book is well suited for those wishing to look up quickly the essential features of most known conditions; it will also be invaluable for teaching and as a reference book for those working either in general pathology or in neuropathology. Neither the spinal cord nor the peripheral nerves are at all fully represented; muscle disease is not mentioned. These limitations will be more important to some readers than to others, but the book as a whole is strongly recommended as one of the most widely ranging atlases of neuropathology now available.

J. A. N. CORSELLIS

#### SEASON OF BIRTH AND SCHIZOPHRENIA

**Season of Birth. A Study of Schizophrenia and Other Mental Disorders.** By PER DALÉN. Amsterdam, Oxford: North-Holland Publishing Company. 1975. Pp 164. Price \$12.50.

Tramer's unlikely finding, in 1929, that mental hospital patients in a Swiss canton had been born