problems in addition to the signs of the Wernicke-Korsakoff syndrome. Many of the patients were closely examined over long periods and the authors make the point that repeated examinations for as long as ten years in some instances allowed them to describe the natural history of the syndrome, and this they do in their third chapter.

Again the description of the pathological findings is precise and comprehensive and the authors stress the periventricular distribution of the lesions and their bilateral symmetry. The authors consider specifically the neuropathological substrate on which are based the defective memory, ocular motor signs, the ataxia, the global confusional state and the occasional disturbance of olfactory and gustatory function. They argue a unity between Wernicke's disease and Korsakoff's psychosis and discuss the relationship between these two and alcoholic cerebellar degeneration, central pontine myelinolysis and other myelinolytic syndromes and interestingly discuss the problem of "alcoholic dementia" concluding that the nosological status of alcoholic dementia is by no means proved. They believe the majority of so-called "alcoholic dementia" patients have suffered Wernicke-Korsakoff syndrome with lack of recognition of the clinical features during life. The post-mortem findings together with various traumatic lesions of the nervous system, related or unrelated to alcoholism, confuse the picture. They conclude that there is no need to invoke a separate entity due to the toxic effect of alcohol on the brain. Typically they write that despite their comprehensive and authoritative monograph "there is still a great need for careful pathological examination of cases that have received thorough clinical and psychological examination".

This volume considerably enhances the already high standard of the Contemporary Neurology series.

**Medical Therapy of Acute Stroke.** Edited by Mark Fisher. (Pp 294; $69.75 US and Canada, $83.50 all other Countries.) Marcel Dekker Press, 1989.

This is a compendium of 15 chapters on a number of different subjects by a series of contributing authors. How could there be so much to say about the Medical Therapy of Acute Stroke? The answer is simple. Crammed into this smallish volume is not only a discussion of currently accepted practice but in addition it covers the scientific basis for the several therapies which are now attracting the energies of experimenters and clinicians. Single chapters are devoted to hemorrhological measures, antplatelet drugs, fibrinolysis, calcium entry blockers, neuropeptides, barbiturate protection, steroids and antihypertensive agents. The rationale for the use of these is discussed in full and the results of trials in animals and man are reported at length.

There are excellent chapters on anticoagulation, angioplasty and intracerebral hemorrhage. The section on aneurysmal subarachnoid hemorrhage provides special mention. And prefatory to all of this is a lucid discussion of present day knowledge of the basic mechanisms in cerebral ischemia. The whole is of high caliber. Opinions with which one disagrees may be expressed but for the most part divergent views are fairly presented.

Neurologists interested in strokes will find this book a most useful 1989 reference to which they will turn repeatedly for information and instruction.

**Neuropsychology Mental Structure.** Edited by Tim Shallice. (Pp 462; £40.00 h/b, £15.00 p/b.) Cambridge: Cambridge University Press, 1989.

Neuropsychology, as with all aspects of neuroscience, has seen a rapid evolution in recent years. One aspect of that evolution has been the fragmentation of neuropsychology into a number of different disciplines, linked only by a shared interest in the study of the behavioural consequences of brain dysfunction. Tim Shallice's book is devoted to one of these disciplines, cognitive neuropsychology. Workers in this field come from two main sources. First, neuropsychologists who try to understand the processes underlying the disorder cognition following brain dysfunction; second, cognitive psychologists who have wished to test the structure of human cognitive processes in cases where those processes have been disrupted. The synthesis of ideas which result from this dual perspective has made cognitive neuropsychology one of the major fields of behavioural neuroscience. Reflecting this, Tim Shallice has written a scholarly and thought provoking book. The book is divided into four sections, each sufficiently structured to be read as a separate unit. It is in considering them together, however, that the book's real strength lies. Section one serves as an introduction to cognitive neuropsychology which covers the evolution of cognitive psychology and an exposition of the fundamental principles of the approach. In section two the author "fleshes out" the skeleton of theory with examples from five areas where cognitive neuropsychological approach has been widely applied. These are in the study of short-term memory, the peripheral and central dextrals, apraxia and in the study of language. As the author himself acknowledges, no attempt is made to provide a review of all of the relevant evidence. Indeed, each area could serve as a topic for a book in its own right. Rather the section illustrates the value of a cognitive approach to the study of neuropsychological disorder. A central theme throughout the book is a consideration of the potential limitations as well as the strengths of cognitive neuropsychology. In particular there is a detailed consideration of the nature of inference. What exactly can be said about the brain and cognition from the study of patterns of ordered and disordered behaviour? In the section on Inference in Neuropsychology, the book makes a potential contribution to the discipline equal to that of Teuber. Indeed, the author illustrates how even that touch-stone of modern neuropsychology, the double-dissociation, may fail to provide the conclusive tests on which so much contemporary theory is based. For this section alone, the book is essential reading for all neuropsychologists whether they work in the clinical study of single cases or in experimental group studies. All are concerned with drawing inferences from behaviour, and all could benefit from the insights offered by the book. The final section draws together many of the themes which have been developed earlier in the book. It considers whether central processes in cognition are best represented by a single equi-capable system or by a series of modular systems. Once again, the author's approach is to present a theoretical framework, illustrated by a few well chosen examples. The final chapter addresses the issue of consciousness. However, while this chapter has often been a postscript, disconnected from the rest of the text, in the present case it serves to bring to a close the logical and reasoned discussion which runs throughout the book.


Questions relating to the behaviour and cognitive ability of epileptics are a common almost everyday problem for both adult and