

work. This is a book which should be referred to by group therapists, but would be of less general interest to other psychotherapists.

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**The Prefrontal Cortex; Anatomy, Physiology and Neuropsychology of the Frontal Lobe (2nd edn).** By JOAQUIN M. FUSTER. New York: Raven Press. 1989. 255 pp.

This is a second edition of Fuster's well-timed text on the prefrontal cortex, originally published in 1980. Psychiatrists have had an interest in the frontal lobes ever since the classic descriptions of the personality changes that occurred to Phineas Gage after his frontal lobes were destroyed by an iron rod which passed through his skull following an explosion. The sequelae of frontal lobe syndromes has continued to be investigated since that time, and many of the consequences of frontal lobe destruction have direct bearing on psychiatric practice. More recently, the extensive evidence that frontal lobe changes may be seen using modern imaging techniques in such common psychiatric conditions as schizophrenia has re-emphasised and rekindled the psychiatrist's necessity to understand this extensive area of the cerebral cortex.

Those possessing the first edition will want to know the extent to which changes have been made. The majority of these, while having relevance for clinical practice, do not directly bear upon it. Thus, many of the additions have had to do with the neurophysiology and neurochemistry of the frontal areas, much of which is derived from animal investigations. There is thus an additional chapter on neurotransmitters, and that on neurophysiology has expanded by some 40%. The chapter on human studies has been restructured, although there are very few references that date beyond 1980. The 1986 monograph by Stuss & Benson (*The Frontal Lobes*) is quoted liberally here, and there is a new section on imaging studies, which derives largely from the studies of cerebral blood flow, especially with PET technology. The author supports the data suggesting hypofrontality in schizophrenia, and is impressed by the increased metabolic rates noted in orbital prefrontal areas of obsessive-compulsive patients.

Like others who have tackled the issue of the frontal lobes, Fuster has his own theory of the function of the prefrontal areas. He discusses the principle of the insoluble union of perception and movement, based on a neural hierarchy which possesses circular connective patterns forming the basis of the perception-action cycle of cognition. It is central to his thesis that the prefrontal cortex is critical in the temporal structuring of behaviour, co-ordinating in particular provisional

short-term memory, anticipatory preparation, and control of interference of behaviour by suppression of external and internal disruptive influences.

For those who do not possess the first edition of this book, the second is refreshingly easy to read, and provides much valuable insight into our experimental knowledge of the prefrontal cortex. It is perhaps less clearly clinical than the monograph by Stuss & Benson, but can be viewed as complementary to it.

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**The Schizophrenias.** Edited by FREDERIC FLACH. London: W. W. Norton. 1989. 233 pp. £20.95.

The aim of this multi-author book is to update the reader on a wide range of issues. Its title is a declaration of the contributors' allegiance to the concept of schizophrenia as a group of heterogeneous disorders. Appropriately, the first chapter is by Manfred Bleuler, who gives a lucid distillation of a lifetime of research and careful observations of the course and outcome of schizophrenia, with brief discussions of the criteria of recovery and the changes in prognosis in recent decades. The chapter is a masterpiece.

Andreasen reviews the historical development of the concept of schizophrenia, with Kraepelin as the starting point, and she raises some of the dilemmas in establishing a system of subtyping. A summary of her 1982 operational definitions is given. There are two excellent chapters, by Patterson and Spohn, on the contributions of neurosciences to the understanding of psychophysiology. Their review of the methodological advances in this complex research field attempts to link up-to-date findings with directions in the subclassification of schizophrenia. In another chapter, Linn endorses the view that supportive psychotherapy, with emphasis on relieving environmental stresses and encouraging the acceptance of realistic goals, has an important role in treatment. Information on maintenance medication and the issues of dosage, discontinuance, and relapse rates are reviewed by Linden *et al.* The development of the concept of expressed emotion and its application to studies of family interventions are summarised in a clear review by Leff. Social skills training aimed at improving interpersonal relationships and promoting community adjustment is described by Falloon.

Most of the papers emphasise a holistic approach to the understanding and management of schizophrenia, and, as review articles, they are of a high standard. However, even allowing for the long gestation period preceding publication, some of the information is dated and few references go beyond the early 1980s.