

Book reviews

MIND, BRAIN AND ADAPTATION IN THE NINETEENTH CENTURY.

CEREBRAL LOCALIZATION AND ITS BIOLOGICAL CONTEXT FROM GALL TO FERRIER By Robert M. Young. (Pp. xiv + 278; 28s.) Clarendon Press: Oxford. 1970.

There is currently a growing convergence of interest between the neurologist and the psychologist which centres largely on what might be called the 'higher' functions of the brain. The former is moving beyond such sketchy consideration of them as might contribute to the localization of a lesion; the latter is becoming more realistically involved with the neural basis of the functions he traditionally studies. The novelty of this *rapprochement* is more apparent than real. Before the turn of the century many neurologists took their psychology—for what it was worth—very seriously, while psychological treatises paid more than lip-service to what was then known of the brain. The parting of the ways was due perhaps less to the impact of Freud than, paradoxically, the behaviourist attempt to objectivize and render nominally physiological the method and theories of psychology. The net result has been that psychologists and neurologists alike are now hampered by lack of appreciation of their predecessors' interactions and their relationship to the biological advances of the late nineteenth century.

Dr. Young in this fascinating and in some respects notable book thus serves not only those with a taste for history but also anyone casting about for fresh starting points for brain research. (To give but one instance, one of the most marked failures of contemporary psychology is its continued evasion of the issue of voluntary *versus* involuntary action. Even cursory acquaintance with the writings of Hughlings Jackson and others of his time cannot fail to suggest fresh thoughts about this.) Dr. Young deploys a wealth of carefully assembled erudition and a quantity of aptly chosen significant detail in tracing the development of views about the functions of the cerebral hemispheres and their parts throughout the period he considers. He does not pretend to cover in equal detail the whole picture of nineteenth century thinking: much, for instance, went on in Europe, and in particular in Germany, to which he makes but sparse reference. Rather his approach is thematic and two features stand out in particular. The first is the story of the multifarious effects of the doctrines of Gall on neurological concepts and research—as opposed to the schematized versions of phrenology popularized by such writers as George Combe. The second emphasis centres upon John Hughlings Jackson, especially, on the one hand, his surprising—and to his readers obfuscating—dependence on the doctrines of Herbert Spencer, and on the other the more fruitful of his influences on his colleagues at the National Hospital, particularly David Ferrier. Between these two major phases there is a curious link in the fact that Spencer, by training an engineer, embarked on his philosophical career a convinced phrenologist!

Dr. Young has uncovered and laid out afresh much of the fascinating history of nineteenth century thinking

about mind and brain. The complexity of the intellectual milieu of the period, in which figures as major as Darwin, Huxley, Jackson and Ferrier intermingled with lesser but not insignificant characters like Edward Carpenter and George Henry Lewes, has for too long been subsumed into conveniently pre-digested, often misleading and infertile textbook stereotypes. Its reappraisal, with which Dr. Young has made so stimulating a beginning, could prove vitalizing to neurology and psychology alike.

R. C. OLDFIELD

RECENT ADVANCES IN NEUROLOGY Edited by Fred Plum.

(Pp ix + 254; illustrated; 60s.) Contemporary Neurology Series, Blackwell Scientific Publications: Oxford. 1969.

Most books on 'recent advances' attempt to cover a wide field in summary form as a convenient source of references for the specialist and condensed information for the generalist. This book adopts a different approach. The editor has selected four important subjects and given his authors space to write comprehensively. The result is four extremely valuable reviews but they are definitely for the specialist reader. William Landau gives a most interesting account of spasticity and rigidity, concluding with the useful aphorism that spasticity represents an exaggeration of *reactivity* at the segmental level while it is the steady state of *activity level* in motoneurons that is increased in rigidity as a result of supraspinal facilitation.

Richard Johnson and Kenneth Johnson write on slow and chronic virus infections of the nervous system. They are justifiably cautious about extending the concept to chronic 'degenerative' diseases of the nervous system. Menkes and Eviatar provide the best short account of biochemical methods in the diagnosis of neurological disorders which is known to the reviewer. The screening tests for abnormal metabolites in the urine are simple and could be routine in a neurological ward. The extensive bibliography will be appreciated. The last chapter by Shapiro and Ausman reviews the role of chemotherapy of brain tumours. The results of a decade of study are most disappointing but this critical review should establish standards for the assessment of further drugs which are bound to follow.

This is a very worthwhile contribution to the neurologist's bookshelf.

J. A. SIMPSON

CLINICAL NEUROSURGERY CONGRESS OF NEUROLOGICAL SURGEONS VOL. 16. (Pp. 513, £8.) William & Wilkins, Baltimore, 1969: U.K. agents E. & S. Livingstone, Edinburgh.

Volume 16 is a particularly successful member of this series. It records the Proceedings of the Congress held in Toronto in 1968. The 'honoured guest' was Professor Norman Dott who contributes four chapters which bring out the charm of his personality, the depth of his wisdom, and the extent of his contributions to neurological surgery.