

Dr. Walsh's book on the physiology of the nervous system. There are many students of neurology, both undergraduate and postgraduate, who find modern neurophysiology a rather forbidding subject involving a great deal of difficult biophysics. To such readers Dr. Walsh's book can be warmly recommended as giving an excellent picture of the range of enquiry of the neurophysiologist, without burdening the reader with unnecessary detail. At the same time the numerous references to original papers provide a stimulating guide to further reading.

In a book of this sort, which provides only an introduction to a highly complex subject, it would be ungenerous to refer to omissions; the balance of the book reflects Dr. Walsh's personal view of what is important in neurophysiology, and indeed it is this quality which makes the book such an interesting and readable one. It might be suggested, however, that in the next edition the physiology of the basal ganglia should receive more detailed treatment. When the first edition of this book was written, it may have been true that we knew only a few fragmented facts about the basal ganglia, and had no coherent theory of their function; in recent years, however, this situation has been greatly changed by the neurosurgical procedures which are now used for Parkinson's disease, and a new chapter on this subject is clearly required.

R. W. GILLIATT

OEUVRES CHOISIES I AND II By G. Marinesco. (Pp. 589 and 561; illustrated. Each volume Lei. 63.) Bucharest: L'Académie de la République Populaire Roumaine. 1963.

These two volumes of selected works of Georges Marinesco cover papers published from 1895 to 1937. The earlier volume (Volume I) contained papers dating from 1895 to 1923 and Volume II contains papers from 1924 to 1937. Thus in these two volumes we have the whole selected works of this great contributor to modern neurological science. Marinesco, born and educated in Bucharest, began his neurological studies in Paris under Charcot at the Salpêtrière. There he worked with Marie, Babinski, and Raymond; at Frankfurt-am-Main he studied with Weigert. In 1897 he was appointed to the Chair of Clinical Neurology created at Bucharest, which he was to occupy for 41 years, for him a period of intense activity in both research and teaching. It is a pleasure to look through this book and note the landmarks of discovery in neuropathology, neurophysiology and clinical neurology for which this great man was responsible. As a reference source to the period of neurological science spanned by Marinesco's working life these two volumes will be invaluable.

J. TREVOR HUGHES

PAVLOV'S TYPOLOGY Recent Theoretical and Experimental Developments from the Laboratory of B. M. Teplov. Compiled, edited, and translated by J. A. Gray. (Pp. xv + 480; illustrated. 84s.) Oxford: Pergamon Press. 1964.

It is well known that Pavlov in his later years expressed a number of views regarding the different 'types' of nervous system displayed by his experimental dogs and was wont, informally, to extend these conceptions to human tem-

perament and personality and to their disorders. A 'weak' nervous system is one which possesses such a constitutional balance of excitatory and inhibitory tendencies that, with increasing stimulus intensity, the point at which increasing response is replaced by protective inhibition is reached sooner than in the type labelled 'strong'. Studies of human behaviour based upon these ideas have been carried on in the Moscow laboratory of B. M. Teplov since before the last war until the present day, and views current in Soviet scientific circles regarding human personality in both normal and pathological connections cannot be understood without access to this work.

Such success Dr. Gray provides in this volume. Unlike many other efforts to mediate between Russian and western science, this work is marked by outstanding scholarship and admirable clarity of language and concept in the English rendering. Relevant original sources seem to have been fully and faithfully explored. The greatest care has been taken to avoid misunderstandings which might arise (as so often they have in the past) through conceptual incompatibilities between the two languages. In these respects the results of Dr. Gray's labours ought to be taken as a model for others moved to similar undertakings.

The book falls into three parts. The first is a translation of an extended essay by Professor Teplov which provides the reader with an interpretative summary of Pavlov's theory of the constitution of the nervous system and of the animal experiments on which it was based. Much of the material referred to and elucidated (notably the records of Pavlov's 'Wednesday Discussions') is not available anywhere else in western translation. This sets the stage for Dr. Gray himself, who contributes a lengthy section in which he critically examines and elucidates the enormous literature of research, Western and Soviet, that is relevant to an extension of Pavlov's ideas to human temperament and personality. Finally we are given a selection of papers from Professor Teplov's laboratory relating to the 'dimension of strength of the nervous system in man'.

Anybody who peruses a book such as this, or who has the opportunity of close discussion with Russian colleagues will probably be struck by two reflections. The first is, 'How strangely different, and difficult to feel one's way into, is the framework within which they think.' The second, 'How oddly similar to many of ours are their preoccupations at the level of actual experiment.' The outcome is immensely stimulating and no psychologist or psychiatrist should fail to profit by the well-conceived and admirably constructed window provided by Dr. Gray.

R. C. OLDFIELD

A MODEL OF THE BRAIN By J. Z. Young. (Pp. vii + 348; 111 figures. 35s.) Oxford: Clarendon Press. 1964.

In 1960 Professor J. Z. Young gave the William Withering lectures at the University of Birmingham. In this book he gives the substance of these lectures developed in accordance with his thinking to date upon the mode of action of the brain. He views the human organism as a self-teaching homeostat, the computer for which is the