

mental growth. In fact unless disease or injury affects the central nervous system directly it has no significant relation to intellectual development. Obviously of course, as the author points out, these findings will not diminish our efforts toward the prevention and cure of every type of physical defect where possible; we will merely know not to expect great changes to result in the field of mental growth. This review merely summarizes the results generally negative or only very slightly positive which are found when an attempt is made to find a correlation between physique and intellect. Numerous tables which give the original data of the various investigations and which substantiate every point made are included in the book and add greatly to its value.

The chapter on "Physique and Temperament" is concerned with the relation between physique and certain non-intellectual aspects of personality which the author subsumes generally under 'temperament.' We find in this field a great variety of attempts which the author considers critically. Among the physical factors considered are physiognomy, endocrinological factors, types of body structure. These range all the way from pseudo-science to the work of those who are making a serious attempt to develop a science of characterology, among whom Kretschmer is perhaps the best known. Relations between physical factors and temperament, in the author's opinion, may and probably do exist, but many of the notions put forth should be looked upon merely as hypotheses. There is also great danger that data based on the observation of abnormal subjects will be applied in the normal group. That the study of such factors as endocrine secretion is of great importance to any science of human behavior will not be doubted but one can not refrain from quoting the author's apt statement in this connection, "What we need is less endocrinological speculation in psychology and more psychological experimentation in the field of endocrinology."

In conclusion stress must be laid upon the extreme value of this book to the clinical psychologist. It is inevitable that in dealing with individual cases one becomes impressed with relationships which may occur in one case and then looks for such relationships in other cases. There is also a great danger that a mere chance relationship will seem to be a causal one. This book will teach us to be more cautious in such situations. On the other hand, we must not lose sight of the fact that in clinical psychology we are dealing with individual cases, often exceptional cases, and the fact that certain relationships disappear in the statistical treatment of group results, while it throws valuable light on the probability of the relationship, does not entirely preclude it in individual clinical analysis.

MILES MURPHY

*General Psychology for Professional Students.* By A. R. Gilliland, John J. B. Morgan and S. N. Stevens. New York: D. C. Heath and Co. 1930.

The purpose of this work, as stated in its Preface, is "to fill the specific need for a special text for professional students"; the professions mentioned in the first chapter as fields for the application of a knowledge of psychology are law, medicine, education, industry, selling, and advertising. The authors'

attempt "to introduce as much objective material and as little theoretical material as possible" is definitely evidenced by the text, if one understands by "objective" merely that which is not "theoretical," including some subjects ordinarily thought of as subjective. Further, having been written by men holding different points of view, this book escapes the pitfall of neglecting large masses of material considered by reputable psychologists to be valid psychological data.

One's first impulse in looking at a new book is to turn to the table of contents for a quick diagnosis of its "personality." This one covers the field of general psychology: The Nature and purpose of psychology, The Human organism, Innate behavior, Sensory processes, Attention, Perception, Learning, Memory, Thinking, Emotional behavior, Mental alertness, Personality, Social behavior, Personal efficiency and motivation, Sleep, Dreams, and hypnosis, and Mental health.

As is likely in any text designed to be elementary a certain amount of dogmatism results from the necessary simplification. Many psychologists will disagree, for example, with the treatment of learning. However, this is balanced by the care that has been taken to make use of the latest data obtained, whatever the point of view of the investigator. Prominent among the observable influences of the schools are those of behaviorism, Gestalt, and psychoanalysis; it is particularly noticeable that whatever the subject under discussion, its bearing upon the individual as a whole is stressed, the simpler being considered always in the light of the more complex.

This book has two of the cardinal textbook virtues: namely, constant reference to actual experiments, and an adequate number of diagrams that can be understood with a minimum of effort. We should like to mete out special praise to the little section on recognition, which usually suffers from inattention. Finally, as a text for professional students, the present work will amply fulfil its purpose of giving applicable knowledge and suggestive illustration of a specific nature in an interesting manner. It is to be recommended wherever such a text is needed.

FRANCIS W. IRWIN

*Experimental Child Study.* By Florence L. Goodenough and John E. Anderson. New York: The Century Co. (Century Psychology Series). 1931.

This book, while in the same series as the one discussed in the foregoing review, is quite unlike it, which of course is entirely proper. Described by the publishers as the first book of its kind, *Experimental Child Study* contains such a diversity of material that it is likely upon first examination to create an impression of incoherence and lack of unity—an impression of having been "thrown together." Closer examination, however, serves largely to remove this impression. It is intended as a manual for classes of beginning students in experimental child study. The reader who takes up the book to learn something of the experimental findings of work in child study will find very little. It is a manual of directions for child study, not a discussion of experimental results.

The book is divided into three parts. The first part, much the shortest