The function of the brain as connected with the mind is, as M. Bergson has stated in his other books, to inhibit mental activity, screening off all except such portion of it as may be useful from the point of view of the choice and action of the moment. Occasionally this screen falls, the inhibitory mechanism lapses in its functioning, and in dreams, in cases of false recognition, in the various phenomena of trance, and in certain other mental states, we are enabled to discern portions of that abundance of mental life which goes on in addition to that portion connected with the working of the brain.

In the last essay "Brain and Thought," the position is taken that theories of equivalence, besides being untrue to the facts, are further vitiated by a logical error, into which their supporters inevitably fall. Either the notation of idealism, or that of realism, or both may be employed. But whatever is employed must be employed consistently, and the two notations kept separate from one another. This, M. Bergson finds, the supporters of theories of equivalence are unable to do, but they surreptitiously interchange one for the other to avoid the contradictions which inevitably threaten, when one is on the verge of success in applying any theory of equivalence to the problem of brain and mind.

The material of the book is not all new, and with certain brilliant exceptions, M. Bergson has expressed similar ideas in former books, but its value as a criticism of most of the usual attempts to define the relationship of mind to brain is decided. And it will probably be welcomed by those psychologists who may prefer to follow "lines of facts" in such matters, rather than *a priori* methods based upon somewhat threadbare and partially inapplicable metaphysical doctrines.

FOSTER P. BOSWELL

General Psychology. WALTER S. HUNTER. Chicago: University of Chicago, 1919. Pp. xiii + 351.

The writing of elementary text-books of psychology appears still in the experimental stage. Variation in the presentation of material occurs long after the science has settled down systematically, as witness mathematics, but in psychology we have not yet eliminated many of our fundamental difficulties. The methods used, the scope of the subject, and the point of view maintained are still open to variable interpretation. Considerable headway

has been made in the matter of agreeing to definitions and concepts, a progress that in view of the divergent traditional training of representative psychologists is in many respects astonishing, but much is still to be hoped for in other directions. There is no better way, however, to improve the presentation of the subject than by continued alteration of the presentation. The science, with its previous mistakes and also its present standards well in mind, is, as it were, continually re-writing its manuscript. Altogether the ideal text ought to be scholarly, unbiased, and pedagogically sound.

The author of the text before us is aware of the problem and willing to advance a solution. He believes that "too much stress is placed upon normal adult psychology (pure psychology) in our introductory courses," and therefore offers a volume which presents "a general survey of the science while still stressing the customary side of the subject." Accordingly a little less than a third of the book is devoted to a description of the fields of psychology outside that of the normal human adult and the remainder treats the material usually found in our texts. It would have been an interesting experiment if the author with a bit of daring had expanded the first part of the text considerably and had condensed the field of the normal human adult mind to about a third or even a quarter of the book. There is a distinct need for a book that shall give a survey of the entire general scope of the subject on the order of Angell's *Chapters from Modern Psychology* but with the intensive treatment of the present volume.

The fields covered in Part I are: animal, individual and applied, abnormal, and social and racial. Here again one might take issue with the author for his divisions and for their order, but in so new an undertaking almost any carefully thought out classification is as good as another. The reviewer could not, for example, agree with the author in casting out child psychology and physiological psychology for the reasons advanced. Historically by far the greater amount of material in child psychology that deserves the name of science has been done outside of the field of tests and by no means "all psychology seeks to correlate consciousness and physiological processes and is therefore physiological psychology in intent." Even the three Wundtian volumes practically dropped their physiological orientation after the first volume. The author is right, however, in insisting that logically at least, though not often in practice, genetic and comparative psychologies are points of view rather than separate segments of the whole subject.

It is not unnatural to begin the series with the animal field. The author's chief interest lies presumably there and the topic offers him one of the best opportunities of presenting psychology from the "objective" point of view. This pleases the student and at once postpones the main difficulty in the teaching of psychology. The author has already paid his respects to introspection as a method. In spite of its literal connotation in practice and in current usage it simply means "observation." In the reviewer's mind we should begin to dispense with the long paragraphs on the peculiar nature of introspection and perhaps, as one authority has already done with the term "consciousness," do away with it altogether. In regard to "structuralistic" and "behavioristic" contentions the author maintains an attitude of benevolent neutrality toward "behaviorism" because it "has the advantage" with the later reservation, however, that "it is much too early to decide between the two points of view." The chapter contains a review of well selected experiments on conditioned reflexes and on general and selective responses illustrating the sensory and motor capacities of various forms of animal life. The presentation is vitalized by a rapid fire of pointed questions and by frequent references to human analogies.

In the chapter on individual and applied psychology the author summarizes first of all the voluminous material that usually passes under the name of educational psychology and then completes the subject with a discussion in several sections of psychological applications to medicine and law, to education, and to business. Since the expansion of the field in industrial relations and enterprises is going on apace, a revision of the text done later might take such developments into account. One misses, too, some of the earlier work done in differential psychology at Columbia and a more than nominal mention of Stern's contributions. Closely allied is the chapter on abnormal psychology since some of the abnormal aspects of mind were just now treated under feeble-mindedness. But the reader might very well demand a stricter delimitation of the abnormal field. Why not include the material under feeble-mindedness? Or does the author seriously commit himself to the formula that mental disturbances are mental disintegrations, as he seems to do in the opening paragraph? The temporary character of the ailments or their appearance after a period of normal mental function is not a safe distinction nor one on which the authorities will agree. But then the author is not responsible because the

entire field needs to be thought out logically with definition, classification, and systematization in mind. Some attention is paid to the Freudian hypothesis and to the psychoanalytic method.

In the chapter on social and racial psychology the author discusses the behavior of the individual when under the stimulus of other individuals. The socializing tendencies of mind as well as the traditional influences of society are given a share in the *ensemble*. Under the former the author finds occasion to discuss the self including its development and under the latter custom and the mob are scrutinized. Racial psychology is covered briefly with a summary of the problems chiefly concerned with racial differences and the question of the influence of hereditary and environmental factors.

In Part II the author strikes boldly out in the traditional field of normal human adult psychology but in an untraditional manner: attention is the first subject. And not a bad idea! Most of the treatment follows the usual course, save where the degrees of clearness become degrees of effort in terms of motor accompaniments. This savors much of Mach's theory of the function of the *tensor tympani* and, indeed, of all shades of theory concerned with the motor explanation of attentive fluctuations. An excellent summary of the nervous system is provided together with clear diagrams of the main structures and connections. Then follow in order: reflex action and instinct, emotions, affective processes, sensory processes, imagination and the sequence of experiences, memory, and thinking. Important considerations which stand out in the development of the text are too many to mention in detail. Above all seems to be the author's gift of making the subjects presented very clear to the reader. An instance of this appears in the discussion of the James-Lange theory of emotions—the logic of the theory, its positive and negative criticisms, and its modern interpretations are all given in exemplary fashion. One misses Crile, however; but what does one not miss in a brief text? Under the pressure of brevity, too, in some cases the arguments assume the specious quality. In dealing with affective processes some interesting developments occur: clearness, location, and meaning are additional attributes. Affective processes may not be very clear, but to be conscious they must be somewhat clear; they have location because they almost always refer to the body, and they have meaning or significance. That is certainly an easy method of disposing of the problem of meaning, but can an attribute

of this character stand coordinately with the others which are pitched in the descriptive key? Quality, duration, intensity, and clearness, if you like, describe the process. Does meaning? It would be an interesting mental test to devise the categories of this new attribute. This confusion is emphasized later when we learn how sensory processes may develop through growth in meaning. In the auditory field the text offers an upper limit of 50,000 v. d. that in the light of recent research may have to be reduced. There is also no discussion of the important investigations on vowel tones. In describing visual sensations the traditional brightness value or tint becomes intensity. Is it not also confusing to denote protanopes as 'red-blind' and deuteranopes as "green-blind"? The book seems to thin out in the realm of the higher mental processes, although the material on memory and association is ample and clear.

Two very general criticisms: the book needs first of all a better underlying logic. Systematically it is not quite as connected as it might become. While the fields of psychology seem in a sense disjointed, it would appear possible to follow some logical outline in the presentation. In the second place it requires better balancing of sections. This has been indicated before. The impression that has repeatedly been made on the reviewer, however, is the grace with which the author has accomplished an inordinate amount of compilation. The assimilation in most places is excellent. The author has furthermore an unusual sense of pedagogical propriety without distortion of scientific fact. Each chapter ends with a concise and selected bibliography preceded by a summary and conclusion, and the entire volume closes with serviceably arranged authors' and subject indices. As a pioneer undertaking, it is a work of high merit.

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Morale, The Supreme Standard of Life and Conduct. G. STANLEY HALL. New York: Appleton, 1920. Pp. ix + 378.

Morale, as defined in Dr. Hall's latest book, is a combination of human efficiency and enthusiasm. On the one hand it is the "cult of condition," whose code is that of "personal and social hygiene," and on the other it is the urge to achievement. Morale "not only faces opportunities, but makes them." As a standard