

cal, which leads to the assumption, at times, that psychical processes have been explained when they have merely been referred to the physiological processes corresponding to them. Again, when one reads, among the statements with reference to the nature of attention made by a group of psychologists, such as Baldwin, Höffding, James, Ladd and others, that 'Külpe holds the regulation views' (p. 62), the value of the references to the literature seems somewhat impaired.

The teleological element, which is freely used, *e. g.*, in the functional tendencies of the central nervous system, as the writer himself observes, requires some clearing up, and the whole book might be more concisely stated. I have indicated what appear to me to be some of the weak points of the book; there are many valuable ones, however, of which only a few could be mentioned in so short a review. The whole is exceedingly bold and independent, and consequently fresh and original, and it is abundantly supplied with concrete illustrations. It contains also the valuable quality of inspiring the reader to investigate and test for himself, which makes the book valuable to a student. But most of these points excepting the last are not the qualities which are specially sought in a general text-book. And one can but conclude that those who are looking for a general text-book on psychology will have still to reflect on the necessity of inspiring someone possessed of the requisite gifts to write such a book.

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DEFINITION OF PSYCHOLOGY.

On the Definition of Psychology. JAMES WARD. *British Journal of Psychology*, I., pp. 3-25.

The aim of this article is to clear the rough definition of psychology — as the science which describes mental processes — of the implications which lurk in the term 'mental processes.' Professor Ward attacks the subject historically, outlining three stages, each of which is marked by a distinctive conception of the field of psychology.

The first point of view to be considered is that of Aristotle, whose conception implies the organism and the environment, and is essentially biological. But Aristotle differs from modern biologists in making the soul the directive principle in all interaction between organism and environment and in making the soul the final cause for which the organism exists. Looking at the facts from the outside, Aristotle fails to recognize what we now call consciousness as the central feature of all psychological facts.

The psychology of Descartes, restricted as it was to the immediate facts of consciousness, is placed in opposition to this extreme objective position. While recognizing the service which Descartes rendered in placing the emphasis on the conscious subject and in clearing up the hazy materialism of the Aristotelian and scholastic psychology, Professor Ward shows that the reaction was extreme, and that it sprang from a distinction between subject and object which was too analytic in character. Descartes' *res cogitans* really excludes everything empirical, giving rise to the dualism of reason and experience, and Dr. Ward agrees with Kant that such a consciousness is not really conceivable. From the objective point of view Aristotle saw that the soul was necessary in order that the organism should have life. "Descartes, who began from the subjective side, ought to have seen that the organism and the environment were necessary in order that the conscious subject should actually have experience." Because the problem of the relation of mind to body and the problem of the reality of human experience remain unsolved, Professor Ward rejects at once 'the perfunctory definition of psychology as the science of mind, over against which there stands a distinct science of matter.'

In the third stage, according to this retrospect, the extreme subjective position is so modified that it ceases to clash with what is essentially true in the objective view. Kant is given credit for having overcome the difficulties arising from the Cartesian metaphysical assumptions, when he confined all knowledge to sense-given realities and recognized the duality of subject and object as essential to experience. But Kant, in company with his predecessors, fell into other errors which were the result of Descartes' imperfect analysis of the facts of experience. Since Descartes recognized only self-conscious experience, he tended, as Professor Ward indicates, to identify the cognitions of self-consciousness with the facts cognized — an error which dies hard — and, secondly, to confuse the experience with the self-consciousness. The latter error is traced back to the failure to recognize the fact that the 'objective' and 'subjective' of psychology are not the same as the 'objective' and 'subjective' of epistemology. As a result of this error, internal experience, with which psychology has to deal, comes to be considered as derived from an 'internal sense.' But 'internal experience' loses its significance when it is shown that such an 'internal sense' is preposterous. The true internal experience is the experience of the individual mind, as contrasted with scientific knowledge, which is the common product and common possession of many minds.

Professor Ward completes this historical survey with a summary of the results of the reaction during the past century against extreme intellectualism, showing how this movement, together with the growth of genetic and comparative psychology, has tended to shift the emphasis from intellect to will, from cognition to conation, from sensitivity to activity. There is no longer any talk of mere cognition, only the interesting is known. It is urged that, for the psychologist, there can be no consideration of an independent realm of truth. Rather knowledge is a means to ends in evolutionary development, not an end in itself, and accordingly 'the sole function of perception and intellection is to guide action and subserve volition.'

In speaking of the psychical life, Dr. Ward advocates the use of the term 'experience' rather than the ambiguous word 'consciousness.' In particular he takes exception to the use of such expressions as 'states of consciousness,' 'operations of consciousness,' 'form of consciousness,' etc. In this connection he attributes the error underlying such expressions to the separation, in the Cartesian system, of the 'modes of consciousness' from the 'conscious subject.' He claims that those who speak of operations of consciousness have eliminated the subject along with the substance; while others have resolved the modes into ideas or presentations and out of such mind-stuff and its interactions have proceeded to build up experience. Considerable attention is devoted to confuting this last doctrine, for which the name presentationism is suggested as preferable to sensationism or associationism.

At the close of the paper there is a plea for the precedence of analytic over genetic psychology, concluding with the statement that 'whatever method is followed, physiological and comparative psychology must fall back on the facts and analogies of our own experience.'

Evidently Professor Ward did not contemplate the formulation, in this article, of a precise definition of psychology, but by devoting himself exclusively to the consideration of mental processes, and by omitting all but the most meager reference to bodily processes, he practically confines the science to the treatment of the phenomena of private experience, and neglects that important side which is concerned with the conditions under which psychical processes occur, except as those conditions are themselves pure psychical processes.

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