

testing their mental judgments by experience, widening their acquaintance with human nature as much as they can, in full faith that they are making psychology. Very poor psychology it may be, very inaccurate and inconsistent and misguided. Very few successful guesses at fruitful hypothesis and very little verification of such will come from their work. But they can do work as good for the purposes of mental science as much of the work of naturalists has been for biology, as good possibly as much of the descriptive work of many professed biologists has been. Any attempt to improve the judgments of common-sense about any sort of facts may prove fruitful, and no one should be debarred from such attempts by being told that they are 'for philosophical reasons' doomed to failure. I know of no other way to tell what may be done in a science of mental facts than by trying, and even if my refutation of Professor Münsterberg's theory be a failure we have a right to try to refute him by attempting the science he denies.

EDWARD THORNDIKE.

WESTERN RESERVE UNIVERSITY.

CONSCIOUSNESS AND THE UNCONSCIOUS.

The reading, before issue, of a forthcoming work on the general subject of 'unconscious' mental processes has revived the opinion, for some time entertained by the writer, that there is an aspect of the phenomena in question which has not always received adequate notice and the consideration of which is calculated to throw light on the whole problem. The view which I am about to present is, of course, not novel; in many respects it is as old as Leibnitz, although there are also many elements in that philosopher's treatment of the subject which I should not like to be understood to accept.

Psychologists are familiar with the phenomena which have given occasion for the belief in 'unconscious mental action' or the 'unconscious mind.' Examples of these are numerous both in the sphere of normal mentality (minimal perception, diffuse attention, the syntheses of perception, the 'retention of ideas,' cases of 'unconscious inference,' habit, ideo-motor action, etc., etc.) and in the less frequent and customary manifestations of mental life (extraordinary reappearances of ideas once apparently forgotten, the performance of mental operations with the attention directed elsewhere or even during periods of sleep, facts of the hypnotic state, etc., etc.). The tendency of the psychology of the day in explaining such phenomena is also well known.

Prominent psychologists of former generations ascribed many of them to some unconscious functioning of mind, to processes assumed to go on below the threshold of consciousness and yet to lie within the limits of the mental rather than beyond them. This is, moreover, the opinion of some of the leaders still. But, for the most part, recent attempts at explanation take a different direction, 'unconscious mental phenomena' being assigned to the sub-conscious, semi-conscious borders of the conscious field, or else being denied title to the conscious predicate altogether and relegated to the class of physiological processes on which consciousness depends.

There is, however, a certain ambiguity in the use of the words 'conscious' and 'unconscious' which leads to considerable error in popular thought, and which may conceal essential facts in the case even from the trained psychologist. For these adjectives may be used in application either to a given psychosis in itself or to its relations to other mental processes. 'I did it unconsciously,' 'He did not know what he was doing'—such phrases, strictly interpreted, do not imply that the action went on entirely outside consciousness, but that the consciousness *of* and *about* the act was reduced to a minimum, or was altogether wanting. Thus the psychosis becomes a disconnected unit and, not being brought into conscious correlation with other psychoses, finds no place in the web of mental life, so that if notice of the occurrence is given from an extraneous source, a basis is furnished for the misconception, that, in some mysterious way, the original process was unconscious and mental in one. For instance, the man who nibbles nuts or fruit after dinner while barely aware of what he does (*cf.* James, *Principles*, II., 522) is not acting unconsciously in the full sense of the word; he is acting (1) with the minimum of consciousness necessary to the performance of the act in question, and (2) the point here raised, with the least conscious connection of his act with the other contents of his consciousness at the time or with an absence of such correlation. A good example from the side of cognition is given in 'the novel of the summer,' where the hero in describing his first meeting with the heroine is made to say: 'I marked, almost without knowing, the rope of pearls that bound her throat (I had become a judge of jewels by being the possessor of so many).' The chief clause here is an accurate statement of psychological fact; the parenthesis adds one of the causes which may contribute to the production of the phenomenon. The general truth is that mental life is a thing of degrees not only in the scale of intensity, but also in the scale of complication. If the web is less compact than usual, some of the customary connect-

ing strands being absent or attenuated, there is danger that the partial loss will be confused with a total disappearance. But since at the same time the functions of consciousness are in some measure performed, the fiction of unconscious mental operations arises.

There is a partial recognition of this aspect of the matter in some of the other views of the subject. Thus it is true that certain 'unconscious ideas' are faint psychoses of momentary duration, which hence attract but little attention, including connective attention; it is true, again, that 'ideas' are called 'unconscious' when, perhaps, belonging to the class just mentioned, they fail to be remembered while sub-conscious or semi-conscious states are obviously such as are not brought into distinct correlation with others, especially with those at the time in the focus of consciousness. The aim of the present discussion, however, is not to dispute the value of these explanations, but to call attention anew to the numerous cases in which the lack of conscious correlation noted constitutes the principal element in the assumed unconsciousness.

If a name be sought for this class of phenomena, psychologists might avail themselves of the classical expression of Leibnitz and say that psychoses of this kind are perceived but not apperceived, that they are perceptions but not apperceptions. And this would be altogether the best designation for them were it not for the wide variation in the meaning of the terms perception and apperception, both in Leibnitz's day and since. In view of this difficulty, in view, also, of the importance of a clear realization of the principle of greater and less complication in consciousness, it has occurred to the writer that, perhaps, we might speak of psychoses or consciousnesses of the first power, second power, third power, or first potency, second potency, third potency, etc. Such phrases would at least have the merit of calling attention to the facts of the case, but their elegance as English and their freedom from misleading associations would raise different questions.

A. C. ARMSTRONG, JR.

WESLEYAN UNIVERSITY.

A CASE OF RETARDED PARAMNESIA.

So many cases of paramnesia or false memory have been reported and studied that this phenomenon, which was once supposed to be very rare and indicative of insanity, is now regarded as quite common and altogether normal. It may be the same with a peculiarity which