tude to life and work. Various methods take account of various aspects of the individual's mentality as if they were things in themselves, and the result is that there is no psychological criterion by which the respective importance of various facts revealed can be adequately assessed. In the case specified above, the worker concerned was adjudged normal by factory and dispensary alike.

Of the various methods at present employed, one may specify three in order to show that they are unsatisfactory in the last resort. One psychology examines the inner articulation of concentrated thinking and makes small effort to discover why an individual should concentrate in this or that direction, or how it is he achieves the mental tension necessary. Another psychology examines the inner articulation of obsessions in a somewhat similar manner. The third type concerns itself with industrial production and limits its inquiry to those aspects of productive activity it considers to be relevant to its problem. All three fail because they have no investigation of total situation to assess and direct their inquiries. They cannot even correlate the different methods they employ.

Directly one takes account of the individual's total situation, a very different result follows. One finds that lesser differences of method are superseded—the one technique is capable of an infinite diversity of applications in factory, school and clinic. In a large factory in the Middle West my attention was recently called to certain interesting illustrations of this fact. Three women worked side by side at a bench; the productive capacity of two suddenly diminished remarkably, the capacity of the third improved. Inquiry showed that the third had recently been very happily married. Of the two whose efficiency diminished, one had had her son arrested by the police for failing to support his family, the other was in process of divorcing her husband. Productive efficiency, like capacity for concentration, is a product or expression of a total mental situation. No mere investigation of productive method or intelligence is enough. In the same factory many other illustrations offered. One girl was in the habit of lying down during the rest periods; her efficiency was much above the average. Certain girl workers were under weight and were put upon a regime which included a fifteen minute period of rest upon a couch in the morning and afternoon. Their productive capacity was greatly increased. Generally it may be said that no psychological method which fails to take account of total situation can hope to be satisfactory either to industry or to psychology itself. What is wanted is a coordinated study of human nature and human behavior capable of being applied in any field.

The question as to what this technique or method should be presents, on the first glance, considerable difficulties. Dr. Person, like the late Dr. Stanley Hall in his last published book, is forced to face the fact that we apparently have not one psychology but many psychologies, not one technique but a diversity of techniques with no obvious common basis. At the very outset of the inquiry, one is compelled to ask the status of these various investigations and especially to ask the nature of the human facts at which each investigation is pointed. Discovery of the relation between the various areas of fact investigated is the only means of discovering the relation between the various methods of inquiry.

There are at present two general forms of psychology in the field—the academic and the medical. I do not propose in this paper to give any special attention to behaviorism in the strict sense, first, because it is an outgrowth of the academic psychology and, second, because it still bears the marks of its physiological origin. In thus discarding it as irrelevant to my present purpose, I must not be supposed to be hostile to or doubtful of the value of physiological investigation. Physiology is at least as important as psychology in the understanding of man; but behaviorism is as yet a physiological rather than a psychological development. At any rate, insofar as behaviorism is psychological, the general outline of my discussion will apply.

II. The Academic Psychology

The academic psychology has been developed mainly in universities, the medical mainly in psychopathological clinics and hospitals. In respect of logic and scientific method, the advantage rests with the academic; in respect of the area of fact surveyed, the advantage rests with the medical. There has been a certain carelessness in the use of words in the clinic; phrases have been admitted to common use which may have a definite reference in case work, but possess no precise logical

meaning. On the other hand, the need of dealing with individual situations has forced the clinic to take account of factors which the laboratory can discard. The hope of an adequate psychology must be conceived as dependent on the extension of logical method to cover the whole area of relevant human fact.

The undue restriction of the academic investigation is consequent upon, first, the so-called sensationist tradition in psychology and, second, that limitation of opportunity so well described by Dr. Person. The former of these I cannot do more than mention in this place. The latter is a fact that is becoming increasingly evident and calls for alteration. At no time have clinics and factories been freely open to psychological observation and research. To this alone is due the fact that the demand of the present for expert assistance remains unsatisfied. It is not possible to reproduce in the laboratory normal conditions of human life and work. This the English investigators of industrial "fatigue" have discovered.[4] It was possible to reproduce in a darkened laboratory room the physical surroundings of the coal miner, but it was not possible to reproduce under such artificially contrived conditions an identical mental attitude. By reason of his tradition and his limited opportunity, the laboratory psychologist has tended to take account only of what we may describe as concentrated thinking; his theory implies that concentration is the only form of mental process in which psychology is officially interested. Laboratory experiments have usually demanded not merely concentration but special efforts of concentration; this applies equally to psychological tests and to inquiries such as that of Kraepelin into the nature of mental fatigue. I must not be supposed to deny the high value which such researches undoubtedly possess; my claim is rather that this alone is not enough. That the waking life of the individual is not wholly given to concentrated thinking is admitted by every psychologist of note. There is need that psychology should study dispersed thinking or revery and sleep. Every psychopathological investigation of the past fifty years has tended to the conclusion that the major decisions of a lifetime are made in mental moods of relaxation rather than tensity.

But limited opportunity and laboratory procedure have had another consequence for academic theory. Pierre Janet[5] has shown that capacity for mental tension or concentration consists not merely of a facilitation of the dominant thought process but also of an inhibition of other responses to the existing situation. Capacity to think about the subject of this lecture, for instance, involves not merely a consent and an effort to listen; it involves also a refusal to listen to noises in the street outside, a refusal to reflect upon the nature of the audience, one's personal comfort or discomfort and matters equally irrelevant. Yet one is as conscious of these other things as of the topic of the lecture; the difference is that one refuses to think about them. This distinction between the larger object one is conscious of and the lesser object one is thinking about is unduly neglected by psychology. Description of "mental process" in terms of concentrated attention has led too many psychologists to disregard the wider hinterland of awareness which surrounds, as it were, the dominant thought activity of any given moment. The fact is of course admitted, but its importance as determining the nature of and capacity for concentration has apparently been realized by Janet alone. C. Lloyd Morgan[6] and G. F. Stout[7] mention this wider awareness, then describe it as "subconscious" and take no further account of it. Bosanquet[8] comes much nearer to the truth. He begins by pointing out that the "presentations at the focus" of consciousness are "probably the smallest part of what the mind has present to it." His criticism of sensationism is that sensationist theory takes account only of "the focus" of consciousness—that is to say, of the object of immediate concentration. Yet in spite of this claim, he proceeds to follow the same road as Stout and Lloyd Morgan and fails utterly to develop his assertion that the course followed by any concentrated thought is largely determined by "presentations which are not in focus." He also falls into the trap which the word subconscious prepares for the unwary psychologist.

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[4]"Fourth Annual Report," Industrial Fatigue Research Board, 1923.

[5]"Les Névroses," E. Flammarion, Paris, 1909, 1917, pp. 346-367.

[6]"Introduction to Comparative Psychology," W. Scott, Ltd., London, 1894; Scribner's, N. Y.

[7]"Manual of Psychology," University Correspondence College Press, London, 1899; Hinds and Noble, New York.

[8]"Psychology of the Moral Self," Macmillan.