

FUNDAMENTALS OF OBJECTIVE PSYCHOLOGY

BY

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PREFACE

AMONG the currents and cross-currents of modern and contemporary psychological discussions, surely the one most observable trend is toward the objective point of view. Even the most extreme subjectivists have recognized as the explanatory foundation for their science facts and speculations based upon neural physiology. And in latter years to this physiological or intra-organic objectivism has been added a behavioristic or extra-organic objectivism; and a skepticism, nourished by the writings of several critical thinkers, such as Professor Knight Dunlap and Professor Max F. Meyer, as to the adequacies of introspective descriptions of man, has taken constructive and systematic form under the hands of Dr. John B. Watson and others. The present book is offered as a survey of the psychological field as it can be made to-day from this viewpoint. In matters of detail it may not represent precisely the attitude of each and every objective psychologist; but I hope to have blocked out main lines of interpretation with which they would all in some measure agree. My purpose will have been attained if the reader gains a realization of the freshness and the soundness of behaviorism as a basis for attacking the many different problems of human nature in a scientific manner.

In places I have assumed, for a beginner's text, some liberty in presenting the results of investigations, in that I have developed behaviorist implications where the investigators themselves have not offered them. Not all the authors quoted, then, are to be considered as subscribers to the program of objective psychology.

While the treatment offered in this book is that of a consistent objectivism, I have not intended to imply an antagonism to the employment of an introspective approach where the teacher wishes to supply it. On certain phases of the subject, indeed, where the processes involved are especially subtle and intricate, their accurate determination as physical processes may actually be furthered by

the subject's effort to observe and to report on them. This is true especially in such behavior as attending and thinking. Some guidance for the study of this self-observing technique might have been included in the book; but on the whole it seemed to me better to let the strictly objective approach stand for itself.

Many characteristics of the text are traceable to my experiences in teaching beginning classes at different institutions. For one thing, I am convinced that a minimum amount of dogmatic generalizations and a relatively large amount of original data tend to discourage rote memorizing, to encourage thinking, and, moreover, to arouse a far greater amount of active interest on the part of the student of even sophomore grade as he works his way through under the guidance of his instructor. Again, I have had the student in mind when I have adopted forms of expression that may seem awkward to the trained psychologist, but that should serve to keep the reader freer from cant and from hypostatizing and closer to the actual processes or traits being described: "perceiving" instead of "perception," "thinking" instead of "thought," "attending" instead of "attention," and the like.

For much the same reason, I have assembled in certain chapters materials that belong together and deserve connected treatment, although in the usual textbooks they are presented under separate rubrics. (This is especially true of the eighth and the twelfth chapters.) I have given up an organization of the book into convenient lessons, in favor of its organization into leading topics, hoping thereby to help the student to escape the dangers of the faculty type of psychology.

The book has been designed first of all as a textbook for use with the full (two-semester) introductory course in psychology; but it is readily adaptable to the needs of abbreviated courses by judicious selection and elimination of paragraphs, sections, and even chapters. I will refrain from setting up concrete suggestions as to the selections to be made.

For reading many of the chapters of the manuscript and for offering constructive suggestions that have been of very great help to me, I am indebted to my former colleagues, Professor F. H. Allport, of Syracuse University, and Professor Hulsey Cason, of the

University of Rochester; to my present colleagues, Professor English Bagby and Professor H. W. Crane; and to Dr. J. B. Watson, of New York City. I cannot adequately express the extent to which I have been benefited by the advice of each of these friendly but critical readers. For the preparation of photographic material I am further indebted to Professor Crane. Throughout the preparation of manuscript and proof I have had very valuable assistance from Miss Margaret Fitzgerald.

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FUNDAMENTALS OF OBJECTIVE PSYCHOLOGY

CHAPTER I

THE GENERAL NATURE OF PSYCHOLOGY

SOME SAMPLE PSYCHOLOGICAL PROBLEMS

1. Learning an Occupation. Some thirty years ago a practical problem of human efficiency attracted the attention of two investigators. Between the novice at telegraphy and the finished operator, they observed, the differences are truly enormous. The former must note down each letter sound as it comes. The latter, on the contrary, can often "copy behind" as much as ten or twenty words, letting the instrument tick off a long series of dots and dashes before he begins to copy on his typewriter, being able at the same time to get the sense of the message, to keep the run of its grammatical structure, to punctuate and capitalize if desired, even to catch errors in words transmitted and call the sender's attention to them. External disturbances, too, have a very great effect upon inexperienced telegraphers, but affect the experienced ones very little. "It is not uncommon to see an operator doing a large amount of important work in a small room where half a dozen sets of instruments are working, trainmen running in and out, talking excitedly and asking questions, engines moving by the window, and trucks running noisily by on the platform. Yet the operator works ahead, calmly and rapidly, and even briefly answers questions addressed to him."¹ Emotional disturbances, also, such as fear, anger, joy, excitement, or the presence of a critical audience on the wire, have little effect on the trained dispatcher other than to facilitate his work, whereas the novice under such conditions sweats profusely and sends "rattled" messages that attract the attention of all the operators on the line.

¹ *Psychological Review*, vol. 4, p. 31.