## **Book Reviews**

## **Fame and Oblivion**

## Alfred Binet. THETA H. WOLF. University of Chicago Press, Chicago, 1973. xiv, 376 pp. \$13.75.

An interest planted in a graduate student 40 years ago by Goodenough's mental measurement course at Minnesota has at last borne fruit in Theta Wolf's absorbing full-length biography of Alfred Binet (1857-1911). We are fortunate the book is as good as it is, for it has no competitors. Except for Varon's M.A. thesis, published as a Psychological Monograph in 1935, and a handful of specialized accounts in French, there is virtually nothing written on Binet. Even standard histories of psychology have accorded him only superficial attention. This neglect is the more remarkable because Binet initiated numerous lines of research which still engage psychologists, quite apart from the socially momentous influence of his famous intelligence test.

The book comes none too soon, for even Binet's younger associates are now gone. Fortunately, Wolf was able in 1960 to interview the 86-year-old Théodore Simon (of Binet-Simon intelligence scale fame) over a period of several months. She was also able to obtain information at first hand from the late Henri Piéron (who succeeded Binet as director of the Sorbonne laboratory and as editor of L'Année Psychologique), and from Binet's own granddaughters, not to mention papers and correspondence by or concerning Binet in the Bibliothèque Nationale. Nevertheless, Binet's own prolific writings-nearly 150 published articles and 13 books written between 1880 and 1911-provide the bulk of the documentation.

A reserved man with few friends, Binet left little record of his personal life; his numerous professional activities could not have left him time for much. Nevertheless, we learn from Wolf that he was the only child of a physician father and an artistically inclined mother, who separated when Binet was young; that he had an in-

dependent income—a fortunate circumstance, because he never achieved the professorship he so avidly sought; that he married a professor's daughter, had two daughters of his own, and was distressed when his favorite child married a cousin; that except for a visiting appointment at Bucharest he never traveled abroad; that he wrote Gothic plays involving psychopathology that were good enough to be performed on the Paris stage; that he disliked physicians, and had his reservations about Americans.

The author has wisely concentrated on Binet's intellectual life. The book, in her words, "is an attempt to present the process of development, through failure and success, of the life work of an eminent scientist." In this she succeeds, aided immeasurably by the fact that Binet, as longtime editor of L'Année Psychologique, was able to publish the record not only of his achievements but of his uncertainties, blind alleys, and errors. Wolf's approach is scholarly, and she documents carefully. The style is readable, but not a match for Binet's in facility and grace. She makes clear the issues and controversies of an earlier day; though for the general reader some parts may be rather heavy going, he will find even in relatively arid patches nuggets of humor, insight, and human interest. If warmly Binet's partisan, Wolf does not attempt to conceal his human imperfections; yet the picture that emerges of this remarkable personality is complex and not altogether consistent. The available facts almost compel psychodynamic hypotheses about him, a sort of speculation for which Binet, one of the earlier practitioners of depth psychology and personality assessment, himself set the pattern.

Although Binet's professional life was relatively short, his research interests were protean. The diversity, richness, and sheer volume of his work confront the biographer with the task of organizing material enough for life studies of several more specialized scientists. Wolf has attempted to compromise between a chronological and a thematic development. The first ten years (1880-1890) are treated chronologically. Thereafter, long chapters deal successively with Binet's several professional "lives"-his research in experimental psychology, the emergence of the first useful intelligence test, the development of his conceptualization of intelligence, his work in psychopathology, and his contributions to experimental pedagogy. The whole is bounded by a prologue which summarizes the principal events of his life, an evaluative epilogue, and a useful index. Relegated to an appendix are Binet's attempts to deal with the epistemological problem—unsuccessful exercises in speculative philosophy which fit not at all with his fundamentally experimental orientation. While this thematic arrangement makes for a certain amount of redundancy and chronological confusion for the reader, it is justified by the greater coherence with which each of Binet's multiple "lives" can be treated.

The intellectual biography which unfolds is unexpectedly dramatic. Selfeducated by his own reading of psychology in the Bibliothèque Nationale, Binet began his career as an associationist and a disciple of John Stuart Mill. Only gradually did his own accumulating research force upon him an acknowledgment of the importance of unconscious psychic process and a recognition of the inadequacy of the associationist position. His first institutional affiliation was with Charcot's laboratory in the Salpêtrière, where he spent seven years observing and experimenting with Charot's hypnotized hysterics, especially the notorious "Wit." Here Binet was a party to such improbable marvels as "magnetic transfer" of hypnotic phenomena, whereby a motor activity involving the subject's left side, such as thumbing one's nose with the left hand, would shift to the right side when a magnet "unknown to the subject" was moved correspondingly from one side to the other; or "perceptual polarization," whereby a red cross hallucinated by the subject on a white paper turned green in the presence of the magnet. The Belgian Delboeuf observed these demonstrations and pointed out that Charcot and his staff neglected such elementary precautions as not talking in the subject's hearing about the phenomena to be elicited. Binet, overawed by Charcot's towering reputation, defended him dog-

matically against Delboeuf and the rival investigators, Bernheim, Liègois, and Liébault at Nancy; but was ultimately forced to the humiliating realization that the whole business was a matter of either suggestibility or outright fakery on the part of the subject. Binet's later almost obsessive concern with experimental control, his excessive caution in drawing inferences from his research, his vociferous reference to "suggestion, that cholera of psychology," reveal how deeply he was scarred by the wasted years with Charcot. As one critic wrote of his later work, "after a marvelous exposition . . . one waits avidly for some conclusions-but he swerves from them . . . . Binet, so to speak, never comes to a conclusion."

The greatest service Wolf performs for the reader is to provide a balanced view of Binet's many achievements, which have for too long been overshadowed by his famous échelle métrique de l'intelligence. Despite the quantitative emphasis of the latter, Binet was fascinated by qualitative differences in problem solving and in what we should now call cognitive style. It is generally recognized that his comparative study of his daughters anticipates Piaget, but the similarities of detail in number conservation experiments come as a surprise. Not only a developmental psychologist, Binet was unquestionably the father of experimental psychology in France. Indeed, modern work owes far more to him than to Wundt. Led to a functionalist position by his own research, he claimed a decade's priority over the Wurzburg school. His attacks on Wundt's elementarism forecast the revolt of Gestalt psychology, and his insights concerning unconscious process are worthy of Freud. His prodigious efforts in pedagogy laid the foundation for an experimental science which is not vet achieved. His "mental orthopedics" for training the defective equal Montessori. Although psychiatrists ignored him. his classification of psychopathological syndromes was better differentiated than Kraepelin's.

Nor do these achievements exhaust the list. Pioneering projective tests before the term was coined, Binet used inkblots before Rorschach and word association before Jung. Interested in creativity, he developed psychological assessment techniques and produced a detailed study of Hervieu, the dramatist, long before the work of Murray, MacKinnon, or even Simoneit, who is sometimes credited with inventing the field. His test of "emotivity," using photographs of Bokhara criminals being decapitated, anticipates Lazarus's stress investigations with the film of Australian subincision. Even the work of Sherif and Asch on the dynamics of conformity in small groups is clearly forecast by Binet's experiments on "suggestion in a group situation," though his explanation seems circular and his vocabulary quaint.

The oblivion in which these germinal researches have rested for more than half a century is attributable in large measure to the notoriously noncumulative nature of psychological research, but also to Binet's being outside the academic establishment, unable to attract students or reward them with degrees. Even worse than neglect are the outright distortions that have attached themselves to the one thing that keeps his memory green, the famous Binet-Simon intelligence scale. Those who would suppress such tests in the service of egalitarianism may be surprised to learn that Binet declined to define intelligence lest he foreclose its exploration, that he specifically believed in the power of training to increase it, that he invariably used the phrase "mental level" (niveau) to avoid the connotations of "mental age," and would certainly have objected violently to calculating the IQ (Simon called the IQ a betrayal!).

Equally relevant for the contemporary reader are Binet's cautions on experimental method, long before Rosenthal and others sensitized investigators to the role of expectations in findings. Binet wrote in another connection, "Tell me what you are looking for and I will tell you what you will find." And the zealots of "informed consent" as applied to psychological research might well ponder Binet on the distortions in subjects' performance, even in matters as innocuous as the Vexirfehler, caused by knowing the experimenter's purpose.

Wolf writes that a young French psychologist characterized Binet's life work as a magnificent *carrefour* from which avenues stretched out in all directions, not one of which was resolved into a true boulevard. The metaphor is apt. The merit of Wolf's book is that readers in many branches of psychology, psychiatry, and education will emerge not only with a clear idea of whence they have come but also of who surveyed the route.

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## **Mental States and Processes**

The Psychophysiology of Thinking. Studies of Covert Processes. F. J. MCGUIGAN and R. A. SCHOONOVER, Eds. Academic Press, New York, 1973. xvi, 512 pp., illus. \$26.50.

This book contains the 13 papers and subsequent discussions from a conference recently held at Hollins College, Virginia. The title would seem to suggest investigations into the neural processes underlying problem solving and concept formation with inferences drawn from-say-the effects of localized lesions, studies on evoked potentials, or microelectrode findings in animals. In fact, a much more accurate impression is given by the subtitle, "Studies of Covert Processes," which suggests a psychological equivalent of squaring the circle, namely, a behaviorist approach to the problem of relating neurophysiology and conscious experience.

The behaviorist rejection of the language of conscious experience is now outmoded in psychology, the behaviorist approach having been found barren and the structuralist approach relatively rich for theoretical explanations of subjects' actions in tasks more cognitively complex than bar pressing. Intellectual critics of behaviorism have tended to reject both the theory and the methods of the older paradigm, preferring, for example, those of cognitive psychology.

At roughly the same time, however, counterculture preoccupation with altered states of consciousness has renewed interest in phenomena such as hallucinations, which virtually necessitate some form of phenomenological description. Ironically, in an empiricist fashion the investigation of abnormal mental states can be pursued pretty much along behaviorist lines. Most of this book reflects such an orientation, a dominant strand being a combining of behaviorist techniques with concurrent physiological measures in studying counterculture phenomena. Thus conditioning techniques appear in seven papers, and seven are concerned with hallucinations, sleep, and biofeedback-hardly the central core of the thought processes. As literature surveys all the papers are competent. However, except for one they do not utilize any very powerful theoretical tools. Thus, Black, in one of the more interesting papers, shows that operant conditioning of brain electrical activity is possible for quite a wide variety of structures, but he provides relatively little insight into the functions