Obituary

Willard Lee Valentine

1904–1947

Willard Valentine, eminent psychologist and editor of *Science* since January 1, 1946, died suddenly of a heart attack at his home in Alexandria, Virginia, on Saturday, April 5, 1947. The loss of this able and enthusiastic leader at the age of 42 is tragic. His 17 months of devoted service to the American Association for the Advancement of Science had resulted in noteworthy contributions to the growth and influence of the Association. This brief period seemed to herald great accomplishments for the anticipated full span of years ahead—accomplishments that others must now strive to realize.

In the fall of 1945, Dr. Valentine resigned his professorship and chairmanship of the Department of Psychology at Northwestern University to undertake full-time service as editor of *Science*. He came to this new position with the conviction that the field of scientific publication is second to none as a factor of importance for human welfare. He entered on his new task with eagerness. His ideas were creative and vigorous; he had imagination but was willing to listen to advice and able to avoid being distraught by conflicting opinions. In November and December 1945 he made a thorough study of *Science* as a publication, analyzing its history and achievements and then formulating policies and goals in line with those of the Association. The main objective chosen was to make the journal maximally useful to American scientists and the general public interested in scientific news and advance. The publication was given a more attractive and dignified appearance by discontinuing advertising on the front cover, using more modern type and format, and by rearranging and adapting the magazine sections in line with current interests of the science reading public. The new editor attempted to discourage a content and style which would appeal chiefly to the specialist and endeavored to give preference to papers that presented

evidence of a cooperative attack on some scientific problem common to, or approached through, several specialties.

Valentine was not an armchair scientist nor was he an armchair editor. He undertook the editorship of *Science* as he had pursued science itself—as an experimental program. He had faith that through carefully planned and controlled trials of publishing different kinds of materials in different kinds of ways and by following through with analysis of reader reactions, a scientific basis would be discovered on which sound and creative publication policy could be built and public welfare served.

Three Middle West educational institutions gave Dr. Valentine his scientific training and teaching opportunities. He was born in Chillicothe, Ohio, December 2, 1904. His father was a flour miller, a veteran of the Spanish-American War, following which he was an invalid or at least not a man of robust health for the remainder of his life. It is recalled that Valentine referred to his mother as the chief source of his intellectual and educational stimulation. He entered Ohio Wesleyan University in 1921, receiving the A.B. degree in 1925 and the M.A. degree in 1926. He was assistant in psychology and mathematics, 1925–26, and assistant instructor in psychology, 1926–28, when he received appointment at the same rank at Ohio State University, where he earned his Ph.D. in psychology in 1929. He became assistant professor of psychology at Ohio State in 1929, was promoted to the grade of associate professor in 1932, and continued at this academic rank until 1940, when he became professor and chairman of the Department of Psychology at Northwestern University. During the 11 years following his doctorate at Ohio State, Valentine played a special role in the Department of Psychology as supervisor of beginning courses. Interest in science instruction at the undergraduate level became for him a prevailing passion which greatly influenced his professional career.

His research activities began in 1927 with perceptual studies in audition and vision, conducted on both human and animal subjects. These were excellent pieces of basic scientific work—perhaps his best. His dissertation was prosecuted under the guidance of Floyd C. Dockeray and the late Albert Paul Weiss. The former had been his professor, guide, and mentor at Ohio Wesleyan University. The dissertation, published as a series of three articles entitled "A Study of Learning Curves," presented a large mass of data on maze learning in rats of all ages and was a very comprehensive treatment of maturation in the rat from the standpoint of learning.

A third phase of his research work, and perhaps the most productive one in stimulating later investigation, related to the study of motility in the newborn infant. Dockeray and Valentine collaborated in the development and refinement of an isolation cabinet for infant research. Dr. Weiss had built the first such box, which served as the starting point for this work. With the fully developed equipment a considerable amount of research work was done at Ohio State by a number of graduate students, and the development of this type of investigation did much to advance scientific study of infant behavior.

Valentine's interest in applied psychology came to overshadow his earlier interest in basic research. Effective teaching of science as represented in the teaching of psychology was the objective of this applied interest. With his associate, Dr. Dockeray, he undertook a detailed analysis of the elementary psychology course at Ohio State. The objectives of the course were stated as a series of achievements which could be expected to result from taking the course—achievements such as acquisition of a body of facts and principles of human behavior, understanding of the application of psychological principles to the contacts and problems of daily life, acquisition of a technical vocabulary, development of skills in the application of scientific methods to the problems of human behavior, and the elimination of superstition and misconception concerning human behavior. By means of various examination techniques the extent to which the course was achieving the desired results was thoroughly analyzed. Examination methods were found to warrant careful study. In collaboration with F. E. Wenrick a paper on "Validity of Examinations" was published (1935) which proposed that factual examinations were inadequate.

Several supplementary lines of investigation and development were engaged in by Valentine in his systematic efforts to improve the efficiency of science teaching. He made studies of misconceptions—physicial, biological, social, economic, and psychological—held by college students and examined the effectiveness of college courses in correcting these superstitions. For several years he was chairman of the Committee on Motion Picture Films for Teaching, of the American Psychological Association. He surveyed the colleges and universities of the United States in reference to their use and need for teaching films, helped to write a detailed technical guide on the production of films, and either prepared or was a collaborator in making 11 such teaching instruments. These were described in the psychological literature and made available for all who wished to purchase them. Valentine's first film, entitled "A Trip Through a Psychological Laboratory," presented an integrated series of experiments and demonstrations highly useful for instruction in a beginning course. His *Laboratory manual for psychology* appeared in 1929 and was revised in 1932; *Readings in experimental psychology* was published in 1931; with Taylor, Baker, and Stanton he brought out *Students' guide for beginning the study of psychology* in 1935 and revised it in 1940. Valentine's most important book, *Experimental foundations in general psychology*, was published in 1938 and revised in 1941. In this volume

he presented some 19 areas of psychological interest, discussed the research findings in each, and interpreted these findings with emphasis on method and controls as well as on results. Almost 100 selected experimental investigations were thus taken up and reviewed. By this type of treatment he sought to emphasize in the mind of the beginning student that science (psychology) was grounded in, and grew out of, research work.

In 1940, when Northwestern University chose a new head for their large Department of Psychology, Valentine was the person selected. Enumeration of the reasons for his selection provides us with a block diagram of Valentine's professional contributions in the field of science. He was chosen head at Northwestern because of his emphasis on research as the foundation of science, his achievements at Ohio State in the improvement of the teaching of psychology, his professional interest in psychological publications, and finally, his demonstrated abilities as business manager and treasurer of the American Psychological Association. The first major task undertaken by the new chairman was that of revising both undergraduate and graduate curricula in order to take into account developments within this scientific field, to make use of the special qualifications of the fairly large staff, and to provide more systematic coverage of the subfields of psychology. The results of these efforts, which tended to unite the Department and build up a team spirit, proved so reasonable and successful as to attract the favorable notice of other departments, which in turn undertook the development of their own curricula along similar lines. In addition, he participated actively in the committees and councils of the University and won enduring respect as a scholar, teacher, and administrator. Thus, two great universities, Ohio State and Northwestern, came to regard him as a leader in science education.

Beginning in 1936 and continuing until his death, Valentine was the efficient and responsible treasurer of the American Psychological Association. In this period the membership increased from 587 members and 1,551 associates to a total considerably in excess of 4,000. From 1937 on, he was business manager of the Psychological Association's scientific journals. There were 5 of these publications when he began this service and 11 at the last. The auditors characteristically reported his accounts in good order; the Association at its annual business meetings, as a rule, readily accepted and approved the budgets he had worked out; and the editors of the several journals valued him as a responsible, cooperative, and congenial business and professional associate. His contributions to the growth and development of this scientific association and its business affairs were indeed very large. To a very wide group of colleagues he was known as "Val" and was valued as a warm and wise friend.

Finally came the opportunity, through the editorship of *Science*, to broaden the horizon and scope of his dearest ambition—the spread of scientific information and thought. Valentine was profoundly challenged and thrilled in being chosen as the successor-editor to James McKeen Cattell and the first editor after *Science* came under full control of the Association. He was ready to give his life with its every skill and ability to this opportunity. And this he did.

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