
Robert G. Crowder (1939–2000)

Robert George Crowder was an outstanding psychologist in the great functional tradition of American psychology, and his intellectual roots can be traced in a direct line from Arthur Melton, his mentor, back to William James and John Dewey. He spent his entire academic career affiliated with Yale University, where he served the department and the discipline in many capacities.

Bob Crowder, the son of Louis L. Crowder and Lucille J. B. Crowder, was born on September 16, 1939, in Waterloo, Iowa. Both his parents were excellent pianists. When Bob was two, his parents moved to Evanston, Illinois, where his father was a professor (and eventually chair) of the Department of Music at Northwestern University and his mother was a pianist who performed in the Chicago area. Bob grew up with music and was himself an excellent pianist. After his primary education in Evanston, he went to the University of Michigan, graduating in 1960 with high honors and as a member of Phi Beta Kappa. He studied in France on a Fulbright Fellowship in 1960–1961, and his fluency in French made that country a frequent destination during his lifetime. Bob returned to the University of Michigan in 1961 and received his doctor of philosophy degree under the supervision of Arthur Melton in 1965. His years at Michigan were exciting, with the Human Performance Center attracting outstanding faculty and students during this period when the new field of cognitive psychology hovered on the horizon.

On receiving his doctorate, Crowder was attracted to Yale University and never left, except for various visiting professorships (such as a lectureship at the University of Bologna). He rose through the ranks at Yale, a rare occurrence at that institution, becoming a professor in 1976. Crowder served Yale in many capacities but chiefly as director of graduate studies (for 3 years) and director of undergraduate studies (for a remarkable 13 years). Generations of Yale students benefited from his wisdom and counsel. He also served as acting chair of the Department of Psychology for a semester but did not find the experience particularly agreeable.

Crowder was an excellent graduate mentor, but he served as major professor for relatively few students at one time. His laboratory operation was smaller than that of many, but it was powerful. He permitted his students wide-ranging inquiry and was happy to advise them on topics that did not constitute his primary research interests. Their interests became his interests, as long as they fell within the broadly conceived purview of cognitive

psychology. Perhaps for this reason, a very large proportion of his students have made significant contributions to experimental and cognitive psychology. Included in this group are Matthew H. Erdelyi, Chao-Ming Cheng, James H. Neely, James S. Nairne, Robert L. Greene, Ian Neath, and Aimée Surprenant.

Bob Crowder became famous within cognitive psychology for his theoretical and empirical contributions as well as for publishing a great textbook. In 1969, he and John Morton proposed a theory of precategorical storage (PAS; also called echoic memory) that elegantly accounted for memory phenomena such as the modality effect and the suffix effect. The modality effect refers to the recall of the last few items in a list being better from auditory presentation than from visual presentation, whereas the suffix effect is reduced recall when an extra, redundant auditory element (such as the word *recall*) occurs at the end of auditory lists. These phenomena previously had not been thought to be related, so the notion that both could be explained by properties of a brief sensory echo persisting in the auditory system was novel. The echo was hypothesized to aid recall of the last few items of auditory lists (enhancing the recency effect) and to be eliminated when an extra item was added (the suffix effect). The theory—although more complex than indicated here—was straightforward, made numerous testable predictions, and also fit well with research on speech perception.

During the 1970s, Crowder and his collaborators developed the PAS theory and tested its implications in many experiments, with the theory beautifully predicting dozens of results. However, in the late 1970s and the 1980s, researchers (including Crowder) produced puzzling results that were impossible to accommodate by the theory. Late in his career, because of these new phenomena and shifts in his own theoretical orientation, Crowder remarked that he believed that this form of memory, which he had studied for so many years, was not precategorical, not exclusively auditory, and, indeed, not even due to storage (in his original sense of the term in his 1969 article with Morton). It is as refreshing as it is rare in psychology for a theorist and researcher to be so open to reversing his prior convictions, but this characteristic marked Bob Crowder in all his psychological inquiries.

Crowder studied many other topics in empirical psychology, especially in the psychology of music, the psychology of reading, and the perception of and memory for time and temporal order, which permeates both music

and memory. Crowder's research and writing extended to topics far beyond auditory memory in his many elegant articles and chapters. He was a clear writer, effortlessly providing the clarity of expression and the clever turn of phrase that could make murky topics comprehensible. These characteristics were especially prevalent in his famous textbook, *Principles of Learning and Memory*, published in 1976 by Erlbaum. The book represented the first comprehensive attempt to summarize the field of human learning and memory since McGeoch and Irion's text in 1952, and nothing like it has been produced since 1976. Crowder's volume, although out of print, is still frequently cited, because it provides analyses of topics in the field that raise original issues rather than merely summarizing the state of the field (as do most textbooks). In 1982, Crowder published *The Psychology of Reading*, which was translated into Italian and Spanish. It was revised (with Richard Wagner) and republished in 1992. He also edited a volume on memory for odors (with Frank Schab) that appeared in 1995.

Besides being an important contributor to the empirical literature with his empirical articles and books, Bob Crowder was the master of the provocative chapter and thought-provoking general article. His 1972 chapter entitled "Visual and Auditory Memory" captured the early evidence supporting the notion of echoic memory, whereas in another chapter (written with Ian Neath), he advocated "The Microscope Metaphor in Human Memory" (1991). In a 1982 article in *Acta Psychologica*, he announced "The Demise of Short-Term Memory" (although prematurely, according to most current researchers), and in a 1989 *American Psychologist* article written with Mahzarin Banaji, he proclaimed "The Bankruptcy of Everyday Memory." The wit and wisdom in these and many more general articles and chapters he wrote will continue to provide great reading for generations of psychologists to come. (References to all of Crowder's writings can be found in his vita published in *The Nature of Remembering: Essays in Honor of Robert G. Crowder*, 2001, edited by H. L. Roediger, J. S. Nairne, I. Neath, and A. M. Surprenant, Washington, DC: American Psychological Association.)

Crowder served the field of cognitive psychology in many editorial capacities. He was editor of *Memory & Cognition*, one of the leading cognitive journals, from 1977 to 1981 and was a consulting editor for 11 more years. He chose to serve a small number of other journals as a consulting editor, including the *Journal of Experimental Psychology: Learning, Memory, and Cognition*

(18 years); the *Journal of Verbal Learning and Verbal Behavior* (23 years); *Music Perception* (12 years); and *Psychonomic Bulletin & Review* (7 years). However, he served many other journals as if he were on their editorial boards, and his generous nature made it hard for him to turn down requests for his insight and assistance. Perhaps for this reason, he served on a grant review panel for the National Institute of Mental Health from 1983 to 1988 (and as its chair from 1986 to 1988) despite the fact that his own funding during that time came from the National Science Foundation.

Bob Crowder was an unusually modest man for someone of such great talents. He was always friendly, with a kind word for everyone and an understanding manner. He rose to prominence in the field, being elected to the governing board of the Psychonomic Society (1981–1986) and serving on its Publications Committee (1981–1983). He was elected a fellow of Division 3 of the American Psychological Association and served on the executive committee of that division (1981–1983). He was also a fellow of the American Psychological Society and spent a year as a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University (1982–1983). Crowder was elected a member of the Society of Experimental Psychologists, one of the highest honors the field of experimental psychology bestows.

Bob Crowder was struck with juvenile (Type 1) diabetes when he was 12 years old, before modern treatment methods involving blood sugar monitoring were available. He managed the disease as well as possible, but he began to suffer complications in his mid-50s, eventually having to retire from the faculty at Yale shortly before his death. He died from complications related to diabetes on July 27, 2000, at only 60 years of age, at home in Hamden, Connecticut, with his wife and children on hand. He is survived by his loving wife, Julie Crowder, and their three children, Edward, Bruce, and Lory Crowder. He also is survived by a brother, David L. Crowder. His many friends, colleagues, and students also mourn the passing of one of the great and good gentlemen of the field. Bob's ashes reside in two places special to him: the Grove Street Cemetery in New Haven, on the corner of Yale's campus; and on the island of Mallorca, where he and his family and friends spent many happy times.

Henry L. Roediger, III
Washington University