NATIONAL ACADEMY OF SCIENCES

# ROGER WILLIAM BROWN
1925–1997

*A Biographical Memoir by*

JEROME KAGAN

*Biographical Memoirs*, VOLUME 77

PUBLISHED 1999 BY
THE NATIONAL ACADEMY PRESS
WASHINGTON, D.C.

Roger Brown

Courtesy of Harvard University Archives

# ROGER WILLIAM BROWN

*April 14, 1925–December 11, 1997*

BY JEROME KAGAN

ROGER BROWN COMBINED a remarkably creative mind, natural gentleness, and a passion for language into a persona marked by generosity, unfeigned humility, and a dazzling writing talent. Although he was the father of developmental psycholinguistics—Roger's students dominate this domain of inquiry—he moved away from the brightest spot on the stage to share credit with his students in order to promote their young careers. The title of his chair, "The John Lindsley Professor of Psychology in the memory of William James," was especially apt for a psychologist who probed the subjective frame with a sureness that reflected his faith in the validity of personal experience as a primary source of evidence. There is the hint of a paradox in Roger's wariness of Platonic abstractions that floated too far from their evidential origins. Roger loved language, but he distrusted words.

It is certain that biographers are most likely to select his summary of the first stage of the acquisition of English as his seminal work, while simultaneously praising his ability to attract so many bright scholars to the study of language development. Yet, his first teaching assignment in 1952 was as a social psychologist at Harvard University. Roger had

good reason to be proud of his 1986 text *Social Psychology: The Second Edition.* Although colleagues regarded it as the most original in the field, instructors did not know how to use a book that was punctuated so frequently with the author's personal feelings—it broke too sharply with formulaic rules. The chapter on "Impressions of Personality," for example, contains a section that only Roger could write. After telling the reader that he was on a spring break in Nassau, he adds, "I think of myself as extremely nonracist and would unhesitatingly check that position on a self-descriptive inventory. . . . At the University Health Service, if I am assigned to a Pakistani woman physician with a diamond in her nostril, I do not flinch."

The uncanny ability to devise experiments that probed phenomena everyone had experienced but no one investigated was one of the most colorful threads in the elegant tapestry of his career. Two of the most famous were the study of the exquisitely detailed memories each of us has of events that were accompanied by an acute, strong emotion, and the frustration that accompanies the inability to retrieve a familiar word—often called "tip of the tongue." Roger explored the former phenomenon with James Kulik by asking informants of different ethnic groups to remember exactly where they were and what they were doing the moment they heard about some newsworthy event, like the assassinations of John F. Kennedy and Medgar Evers. Roger used the phrase "flash bulb memories" to convey the incredible detail contained in these episodic retrievals by those for whom the event was emotionally relevant. He even speculated on the evolutionary advantage this competence conferred on our species.

With David McNeill, Roger asked students to guess the word they were searching for when they were in the "tip of the tongue" state. Many of these guesses were near misses

that had the same first letter, same number of syllables, and same syllabic stress as the correct word, suggesting that nonsemantic features are stored as inherent components of every word. A person searching for the word "sextant," for example, might guess secant, sextet, or sexton.

Although his fans, students, and colleagues alike admired his discoveries and smiled at his graceful sentences, fewer have commented on the moral authority he brought to academic settings. I watched Roger year after year listen quietly during a heated faculty discussion on a controversial issue, and then, at the perfect time, in a pace neither hurried nor hesitant, express his opinion. Usually his comment settled the issue as he had suggested. The reason for Roger's extraordinary persuasiveness was that his colleagues had awarded him the position of representing the unselfish voice. All of us understood that his remarks were not motivated by self-aggrandizement, but by his notion of what was best for faculty, students, and university. This role is not an automatic addition to the respect that follows fame, prizes, publications, and high intelligence. It is awarded—and rarely—by colleagues who have been pleasantly surprised by the fact that someone among them can be trusted.

Roger William Brown was born on April 14, 1925, in Detroit, Michigan, into a family of four brothers, together with two sons of the elder brother, that, by the time he was ready for school, began to suffer from the economic distress of the depression. Roger attended the Detroit public schools and, on graduation from high school, thought about becoming a novelist of social protest. He enrolled in the Navy during his first year at the University of Michigan. He was accepted into the V-12 Program, went first to Oberlin College and then to midshipmen training at Columbia University. Roger witnessed the battle of Okinawa and was on the first ship to enter Nagasaki harbor following the explosion

of the atomic bomb. But there were many quiet days and nights at sea and much time to read. John B. Watson's book *Behaviorism*, which had attracted other budding novelists to psychology—B. F. Skinner included—also tempted Roger to replace a career in writing with psychology. He earned his bachelor's, master's, and doctoral degrees at the University of Michigan, the last in 1952. Although his doctoral research was on the social psychology of the authoritarian personality, a popular topic after the Second World War, the retention of a special curiosity about language rendered him receptive to chance events. He remembered—perhaps a flashbulb memory—a lecture on the phoneme by Charles Fries that fit his motivation perfectly. Uncertain about his talent as a novelist and discouraged by the complexity of the phenomena of social psychology, he discovered that an understanding of language appeared to possess the complexity and amenability to empirical inquiry that made it a perfect place to exploit his intellectual gifts and strongest passions.

Roger joined the faculty of Harvard University as an instructor in 1952 and was promoted to assistant professor the following year. He taught undergraduate courses in social psychology and language and became a participant in a research group on cognitive processes led by Jerome Bruner. The concepts of artificial intelligence, language, and cognition were replacing the antimentalist views of the behaviorists, and there was a heady excitement over mind and language swirling around MIT and Harvard in the mid-1950s. Listen to Roger describe the ambiance:

> Come with me, if you will, to Harvard and MIT in the early 1950s. American linguistics is still structural; Noam Chomsky is a junior fellow at Harvard, and we are all unaware of the surprise he is preparing. Skinner's behaviorism is strong at Harvard, George Miller is still interested in communication theory, and there is a lot of excitement in Jerome Bruner's cognition project

about the work on concept formation that would be described in *The Study of Thinking*.

In addition, Herbert Simon, Alan Newell, Marvin Minsky, and John McCarthy were applying the ideas of artificial intelligence to the study of mind. The new legitimacy of mind, thought, and language supported Roger's intellectual interests, and he and Eric Lenneberg, in one of their first collaborations, tested the highly publicized view of Benjamin Lee Whorf that the language of a community must influence the way the speakers remember and reason. Although these two young scholars found some initial support for that idea in a study of names for colors, four decades later Roger changed his mind following research by Brent Berlin and Paul Kay on the color words used by other cultures and a study by Eleanor Rosch-Heider on the Dani of New Guinea suggesting that some colors are naturally salient because of the brain's construction, rather than because of their names. The Dani showed good recognition memory for colors that their language did not name.

Roger wrote his first synthesis of the relations between language and mind during a sabbatical year in 1957. *Words and Things* was the first book on the psychology of language that was an obvious heir of this first stage of the cognitive revolution—and it remains in print forty years later. The ten chapters dealt with the nature of meaning, the relation between language and thought, and even the possibility that phonemes have symbolic connotations—for example, why most people feel that the word "ching" should mean light, while "chung" probably means heavy. Steven Pinker, one of Roger's students, admitted that *Words and Things* was one of the inspirations for Pinker's own book *The Language Instinct*.

The year Roger wrote *Words and Things* also marked the

year he moved to MIT to teach popular courses on social psychology and language. Roger returned to Harvard in 1962 with the title of professor of social psychology and a five-year grant from the National Institute of Mental Health to study the language acquisition of three children he and his students named Adam, Eve, and Sarah. The strategy of this study was Baconian in the extreme, for it consisted of the careful collection, transcription, and analysis of a large corpus of spontaneous conversations between each mother and her child in the naturalness of the home setting. It turned out that Roger was wise to gather extensive data on a few subjects rather than more superficial information from a larger group. The extensive protocols were discussed with a gifted group of young colleagues that included Ursula Bellugi, Colin Fraser, Courtney Cazden, Jean Berko Gleason, David McNeill, Dan Slobin, Sam Anderson, Richard Cromer, and Gordon Finley. *A First Language: The Early Stages*, published by Harvard University Press in 1973, generated a large number of provocative generalizations, even though it did not explain completely how children acquired language. Although everyone knew that children acquire language at different rates, the data revealed that these rates appear more uniform when each child's attainment of a syntactic milestone is related to the average length of the child's utterances; that is, the mean number of morphemes in a large number of statements. This measure—the "mean length of utterance"—has become a standard index of a child's status in acquiring English.

Roger and his students also discovered that although children use abbreviated utterances like "dolly sit" or "hit cup," their minds hold a complex proposition. The problem is that the young child cannot express the whole idea in language. Roger also detected remarkable uniformity in the order of acquisition of English morphemes. For example,

the *s* inflection on verbs—come versus comes—is acquired later than the *s* inflection on nouns. Tag questions (He can play, can't he?) emerge much later in development because these sentences require the grammatically complex processes of inversion, negation, and ellipsis. Most important for theory, the protocols revealed that parents do not praise sentences that are syntactically correct nor criticize those that are grammatically wrong. Rather, most parents react primarily to whether the child's sentence is true or false. That discovery meant that Skinner's contention, popular at the time, that grammar was learned in accord with the principles of reward and punishment had to be incorrect. Children learned the syntax of their language by relying on cognitive abilities, still poorly understood, with processes that remain a central puzzle in developmental psycholinguistics.

Roger spent a sabbatical year—it turned out unsuccessfully—trying to compose a summary of the later stages of language acquisition. The analyses of the older children's speech did not yield insights with the power of those inferred from the first stage. Roger decided there was little value in publishing the idiosyncratic details contained in the grammars that required so many hours of work. Equally important, linguistic theory had begun to expand and Roger admitted to some reluctance over devoting the time required to learn the new formalisms. He once noted, "I have worked in different areas because I like beginnings, times when the curve of knowledge is rising steeply, when chunks of intellectual gold still lie on the surface to be discovered by whoever looks first. When the incremental curve levels off and new discoveries become hard to make, I tend to look elsewhere." Fortunately, his students, including Jill de Villiers, Helen Tager-Flusberg, and Kenji Hakuta, are now active in this domain.

Roger served as the last chairman of Harvard's Depart-

ment of Social Relations from 1967 to 1970. This was the time of student rebellion against the Vietnam War and elitism in the academy, and Roger could not avoid confrontations with students who transferred their unbound anger at society to anyone in a position of authority. I remember sitting in a large auditorium the afternoon Roger was speaking to hundreds of students waving flags and stamping their feet to complain about a policy that Roger had instituted. After a flow of abusive language, Roger replied, "I think that I make a very unlikely Fascist pig." A long laugh broke the mob's hostility and the afternoon was won. I dropped in on Roger later that day to congratulate him for creative handling of a messy situation.

Roger was remarkably active during the last two decades of his academic life. He wrote a draft of a book, never published, called, "A New Paradigm of Reference," that revised earlier notions on meaning by accommodating to the work of his student Eleanor Rosch. He also composed thoughtful papers on the varied moods conveyed by music, the differences between novels and songs, and drafted a theory of politeness that profited from the work of Penelope Brown and Steven Levinson. Roger admitted to feeling delighted when he discovered that some verbs ascribe causality to their targets—Bill admires Sam because Sam is admirable—whereas others ascribe causality to their subjects—Bill charms Sam because Bill is charming. However, he learned later that this provocative insight had been detected earlier by Alfonso Caramazza and Catherine Garvey.

His health began to decline during the last decade of his life; he had a bypass operation and was diagnosed with prostate cancer. Despite the chronic discomfort of these illnesses, Roger retained his civility and gentleness, continued to supervise students, and taught a popular course on

the relation between psychology and fiction until retirement in 1994.

When Roger's partner of forty years, Albert Gilman, died of cancer in 1989, he confessed to the unexpected difficulty of coping with the pain of that loss. During the next half dozen years, he tried to conquer each day's dark mood of isolation with a series of relationships with younger men. He summarized those terrible years in a short book, published in 1996, called *Against My Better Judgment.* Roger's friends were simultaneously puzzled and saddened by the honesty of this memoir and could not understand why he had chosen a confession that created impossible levels of dissonance in those who loved him most. Jean Berko Gleason, Roger's first student, ended her comments in a 1998 memorial service by saying that the Roger Brown she would remember was tall, handsome, brilliant, kind, incredibly generous, and a wickedly funny man.

Eric Wanner, a former student and president of the Russell Sage Foundation, offered a speculation at the memorial service that may help to explain why Roger rubbed sadness into each page of the memoir. Wanner suggested that a suspicion of psychological theory and its unconstrained descriptors permeated Roger's scholarship, and he wished to remind psychologists and his close friends of the easily suppressed truth that each person's anima is so hidden and resistant to logical analysis, one must reject simple stereotypes as appropriate descriptions of the warren of feelings, thoughts, and symbols that are the skeleton of the human psyche. If one reads *Against My Better Judgment* with that assumption it becomes a revealing psychological document. I suspect this was one of Roger's motivations for writing it.

Roger Brown was a fellow of the American Academy of Arts and Sciences and was elected to the National Academy of Sciences in 1972. He was awarded the G. Stanley Hall

Prize in developmental psychology of the American Psychological Association in 1973 and received honorary degrees from York University, England, in 1970, a D.Sc. from Bucknell University in 1980, and a D.Sc. from Northwestern University in 1983. He was awarded the Distinguished Scientific Achievement Award of the American Psychological Association in 1971, and in 1985 was awarded the International Prize of the Foundation Fyssen in Paris.

I THANK STEVEN PINKER for sharing with me his obituary to be published in *Cognition* in 1998.

## SELECTED BIBLIOGRAPHY

1954

With E. Lenneberg. A study in language and cognition. *J. Abnorm. Soc. Psychol.* 49:454-62.

1958

*Words and Things: An Introduction to Language.* Glencoe, Ill.: Free Press.

How shall a thing be called? *Psychol. Rev.* 65:14-21.

1960

With J. Berko. Psycholinguistic research methods. In *Handbook of Research Methods in Child Psychology*, ed. P. H. Mussen. New York: Wiley.

1964

With U. Bellugi. The acquisition of language. *Monographs of the Society for Research in Child Development*, No. 92.

1966

With D. McNeill. The "tip of the tongue" phenomenon. *J. Verbal Learn. Verbal Behav.* 5:325-37.

With A. Gilman. Personality and style in Concord. In *Transcendentalism and Its Legacy*, eds. M. Simon and T. H. Parsons, pp. 87-122. Ann Arbor: University of Michigan Press.

1973

*A First Language: The Early Stages.* Cambridge, Mass.: Harvard University Press.

Development of the first language in the human species. *Am. Psychol.* 28:395-403.

1974

With R. Herrnstein. *Psychology.* Boston: Little Brown.

1976

Reference: In memorial tribute to Eric Lenneberg. *Cognition* 4:125-53.

1977

With J. Kulik. Flashbulb memories. *Cognition* 5:73-99.

1978

A new paradigm of reference. In *Psychology and Biology of Language and Thought: Essays in Honor of Eric Lenneberg*, eds. G. A. Miller and E. Lenneberg. New York: Academic Press.

1981

Cognitive categories. In *Psychology's Second Century: Enduring Issues*, eds. R. A. Kasschau and C. N. Cofer, pp. 199-212. New York: Praeger.

Symbolic and syntactic capacities. *Philos. Trans. Roy. Soc. Lond. B* 292:197-204.

1983

With D. Fish. The psychological causality implicit in language. *Cognition.* 14:237-73.

1986

*Social Psychology: The Second Edition.* New York: Free Press.

1989

A very private person. In *A History of Psychology in Autobiography*, vol. VIII, ed. G. Lindzey, pp. 47-59. Stanford, Calif.: Stanford University Press.

1996

*Against My Better Judgment: An Intimate Memoir of an Eminent Gay Psychologist.* New York and London: Harrington Park/Haworth Press.