

Lila Gleitman—trailblazer in cognitive science, beloved mentor, incandescent wit—dies at 91

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Lila R. Gleitman, Professor Emerita of Psychology and Linguistics at the University of Pennsylvania, died on August 8, 2021, at the age of 91. A member of the National Academy of Sciences and a towering figure in the fields of cognitive science and psycholinguistics, Gleitman altered our understanding of how children successfully become conversant in their native tongue, seemingly effortlessly and without instruction, by about the age of 3 or 4 years. In a career that spanned six decades, she explored how children acquire language, the relationships between language and thought, and the nature of concepts. As renowned as she was for her pioneering research in language acquisition, Gleitman was also admired and beloved for her intellectual generosity, her full-hearted devotion to students and colleagues, and her unparalleled wit. Gleitman left an indelible imprint on the field of cognitive science through her highly original and theoretically important work, but also through the many students and colleagues in cognitive science whose work she inspired and influenced.

Gleitman was born in Brooklyn, New York, in 1929, attended James Madison High School in Sheepshead Bay, Brooklyn, and received her Bachelor of Arts in Literature in 1952 from Antioch College. She entered graduate school in linguistics at the University of Pennsylvania in the early 1960s as a student of Zellig Harris, earning her doctorate in 1967. She then began her academic career as an assistant professor at Swarthmore College before becoming the William T. Carter Professor of Education at the University of Pennsylvania in 1972. She subsequently served as Professor of Linguistics and as the Steven and Marcia Roth Professor of Psychology at the University of Pennsylvania, from 1973 until she retired in 2001. She was also the founding director (with Aravind Joshi, Engineering) of the Institute for Research in Cognitive Science at the University of Pennsylvania, funded by the National Science Foundation as one of their few Science and Technology Centers at that time, and the only one focusing on cognitive science. With Joshi, she served as Co-Director of the Institute for Research in Cognitive Science from 1991 to 2001.

Gleitman explored questions pertaining to language acquisition, such as how linguistic and extralinguistic input to the child conspire with the child's own innate cognitive and linguistic biases to shape language learning. While interested in language learning in typically developing children, Gleitman drew on unusual cases of development—especially revealing “experiments of nature”—to inform our understanding of how language is learned. For example, with colleagues, she examined how children born deaf and without exposure to any linguistic model (speech or sign) nevertheless could invent their own sign language, which, without any formal input, still obeyed many principles common to spoken and signed languages of the



Lila Gleitman. Image credit: Julia Lehman-McTigue (photographer).

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world. In another series of studies, she examined language development of the congenitally blind child, finding that without visual experience, the child could easily and rapidly acquire visual terms, such as “look” and “see,” as well as color terms like “red.” This series of studies uncovered the crucial role that syntactic structure plays in children’s word-learning and opened a decades-long research program with yet another set of colleagues, focused on the linguistic and conceptual contexts that drive children’s word-learning and the cognitive computations that allow children to narrow down their hypotheses about what a particular word might mean.

In addition to her election to the National Academy of Sciences, Gleitman received numerous other honors. She was an elected Fellow of the American Psychological Association, the Association for Psychological Science, the Society of Experimental Psychologists, the American Association for the Advancement of Science, and the American Academy of Arts and Sciences. She was a recipient of the American Psychological Association Distinguished Scientist Award, the American Association for the Advancement of Science John McGovern Award in the Behavioral Sciences, the Prix Internationale Award from the Fyssen Foundation, and the David Rumelhart Prize from the Cognitive Science Society, among many others. She served as President of the Language Development Society, the Society for Philosophy and Psychology, and the Linguistic Society of America. (We must also report that she was a proud member of the Blue Dragon Society at Camp Kee Wah Kee. She would not forgive us if we failed to mention that.)

She published many landmark works in the field, widely cited even years after their publication. These included hundreds of journal articles and several books, including *Phrase and Paraphrase: Some Innovative Uses of Language* (1), *Language Acquisition: The State of the Art* (2), *Language and Experience: Evidence from the Blind Child* (3), and *Sentence First, Arguments Afterward: Essays in Language and Learning* (4), a collection of important papers from across Gleitman’s career. Gleitman took special joy in creating amusing titles for her publications, including the following memorable examples: “Mother, I’d rather do it myself: Some effects and non-effects of maternal speech style” (5), “Beyond Herodotus: The creation of language by linguistically deprived deaf children” (6), “A picture is worth a thousand words, but that’s the problem: The role of syntax in vocabulary acquisition” (7), and “Height matters” (8).

Gleitman touched the lives of innumerable people with her ready wit, her piercing intelligence, and her tireless commitment to getting to the bottom of things. Under her

leadership, the University of Pennsylvania’s Institute for Research in Cognitive Science became a model for promoting interactions between psychology, linguistics, computer science, philosophy, neuroscience, and other branches of inquiry that contribute to the computational study of the mind (a role inherited by the University of Pennsylvania’s Mindcore today). Her students include some of the luminaries in the fields of cognitive science, psychology, and linguistics. Years after completing their graduate work, former students often remained her close collaborators and cherished friends, as she took a lifelong interest in their research, their children, and the paths their lives took. Long-lasting connections were also forged in the famous Cheese Seminar (so named in honor of the refreshments served), a weekly evening seminar held in the Gleitman household and cohosted with her husband, the late Henry Gleitman. Lila and Henry married in 1958 and became lifelong intellectual collaborators as well as life-partners. Henry was Professor Emeritus at the University of Pennsylvania at the time of his death in 2015. The Cheese Seminar they held at Gleitmanor (as their home became known) was legendary, both for the penetrating discussions of the central issues of psychology and philosophy it sparked and the epicurean respect for cheese that it cultivated in several generations of well-fed graduate students.

The joyfulness with which Gleitman pursued science—and indeed all aspects of her life and work—inspired everyone who knew her. To her final days, Gleitman was vitally engaged both by her ongoing research and by the people in her life. She adored playing bridge with her daughter Ellen Luchette, with whom she competed in national tournaments, an activity to which she devoted herself with the same ferocious intensity that characterized everything she did. Her final publication (9) was an intellectual autobiography, written in collaboration—and largely via phone conversations during the pandemic lockdown—with her daughter Claire Gleitman, a true labor of love for both of them. In addition to her two adored daughters, Gleitman is survived by her beloved sons-in-law, Mark Luchette and David DeVries; her cherished grandchildren, Zachary and Zoe Luchette and Philip and Lucas DeVries; and the countless students and colleagues who will treasure her memory forever.

Lila Gleitman was a giant in her field, and she had a larger-than-life, luminous personality. No one who ever knew her is likely to forget her, and her name will forever be associated with the field of language learning, which her work arguably did more than anyone before or since to define.

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