

# **Do Justice and Let the Sky Fall**

## **Elizabeth F. Loftus and Her Contributions to Science, Law, and Academic Freedom**

*Edited by*

**Maryanne Garry**  
*Victoria University of Wellington*

**Harlene Hayne**  
*University of Otago*

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# Contributors

Robert Belli  
Department of Psychology  
University of Nebraska–Lincoln  
Lincoln, NE USA

Mahzarin R. Banaji  
Department of Psychology  
Harvard University  
Cambridge, MA USA

Gordon H. Bower  
Department of Psychology  
Stanford University  
Stanford, CA USA

Maggie Bruck  
The Department of Psychology  
and Behavioral Sciences  
Johns Hopkins Hospital of Medicine  
Baltimore, MD USA

Stephen J. Ceci  
Department of Human Development  
and Family Studies  
Cornell University  
Ithaca, NY USA

Geoffrey R. Loftus  
Department of Psychology  
University of Washington  
Seattle, WA USA

Mark A. McDaniel  
Department of Psychology  
Washington University  
St Louis, MO USA

Jaqueline McMurtrie  
School of Law  
University of Washington  
Seattle, WA USA

Kristie E. Payment  
Department of Psychology  
Kent State University  
Kent, OH USA

Henry L. Roediger III  
Department of Psychology  
Washington University  
St Louis, MO USA

Seema Clifasefi  
Department of Psychology  
University of Otago  
Dunedin New Zealand

Deryn Strange  
School of Psychology  
Victoria University of Wellington  
Wellington, New Zealand

Maryanne Garry  
School of Psychology  
Victoria University of Wellington  
Wellington, New Zealand

Carol Tavris  
Los Angeles, CA USA

Harlene Hayne  
Department of Psychology  
University of Otago  
Dunedin, New Zealand

Maria S. Zaragoza  
Department of Psychology  
Kent State University  
Kent, OH USA

Elizabeth F. Loftus  
Psychology & Social Behavior  
University of California, Irvine  
Irvine, CA USA



CHAPTER

3

Elizabeth F. Loftus:  
The Early Years



Geoffrey Loftus

1966–1970: STANFORD, CALIFORNIA

Stanford graduate students in the mid- to late 1960s were roughly divided into two cultural camps. In the traditional scientist-in-training-as-nerd camp dwelt a collection of individuals, almost exclusively male, who wore motley neckties every day, and took their work seriously, 24/7. In stark contrast stood the still small, but nevertheless ascendant, scientist-in-training-as-hippy camp whose members wore tie-dyed shirts and spent weekends going to Dead concerts at the Fillmore, encounter groups in Big Sur, and protest marches in Golden Gate Park.

Elizabeth Jane Fishman arrived on campus in August 1966, not fitting neatly—or at all—into either of these camps or any other. The closest one could come to a nutshell description of her is that she resembled some big-studio Hollywood portrayal of an up-and-coming assistant DA—21 years old, glamorous, with finely chiseled high cheekbones, long dark hair, perfectly tailored business suits, trademark LA sunglasses, and a body to die for. In a seemingly calculated, but actually inadvertent counterpoint to this image, her principal means of transportation was a yellow, three-on-the-handlebars, 1964 Schwinn. She took the Stanford Psychology Department by storm, becoming, without trying, the center of atten-

tion wherever she went: making friends with most people, annoying a few others, and generally stirring up controversy. She was endlessly animated, the tip of her nose bobbing up and down slightly as she talked, providing subtle emphasis to whatever point she was making. No one knew quite what to make of her.

Beth quickly found herself placed in Ventura Hall, home of the intimidatingly named Institute for Mathematical Studies in the Social Sciences, headed by the venerable Patrick Suppes. Every Friday afternoon she, along with other assorted Serious Scientists, was required to attend an Institute seminar in which was soberly discussed the latest developments in mathematical learning theory, or mathematical memory theory, or mathematical judgment theory, or whatever other mathematical flavor was in vogue that week. Having majored in mathematics at UCLA, Beth was no stranger to the abstruse equations that bespeckled the blackboards, but she wasn't all that interested in them either. As others animatedly argued about constraints on, and relations among  $d$ 's and  $q$ 's and  $x$ 's, Beth surreptitiously hemmed her skirts, caught up on her correspondence, and concocted drink recipes for whatever party she anticipated would soon herald the upcoming weekend. In a covert poll taken among her colleagues, she was enthusiastically and unanimously voted least likely to succeed as a psychologist, and an Institute pool sprang up, with contributors placing bets as to when she'd quit and return to Los Angeles to become an advertising executive or something.

By the fall of her second year, Beth had aced all her first-year courses and traded in the Schwinn for a red Alfa-Romeo convertible, but aside from those accomplishments, had made little progress in defining her career goals. One new diversion materialized: She was made a "big sister"—assigned the job of mentoring—one of the incoming first-year students, a black-leather-jacketed Bostonian named Geoff Loftus who had blown in from the East Coast astride a large black BMW. Beth approached the job with typical aplomb: Within 3 months she and her mentee were engaged, and the following June they were married under a chupah in the backyard of her family's Bel-Air home. Although still not very serious about experimental psychology, the radiant bride hedged her bets, spending but 1 day on her honeymoon, followed by 3 months of intense study for the departmental General Exams.

Part of Beth's motivational problem was that she had minimal independence in her research endeavors. Her day job was to be a small cog in the "Pat Suppes machine"—a massive educational juggernaut designed to bring computer-aided instruction to the masses, to diverse elementary schools ranging from waspy Palo Alto to the far reaches of the Indian subcontinent. Beth's role was to write arithmetic problems and hand them off to an eclectic collection of curriculum designers, computer programmers, and educational researchers, who would then stir them into an immense educational stew that, in turn, would issue forth via telephone lines to assorted teletypes around the globe. Although cosmically worthwhile, working for the Suppes machine was not an activity that fostered a great deal of personal satisfaction among its many drones. Beth felt herself to be professionally stifled and, in desperation, even briefly considered becoming a clinician.

In 1969, things changed. Somewhat by chance Beth began working with a social psychologist, Jon Freedman, on the problem of memory organization. Although her PhD dissertation developed out of her still-small role in the Suppes machine, her professional interest had shifted to the structure of semantic memory. Suddenly she blossomed, and on the strength of her groundbreaking work in this area, was offered a position by the New School for Social Research. In the summer of 1970 she moved to Manhattan where, at the epicenter of the New York academalopolis, she thrived.

### THE 1970S: SEATTLE

A traditional conundrum for married professionals is that of trying to find two jobs in the same geographic area. Beth and her husband were not immune to this problem: In 1972, after a year's postdoc at New York University, Geoff joined the faculty at the University of Washington, and a year later, Beth turned down a position at Harvard to follow him there. Her interest in the study of memory organization had peaked at that point—what else can you do after writing an article called “How to Catch a Zebra in Semantic Memory”—and she viewed her new position in Seattle as an opportunity to rummage around in quest of new research attractions. Such an opportunity arrived from an unexpected source, the U.S. Department of Transportation, which had granted Beth a little money to carry out some vaguely defined research involving motor vehicle accidents. One rainy November night, in a seedy St. Louis motel room, she and her husband were sitting around discussing what she might do with these funds. Suddenly, Beth was struck with a burst of inspiration—the eventual far-reaching implications of which were utterly opaque at the time. “I know!” she said. “I’ll show people a movie of a car crash. Then I’ll ask them, ‘Did you see a broken headlight?’ or ‘Did you see the broken headlight?’” She beamed expectantly at Geoff. “Yeah?” he answered, with his typical enthusiasm for ill-specified research questions. “So what?”

Characteristically undaunted, Beth set forth to actually do that experiment, the results of which demonstrated what lawyers and linguists had known for centuries: that the phrasing of a question affects the answer that you’ll get. In this case, people were more apt to “remember” *the* broken headlight than *a* broken headlight. Many Serious Scientists would have taken that result straight to the ivory tower—numerous distinguished careers have been built on considerably less dramatic linguistic phenomena. But Beth was no more interested in esoteric, removed-from-the-real-world research than she had been in the differential equations back at Ventura Hall, and her little *the-versus-a* result formed a seed from which would grow a revolution in our understanding of human memory. Before long, articles began to emerge from Beth’s lab, one after another like waves on a beach, demonstrating via many elegant experiments that memories for real-life events were often inaccurate—but systematically inaccurate in ways that were entirely predictable on the basis of casual, but relevant information provided after the



fact. For instance, just asking a witness to a car crash “How fast were the cars going when they smashed into each other?” triggered witnesses to reconstruct their memories, unconsciously adding false, but “smashed”-relevant details, such as broken glass. Of critical importance was that Beth and her colleagues demonstrated that these reconstructed memories seemed just as real to their owners as did those based on actual perceptual experience. Accordingly, such memories could potentially form bases of highly confidence-invoking-but-dead-wrong reports provided by people in many critical situations such as ... well, such as by an eye-witness testifying in a court of law.

Which led to the reasons that Beth will be remembered by future generations not only as an unusually inspired and insightful scientist, but also as a profoundly influential exponent of social change within a key cultural setting. As she was busily fostering a paradigm shift in our understanding of how memory works, Beth was also assembling the underpinnings of another revolution, this one in the field of law. She had always been a crime buff. From the time she was little, she had immersed herself in crime movies, crime TV shows (“Colombo” was a favorite) crime novels, and accounts of real-life crime. It was partly this interest and partly her emerging understanding of the relevance of her new work to evaluating eye-witness testimony that propelled her to begin hanging out with defense lawyers and drifting into Seattle courtrooms to observe trials.

And so it came to pass that in 1974, she was observing a murder trial, offering suggestions to the defense lawyer, her friend, Phil Ginsberg. At length, she told him, “You know, Phil ... there are eyewitness issues here that are very similar to those that my students and I have studied in the laboratory. Maybe this work could be offered as expert testimony.” Phil agreed this would be a great idea but explained that the laws of evidence work according to a perplexing tradition: If some class of evidence had never been presented before, then there’s no precedent for it, and if there’s no precedent, then it’s inadmissible. Beth soon began to understand this dilemma firsthand: She tried to present such testimony several times over the next year or so and sure enough, judges wouldn’t allow it in. In light of this frustrating judicial catch-22, it seemed almost a miracle that on June 3, 1975—the day her father died of cancer in his Los Angeles home—Seattle Superior Court Judge Janice Niemi allowed Elizabeth Loftus to provide Washington State’s first, and of course precedent-establishing, expert testimony on the topic of eyewitness identification.

## 1975 TO THE PRESENT

This seminal event took place almost 30 years ago. It is at that juncture in the saga of Beth’s life that my part of this story largely ends, and I leave to others the task of filling in the many details of her subsequent pivotal contributions to science and society. But I would like to end my tale with two observations.

First, it's axiomatic that no person, no matter how persuasive and charming she is, can make serious contributions to controversial arenas without acquiring enemies along the way. Beth is no exception. Her original work on behalf of those accused of heinous crimes earned her the bitter animosity of many individuals whose judicial philosophy, contrary to "innocent until proven guilty," appeared to be, "where there's smoke, there's fire." This animosity ramped up dramatically in the 1980s and 1990s when the beneficiaries of Beth's forensic interests morphed from suspects in muggings and convenience-store robberies to individuals who, after having shown up as perpetrators in "repressed but recovered" memories of alleged victims, were accused of having sexually abused their children many years earlier. Beth took a strong position on these issues, which amounted to "repressed memories are often false memories," and for this stand attracted firestorms of criticism that touched every corner of her life. This incessant enmity affected Beth in many ways, none of them pleasant. But of the many and varied forms of harassment devised by Beth's detractors, none devastated her more than a cynical betrayal by her home institution: The University of Washington administration, spearheaded by its powerful human subjects review committee, trumped up—and eventually dropped without comment or apology—charges against her that, for a 2-year period, crippled her ability to carry out research or to publicly present her views. Beth hit back in a 2002 *Skeptical Inquirer* article, but at that point she was fed up with the University of Washington. In 2002—to the dismay of her many departmental colleagues and other supporters there, and despite having built a satisfying and multifaceted life in Seattle during her 29 years of University of Washington service—Beth departed for the sunnier climates of California where she currently teaches at UC–Irvine.

The second observation is more personal. Like many people whose lives are driven by a passionate commitment to a changed world, Beth has been consumed by her work. Alas, this view was not entirely shared by her husband, who was continually lobbying for, for example, a vacation that wasn't tied to a professional convention or a continuing-education seminar. In 1991, unable to reconcile these differences, the couple divorced. However, their fundamental relationship never changed and they have remained close friends. Close enough, indeed, that Beth's ex-husband even gets a kick out of writing book chapters about her.