

## ***Evelyn Fox Keller, Who Turned a Feminist Lens on Science, Dies at 87***

Trained as a physicist and biologist, she argued that science had become gendered, with a narrow masculine framework that distorted inquiry.



The scientist Evelyn Fox Keller in 2005. She wrote widely about the way ideas of masculinity and femininity had affected her profession. Credit...Rick Friedman/Corbis, via Getty Images **By [Clay Risen](#)** Sept. 30, 2023

Evelyn Fox Keller, a theoretical physicist, a mathematical biologist and, beginning in the late 1970s, a feminist theorist who explored the way gender pervades and distorts scientific inquiry, died on Sept. 22 at an assisted living home in Cambridge, Mass. She was 87.

Her children, Jeffrey and Sarah Keller, confirmed the death. They did not specify a cause.

Dr. Keller trained as a physicist and focused much of her early work on applying mathematical concepts to biology. But as the feminist movement took hold, she began to think critically about how ideas of masculinity and femininity had affected her profession.

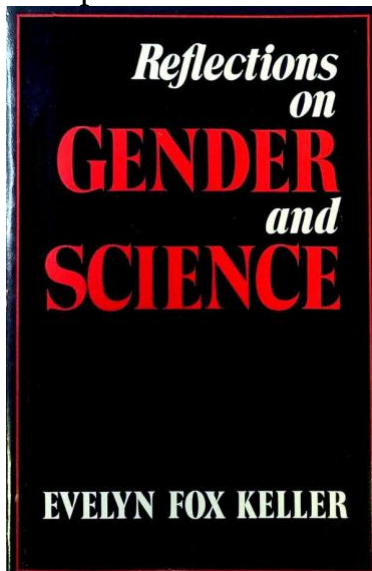
Like many women in the sciences, she had faced years of disparagement and discrimination, and one of her first efforts was to quantify the effect such a hostile environment had on women — how it held them back, and how it drove many to leave science completely.

Her inquiry soon went deeper, in books like “Reflections on Gender and Science” (1985). “Let me make clear from the outset,” she wrote in that book, “that the issue that requires discussion is not, or at least not simply, the relative absence of women in science.”

The issue, rather, was how people talked about science, and how the scientific community thought about itself and its work — frameworks that, she argued, had been bracketed by gender ideology since the scientific revolution of the 17th century.

Dispassionate objectivity was the rule; scientists disparaged subjectivity and feeling as feminine. She noted that many of the members of the Royal Society of London, Britain’s academy of sciences, which was founded in 1662, were explicit about their desire to construct a “masculine” discipline. “Let us establish a chaste and lawful marriage between mind and nature,” said Francis Bacon, an inspiration for the society.

The problem, Dr. Keller argued, was that gender ideology, and in particular its emphasis on hard, objective thinking, excluded other modes that might prove equally useful. Feeling, empathy, intuition — these were not necessarily feminine aspects of inquiry, but they had all been excluded from “masculine” scientific methods, while potentially disruptive notions of control and domination had been placed at the center.



In books like “Reflections on Gender and Science,” Dr. Keller argued that gender ideology, and in particular its emphasis on hard, objective thinking, excluded other modes that might prove equally useful.

She called instead for what she called “dynamic objectivity,” in which the line between observer and observed was blurred and subjective feelings would be seen as resources — a situation in which, not incidentally, more women might be welcomed into the field.

“I am not saying that women will do a different kind of science,” she told *The Boston Globe* in 1986. “I am saying when there are more women in science, everybody will be free to do a different kind of science.”

Evelyn Fox was born on March 20, 1936, in Queens. Her parents were Jewish immigrants from Russia — her father, Al, ran a deli in Manhattan, and her mother, Rachel (Paperny) Fox, was a homemaker.

Al and Rachel Fox never finished high school, but all three of their children went on to stellar academic success: Evelyn's brother, [Maurice](#), was a geneticist at the Massachusetts Institute of Technology, and her sister, [Frances Fox Piven](#), is a political scientist at the City University of New York's Graduate Center and a leading figure in the welfare rights movement.

Evelyn studied at Queens College before transferring to Brandeis University, where she graduated with a degree in physics in 1957. She then enrolled in the graduate physics program at Harvard, where she was one of only three women out of 100 students.

Though she proved a capable student, she confronted animosity from her peers and teachers. After she wrote one particularly good essay, she recalled, a professor invited her to his office to discuss it — not because she did so well, but because he was sure she had plagiarized someone else's work.

After passing her oral exams, she considered leaving physics entirely. But a visit with her brother to the Cold Spring Harbor Laboratory on Long Island showed her a new path.

She not only found a welcoming community; she also encountered people doing pathbreaking work applying mathematics and physics to biology. She returned to Harvard and received her doctorate in 1963.

She began teaching at New York University and in 1964 married Joseph Keller, a fellow mathematician. They divorced in 1976. Along with her children and her sister, Dr. Keller is survived by two grandchildren. Her brother died in 2020.

Dr. Keller established herself as an academic scientist, teaching at the State University of New York at Purchase and Northeastern University in Boston. But she continued to feel boxed in because of her gender.

Finally, at a conference at the University of Maryland in 1974, she surprised the crowd with a talk about women in science, which she later turned into an essay, "The Anomaly of a Woman in Physics."

The paper sent shock waves through the field and soon led to her next project, a biography of the biologist [Barbara McClintock](#). They had met before: Dr. McClintock worked at Cold Spring Harbor, and Dr. Keller remembered her as a lonely, frustrated woman. But she soon realized that her impression had been filtered through her own assumptions, and through the way other people talked about her.

In reality, Dr. McClintock was a radically creative thinker, with original ideas about genetics derived from her work with corn. The resulting book, aptly titled "A Feeling for

the Organism: The Life and Work of Barbara McClintock,” was published in 1983, less than a year before Dr. McClintock won the Nobel Prize in Physiology or Medicine.

In 1988 Dr. Keller moved to the University of California, Berkeley, where she taught courses in the history and philosophy of science. She received a MacArthur “genius” grant in 1992 and, soon after that, began teaching at M.I.T.

She continued to press her argument in books, essays and speeches, often to packed auditoriums. Her later books include “The Century of the Gene” (2000), “Making Sense of Life: Explaining Biological Development With Models, Metaphors and Machines” (2002) and “The Mirage of a Space Between Nature and Nurture” (2010).

Unlike many of her generation’s postmodern critics of science, Dr. Keller believed it was possible to overcome science’s ideological problems.

Calling herself an “unreconstructed modernist,” [she told The New York Times in 2005](#), “I retain the hope and even the belief that at least some forms of confusion can actually be cleared up.”