

BARNES, Mabel (Schmeiser). July 29, 1905–February 22, 1993.

CORNELL COLLEGE (BA 1926), UNIVERSITY OF WISCONSIN (MA 1928), OHIO STATE UNIVERSITY (PhD 1931).

Mabel Frances Schmeiser was the second of six children of Christena M. (Wehmeyer) (1879–1953) and Emanuel Schmeiser (1872–1942), both Iowa natives who had married in 1902. Her mother was educated through the eighth grade, and her father, a farmer, received some elementary education. All of the children were born in Wapello, in southeastern Iowa just a few miles from the Mississippi River, and all attended college; the four oldest were graduates of Cornell College in Mount Vernon, Iowa, about sixty miles north of Wapello; the two youngest attended Iowa State University. Mabel Schmeiser's siblings were Agnes P. (1903–2002), who was a teacher; Martin L. (1907–1976), a civil engineer who also did some graduate work at Iowa State; Mary M. (1909–1991), a dietician and small business owner; L. Josephine (1912–1999), a graduate of Iowa State who was a dress designer for a department store and who was the wife of a president of Pennsylvania State University; and L. Maurice (1919–2008), who attended Iowa State for two years and became a farmer.

Mabel Schmeiser began her education in a one-room country school and graduated from the high school in Wapello in 1922 before going to Cornell College. In the spring of 1926, before her graduation, she was chosen as recipient of the mathematics department fellowship at the University of Wisconsin, where she subsequently spent the next academic year. She received her master's degree from Wisconsin in 1928 after having entered Ohio State University for further graduate work in 1927. She was at Ohio State 1927–30 and the summers of 1930 and 1931. She was a graduate assistant the first two years and a university fellow the last year.

Through a teachers' employment agency, Schmeiser found a position as professor and acting chairman of the mathematics department at Nebraska State Normal School and Teachers College (now Wayne State College) in Wayne. She was there, substituting for someone on leave of absence 1930–31, the year before finishing her dissertation and receiving her PhD from Ohio State. She continued in that position until 1933, when her predecessor returned to resume the position.

During the Depression, with jobs hard to find, Schmeiser applied to and was accepted at the recently opened Institute for Advanced Study at Princeton. She spoke about her year there, as well as other aspects of her life and career, at a panel on women in American mathematics at the centennial celebration of the AMS in Providence in 1988. She noted that there were still no jobs at the end of the academic year 1933–34, so "six men and I from the Institute and from Princeton University took a special qualifying exam to be taken on as substitutes for mathematics teachers on leave from New York City high schools. Our duties were to teach light schedules in the high schools to which we were assigned and to give jointly an alertness course, as it was called, for high school teachers. It qualified them for raises" (1988, 7). Schmeiser was a substitute at Wadleigh High School in Manhattan.

On July 3, 1935, Mabel Schmeiser and John Landes Barnes were married. He was born in New Jersey in 1906, had a bachelor's degree and master's degree in electrical engineering from MIT, and a master's degree and a 1934 PhD in mathematics from Princeton. They first lived in Massachusetts, where J. L. Barnes had a position

as assistant professor at Tufts College (now University). Although Mabel Barnes did not have a regular position at Tufts and normally gave her home address for the AMS membership list, in September 1938 she used the college as her mailing address. She later reported, “I kept my hand in somewhat by marking papers and substituting for [my husband] when he was away, and by helping him edit the mathematics section of Eshbach’s *Handbook of Engineering Fundamentals*, second edition” (1988, 7).

John Barnes remained at Tufts until 1942, during which time he was promoted to professor of mathematics and served as chairman of applied mathematics as well as acting chairman of electrical engineering. During that period their two children were born. George Gared Barnes, born in December 1936 in Boston, became an engineer, having earned a bachelor’s degree in physics, and master’s degrees in engineering, in statistics, and in business administration. Lynne Ries Barnes Small, born in August 1940 in Philadelphia, has a PhD in mathematics from Yale and is a professor at the University of San Diego.

During World War II John Barnes was on leave from Tufts and did war work with Bell Telephone Laboratories, first in New York and then in New Jersey. They returned to Tufts after the war, and Mabel Barnes was hired as an assistant professor at Tufts for 1946–47, partly because of the influx of veterans. She later noted, “nepotism and my being a woman were overlooked. Desperation again overcame prejudice” (1988, 7). Although she was rehired for the next year, they moved to California where her husband had taken a position as professor in engineering at UCLA. He remained there until his retirement in 1974. In addition to many consulting positions over the years, John L. Barnes was founder and president, from 1957 until 1976, of Systems Corporation of America. He died in La Jolla in 1976 shortly before his seventieth birthday.

In 1950 Mabel Barnes resumed her career by taking a position at Occidental College in Los Angeles, where she was instructor 1950–51, lecturer 1951–52, assistant professor 1952–56, associate professor 1956–64, professor 1964–71, and then professor emeritus. In 1955 she became the editor of “Installation of New Chapters” in *Pentagon*, the journal of Kappa Mu Epsilon. She served until 1961 and was succeeded by [Sister Helen Sullivan](#).

Lynne Barnes Small wrote in 1997 that her mother “liked to travel, especially to remote places, and took many trips with the Sierra Club and/or one of her grandsons. . . . The generation-skipping trips had a certain charm: picture grandmother and grandson in the 9-to-12-year-old range traveling to Alaska or to remote parts of northern Canada.” Her main activity during retirement was working on conservation with both the Sierra Club and with the Desert Protective Society. She also was a volunteer at the Sherman Oaks Hospital for many years.

Mabel Barnes died in Los Angeles in 1993 at age eighty-seven.

Organizational affiliations: AMS, MAA, Phi Beta Kappa, Kappa Mu Epsilon.

Thesis and dissertation:

1928 [Schmeiser, M. F.] Multiple and iterated integrals. MA thesis, University of Wisconsin, directed by Edward Burr Van Vleck. Typescript.

1931 [Schmeiser, M. F.] Some properties of arbitrary functions concerning approach to a straight line. PhD dissertation, Ohio State University, directed by Henry Blumberg. Typescript. Abstract: *Abstracts of doctors’ dissertations. The Graduate School, Ohio State University*. 7:241–51. See also **1934**.

Publications:

1934 [Schmeiser, M.] Some properties of arbitrary functions. *Fund. Math.* 22:70–76. Published version of PhD dissertation. Reviews: *JFM* 60.0194.02 (R. Schmidt); *Zbl* 008.34302 (H. Blumberg). Presented to the AMS, Cambridge, MA, 26 Dec 1933; abstract: *Bull. Amer. Math. Soc.* 40:37 #32.

1988 Mabel S. Barnes. In Centennial reflections on women in American mathematics. *AWM Newsletter* 18 (6): 6–8. Transcript of a panel discussion sponsored by the AWM at the AMS Centennial meeting, Providence, RI, 9 Aug 1988. Reprint, with editorial revisions: 2005. Fifty years in mathematics. In *Complexities*, ed. B. A. Case and A. M. Leggett, 27–30. Princeton, NJ: Princeton University Press.

References to: AmMSc 8, 9P–11P; AmMWSc 12P, [BioWMath](#).

Other sources: PhD dissertation autobiography 1931; Owens questionnaire 1937; authors' questionnaires for Mabel S. Barnes and John L. Barnes completed by Lynne Barnes Small 1992; communication from Lynne B. Small 1997; WhoAm 39 (Barnes, John Landes); [University of California: In Memoriam, September 1978 \(John Landes Barnes, Engineering\)](#)

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