

McCOY, Dorothy. August 9, 1903–November 21, 2001.

BAYLOR UNIVERSITY (BA 1925), UNIVERSITY OF IOWA (MS 1927, PhD 1929).

Dorothy McCoy was born in Waukomis in Oklahoma Territory, four years before Oklahoma attained statehood. She was the elder of two children of Susan Ellen (Holmes) (1876–1941) and Stephen Franklin McCoy (1860–1906). Her mother was born in Kansas but grew up in Lawrence County in southwestern Missouri and attended a few short terms at a country school. Her father, born in Alabama, was a farmer who homesteaded in Oklahoma. He had almost no education but did learn to read and write. Her parents were married in 1902. Her younger brother, Neal Henry, was born on March 6, 1905.

After Dorothy McCoy's father died in 1906, her mother and the two young children moved to Chesapeake in Lawrence County, Missouri, where her mother still had family. There Dorothy and Neal attended a one-room elementary school before the family moved to nearby Marionville where the children attended high school. After Neal skipped the seventh grade, the two of them did almost all of their further schooling together. Dorothy McCoy wrote in 1985 that her mother was very ambitious for both her children.

After Dorothy and Neal McCoy graduated from high school in 1921, the family moved to Waco, Texas, where they both attended Baylor University, a Baptist school. After they graduated from Baylor with honors in 1925, both taught in high school for a year in Texas; Dorothy was in Port Arthur. Together they then began their graduate work at the State University of Iowa, the official name of the University of Iowa, in Iowa City in July 1926. They earned their master's degrees a year later and continued with their work for the doctorate. Dorothy McCoy's major field of study was mathematics with a first minor in education and a second minor in psychology. She wrote her dissertation in topology under the direction of E. W. Chittenden; Neal's dissertation was on commutation formulas in the algebra of quantum mechanics and was also directed by Chittenden. Both Dorothy and Neal received their doctorates in 1929. While at Iowa Dorothy held a scholarship for one year, a fellowship for the year 1927–28, and a graduate assistantship during 1928–29, her last year there. Dorothy McCoy was the only woman to receive a doctorate in mathematics at Iowa before 1940.

Neal McCoy held a National Research fellowship at Princeton for the two years after receiving his PhD and then joined the faculty at Smith College, where he had a distinguished career as a researcher and teacher. He was particularly noted as the author of textbooks in abstract algebra. He retired in 1970.

Immediately after receiving her PhD, Dorothy McCoy went to Belhaven College in Jackson, Mississippi, as professor and head of the mathematics department. During her twenty-year tenure there, Belhaven was a women's college affiliated with the Presbyterian church. While there, she sponsored the Baptist Student Union. In the summer of 1930 she taught as a visitor at Baylor, while during the summer quarter of 1931, she attended classes at the University of Chicago as a visiting PhD. According to her obituary she also studied during a summer at Columbia University. In 1933 she joined the editorial board of the *Mathematics News Letter*, then an independent journal that had been published under the auspices of the Louisiana-Mississippi Section of the MAA and the Louisiana-Mississippi Branch of the NCTM until the end of 1931. In 1934 the journal changed its name to *National*

Mathematics Magazine, and McCoy remained on the board until its last issue under that name in 1945; in 1947 it resumed publication as *Mathematics Magazine*. Also during this time McCoy was active in the Louisiana-Mississippi Section of the MAA. She served as secretary of the section 1932–37, chairman 1937–38, and vice chairman for Mississippi 1938–39.

The attraction of teaching in a Baptist college contributed to McCoy's decision to move to Wayland Baptist College (now University) in Plainview, Texas, in 1949, two years after it became a four-year college. She went as professor of mathematics and chairman of the division of physical and biological sciences. During the academic year 1953–54, she was a Fulbright professor at Baghdad University in Iraq. She also attended institutes for college teachers in Boulder, Colorado, during the summer of 1953; at Vanderbilt University for one summer and a semester; and at Washington State University. Between 1954 and 1958 she worked one summer at Patrick Air Force Base in Florida and two summers at the Aberdeen Proving Ground in Maryland. She also taught one summer at Northwestern State Teacher's College (now Northwestern Oklahoma State University) in Alva, Oklahoma. She was visiting professor at the University of Hawaii in summer 1958 and at Baylor in summer 1961. Her obituary indicates that she also taught for a summer at the University of New Mexico. She served on the council of the AAUP in the early 1960s. She remained chairman of the division of physical and biological sciences at Wayland Baptist until 1972.

In 1975 McCoy retired as distinguished professor emeritus of mathematics. After her retirement she spent six months as a teacher of children of missionaries in Malawi in southeastern Africa; a year later she worked for three months at a similar school in Indonesia. These experiences caused her to found a mission interest group in Plainview; she remained involved with that group for the remainder of her life.

The Dorothy McCoy lecture series was established in 1980, she received the Wayland Alumni Association plaque for distinguished service to students in 1982, and she was given the Roy McClung Service plaque for her concern for foreign students at Wayland Baptist. In 1999 she was the first to receive the Distinguished Lifetime Service Award from the Association of Former Students. A bust, created by a former art teacher at Wayland, has been on display at the library. In September 2001 she was one of the first two inductees into the Division of Mathematics and Science hall of honor at Wayland Baptist.

Dorothy McCoy was a Southern Baptist and was active in the First Baptist Church in Plainview. She had many hobbies over the years, including travel, photography, and in later years, bird watching. According to her obituary, her travels included Central America, South America, and India, in addition to her trips to Iraq and Africa. She maintained her home in Plainview, but continued to visit her brother, Neal, in Massachusetts until both were well into their nineties. Neal McCoy died in Northampton on January 4, 2001. According to a communication from Janet Seright, a friend in Plainview, Dorothy McCoy remained active, drove her car, and was still involved in church and mission activities until September of that year.

On September 27, 2001, Wayland Baptist dedicated in Dorothy McCoy's name a recently acquired and renovated property to serve as a senior men's honors dormitory. The day after the dedication she moved from her home to Prairie House

Living Center, an assisted living facility in Plainview, where she died at age ninety-eight less than two months later. She is buried in Plainview Memorial Park. The family suggested that memorials be made to the Dorothy McCoy scholarship fund for mathematics at Wayland Baptist University.

Organizational affiliations: AMS, MAA, AAUP, Sigma Xi.

Thesis and dissertation:

1927 A study of complex roots of polynomials. MS thesis, University of Iowa, directed by Roscoe Woods.

1929 The complete existential theory of eight fundamental properties of topological spaces. PhD dissertation, University of Iowa, directed by Edward Wilson Chittenden. Printed version, 1930, reprinted from *Tôhoku Math. J.* 33:88–116.

Publications:

1930 The complete existential theory of eight fundamental properties of topological spaces. *Tôhoku Math. J.* 33:88–116. Published version of PhD dissertation. Review: *JFM* 56.1123.05 (E. Pannwitz). Presented to the AMS, Des Moines, IA, 31 Dec 1929; abstract: *Bull. Amer. Math. Soc.* 36:211 #167.

1932 Axioms and their relations to secondary school mathematics. *Math. News Lett.* 6 (4): 11–14. Presented to a meeting of the NCTM, Natchitoches, LA, 13–14 Mar 1931.

1935 Space. *Natl. Math. Mag.* 9:155–62.

1936a Continuous transformations of finite homogeneous spaces. *Natl. Math. Mag.* 10:212–18. Review: *JFM* 62.1406.06 (G. Aumann). Presented to the AMS, Pittsburgh, PA, 28 Dec 1934; abstract: *Bull. Amer. Math. Soc.* 41, no. 1, pt. 2: 28–29 #39.

1936b Review of *A Mathematician Explains*, by M. I. Logsdon. *Natl. Math. Mag.* 10:236.

1937 Review of *First Year of College Mathematics*, by R. W. Brink. *Natl. Math. Mag.* 12:103–04.

1938 Review of *Plane Trigonometry*, by C. N. Mills, E. Atkins, and E. F. Scott. *Natl. Math. Mag.* 12:419–20.

Abstracts not listed above:

1934 Combinations of abstract spaces. *Amer. Math. Monthly* 41:474 #2. Presented to the MAA, Jackson, MI, 24 Mar 1934.

1949 Undergraduate mathematics in our Louisiana-Mississippi Section. *Amer. Math. Monthly* 56:587 #2. Presented to a meeting of the MAA, Oxford, MI, 8–9 Apr 1949.

Presentations not listed above: “The social studies curriculum and mathematics.” Presented to the NCTM, Baton Rouge, LA, 30 Dec 1940 meeting.

References to: AmMSc 6–8, 9P–11P; AmMWSc 12P–13P, 14–21; [BioWMath](#).

“Wayland to Dedicate Honors Dorm to Former Faculty Member.” Wayland Baptist University news release, 5 Oct 2001.

“Dr. Dorothy McCoy.” (Obituary) *Plainview (TX) Daily Herald*, 22 Nov 2001.

“Longtime Wayland Supporter, Former Professor Dies.” Wayland Baptist University news release, 29 Nov 2001.

Hutchinson, Joan P. and Larry Riddle. “Dorothy McCoy (1903–2001).” *AWM Newsletter* 32 (Jan–Feb 2002): 8–9.

Other sources: PhD dissertation abstract biography 1930; Owens questionnaire 1937; Smithsonian questionnaire 1985; correspondence between D. McCoy and J. Hutchinson Feb–May 2001, shared with the authors; communication from Janet Seright to Joan Hutchinson Dec 2001; US Census 1880, 1910, 1920 MO, 1930 MS.