## DARKOW, Marguerite D. November 12, 1893–December 9, 1992.

BRYN MAWR COLLEGE (BA 1915), UNIVERSITY OF CHICAGO (MA 1923, PhD 1924).

Marguerite Daisy Darkow was the second of three daughters of Flora (Singer) (1867–1942) and Martin Darkow (1856–1928). Her mother, born in Vienna, studied in private schools there; she learned German, French, English, a little Italian, and studied piano from a well-known teacher there. Martin Darkow was born in Riga, then in Russia. He studied violin as a boy and learned piano and organ. He attended college in Vienna. Flora Singer and Martin Darkow were married in 1888, and their first daughter, Angela Charlotte (1889–1943), was born in Vienna. They immigrated to the United States in about 1891, and Marguerite was born in Philadelphia two years later. The youngest daughter, Felice Evelyn (1898–1989), was also born in Philadelphia. Martin Darkow's occupation was listed as doctor in 1900, newspaper editor in 1910, and music teacher in 1920. Both Flora and Martin Darkow taught piano, but for the most part, he earned his living as a music and theatre critic for a German language newspaper.

In the mid-1910s, Martin Darkow was managing editor of a socialist Germanlanguage newspaper, the Philadelphia *Tageblatt*, that reported the war news from a German perspective. In September 1917 he, along with others connected with the newspaper, was indicted and tried for treason and for violation of the Espionage Act for making false statements to help the enemy. These charges were based on articles and editorials that appeared after the United States had declared war on Germany in early April 1917. In 1918 Darkow was acquitted on the treason charge but was convicted on the other charges. He received a five-year sentence that he appealed. Even though the Supreme Court upheld the conviction in March 1920, Darkow was never imprisoned and was pardoned by President Woodrow Wilson in June that year.

All three daughters earned higher degrees. Angela Darkow earned a BA in 1911, an MA in 1912, and a PhD in Greek literature in 1914 from Bryn Mawr. She taught Greek and Latin for several years in private high schools, later worked as an actuary, made and sold jam and fine embroideries during the Depression, was a bookkeeper, worked temporarily for the US Bureau of Labor Statistics, and died of cancer after a long illness. Felice E. Darkow received her BA in 1920 from the University of Pennsylvania and her LLB from the law school there. She had a variety of positions; the last two decades of her career she was with the US Department of Labor, first in Philadelphia and then in Washington, D.C. She was given the Distinguished Service Award upon her retirement.

Marguerite Darkow attended the E. Spencer Miller School in Philadelphia 1899–1907 and the Philadelphia High School for Girls 1907–11 before entering Bryn Mawr College in 1911. During her four years at Bryn Mawr she held several scholarships. She was First Bryn Mawr Matriculation Scholar for Pennsylvania and the Southern States 1911–12, Simon Muir scholar 1911–15, James E. Rhoads junior scholar 1913–14, and Maria L. Eastman Brooke Hall memorial scholar 1914–15. She graduated in mathematics and physics in 1915 and led the list of honor students. As the student with the highest average, Darkow was awarded a Bryn Mawr European fellowship for 1915–16; a Philadelphia newspaper reported that she had attained the highest average of any Bryn Mawr student since 1900. Her mother's cousin, the philosopher

Book Web Page DARKOW - 2

Edmund Husserl, was then at Göttingen and encouraged her to come there to study, but she delayed using the fellowship because of the war in Europe.

In 1915–16 Darkow taught mathematics and science at Tudor Hall, a private school for girls in Indianapolis. During the summer of 1916 she studied at the University of Pennsylvania before entering the Johns Hopkins University that fall. She was a graduate student and fellowship holder in physics and mathematics 1916– 17, during which she had courses in higher geometry, theory of functions, and theory of mechanics of physical optics. In the summer of 1917, she did statistical work for the children's bureau of the US Department of Labor. In 1917–18 she returned to teaching mathematics and science, this time at Rogers Hall in Lowell, Massachusetts, and the following year, 1918–19, she did astronomical research at the Leander McCormick Observatory at the University of Virginia. During several summers she worked as both a private tutor and as a tutor for fall college entrance exams at tutoring camps in New England. From 1917, and continuing into the 1920s, Darkow's father was often mentioned in the news making it difficult for her to pursue a normal career. On April 20, 1917, a few weeks after the United States entered the war against Germany, M. Carey Thomas, president of Bryn Mawr, wrote to Charlotte Scott, head of the mathematics department:

I should not be willing to nominate Miss Darkow for any position in Bryn Mawr College.... I am particularly anxious that the question should not be brought up as I think that it might hurt her future career as a teacher. I should also not be willing for her to correct examination papers. I do not wish to bring her into connection in any way with Bryn Mawr College. (M. Carey Thomas Papers, microfilm reel 137, LXII, 138)

Although Thomas does not explain the reasons behind her attitude toward Darkow, the proximity of Bryn Mawr to Philadelphia would have made it likely that Thomas was already aware of the writing that later led to Martin Darkow's indictment for treason. Furthermore, other of Thomas's official papers of the time have been described as including "her efforts to assure that German propaganda be banned from the [Bryn Mawr] campus" (M. Carey Thomas Papers Guide and Microfilm Edition, Reel 137: M. Carey Thomas Official Papers; Letterbook no. 62. February 17, 1917 - January 3, 1918).

In 1920 Darkow was living in her parents' home in Philadelphia. She began working in the actuarial department of the Provident Life Insurance Company in Philadelphia in 1919 or 1920 and passed section A, part I, of the Actuarial Society of America examinations in May 1920. She passed part II of the associate examination in May 1921 and part III in May 1922.

Darkow left her position at Provident in 1922 to enter graduate school at the University of Chicago with a fellowship. She earned her master's degree in 1923 and continued another year at Chicago with a fellowship. She received her PhD in August 1924 with a dissertation written under the direction of L. E. Dickson. The results in her dissertation and in her 1927 paper in the *Annals of Mathematics* were cited in papers through at least 1940. In 1924–25, she traveled in Europe and finally used the European fellowship awarded by Bryn Mawr in 1915 to study at the Sorbonne in Paris. During this trip she visited Edmund Husserl, who was then at Freiberg and who again urged her to go to Göttingen.

Book Web Page DARKOW - 3

Darkow was appointed assistant professor at Indiana University in Bloomington in 1925, and her appointment was terminated after two years. Correspondence from the time reveals issues or misunderstandings. The university president wrote that her appointment was originally a one-year appointment to replace a faculty member on leave. Darkow responded that nothing in the original appointment letter indicated that that was the case. She also noted that L. E. Dickson, her advisor at Chicago, recommended at the time that she give up the National Research Council fellowship to which she had been appointed and take the Indiana position instead, and that he would not have done so for a one-year position. There is a further question of whether a report to the president that she was a reader of the American Mercury magazine and an admirer of H. L. Mencken contributed to the dismissal. Darkow clearly felt that it had (President's files, Indiana University Archives). In any case, the following year, 1927–28, she was an instructor at Pennsylvania State College.

In the fall of 1928 Darkow began her career at Hunter College in New York, where she was instructor 1928–30, assistant professor 1928–42, associate professor 1942–56, professor 1956–59, and professor emeritus after her retirement in 1959. She continued her study of mathematics at the University of Chicago in summer 1938 and studied statistics at the University of Michigan the following two summers. In June 1940 Darkow indicated in a letter to Helen Owens that she had "a short paper, 'Generalized Center-circles,' in search of a publisher" (Owens Papers). In that same letter, she also commented on women in mathematics noting that women spend time on "minor domestic duties that certainly hamper their energies." Nonetheless, she indicated that "if we exclude the first-rate Mathematicians, I believe we will find many women who can compete with men in the second rank, as teachers, statisticians, etc." The following year Darkow and a colleague at Hunter, Mary K. Landers, wrote a preliminary edition of a textbook they called Elementary Mathematics. Darkow sometimes served as faculty advisor of the Hunter College mathematics club and as director of the Hunter chapter of Pi Mu Epsilon.

Darkow was interested in bird watching, travel, flowers, photography, reading, and corresponding with friends. She knew Latin and Greek, read both German and French with ease, and taught herself Spanish and a little Italian after her retirement. She traveled frequently. She regularly contributed to charities and was a member of the American Civil Liberties Union and various anti-nuclear organizations. In 1936 she hosted Edmund Husserl's son, Gerhart, a law professor, and his son-in-law, Jakob Rosenberg, an art historian, when they came to the United States to escape from Nazi Germany. As established academics, both of these cousins had jobs waiting for them. In March 1940, a Jewish cousin who was fleeing Austria without a job in the United States listed Darkow's address as her destination on the manifest of alien passengers arriving in the United States.

In about 1950, Darkow became close friends with Edna Sheinhart (1923–1995), who had graduated from Hunter in the 1940s and was a research engineer. After Darkow's retirement they shared an apartment in New York, traveled together, and then shared a home in Berkshire County, Massachusetts. Sheinhart had bought a farm in Sheffield, and the renovated barn became their permanent home in 1972. Their last good trip was to Egypt in 1979. In about 1982 Darkow was diagnosed with Alzheimer's disease. She remained in her home and was cared for by Sheinhart

Book Web Page DARKOW - 4

and a staff of care givers. Marguerite Darkow died in her home in 1992. She was ninety-nine. Her ashes were buried at the top of the hill on the premises.

A letter from Dorothy Garfein, a friend and executor of her estate, informing Bryn Mawr of Darkow's death, indicated that "as a tribute to her lifelong concern for wildlife and the environment a 215 acre tract of farmland and woods was donated in Marguerite's name to the Massachusetts Audubon Society." This gift formed the basis of a wildlife sanctuary in Sheffield, Massachusetts. It was first called the Mount Everett Wildlife Sanctuary but was opened to the public in 2007 as the Lime Kiln Farm Wildlife Sanctuary.

Organizational affiliations: AMS, MAA, IMS, Sigma Xi, Pi Mu Epsilon.

## Thesis and dissertation:

**1923** A Riemann surface for the function  $z = w - e \sin w$ ,  $(0 \le e \le 1)$ . MA thesis, University of Chicago. Typescript.

1924 Arithmetics of certain algebras of generalized quaternions. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Typescript. Abstract: *University of Chicago. Abstracts of theses. Science series.* 3:3–6.

## **Publications:**

1927 Determination of a basis for the integral elements of certain generalized quaternion algebras. *Ann. of Math.* 2nd ser., 28:263–70. Reviews: *JFM* 53.0120.03 (R. Brauer); *Rev. semestr. publ. math.* 34, pt. 1: 61 (W. A. Wythoff).

**1929** (Editor) Sir William Rowan Hamilton: On Quaternions. In *A Source Book in Mathematics* ed. D. E. Smith, 677–83. New York: McGraw-Hill Book Co. Reprint: 1959. New York: Dover Publications.

1935 with L. S. Hill. On algebraic treatment of geometry on a spherical surface. Scripta Math.~3:234-46,~329-36. Review: JFM~61.1391.03 (M. Steck).

 ${f 1941}$  with M. K. Landers. *Elementary Mathematics*. Prelim. ed. New York and Ann Arbor: Edwards Brothers.

1944 Review of *Mathematics Dictionary*, rev. ed., eds. G. James and R. C. James. *Scripta Math.* 10:186–88.

1957 Interpretations of the Peano postulates. Amer. Math. Monthly 64:270-71.

## Abstracts not listed above:

1938 Generalized center-circles. *Bull. Amer. Math. Soc.* 44:786–87 #464. Presented by title to a meeting of the AMS, Richmond and Williamsburg, VA, 27–30 Dec 1938.

1947 with L. A. Aroian. The fourth degree exponential function. *Bull. Amer. Math. Soc.* 53:1128 #430 and *Ann. Math. Statist.* 18:609 #8. Presented by Dr. Aroian to the AMS and the IMS, New Haven, CT, 4 Sep 1947.

**References to:** AmMSc 6-8, 9P-11P; AmWom 1935-40.

"Student at Bryn Mawr Gets Highest Honor Since 1900." Unidentified Philadelphia newspaper clipping.

Obituary in "Class Notes." Bryn Mawr Alumnae Bulletin, Summer 1993.

Other sources: Owens questionnaire 1937; Owens Papers; Smithsonian questionnaire 1982 (prepared by Felice Darkow); communication with Dorothy I. Garfein (friend); Bryn Mawr College Archives and Alumnae Files; Society of Actuaries Library; communication with Indiana University Archives; M. Carey Thomas Papers (New Haven, CT: microfilmed by Research Publications, 1981); M. Carey Thomas Papers Guide and Microfilm Edition; Russell A. Kazal, Becoming Old Stock: The Paradox of German-American Identity (Princeton, NJ: Princeton University Press, 2004); Edmund Husserl: Briefwechsel, vol. 9, Familienbriefe (Dordrecht: Kluwer Academic Publishers, 1994); US Census 1900, 1910, 1920, 1930 PA.