SPERRY, Pauline. March 5, 1885–September 24, 1967.

SMITH COLLEGE (BA 1906, MA 1908), UNIVERSITY OF CHICAGO (MS 1914, PhD 1916).

Pauline Sperry was born in Peabody, Massachusetts, the second of three children of Henrietta (Learoyd) (b. 1850) and Willard Gardner Sperry (b. 1847), both natives of Massachusetts. Her mother studied at Abbot Academy in Andover, Massachusetts, and between 1868 and 1878 served five years as a teacher and vice principal there. Her father graduated from Yale University in 1869. Her parents married in 1879. Willard Gardner Sperry was master of a high school in Massachusetts, served for many years as pastor at Congregational churches in Massachusetts and New Hampshire, received a doctor of divinity degree in 1893, was president of Olivet College in Michigan 1893–1904, and then became a minister in York Beach, Maine. Pauline Sperry's siblings were Willard Learoyd (1882–1954) and Henrietta (1889-1974). In 1885 the Sperrys bought a cottage in York County, Maine, which they owned for nearly fifty years, and to which they returned every summer. Her brother earned his bachelor's degree from Olivet College, was in the first group of American Rhodes scholars to go to Oxford in 1904, earned master's degrees from Oxford and from Yale, became a clergyman and writer, and spent most of the latter years of his life as dean of the Harvard Divinity School. Her sister graduated from Smith College and became a writer. She wrote a weekly food column for the New York Times in the 1930s, wrote four books, and was a contributor to women's magazines.

In 1902 Pauline Sperry began her undergraduate work at Olivet College in Michigan, where her father was president until 1904. She then attended Smith College in Northampton, Massachusetts, received her BA from Smith in 1906, and spent most of the first few years of her career there. The year after her graduation, she was a teacher of mathematics at Hamilton Institute in New York City. The next year, 1907–08, she was a fellow in music and mathematics at Smith, where she earned a master's degree in music in 1908. Sperry remained at Smith as an assistant in mathematics 1908–11 and as instructor 1911–12. In 1910 she, her widowed mother, and her sister, who graduated from Smith that year, were living in Northampton. In 1912–13 Pauline Sperry was a traveling fellow from Smith.

Sperry then studied at the University of Chicago and received her master's degree in mathematics in 1914. She was a fellow at Chicago 1915–16 and received her doctorate in 1916 with a dissertation in projective differential geometry supervised by Ernest J. Wilczynski. Sperry returned to Smith as assistant professor for the year 1916–17. During the 1917 summer session she taught at the University of California in Berkeley, at that time the only campus of the University of California, and joined the faculty there as an instructor that autumn.

Sperry remained at the University of California for the rest of her career. She was instructor 1917–23, assistant professor 1923–31, associate professor 1931–52, and associate professor emeritus from 1952. When appointed assistant professor, she was the first woman in mathematics in a professorial rank at the University of California. Sperry taught graduate courses in differential geometry and supervised the doctoral dissertations of five students at Berkeley: William Lawrence Hutchings (1935), Philip Osborne Bell (1936), Raymundo Acosta Favila (1939), David Bliss Dekker (1948), and Ting-Kwan Pan (1949). She was on leave the first half of 1938–39 and was in Europe some of that time. During her sabbatical in the spring

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of 1949, Sperry was in Carmel, California, where she had spent many summers during at least the previous two decades. In addition to her regular undergraduate and graduate teaching, in August 1943 she taught navigation to the University of California Navy ROTC.

In April 1920 the upper class and graduate women mathematics students at the University of California formed a mathematics club, Mu Theta Epsilon, that had as one of its aims improved cooperation among students and faculty. All of the faculty were honorary members but the students chose Pauline Sperry as their one active faculty member. Although the latest mention of this club, described in 1925 as a women's mathematics honor society, to appear in the American Mathematical Monthly was in January 1928, Sperry's mentoring of other women did not end then, and, at least in the 1940s, she would take women graduate students to lunch in the Women's Faculty Club. She was also involved in the MAA, and served as vice chairman 1944–45 and then chairman 1945–46 of the Northern California Section.

Although Sperry is listed as being an associate professor 1931–52, she did not serve as such 1950–52. Sperry was among the thirty-one professors dismissed from the university in July 1950 because they would not sign a loyalty oath affirming "that I am not a member of the Communist Party or any other organization which advocates the overthrow of the Government by force or violence" (Gardner, California Oath Controversy, 155). It was later reported that Sperry's "concern, and thus her refusal to sign, centered on the damage to the free and open atmosphere of the university that followed the requirement of the oath" (Innis, "Lessons from the Controversy over the Loyalty Oath," 355). In October 1952 the California Supreme Court ordered that the non-signers be reappointed and Sperry was given the rank associate professor emeritus as of July 1952; further litigation brought her back pay for 1950–52 in 1956.

Sperry was always proud of the stand she took in 1950 and explained in her 1965 article, "Formula for happiness at eighty," in the *Smith Alumnae Quarterly* that she "had always burned for causes" (p. 154). She reiterated her commitment to civil liberties and noted that part of her formula "is summed up in this phrase: 'Frugal spending and extravagant giving'" (p. 155); she also described many of the good deeds that represent her adherence to this part of the formula.

During her years at the University of California and possibly for some years before, Sperry had a close friend in Alice Tabor (1878–1959), who had gone to the University of California in 1916, a year before Sperry joined the faculty. Tabor had also been a graduate student at the University of Chicago and earned a master's degree from there in 1913 and a PhD in 1916, before joining the German department at California. For many years, starting at least by 1920, Sperry lived with Alice Tabor and Tabor's mother in Berkeley; Tabor's mother died in 1948, the year that Alice Tabor retired from the university, and Sperry and Tabor continued to share a residence in Berkeley. At some point, by the early 1930s, they had built a home in Carmel, California, on the Monterey Peninsula, in which they spent many summers, and to which they moved permanently in 1950. The 1960 obituary of Alice Tabor by Sperry and others noted that at the University of California Tabor had "conceived the idea of the Friday Dinner Club, a group of faculty women who gathered monthly for many years to share their widespread and varied interests in research" (1960, 50). The official Faculty Women's Club was organized in 1919 with Sperry and Tabor responsible for the finances and with Tabor as treasurer

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of the building committee. The clubhouse opened in 1923, and Sperry served as director of the club 1926–28.

After she retired to Carmel, Sperry was active in the Monterey Peninsula Friends' Meeting, the American Civil Liberties Union (ACLU), the American Friends Committee on Legislation, the Committee for a Sane Nuclear Policy (SANE), and the League of Women Voters. Sperry's own religious beliefs and political commitments may have been reinforced by her friendship with Tabor, who had a "deep concern for human welfare [that] was a natural inheritance from a long line of Quaker ancestors who as abolitionists had sheltered slaves escaping to Canada, helped revolutionize the treatment of the mentally ill, and pioneered in prison reform and in the Woman Suffrage Movement" (1960, 50). Sperry reported to Smith College in 1957 that she had been active in the local Democratic headquarters in the recent election. She was in London in the summer of 1959.

In early 1961 Sperry reported that she had sold her home in Carmel and moved to Forest Hill Manor, a retirement community in Pacific Grove, California. That same year she received the Olivet College distinguished alumni award. She reported to Smith in February 1963 that she had broken her arm; a year later she noted that she had made a three-month trip to England and New York by freighter. In April 1964 Sperry reported as her chief interest the Step-by-Step School for impoverished children in Haiti. In 1967 Pauline Sperry died in Pacific Grove at the age of eighty-two.

Organizational affiliations: AMS, MAA, AAUP, Phi Beta Kappa, Sigma Xi.

Theses and dissertation:

1908 The development of modern English oratorio. MA thesis, Smith College. Typescript. 1914 On the theory of a one-to-one and one-to-two correspondence with geometrical illustrations. MS thesis, University of Chicago. Typescript.

1916 Properties of a certain projectively defined two-parameter family of curves on a general surface. PhD dissertation, University of Chicago, directed by Ernest Julius Wilczynski. Private edition, 1918, distributed by the University of Chicago Libraries, reprinted from Amer. J. Math. 40:213–24.

Publications:

1918 Properties of a certain projectively defined two-parameter family of curves on a general surface. Amer. J. Math. 40:213–24. Published version of PhD dissertation. Reviews: JFM 46.1101.02 (R. von Lilienthal); Rev. semestr. publ. math. 27, pt. 1: 2 (E. B. Cowley). Presented to the AMS, Chicago, 22 Apr 1916; abstract: Bull. Amer. Math. Soc. 22:441–42 #29.

1926 with H. E. Buchanan. *Plane Trigonometry*. Johnson's Mathematics Series. Richmond, VA: Johnson Publishing Co. Reviews: *Amer. Math. Monthly* 35:144–45 (P. A. Fraleigh); *Sch. Sci. Math.* 27:776 (J. M. Kinney).

1928 Short Course in Spherical Trigonometry. Johnson's Mathematics Series. Richmond, VA: Johnson Publishing Co. Review: Amer. Math. Monthly 36:394–95 (M. E. Wells).

1931 Bibliography of projective differential geometry. *Univ. Calif. Publ. Math.* 2:119–27. Reviews: *Bull. Amer. Math. Soc.* 38 (1, pt. 1): 19 (E. P. Lane); *JFM* 57.1545.06 (G. Feigl). 1960 with C. H. Bell, J. Miles, and L. M Price. Alice Post Tabor, German: Berkeley. *University of California: In Memoriam* (April): 49–51.

1965 Formula for happiness at eighty. Smith Alumnae Quarterly (Spring): 154–55.

Abstracts not listed above:

1919 On the work of Gabriel Marcus Green in the field of projective differential geometry. *Bull. Amer. Math. Soc.* 25:394 #4. Presented to the AMS, Palo Alto, CA, 5 Apr 1919.

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1923 On real elements in imaginary linear spaces. Bull. Amer. Math. Soc. 29:196 #16. Presented to the AMS, Palo Alto, CA, 7 Apr 1923.

1933 Ernest Julius Wilczynski. Bull. Amer. Math. Soc. 39:203 #96. Invited address presented to the AMS, Palo Alto, CA, 18 Mar 1933.

1941 The gyroscope and its uses in aviation and navigation. Amer. Math. Monthly 48:292 #3. Invited address presented to the MAA, San Francisco, CA, 25 Jan 1941.

References to: AmMSc 3-8, 9P-10P; AmWom 1935-40; BiDWSci; BioWMath; MacTutor; NotWoMa, Poggendorff 6, 7b.

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Fasanelli, Florence D. "Pauline Sperry (1885–1967)." In Women of Mathematics: A Biobibliographic Sourcebook, eds. Louise S. Grinstein and Paul J. Campbell, 217–19. Westport, CT: Greenwood Press, 1987.

Related manuscript material:

William Learoyd Sperry. Letters and Sermons, 1902–1954. Andover-Harvard Theological Library, Harvard Divinity School. Includes letters to his sister Pauline Sperry.

Group for Academic Freedom records, 1950-1956. Bancroft Library, University Archives. Berkeley, California.

Other sources: Owens questionnaires 1937, 1940; Smith College Archives; University of California, Berkeley, Archives; communication with Monterey (CA) Public Library; George R. Stewart, The Year of the Oath (Garden City, NY: Doubleday and Co., 1950); David P. Gardner, The California Oath Controversy (Berkeley: University of California Press, 1967); Nancy K. Innis, "Lessons from the Controversy over the Loyalty Oath at the University of California," Minerva 30 (1992): 337–65; Moore, Mathematics at Berkeley, extract in AWM Newsletter 36 (Jul–Aug 2006): 16–25, as "Women Mathematicians at Berkeley—The Early Years"; WhAm 4 (Sperry, Willard Gardner); "Deaths: Prof. Tabor," Monterey Peninsula Herald, 6 Mar, 1959; US Census 1880 MA, 1900 MI, 1910 MA, 1920, 1930 CA; SSDI.

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