

COPE, Frances (Thorndike). August 19, 1902–May 14, 1982.

VASSAR COLLEGE (BA 1922), COLUMBIA UNIVERSITY (MA 1925), RADCLIFFE COLLEGE (PhD 1932).

Elizabeth Frances Thorndike, known as Frances, was born in New York City, the eldest child of Elizabeth (Moulton) (b. 1878) and Edward L. Thorndike (1874–1949), both originally from Massachusetts. She came from a distinguished academic family. Her mother had taken the four-year classical course at Boston University, while her father, who had studied with William James at Harvard, earned a PhD from Columbia in 1898 and became one of the most influential educational psychologists of the first four decades of the twentieth century. He was on the faculty at Teachers College, Columbia University, 1904–40; among his numerous books were one on the psychology of arithmetic and another on the psychology of algebra. Her father was one of four children, all of whom were college graduates and teachers. His two brothers were Ashley Horace (1871–1933), who received a PhD in literature from Harvard in 1898, and (Everett) Lynn (1882–1965), whose 1905 PhD from Columbia was in history. Both taught at Columbia. His sister, Mildred Thorndike (1888–1975), was a teacher.

Elizabeth Moulton and Edward L. Thorndike married on August 29, 1900. In 1904, two years after Frances Thorndike's birth, a second daughter was born but lived less than two weeks. Three sons followed: Edward Moulton (1905–1991), Robert Ladd (1910–1990), and Alan Moulton (1918–2006). All of the children eventually earned PhD's: Edward in physics from the California Institute of Technology in 1930, Robert in psychology from Columbia University in 1935, and Alan in physics from Harvard University in 1947.

Frances Thorndike first attended the Horace Mann School, a private school associated with Teachers College, Columbia University, that had opened as a coeducational school in 1887 and remained so for about twenty-five years. Thorndike also went to the public school in Montrose, New York, and then to Drum Hill High School in Peekskill, New York. She attended Vassar College and, according to her father's biographer, impressed psychologist Margaret Washburne as the most brilliant student she had ever had. After Thorndike's graduation from Vassar in 1922, she worked as an engineering assistant at the American Telephone and Telegraph Company in New York City 1922–24 and again 1925–27, after taking the year 1924–25 to earn a master's degree in mathematics from Columbia University.

Frances Thorndike became instructor of physics at Vassar for the year 1927–28 and studied at Radcliffe College in 1928–29 as a Vassar alumnae fellow. On June 29, 1929, Frances Thorndike married Thomas Freeman Cope. Cope was born in Texas in 1900, earned a bachelor's degree in 1923 and a master's degree in 1925 from Tulane University, and received his PhD in mathematics from the University of Chicago in 1927. He was at Harvard for the year 1928–29 as a National Research Council fellow. They remained in Cambridge the year after their marriage, he as instructor of mathematics at Harvard.

In 1930 the Copes moved to Ohio, where T. Freeman Cope was head of the mathematics department at Marietta College until 1937. Frances T. Cope completed her work for the PhD at Radcliffe as a student of George David Birkhoff in 1932. The publications resulting from her dissertation continue to be cited in mathematics

and physics literature. The Copes had three children: Freeman Widener (1930–1982); Elizabeth Frances, born in 1934; and Mary Thorndike, born in 1935. Freeman earned an MD from the Johns Hopkins University in 1955, and Elizabeth earned a PhD from Harvard in psychotherapy in 1963.

Frances Cope was an instructor of mathematics at Vassar College during second semester 1935–36. In 1937 the family moved to New York, and T. Freeman Cope joined the faculty at Queens College. He was assistant professor 1937–39, associate professor 1939–48, professor 1948–70, and department chairman 1937–50 and 1952–69. He also served as an expert consultant on mathematics tests for the Adjutant General's Office 1944–46. Frances T. Cope served as instructor at Queens in 1941 and at Adelphi College 1941–43.

Frances Cope was a member of the Vassar Club and the auxiliary of the Peekskill, New York, Community Hospital. She died suddenly at her home in Montrose, New York, at age seventy-nine in 1982. She was survived by her husband, three children, seven grandchildren, and three brothers. T. Freeman Cope died in Rochester, Minnesota, two years later.

Organizational affiliations: AAUW, Phi Beta Kappa.

Thesis and dissertation:

1925 [Thorndike, F.] Partial differential equations of the first order. MA thesis, Columbia University.

1932 Formal solutions of irregular linear differential equations. PhD dissertation, Radcliffe College, directed by George David Birkhoff. Summary: *Radcliffe Summaries of Theses* 1931/1934: 59–60. See also **1934–36**.

Publications:

1926 [Thorndike, F.] Applications of Poisson's probability summation. *Bell Syst. Tech. J.* 5:604–24.

1934–36 Formal solutions of irregular linear differential equations, Parts I & II. *Amer. J. Math.* 56:411–37 and 58:130–40. Published version of PhD diss. Reviews of Part I: *JFM* 60.0382.02 (O. Perron); *Zbl* 009.35401 (I. S. Sokolnikoff). Reviews of Part II: *JFM* 62.0523.02 (O. Perron); *Zbl* 013.20402 (I. S. Sokolnikoff). Part I presented by title to the AMS, Atlantic City, NJ, 27 Dec 1932; abstract: *Bull. Amer. Math. Soc.* 39:24 #8.

References to: AmMSc 6–8, 9P.

“Frances Thorndike Weds Dr. T. F. Cope; Daughter of Teachers College Professor Married at Parents' Summer Home.” *New York Times*, 1 Jul 1929.

“Frances T. Cope.” (Obituary) *Peekskill (NY) Sunday Star*, 16 May 1982. Obituary. *Harvard Magazine*, Jan-Feb 1983.

Other sources: Owens questionnaire 1940; Vassar College Archives; communication with Field Library (Peekskill, NY); Geraldine M. Joncich, *The Sane Positivist: A Biography of Edward L. Thorndike* (Middletown, CT: Wesleyan University Press, 1968); WhoAm 38 (Cope, Thomas Freeman); US Census 1920 NY, 1930 MA, 1930 NY; SSDI.