

**GRANT, Anna M. C.** June 22, 1903–February 23, 1984.

DALHOUSIE UNIVERSITY (BA 1925), BRYN MAWR COLLEGE (PhD 1937).

Anna Margaret Catherine Grant was the youngest of five children of Jessie (Gordon) (1860–1933) and Angus MacGillivray Grant (1854–1935), both of Nova Scotia, Canada; she was born in Springville, Pictou County, Nova Scotia. Both parents had attended country school, and her father was a foreman in weaving mills in Nova Scotia and in Providence, Rhode Island. Her siblings were Isabel MacGillivray (1891–1961), Jennie Gordon (1896–1983), Alexander James (1898–1949), and Donald Gordon (1900–1940). Her two older sisters received bachelor's degrees from Dalhousie University. Isabel Grant graduated in 1911, with great distinction in mathematics, and became the first woman actuary in the department of finance with the Canadian federal government. Jennie Grant graduated in 1917 and became head accountant for a major firm in Canada. Her brother Alexander was an electrical engineer who had graduated from McGill University. Her brother Donald was in the Canadian army in World War I, served overseas immediately upon graduation from high school, and then had a business in Canada.

Anna M. C. Grant attended public schools in Nova Scotia and in New Brunswick, Canada, before entering Dalhousie University in Halifax, Nova Scotia. She graduated in 1925 with great distinction in mathematics, English, and philosophy. After her graduation she taught in private schools for several years. They included St. Hilda's School, Calgary, Alberta, 1926–27; Kemper Hall, Kenosha, Wisconsin, 1927–29; and Miss Fine's School, Princeton, New Jersey, 1929–31.

Grant was a part-time graduate student in mathematics and physics at Bryn Mawr College 1931–34. She was also a full-time teacher at Miss Wright's School in Bryn Mawr starting in 1932 and continuing through 1934–35. She then returned to Bryn Mawr College as a full-time graduate student; she was a graduate scholar in mathematics 1935–36 and a graduate fellow in mathematics 1936–37. She also participated in a cooperative plan for graduate study with Swarthmore College and the University of Pennsylvania. She had classes with [Anna Pell Wheeler](#), G. A. Hedlund, [Marguerite Lehr](#), William B. Huff, John R. Kline, W. W. Flexner, and N. A. Jacobson. She wrote her dissertation under the direction of Hedlund and received her PhD in 1937, the same year as [Annita Tuller](#), Hedlund's other student at Bryn Mawr. Grant published her dissertation in 1939, and Hedlund referred extensively to it in the article that immediately followed it in the *Duke Mathematical Journal*; he also referred to Tuller's dissertation in that article. In a 1970 Bryn Mawr College survey, Grant expressed her appreciation for “the sustained interest and encouragement on the part of Dr. Wheeler” (Bryn Mawr College Alumnae Association). At some point, she also took, but not for credit, mathematics courses at the University of Chicago.

While at Bryn Mawr College, Anna Grant listed her home as Rockville Centre, Long Island, New York, and she returned there after receiving her doctorate. All of her postdoctoral positions were in the New York City area, most often on Long Island. It appears that her first position began in the spring of 1938, when she taught mathematics from March to June to grades nine through eleven at the Kent Place School in Summit, New Jersey. She was a mathematics teacher at The Brearley School in Manhattan 1939–42. From 1943 to 1945 she was a member of the technical staff for Bell Telephone Laboratories in New York, and from 1946 to 1949

she was a project engineer for Project Sparrow for Sperry Gyroscope Company in Lake Success, New York.

Grant returned to The Brearley School as mathematics teacher and head of the department during the years 1949–51 and 1953–55. It was also during this period that she took both undergraduate and graduate courses in electrical engineering at Brooklyn Polytechnic Institute (now Polytechnic Institute of New York University). A niece wrote in 1985 that she studied engineering “in order to compete with men in her field. She had felt discriminated against in industry because of her gender” (Smithsonian questionnaire).

Grant worked as an engineer after the mid-1950s. From 1956 to 1959 she was principal engineer with the Dynamics Department at Republic Aviation Corporation in Farmingdale, New York. From 1959 to 1961 she was senior engineer with Fairchild Stratos Corporation in Wyandanch, New York, and from 1962 to 1967 she was an engineer working in dynamic analysis for the Airborne Instruments Laboratory in Deer Park, New York. Her niece reported that when she retired Grant was a senior research engineer doing trouble-shooting on guided missiles.

In addition to her work, Grant was interested in all types of sewing, gardening, cooking, baking, and writing. She was also knowledgeable about eighteenth-century porcelains. In 1970 she indicated that she was a Democrat and a Protestant. She made her home in Medford, New Jersey, after her retirement. She died in Medford in 1984 at age seventy-nine.

**Organizational affiliation:** AMS.

**Dissertation:**

**1937** Asymptotic transitivity on surfaces of variable negative curvature. PhD dissertation, Bryn Mawr College, directed by Gustav Arnold Hedlund. Printed version, 1939, reprinted from *Duke Math. J.* 5:207–29.

**Publication:**

**1939** Surfaces of negative curvature and permanent regional transitivity. *Duke Math. J.* 5:207–29. Published version of PhD dissertation. Reviews: *JFM* 65.1412.02 (H. Pietsch); *Zbl* 021.23603 (E. Hopf).

**Other sources:** PhD dissertation vita 1939; Smithsonian questionnaire 1985 (prepared by a niece, Jessie F. Flouton); Bryn Mawr College Archives; communications with Bryn Mawr College Alumnae Association, The Brearley School, and Kent Place School; G. A. Hedlund, “The measure of geodesic types on surfaces of negative curvature,” *Duke Math. J.* 5 (1939): 230–48.

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