BAREIS, Grace M. December 19, 1875—June 15, 1962. HEIDELBERG UNIVERSITY (BA 1897), OHIO STATE UNIVERSITY (PHD 1909).

Grace Marie Bareis was born in Canal Winchester, Ohio, the first of two daughters of Amanda Jane (Schoch) (1850–1908) and George Frederick Bareis (1852–1932). Both parents were natives of Ohio. Her father was educated in district and public schools in Ohio and conducted a successful lumber business in Canal Winchester. He was a student of history and archaeology and published a history of the local township in 1902. Grace Bareis's younger sister was Helen Paul (1877–1934).

After attending the public schools in Canal Winchester, Grace Bareis studied at Heidelberg University (Heidelberg College after 1926) in Tiffin, Ohio. She took the classical course and participated in the Hesperian Literary Society and the Oratorical Association before graduating in 1897 as valedictorian of her class. Her sister graduated from Heidelberg two years later.

Grace Bareis spent the two years 1897–99 as a graduate student at Bryn Mawr College, where she contributed a paper to the Mathematical Journal Club in spring 1899. She also graduated from the Columbus Normal School in Ohio in 1899. Bareis was a teacher at Miss Roney's School in Bala, Pennsylvania, from 1899 until 1906 while continuing her graduate work in mathematics at nearby Bryn Mawr College during 1902–06. During her last two years in Pennsylvania, she submitted at least fourteen solutions to problems in the *Monthly*, seven of which were chosen to appear.

In 1906 Bareis returned to the Midwest to finish her graduate work in mathematics at Ohio State University. She was a fellow there 1906–08, was appointed assistant professor in 1908, and was the first recipient of a doctorate in mathematics from Ohio State when she received her PhD in 1909. After nearly forty years on the faculty she retired as assistant professor emeritus in 1946. During her years at Ohio State, she directed master's theses, mainly in geometry, for at least fifteen graduate students, of whom at least eight were women. Other positions she noted over the years include faculty member in the Education College, advisor for Arts College women, and group leader for freshman week. She participated in the OSU faculty club and the faculty women's club as well as the Columbus College Club. She spent the summer of 1920 at Columbia University, and in 1922 her 1909 PhD dissertation was printed. During World War II, she taught students in the Army Specialized Training Program at Ohio State, and for two years after her retirement she continued to teach because of the postwar shortage of instructors.

In 1948 Bareis gave a gift of \$2000 to Ohio State University to help commemorate its seventy-fifth anniversary. She asked that the interest on her donation be used to fund the Grace M. Bareis Mathematical Prize to be awarded annually after a written contest. She believed that sophomores would benefit most from participation in such a contest.

During her lifetime Bareis remained active in her college alumni organizations; she belonged to the Ohio State alumni association, was on the Ohio State University alumni council, and from 1935 to 1956 was a member of the board of trustees of Heidelberg College. She was the second woman to hold that position: her father had been president of the board for many years before his death in 1932, and her sister, Helen Bareis, completed his term after his death. Heidelberg gave Grace Bareis an honorary degree of Doctor of Pedagogy at the hundredth anniversary of the college

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in 1950, and the Bareis Hall of Science was built there in 1964 to honor her and her father. Grace Bareis had made a sizable gift towards its construction.

Although Bareis never served as an officer of the MAA or its Ohio Section, she attended many national meetings and attended more than thirty annual meetings of the section from its inception in 1916 through 1955, nine years after her retirement.

Bareis was active in church activities: she was a member of the Evangelical and Reformed Church at Canal Winchester, belonged to the Missionary Society, participated in the Business Women's Sunday School class, and was an affiliate member of the Indianola Methodist Church. She volunteered with the Red Cross and belonged to the DAR, the Ohioana Library Association, and the Franklin County Historical Society; she was a life member of the Ohio State Archeological and Historical Society. She maintained her home, and spent the summers, in Canal Winchester. At one point she described her hobbies as gardening and farming; she managed a farm near Brice, Ohio. In response to a question for her entry in Woman's Who's Who of America of 1914–15, Bareis indicated that she favored woman suffrage.

Grace Bareis lived for twenty-six years with a friend, her former student and later mathematics department colleague, Margaret Eloise Jones (1895–1979), in Columbus. Bareis died in 1962 at age eighty-six at her home in Columbus after a lengthy illness. Her nearest surviving relatives were cousins. Funeral services were held at the Evangelical and Reformed Church and burial was in the Union Grove Cemetery, both in Canal Winchester.

After her death, Bareis's estate was valued at \$553,195, with the largest single bequest to Margaret Jones. Other bequests included several to various church and mission organizations and to educational institutions, including one to Ohio State to aid women students majoring in mathematics. In 2006 Grace Bareis was one of forty-five women mathematicians featured with an individual poster containing a brief biography at the "Connecting Women in Mathematics Across Canada" workshop held at the Fields Institute. She and Anna Pell Wheeler were the only two women in our study so honored.

Organizational affiliations: AMS, MAA (charter member), AAAS, Sigma Xi, Pi Mu Epsilon.

## Dissertation:

1909 Imprimitive substitution groups of degree sixteen. PhD dissertation, Ohio State University, directed by Harry Waldo Kuhn. Printed version, Press of the New Era Printing Company, Lancaster, PA.

## **Publication:**

1932 with Vladimir F. Ivanoff. [Reply to] A simple geometrical paradox–Proposed by J. L. Coolidge. *Amer. Math. Monthly* 39:29–31. Review: *JFM* 58.0683.05 (H. Grunsky).

## Presentation:

The nature of a first course in analytic geometry. Presented to the Ohio College Association, Columbus, OH, 29 Dec 1909.

References to: AmMSc 3-8, 9P; BioWMath; WomWWA.

"Grace Bareis, 86, Claimed by Death." [Tiffin, Ohio, newspaper] 16 Jun 1962.

"Retired OSU Teacher Dies at 86." Columbus Dispatch, 17 Jun 1962.

"2 Women's Estates Set at \$913,050." Columbus Evening Post, n.d.

"Grace Marie Bareis | Department of Mathematics."

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**Other sources:** Owens questionnaire 1937; Bryn Mawr College Archives; Ohio State University Archives; communication with Heidelberg College Archives; OhA&B (Bareis, George F.); US Census 1880, 1900, 1910, 1920, 1930 OH.

Last modified: December 21, 2010.