

**MONTAGUE, Harriet F.** June 9, 1905–March 19, 1997.

UNIVERSITY OF BUFFALO (BS 1927, MA 1929), CORNELL UNIVERSITY (PhD 1935).

Harriet Frances Montague, born in Buffalo, New York, was the younger of two children of Alice Barbara (Haffa) (1880–1942) and Laurence Hibbard Montague (1881–1950), both natives of Buffalo. Her mother had a high school education and later was a cashier in retail stores and a homemaker; her father had an elementary and private musical education and was an organist, choirmaster, and composer. Her parents married in about 1902; their first child, Ainslie B. Montague, was born in 1904 and died in 1921.

Harriet Montague attended Lafayette High School in Buffalo before entering the University of Buffalo, where she spent many years as a student, and all of her career as a faculty member. (The University of Buffalo, originally private, was incorporated into the state system in 1962 and has since been the State University of New York at Buffalo.) Montague received her undergraduate degree from the University of Buffalo magna cum laude in 1927 in the Honors Division. She stayed at the university as a graduate assistant in mathematics 1927–29 and received her master's degree in 1929. She was then appointed instructor in the department and apparently continued some graduate work in mathematics while also teaching.

In December 1933 Montague applied for admission to Cornell University for the summer of 1934. She was admitted and studied informally with Virgil Snyder that summer and continued her formal course work in the academic year 1934–35. It was recommended that she be given four terms residence credits for her graduate work at Buffalo. A memo of February 1935 indicates that Montague was admitted to Cornell without financial support because she was unknown to any member of the department. However, reports from her Cornell professors were highly favorable, and she was recommended for a tuition scholarship for spring 1935. Virgil Snyder, her dissertation advisor, wrote that he had all the scholars and fellows in the department in his course and that Miss Montague was as good as any member of the class. Having completed her dissertation in geometry, Montague received her PhD in June 1935 with minors in algebra and logic.

After receiving her doctorate, Montague returned to the University of Buffalo and served there as instructor 1929–39, assistant professor 1939–44, associate professor 1944–47, and professor 1947–73. She was acting chairman of the mathematics department during the first semester 1945–46 and in the academic years 1962–65, and was director of undergraduate studies 1970–73. From 1967 she was also professor of education. She retired as professor emeritus in 1973. In her 1981 Smithsonian questionnaire she mentioned both Harry M. Gehman, her department head at Buffalo 1929–62, and Mabel D. Montgomery, “former student, co-author, friend,” as close associates with whom she had had significant mathematical contact.

Montague contributed to the department and university in many ways. During the 1930s and 1940s she was often faculty advisor to the University of Buffalo mathematics club. Her curriculum vitae from 1976 lists mainly her most recent activities. She details her departmental committee memberships for 1972–73 as chairman, Building Committee; chairman, Advisory Committee for Undergraduate Studies; Mathematics–Education Committee; and Ad Hoc Committee on Course Renumbering; she notes that other departmental duties in the past are too numerous to reconstruct. School and faculty positions included coordinator for the mathematics

section of the Western New York Science Forum, former member of the Executive Committees of the College of Arts and Sciences and the Millard Fillmore College (the evening division), and former member of the Student Affairs Committee of the faculty senate. University activities for 1971–73 included serving as a member of the President’s Committee on the Recruitment and Promotion of Women Faculty and Staff and serving as treasurer of the Faculty Club.

Montague taught both undergraduate and graduate courses, primarily in algebra, geometry, and mathematics education and was often faculty advisor to the mathematics club. She directed one mathematics PhD dissertation, that of Samuel T. Stern in logic in 1962. She also directed seven dissertations for EdD degrees that were awarded between 1969 and 1972. Already in 1953 her concern with mathematics education was evident when she organized the Inter-School Math Society for gifted high school students in six Buffalo area schools. According to her 1976 vita, “the selected group of students and their teachers met monthly on a voluntary basis to study topics in mathematics not in the normal curriculum. This activity predated the impetus generated by Sputnik to recognize and develop the abilities of gifted students in science and mathematics” (Smithsonian questionnaire 1981). The groups met for several years until the National Science Foundation established programs with similar goals. Montague was director of various NSF summer institutes for secondary teachers from 1957 until 1970. Her 1963 textbook for non-science students, *The Significance of Mathematics*, was coauthored with her colleague Mabel D. Montgomery, who had received a PhD in mathematics from the University of Buffalo in 1953, the second year such a degree was awarded there.

Montague was active in mathematics and mathematics education organizations. She was particularly involved with the Upper New York State Section (now the Seaway Section) of the MAA. She was one of the original founders in 1940, served as vice chairman 1952–53, chairman 1953–54, and governor 1961–64. In addition, she served on the MAA nominating committee for 1965 and was a life member of the association. She was also a member of the International Phenomenological Society and of Pi Lambda Theta, an honor and professional association in education, and was a member of the council, and later historian (1974–79), of the Association of Mathematics Teachers of New York State. She had been a member of the AMS for sixty-seven years at the time of her death. Montague was active in professional activities outside of mathematics, especially in Buffalo chapters of the AAUP and the AAUW. She served as secretary and as president of the local branch of the AAUP and as treasurer of the Buffalo AAUW (1937–39). In 1966 the Buffalo branch of the AAUW presented her with its Achievement Award and gave her a lifetime membership in the organization.

Harriet Montague was an active Presbyterian with an involvement in church activities at the local, regional, and national levels. In the 1960s she was chairman of the department of campus ministry for the Council of Churches. She was a ruling elder of the United Presbyterian Church USA beginning in 1957 and was the first woman to serve as vice-moderator (1963) and moderator (1964) of the Presbytery of Western New York. She was a member of the Board of Directors of Auburn Theological Seminary in New York City for several years beginning in 1969, was on the national Board of Christian Education 1965–72 (vice president 1969–72) of the United Presbyterian Church USA, and was a member of the National Commission for United Ministries in Higher Education 1968–72.

In the late 1930s Montague wrote that she was a member of Theta Chi (a social fraternity) and Cap and Gown, and described herself as a Republican. She mentioned music and sports as hobbies. In 1981 she mentioned watercolor painting, gardening, and volunteer work at the Buffalo Zoo, where she was a docent. Non-professional memberships at that time were the Buffalo Zoological Society, where she was since 1975 on the board of directors; the Buffalo Museum of Science; and the Buffalo Historical Society. Other local memberships in 1976 included the YWCA and the Allentown Association, a neighborhood organization.

In 1972 the State University Alumni Association presented Montague with its Distinguished Alumni Award. She was given citations at the 50th anniversary of the College of Arts and Sciences at the University of Buffalo and at the 125th anniversary of the founding of the university. The Harriet F. Montague Award was established at the time of her retirement in 1973. It is presented to an undergraduate mathematics major after the completion of his or her junior year, and is awarded on the basis of intellectual and creative promise in mathematics.

After a long illness, Montague died in 1997 at age ninety-one in her Buffalo home, which she shared with Mabel D. Montgomery, her only listed survivor. A memorial service was held in First Presbyterian Church, Symphony Circle; she is buried in Forest Lawn Cemetery in Buffalo.

**Organizational affiliations:** AMS, MAA, NCTM, AAUW, AAUP, Phi Beta Kappa, Sigma Xi, Pi Mu Epsilon.

**Thesis and dissertation:**

**1929** A detailed study of the directrices of a linear congruence. MA thesis, University of Buffalo. Typescript.

**1935** Certain non-involutorial Cremona transformations of hyperspace. PhD dissertation, Cornell University, directed by Virgil Snyder. Typescript. Printed abstract, 1936, reprinted from *Bull. Amer. Math. Soc.* 42:727–31.

**Publications:**

**1936a** Certain non-involutorial Cremona transformations of hyperspace. *Bull. Amer. Math. Soc.* 42:727–31. Abstract of PhD dissertation. Review: *JFM* 62.0751.03 (E. A. Weiss).

**1936b** Textbooks, reference books or story books. *Natl. Math. Mag.* 11:152–53.

**1938** Envelopes associated with a one-parameter family of straight lines. *Natl. Math. Mag.* 13:73–75. Review: *JFM* 64.1318.02 (M. Zacharias).

**1940a** Review of *Elementary Theory of Equations*, by W. V. Lovett. *Amer. Math. Monthly* 47:164–65.

**1940b** Review of *Plane Trigonometry*, by W. T. Stratton and R. D. Daugherty. *Amer. Math. Monthly* 47:102–03.

**1940c** Review of *Portraits of Famous Philosophers Who Were Also Mathematicians*, by C. J. Keyser. *Amer. Math. Monthly* 47:311–12.

**1941** A course on the significance of mathematics. *Amer. Math. Monthly* 48:681–84. Talk with same title presented to the MAA, Ithaca, NY, 3 May 1941; abstract: *Amer. Math. Monthly* 48:513 #2.

**1942** Review of *A New System of Reckoning Which Turns at 8*, by E. Swedberg. *Amer. Math. Monthly* 49:114–15.

**1943** Review of *Galois Lectures, Addresses Delivered by Jesse Douglas, Philip Franklin, Cassius Jackson Keyser, Leopold Infeld*. *Scripta Math.* 9:107–09.

**1944a** The method of infinite descent and the method of mathematical induction. *Philos. Sci.* 11:178–85.

- 1944b** Review of *Analytic Geometry*, by E. E. Smith, M. Salkover, and H. K. Justice. *Amer. Math. Monthly* 51:228–29.
- 1949** Eccentricity and slope. *Pentagon* 9:27–29. Talk with same title presented to the MAA, Rochester, NY, 10 May 1947; abstract: *Amer. Math. Monthly* 55:199 #3.
- 1951** Tutorial work in mathematics at the University of Buffalo. *Math. Mag.* 24:207–08. Presented as portion of “The tutorial system at the University of Buffalo” to the MAA, Syracuse, NY, 22 Apr 1950; abstract: *Amer. Math. Monthly* 57:588 #7.
- 1953** Review of *Geschichte der Mathematik*, by O. Becker and J. E. Hofmann. *Scripta Math.* 19:246–48.
- 1955** Review of *Mathematics in Western Culture*, by M. Kline. *Philos. & Phenomen. Res.* 15:434–36.
- 1956** with members of Committee on College Algebra. J. C. Eaves, ed. *College Algebra*. New York: Pitman Publishing Co.
- 1959** A demonstration class in a National Science Foundation Summer Institute. *Bull. Natl. Assoc. Secondary School Principals* 43:98–100.
- 1961** with P. M. Henry. The case for a general education course in mathematics. *J. Gen. Ed.* 13:97–112. Talk with same title presented to the MAA, Rochester, NY, 7 May 1960; abstract: *Amer. Math. Monthly* 67:832 #7.
- 1963** with M. D. Montgomery. *The Significance of Mathematics*. Columbus, OH: Charles E. Merrill Books. Reviews: *Math. Gaz.* 49:328 (A. G. Sillitto); *Math. Mag.* 40:39–41 (J. L. Preston). Prelim. Ed. 1961. “How mathematicians develop a branch of pure mathematics,” 119–26, 133–35, excerpted in *Mathematics: People, Problems, Results*, ed. D. M. Campbell and J. C. Higgins, 279–88. Belmont, CA: Wadsworth International, 1984.
- 1970a** Certification of teachers of secondary school mathematics. *NY State Math. Teachers’ J.* 20:152–59. Also appears as ERIC Document, Apr 1970, with additional charts.
- 1970b** (Editor) With J. W. Democko. *An Introduction to Matrices*. Buffalo: The State University of New York. Written for high school students by high school students.
- 1972** The sections. In *The Mathematical Association of America: Its First Fifty Years*, ed. K. O. May (The Mathematical Association of America), 78–103. Telegraphic review: *Amer. Math. Monthly* 80:1157.
- 1973a** Let your students write a book. *Math. Teacher* 66:548–50.
- 1973b** Teachers of mathematics in private secondary schools. *NY State Math. Teachers’ J.* 23:40–42.
- References to:** AmMSc 6–8, 9P–11P; AmMWSc 12P–13P, 14–21; AmWom 1935–40; LEduc 5; WhoAm 38; WhoRel 1–2.
- “Harriet F. Montague, UB Professor of Math, Church Moderator, Dies at 91.” *Buffalo News*, 21 Mar 1997.
- “Harriet F. Montague, 91, UB Mathematics Professor.” (Obituary) *State University of New York at Buffalo Reporter* 28 (27 Mar 1997).
- Cavior, Stephen. “Harriet F. Montague, Founder and Former Governor.” (Obituary) *Seaway Current* 21 (Fall 1997): 11.
- Other sources:** PhD dissertation vita 1935; Owens questionnaires 1937, 1940; Smithsonian questionnaire 1981 (with 1976 vita); Division of Rare and Manuscript Collections, Cornell University Library; Former Members of the Department files, Cornell University Department of Mathematics.