TURNER, Mary (Haberzetle). June 4, 1912—November 16, 1983. SAINT XAVIER COLLEGE FOR WOMEN (BS 1934), UNIVERSITY OF CHICAGO (MS 1936, PhD 1938).

Mary Barbara Haberzetle was born in Chicago, Illinois, the first of two daughters of Helen (Martin) (1886–1978) and William Thomas Haberzetle (1881–1955), both born in Chicago. Her parents married in 1911. Her mother, orphaned at an early age, worked to support herself when young and determined that her children would receive an excellent education. Her father was a saloon keeper in business with his brother. The younger daughter, Florence, was born in 1914 and received her bachelor's degree from DePaul University in 1936 and a master's degree from Chicago Teachers College in 1941. She worked as a secretary for a few years and then taught in the Chicago public schools for twenty-six years.

Mary Haberzetle received her primary and secondary education in parochial schools in Chicago run by the School Sisters of Notre Dame; she attended St. Anthony Grammar School and Academy of our Lady (also called Longwood Academy), where she was the top scholar in her graduating class of 1930.

Haberzetle entered Saint Xavier College for Women (now Saint Xavier University) in Chicago, where she held a four-year scholarship, majored in mathematics, and graduated with honors in 1934. During her studies at Saint Xavier, she was especially encouraged to do graduate work and urged to apply for a fellowship at the University of Chicago by Emily Pixley, a mathematics professor at Saint Xavier and a 1933 Chicago PhD.

After graduating from Saint Xavier, Haberzetle worked as a social worker for the Cook County Welfare Department 1934–35 before beginning her graduate work at the University of Chicago in the autumn quarter of 1935. After receiving her master's degree in 1936, she was a fellow her last two years of graduate study and received her doctorate in 1938.

Haberzetle taught at Mount Holyoke College in the first semester of 1938, replacing Frances Baker who was on leave, and at Queens College in New York City 1939–1941. Between 1937 and 1941 she published four papers. Her 1941 paper was mentioned that year by Hans Rademacher in an AMS invited address, "Trends in research: The analytic number theory," that appeared in the *Bulletin* of the AMS in 1942. Generalizations by others of the results in 1941 appeared over the next twenty years. Although 1941 was submitted for publication after her marriage, it appeared under the name Mary Haberzetle.

On January 27, 1940, Mary Haberzetle married M. Jonathan Turner (1915–1995), who had received a master's degree in mathematics from the University of Chicago in 1937. He was a mathematics instructor 1937–40 and received an MS in aeronautical engineering from New York University in 1941. He worked as an engineer in structural technology for the United Aircraft Corporation in Stratford, Connecticut, from 1941 until 1949 when they moved to Seattle where he spent the rest of his career at the Boeing Company.

Three children were born while they were in Connecticut: William Charles in 1942, Richard James in 1944, and Katherine Marie in 1947. All received PhD's from the Yale graduate school in the 1970s: William and Richard in physics in 1973 and 1972, respectively, and Katherine in physical chemistry in 1976. Richard also received an MD from the University of Miami in 1974.

In 1960, when the children were in their teens and approaching college age, Mary Turner resumed her teaching by taking a position at Seattle University as an assistant professor; she was promoted to associate professor in 1963 and became a full professor in spring 1971 shortly before the onset of illness hastened her retirement in June that year. Her sister, Florence H. Baker, of Florida, has written that, "she had talent as an artist and enjoyed all the arts – painting, music, and weaving. She also enjoyed outdoor activities, hiking, mountain climbing, and snow-shoeing which she enjoyed during her retirement years."

Mary Haberzetle Turner died in Seattle, Washington, in 1983 at age seventy-one.

## Organizational affiliation: AMS.

## Thesis and dissertation:

1936 [Haberzetle, M.] Representation of large integers by cubic polynomials. MS thesis, University of Chicago. Typescript.

1938 [Haberzetle, M.] Two new universal Waring theorems. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Typescript. Private edition, 1939, distributed by the University of Chicago Libraries, reprinted from *Duke Math. J.* 5:49–57 and *Amer. J. Math.* 61:357–64.

## **Publications:**

1937 [Haberzetle, M.] Representation of large integers by cubic polynomials. *Amer. J. Math.* 59:55–56. Reviews: *JFM* 63.0126.02 (W. Weber); *Zbl* 016.05401 (G. Pall).

1939a [Haberzetle, M.] The Waring problem with summands  $1 + bx^n$ . Amer. J. Math. 61:357–64. Part of published version of PhD dissertation. Reviews: JFM 65.0149.02 (W. Weber); Zbl 022.11503 (W. Weber). Presented as "Two new universal Waring theorems" to the AMS, Chicago, 8 Apr 1938; abstract: Bull. Amer. Math. Soc. 44:336 #203.

**1939b** [Haberzetle, M.] The Waring problem with summands  $x^m$ ,  $m \ge n$ . Duke Math. J. 5:49–57. Part of published version of PhD dissertation. Reviews: JFM 65.0149.01 (W. Weber); Zbl 022.11502 (W. Weber). Presented as "Two new universal Waring theorems" to the AMS, Chicago, 8 Apr 1938; abstract: Bull. Amer. Math. Soc. 44:336 #203.

**1941** [Haberzetle, M.] On some partition functions. *Amer. J. Math.* 63:589–99. Reviews: JFM 67.0126.03 (H. D. Kloosterman); MR 3,69b (H. Rademacher); Zbl 025.25203 (V. Jarník).

Other sources: MS thesis vita 1936; PhD dissertation vita 1938; authors' questionnaire 1991 (prepared by her husband); communication with Florence (Haberzetle) Baker and with M. Jonathan Turner 1991; US Census 1920, 1930 IL.

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