THORNTON, Marian (Wilder). July 18, 1905–September 30, 1992. UNIVERSITY OF MINNESOTA (BA 1927, MA 1930, PhD 1933).

Marian Augusta Wilder, born in Shakopee, Minnesota, just southwest of Minneapolis, was the daughter of Minnie Florence (Buchanan) (b. 1870) and George D. Wilder (b. 1866), both natives of Minnesota. At the time of the 1900 census her parents had been married a year, her father was a sash and door commercial traveler, and they had an infant daughter, Lois. In 1910 the family was living in St. Paul, her father was a salesman, and there were two surviving children, Lois and Marian, of three born. They were living in Minneapolis in 1920 and 1930.

All of Marian Wilder's university work was done at the University of Minnesota, where she earned her bachelor's degree in 1927, her master's degree in 1930, and her doctorate in 1933. After she received her BA, Wilder was a high school teacher in Minnesota for the next two years, 1927–29. She returned to the university in 1929, where she was an assistant in mathematics 1929–31 and an assistant in biometry 1931–34. Wilder worked with the noted biometrician and botanist J. Arthur Harris, who headed the Minnesota botany department from 1924 until his death in 1930; she published three papers with him. Wilder received her master's degree in 1930 with a major in mathematics and a minor in education; her thesis dealt with the mathematical theory of statistics. She then completed her doctoral work with a major in mathematics and a minor in biometry. She remained at the university as a graduate fellow in the biometric laboratory 1933–34, the year after she received her PhD.

Wilder worked as a statistician at the Mayo Clinic 1934–35 and then returned to the University of Minnesota, where she was hired as a research statistician and instructor for 1935–36. She wrote in her 1937 questionnaire for Helen Owens that she had "been patient in sanitarium since Nov 1935 ready to begin work again Jan 1938." She is likely to have been at the Glen Lake state tuberculosis sanitarium, which was located in Oak Terrace, Minneapolis, her address on the September 1936 AMS membership list. She was a research statistician for the committee on educational research in the college of education in the late 1930s.

Wilder was a statistician with the division of preventable diseases of the Minnesota State Department of Health from 1938 or 1939 until 1942. Her work in the late 1930s and early 1940s focused on the use of statistics in medical and psychological data.

On August 27, 1938, Marian Wilder married G. Parnell (Barney) Thornton (1907–1968). They remained in the Minneapolis–St. Paul area. Her address on membership lists from ASA and IMS show her living in St. Paul from about 1943. In February 1954, when she applied for her social security number, she was living in St. Paul and was a substitute at the College of St. Catherine College in St. Paul. Later Thornton again worked for the University of Minnesota in Minneapolis. In 1966 her name appears on a list of graduate faculty in the Biometry Division of the School of Public Health, College of Medical Sciences. In 1970–71 she was listed in the CML, the combined membership list of mathematics societies, as living in Minneapolis and as being an associate professor at the university; she does not appear in subsequent lists.

Thornton was living in St. Louis Park, Minnesota, just west of Minneapolis, at the time of her death at eighty-five in September 1992. Her husband, Barney, and sister, Lois, predeceased her. There was a mass of Christian burial at Most Holy Trinity Church in St. Louis Park, and she was buried in Omaha, Nebraska.

Organizational affiliations: AMS, MAA, ASA, IMS, Phi Beta Kappa, Sigma Xi.

Thesis and dissertation:

1930 [Wilder, M. A.] Dynamical analogies in the theory of correlation. MA thesis, University of Minnesota. Typescript.

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1933 [Wilder, M. A.] Some problems in closest approximation over a discrete set of points. PhD dissertation, University of Minnesota, directed by Dunham Jackson.

Publications:

1929 [Wilder, M. A.] with J. A. Harris and B. Gunstad. Influence of change of sex on the intensity of heredity. *Proc. Soc. Exp. Biol. Med.* 26:851–54.

1930a [Wilder, M. A.] with J. A. Harris and A. E. Treloar. On the theory of contingency: II. Professor Pearson's note on our papers on contingency. *J. Amer. Statist. Assoc.* 25:323–27. Response to On the theory of contingency: I. Note on Professor J. Arthur Harris' papers on the limitation in the applicability of the contingency coefficient, by Karl Pearson, 320–23. Followed by On the theory of contingency: III. Postscript, by Karl Pearson, 327; and IV. Note by the editor, 327.

1930b [Wilder, M. A.] with J. A. Harris and C. Tu. The biologic significance of certain differences between correlation coefficient, correlation ratio, and contingency coefficient. *Amer. J. Bot.* 17:175–85.

1931 [Wilder, M. A.] Correlation coefficients and transformation of axes. *Amer. Math. Monthly* 38:64–66. Reviews: *JFM* 57.0624.04 (G. Schulz); *Zbl* 001.15101 (K. Christensen). Presented to the AMS, Providence, RI, 12 Sep 1930; abstract: *Bull. Amer. Math. Soc.* 36:644.

1934 [Wilder, M. A.] with A. E. Treloar. The adequacy of "Student's" criterion of deviations in small sample means. *Ann. Math. Statist.* 5:324–41. Review: *JFM* 60.1173.02 (A. C. Aitken). Presented to the Econometric Soc. and Section K of the AAAS, Boston, MA, 30 Dec 1933.

1935 [Wilder, M. A.] with K. K. Nygaard and J. Berkson. The relation between viscosity of the blood and relative volume of erythrocytes (hematocrit value). *Amer. J. Physiol.* 114-128-31

1937 [Wilder, M. A.] with A. C. Eurich and H. P. Longstaff. *The Effect of Weekly Examinations upon Achievement in Psychology*. The Effective General College Curriculum. Univ. of Minnesota Press.

Technical reports (University of Minnesota Committee on Educational Research):

1937–38 [Wilder, M. A.] Mathematics examination study. 6 pts. Pts. 1–2, Mathematics 1 Higher Algebra (pt. 1, 1937 W; pt. 2, 1937 S), presented as "Examination techniques in higher algebra" by J. H. Daoust to the MAA, St. Paul, MN, 15 May 1937; abstract: Amer. Math. Monthly 44:422 #12. Pts. 3–5, Mathematics 4 Trigonometry (pt. 3, 1937 S; pt. 4, 1938 W; pt. 5, 1938 S), presented as "Note on experimental testing in trigonometry" by M. A. Wilder to the MAA, Collegeville, MN, 14 May 1938; abstract: Amer. Math. Monthly 45:564 #5. Pt. 6, Summary of 1937–38.

1938a [Wilder, M. A.] Effect of differentiating power of an item of various criteria used for separating into top, middle, and low groups.

1938b [Wilder, M. A.] Effect of presence of undifferentiating items on reliability of examination. Presented to the Minn. Soc. Study Educ., 1939.

1938c [Wilder, M. A.] English test – correspondence of items in grammar and usage.

1938d [Wilder, M. A.] English theme study.

1938e [Wilder, M. A.] Factor analysis of comprehensive examination in General College in S 1937. Presented to the Minn. Soc. Study Educ., 1938.

1938f [Wilder, M. A.] Reflective thinking examination in General College 1938 S.

1939a [Wilder, M. A.] Differentiating power of items in various criterion groups.

1939b [Wilder, M. A.] Discriminating power of items in different forms of same test.

1939c [Wilder, M. A.] Extrovert – introvert study.

1939d [Wilder, M. A.] Proctor Gamble test vs. honor point ratio.

1939e [Wilder, M. A.] Tuttle School. 4 pts. Pt. 1, Prediction of Simon-Binet I.Q.'s from group tests at earlier grade levels, presented by T. R. McConnell to the Minn. Soc. Study

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Educ., 1939. Pt. 2, An example of analysis of variance technique. Pt. 3, Analysis of variance study of group tests for I.Q. Pt. 4, Prediction of achievement test results.

Technical reports (Minnesota State Department of Health):

1939 [Wilder, M. A.] with Tendeland and Prudhon. Comparison of Kline exclusion, Kline diagnostic, and Kolmer blood tests.

1940 [Wilder, M. A.] with Tendeland and Prudhon. Use of routine Wassermanns in maternity cases by Minnesota hospitals.

Abstracts not listed above:

1930 [Wilder, M. A.] A derivation of the equation for the normal surface. *Amer. Math. Monthly* 37:340 #2. Presented to the MAA, Northfield, MN, 17 May 1930.

1934 [Wilder, M. A.] The adequacy of student's z test. Amer. Math. Monthly 41:63–64 #4. Presented to the MAA, St. Paul, MN, 13 May 1933.

References to: AmMSc 6-7.

"Thornton." (Funeral notice) Minneapolis Star Tribune, 2 Oct 1992.

Other sources: Owens questionnaires 1937, 1940; application for social security account number 1954; communication with Minnesota Historical Society; *Minnesota Bulletin*, Register of PhD's; US Census 1900, 1910, 1920, 1930 MN; SSDI.

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