

INFELD, Helen (Schlauch). July 20, 1907–July 6, 1993.

NEW YORK UNIVERSITY (BA 1928), CORNELL UNIVERSITY (MA 1929, PhD 1933).

Helen Mary Schlauch was born in the Bronx, in New York City, the third child of Margaret (Brosnahan) (1872–1947) and William Storb Schlauch (1873–1953). Her parents were born in Pennsylvania as were her older sister, Margaret (1898–1986), and brother, William H. (b. 1902). Her mother was born a Catholic and her father a Lutheran, but the children were raised with no religious affiliation. Her father earned a bachelor's degree from the University of Pennsylvania and a master's degree from Columbia University. He taught mathematics at the High School of Commerce in New York City and after 1929 was on the faculty of the School of Commerce, Accounts and Finance of New York University, from which he retired as professor emeritus in 1948. Her father served for many years as an associate editor of the official journal of the National Council of Teachers of Mathematics and held the title honorary president of that organization after his retirement.

Helen M. Schlauch graduated from high school in Hasbrouck Heights, New Jersey, in 1924. She then attended Washington Square College of New York University on a scholarship and graduated in 1928 with a major in mathematics and minors in English and psychology. At NYU she was a member of the women's honor society Eclectic and of the sorority Alpha Omicron Pi, serving as president of the Pan Hellenic Council her junior year. She also participated in the Dramatics Society 1924–28 and the Varsity Women's Debating Team 1925–28.

Following her graduation from NYU, Schlauch studied at Cornell University and received a master's degree in 1929. For the next several years, she was on the faculty at Hunter College in New York City and continued her graduate work at Columbia and Cornell. She was at Hunter as tutor 1929–31 and instructor 1931–32, while also taking a course yearly at Columbia during these years. During the summers of 1930 and 1931, she was registered for informal study at Cornell with Virgil Snyder.

In May 1932 Helen Schlauch married Leonard Palmer Adams (1906–2000), who was studying for a PhD in labor economics at Cornell. L. P. Adams had received his bachelor's degree from Alfred University in 1928 and his master's degree from Cornell in 1930. In June 1932 Helen Schlauch Adams returned to Cornell as a scholar and took her PhD examination in July 1933 with major geometry, first minor algebra, and second minor electricity. Her dissertation in algebraic geometry was done under Snyder's supervision. L. P. Adams was at Cornell through 1934. He was an instructor at Colgate University 1934–35, received his doctorate from Cornell in February 1935, and was a research associate at the Central States Board in Washington 1935–36. They were divorced in 1936; there were no children.

Helen Adams remained on the faculty of Hunter as an instructor 1931–41. At a 1938 meeting of the AMS, she met the Polish-born and -educated theoretical physicist, Leopold Infeld (1898–1968), who taught for eight years in Jewish secondary schools in Poland after receiving his PhD in 1921 from the University of Krakow. After five years at the University of Lwow (then in Poland, now Lviv, Ukraine) and a year as a Rockefeller Foundation fellow at Cambridge, England, he came to the Institute for Advanced Study in Princeton. When he met Helen Adams he had just published *The Evolution of Physics* with Albert Einstein and was about to go to Canada to teach at the University of Toronto on the applied mathematics faculty.

During 1938–39 he often traveled from Toronto to New York to see Helen Adams. They were married in New Jersey on April 12, 1939, and had two children, Eric S. (b. 1940) and Joan M. (b. 1943), both born in Toronto.

While on the applied mathematics faculty, and later the mathematics faculty, of the University of Toronto, Leopold Infeld actively campaigned against nuclear weapons. After spending the summer of 1949 in Warsaw, he announced that he wanted to spend 1950–51 in his native Poland lecturing at the University of Warsaw. Shortly thereafter he was accused of being an atomic spy. In May 1950 he left for Poland in a move that he later announced would be permanent; he resigned his professorship at Toronto in August 1950.

Leopold Infeld's description of this part of his life appears in his book *Why I Left Canada*, which was translated by Helen Infeld. He had described his earlier life in the Jewish ghetto of Krakow in *Quest: An Autobiography*, which was first published in 1941 and which appeared in a second edition in 1980. He was also the author of the 1948 fictional biography of Evariste Galois, *Whom the Gods Love*, and the 1950 *Albert Einstein, His Work and Its Influence on Our World*. In Warsaw Leopold Infeld became the director of the Theoretical Physics Institute and served in this position until his death in 1968. In Poland he was critical of censorship by the Polish government. In 1995 he was posthumously awarded the rank of professor emeritus from the University of Toronto.

Before the family emigrated to Poland, Helen Infeld served in various positions in the Ajax division of the University of Toronto. The Ajax campus was created from a massive munitions plant after the war to help accommodate the returning veterans and was in existence for three and a half years. She was both assistant and reader the first six months of 1946 followed by assistant 1946–47 and instructor 1947–49, after which the Ajax campus was closed and she was unemployed. At the end of 1948 she described her life in Canada to her master's thesis supervisor, Walter B. Carver, in a letter that is in an envelope pasted to the back cover of the archival copy of her 1929 master's thesis.

I've gone back to work. After giving up one job to come to Toronto with Leopold, and getting two children beyond babyhood, I found myself with a wonderful opportunity to have what I'd always wanted. The returning veterans so increased the student body, that the Engineering School here took over a former defense plant and turned it into a college for the first two years of engineering – twenty miles from town. There I have been teaching Calculus for the past $3\frac{1}{2}$ years, while a very nice housekeeper kept things going at home. I teach part-time and am home several days a week – I see the children when they come in from play, and I'm having a wonderful time. The veterans are fine to work with, and most appreciative. (Cornell University Archives)

Helen Infeld sailed for Poland in July 1950, her first trip outside of North America. The following year her sister, Margaret, a linguist on the faculty of New York University, joined the Infelds in Poland and, as reported in her obituary in the *New York Times*, left the United States “saying she wished to avoid persecution for pro-Communist views.” Margaret Schlauch served as professor and head of the English department of Warsaw University until 1967. The cold war atmosphere of

the 1950s caused the Canadian government to cancel the Infeld children's citizenship in December 1958 when they were fifteen and eighteen. Their daughter left Poland in 1974 and was living in Ontario, Canada, in the early 1990s. Their son, a professor of physics at the Solton Institute in Warsaw who was educated at Trinity College, Cambridge, and Warsaw University and who publishes under the name Eryk Infeld, spent some time at the Centre de recherches mathématiques of the Université de Montréal in the early 1990s.

Her son reported that Helen Infeld "faced the challenge of bringing up a family in a country that was completely new to her" and that "devotion to her family ... led to diminishing interest in mathematics (other than through her husband and son)" (authors' questionnaire 1991). Leopold Infeld had a heart condition and in 1959 suffered a stroke. Their son credits his father's survival to his mother's care.

In 1965–66 Helen and Leopold Infeld spent five months in the United States, living in Dallas, Texas, while Leopold Infeld was a visiting professor at the Southwest Center for Advanced Studies (now part of the University of Texas at Dallas). They then returned to Poland. After Leopold Infeld's death in 1968, and until 1982, Helen Infeld served as editor of *Poland (A Monthly)*, the English-language version of a periodical devoted to cultural events in Poland.

Helen Infeld was a member of the Polish-Icelandic Society. She received Poland's Gold Cross of Merit in 1954 and in 1970 the Chevalier Cross, Polonia Restituta, one of the highest distinctions awarded by the Polish government. She died in Warsaw in 1993 shortly before her eighty-sixth birthday. Her funeral was held at the Powazki municipal cemetery.

Organizational affiliations: AMS, MAA, Phi Beta Kappa, Pi Mu Epsilon.

Thesis and dissertation:

1929 [Schlauch, H. M.] Mixed systems of linear equations and inequalities. MA thesis, Cornell University, directed by Walter Buckingham Carver. Typescript. See also **1932**.

1933 [Adams, H. S.] On the normal rational n -ic. PhD dissertation, Cornell University, directed by Virgil Snyder. Typescript. Printed abstract, 1936, reprinted from *Bull. Amer. Math. Soc.* 42:441–48.

Publications:

1931 [Schlauch, H. M.] Point-college: A mathematical collegiate farce concerning analytics in which the student body is composed of animated points. *Sch. Sci. Math.* 31:448–54.

1932 [Schlauch, H. M.] Mixed systems of linear equations and inequalities. *Amer. Math. Monthly* 39:218–22. Published version of MA thesis. Review: *JFM* 58.0099.01 (G. Anders). Presented to the AMS, Bethlehem, PA, 27 Dec 1929; abstract: *Bull. Amer. Math. Soc.* 36:198 #116.

1936 [Adams, H. S.] On the normal rational n -ic. *Bull. Amer. Math. Soc.* 42:441–48. Abstract of PhD dissertation. Reviews: *JFM* 62.0764.02 (R. Weitzenböck); *Zbl* 014.17503 (J. Todd).

1939 Review of *General Mathematics*, by C. H. Currier, E. E. Watson, and J. S. Frame. *Amer. Math. Monthly* 46:443.

1978 (Translator from the Polish) *Why I Left Canada: Reflections on Science and Politics* by L. Infeld. Edited with an introduction by L. Pyenson. Montreal: McGill-Queen's Univ. Press. Reviews: *Amer. Math. Monthly* 86:139 (L. A. Steen); *Science* 204 (4388): 49–50 (M. Kac); *Isis* 70:638 (L. Badash).

1979 Remembering my husband Leopold Infeld. *Poland (A Monthly)*.

References to: AmMSc 6–8.

Infeld, Eryk. "Biography." In *Leopold Infeld: His Life and Scientific Work* edited by E. Infeld. Warszawa: Polish Scientific Publishers, 1978.

Other sources: PhD dissertation biography 1933; Owens questionnaire 1937; authors' questionnaire completed by son 1991; Division of Rare and Manuscript Collections, Cornell University Library; Former Members of the Department files, Cornell University Department of Mathematics; University of Toronto Archives; "Margaret Schlauch, 88; American Expatriate," *New York Times*, 23 July 1986; Susan Bloch-Nevitte, "Closing the circle," *University of Toronto News*, 29 May 1995; WhAm 4 (Infeld, Leopold); US Census 1920, 1930 NJ.

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