

Josephine M. Mitchell and Lowell I. Schoenfeld were mathematicians, she in analysis (several complex variables) and he in number theory (analytic). They were married for nearly 50 years. They wrote at least one paper together. They shared a love of the outdoors, which became even more intense in later years. Josephine Mitchell passed away at the end of 2000, and slightly more than one year later, Lowell Schoenfeld passed away as well. But this brief description of two intertwined lives is wholly inadequate, for in many ways these two mathematicians represented twentieth-century mathematics in America.



Josephine Mitchell grew up in Edmonton, Canada, and did her undergraduate work at the University of Alberta. Her interests at the time were history and mathematics. The mathematics professors persuaded her to study mathematics, which at the time some viewed as an uncommon field for women. She graduated in 1934 and eventually went on to get her Master's and Ph.D. from Bryn Mawr College in Pennsylvania, under the direction of the famous mathematician Anna Pell Wheeler. She

taught at several small colleges, but in the early 1950s ended up at the University of Illinois in Champaign-Urbana.

Lowell Schoenfeld spent his early years in New York City, graduating Cum Laude from the College of the City of New York in 1940. He went on to MIT to earn a Master's, and then to the University of Pennsylvania, receiving his Ph.D. in 1944 under the direction of Hans Rademacher. (During his years in graduate school, he seems to have worked for the Philadelphia Navy Yard as well, writing reports on aircraft navigational computers.) After positions at Temple University and Harvard, he moved to the University of Illinois, where he met his future wife.

When the two met in the early 1950s, she was an Associate Professor with tenure, he an untenured Assistant Professor. Anti-nepotism rules had begun to enter American universities in 1920s, and by the early 1950s they had become widespread. They were sometimes used to subtly discriminate, but in this case there was nothing subtle at all. As soon as Mitchell and Schoenfeld were married, the University demanded that she, the senior and *tenured* faculty member, step



down from her position, while he, the junior and *untenured* partner, was permitted to keep his. Both husband and wife protested; they appealed for help to the American Association of University Professors; they went to the American Association of University Women. But their efforts were unsuccessful, and the University of Illinois prevailed in the end. *Both* resigned their positions.

They began a period of wandering from one institution to another, trying to find an institution that accepted both as mathematicians. They finally settled at Penn State University, which at the time was one of the few universities to hire couples.

Their 10 years at Penn State are remembered fondly by one of their colleagues at the time, Raymond Ayoub. He remembers both for their hospitality, their frequent colloquium parties, and their sparkling and stimulating conversation. He also remembers Lowell for leading a protest against the university library, which had decreed that all departmental collections be housed with the main library. The protestors won.

Throughout their lives, both seem to have loved the outdoors—hiking, canoeing, and especially wild-flowers. During their time at Penn State, Ayoub remembers that Josephine gained the habit of tasting every unusual plant she saw, a habit that he describes as "nerve-wracking" since he was certain she would succumb to some poisonous plant on each excursion. Their love of wild-flowers seemed to grow as years went by, and Josephine became an avid photographer in later years.



They moved to the University of Buffalo in 1968, where they each became active department members—writing papers, directing dissertations, reviewing for Math Reviews, and cultivating a better library (which was a constant theme throughout their lives). They each retired during the 1980s, but they maintained many interests—in the outdoors, in the library, in the symphony, in traveling, in family . . . and in mathematics.

Ralph Waldo Emerson once wrote that "Nature and Book belong to the eyes that see them." There seems no better epitaph for Josephine Mitchell and Lowell Schoenfeld; Nature and Books were theirs, throughout their lives.

The Society has received a substantial bequest from Josephine Mitchell and Lowell Schoenfeld, which will be part of the Society's Endowment, with its income used to support mathematics and scholarship. In one special way, they have already provided unusual support for mathematics: Their rather magnificent collection of books and journals was sent to Charles University in the Czech Republic, where recent floods had destroyed the entire library.

In both ways, these two "gentle" mathematicians, whose work spanned a half century and whose professional lives represented so much about twentieth century mathematics, will be a part of the mathematical community during the next century as well. The Society is grateful, and we honor them today by naming this portion of our garden the "Josephine Mitchell and Lowell Schoenfeld Memorial Garden."



*John Ewing
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