

## A. C. Schaeffer, Mathematician

In 1949, the coveted Bocher prize for outstanding achievement in mathematics was awarded to Albert Charles Schaeffer and Donald C. Spencer. I happened to visit Schaeffer the day after he received the good news. His intense pleasure and complete surprise at being thus recognized showed the modesty with which he looked on his own achievements. On 2 February 1957, by the sudden death of Albert Schaeffer, American mathematics lost one of its most original minds and one of its most interested and interesting contributors.

Schaeffer's marks of distinction were his tenacity and his overwhelming desire to throw all his intense energy into solving stubborn mathematical problems. Where others turned aside and were content to seek closer goals, he continued, overcoming obstacles with originality and technical brilliance and always emerging with a contribution worthy of his extremely high standards. He wanted none of the credit for arriving at insignificant mathematical formulas; rather, his expert attention was all directed toward hard analysis, and it was here that he attained his reputation.

Schaeffer did not discover his interest in mathematics until he was a practicing engineer with the State Highway Commission of Wisconsin. He held a degree in civil engineering from the University of Wisconsin and had married the former Carol Marsh of Boston. In 1933, after he found that even the smallest mathematical problem that arose in connection with his work was of compelling interest to him, he resigned his position with the State Highway Commission and entered the graduate school of Massachusetts Institute of Technology, in the

field of applied mathematics. Encouraged by his loyal wife, he went on to receive the Ph.D. degree, in 1936. He never returned to engineering, although his interest in its problems was always evident.

The beginning of Schaeffer's active and productive career as teacher and scholar showed again his drive and tenacity. Teaching positions were scarce in 1936, but he did not sit back and wait for offers. Instead, he drove from college to college, diploma in hand, asking about possible openings. His first opportunity came with the offer of a position as instructor at Purdue University. Later he moved to Stanford, then back to Purdue, where he remained until 1950, except for one semester spent as visiting professor at Carnegie Institute of Technology.

In 1950 the Schaeffers returned to their alma mater, the University of Wisconsin. Schaeffer was now recognized as one of the truly forceful mathematicians of the country. At Wisconsin he continued his vigorous research in pure mathematics and, at the time of his death, was serving as chairman of the mathematics department.

Schaeffer's research interests lay in the area of analysis—polynomials, schlicht functions, entire functions, and analytic number theory mark the general subdivisions into which his many research papers fall. He enjoyed working with others, and it was a pleasure and a privilege to collaborate with him. I had the honor of associating with him on the production of many early papers. His other most frequent collaborator was Spencer, with whom he completed the major attack on the coefficient problem for schlicht functions which won the

Bocher prize and which was published as a colloquium volume by the American Mathematical Society in 1950.

Schaeffer's work in mathematics had many facets. He was an active member of the Mathematical Association of America and of the American Mathematical Society and served a term as associate secretary of the latter. During World War II he was active on several research panels and later was director of the Office of Naval Research Mathematics Project at Stanford, working in close association with George Polya, Gabor Szegő, Spencer, and others. More recently he had served as editor of the *Proceedings of the American Mathematical Society* and of the *Duke Journal* and as a consultant on various national panels and committees.

The students who came under Schaeffer's influence will never forget his intense interest in his subject and in teaching, his capacity for hammering together, before their eyes, the precise, complicated structure he wished to present. Those who worked more closely with him on research will always recall with admiration his utter disregard of stumbling blocks in the way of mathematical progress, his ability to advance rapidly along any line of investigation he undertook. And those of us who appreciated him most and loved him best will continue to be influenced by the memory of those traits of character which made him unique—his boundless enthusiasm for living and for making friends, his frank and outspoken criticism of anything he believed to be unjust, his loyalty to his colleagues, and the extreme simplicity of his nature. To him, the poetry expressed by the motion of a baseball player was as exquisite as any symphonic movement. He was without deceit and was completely lacking in pretentiousness.

Science could use many Al Schaeffers; his influence will be felt throughout the lifetime of those who were privileged to know him, and his work will point the way to much future mathematical progress.

R. J. DUFFIN

*Carnegie Institute of Technology,  
Pittsburgh, Pennsylvania*

