

In Memoriam

Ralph P. Boas, Jr.

(1912-1992)

This issue of the *Journal of Mathematical Analysis and Applications* is dedicated to the memory of Ralph Philip Boas, Jr., who was Editor (1985-1991 with George Leitmann) and an Associate Editor (1977-1981) of this journal. He died in his home in Seattle on July 25, 1992, just 2 weeks before his 80th birthday.

Concerning their editorial relationship, George Leitmann stated, "During our all too brief co-editorship of *JMAA* Ralph Boas provided outstanding policy advice and did yeoman service himself in the processing of submissions to the journal. His deep knowledge of the field of real and complex analysis, as well as his long involvement with the mathematics community, made him an ideal editor for a journal of the broad scope of *JMAA*. He was a wise and gentle man with whom it was a pleasure to co-edit the journal. I shall miss him greatly."

Creighton Buck, who knew Ralph for over 50 years, wrote in a letter: "Others may share my feeling that it is impossible to paint an appropriate picture of Ralph's role in the world of mathematics. It would have to be a giant mosaic, created by many hands, each bringing a different picture of his contributions to our community. He has left his imprint on every one of the organizations that make up the world of mathematics—from the elaborate communications structure that is *Math Reviews*—to the procedures (now routine) that have simplified regional meetings of the mathematical societies. How often I remember his voice, offering a wry comment and cool common sense, to solve an administrative headache, or divert a catastrophe." And he concluded with: "If there is such a thing as a mathematical midwife (or whatever the mr form is) Ralph has done his share. I have heard him described as the perfect referee—helping the author to write a good paper, without making it easy. He was a great editor because he trained his referees. He will be missed!"

Ralph Boas was born August 8, 1912, in Walla Walla, Washington. He received his A.B. degree in 1933 and his Ph.D. (under D. V. Widder) in 1937 at Harvard University. A 2-year National Research Fellowship enabled him to go to Princeton in 1937 to work with Salomon Bochner, and to Cambridge, England, in 1938, where he attended lectures by Hardy, Littlewood, and Besicovitch. Ralph taught at Duke University (1939-1942), at the U.S. Navy Pre-Flight School in Chapel Hill (1942-1943), and as a visiting lecturer at Harvard University (1943-1945). He was the Executive Editor of *Mathematical Reviews* during 1945-1950 and a lecturer at the Massachusetts Institute of Technology during 1948-1949. Besides having studied Greek, Latin, French, Sanskrit, and German, he went on to learn Russian (by reviewing Russian papers for *Mathematical Reviews*) and a little Georgian. See his article in the book "More Mathematical People" (edited by D. Albers *et al.*) concerning his experiences with Gaelic, Chinese, etc.

Without having been an Assistant or Associate Professor, Ralph became a

Professor of Mathematics at Northwestern University in 1950 and was Chairman of the Mathematics Department from 1957 until 1972, during which time most of the current full professors were hired. Besides being an excellent teacher and expositor, he possessed broad insight and knowledge not only in his areas of research, but also about mathematics in general and the lives of many mathematicians. He wrote almost 200 papers on real and complex analysis, which were mainly concerned with functions of exponential type, polynomial expansions of analytic functions, Fourier series and power series with positive coefficients, growth of analytic functions and of the partial sums of infinite series, moment problems, and Tauberian, completeness, uniqueness, and integrability theorems. His coauthors included S. Bochner, F. Smithies, J. W. Tukey, D. V. Widder, G. Polya, N. Levinson, A. C. Schaeffer, M. Kac, H. Pollard, R. C. Buck, P. Erdős, K. Chandrasekharan, S. Izumi, Q. I. Rahman, P. M. Anselone, L. Schoenfeld, R. Askey, M. Marcus, M. S. Klamkin, his wife Mary L. Boas, and some of his 11 Ph.D. students. His lucidly written textbooks "Entire Functions" (1954) and "A Primer of Real Functions" (1960) are still used, along with his two authoritative monographs "Polynomial Expansions of Analytic Functions" (joint with R. C. Buck in 1958) and "Integrability Theorems for Trigonometric Transforms" (1967) and his more recent first year complex variables book "Invitation to Complex Analysis" (1987). Ralph edited the first two volumes of the Collected Papers of G. Polya in 1974, and translated (from Russian) Nikiforov and Uvarov's "Special Functions," Suetin's "Polynomials Orthogonal over a Region and Bieberbach Polynomials," Shirayev's "Probability," and E. V. Voronovskaja's book "The Functional Method and Its Applications." In 1990 he edited the second edition of Lohwater's Russian-English Dictionary of the Mathematical Sciences.

His numerous professional activities included being Vice President (1959-1960) and Trustee (1966-1970) of the American Mathematical Society, President of the Mathematical Association of America (1973, 1974), and Editor of the *American Mathematical Monthly* (1976-1981), *Selecta Mathematica Sovietica* (1981, 1982), and (with G. Leitmann) *Journal of Mathematical Analysis and Applications* (1985-1991). He was a Guggenheim Fellow (1951-1952) and he received the Distinguished Service Award from the Mathematical Association of America in 1981. Although Ralph formally retired in 1980 from Northwestern University as Henry S. Noyes Professor Emeritus of Mathematics, he continued his professional activities. He was always willing to help, and he has left a lasting influence on those who knew him and on the mathematical community.

Ralph Boas is survived by his wife of 51 years, Mary, Professor Emeritus of Physics at DePaul University, his daughter Anne, and two sons, Ralph and Harold (Professor of Mathematics at Texas A & M University). A memorial service was held on October 9, 1992, at Northwestern University.

GEORGE GASPER
Northwestern University

Donations in the memory of Ralph P. Boas may be made to the Ralph P. Boas, Jr., Mathematics Library at Northwestern University.

THE EDITORS