[W] Hermann Weyl, Inequalities between the two kinds of eigenvalues of a linear transformation, Proc. Nat. Acad. Sci. U.S.A. **35** (1949), 408-411.

J. R. RETHERFORD LOUISIANA STATE UNIVERSITY

BULLETIN (New Series) OF THE AMERICAN MATHEMATICAL SOCIETY Volume 19, Number 2, October 1988 ©1988 American Mathematical Society 0273-0979/88 \$1.00 + \$.25 per page

Selected papers of Errett Bishop, edited by John Wermer. World Scientific Publishing, Singapore and Philadelphia, xxiv + 414 pp., \$56.00. ISBN 9971-50-127-9

In the summer of 1959 I visited the Mathematics Department in Berkeley for the first time. There was a summer-long seminar in functional analysis that year, and practically everyone working in Banach algebras and associated topics spent some time there. I met Errett Bishop at one of the post-seminar teas, and we talked of problems in several complex variables related to function algebras. He asked me whether or not I knew if any analytic polyhedron in a complex manifold of dimension n could be approximated by one defined by only n functions. I hadn't a clue, and I asked him why he supposed such a thing should be true. His answer: "Well, for a projective variety of dimension n, it is true that almost every projection to P^n is of degree n, and that's really the same thing for this special case." I was unable to see the connection, and, being a brash upstart fresh out of MIT, I assumed that there wasn't one. We passed on to a discussion of minimal boundaries; that spring I had studied his paper on this subject and was very impressed by the appearance of "hard" analysis in what I thought was a subject in "soft" analysis. I wanted to calculate the minimal boundary of analytic polyhedra. Errett instantly knew where I was stuck, and suggested that I needed to understand better how to cut down representing measures using peak sets.

Several months later, while writing up a set of notes on analytic spaces, I finally understood Bishop's connection between generic projections of projective varieties and (what later became known as) special analytic polyhedra. I discovered how easy it was to extend known theorems for the polydisc to analytic covers of the polydisc, and that his idea, if true, amounted to the assertion that any Stein space could be approximated by analytic covers of polydiscs! What a potent tool! All theorems proven locally for analytic spaces by means of the parametrization theorem could now be proven for arbitrarily large domains on Stein analytic spaces. I called him to tell him about my discovery. He seemed pleased and interested and added this: "Furthermore, if I can see how to convert an almost proper map to a proper one, all these theorems will extend to the whole Stein space, and furthermore, provide an embedding into C^n ." "You mean you can prove Remmert's theorem?" I asked. He replied that he thought so.

In that way began one of the most important mathematical friendships of my career. For most of the following two years, Errett Bishop was a member of the Institute for Advanced Study, and I was an assistant professor at Princeton

538