## WITOLD HUREWICZ, IN MEMORIAM

## SOLOMON LEFSCHETZ

Last September sixth was a black day for mathematics. For on that day there disappeared, as a consequence of an accidental fall from a pyramid in Uxmal, Yucatan, Witold Hurewicz, one of the most capable and lovable mathematicians to be found anywhere. He had just attended the International Symposium on Algebraic Topology which took place during August at the National University of Mexico and had been the starting lecturer and one of the most active participants. He had come to Mexico several weeks before the meeting and had at once fallen in love with the country and its people. As a consequence he established from the very first a warm relationship between himself and the Mexican mathematicians. His death caused among all of us there a profound feeling of loss, as if a close relative had gone, and for days one could speak of nothing else.

Witold Hurewicz was born on June 29, 1904, in Lodz, Russian Poland, received his early education there, and his doctorate in Vienna in 1926. He was a Rockefeller Fellow in 1927–1928 in Amsterdam, privaat docent there till 1936 when he came to this country. The Institute for Advanced Study, the University of North Carolina, Radiation Laboratory and Massachusetts Institute of Technology (since 1945) followed in succession.

Mathematically Hurewicz will best be remembered for his important contributions to dimension, and above all as the founder of homotopy group theory. Suffice it to say that the investigation of these groups dominates present day topology.

Still very young, Hurewicz attacked dimension theory, on which he wrote together with Henry Wallman the book *Dimension theory* [39].<sup>1</sup> We come to this book later. The Menger-Urysohn theory, still of recent creation was then in full bloom, and Menger was preparing his book on the subject. One of the principal contributions of Hurewicz was the extension of the proofs of the main theorems to separable metric spaces [2 to 10] which required a different technique from the basically euclidean one of Menger and Urysohn. Some other noteworthy results obtained by him on dimension are:

(a) A separable metric n-space (=n dimensional space) may be topologically imbedded in a compact metric n-space [7].

<sup>&</sup>lt;sup>1</sup> Square brackers refer to the bibliography at the end.