

HAPPY 80-th BIRTHDAY PROFESSOR MARDEŠIĆ



This issue of Glasnik Matematički is devoted to its founding editor Sibe Mardešić on the occasion of his 80-th birthday. Thus the present editors of Glasnik Matematički wish to thank Professor Mardešić for the founding of our first journal entirely devoted to mathematics, as well as for his participation in the journal as an editor, author, referee and as the member of our mathematical community who has been keeping an eye on Glasnik Matematički all the time.

Sibe Mardešić was born on June 20, 1927, in Bergerdorf (near Hamburg, Germany), where his parents temporarily resided. He lived there only a short time before his family moved to Chile. Due to economic crisis the family returned back to Split, Croatia, in 1930, where he completed elementary school and high school. After WW2 he enrolled in the University of Zagreb taking mathematics as his major. He started with research as an undergraduate student and has been involved in it to this day. After having completed his undergraduate degree he took a position of an assistant at the Department of Mathematics of the University of Zagreb, advancing there through all academic positions until his retirement in 1991.

As a mathematician he is a topologist. Even more, he is a self-taught topologist, who began his research in algebraic topology, but his later work

ranges through all main branches of topology. The algebraic topology results obtained in his doctoral dissertation *Certain homological properties of some function spaces* were soon followed in the joint work with Pavle Papić by results in general topology. Dimension theory was then enriched by the *factorization theorem* of maps which is, in present-day texts on dimension theory, usually called the *Mardešić Factorization Theorem*. He also made significant contributions to the continua theory, for instance his striking example showing that the Hahn-Mazurkiewicz Theorem does not extend to the nonmetric case.

When Borsuk first introduced the new theory, later named *Shape Theory*, Mardešić immediately saw what a significant advance this was. In collaboration with Jack Segal he developed an alternative approach to shape theory based on inverse systems. Today this approach bears the namee “ANR-system approach to shapes”. That approach has quickly turned out to be very convenient in attacking different questions which have been naturally arising in the new theory. The shape theory blossomed during the next decades, its development greatly owing to Mardešić’s many contributions.

Mardešić established many fruitful collaborations with fellow topologists during his career. Perhaps the most fruitful one was with Jack Segal. Their book on shape theory¹ has become a standard reference and resource for the subject. Mardešić continues to produce results in this area. In addition to a sequence of research papers, he published a book on strong shape and homology².

Alongside with research, he devoted his efforts to teaching topology and encouraging research. In 1961 he founded, together with P. Papić, the *Topology Seminar* of the University of Zagreb. In the Seminar we learned topology, presented new results, hosted topologists from abroad etc. Let us mention that 50 graduate students obtained their Master’s Degree through the work in the Seminar.

In recognition of his work, professor Mardešić received highest awards: Republic of Croatia Award “Ruđer Bošković” (1965); City of Zagreb Award (1978); Republic of Croatia Award for his entire scientific work (1990). He is a member of the Croatian Academy of Sciences and Arts and the Academia Europea.

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GUEST EDITORS

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¹S. Mardešić and J. Segal, *Shape Theory*, North-Holland Publishing Co., Amsterdam-New York-Oxford 1982. ISBN: 0-444-86286-2.

²Sibe Mardešić, *Strong Shape and Homology*, Springer-Verlag, Berlin-Heidelberg-New York 2000. ISBN: 3-540-66198-0.