Milestones in the Development of Computational Linguistics for Serbian

Computational Linguistics started to attract attention of researchers, most notably mathematicians, in Serbia more than 35 years ago. One of them, Duško Vitas, professor at the University of Belgrade, Faculty of Mathematics, at that time a young researcher at the Mathematical Institute of the Serbian Academy of Sciences and Arts (SASA) and a PhD student, already intrigued by the work of Noam Chomsky and Maurice Gross, was offered by his mentor, Professor Nedeljko Parezanović, a book written by Gerard Salton to have a look "if there is something interesting in it". And he indeed discovered many interesting things in it, including the field of Information Retrieval, as well as other fields related to text processing, which never ceased to attract and excite him. His great enthusiasm inspired many other researchers during the following years to dedicate their work to this topic.

The work of Professor Vitas and his colleagues that ensued was marked by never fading enthusiasm, as well as perseverance to establish the foundations of Computational Linguistics in Serbia as a research field and broaden its influence. The events that had the greatest impact on the development of Computational Linguistics for Serbian, were the following:

- Production of the first concordancer for Serbian dubbed Aurora and the MORF morphological generator
- Establishment of the Permanent Seminar on Mathematical and Computational Linguistics at the Mathematical Institute of SASA way back in 1978
- Funding of the first interdisciplinary project Mathematical and Computational Linguistics 1981-1985 that brought together mathematicians and linguists
- Organization of several national ("national" back then meaning the former Yugoslavia as a whole), and international conferences dedicated to Computational Linguistics
- Organization of visits of several distinguished researchers in the field;
- Establishment of strong and fruitful relations with eminent researchers, most notably, Professors Ljubomir Popović, Maurice Gross, and Wolfgang Teubert
- Introduction of the first courses in Mathematical and Computational Linguistics for students of General Linguistics and students of Serbian at the Faculty of Philology in 1994, as well as Natural Language Processing graduate courses for students of Mathematics at the Faculty of Mathematics in the same year
- Participation in the cooperative project "Languages Industries" 1989-1991 that was followed by participation in a number of European and bilateral projects

- Emergence of a number of young researchers, both mathematicians and linguists, interested in various aspects of text processing, mathematical and computational linguistics.

Over the last 35 years, many resources and tools for processing Serbian have been developed within the Human Language Technologies group of the Faculty of Mathematics. Also, a number of PhD theses and master theses have been completed in this field. The participation of the HLT group in CESAR (CEntral and South-east europeAn Resources), which is part of META-NET, a Network of Excellence forging the Multilingual Europe Technology Alliance, asserted the place of Serbian in the European family of languages when resources and tools for its processing are concerned, and opened new perspectives for their growth.

This volume presents the latest research results in the field of Computational Linguistics for Serbian, especially dedicated to development of lexical and textual resources, as well as related tools and their application. The majority of authors belong to the new generation of researchers who are expected to take the leading position in this field in the future.

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