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## **Report – short visit to Novi Sad, the first meeting of the project “The role of inflectional complexity in language processing”**

The purpose of the visit was to start a small research project, in order to explore the role of the inflectional variability in nominal declension in Croatian/Serbian and German. The research project should be carried out in two steps (two meetings, the first taking place in Novi Sad in December 2012, and second in February 2013 in Zagreb).

In order to hold the first meeting, two researchers from Croatia (Prof. Dražen Domijan, University of Rijeka and Assistant Prof. Maja Anđel, University of Zagreb) met in Novi Sad with Prof. Petar Milin, University of Novi Sad, Serbia. The meeting begun on Wednesday, December 5 and ended on Saturday, December 8. Prof. Dražen Domijan from Rijeka was driving both of us in his car.

For the whole project, three different activities should contribute to the completion of the goal:

- 1) Systematization of previous empirical findings and theoretical discussions related to the role of inflectional variability in cognitive processing; pinpointing differences in language processing with different degree of morphological complexity.
- 2) Starting a line of empirical and simulation studies that would follow from systematized findings and discussions, describing inflectional variability as gradual in nature and aiming to investigate its role in cognitive processing.
- 3) Co-implicative role of regularity and variability in inflectional morphology will be discussed, raised from contemporary findings of this programme.

The aim of the first meeting was set to fulfil the first goal, i.e. to discuss and systematize existing findings, research frames and models that reveal processing differences in languages with different inflectional variability. The literature was found and partially analyzed before the actual meeting. We have concluded that the relevant literature comes mainly from three different disciplines – from the psycholinguistic research (e.g. Feldman 1994, Katz et al.

1994, Kostić 1994), from the neurolinguistic research (e.g. Järvikivi et al. 2006, Božić et al. 2007, Bick et al. 2011) and some from the field of speech and language pathology.

In addition to the literature review, we extensively worked on designing experiments that can shed light on our questions. First, we decided that the best way of measuring the psychological impact of morphological complexity would be three kinds of experiments: forced decision experiment, self-paced reading experiment and eye-tracking experiment. Then we designed the actual measuring items: since we are planning on comparing the phenomenon in Croatian/Serbian and German (which differ in morphological complexity), first we had to set the criteria for the nouns that we would use in the experiment. After that, we designed fifty sentences that would be used, such as:

Ispred njih stoji **jabuka** i mineralna voda. (In front of them there is an apple and mineral water.)

Ivana uvijek poslužuje **salatu** uz glavno jelo. (Ivana always serves salad along with the main course.) (whole list available upon request)

For each morphologically distinct case in Croatian/Serbian we have made ten sentences containing a noun in a target case (nominative, accusative, dative/locative, genitive, instrumental). All the nouns belong to the most simple, but diversified nominal paradigm in Croatian/Serbian (feminine ending in –a). As a counterpart paradigm for German we have chosen the masculine paradigm, for its diversity and distinctiveness. Therefore, we had to take care that every noun we have chosen belongs to the same paradigm in the source language (feminine in Croatian/Serbian) and that every one of them has its translation in the same nominal paradigm in German (masculine). The lexical environment of every target noun was constrained in a way that allows the experiment to be conducted under similar circumstances in both Croatian/Serbian and German.

The rationale behind the first experiment, i.e. the forced decision experiment, is to enable us to establish an impact scale of morphological mistakes in Croatian/Serbian and German. In other words, we want to know with what degree of severity do native speakers estimate different morphological mistakes in the observed languages.

After completing the experiment design, we discussed the possibilities of carrying out the experiment. The experiments for Croatian/Serbian will be carried out at the Universities of Novi Sad, Rijeka and Zagreb. The German part should be done by Prof. Petar Milin at the

University of Tübingen. An on-line questionnaire will also be prepared. A pilot for computer-aided and paper-and-pencil questionnaire will be made as well, in order to compare the computer-aided and the paper-and-pencil versions and to ensure their reliability. The on-line questionnaire can also be used as a basis for starting a database as a tool for determining the morphological complexity of nominal declension. This database should be accessible for other researchers.

Normative studies, i.e. ratings, for the described activities and experiments should be carried out until the end of February, when the next meeting is planned.

The proposed project is planned to be only the beginning of a broader series of research experiments, so that collaboration between the involved Universities should continue with even bigger intensity. There is a plan to broaden the cooperation by signing other kinds of bilateral contracts as well (Erasmus etc.).

For the experiment in question, it is planned to submit the results to a major paper or conference, but as the results will only be evaluated during the next meeting, the details on publication will be discussed later on.

#### Literature

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