Mario Essert, *associate of the Department of Mathematics, University of Osijek,* messert@inet.hr

Lucija Tatarević, *student, Dept. of Mathematics, University of Osijek,* lucija.tatarevic@gmail.com

Marko Orešković, *National and University Library in Zagreb,* moreskovic@nsk.hr

Croatian network e-dictionary of multiword expressions

Similar to how molecules are formed from atoms, the multiword expressions are formed from words. They usually hold different information type within (e.g. terminological: war ship; sociological: loose customs union; metaphorical: my sweet sunshine; phrasematical, proverbial, etc. Having MWE lexicon is important for a language, because it gives paradigmatical and semantical components which simple dictionary has not. The network Syntactic and Semantic Framework (SSF) also includes such 'molecular' lexicon, which is similar to already described lexicons of words and syllables/morphs. Currently there are over 170,000 multiword expressions which were automatically collected from external resources (respecting copyright) or from network documents (with statistical verification of type, i.e. type of bonding within the MWE). Display settings are also similar to other lexicons. Ordering of multiwords is by default in ascending order based on the words position within the multiword which can be additionally configured in the setup screen (e.g. to show only collocations, phrasemes, etc.). Near each multiword there is a list of words (atoms) from which the multiword is formed. Special attention s given to statistical tools for MWE processing (e.g. measures for collocational and collostructional strength). Such tools (Student's t-test, Pearson's chi-square test, loglikelihood and the Fisher exact test) are used for collocation detection and verification. Additional efforts are made in agglomerative clustering in order to conduct researches of collostructions (Stefanowitsch, Gries) in Croatian language.

Keywords: network framwork, multiword lexicon, collocation detection, researches of collostructions