Evidence of Split Morphology Hypothesis in Czech

Radka Julínková, Palacký University Olomouc, Czech Republic Denisa Bordag, Herder-Institut, Universität Leipzig, Germany

Derivation and inflection are basic morphological processes by which two different classes of words are formed, i.e. words with derivational affixes and words with inflectional affixes. Linguists suggest several principles of lexical storage for morphologically complex words. According to Split Morphology Hypothesis (SMH), derivation and inflection are mentally completely different processes, which was proved in many non-Slavonic languages, but also disproved in Hebrew.

The aim of this research was to find out whether SMH is relevant also to Slavonic languages with abundant inflectional system, in this case to Czech (because in Slavonic languages only one research on SMH was done and was affirmed in Serbian - Feldman, L.B.: Beyond orthography and phonology: Differences between inflections and derivations. Journal of Memory and Language, 33, 1994, s. 442-470.).

Our research is based on morphological repetition priming (identical, inflectional, derivational) and on the method known as lexical decision. The battery test suitable for Czech language, containing twenty seven triples of words (nouns, verbs), which were morphologically related (basic form of word, inflectionally related form, and derivationally related form) and also 27 triples of made-up pseudowords, was created. Real words and pseudowords were presented to respondents at random and reaction times (RTs) were measured according to the type of prime. The method known as lexical decision was used and RTs were compared.

The results indicate that RTs were significantly slower in derivational priming compared to inflectional priming or identity priming, which were statistically the same. As for pseudowords, the effect of type of prime was not significant for any of RTs (therefore different RTs in inflectional and derivational priming with real words should not be caused by orthographic effect). We also found out that RTs for nouns were faster than for verbs.

Significantly larger facilitation with inflection suggests that there are distinct representations of inflectional and derivational forms in lexicon also for Czech language.