The Complexity-based Ordering Hypothesis (CBO, Hay 2003) posits that cognitive processing restricts affix combinability above and beyond structural restrictions (e.g. *inter-nation-iz-ation-al, despite being interpretable and meeting structural restrictions). Specifically, CBO states that affixes that tend to be parsed during lexical access occur farther from the root (in English) than affixes that do not, because this facilitates lexical access. However, the exact nature of the interaction can only be pinned down through cross-linguistic testing. In this paper we investigate constraints on the ordering of Russian derivational suffixes.

Manova (2010) and Talamo (2011) have raised doubts about CBO based on less strict affix ordering in Bulgarian and Italian than in English. However, these studies are problematic because they did not consider the potential implications of cross-linguistic differences in cognitive processing. In languages that make more use of morphology, we might expect lexical access to bias more towards parsing (Hankamer 1989). And in such a language, CBO can be interpreted as predicting less strict affix ordering.

To explore this issue, we used a 24-million-token Russian corpus and a set of 19 derivational suffixes to identify all word types where any two of the suffixes occurred adjacent. The 59 attested affix combinations represented a marginally more-than-random degree of ordering restriction (p = 0.06, versus p < 0.0001 for English (Plag and Baayen 2009)). However, parsing ratios for all affixes in the set (the percentage of an affix’s attestations expected to be parsed during lexical access) suggest that Russian also biases more towards parsing (compared to English data in Hay and Baayen (2002)). Less strict affix ordering in Russian is thus not directly contradictory to CBO. This result highlights the need to carefully consider possible cross-linguistic differences in cognitive processing and their implications for structural restrictions like affix ordering.