Suffix combinability and the organization of the mental lexicon

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Recently, there has been much interest in affix ordering from various perspectives (Aronoff and Manova 2010; Manova and Aronoff 2010; Manova 2011, 2015, among others). Although most researchers analyze the ordering of affixes in terms of affix combinations, it has not been investigated yet whether pieces of words such as affix combinations play a role in the mental lexicon. Thus this study is the first attempt at discovering the representation of combined affixes, more precisely of combined derivational suffixes, in the mental lexicon.

A derived word may be further derived to create another word of the type BASE-SUFFIX1-SUFFIX2, e.g. lead-er-ship. Bulgarian, Russian, English, and Italian data have shown that in such derivations SUFF1 relates to SUFF2 in specific ways and the combinations of the derivational suffixes are either fixed or predicable (Bagasheva and Manova 2013, Manova 2011, 2015, Manova and Talamo 2015). Fixed combinations are those in which SUFF1 is always followed by only one SUFF2 of a major lexical category (noun, adjective, verb). In a predictable combination, SUFF1 is followed by more than one SUFF2 of a lexical category but either one of the SUFF2 suffixes dominates over the others, i.e. it derives a great number of types, whereas all other SUFF2 suffixes derive a very limited number of types; or different SUFF2 suffixes of the same lexical category derive different semantics, e.g. an object and an abstract noun. To uncover the status of derivational suffix combinations in the mental lexicon, we conducted two psycholinguistic experiments: 1) identification and discriminating of existing and non-existing suffix combinations (60 suffix combinations altogether (30 existing / 30 non-existing) were tested; there were two lists, each with the suffixes of the other in reverse order; each subject saw all combinations; 64 subjects participated); and 2) visual recognition with reaction-time measuring of the processing of existing and non-existing fixed and predictable combinations (88 suffix combinations altogether were tested; the fixed and predictable combinations were additionally balanced for productivity; there were different orders of the 88 suffixes; each participant saw all combinations; 53 participants). The data for the experiments come from Polish, a language that is similar to the aforementioned languages with respect to combinability of derivational suffixes; and all subjects were adult native speakers of Polish. The half of the non-existing suffix combinations were generated by manipulating letters of legal suffix combinations, the other half were obtained by changing the order of the suffixes of legal combinations. The paper will report on the results of the experiments and discuss what those results reveal about the organization of the mental lexicon and the general architecture of grammar.

References

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