Ambiguity in Russian Verbal Prefixation System: From Lexical Semantics to Probability Theory

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Traditionally, one of the usages of the prefix *po-* is associated with some characteristic of an event being lower than the expected value. However, numerous corpora examples do not support inclusion of this meaning component into the interpretation of the prefix, e.g. because *po*-prefixed verbs can modified by adverbials denoting a high degree.

I propose to use underspecified semantics and probabilistic pragmatic modelling to explain intuitions about the delimitative nature of the prefix *po-* without introducing restrictions that are not supported by the corpora examples. The prefix *po-* is analysed as making the event denoted by the derivational base bounded without providing concrete values of these boundaries: the initial and the final stages of the event are mapped to some (not specified) degrees on the scale that is used to measure the event. At the same time, almost all other verbal prefixes are more restrictive with respect to the identification of the initial and final stages of the event. When several prefixes with overlapping semantic contributions can be attached to the same derivational base, the derived verbs compete with each other and the *po*-prefixed verb acquires the observed attenuative inference.

To make the analysis computational, I consider formal semantic representations (in Frame Semantics as formalized by Kallmeyer and Osswald 2013) of various prefixed verbs and then pass the relevant data to a three-layered Rational Speech Act model (RSA, Goodman and Frank 2016) using WebPPL. As a result, I obtain predictions that align with the traditional view, but are more flexible, as the literal semantics remains underspecified and inferences can be cancelled in particular contexts.

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