A neo-Fregean semantics for number words

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Number words have played a central role in debates about the relation between context and meaning. The dominant analysis of number words in linguistics, going back to Horn 1972, treats them as expressions whose semantic content provides a lower bound on a quantity, and derives upper boundedness in assertions about exact quantities via a Quantity-based scalar implicature. This analysis has been challenged in recent years both in the theoretical literature, by data which show that upper bounded interpretations are a part of semantic content, and in the experimental literature, by results which show that number words do not pattern with other scalar terms in language acqusition and processing.

These challenges have led to three types of alternative analyses: underspecifcation accounts, whereby boundedness entailments arise via pragmatic enrichment (Carston 1998); two-sided semantic analyses, whereby upper- and lower-bounded readings arise via implicature (Breheny 2008); and polysemy analyses, in which number words have both lower-bounded and two sided readings as a matter of semantics, and upper-bounded readings arise via implicature (Geurts 2006). While these analyses differ in their details, they all account for at least one type of scalar reading in terms of pragmatic content.

The goal of this talk is to present and motivate a fully semantic and compositional analysis of scalar readings, in which number words denote second-order properties of properties of quantities, and scalar readings arise through scopal interactions between number words and other constituents in a Logical Form, rather than through implicature or enrichment. I show that this analysis provides a better account of both the experimental results and the facts that have been problematic for the traditional analysis, and that it also explains a complicated set of facts involving modified numerals, recently discussed by Nouwen (2010), which are not easily handled by any of the other analyses.

References

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