## Vagueness, Approximation and the Maxim of Quality

Paul Egré Institut Jean Nicod paul.egre@ens.fr

LSCP steven.verheven@kuleuven.be

Steven Verheyen

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Frazee and Beaver (2010) have proposed that vagueness is rational under uncertainty. We give further elaboration of that idea, drawing specific attention to the relation between vagueness and the Gricean maxim of quality (Egré and Icard 2017).

Consider a situation in which a speaker could not count exactly how many people attended a party. Then there is no number n such that the speaker can truthfully and justifiably assert "there were n persons at the party". For every value of n, either the sentence is going to be false, or it will be true without warrant. The speaker may, however, abide by Grice's quality maxim if the language permits the expression of precise comparison and intervals, as in: "there were more than n people", or "there were between nand m people". The problem then is that intervals for which the speaker might be 100% confident to include the true value may be too large to be informative, this time in violation of the maxim of quantity.

On the other hand, if the speaker S is starting from her best guess of the actual number of people, then semantic vagueness guarantees truthfulness. Suppose the actual number of attendees at the party was 33 but the speaker's best estimate is 50. By saying "around fifty people", S can speak truly and justifiably, supposing "around n" to be true of k if there is an interval centered around n that includes k. Semantically, there is always such an interval. Yet the utterance is non-vacuous. In effect, the speaker has in mind a particular probability distribution of values around 50. The hearer does not have access to that probability distribution, but should be in a position to infer that the speaker holds 50 to be more likely than other values. One way to derive this is to assume that "around n" denotes the set of all intervals [n - k, n + k], with a probability distribution on them, such that the probability of n is at least as high as the probability of the other values within each interval.

**References:** • Frazee J. and Beaver D. (2010). Vagueness is rational under uncertainty. M. Aloni et al. (eds.) *Logic, Language and Meaning.* LNCS. • Egré P. and Icard B. (2017). Lying and vagueness. J. Meibauer (ed.). *Oxford Handbook of Lying.*