
Measurement scales and competition between alternatives

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Two bodies of literature tackle the role of scales in adjective interpretation: The one on measurement scales in semantics and the one on Horn scales/scalar implicature in pragmatics (see Solt, 2015 for an overview). To date, there has been little research into the interplay of the two kinds of scales (but see Gotzner, Solt, & Benz, 2018). We postulate that scale structure may be crucial to implicature computation in the adjectival domain.

We present an experimental study on the interpretation of relative and absolute gradable adjectives differing in informational strength, evaluative polarity and presence of negation (8 conditions for each adjective type).

Our results show that participants use distinct portions of the response 5-point scale when interpreting predication statements with weak vs. strong (positive/negative) scale-mates of non-negated relative (e.g., *large* vs. *gigantic*) or absolute adjectives (e.g., *clean* vs. *pristine*), indicating that they are sensitive to the informational strength of the different expressions. These distinctions are less pronounced when the same expressions appear under negation. We find that, under negation, middling interpretations (‘neither large nor small’) favor relative adjectives (*not small/tiny/gigantic*), while a polarity asymmetry due to negative strengthening (inference to the antonym) arises for weak relative terms (*not large* vs. *not small*), and possibly for strong absolute terms (*not pristine* vs. *not filthy*). Weak absolute terms are largely interpreted semantically (*not clean* \Rightarrow ‘dirty’, *not dirty* \Rightarrow ‘clean’; see Rotstein & Winter, 2004; Kennedy & McNally, 2005), while fine scale granularity interacts with minimum/maximum standard semantics triggering additional inferences: middling (‘neither clean nor dirty’) and inference to the antonym. Current studies in our lab investigate the extent to which these types of reasoning hinge on the direct comparison of competing alternatives presented concurrently in our specific experimental setup.

Overall, our findings are in line with degree-based analyses of gradable adjectives and they show that different properties of measurement scales—the type of standard and granularity—as well as evaluative polarity are responsible for the derivation of different (pragmatic) inferences (see also Gotzner et al., 2018).