We investigate context dependence in two subclasses of gradable adjectives: relative gradable adjectives (RGAs) such as ‘tall,’ and absolute gradable adjectives (AGAs) such as ‘empty.’ Both classes display context dependence: the interpretation of the adjective is partially determined by the contexts in which they are used:

(1) Alex is tall.
   a. [among 6 year olds]  b. [among adults]
(2) The theatre is empty.
   a. [prior to start of performance]  b. [prior to fumigation with termite poison]

Different basic meanings? However, the two classes differ in important ways related to the (un)availability of precise interpretations.

 RGAs are inherently vague  AGAs have precise meanings

In RGAs, context sensitivity and vagueness are linked: they express properties that require an object to exceed a standard of comparison determined relative to a salient comparison class.

Puzzle: How do we reconcile the apparent similarity in context dependence, and the differences in the (un)availability of precise meanings [1-2]?

Questions:

1. Given semantic analysis of RGAs, we expect sensitivity of standard to local context.
2. Do AGAs pattern like RGAs? Hypothesis1 predicts "yes"; Hypothesis2 does not.

Exp1-2: Sensitivity to local discourse — semantic context dependence

1. Hypothesis1: Both RGAs and AGAs express the same kinds of properties.
2. Part to be explained: existence of precise interpretations for AGAs.
3. Hypothesis2: AGAs differ from RGAs in having precise meanings.
4. Part to be explained: source of context-dependence in AGAs.

We present four Mechanical Turk experiments that provide support for Hypothesis2.

Exp1-2: RGAs sensitive to salience in the local context in a way that AGAs are not. EXP3-4: RGAs and AGAs have different dynamic patterns. AGAs, consistent with [4], show an asymmetry in the direction of shiftability, while RGAs do not.

Explanation: Context dependence in RGAs and AGAs have different sources:

RGAs exhibit semantic context dependence — function of semantic content

AGAs exhibit pragmatic context dependence — toleration of uses that deviate from semantic content

Exp3-4: Ordering effects — pragmatic context dependence

Results — RGAs:

> Prior exposure to extreme exemplar increased likelihood of accepting a subsequent use of the same adjective
> No interaction with current item's scale position

Results — AGAs:

> Prior exposure to a max precision exemplar decreased likelihood of accepting a subsequent use of the same adjective
> Interaction with current item's scale position: objects distant from maximally precise were more strongly affected by a prior maximally-precise exemplar

Discussion

These results provide additional evidence for a distinction between RGAs and AGAs (Hypothesis2). We interpret the different patterns of behavior as reflecting different types of context dependence:

(i) RGAs are sensitive to semantic context
   - Standards of comparison for RGAs are closely tied to the local discourse representation
   - By contrast, uses of AGAs that deviate from semantic content are sensitive to broader features of the context at large

(ii) AGAs are sensitive to pragmatic context
   - Standards of comparison for RGAs shift in response to changes in the local context of interpretation, irrespective of shift direction
   - Interpretations of AGAs also vary with aspects of the context; however, RGAs show an asymmetry in direction of shiftability: they allow shifts to higher levels of precision, and resist loosening a standard that was previously set at maximum precision
   - This is consistent with a picture where AGAs, unlike RGAs, have precise basic meanings, and pragmatic aspects of the context modulate comprehenders' willingness to tolerate uses that deviate from maximally precise interpretations.

In work currently in progress, we investigate differences in sensitivity between RGAs and AGAs to aspects of the global communicative (i.e. not necessarily linguistic) context, such as goal structure and communicative intent.

References


Participants judged images as in Exp1 (isolated). Responses fit to mixed-effects regression models with the following fixed effects:

- Scale position
- Number prior instances of the same adjective
- Prior precise/extreme exemplar (RGA: tallest ladder; AGA: completely empty cup)