

Context Dependence, Vagueness and Prototypes

1 Some worries about contextualism and interest relativity

Stanley (2003) presents some problems for the contextualist and interest relative analyses of vagueness that we looked at last week. The problem for the former involves ellipsis. If we look at expressions whose semantic value is crucially linked to the context (i.e., cannot be determined as a function of some expression in the sentence), we see that their values must remain constant across ellipsis.

- (1) [Pointing at Jones, then at Smith]
If Lee can go to her presentation, then Kim can *(go to her presentation).
- (2) Jones gave her presentation this morning and Smith did too.

According to Stanley, the contextualist analysis of vagueness amounts to the claim that vague predicates are indexicals. This means that they ought NOT to be able to shift their meanings under ellipsis in the way required to avoid the Sorites Paradox. (3) shows that this is not the case:

- (3) [Assume a continuum of 100 color chips going from red to orange]
 - a. Chip 1 is red.
 - b. If chip 1 is red, then chip 2 is too.
If chip 2 is, then chip 3 is.
...
If chip 47 is, then chip 48 is.
If chip 48 is, then chip 49 is.
..
 - c. Chip 100 is red.

According to Stanley, the fact that we get the usual effects here means that whatever is going on, it is not due to contextual shifting of the meaning of *red*: ellipsis makes such shifting impossible, so we ought to reject one of the (b) claims.

Raffman 2005 responds by saying that her contextualism does not boil down to indexicality. Instead, she wants to make an analogy to ‘sloppy readings’ of comparison classes.

- (4) That elephant is big and that flea is too.

I don’t think this works, but more on that shortly. Neither Stanley nor Raffmann provides a theory of ellipsis, so before we do anything, we should make that explicit. Here is one view (Rooth 1992):

- (5)
 - i. A deleted VP must be syntactically identical to its antecedent, up to indexical values on pronouns, etc.
 - ii. A deleted VP must be contained in a phrase that contrasts appropriately with some phrase that contains its antecedent.
- (6) A constituent ϕ contrasts appropriately with a constituent ψ iff:
 - i. ϕ and ψ don’t overlap, and

- ii. for all assignments g , the regular semantic value of ψ with respect to g is an element of the focus value of ψ with respect to g .

This deals with context-dependent interpretations of pronouns no problem:

- (7) a. $\text{Foc}(\llbracket \llbracket \text{Lee can go to her}_1 \text{ presentation} \rrbracket \rrbracket) = \{x \text{ went to } g(1)\text{'s presentation} \mid x \text{ an alternative to } Lee\}$
- b. $\llbracket \llbracket \text{Kim can go to her}_2 \text{ presentation} \rrbracket \rrbracket = \text{Kim can go to } g(2)\text{'s presentation}$

But what precisely does it have to say about deletion of a vague predicate? That really depends on what the contextualist claim is. Raffman's analogy to bound comparison classes can't be right, because there's nothing in the sentence to act as a binder.

But what if the contextual effect is more about *judgments* than about actual meaning, along the lines of what we see in e.g. phoneme identification tasks (REFERENCES?). On this view, the meaning is fixed once and for all, and boundarylessness is really a property of our judgments of whether something is a member of the category or not. It is these judgments that are affected by category shifts, not the actual extension of the predicate. I don't think this is what Raffman has in mind, but it seems to get out of Stanley's problem — in effect, it's a way of uniting Williamson's epistemic vagueness with the sort of 'internal context dependence' advocated by Raffman.

Turning to Graff's interest relativity, Stanley focuses on the dependence on 'persons and their interests':

- (8) *Significantly greater than* is a context-dependent relation, since what is significant to one person may not be significant to another. Any use of 'significant', or of any word whose content involves what is significant, requires an implicit subject with interests — an answer to the question: *significant to whom?* (Graff 2000, p. 75)

Stanley's worry about this kind of account is that it is going to have a hard time dealing with examples like (9), which seem to force evaluation of the vague predicate in worlds where it is impossible for it to have a significant amount of height, given the expressed absence of any individuals relative to whom significance could be determined.

- (9) If there were no people, then Mt. Everest would still be tall (for a mountain).

There is a way out of this, though we'd have to do some exploring to see if it actually works. If we assume that the positive form is really a combination of a *pos* morpheme plus the adjective (which for the sake of argument we'll analyze as a measure function), and that the meaning of the former is defined as a relation between degrees, then we can deal with (9) by relativizing the two degrees to different possible worlds:

$$(10) \quad \llbracket pos \rrbracket^w = \lambda g \lambda x. g(x)(w) \succ \mathbf{significant}(g)(w')$$

$$(11) \quad \forall w \in Dom \text{ s.t. there are no people in } w, \mathbf{tall}(e)(w) \succ \mathbf{significant}(\mathbf{tall})(\mathbf{w}_0)$$

(11) seems to get the right truth conditions, but whether it can be supported across a range of cases remains to be seen.

I have two other worries about Graff's analysis. First, it's not clear to me that it really avoids Stanley's criticisms of a contextualist account, even though Stanley says it does, given the context-dependence of the significance function.

Something to consider: *predicates of personal taste?*

- (12) A: That was fun!
 B: No it wasn't.

What are A and B disagreeing about here? I want to come back to this towards the end of the quarter, by looking at some recent work by Peter Lasnik.

Another worry is the extent to which this analysis is constructed to handle gradable predicates. This makes it different from all the other analyses we've looked at, and it's unclear how it will generalize. But perhaps the answer is that some expressions just lexicalize *pos*, in effect. This implies that a central feature of vague predicates is some sort of measure function. But a measure of what?

2 (Proto)typicality, category membership, and vagueness

Prototype theory: Construe membership in a concept's extension as graded, determined by measure of similarity to the concept's best exemplar (or by some other measure of central tendency).

(Kamp and Partee 1995) investigate the relation between prototypes, compositionality, and vagueness in the context of a supervaluation analysis of the latter. Today I want to highlight a few aspects of the discussion, though I will not attempt to 'bring it all together', since I am still trying to assimilate all the internal and external connections.

2.1 Prototypes and admissible completions

Kamp and Partee suggest using the similarity measure as a way of constraining supervaluations, so that e.g. for any two borderline chairs a and b , if $c_{chair}(a) \succ c_{chair}(b)$, then there are no admissible completions in which b is in the positive extension of *chair* but a is not.

If we are working within a framework that makes a semantic distinction between gradable and nongradable predicates, this one way of capturing what's similar about them, and maybe gives us a handle on 'higher order comparisons'.

- (13) a. A is more of a chair than B.
 b. Shaq and Kobe are both tall, but Shaq is more tall than Kobe is.

2.2 Prototypes and vagueness

Kamp and Partee suggest the following classification, where +/- V = vague/sharp, +/- P = does/does not have a prototype, and +/-PE = prototype does/does not determine extension:

- (14) a. [+V, -P]
 tall, wide, heavy, not red
 b. [+V, +P]
 (i) [-PE]
 adolescent, tall tree
 (ii) [+PE]
 red, chair, bully, shy
 c. [-V, -P]
 inanimate, odd (number), not a bird
 d. [-V, +P]
 (i) [-PE]
 bird, fish, grandmother
 (ii) [+PE]
 \emptyset

This makes it fairly clear that vagueness is related to (some notion) of scalarity, but the +/- P distinction raises the question of whether we might see some differences in behavior. In particular, this distinction (if it is right) seems to really call into question Raffman's contextualist analysis.

Another question: is (14d.ii) really empty? Could this be where we put absolute adjectives like *full*, *straight*, *spotted* and so forth? But if that were right, then we would have some prototype-based expressions that are vague and some that are not?

If this is not where we put them, then where should they go? What sort of explanatory power does this typology have in the first place?

2.3 Compositionality and context dependence

The problem of striped apples, pet fish, giant midgets, and midget giants.

References

- Graff, Delia. 2000. Shifting sands: An interest-relative theory of vagueness. *Philosophical Topics* 20:45–81.
- Kamp, Hans, and Barbara Partee. 1995. Prototype theory and compositionality. *Cognition* 57:129–191.
- Raffman, Diana. 2005. How to understand contextualism about vagueness: Reply to Stanley. *Analysis* 65.3:244–248.
- Rooth, Mats. 1992. Ellipsis redundancy and reduction redundancy. In *Proceedings of the Stuttgart Ellipsis Workshop*, ed. Steve Berman and Arild Hestvik. Arbeitspapiere des Sonderforschungsbereichs 340, Bericht Nr. 29, IBM Germany, Heidelberg.
- Stanley, Jason. 2003. Context, interest relativity, and the sorites. *Analysis* 63.4:269–280.