Overview

(1)

a. She is taller than I realized.
b. She is not as tall as I realized.

Key issues:
- What is the status of realizer’s complement in examples like (1a)?
- How do we understand realizer’s presuppositional status in light of such examples?
- What can this tell us about gradability/comparison and factivity/projection more generally?

Preview of analysis:
- Semifactives express a knowledge relation, but support GRADATED AWARENESS: you know/really less than the whole truth, but not more than the whole truth.
- Graded awareness is sensitive to scalar orientation
- The complements in question address issue content and thus don’t project

Additional examples from the web:

(2) Our Constitution was a far more dramatic departure from history than I had appreciated.

(3) [This record may be better than I was aware of.]

(4) This sequencing of images in a physical book feels so much closer to films (movies, not physical flip-book film), than I had noticed before.

Background: Factivity

Factive regret, semifactive realize (Kiparsky & Kiparsky 1970, Karttunen 1971)

(5) a. John didn’t regret that he had not told the truth.
b. John didn’t realize that he had not told the truth.

(6) a. If I regret later that I have not told the truth, I will confess it to everyone.
b. If I realize later that I have not told the truth, I will confess it to everyone.

In (5), both regret and realize presuppose the truth of their complements; this is the core characteristic of factivity.

In (6), they come apart: realize’s complement is no longer presupposed true (whence Karttunen’s term “semifactive”)

Semifactives in comparative clauses:
- There is precedent for the observation that realize’s complement can fail to be presupposed
- But it’s not the case that anything goes: even though realize’s complement in (1b) isn’t presupposed true, the sentence is still felicitous
- The infelicity of examples like (1b) has been observed at least since Horn & Morgan (1969)

Scalar Orientation

(7) a. He is shorter than I realized.
b. A Disney vacation is less expensive than I realized.

(8) a. She is less tall than he is.
b. She is not as tall as he is.

(9) a. She is less tall than I realized.
b. #She is not as tall as I realized.

- Ordinarily, less ADJ than and not as ADJ as are truth-conditionally equivalent, as in (8)
- But when we introduce a semifactive like realize into the than-clause, we get infelicity in the not as ADJ as cases
- We’ve uncovered an important clue about the semantics of semifactives

Implementation

Core idea: GRADATED AWARENESS as a feature of / constraint on knowledge

- Semifactives like realize express a knowledge relation
- You can only know things that are true
- However, knowledge can be incomplete: you can know things that are asymmetrically entailed by what is true (cf. Vlach 1974)
- But you can’t know more than the whole truth. In question-and-answer terms, you can’t know an answer that asymmetrically entails a question’s strongest true answer

As a matter of their lexical semantics, semifactives like realize require informational consistency / truth-in-context between their complement and their matrix environment

- We find the same behavior in supposition contexts (cf. Yalcin 2007)

(10) a. Suppose she was taller than you realized.
b. #Suppose she was not as tall as you realized.

Graded Awareness and Our Initial Assumption

(11) She is taller than I realized

- Proposal: to realize that she was d-tall to (some proposition that she was d-tall)
- MAX[. I realized she was d-tall] = MAX[. d such that the speaker knew the proposition that she was d-tall]

This explains the contrast between (1a) and (1b): the claim in (1b) is that she was d-tall, but it’s not d-tall in the speaker’s actual context.

In (14), they come apart: complement and matrix environment as a matter of their lexical semantics, even as the complement fails on independent pragmatic grounds to qualify as projective content

Graded Awareness is sensitive to scalar orientation: in a given scenario, for a given value of d, you can know/really: she was d-tall or she was d-short, but not both (unless d is the exact degree of her height)

Explaining the Non-Equivalence Puzzle

The asymmetry in (9) falls out from graded awareness + scalar orientation:
- In #It is not as tall as it really was, we compare degrees of tallness: the maximal degree to which you realized she was tall exceeds the full actual extent of her tallness → inconsistent with graded awareness
- In She is less tall than I realized, we compare degrees of not-tall-ness: the maximal degree to which you realized she was not-tall is not the full actual extent of her not-tall-ness → consistent with graded awareness

Projection

Factivity and projection:
- Factive presuppositions are a type of projective content; on the classical view, the truth of a factive’s complement projects to the matrix context
- In the cases at hand, the semifactive’s complement must be true (relative to the matrix context), but it’s not presupposed: no apparent constraints on the input context, etc.
- This is consistent with the findings of much recent work on projection: content that addresses the question under discussion or otherwise at-issue material generally doesn’t project (Beaver 2010, Abusch 2011, 2016, Simons et al. 2017, Degen & Tonhauser 2022)
- The semifactive complement here addresses the same issue as the matrix clause: her height

We can maintain the view that semifactives like realize require consistency between their complement and matrix environment as a matter of their lexical semantics, even as the complement fails on independent pragmatic grounds to qualify as projective content

Generalizing the Picture

Downward-oriented degree predicates: infelicitous underestimation, not overestimation

(14) a. He is shorter than I realized.
b. #He is not as short as I realized.

(15) a. A Disney vacation is less expensive than I realized.
b. #A Disney vacation is not as expensive as I realized.

- Why do downward-oriented gradable constructions show the opposite pattern from the one seen above, and what does this mean for graded awareness?
- Core insight of the gradability literature: scalar semantics is sensitive not just to scalar position, but also to scalar orientation (Kiparsky 2001, Schwarzschild 2013)
- Degrees of expensiveness and degrees of insensiveness share a scale, but have different orientations along that scale (likewise for degrees of tallness and degrees of shortness)

Graded awareness is sensitive to scalar orientation: in a given scenario, for a given value of d, you can know/really: she was d-tall or she was d-short, but not both (unless d is the exact degree of her height)

References

Beaver, David. 2010. Have you noticed that your belly button lint colour is related to the colour of your clothing? In Rainer Bäuerle, Uwe Reyle & Thomas Ede Zimmermann (eds.), Presuppositions and discourse: essays offered to Hans Kamp, 65–100. Emerald.

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