WHAT DOES *really* *REALLY* MEAN?:
EVIDENCE, STANDARDS AND PROBABILITY IN DIALOGUE

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Questions

- How do we model gradable beliefs in dialogue?
- How does this relate to other uses of degrees and standards?

Really and VERUM

- *Really* provides a test case for modelling gradability in dialogue.
  
  1. The lines really ARE straight. (epistemic)
  2. The lines ARE really straight. (actuality)
  3. The lines are really long. (intensifier)

- Romero and Han (2004): epistemic really = VERUM

- Davis et al. (2007): Asserting really

Evidence, evaluation & the kernel

- von Fintel and Gillies (2009): epistemic modals signal inference from direct evidence, i.e. "the kernel".
- Davis et al. (2007): Asserting really

Proposal:

- Generalized kernel \( K \): propositions in the CB that are highly ranked
- i.e. important/relevant to the QUD.
- Evidence is weighted by probabilities.
- This dynamically determines \( K \).
- Utterances are evaluated w.r.t. \( K \).

⇒ Really manages the kernel. VERUM signals updates of propositions in the conversational background.
⇒ What counts as evidence depends on the contextual standard.

Really Raising Standards

The blue and green spirals are really the same color.
⇒ To get to ‘really’ you might need to discount direct evidence!

⇒ Really raises the standard of evidence: propositions that don’t meet this standard are dropped from the kernel.
⇒ Expanding the evaluation domain reduces likelihood of ‘accidentally’ exceeding the standard.
⇒ Less assumptions ⇒ more general results!

(1) \( K' \subset K \), a higher standard of evidence,

a. \[ [\text{really}]\left[ G(x) \right] = \exists d > \text{std}(S_2) \land G(d(x)) \]

b. \[ [\text{really}]\left[ C_{X,K}(p) \right] = \exists d > c_r \land C_{X,K}(p) = d \],
i.e. \( C_{X,K}(p) > c_r \)

⇒ more possible worlds.

Modals and Actuality

Really + modals raise likelihoods.

(6) Those colors really might/must be the same.

⇒ discount ‘eye’ evidence.

Considering \( N \) draws from BEST evidence worlds:

(7) a. \[ C_{X,K}(\text{MIGHT}(p)) = \text{Pr. of drawing at least one } p \text{ world} \]

b. \[ C_{X,K}(\text{MUST}(p)) = \text{Pr. of drawing all } p \text{ worlds.} \]

The position of really determines whether the probability calculation is done with \( K \), fixed in the discourse.

(8) Mary really might be an alien.

⇒ Given \( K' \subset K \), calculate the probability w.r.t \( K' \) that Mary is an alien.

(9) Mary might really be an alien.

⇒ Calculate the probability w.r.t \( K \), that given a \( K' \subset K \), Mary would be an alien. \( K' \) is salient alternative to \( K \) which may or may not be adopted as the standard afterwards.
⇒ Possible divergence from ‘normal’ standards.

Foregrounding with VERUM

VERUM signals status updates of propositions which are already in the conversational background. VERUM doesn’t change standards.

⇒ Quality updates: Signalling polarity update:
  (10) Mary has green blood. See, she is an alien!
  ⇒ emphatic prosody + L+ ⇒ QUD resolution

⇒ Relevance updates: VERUM marks (11b) as important for the evaluation of (11a).
  (11) a. I think Mary’s an alien.
    b. She DOES seem to have blueish skin,
    c. but I think that’s just a trick of the light.

⇒ AB-contour, i.e. H% ⇒ substrategies (Büring, 2003)

We can foreground the polarity of someone else’s public beliefs, if they are relevant to resolving the QUD:

(12) a. A: What has Mary ever done to deserve this?
    b. B: Well, she DID hack the space shuttle computer...

⇒ not speaker oriented ⇒ not CI (Potts, 2005)

⇒ VERUM does not appear to introduce extra expressive/CI meaning on its own. It seems VERUM focus is just focus.
⇒ More general analyses of intonation can tell us what sort of update is going on.

Implications

- We can treat gradability of beliefs in the same way as other types of semantic gradability.
- This allows a unified analysis of the different ‘types’ of really.
  ⇒ Propositions in the CB are ordered for purposes of utterance evaluation general. (Probabilities!)
- Really and VERUM are different linguistic tools for managing discourse level structures.
- Certain intonational features seem to work at the same level.
⇒ Probably not the CI dimension!