

# Question others, not yourself!

## Do QUDs affect naturalness within and across speakers?

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### Background

#### Theories of Questions under Discussion (QUDs, Roberts 1996/2012):

- Discourses are structured by a set of *implicit* or *explicit* questions

**Question:** How do QUDs associated with different types of verbs affect the naturalness of two-sentence discourses presented as monologues or dialogues?

#### In this study, we manipulate verbs and the absence/presence of a polar response particle:

- Verbs like *wonder* (*if p*) are assumed to *trigger polar questions* as QUDs
- Verbs like *heard* (*that p*) may (weakly) indicate shared knowledge/prompt more details
- Polar response particle *yes* is assumed to ease resolution of a prominent QUD

### Discussion

- Wonder-type verbs** were rated worse than **heard-type verbs** overall
  - Suggests that inferring an answer to the polar question is costly
- This cost or **penalty was decreased** in the presence of polar response particle, *yes*.
  - Supports claim that *yes facilitates resolution* of an otherwise costly QUD
- The *yes* effect also supported by **observed penalties** when *yes* omitted in dialogues
  - Polar particle most useful in two speaker contexts, not monologues
- The **penalty for wonder-type verbs** was **larger** in monologues than dialogues
  - Suggests **additional cost** of perceiving an interlocutor's discourse as inconsistent

## The Study

### Method

#### Three Within-Participant Factors:

- 2 within-items**
  - Verb:** *wonder* / *heard*
  - Yes response:** +/- *yes*
- 1 between-items**
  - Speaker:** 1 vs. 2 speakers
    - 16 items total
    - Split half across speaker

#### Procedure:

- Discourse rating task on IbexFarm
  - 7-point (*naturalness*) Likert scale
- Recruited participants (N=40) on Amazon Mechanical Turk

### Results

#### By-Participant ANOVA:

- Significant main effects for all factors**
- All two-way interactions significant**
  - No three way interaction

#### Interpreting Two-way interactions:

- Speaker\*Yes:**
  - In [-yes], two-speaker decreases (-.9) while one-speaker increases (+.3)
- Speaker\*Verb:**
  - In [wonder], larger penalty in 1 (-1.6) vs. 2-speaker conditions (-.7)
- Yes\*Verb:**
  - In [wonder], larger penalty for not using 'yes' (-1.8) than using 'yes' (-.4)

Average 'naturalness' ratings (1-7) for each discourse type

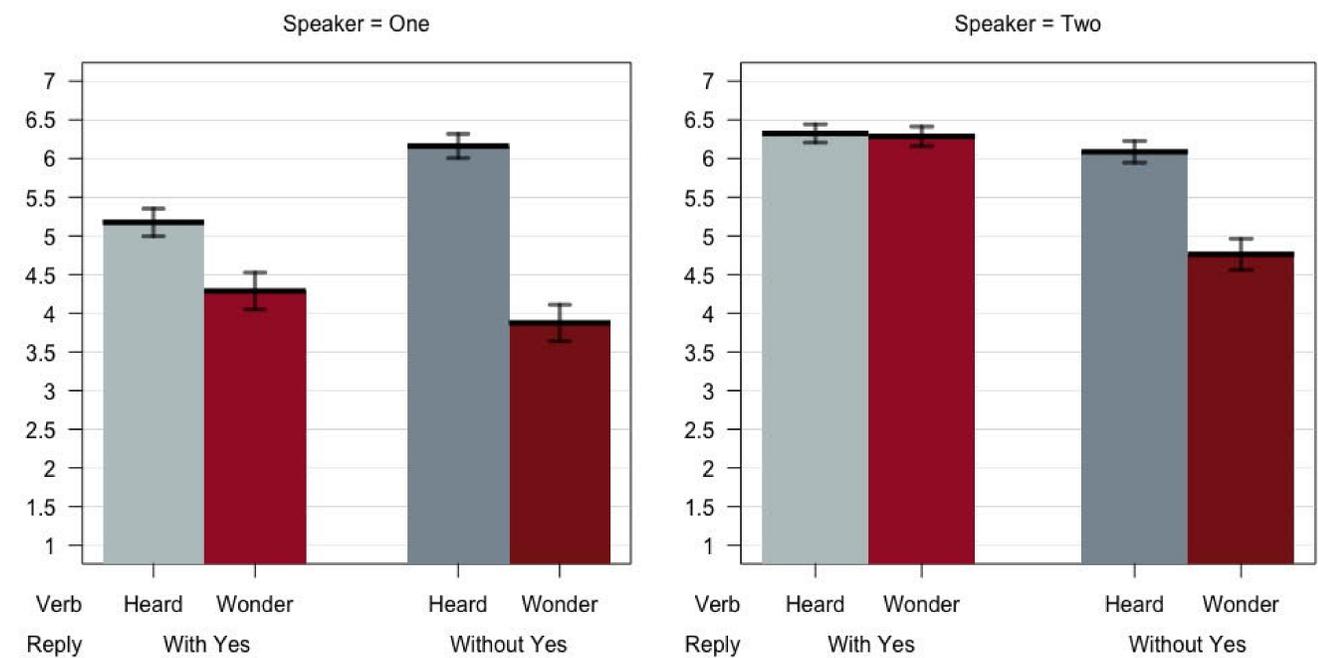


Figure 1: Average by-participant ratings for the eight different discourses with standard errors. All main effects and all three two-way interactions are significant in both a by-subject ANOVA and an lme model.

### Acknowledgements

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#### One speaker item:

**Speaker A:** I {*wonder if* | *heard that*} Chuck acquired a tux for Lynschrift. (Yes, ) It was midnight blue.

#### Two speaker item:

**Speaker A:** I {*wonder if* | *heard that*} Chuck bought a new BMW.

**Speaker B:** (Yes, ) It was a bright cherry red.