

What is at-issueness?

An experimental comparison of diagnostics

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Experiments on the semantics/pragmatics interface (XPrag fest 2025)
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At-issueness

Distinguish propositional content expressing the main point of an utterance (at-issue content) from those conveying background information (not-at-issue content) (e.g., Potts 2005)

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- a. At-issue content: *Greg is envied by his neighbor*
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e.g., (Snider 2017b,a, 2018; Tonhauser et al. 2018; Koev 2018; Faller 2019; Korotkova 2020)
- ▶ This work: take a step in addressing this question, by investigating **whether different commonly used diagnostics yield the same results for propositional contents introduced by the same kinds of expressions?**

Preview

Our results suggest that:

- ▶ Exps. 1–4: The diagnostics we test **do not all yield the same results**
- ▶ Exps. 5–6: The speech act matters: We get a clearer picture when assessing the not-at issue content of different expressions in **questions** rather than assertions

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(Snider 2017b,a, 2018; Koev 2018; Faller 2019; Korotkova 2020)
- ▶ We offer a systematic experimental comparison

Question-based at-issueness diagnostics

Question-based diagnostics assume a conception of at-issueness relative to the QUD:
At-issue content is the part of an utterance that interacts with the current QUD

(Amaral et al. 2007; Simons et al. 2010)

Exp. 1 (QUD diagnostic)

Nora: *What did Ann steal?*

Leo: *The manager reported Ann, who stole the money.*

How well does Leo's response fit Nora's question?



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Charlotte: *Did the manager report Ann, who stole the money?*

Is Charlotte asking whether Ann stole the money?



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► Other diagnostics make other assumptions

(Snider 2017b,a, 2018; Koev 2018; Faller 2019; Korotkova 2020)

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Exp. 3 ('direct dissent' diagnostic)

Dawn: *The neighbor envies Greg, who bought a new car.*

Charlotte: *No, he didn't buy a new car.*

How natural is Charlotte's rejection of Dawn's utterance?



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Dawn: *The neighbor envies Greg, who bought a new car.*

Charlotte: *No, he didn't buy a new car.*

How natural is Charlotte's rejection of Dawn's utterance?



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Exp. 4 ('yes, but' diagnostic)

Vincent: *The boss scolded Dustin, who lost his key.*

Nina:

- ☐ *Yes, but he didn't lose his key.*
- ☐ *Yes, and he didn't lose his key.*
- ☐ *No, he didn't lose his key.*

Please choose the response by Nina that sounds best to you.

Continue

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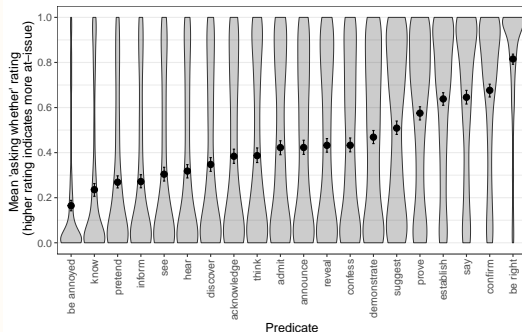
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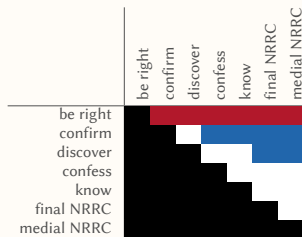


Experiments 1–4: Method

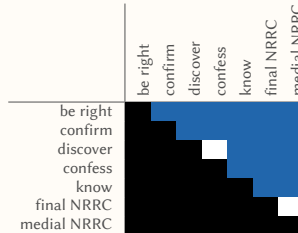
In each experiment, 80 participants saw each of 7 conditions once, each randomly paired with a clause to instantiate it (item), e.g. *Greg bought a new car*, + 2 controls (attention checks)

Results

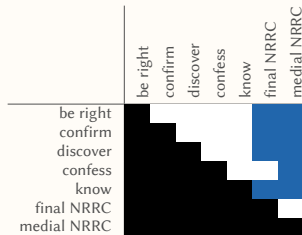
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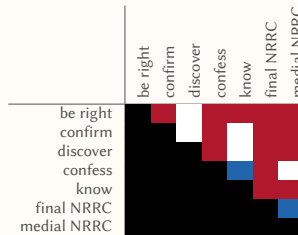
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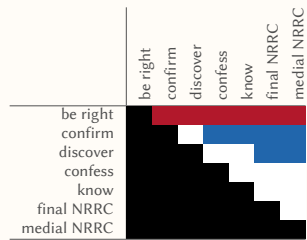
Exp. 2 ('asking whether'): greatest differentiation between contents

- ▶ Range of means
- ▶ More pairwise differences between contents

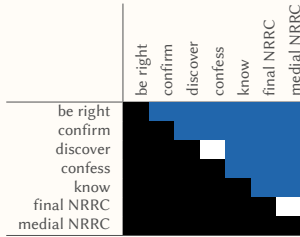
Posthoc pairwise comparisons of the estimated means/proportions for each content using the 'emmeans' package (Lenth 2023) in R (R Core Team 2016). The input to the pairwise comparisons were bayesian mixed-effects beta regression models (Exps. 1-3) or a mixed-effects logistic regression model (Exp. 4)

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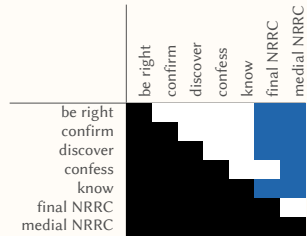
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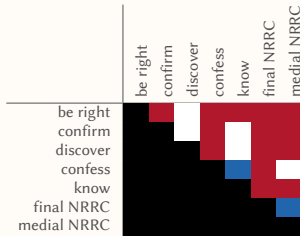
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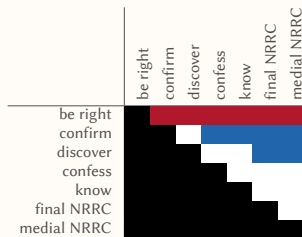
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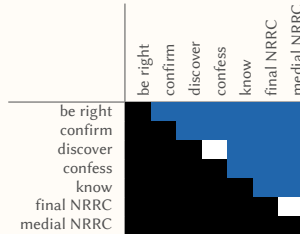
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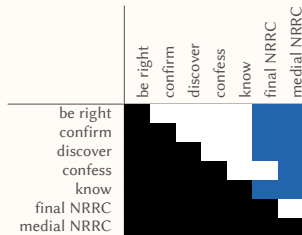
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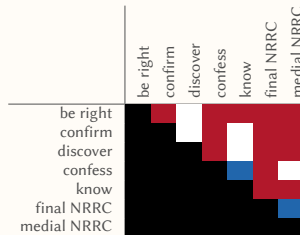
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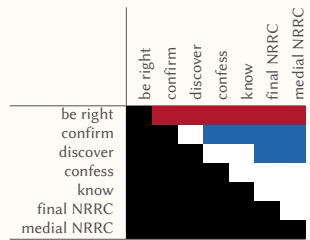
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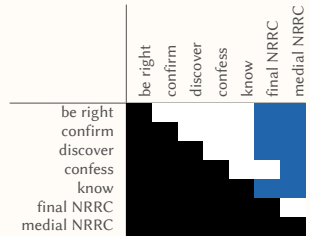
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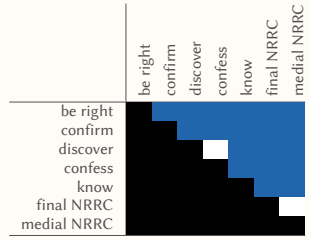
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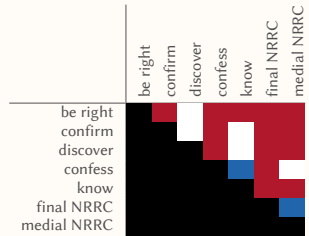
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Fine-grained differences only with ‘asking whether’

Content rankings always different

- ▶ Most pairwise differences inconsistent
- ▶ *be right* very different for QUD diagnostic

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We further explore this question:

Why does Exp. 2 ‘asking whether’ show a greater differentiation of contents than the other diagnostics?

Why is “asking whether” so different?

Previous literature:

- ▶ **Question-based vs. assertion-based at-issueness** diagnostics:
The question-based diagnostics (QUD, ‘asking whether’) are about whether a proposition is at issue relative to a QUD introduced in the previous discourse, whereas assertion-based diagnostics (direct dissent, ‘yes but’) target a different underlying notion

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② **Response task:**

...when participants are more directly asked what the utterance was about vs. when giving acceptability judgment or forced-choice continuation responses.

Question-embedding or response task?

In Exps. 5-6, we test whether the fine-grained differences among clause-embedding predicates observed with ‘asking whether’ diagnostic are replicated with other diagnostics.

Exp. 5 (‘asking whether’ diagnostic)

Ruth asks: *"Did Helen discover that Tony had a drink last night?"*

Is Ruth asking whether Tony had a drink last night?

no

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Christina: *"Yes, Julian dances salsa."*

Does Christina's response to Gary sound good?

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Materials + procedure

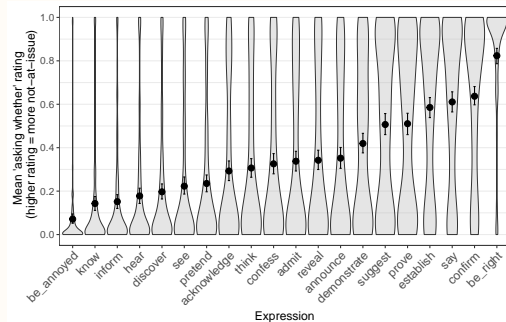
- Contents: 20 clause-embedding predicates of Tonhauser et al. (2018) and Degen and Tonhauser 2025: *be right, confirm, say, establish, prove, suggest, demonstrate, announce, reveal, admit, confess, think, acknowledge, pretend, see, discover, hear, inform, know* and *be annoyed*

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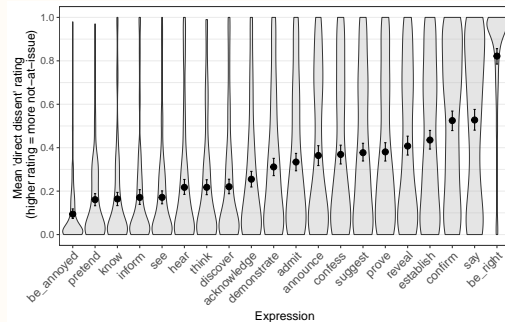
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- ▶ Across the two experiments, 550 participants saw each of 20 conditions once, each randomly paired with a clause to instantiate it (item), e.g. *Julian dances salsa* + 6 control trials (attention checks)

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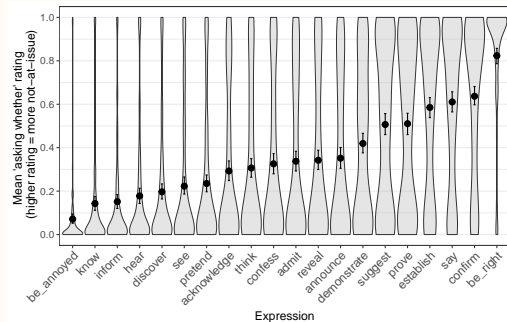
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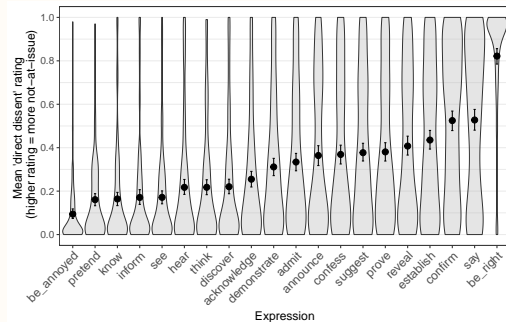
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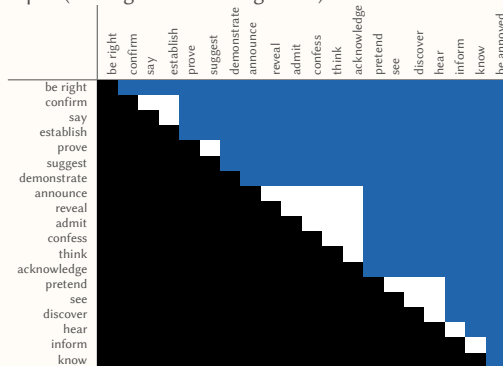
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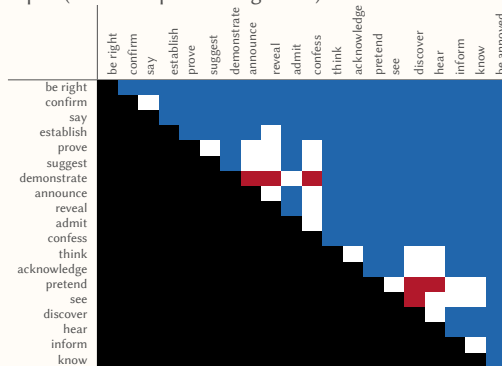
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- ▶ The **speech act** (question vs. assertion) affects how sensitive a diagnostic is to differences between contents
- ▶ Different from previous literature suggesting that different diagnostics show different empirical results:
Mostly highlighted difference between QUD at-issueness, and assertion-based diagnostics, which are either argued not to be about at-issueness at all (Snider 2017b,a, 2018), or about a separate assertion-based notion of at-issueness (Koev 2018; Faller 2019; Korotkova 2020)

So why are question embeddings so different from assertions?

- **Questions:** At-issue content partitions the context; without speaker commitment
(Groenendijk and Stokhof 1984; Ginzburg 1996; Roberts 1996; Tonhauser et al. 2018)
[[*Is Greg, who bought a car, envied by his neighbor?*]] = {Greg, who bought a car, is envied by his neighbor,
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Big question here: which lexical properties can affect this how? Look to literature on presupposition triggering?
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So why are question embeddings so different from assertions?

- ▶ **Questions:** At-issue content partitions the context; without speaker commitment
(Groenendijk and Stokhof 1984; Ginzburg 1996; Roberts 1996; Tonhauser et al. 2018)
[[*Is Greg, who bought a car, envied by his neighbor?*]] = {Greg, who bought a car, is envied by his neighbor,
Greg, who bought a car, is not envied by his neighbor}
- ▶ **Literal meaning** of appositives / lexical semantics of clause-embedding verbs affects how much/likely the embedded content is interpreted as at issue
Big question here: which lexical properties can affect this how? Look to literature on presupposition triggering? (Abrusán 2011; Schlenker 2021; Anand and Korotkova 2024; Scontras and Tonhauser 2025)
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- ▶ Testing at-issueness of contents in declarative assertions muddles the picture, making at-issue and not-at-issue content harder to distinguish; especially when the test itself invokes commitment (like those using assent/dissent)

Takeaways

- ▶ Experimental confirmation for claims that there are empirical differences between at-issuencess diagnostics (Snider 2017b,a, 2018; Koev 2018; Faller 2019; Korotkova 2020)

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- ▶ But: difference between QUD at-issueness and assertion-based diagnostics does not seem to be the most important; **speech act** where the target content is embedded is more important
- ▶ Important question for future work: What the results might tell us about whether the diagnostics reflect a shared underlying notion of at-issueness

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