

Two Readings of *Wh*-Questions

(1) Where can I find coffee?

Dana **knows where** I can find coffee.

Mention-Some What is **a** place that I can find coffee?

Mention-All What is **every** place that I can find coffee?

(2) Who came to the party?

Dana **knows who** came to the party.

Mention-Some Who is **a** person that came to the party?

Mention-All Who is **every** person that came to the party?

Modulated by linguistic factors?

Generally [1-8]	Questions are MA-biased MS is restricted...
Wh-Word [9,10]	Who-Qs are MA-biased Non-Who-Qs are MS biased
Modal [3-8]	Modal-Qs are MS-biased Non-Modal-Qs are MA-biased
Matrix Verb [4,11,12]	Know-wh is MA biased

- CogSci work emphasizes role of speaker's goal [13].
- Recent experimental work [14-15] confirms goals and linguistic form both play key role for interpretation.

References [1] Karttunen 1977; [2] Groenendijk & Stokhof 1982, 1984; [3] George 2011; [4] George 2011; [5] Fox 2014; [6] Nicolae 2014; [7] Dayal 2016; [8] Xiang 2016; [9] Ginzburg 1995; [10] Asher & Lascarides 1998; [11] Heim 1994; [12] Kleindinst & Rothschild 2011; [13] Clark 1979; [14] Moyer & Syrett 2019; [15] Moyer 2020; [16] Godfrey et al 1992; [17] Rohde 2005; [18] Degen & Jaeger 2011; [19] Dayal 1991

There has been no systematic investigation of naturally-occurring questions.

(Q1) Is there an MA bias? (Q2) Is interpretation modulated by form?

Step 1: Naturalistic Stimuli

- Root (n=995) and embedded (n=1075) *wh*-questions extracted from the **Switchboard corpus** [16].
- Coded for syntactic structure and linguistic factors using TGrep2 [17] and TGrep2 database tools [18].
- Questions randomly split into lists of 30 questions.
- Distribution of factors kept roughly proportional to overall

Step 2: Paraphrase Rating Task

- Native English speakers from Prolific, ~\$14/hr
- Root Task (n=660)
- Embedded task (n=1073)

- What does it have in it? (.86)**
- Nobody can predict what's going to happen in 20 years. (.69)**

- When would people do it? (.74)**
- What have you seen lately? (.66)**
- I'm not real sure why anybody would need a full automatic weapon (.61)**

MS=MA

- Where do you live? (1)**
- I know who you're talking about (.94)**

Some questions presuppose a unique answer, but in principle there can be multiple [19]

Speaker #2: pretty good.
Speaker #1: i do like to ski.
Speaker #2: pretty, pretty down there. huh?
Speaker #1: yeah, i , i said i do like to ski.
Speaker #2: **so, where have you skied?**

Based on the sentence in red, how likely do you think it is that the speaker wanted to know about each of the following?

What is every place...? .73

What is a place...? .2

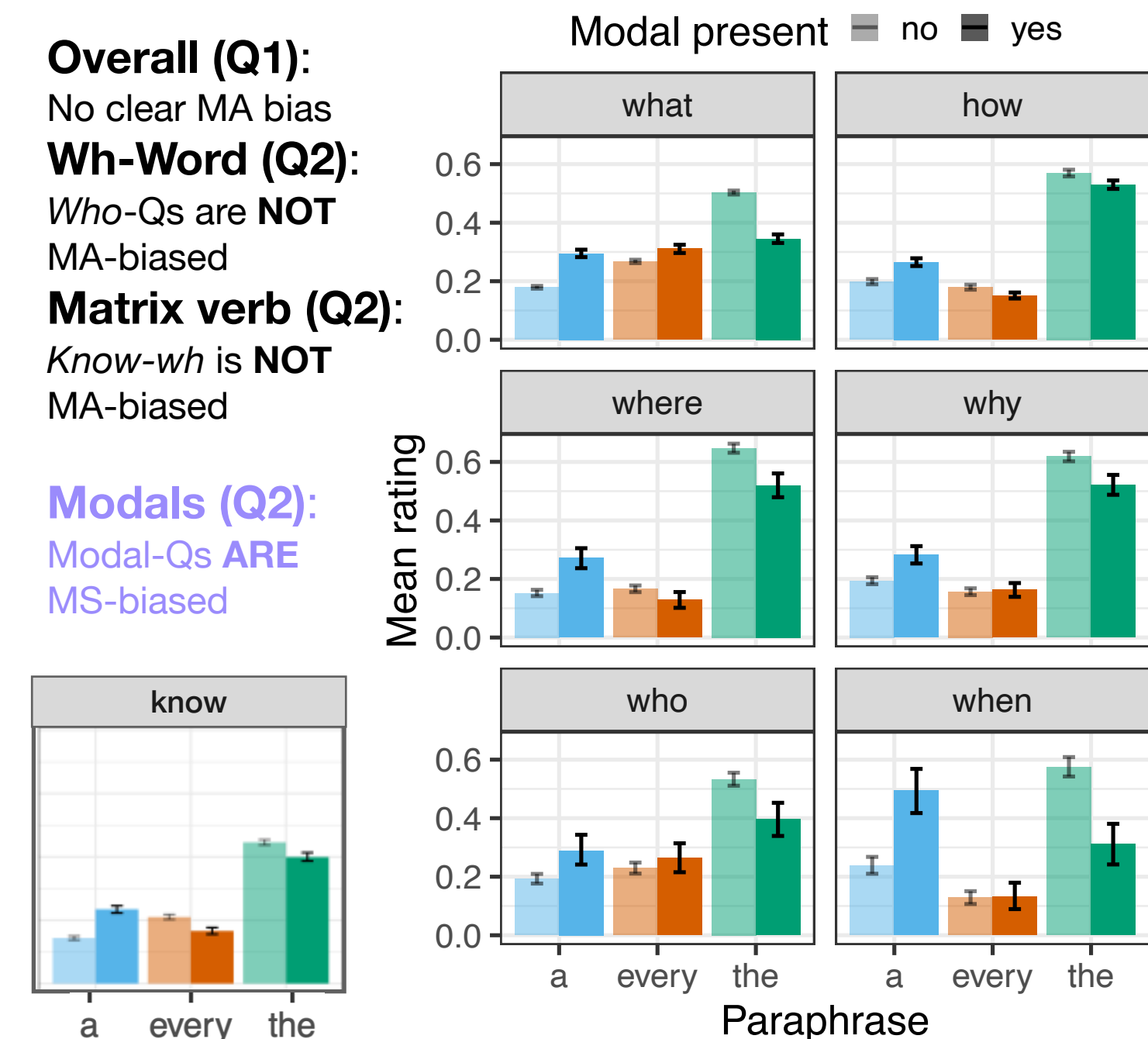
What is the place...? .07

Something else 0

Continue

Results

- Overall (Q1):**
No clear MA bias
- Wh-Word (Q2):**
Who-Qs are **NOT** MA-biased
- Matrix verb (Q2):**
Know-wh is **NOT** MA-biased
- Modals (Q2):**
Modal-Qs **ARE** MS-biased



Discussion and Conclusion

- Most intuitions reported in the literature not supported — naturalistic distribution of meaning is unexpected.
- Interpretation derived from hearers reasoning about the speaker's goal in the context.**
- Building theories of meaning based on the small set of inherited intuitions may be misleading.

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