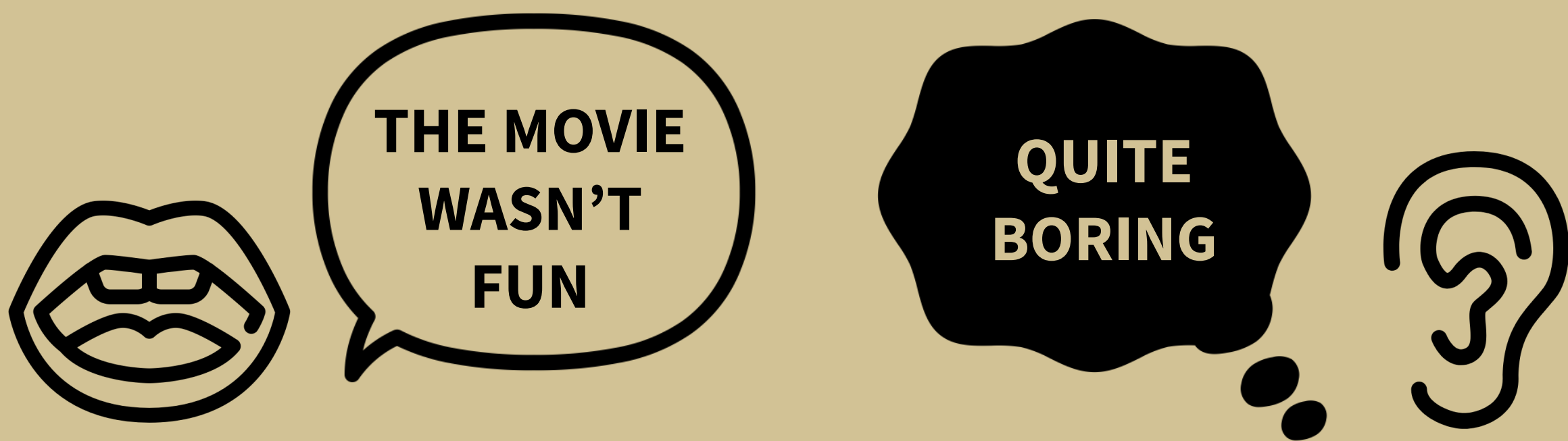


Is the asymmetry in negative strengthening the result of adjectival polarity or face considerations?

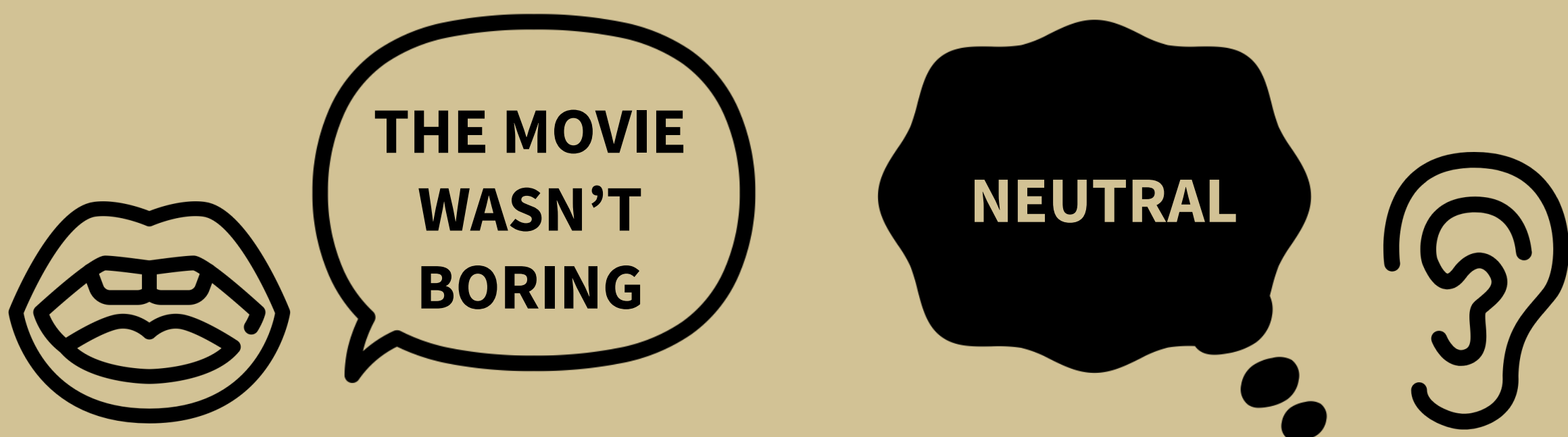
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{sarangj, cgpotts, jdegen}@stanford.edu

What is Negative strengthening?

- Negated adjective gets stronger interpretation [1,2,3,4,5]



- Less negative strengthening for negative adjectives

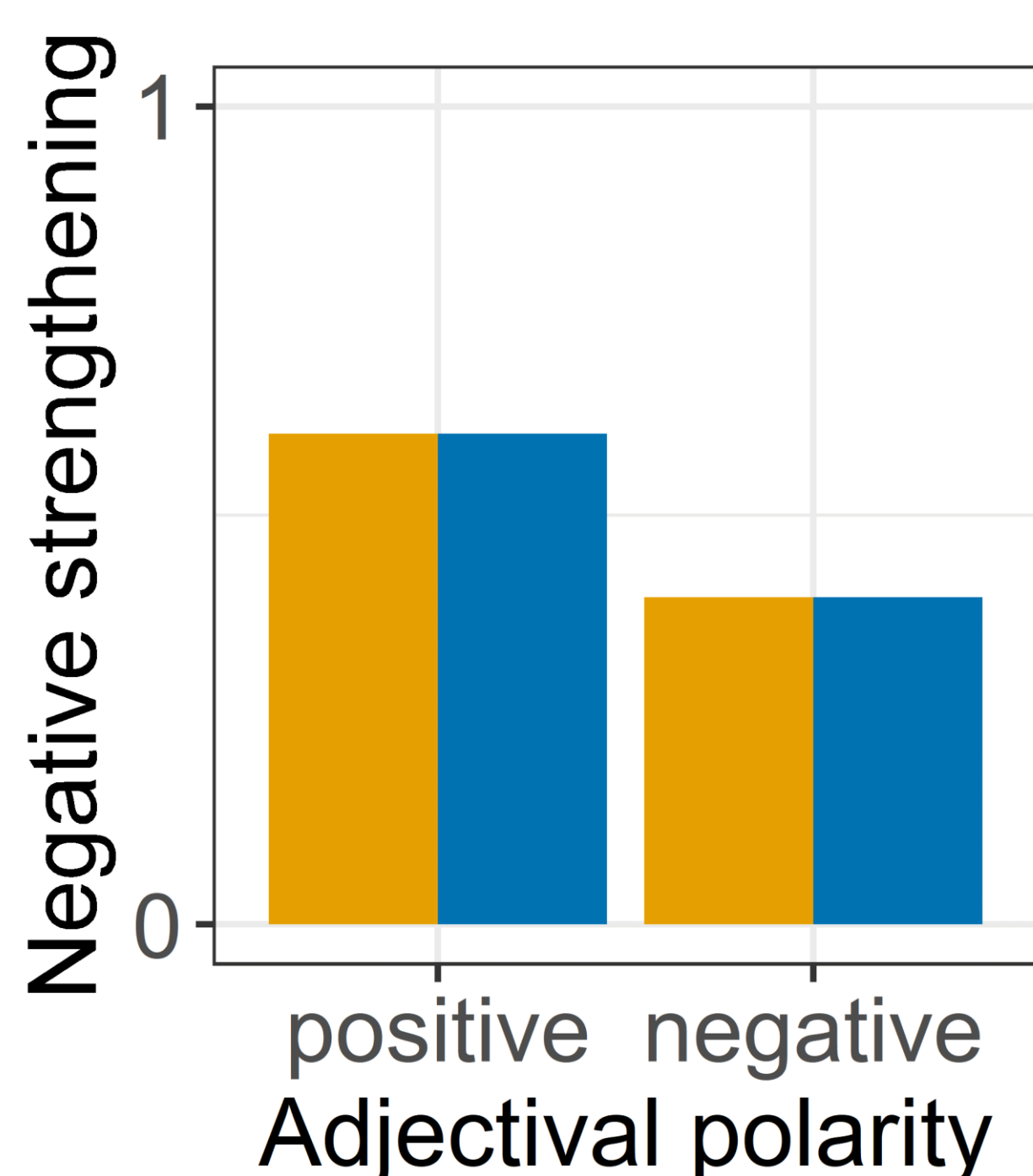


What causes asymmetry in negative strengthening?

Two accounts: polarity vs. face



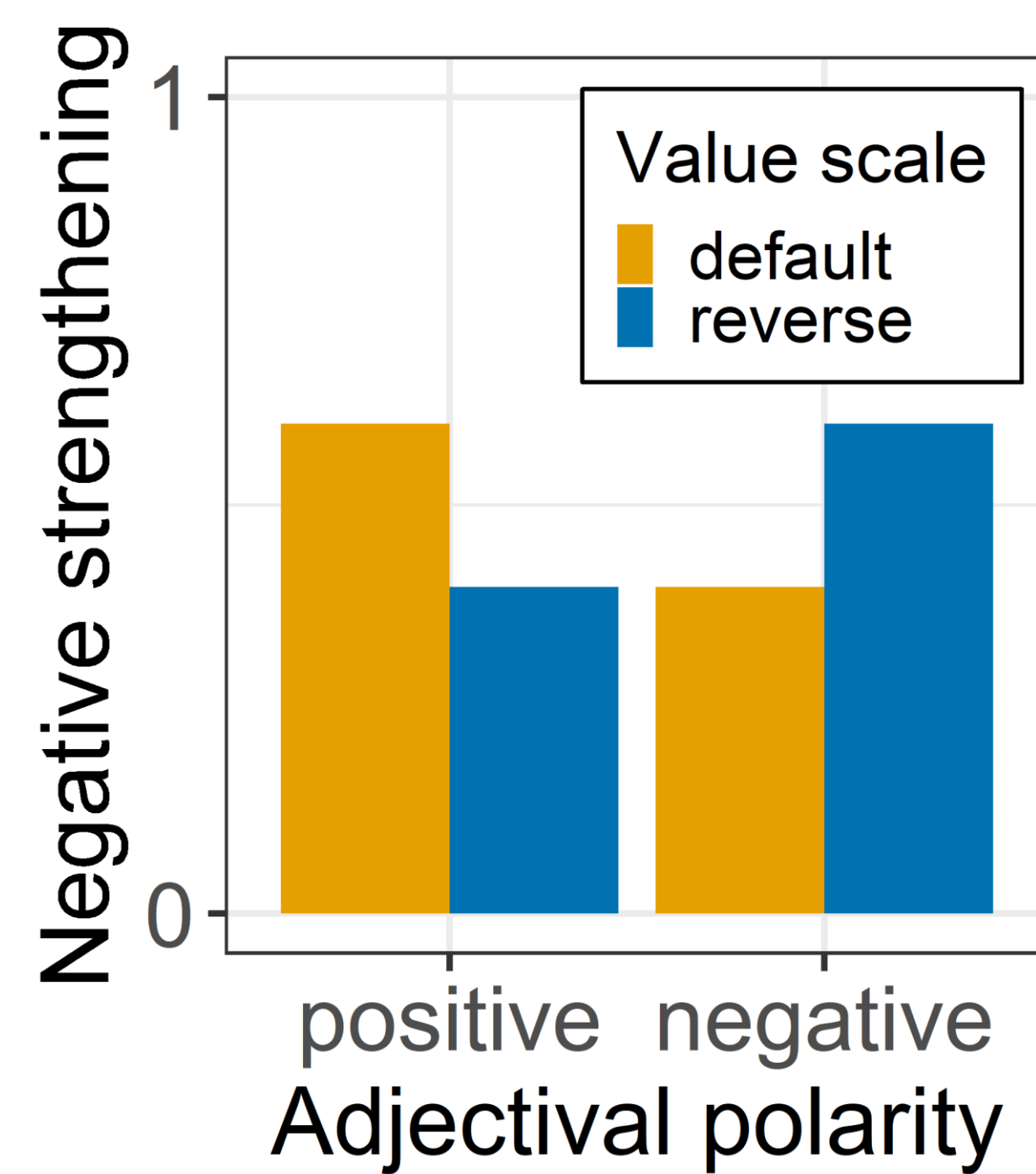
Polarity [4,5]



- Intrinsic polarity of adjective [3,6,7]
- Assumptions
 - Negative polarity is costly [8]
 - Costly expression describes atypical case [9]
- “**Not boring**” → highly atypical case of “fun”
- “**Not fun**” → slightly atypical case of “boring”



Face [1,2,3,10]



- Self-image of interlocutors [1]
- Assumption: both speaker & listener consider face [1,10]
- “**Not fun**” → speaker avoids face-threatening “boring”
- “**Not boring**” → no reason to avoid face-saving “fun”

Value scale can tease apart polarity & face

- Value scale (default/reverse) maps states to values [11]

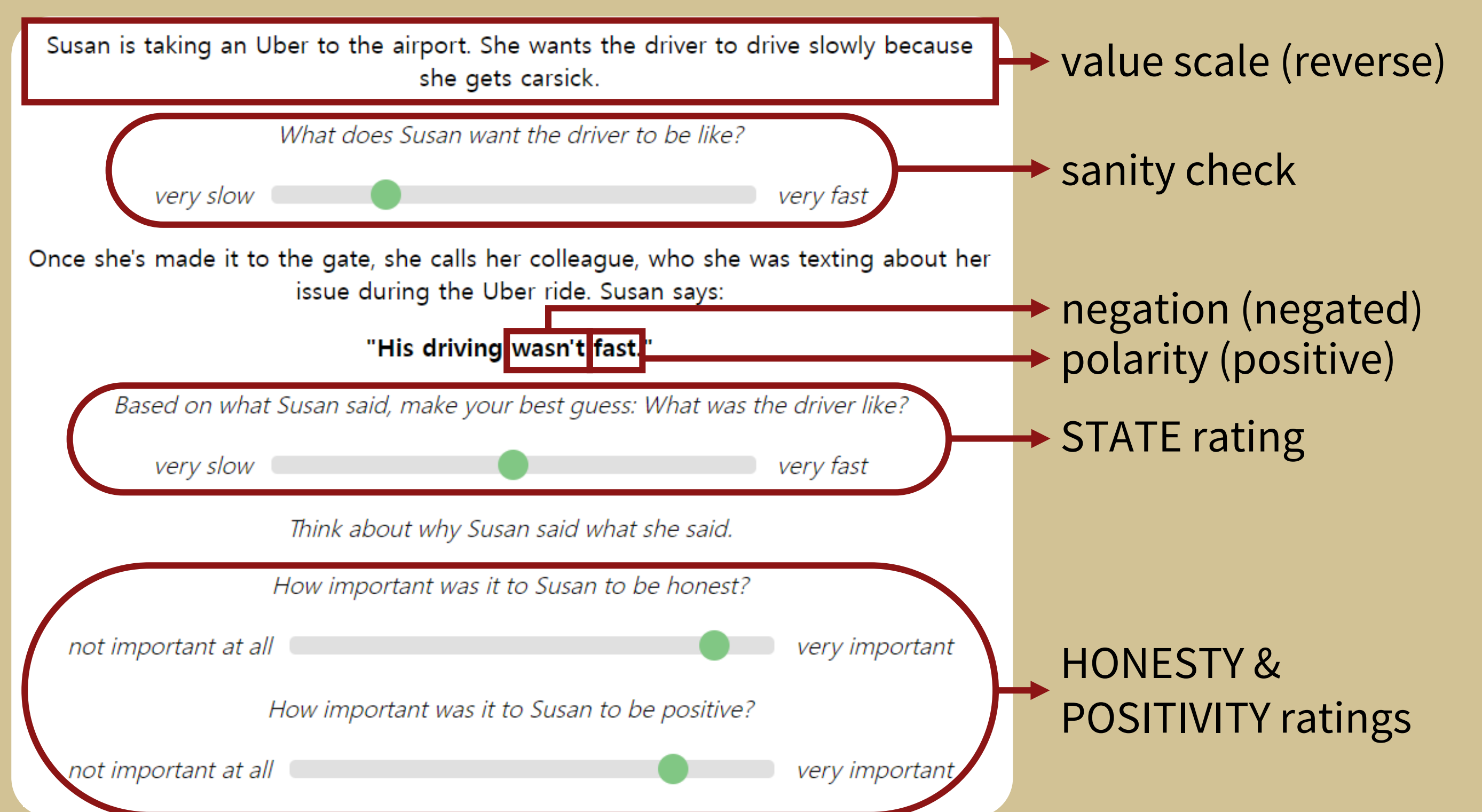
Susan is taking an Uber to the airport. She wants the driver to drive **fast** because she is **late for a flight**.

Susan is taking an Uber to the airport. She wants the driver to drive **slowly** because she **gets carsick**.

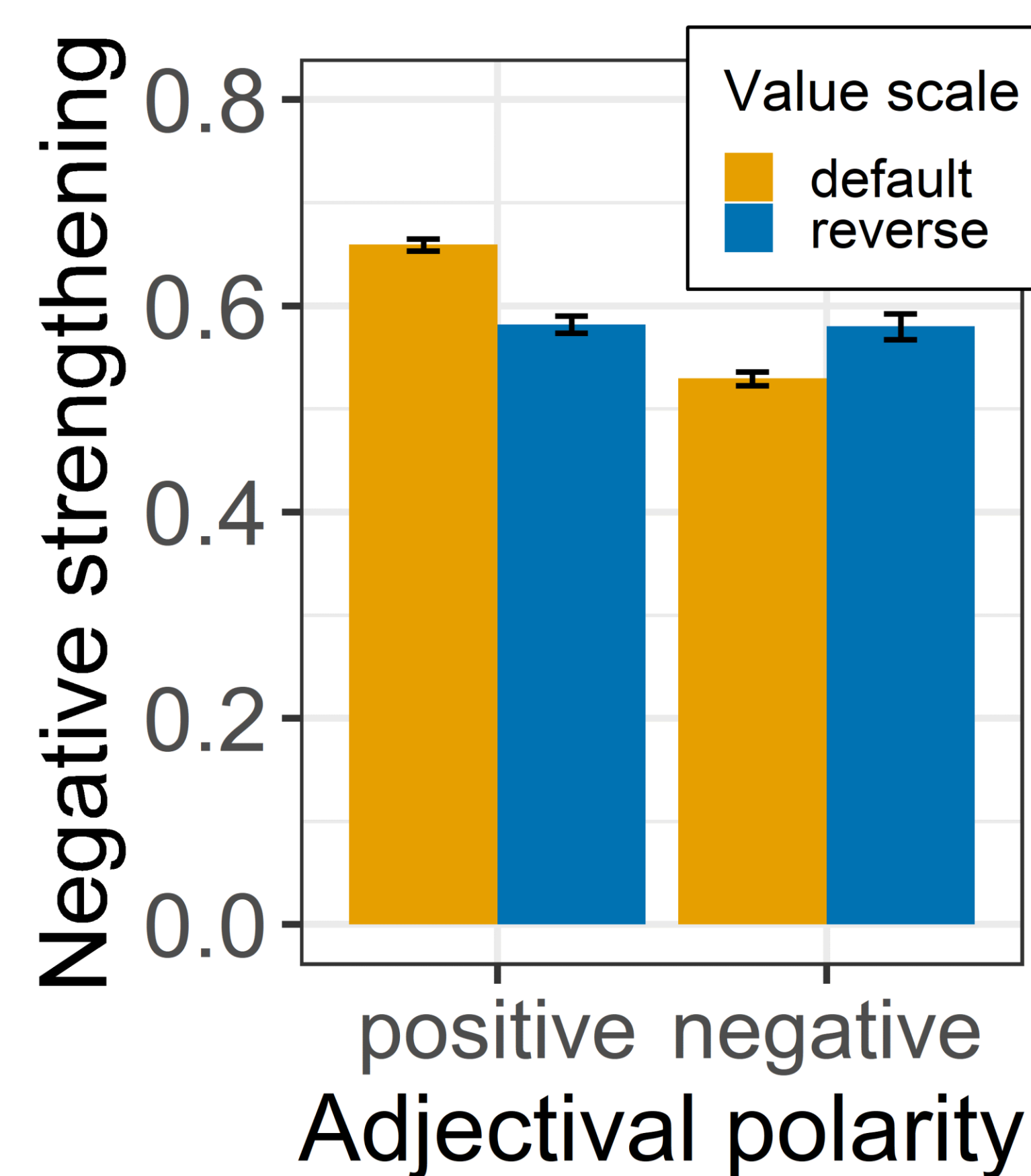
- Polarity & face accounts make different predictions for reverse value scale [4]

Experiment (N=231)

- 64 stimuli
 - 4 scales (quality, speed, length, size)
 - 4 contexts (2 default, 2 reverse value scale contexts)
 - 4 utterances (“XX [was/wasn’t] [positive/negative]”)
- Each participant saw 8 stimuli & 8 controls
- Results were modeled through RSA framework [12,13]

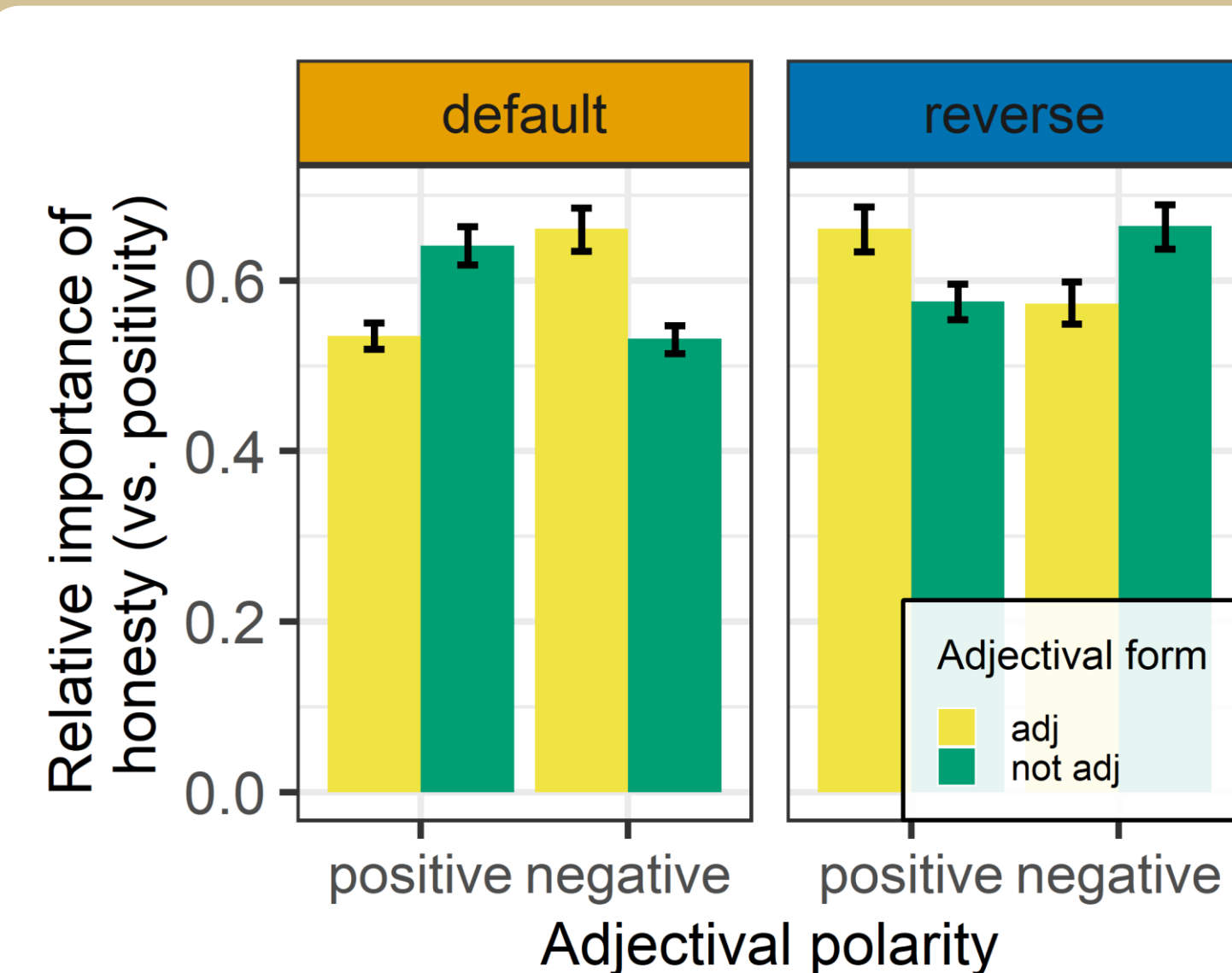


Reverse value scale removed asymmetry¹



- Reverse value scale *removed* asymmetry instead of *preserving* it (polarity account) or *flipping* it (face account)
- Intermediate pattern

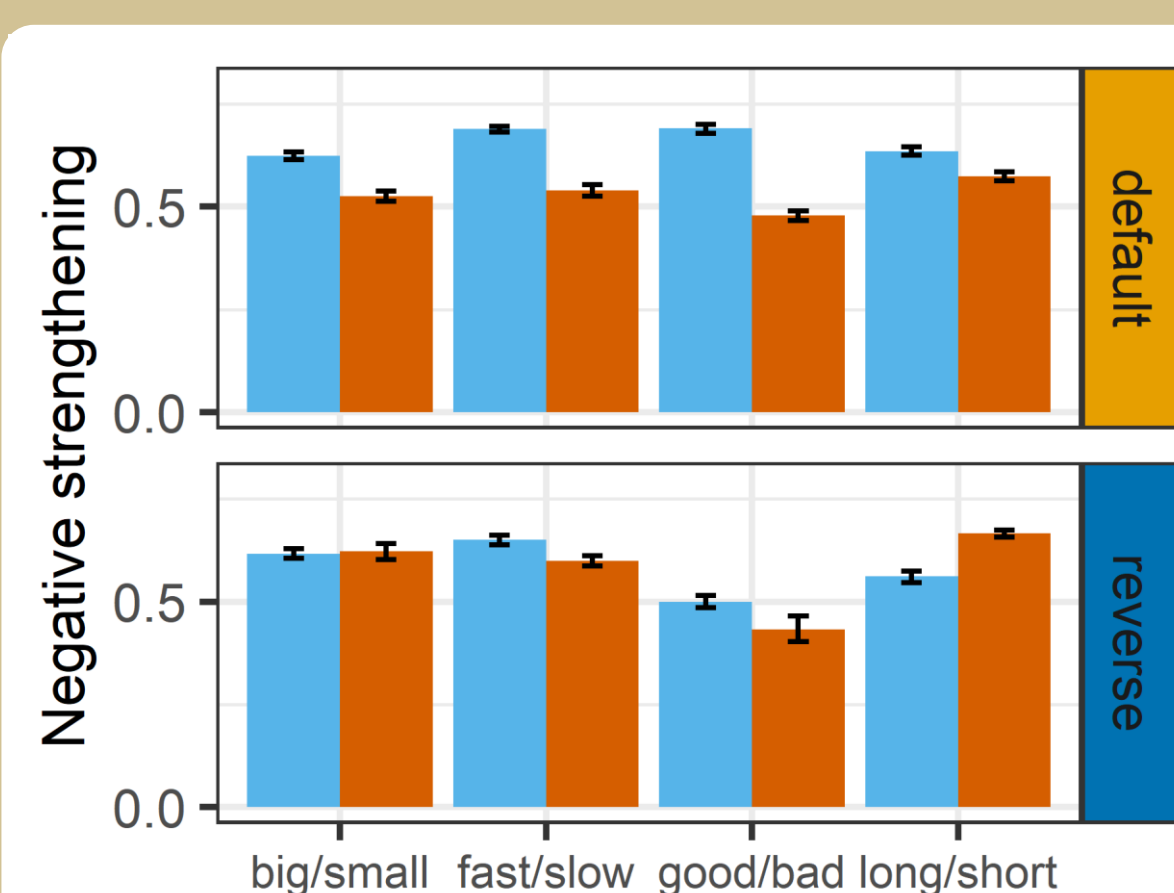
Being informative mattered more in face-threatening utterance



- Default:** Being honest was inferred to matter more for “not fun” & “boring”
- Reverse:** Being honest was inferred to matter more for “fun” & “not boring”

Takeaways

- Value scale works as proxy for face considerations
- Asymmetry in negative strengthening results from listener’s reasoning that speaker tries to balance polarity cost and face considerations



- Adjectives showed variation¹
- Good/bad showed largest asymmetry

References [1] Brown & Levinson (1987) *Politeness: Some universals in language usage*. [2] Gotzner & Mazzarella (2021) Face management and negative strengthening: The role of power relations, social distance, and gender. *Frontiers in psychology*, 12. [3] Horn (1989) A natural history of negation. [4] Mazzarella & Gotzner (2021) The polarity asymmetry of negative strengthening: dissociating adjectival polarity from facethreatening potential. *Glossa*, 6(1). [5] Ruytenbeek et al. (2017) Asymmetric inference towards the antonym: Experiments into the polarity and morphology of negated adjectives. *Glossa*, 2(1). [6] Cruse (1986) *Lexical semantics*. [7] Lehrer & Lehrer (1982) *Antonymy. Linguistics and philosophy*. [8] Kaup & Dudschig (2020) Understanding negation: Issues in the processing of negation. *The Oxford Handbook of Negation*. [9] Horn (1984) Towards a new taxonomy for pragmatic inference: Q-and R-based implicature. *Meaning, form and use in context*. [10] Yoon et al. (2020) Polite speech emerges from competing social goals. *Open Mind*, 4. [11] Yoon et al. (2016) Talking with tact: Polite language as a balance between kindness and informativity. *CogSci Proceedings*. [12] Frank & Goodman (2012) Predicting pragmatic reasoning in language games. *Science*, 336. [13] Degen (2023) The rational speech act framework. *Annual Review of Linguistics*, 9(1).

Footnotes ¹The graph plots bootstrapped differences in state ratings between non-negated and negated forms of the same adjectives.