

# Interpreting scalar quantifiers in context: Mouse-tracking evidence for the role of real-time social reasoning

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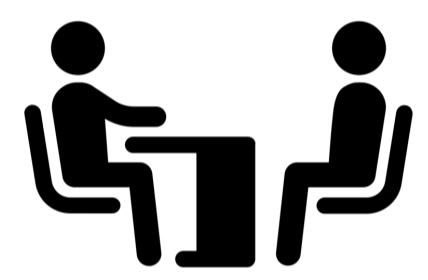
## INTRO

When admitting to (eating) 'lots' is undesirable, listeners commit to a **semantic interpretation** of *some* following a disfluency (Loy et al., 2019).

- 1) Is this a **simple bias from disfluency**?
- 2) Or does it reflect **rapid reasoning from the context**?

## METHODS

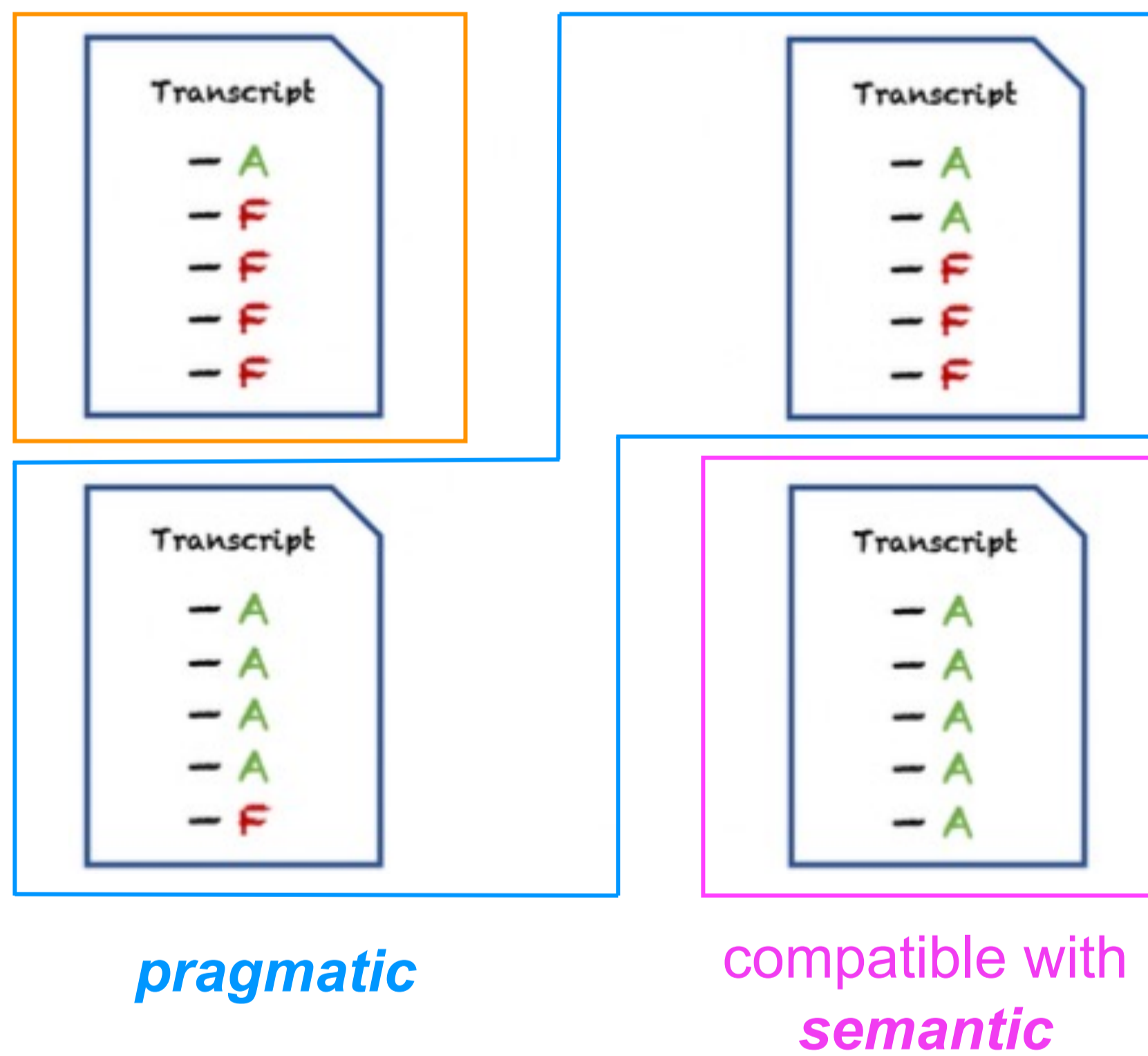
- Job interview ('lots' is desirable)
- Web-based mouse-tracking task



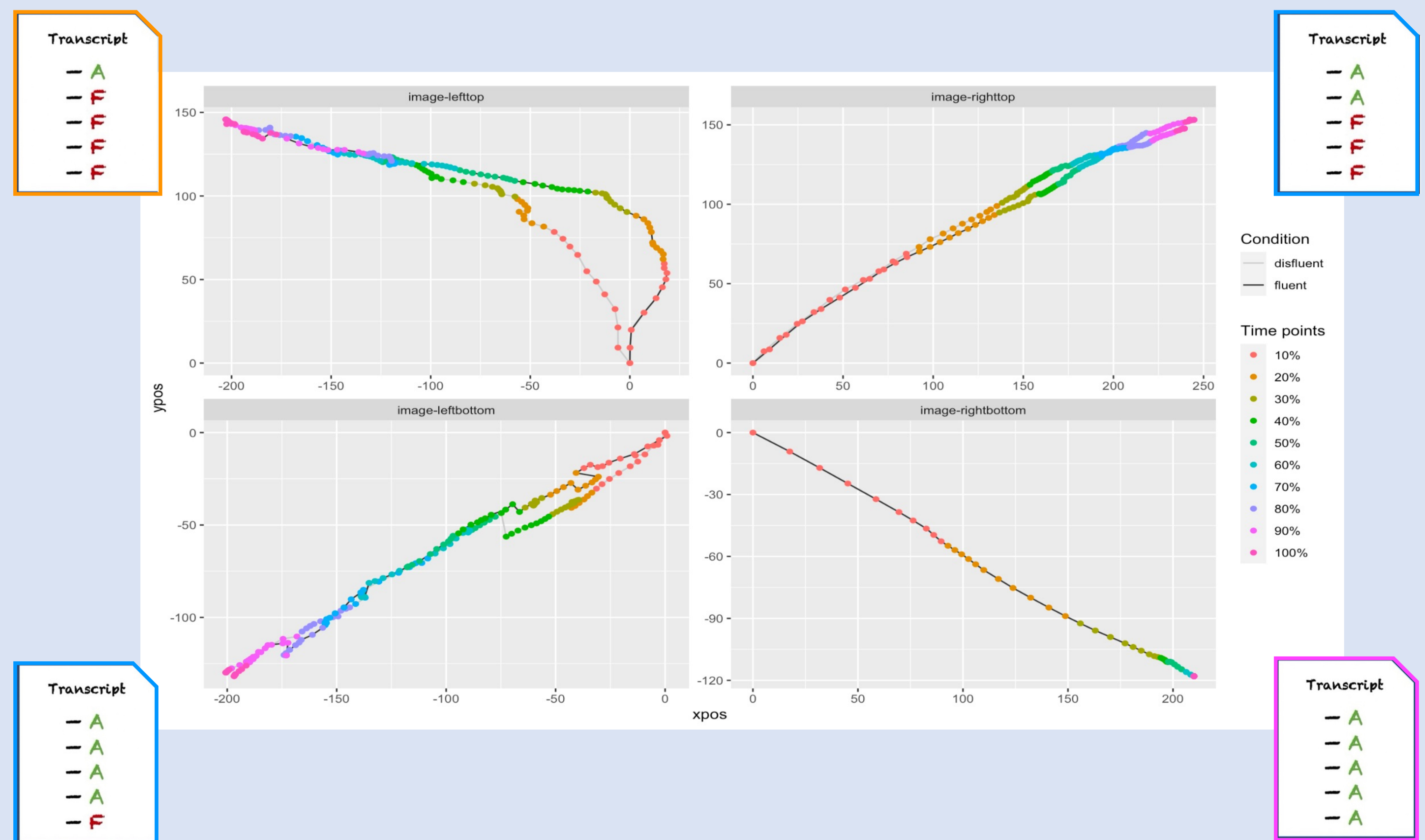
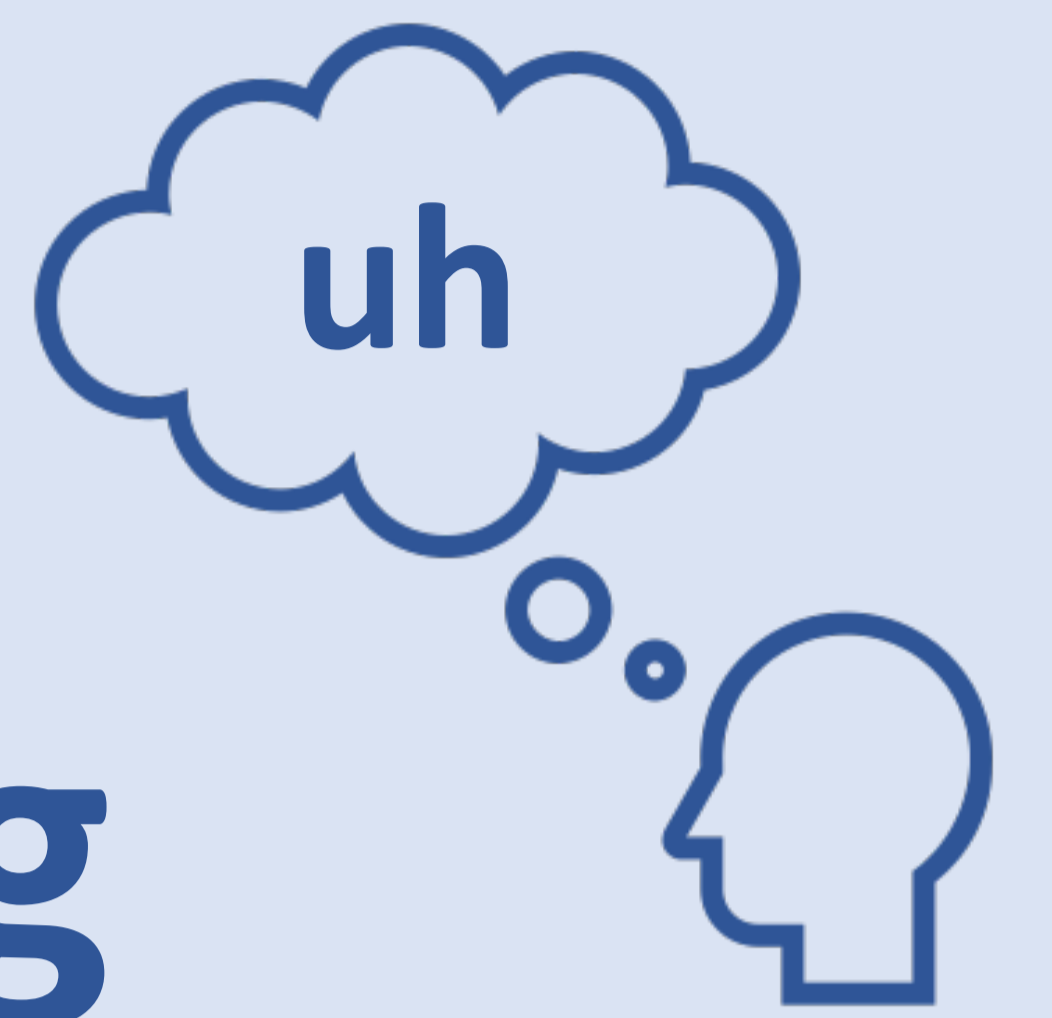
"How many 'A's have you got for your psychology modules?"

I've got some 'A's.  
**(Fluent)**

I've got, uh, some 'A's.  
**(Disfluent)**

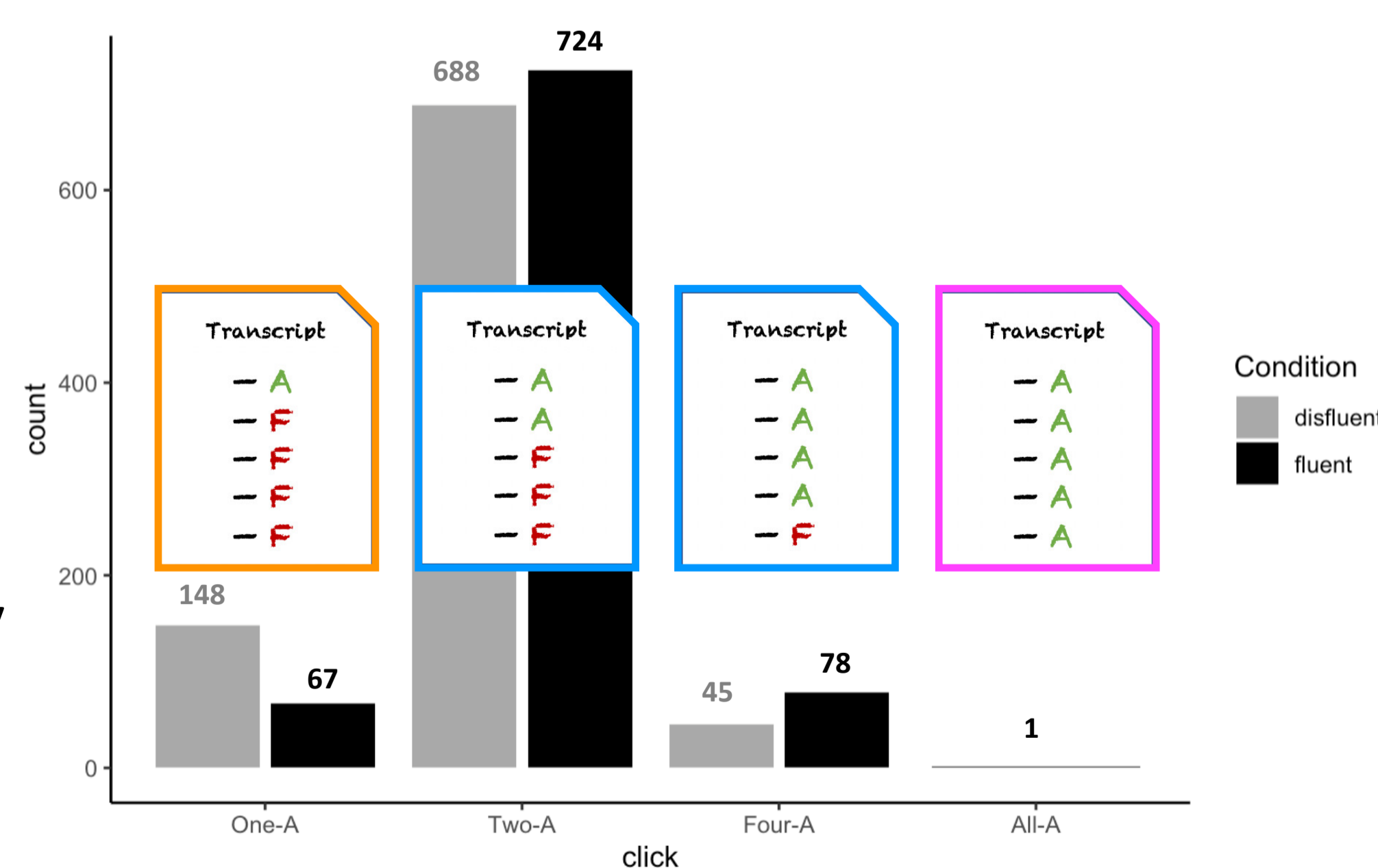


# Listeners integrate context quickly in real-time reasoning about meaning.



## RESULTS

- **More likely** to click on **one-A** image following a **disfluent** utterance ( $p < 0.001$ )
- **One-A** clicks suggest that the speaker uttered *some* to convey (desirable) 'lots' when truth is really (undesirable) 'few' 'A's.



## DISCUSSION

- Listeners **take the social context into account** when **reasoning** about the interpretation of scalar quantifier *some*.
- **This reasoning happens quickly** (where utterances are disfluent, listeners make the decision to click on one-A target very quickly).



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