

Interference in presupposition resolution



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1. Introduction

John ate pizza. Jane ate pizza too.

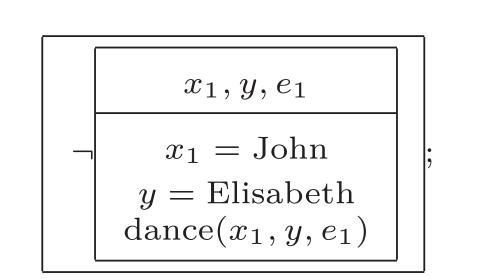
#John ate pizza. Jane went running too.

- **Presupposition**: indication that a part of the information communicated was already established earlier in the discourse (e.g., Beaver & Geurts, 2011; van der Sandt, 1992)
- Recall of information in discourse needed: what role does memory play?
- (In)accessibility of antecedent important for accomodation (e.g., Geurts, 1999)

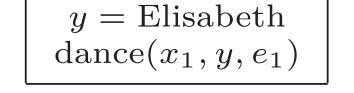
John danced with Elisabeth. Bill danced with Elisabeth too.



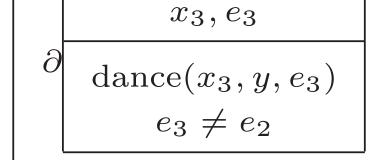
#John didn't dance with Elisabeth. Bill danced with Elisabeth too.



 x_2, e_2 $x_2 = \text{Bill}$ dance (x_2, y, e_2)



	x_3, e_3		
∂	dance (x_3, y, e_3)		
	$e_3 \neq e_2$		



RQ: To what extent is the retrieval process in presupposition resolution subject to interference by inaccessible antecedents?

2. Materials and Methods

Sophie ate/peeled/squeezed her orange. Tess didn't eat/peel/squeeze her orange. That Jill *ate* her orange too, was a big surprise.

			INACCESSIBLE ANTECEDENT		
eat - eat: Match			eat	peel	squeeze
eat - peel: Partial match eat - squeeze: Mismatch	Accessible antecedent	eat peel squeeze	M-M PM-M MM-M	M-PM PM-PM MM-PM	M-MM PM-MM MM-MM

4. Eye-tracking experiment

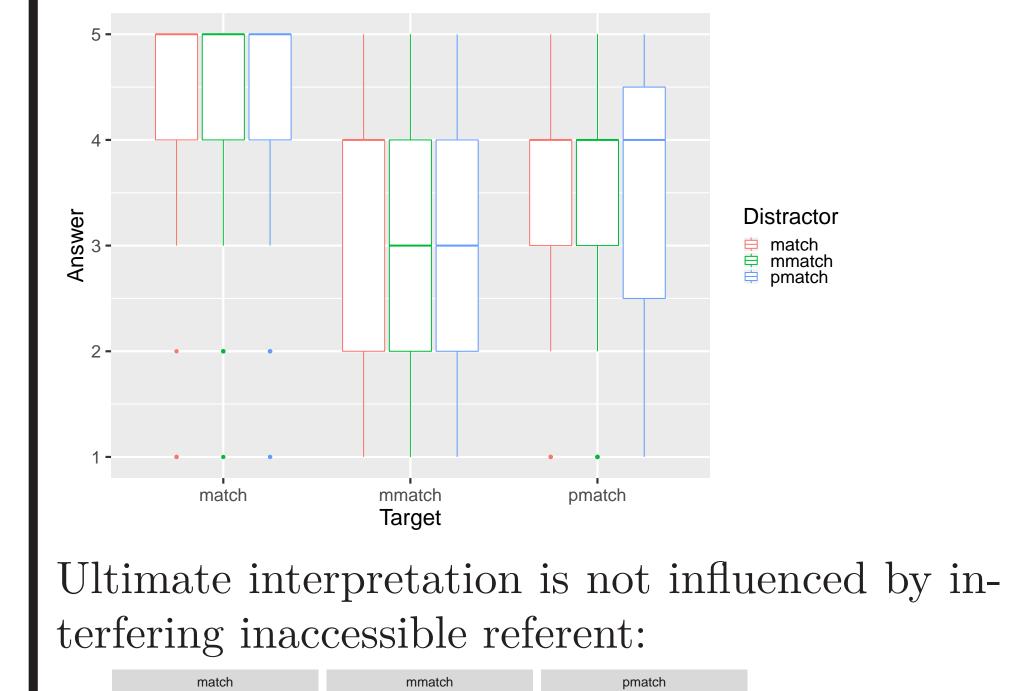
Measure on last sentence of discourse (identical over the 9 conditions) surprise

That Jill her orange too eaten has was a big

(pseudoDutch)

3. Acceptability judgements

Accomodation is easier when verb (partially) matches the presupposition:



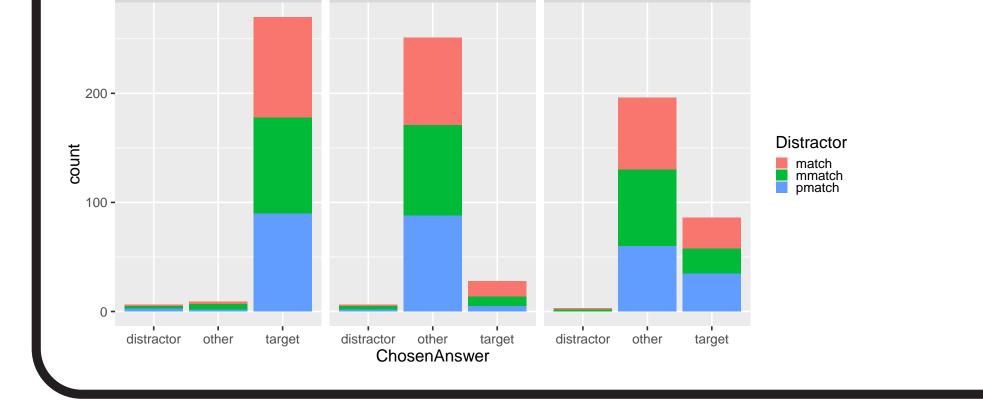
clause

tooverb

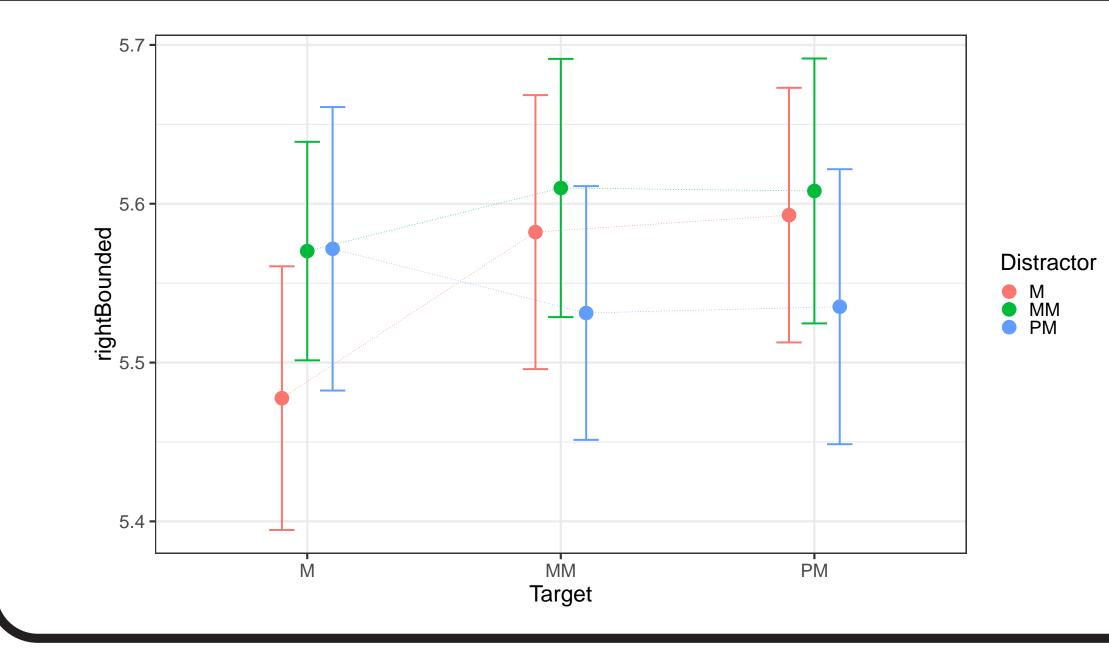
3 following words wrap-up aux

45 participants 45 items, 45 fillers (50% followed by a comprehension question)

Expectation: If search is cue-based: interference effects of matching inaccessible antecedent



5. Results



- 1. IA 3/4 (Inaccessible antecedent/clause up to ook): Fewer and shorter fixations for MM-MM
- 2. IA 6 (Verb): Total reading time longer for MM and PM
 - -Accessible antecedent (MM: B=0.17, SE=0.05, t=3.40; PM: B=0.17, SE=0.05, t=3.50)
 - -Inaccessible antecedent (MM: B=0.14, SE=0.05, t=2.85; PM: B=0.13, SE=0.05, t=2.71)
 - -More regressions when accessible antecedent is MM (B=0.56, SE=0.26, t=2.14)
- 3. IA 8 (3 words after aux): First pass/First Fixation: shorter fixations for accessible MM

6. Discussion

-(Partial) mismatching information influences retrieval, independent of (in)accessibility

-Slowdown on verb due to mismatching inaccessible antecedent; opposite direction than predicted by cue-based retrieval

1. During processing, inaccessible antecedents are temporarily accessible; considered as possible antecedents to resolve presupposition

- Accessibility ignored during presupposition processing
- Accessibility is a grammatical constraint

2. Priming effect

- No information about accessibility and processing

Selected references

Beaver, D. & Geurts, B. (2011). Presupposition. Stanford Encyclopedia of Philosophy. Geurts, B. (1999). Presuppositions and Pronouns. Leiden: Brill. van der Sandt, R. (1992). Presupposition projection as anaphora resolution. Journal of semantics, 9(4), 333-377.

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