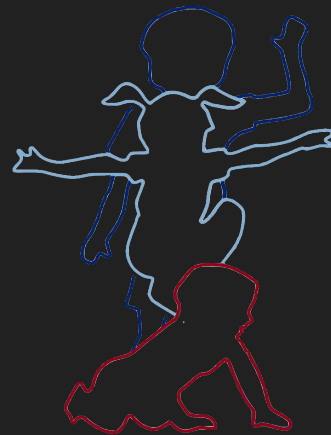


The Influence of Verb Information on Learning Novel Words

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Word learning is a notoriously difficult problem



From Medina, Snedeker, Trueswell, and Gleitman (2011)

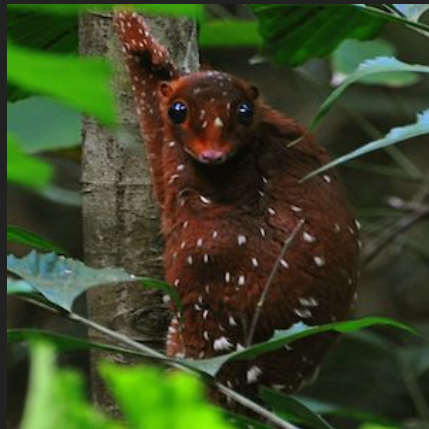
... but children are remarkably good at it

- Mutual exclusivity (Markman & Wachtel 1998) and the shape bias (Landau et al 1988) help to constrain learning
- They can track co-occurrence statistics (Yu & Smith 2007) or their hypothesized word meanings (Trueswell et al 2013) to figure out word-referent mappings across learning situations

Experiments focus on learning words in isolation



Gavagi



I see the dax! Point to the dax!

Language contexts provide rich information that is likely a crucial part of word learning

- Children hear most of their words embedded in rich linguistic contexts (Hoff-Ginsberg, 1990)
- Linguistics contexts are known to carry useful information (verb learning, for example (Gleitman, 1990).
- Language contexts could be a source of stable information in ever-changing environments (Lidz, 2020)

How does *language itself* contribute to learning novel nouns?

- (1) Can verb information help learners identify *good learning opportunities*?
- (2) Does verb information prompt learners to *hypothesize features* of novel words (e.g. [+animate])?

Experiment 1 - learning trials

Can verb information help learners identify good learning opportunities?

ALIGN



CONFLICT

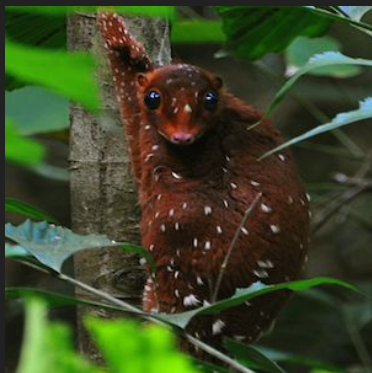


“Mary feeds the bananas to the dax! Click on the bananas!”

Experiment 1 - test trials

Can verb information help learners identify good learning opportunities?

ALIGN

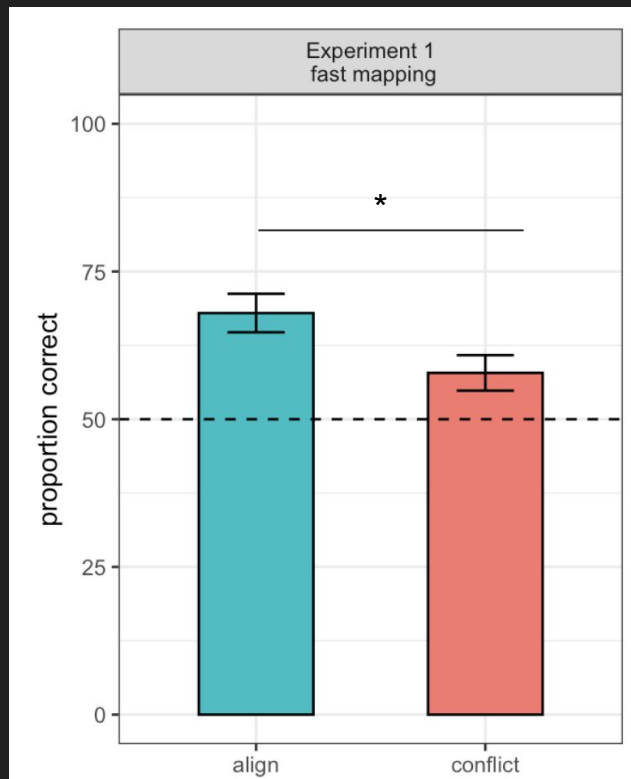


CONFLICT



“Mary sees the dax again! Click on the dax!”

Experiment 1 - results



Experiment 2 - learning trials

Does verb information prompt learners to *hypothesize features* of novel words?

ALIGN



CONFLICT



“Mary feeds the bananas to the dax! Click on the bananas!”

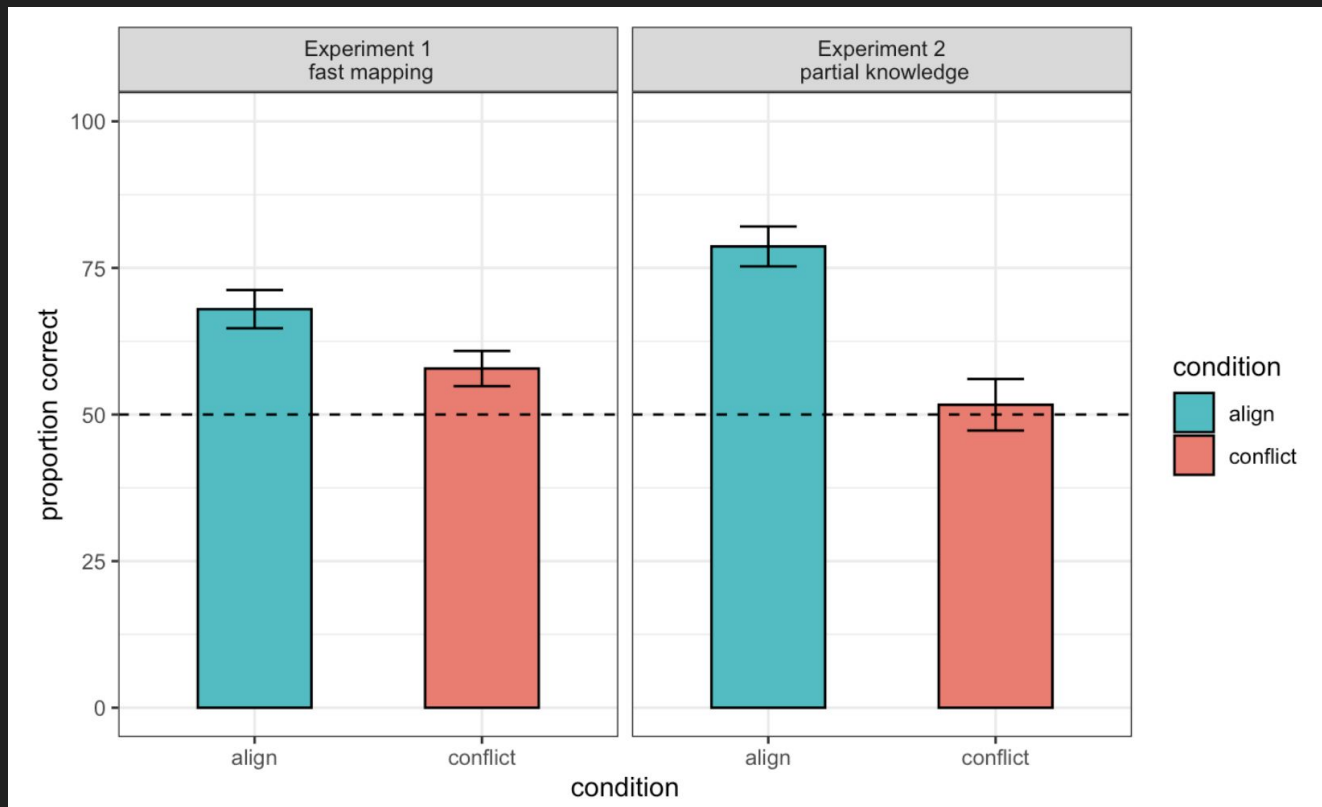
Experiment 2 - test trials

Does verb information prompt learners to ***hypothesize features*** of novel words?

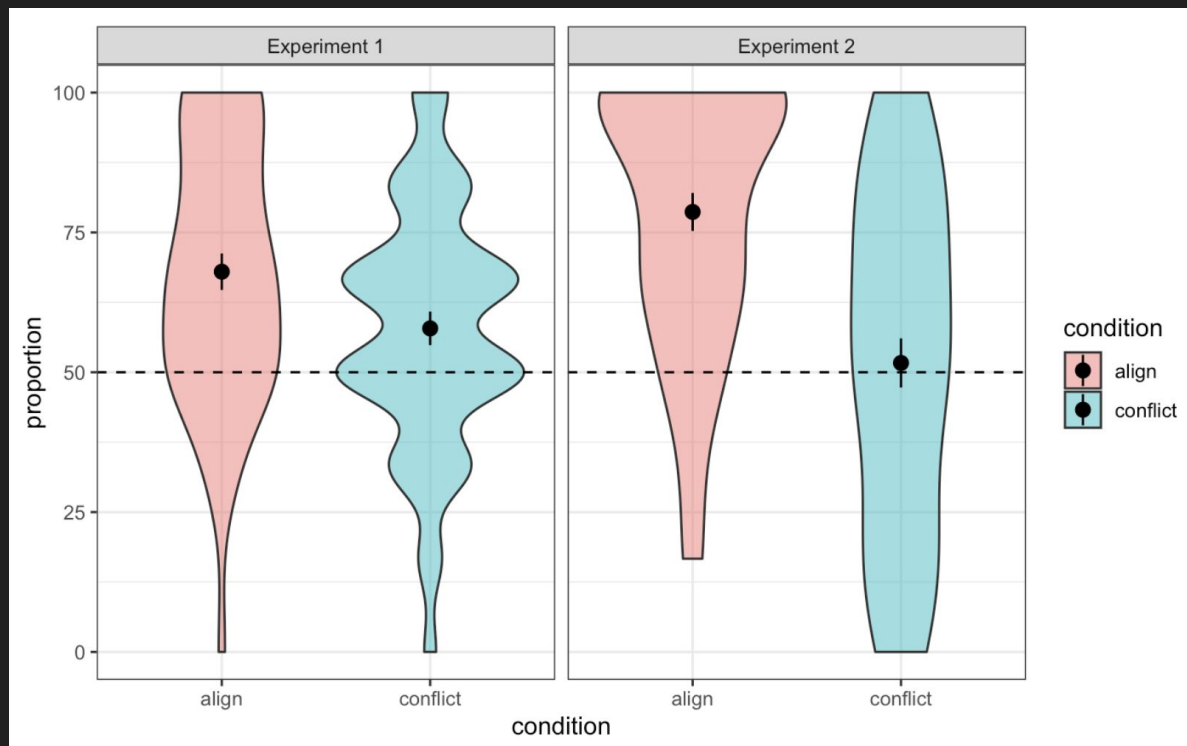


“Mary sees the dax again! Click on the dax!”

Experiment 2 - results



Experiment 2 - results



Conclusions & future directions

- Adults can use verb information to determine whether to map a novel noun to a novel referent
- Some adults used the verb information to hypothesize a feature of the novel noun, while others continued to rely on mutual exclusivity.
- In ongoing work, we are testing these hypotheses with children and we hope to emphasize the important role language itself plays in children's early vocabulary development.

Questions

AUX SLIDES

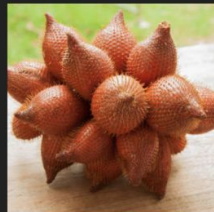
Experiment 1 - results

ALIGN

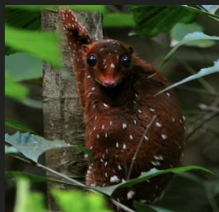


"Mary feeds the bananas to the dax! Click on the bananas!"

CONFLICT



ALIGN



"Mary sees the dax again! Click on the dax!"

CONFLICT

