Could both be right? Children and adult's sensitivity to subjectivity in language

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Background

- Word meanings may be subjective, posing a challenge for semantic compositionality
- Subjective words permit faultless disagreement[1]

➔How does the adult intuition that subjective disagreements are faultless develop?

Faultless disagreement could arise when:
- Speakers have different personal tastes
- A predicate is inherently vague
- Speakers have had different experiences, thus different standards

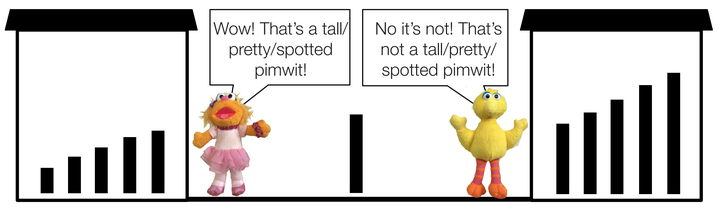
➔Do adults and children consider a speaker's opinion and experience when interpreting different adjectives?

- 4-year-olds understand that words like *tall* are interpreted relative to specific distributions[2]
- Young children may be naive realists[3]
- *Linguistic* subjectivity may be especially difficult, due to children's fundamental assumptions about language[4]

Faultless disagreement not permitted ? *Permit faultless disagreement*

ABSOLUTE adjectives	RELATIVE adjectives	SUBJECTIVE adjectives
spotted, striped, clear, full	*tall, big, cold, heavy, expensive*	*pretty, tasty, funny, boring*

Stimuli & Method



Puppets are independently exposed to distinct (see above) or identical distributions of novel objects, varying along two dimensions (e.g., height and spottedness), then disagree about a novel, intermediate object.

Trial Type	Novel Object	Disagreements
Training Trials	fep	*white/black, sparkly/round*
	zav	*blue/red, shiny/square*
Critical Trials	pimwit	*spotted, tall, pretty*
	pimwit (plain)	*pretty*
	dax	*striped, big, boring* } Adults ONLY
	dax (plain)	*boring* } Adults ONLY

TRUE/FALSE ABSOLUTE RELATIVE SUBJECTIVE

Method, cont.

Test Questions

Following each assertion:
CRITICAL QUESTION: *Zoe said, "That's a tall pimwit," was she wrong, or could she be right?*
UTTERANCE EXPLANATION: *Why?*
} FAULTLESS DISAGREEMENT = 'could be right' for both speakers

Following each disagreement:
DISAGREEMENT EXPLANATION: *Why did Zoe and Big Bird not agree?*
} Qualitative responses coded for reference to:

For each object, in a post-test:
PERSONAL PERCEPTION: *Is this pimwit tall?*

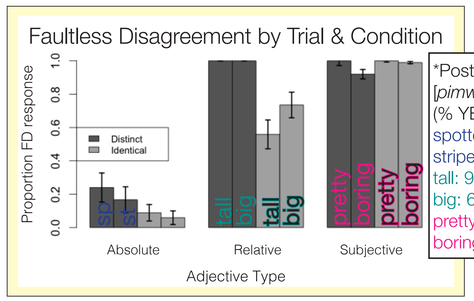
code	example
object property	*There are dots on the pimwit.*
speaker experience	*He saw tall pimwits & she saw short ones.*
speaker opinion	*Big Bird likes purple & Zoe hates spots.*

Experiment 1: Adults

Are faultless disagreement judgments modulated by speakers' experience?

➔ Characters exposed to distinct or identical distributions

Participants: 59 adults (DISTINCT: 25 adults, 18 women, M = 21 yrs, SD = 1.7 yrs; IDENTICAL: 34 adults, 26 women, M = 20.9 yrs, SD = 3.5 yrs)



*Post-test: Is this [*pimwit/dax*] [ADJ]? (% YES):
spotted: 100%
striped: 100%
tall: 97%
big: 62%
pretty: 97%
boring: 32%

- Adult faultless disagreement responses differentially related to post-test judgments: for absolute & relative, greater consensus >> less faultless disagreement

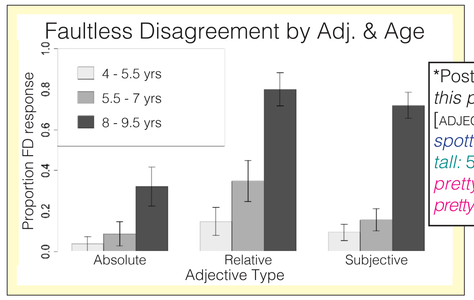
CONDITION x ADJECTIVE TYPE interaction:
- FD rates decrease in IDENTICAL condition for absolute & relative, but not subjective, adjs.

UTTERANCE EXPLANATIONS
Adults refer to...
- **object properties** more for abs.
- speaker experience more for relative adjectives
- **speaker opinion** more for subj.

In **IDENTICAL** condition:
- speaker experience less
- **opinion** more overall

Experiment 2: Children

Do children permit faultless disagreement for subjective adjectives, and relative adjectives when characters have been exposed to distinct distributions?



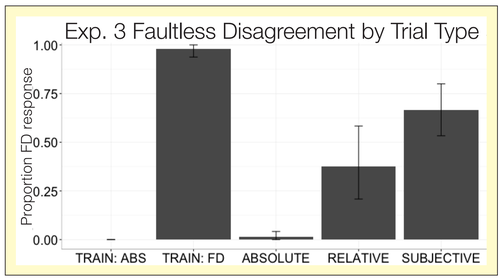
*Post-test *(Is this pimwit* [ADJECTIVE]?):
spotted: 98%
tall: 56%
pretty: 88%
pretty (plain): 58%

Participants: 71 children, 4;0 - 9;6
- 4;0 - 5;6, n = 24 (15 girls)
- 5;6 - 7;0, n = 23 (8 girls)
- 8;0 - 9;6, n = 24 (14 girls)

- Children 'sided' with character who accorded with their own perceptions
- Rates of faultless disagreement judgments did not differ for absolute and subjective adjectives in younger age groups

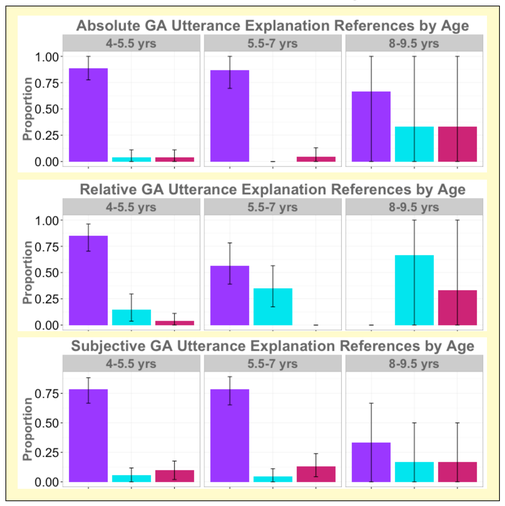
Experiment 3: Older Children

Participants: 24 children, 8;0 - 9;6 (12 girls)



- Older children permitted faultless disagreement for relative, subjective adjs. when speakers exposed to **IDENTICAL** distributions.
- **Still significantly below adult and training-trial baseline rates.**

Do children understand that different information sources are relevant for different adjectives?



- Children's early explanations refer largely to object properties

With age, children become more likely to refer to...
- speaker experience for relative adjectives
- **speaker opinion** for subjective adjectives

- Oldest age group still significantly below adult levels of reference to information sources beyond properties of the object.

Conclusions

- Adults permit faultless disagreement for many reasons: distribution exposure, inherent uncertainty, and speaker opinion
- Less faultless disagreement for relative adjective assertions with more consensus (i.e., more for *big* than *tall*)
- Prolonged developmental trajectory of faultless disagreement judgments, consistent with interpretive ToM literature[5]

Future Directions
- Continuity between children and adults?
- How do children come to master linguistic subjectivity?
- More sensitive methods (e.g., informant paradigms where speakers 'incorrectly' use absolute vs. relative/subjective adjs)
- How does children's understanding of linguistic subjectivity relate to their metalinguistic & epistemological development?

References

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2 Barner, D. & Snedeker, J. (2008). *Child Development, 79*(3), 594–608.
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4 Diesendruck, G. (2005). *Developmental Psychology, 41*(3), 451.
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