Children’s interpretation of rising vs. falling intonation in declaratives clauses

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Background: Clause types and speech acts

• Crosslinguistically, 3 clause types ⇔ 3 speech acts (Sadock & Zwicky 1985, König & Siemund 2007)

(1) *Declarative* ⇔ *assertion*: Zebra went to the school.
(2) *Interrogative* ⇔ *question*: Did Zebra go to the school?
(3) *Imperative* ⇔ *request*: Zebra, go to the school.

• But these canonical links are violable
• Rising declaratives can convey questions, though they are subtly distinct from polar interrogatives:

(4) *Rising declaratives*: Zebra went to the school?
Research Questions

1. When do children figure out the canonical speech act for each clause type?

2. When do children figure out that these canonical links can be violated?

• By age 3, kids produce and understand polar interrogatives as questions. (Shatz 1979; Grosse & Tomassello 2012; Lammertink et al. 2015; Casillas & Frank 2017; Gagliardi et al. 2016; Perkins & Lidz 2019; Yang et al. 2020)
  • But could they be merely reacting to prosody?
  • Do they understand rising declaratives?

• Experiment comparing child interpretation of rising declaratives to other clause types
Experimental method

• **Basic idea**: Context in which a puppet is equally likely to assert, request, and ask.
  • Observe child’s response as means to inferring their interpretation of the puppet’s utterance.

• The child’s task is to help animals get to their workplaces in a village.

• The puppet skypes in to help, but only sometimes remembers where the animals work.
  • When the puppet forgets, the child can check a book of information about where the animals works.
Experimental Method & Design

Four conditions: (16 test trials total; within participant)

- 4 falling declaratives: *Cow works at the school.*
- 4 imperatives: *Put Zebra in the school.*
- 4 polar interrogatives: *Does cat work at the grocery store?*
- 4 rising declaratives: *Duckie works at the toy store?*

- Falling declaratives and imperatives should lead the child to place the animal in their workplace.
- Polar interrogatives should lead the child to check the book
- What does the child do with rising declaratives?
  - Like falling declaratives, place the animal?
  - Like polar interrogatives, check the book?
  - Something in between?
Results

16 adults  

19 children 3;6 – 4;6 (mean 3;11)

Imp = imperative,  FD = falling declarative,  RD = rising declarative,  PQ = polar interrogative
Discussion

• Rising declaratives ≈ polar interrogatives ≠ falling declaratives

• But: Rising declaratives ≠ polar interrogatives. Why?
  • While rising declaratives can be used to ask questions, they also convey a bias for the truth of the content of the declarative clause
    • Some participants may be placing the animal based on that bias
  • Alternatively, some participants may arrive at an assertive interpretation of rising declaratives in some trials (Hirschberg & Ward 1995; Truckenbrodt 2012; Jeong 2018; a.o.)
    • Thus may place the animal based on the asserted information

• Children exhibit subtle adult-like behavior with rising declaratives by 3;6 - 4;6
  • Don’t just rely on prosody as a cue to questionhood
  • Know that declaratives can be used to ask questions and not just make assertions
Thank you

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