Resumptive pronouns hinder sentence comprehension in English
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BACKGROUND

What are resumptive pronouns?
• In relative clauses, arguments appear far away from their verb:
  the forbidden fruit that Dan saw her pick
  • Some languages (e.g., Arabic, Gbadi) can also form relative clauses with resumptive pronouns (RPs):
    the forbidden fruit that Dan saw her pick

• In structures known as islands, gaps are unacceptable and not often produced.[7]
  *the forbidden fruit that Dan wondered if she picked__

  • Instead, English speakers produce resumptive pronouns in islands.[4]
    *the forbidden fruit that Dan wondered if she picked it

  • But resumptive pronouns aren’t acceptable either.[1,2,4,5]

INTRODUCTION

Why do English speakers produce resumptive pronouns?
• Competing hypotheses:
  • comprehension facilitation (for the listener)3,6
  • production facilitation (for the speaker)4

  Hofmeister & Norcliffe (2013) argue for comprehension:
  • faster reading times following RPs vs. gaps

Shortcomings in previous research
• Comprehension question data not reported
• Stimuli provide pragmatic cues, so speakers can answer comprehension questions without parsing
• Comprehension was measured off-line
• Reading times cannot be interpreted without knowing the reader’s parse
• Stimuli were non-islands (where RPs rarely occur)

PRESENT STUDY

Question: Do RPs serve to facilitate comprehension?
• To isolate the contribution of RPs vs. gaps, we:
  • avoid giving pragmatic cues by using animal characters
  • collect fine-grained comprehension data
  • interpret reading times with respect to reader’s interpretation

• To improve validity, we:
  • included islands in our stimuli

Stimulus design: 2 x 3
• 2 levels of STRATEGY: resumptive pronoun, gap
• 3 levels of ISLANDHOOD: non-, Wh-, adjunct

EXPERIMENT 1: One-shot pilot

Method
• N=300 Mechanical Turkers saw 1 sentence
• All stimuli in this experiment came from one item set
• Ss clicked on one of 4 images depicting possible interpretations:

Multiple choice options for comprehension questions:

TARGET Mr. Piggy tickled Miss Dino with a feather.
LOCAL Mr. Piggy tickled Miss Rabbit with a feather.
DANGLE Mr. Piggy tickled Miss Duckie with a feather.
INSANE Miss Rabbit tickled Miss Dino with a feather.

Results

• Faster reading times following RPs vs. gaps

DISCUSSION

Resumptive pronouns hinder comprehension
• Like Hofmeister & Norcliffe (2013), we observed faster reading times after RPs vs. gaps…
  • …but this does not reflect facilitation given that RPs result in more non-target interpretations.

• RPs encourage locally coherent—but globally infelicitous—dependencies.
• True even in island domains, where they are commonly heard & produced.
• Resumptive pronouns are not used to facilitate parsing.
• These findings are consistent with a production account of English resumption.[4]

REFERENCES

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