Optional resumption is used to overcome ambiguity in Hebrew

HSP 2023

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National Science Foundation BCS-2019804 to UC Santa Cruz

INTRODUCTION

Resumptive pronouns (RPs) have been argued to help comprehenders establish complex or infelicitous filler-gap dependencies [1,2]. Yet, RPs do not consistently facilitate comprehension [3], are dispreferred to gaps even a when grammatical [4], and incur costs due to gap prediction [5].

In this study, we delineate one case where RPs may facilitate processing - when **local ambiguity obscures the prediction of an object gap**.

We examine optional resumption in **Hebrew object relative clauses** (ORCs) and focus on ORCs with **null subjects** - ORCs which may initially be **misinterpreted as subject relative clauses** (SRCs):

The apprentices$_i$ that Ø tested.PL…

SRC: t_i

ORC: impersonal *pro* (null 'someone')

We measure acceptability, comprehension, production of RPs, while manipulating the prominence of the SRC reading via **filler-verb agreement** and **filler animacy** (inanimates are less SRC-biased [6]).

EXPERIMENT 1: Acceptability Judgement & Comprehension

A joint acceptability judgement and comprehension task (participants= 60, sets=48) in a 2x2x3 design, crossing: **Subject** (*Null* or *Overt*), **Tail** (*Gap* or *RP*), and **Filler type** (*animate.PL*, *animate.SG* or *inanimate.PL*).

Filler type	**Sentence**
animate.PL	We like the **apprentices$_i$** that {∅ | people} tested.PL {_ | them}$_i$ during training.
animate.SG	We like the **apprentice$_i$** that {∅ | people} tested.PL {_ | him}$_i$ during training.
inanimate.PL	We like the **experiments$_i$** that {∅ | people} tested.PL {_ | them}$_i$ during training.
Question:	Did the { apprentices | apprentice | experiments } test something?

EXPERIMENT 2: Sentence Completion

Pilot sentence completion task (participants=20, sets=24). Participants wrote an RC completion to a filler+comp preamble, following a two-sentence context in a 2×3 design, crossing **Subject** (*Null* or *Overt*) and **Filler type** (*animate.PL*, *animate.SG* or *inanimate.PL*).

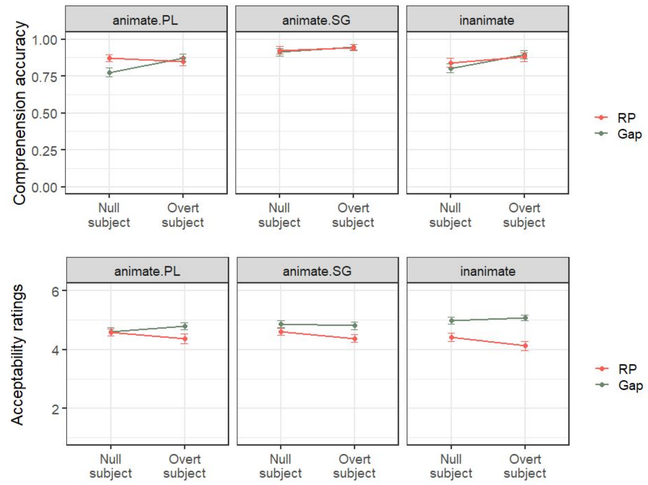
Context	{∅ | the researchers} tested.PL the **{ apprentices | apprentice | experiments }** in the beginning of the year. Still, the { apprentices | apprentice | experiments } failed.
Task	The **{ apprentices | apprentice | experiments }** that _____ failed.

RESULTS: Experiment 1

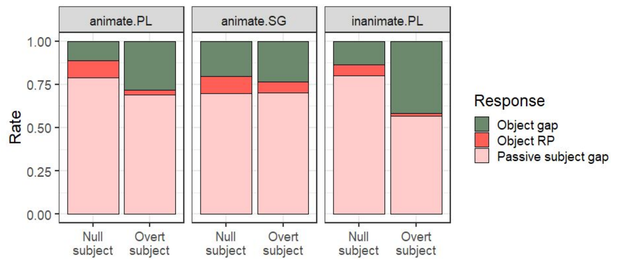
Comprehension: Subject x Tail interaction only within the Animate.PL conditions, indicating that **RPs improve comprehension of null subject ORCs** (posterior mean: 0.38, CrI: [0.02, 0.55]).

Acceptability: Subject x Tail interaction only within the Animate.PL conditions, such that the **RP cost is reduced for null subject ORCs** (0.18 [0.03, 0,34])

In both acceptability and comprehension, despite not finding reliable interactions within other filler conditions, three-way interactions were not reliable.



RESULTS: Experiment 2



Participants mainly used **passive SRCs** in all conditions. While ORC productions were less frequent and not equally distributed, object gaps seem more frequent with overt subjects, while RPs are more common with null subjects.

Up next: an improved design blocking passive productions.

CONCLUSION

The distribution of RPs in Hebrew is modulated by local ambiguity with an SRC.

We found that when the subject of an ORC is null, and the filler is a likely subject (animate and agreeing with the verb):

- Comprehension of the filler-gap dependency decreases but **RPs restore comprehension;**
- **RP acceptability increases**, and they are rated on a par with gaps.

References

[1] Hawkins 1999; [2] Ariel 1999; [3] Morgan et al. 2020; [4] Meltzer-Asscher et al. 2015; [5] Fadlon et al. 2018; [6] Mak et al. 2002