

The Representational Nature of Representational Noun Phrases

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Introduction

Question

Why are reflexives in representational noun phrases (e.g. *a picture of himself*) exempt from Binding Theory?

Two hypotheses:

- **Linguistic Structure:** reflexives in certain lexical argument structures are exempt from Binding Theory (Pollard & Sag 1992, Reinhart & Reuland 1993); or representational Noun Phrases (RNP's) contain a null possessor which binds the reflexive (e.g. Chomsky 1986, Davies & Dubinsky 2003).
- **Representational Meaning:** RNP reflexives are different from "normal" reflexives because they refer to representations of people, not because of linguistic structure.

Background

Parallels between "Reference Transfer" reflexives and RNP reflexives

- Jackendoff (1992) notes that "reference transfer" (RT) allows a representation of a person to be referred to by a reflexive, but only true referent can bind reflexive.
 1. At the wax museum of music history, Ringo Starr saw himself.
 2. Ringo fell on himself. <only if real Ringo falls on statue>
- Lidz (2001) points out that these reflexives (unlike "normals") can co-refer when elided.
 3. Ringo Starr saw himself, and Paul did too. <saw statue of Ringo>
- RNP reflexives also seem to be able to co-refer when elided.
 4. Bill admired the picture of himself, and Beth did too. <admired picture of Bill>
- RT and RNP reflexives each refer to representations of people but appear in different linguistic structures; do they behave similarly for the same reason?

Experiment 1

Question

Do RNP reflexives receive more co-referential interpretations than "normal" direct object reflexives?

Methods

- 23 participants saw scenes on a monitor and heard prerecorded sentences.
- verified if the sentence matched the scene by pressing 'y' or 'n'.
- Each sentence contained one of three verbs.
- 12 critical sentences with ellipsis, 12 control with no ellipsis, and 48 fillers with no reflexives.
- 2 critical sentence types, each matched with 2 different scenes (see Display 1 & 2, column 2).

Direct Object Reflexive Condition: Display 1



Jose is pointing at himself, and Mike is too.

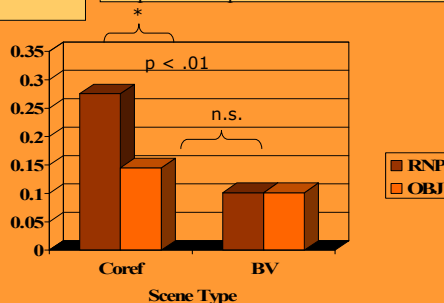
RNP Reflexive Condition: Display 2



Jose is pointing at a picture of himself, and Mike is too.

Results

Fig. 1. Proportion of Coreferential Responses Exp 1.



Note: a coreferential response is a "y" to a coreferential scene or an "n" to a bound variable scene.

There was a marginal interaction of scene type x reflexive type $p < .1$. Importantly, the planned comparison of RNP vs OBJ within the coref scene was significant, $p < .01$ (one-tailed).

- **Summary:** Elided RNP reflexives more likely to receive coreferential interpretations than OBJ reflexives.

Experiment 2

Question

- Will reference transfer reflexives also co-refer more than normal reflexives? Exp 1 had correlated linguistic structure and referent of the reflexive. Exp 2 decouples the two to isolate the effect of structure.

Methods

- Same scenes as Experiment 1
- all reflexives appear as direct objects—no RNP's.
- Half of reflexives are RT reflexives, half "normal"
- N=37

Normal Reflexive Condition: see Display 1, above.

RT Reflexive Condition:

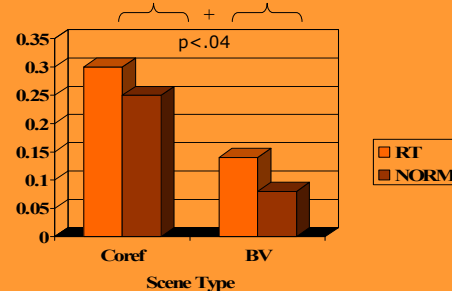
Display 3



Jose is pointing at himself, and Mike is too.

Results

Fig. 2. Proportion Coreferential Responses Exp 2

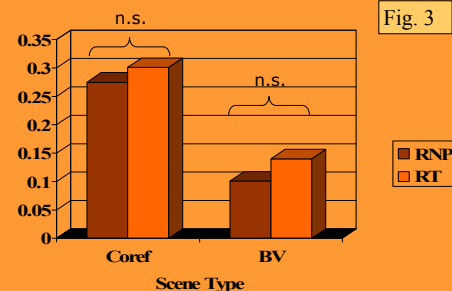


Note: The No-ellipsis BV scene allowed us to see if any participant would not accept reference transfer. If a participant rejected at least 2 out of the 3 trials of this type they were excluded from analysis; 6 out of 37 were excluded.

There was a main effect of reflexive type (i.e. to what the reflexive referred), $p < .04$.

- **Summary:** Elided RT reflexives more likely to receive coreferential interpretations than normal OBJ reflexives.

Comparing Exp 1 & 2: RNP vs. RT



There were no effects of NP structure, all f 's $< .025$.

- **Summary:** Reflexives behaved the same when they referred to a representation regardless of linguistic structure.

Conclusions & Future Directions

- Results inconsistent with either linguistic structural account.
- The referential distinction was only in the visual scene (Exp 2) so could have only been instantiated in a "non-linguistic conceptual" representation.
- The nature of this instantiation will be the subject of future research.
- Eye-tracking version of these studies is currently being run to investigate the implicit processes leading to these interpretations.

References

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