

COREFERENTIAL INTERPRETATIONS OF REFLEXIVES IN PICTURE NOUN PHRASES: AN EXPERIMENTAL APPROACH

BACKGROUND. There have been two main approaches to accounting for the referential possibilities of a reflexive anaphor in a “picture” noun phrase such as (1). The “standard” Binding Theory (BT) treats such a reflexive as a usual anaphor, obligatorily bound by another NP in its local domain (either the subject of the sentence, or a null possessor within the picture NP itself). The other approach is to treat such a reflexive as a “BT-exempt” anaphor (Pollard & Sag 1992) or a “logophor” (Reinhart & Reuland 1993), in which case unlike a true argument reflexive, its referential possibilities are determined in part pragmatically, in some ways more like those of a pronoun.

1. Ken saw a picture of himself.

Reinhart & Reuland (1993) and Grodzinsky & Reinhart (1993) argue that a difference between argument reflexives on the one hand and picture NP reflexives and pronouns on the other, is that the former are always interpreted as bound variables (BV), while the latter allow a coreferential (coref.) interpretation. This claim is illustrated in the ellipsis (2) and ‘only’ construction (3). On the BV interpretation (sometimes called “sloppy”), the elided reflexive is interpreted as bound by Lili, not by Lucie; but on the coreferential interpretation (“strict”) the elided reflexive is coreferential with Lucie back in the antecedent clause. A parallel contrast is found with the ‘only’ construction.

2. Lucie liked the picture of herself, and Lili did <like a picture of herself>, too. [BV, coref.]
3. Only Lucie like the picture of herself.

CURRENT RESEARCH. The research presented here tests these predictions experimentally. Our main question was to determine if the coreferential interpretation is indeed available to the picture NP reflexive in the Ellipsis and ‘only’ constructions.

We monitored our 16 participants’ eye-movements while they were seated in front of a computer monitor. They listened to sentences containing picture NP reflexives while verifying if the scene displayed matched the sentences they heard, which were similar to those in (4) and (5).

4. Joe is seated below a picture of himself, and Ken is, too. [Ellipsis]
Joe is seated below a picture of himself, and Ken is seated below a picture of himself, too. [No-Ellipsis]
5. Only Joe is seated below a picture of himself. [Only]
Joe is seated below a picture of himself. [No-Only]

Three different types of scenes displayed. In every case there were two dolls either sitting, standing, or lying down; above each doll was a framed photo of a doll. The picture above the subject doll (Joe in (4)/(5)) was always of the subject. The doll in the picture above the second doll varied: it was either also a picture of the subject doll

(Subject match condition), or a picture of the second doll himself (Alternate match), or a picture of a third doll, not present (No match). The scenes, sentences, pictures and “yes” vs. “no” responses were all fully counterbalanced and fillers containing similar sentences but with no reflexives, Ellipsis or ‘only’, were also included.

RESULTS. The overall results suggest that on the Ellipsis and ‘Only’ conditions participants allow a coreferential interpretation of the reflexive in the picture NP. So, while on the No-Ellipsis Subject match condition participants answered “yes” on only 2% of the trials, on the Ellipsis Subject match condition they answered “yes” on 17% of the trials. This difference is significant (all differences mentioned are statistically valid unless otherwise stated) and indicates that participants are allowing a coreferential interpretation on the Ellipsis condition but not on the No-Ellipsis condition. Also, on the No-Ellipsis Alternate match condition participants answered “yes” on 100% of the trials, but on the Ellipsis Alternate match condition participants answered “yes” on 89%. This difference also indicates that participants are allowing a coreferential interpretation with Ellipsis but not without it. Turning to the ‘Only’ construction, we find a similar pattern. The most revealing data here come from the Subject match conditions: on the No-Only condition participants answered “yes” on 100% of the trials, but on the Only condition they did so on 91% of the trials. This difference is significant and again indicates that they are allowing a coreferential interpretation more frequently on the Only than on the No-Only condition. We also monitored the participants’ eye-movements throughout the experiment and those data are currently being analyzed. Our expectation is that looks to the subject doll will be increased on both the Ellipsis and Only conditions when compared to the No-Ellipsis and No-Only conditions.

CONCLUSIONS. The first conclusion we can draw from this study is that the coreferential interpretation does indeed seem to be available to reflexives in picture NPs, at least when in constructions that encourage such a reading, such as Ellipsis and the “only” construction. Secondly, these results help to shed light on the proper treatment of reflexives in picture NPs. If the Reinhart & Reuland (1993)/Grodzinsky & Reinhart (1993) claim that the coreferential interpretation of a reflexive is evidence that it is not a pure argument anaphor, but rather a logophor (or BT-exempt anaphor), then we have found evidence in favor of treating picture NP reflexives in English as logophors. This ultimately supports a view of reflexives that incorporates both structural factors (for true argument reflexives) and non-structural factors (for logophors/BT-exempt reflexives), such as those found in Pollard & Sag (1992) and in Reinhart & Reuland (1993). Finally, we have also shown that it is possible to examine theoretically important questions such as these in an experimental fashion.

REFERENCES

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