

A note on Dahl's puzzle

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The note shows, quite unambitiously, that Dahl's puzzle can be accounted for by assuming Sag's (1976) ellipsis licensing condition and Rule H (Fox 2000). Subsequently, we indicate one possible way how to transpose the proposal to more recent approaches to ellipsis licensing.

1. Dahl's puzzle

Recall Dahl's puzzle, exemplified in (1): out of the four possible disambiguations of the second sentence, only three are available. In particular, the sentence lacks the 'strict-sloppy' reading.

- (1) John said he talked to his mother. Bill did -- too.
BJJ BBB
BBJ *BJB

2. Sag's ellipsis licensing condition and Rule H

Let us assume Sag's ellipsis licensing condition: the deletion of a VP is licensed if the derived VP is semantically identical to a derived VP in the previous discourse. For example, the VP *said that it is raining* has $\lambda x x \text{ said that it is raining}$ as the derived VP, and its ellipsis is licensed if the derived VP has been used previously in the discourse. Crucially, the prefixed λ -binder may bind a variable within the VP.

Fox (2000:115) puts forward the following economy rule governing the binding of pronouns:

- (2) **Rule H:** A pronoun, α , can be bound by an antecedent, β , only if there is no closer antecedent, γ , such that it is possible to bind α by β and get the same semantic interpretation.

3. Derivation of Dahl's puzzle

We show that on the assumption of Sag's ellipsis licensing condition, and Fox's Rule H, Dahl's puzzle is accounted for. We look at the four possible disambiguations of the sentence with ellipsis in (1) in turn. In all but the last one, the semantic identity is satisfied. In the last one Rule H applies: it blocks the parse of the antecedent sentence in which the lowest pronoun is bound directly by the matrix subject; the licit parse of the antecedent sentence does not provide an appropriate derived VP for ellipsis to be licensed.

- (3) 'Strict-strict' disambiguation
A: $\lambda x x \text{ said John talked to John's mother}$
T: $\lambda x x \text{ said John talked to John's mother}$
- (4) 'Sloppy-strict' disambiguation
A: $\lambda x x \text{ said } x \text{ talked to John's mother}$
T: $\lambda x x \text{ said } x \text{ talked to John's mother}$
- (5) 'Sloppy-sloppy' disambiguation
A: $\lambda x x \text{ said } x \text{ talked to } x's \text{ mother}$
T: $\lambda x x \text{ said } x \text{ talked to } x's \text{ mother}$

- (6) 'Strict-sloppy' disambiguation
- A: $\lambda x x$ said John talked to x's mother [Blocked by Rule H!]
- A: $\lambda x x$ said John $\lambda z z$ talked to z's mother
- T: $\lambda x x$ said John talked to x's mother [Ellipsis licensing condition is not satisfied!]

4. Translation?

Can this derivation of Dahl's puzzle be transferred to Rooth's or others' approaches to ellipsis licensing? And how do the stipulations that would be required by this move relate to those of Fox about parallelism in ellipsis? I address only the first question here (though the discussion of Roelofsen's counterexample below may shed some light on the answer to the second one).

The transfer is possible. One way to do it would be to stipulate that the focus placement rules apply to the domain that excludes the matrix subject. For instance, we would need to stipulate that Rooth's \sim operator must be inserted in a position asymmetrically c-commanded by the matrix subject (or perhaps, more generally, the topmost expression in the sentence).

- (7) A: [John [$\lambda x x$ said [John [$\lambda z z$ talked to z's mother]]]]
T: [Bill_F [\sim [$\lambda x x$ said [John talked to x's_F mother]]]]]

On this parse, the lowest pronoun in the target sentence in (7b) must be focused since neither it, nor any constituent containing it, is otherwise given. Focused elements cannot be elided.

5. Roelofsen's counterexample

Roelofsen (2011) comes up with several counterexamples to the combination of Rule H and Fox's parallelism constraint. One of them is provided below -- the elided pronoun may be bound by the matrix subject, even though this binding configuration does not have an appropriate, parallel antecedent according to Fox. On the above assumptions, (8) may have the representation in (9), where the antecedent sentence respects Rule H.

- (8) No student said that he liked his paper.
But every student hoped that the teacher would.
- (9) A: no student $\lambda x x$ said that x $\lambda z z$ liked z's paper
T: **every_F** student $\sim \lambda x x$ **hoped_F** that **the teacher_F** liked x's paper

If a focused DP may have a bound variable as an alternative, and if the alternatives are not subject to Rule H, the above proposal correctly predicts the felicity of (8) on a bound construal of the elided pronoun. It goes without saying that further study of these issues is mandated.

References

- Fox, D. 2000. *Economy and semantic interpretation*. Cambridge, Massachusetts: MIT Press.
- Roelofsen, F. 2011. Free Variable Economy. *Linguistic Inquiry* 42:692–697
- Sag, I. 1976. *Deletion and logical form*. Dissertation, MIT.