

Missing Antecedents Found

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Missing Antecedent Phenomena and Deep and Surface Anaphora

Hankamer and Sag 1976 (H&S76) propose a distinction between:

Deep anaphora – present as such in underlying representation and do not involve deletion or substitution.

Surface anaphora – derived transformationally by deletion or substitution under identity with a syntactically present antecedent.

Following Grinder and Postal 1971, H&S76 argue that **Missing Antecedents Phenomena** can be licensed by surface anaphors: in (1-a), the first conjunct does not introduce a camel type referent, but the second conjunct does, and hence this referent can be picked up anaphorically by *it* in the third conjunct. (1-c) shows that *it* is infelicitous without the second conjunct. With VP Ellipsis (VPE), as in (1-b), the sentence is acceptable despite the apparent absence of the NP antecedent because it is present in deep structure: *but Ivan has ridden a camel* (H&S76 (23a,b) and (25)).

- (1) a. I've never ridden a camel, but Ivan's ridden a camel, and he says it stank horribly.
b. I've never ridden a camel, but Ivan has, and he says it stank horribly.
c. *I've never ridden a camel, and it stank horribly.

Following Bresnan 1971, they contrast VPE with VP Anaphora (VPA), e.g., *do it*, which, being a deep anaphor, is present as such in deep structure so that there is no antecedent for *it*:

- (2) *Jack didn't cut Betty with a knife — Bill did it, and it was rusty. (H&S (30)).

Discourse Conditions on VPE and VPA

Recent work on the discourse conditions on VPE and VPA (Miller 2011, Miller and Pullum 2014, Miller and Hemforth 2014, Flambard 2018) suggests that there are construction specific discourse conditions on the choice between VPE and VPA. Specifically the following conditions, illustrated in (3) will be relevant to the present discussion:

—If the QUD (Question Under Discussion, Ginzburg 2012) addressed by the anaphoric clause is the identity of the subject, which contrasts with that of the antecedent clause, VPE is preferred to VPA.

—If the QUD addressed by the anaphoric clause goes beyond providing a contrastive subject, introducing a new QUD expressed by a non contrastive adjunct, VPA is preferred to VPE.

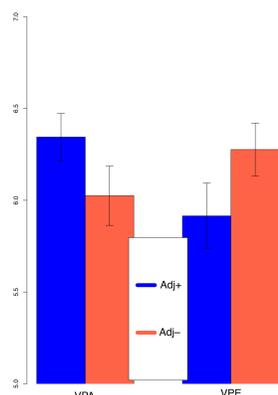
- (3) a. Sue didn't write a song. Sam did. (VPE/Adj-)
b. Sue didn't write a song. #Sam did it. (VPA/Adj-)
c. Sue didn't write a song. #Sam did for her. (VPE/Adj+)
d. Sue didn't write a song. Sam did it for her. (VPA/Adj+)

In this light, it appears that the difference in judgments between (2) and (1-b) might simply be caused by the violation of the discourse conditions in (2) (*do it* without a non contrastive adjunct is degraded), rather than having to do with the choice between VPE and VPA.

Experiment 1: Discourse Conditions

Design 20 items with 4 conditions of the type given in (3). These items were distributed across 4 lists in a Latin Square design. 47 subjects (recruited on MTurk) judged the acceptability of the second clause in the context of the first on a scale of 1-7. Experiment run on Ibx Farm (Drummond 2014).

Results No significant effect was found for either Adj+/Adj- or VPE/VPA. On the other hand, **the interaction** between Adjunct and VPE was highly significant ($p < 0.0027$), providing strong corroboration for the validity of the discourse conditions.



Experiment 2: Missing Antecedents

Is the difference in acceptability between (1) and (2) due to the choice between VPE and VPA, as classically assumed, or due to the discourse conditions?

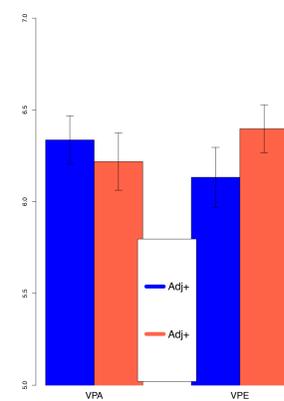
Design 20 items with 4 conditions, identical to those given in (3), but with an additional third sentence with the pronoun *it*, as shown in (4):

- (4) a. Sue didn't write a song. Sam did. He sang it beautifully. (VPE/Adj-)
b. Sue didn't write a song. Sam did it. He sang it beautifully. (VPA/Adj-)
c. Sue didn't write a song. Sam did for her. He sang it beautifully. (VPE/Adj+)
d. Sue didn't write a song. Sam did it for her. He sang it beautifully. (VPA/Adj+)

The procedure was identical to Experiment 1, except that 47 (different) subjects were instructed to judge the acceptability of the third clause in the context of the first two.

Expectations If, as classically assumed, the use of VPA makes it more difficult to recover an antecedent for *it* in the third clause, we would expect the VPA conditions (4-b) and (4-d) to be less acceptable than the VPE conditions (4-a) and (4-c). Given the results of Experiment 1, we might also expect a contamination effect from the acceptability of the second clause, so that, among the VPA conditions, (4-b) would be worse than (4-d), and among the VPE conditions, (4-c) would be worse than (4-a).

Results were exactly parallel to those of Experiment 1, but with a weaker effect for the interaction ($p < 0.0137$). Crucially no effect was found for the choice between VPE and VPA. Given the fact that the third sentence is identical in all conditions, the judgments can only be explained as a contamination effect from the acceptability of the second clause.



Discussion Beyond the fact that Experiment 2 provides no evidence for a distinction between VPE and VPA in terms of missing antecedents, one might argue that it actually provides some evidence against the idea of the presence of unpronounced syntactic structure in the ellipsis site. McKoon et al. (1993) show that the accessibility of discourse entities is affected both by pragmatic and morphosyntactic factors: in this light (5-a) should be easier to process and thus presumably more acceptable than (5-b), because the antecedent-trigger is identical to the antecedent.

- (5) a. Kim is from France, but he's never lived there as an adult.
b. Kim is a Frenchman, but he's never lived there as an adult.

If VPE differs from VPA, in that there is unpronounced structure in the ellipsis site, the necessary antecedent for *it* will be present in the correct morphosyntactic form in VPE (parallel to (5-a)), but not in VPA (parallel to (5-b)), where it would have to be inferred from conceptual structure. One would then expect the unpronounced structure in VPE to make the referent more accessible, increasing the acceptability of the third sentence in the context of VPE, as in (5-a). But no such effect was found.

Conclusion

- Strong corroboration of the discourse conditions.
- No evidence for any effect of VPE vs. VPA on the acceptability of the third clause.
- Missing antecedent phenomena cannot serve as a test for distinguishing deep and surface anaphora, as is still often the case in recent papers.
- Absence of evidence for unpronounced structure in VPE.

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