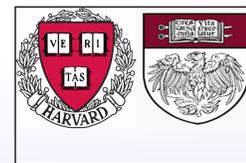# Accounting for Voice Mismatch in Ellipsis

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Problem

Why are voice mismatches (VMM) between elided material and antecedent sometimes acceptable and sometimes not?

Background

Common approaches to ellipsis posit either syntactic [1,2] or semantic [3,4] identity between elided material and antecedent. VMM constructions pose problems for both approaches. Non-acceptability of VMM in (1) problematic for semantic identity; acceptability of VMM in (2) problematic for syntactic identity.

(1) *The problem was looked into by John, and Bob did too. <look into the problem>

(2) The janitor must remove the trash whenever it is apparent that it should be. <removed>

Solutions:

Discourse coherence approach [5]: Coherence relations between antecedent and elided material determine whether syntactic or semantic identity required in ellipsis. *Cause/effect* relations require just semantic identity. *Resemblance* relations require both semantic and syntactic identity.

(3) Jim skipped class because Susie did. (Cause/effect)

(4) Jim skipped class and Susie did too. (Resemblance)

But...

Frazier/Clifton [6]: No evidence for coherence approach
Kim/Runner [7]: Cause/effect improves VMM in VPE, not pseudogapping

Syntactic approach based on *size* [1,2]: In big ellipses, when ellipsis contains voice head, VMM illicit. In small ellipses, when ellipsis does not contain voice head, VMM licit.
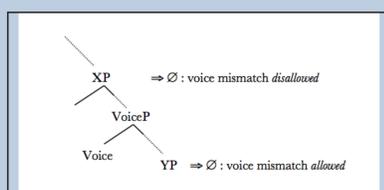
Predictions

Coherence Approach: VMM in cause/effect ellipses more acceptable than in resemblance. Size of ellipsis does not affect acceptability.
Syntactic Approach: VMM in small ellipses more acceptable than in big ellipses. Coherence relation does not affect acceptability.

References

[1] Merchant, J. (2007). Voice and ellipsis. In Progress. [2] Chung, S. (2011). Syntactic Identity in Sluicing: How Much, and Why. Ms., UC-Santa Cruz. [3] Dalrymple, M., S. M Shieber, and F. Pereira. (1991) Ellipsis and Higher-Order Uni- Pcation. Linguistics and Philosophy 14:399-452. [4] Hardt, D. (1993). Verb phrase ellipsis: Form, meaning, and processing. PhD thesis, University of Pennsylvania. (Distributed as IRCS Report 93-23.) [5] Kehler, A. (2000). Coherence and the resolution of ellipsis. Linguistics and Philosophy, 23:533-575. [6] Frazier, L., and C. Clifton. (2006). Ellipsis and discourse coherence. Linguistics and Philosophy, 29(3): 315Ð346. [7] Kim, C. S. and Runner, J. T. (In Press). Discourse structure and syntactic parallelism in vp ellipsis. [8] Kertz, L. (2010). Verb phrase ellipsis: The view from information structure. Draft.

Experiment

- 2×2×2×2 design with four factors: coherence relation (cause/effect vs. resemblance), voice (match vs. mismatch), size (big vs. small), and sentence type (elliptical vs. non-elliptical controls). For big, we test sluicing; for small, we test verb phrase ellipsis (VPE).

- 80 16-condition items with context sentence. Native English speakers (n=51) rated acceptability (1-7) on Amazon Mechanical Turk

(5) Jean was trying to sell her car. I know that someone bought it

Elliptical Conditions

(i) a. and Lisa knows who.   (Big, Resemblance, Matched)
     b. and Lisa knows by who.   (Big, Resemblance, Mismatched)
(ii) c. because she told me who.   (Big, Cause-Effect, Matched)
     d. because she told me by who.   (Big, Cause-Effect, Mismatched)
(iii) e. and Lisa also knows that someone did.   (Small, Resemblance, Matched)
      f. and Lisa also knows that it was.   (Small, Resemblance, Mismatched)
(iv) g. because she told me that someone did.   (Small, Cause-Effect, Matched)
     h. because she told me that it was.   (Small, Cause-Effect, Mismatched)

Non-Elliptical Conditions

(i) i. and Lisa knows who bought it.   (Big, Resemblance, Matched)
     j. and Lisa knows who it was bought by.   (Big, Resemblance, Mismatched)
(ii) k. because she told me who bought it.   (Big, Cause-Effect, Matched)
     l. because she told me who it was bought by. (Big, Cause-Effect, Mismatched)
(iii) m. and Lisa also knows that someone bought it. (Small, Resemblance, Matched)
      n. and Lisa also knows that it was bought.   (Small, Resemblance, Mismatched)
(iv) o. because she told me that someone bought it. (Small, Cause-Effect, Matched)
     p. because she told me that it was bought.   (Small, Cause-Effect, Mismatched)

Results
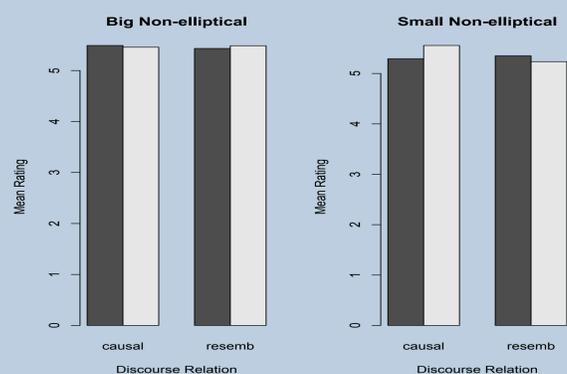
In non-elliptical conditions, no significant differences. But, in elliptical conditions:

- Main effect of voice (p<.001): Matched judged more acceptable than Mismatched (a,c,e,g>b,d,f,h; 5.14 vs. 3.82)

- Interaction between size and coherence (p<.001): In **small elliptical** conditions only, Cause-Effect judged better than Resemblance (g,h>e,f; 4.94 vs. 4.32)

- No effect of coherence in big conditions
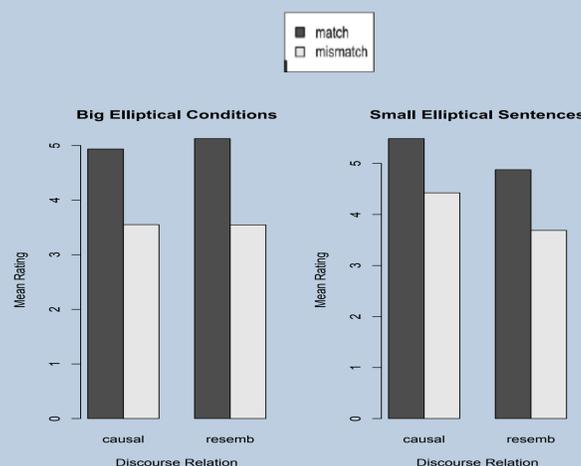
Contra syntax-only approach: There is an effect of coherence.
Contra coherence-only approach: Coherence effect only seen in small ellipses.

Conclusions

Data show a discourse effect on ellipsis, but this effect only possible in small, not big ellipses. Thus, a syntactic identity condition cannot be replaced by the discourse approach. Syntax plays a critical role in both cause/effect and resemblance ellipses, when size is taken into account. Syntactic identity is necessary for ellipsis, but coherence effects do further modulate the acceptability in small ellipses, but not big. Additionally, lack of effects in the non-elliptical conditions (i-p) problematic for accounts which assume general information structural principles, not specific to ellipsis, can explain the VMM facts (cf [8]).