No cost for canceling causal inferences in the comprehension of short English narratives

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Online commitment to pragmatic inferring
- Are inferences generated actively and incrementally?
- Do inferences require costly reanalysis to retract?

Our test case: Causal inferences in discourse.

Sally voted for the candidate because she has a progressive platform.

Comprehenders use schemata like EXPLANATION(α, β) to expect certain form and content in running discourse [9–12, 14].
- When is the associated inference α because β computed?
- Does it become a firm representational commitment?

What does incremental commitment look like?
Two features diagnose active and firm representational commitment in lexical [6, 8], aspectual [4, 13], and quantificational [5, 7] ambiguities:
- Representation costs at the ambiguous region when content or recent context is inconsistent with a heuristic preference or default. (e.g. subordinate access, coercion)
- Reanalysis costs at late disambiguation if incompatible with a heuristic preference.

Hypotheses & Predictions
Causal inferences are incremental and heuristic:
- When α begs explanation, readers predict α because β.
- Predicts difficulty on β when it is not a plausible or possible explanation for α.

Causal inferences are firm:
- Readers register α because β as a representational commitment.
- Predicts difficulty when an explicit, contrary explanation is later given for α.

Experiment 1: Causal plausibility (n = 128)
RCs in choice contexts are expected as explanations, but later retraction comes for free.

Early
Last week, because his name is first on this year’s ballot, she voted for the candidate that has a progressive platform, Pat Mirabella.

Late
Last week, she voted for the candidate that has a large mustache, Pat Mirabella.

Plausible
Last week, because his name is first on this year’s ballot.
Last week, because his name is first on this year’s ballot, she voted for the candidate that has a large mustache, Pat Mirabella.

Implausible
Last week, she voted for the candidate that has a large mustache, Pat Mirabella, because his name is first on this year’s ballot.

Conclusions
✓ Incremental: Implausible = slow, even after early because.
✗ Not firm: No reanalysis cost for because after plausible explanation. (BF10 > 2)

References

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