

Limited Reactivation in Noun Phrase Ellipsis

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Questions: What is the nature of the representation at ellipsis sites? What information, and how much, is reactivated?

Background

Reactivation occurs when structure is reaccessed to resolve a dependency. e.g., fillers reactivating at gap sites, pronouns reactivating their antecedents.

Ellipsis instantiates such a dependency between the antecedent and ellipsis site.

- Sue walked John's [dog]_{Antecedent} and Bill walked Mary's [dog]_{Ellipsis Site}
- differs from filler-gap ○ requires antecedent ○ *but* contains non-overt material
- What is the depth of reactivation needed to interpret ellipsis sites?

Agreement Attraction (AA) can diagnose the amount of structure reactivated. AA occurs when the verb incorrectly agrees with **the attractor** that intervenes between **the grammatical controller of agreement** and the verb.

- The *key*_{SG} to the *cabinets*_{PL} *are*_{PL} on the table.

AA is fed by differing number features contained in the same constituent[3-5].

(NP)Ellipsis + AA: Can agreement attraction effects be seen after ellipsis sites?

- AA-triggering complex nominals can be used as the antecedent for NPE
- The amount of structure reactivated will reactivate different number features
- Sarah's [key to the cabinets]_{Antecedent} got lost, but Scarlett's ...

Full Reactivation: [key to **the cabinets**] *were* on the table. *Deep*
 Partial Reactivation: [**key**] *was* on the table. *Shallow*

➤ Agreement appearing on the verb after the ellipsis site will diagnose the size of the reactivated constituent.

- ★ Predictions: If full reactivation → ✓ agreement attraction
- If partial reactivation → ✗ NO agreement attraction

Experiment 1

? Do complex AA-triggering nominals generate agreement attraction when in a possessive structure?

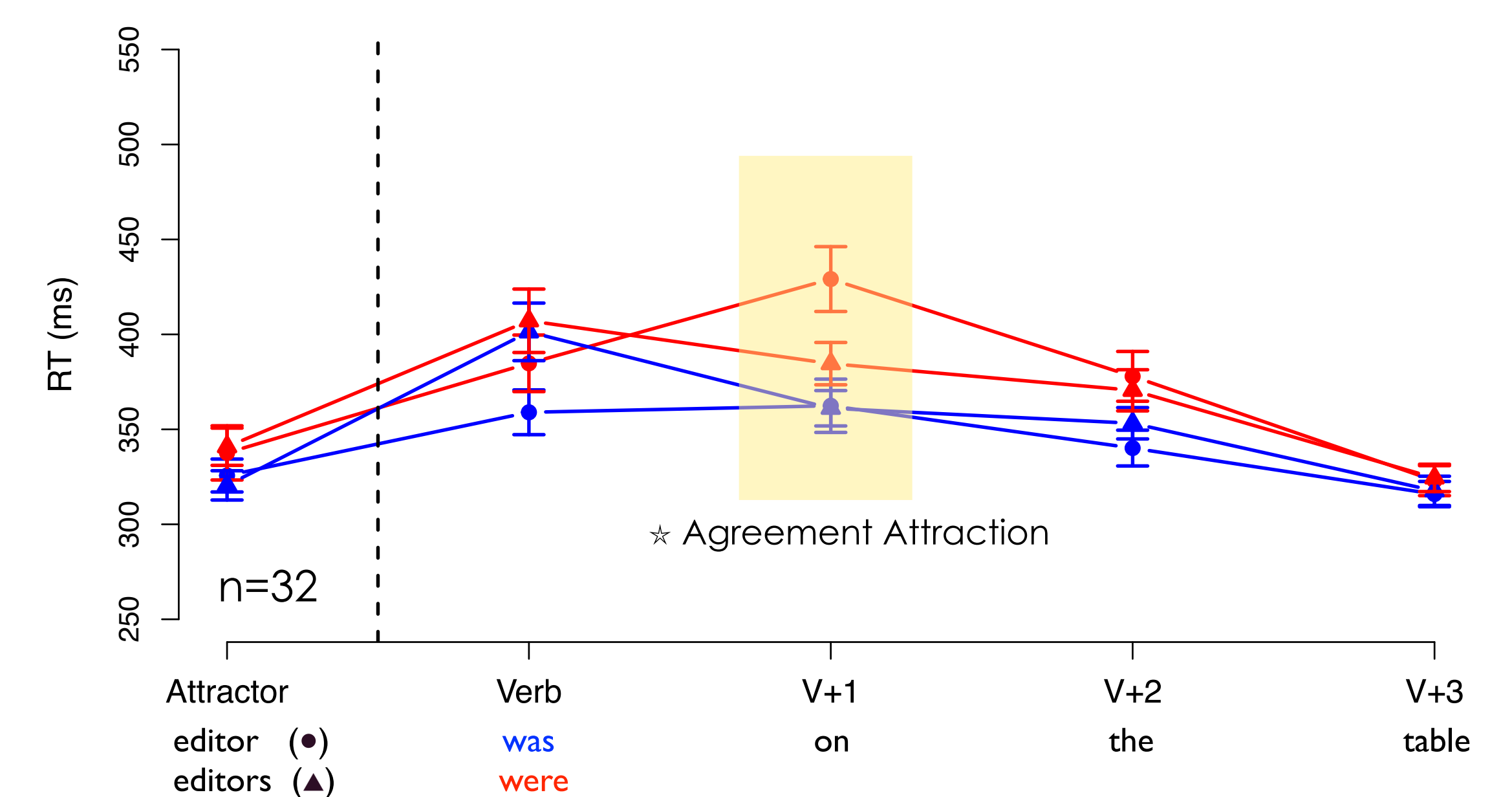
Design: Self-paced reading; 32 participants; 32 item sets distributed via Latin Square; 96 fillers
 2x2; Attractor NUMBER (Singular ●, Plural ▲) x Verb GRAMMATICALITY (Grammatical, Ungrammatical)

Items: Scarlett's memo from the editor_{SG} {*was*_G/*were*_{UG}} on the table. *Singular Attractor*
 Scarlett's memo from the editors_{PL} {*was*_G/*were*_{UG}} on the table. *Plural Attractor*

Main effect of GRAMMATICALITY; interaction of NUMBER x GRAMMATICALITY

Ungrammatical, Plural (▲) condition is read faster than Ungrammatical, Singular (●)

★ **Complex AA-triggering nominals in a possessive structure ✓ DO generate agreement attraction.**



Experiments 2 & 3

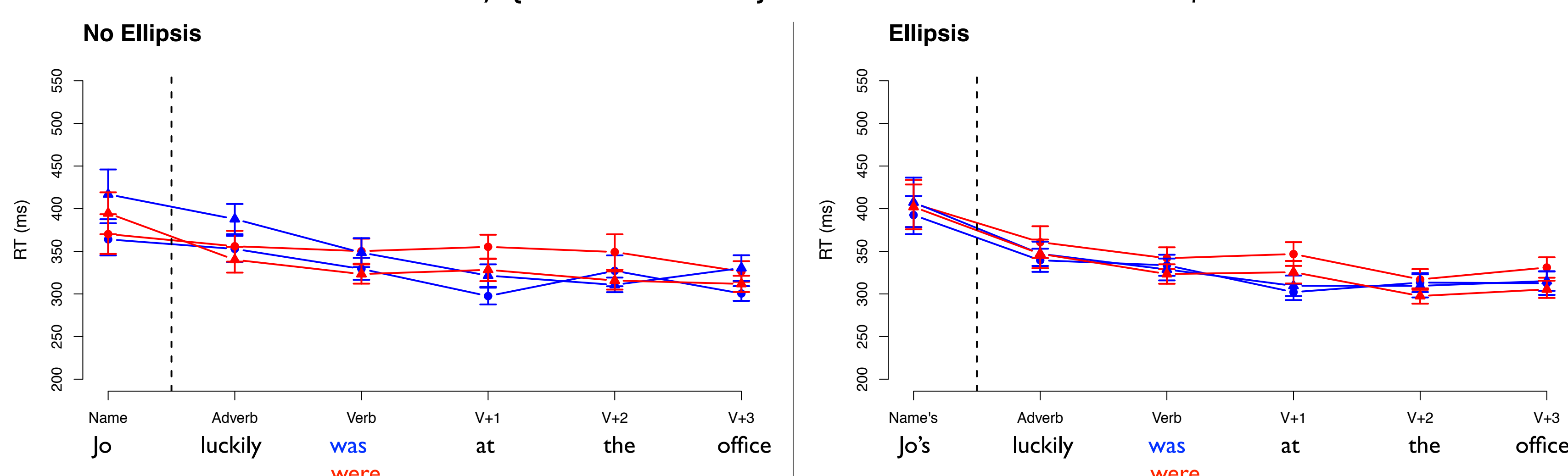
? Do complex AA-triggering nominals generate agreement attraction when elided?

Design: Self-paced reading
 2x2x2; NUMBER x GRAMMATICALITY x ELLIPSIS (Ellipsis, No Ellipsis)

Experiment 2: Clauses Joined with Causal Connectives

n=32

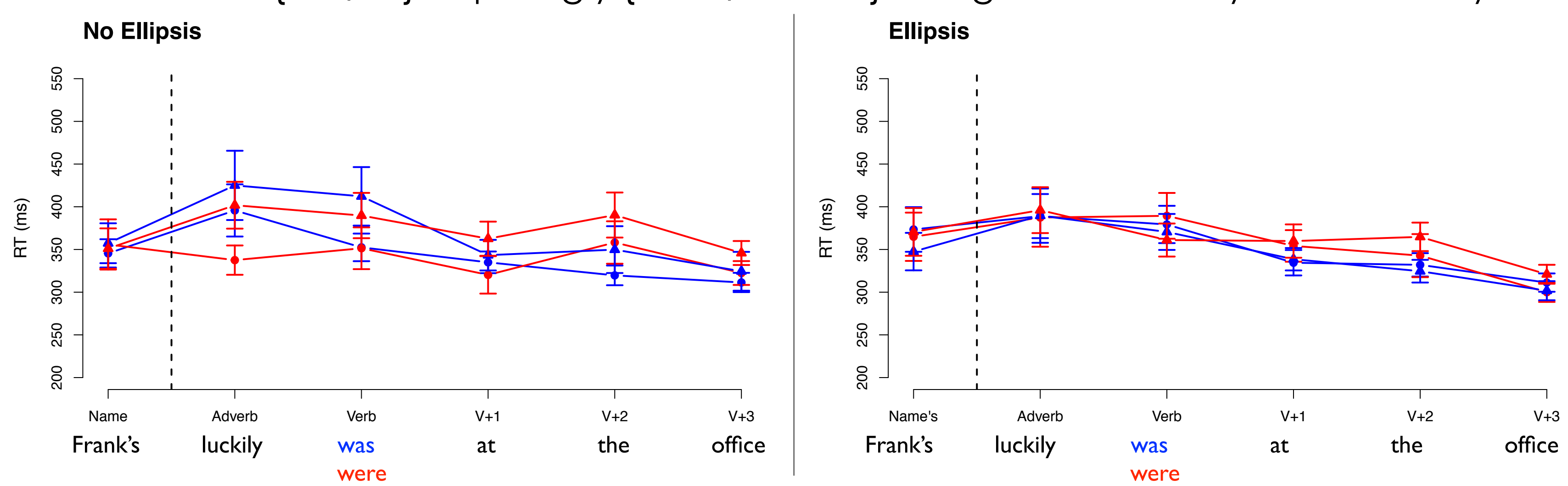
Items: Ann's memo from the editor{ \emptyset _{SG}/*spl*} got lost, while Jo's luckily {*was*_G/*were*_{UG}} at the office. *Ellipsis*
 while Jo luckily {*was*_G/*were*_{UG}} at the office. *No Ellipsis*



Experiment 3: Clauses Joined with Temporal Subordinators

n=60

Items: Before Harvey's memo from the editor{ \emptyset _{SG}/*spl*} could be found, Frank{ \emptyset _{NE}/*'se*} surprisingly {*was*_G/*were*_{UG}} being scrutinized by the secretary.



Main effect of GRAMMATICALITY; no GRAMMATICALITY x ATTRACTOR interaction

★ When elided ... ✗ **NO agreement attraction.**

✓ Sensitivity to GRAMMATICALITY; *at least* reactivating head.

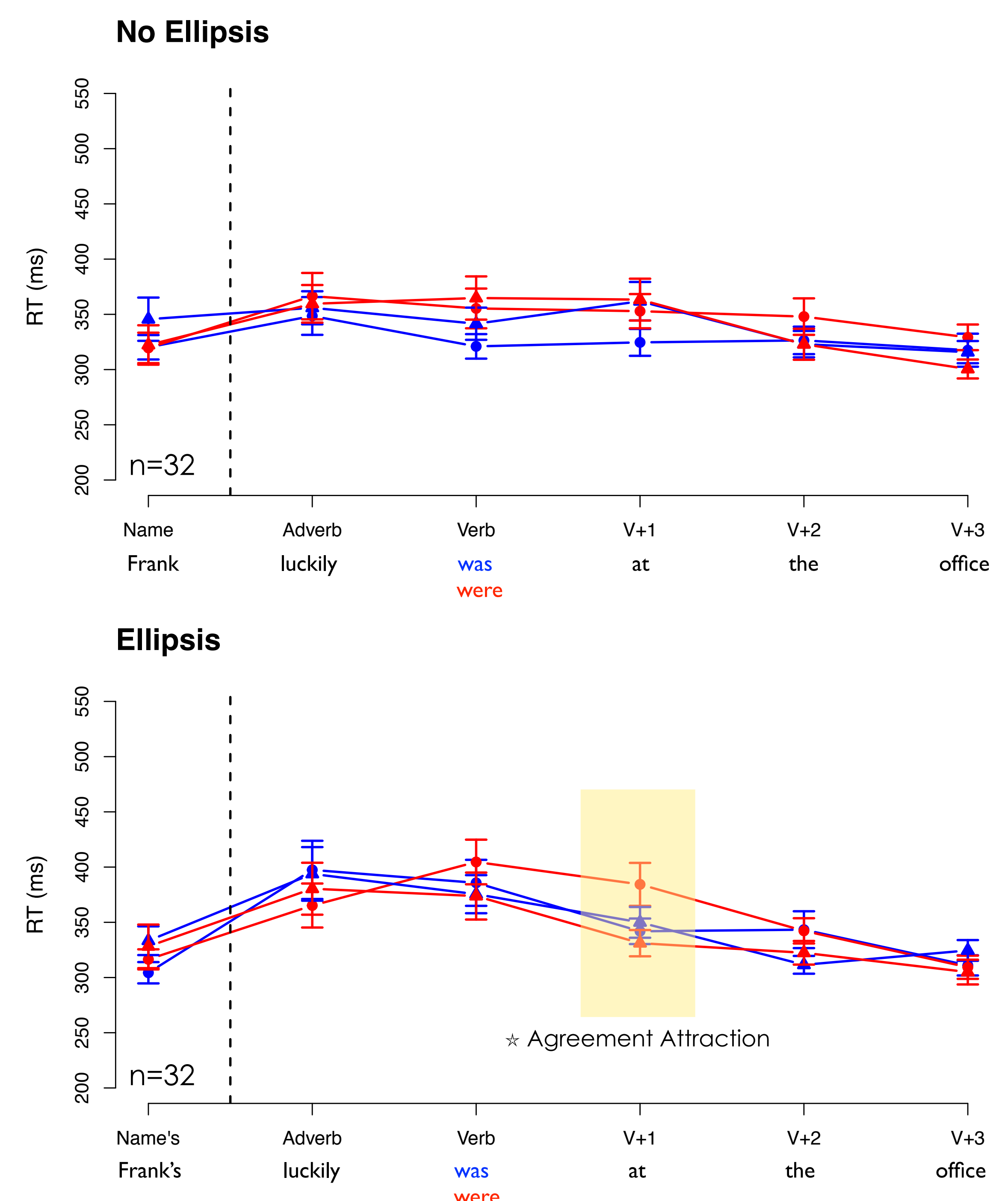
★ **Claim:** Reactivation is partial; only the head is reactivated
 NO attraction since the intervening number features are not reactivated

Experiment 4

? Does agreement attraction occur when only the attractor is elided?

Design: Self-paced reading
 2x2x2; NUMBER x GRAMMATICALITY x ELLIPSIS

Items: Before the memo from Harvey's architect{ \emptyset _{SG}/*spl*} could be found, the report from Frank{ \emptyset _{NE}/*'se*} {*was*_G/*were*_{UG}} sent to the engineer.



Main Effect of GRAMMATICALITY; Interaction of GRAMMATICALITY x ATTRACTOR

★ When only the head is elided ... ✓ **DO generate agreement attraction.**

- ★ **Conclusions:**
 - Reactivation is not deep/exhaustive; there is only partial reactivation
 - Representation at ellipsis sites is sensitive to number features

Discussion

- Sensitivity to morpho-syntactic number features implicates that the representation is partially syntactic
- Lack of attraction effects in Experiments 2 & 3 is *contra* a percolation account, but compatible with a content-addressable account

Future Work

- Is all reactivation under ellipsis partial (generalize to VPE, sluicing, etc.)?
- Are mismatches in NPE allowed as in VPE?
- What factors trigger partial versus full reactivation?

References

- [1] Merchant, J. (2001). [2] Hardt, D. (1993). [3] Bock, J. K., & Miller, C. A. (1991). [4] Wagers, M., Lau, E., Phillips, P. (2009). [5] Eberhard, K. M., Cutting, J. C., & Bock, J. K. (2005).

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