Discourse Coherence: How do speakers show and listeners decide what the center of attention is?

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HOUSTON (Reuters) A Texas woman was sentenced to 10 years in jail for running over the manager of a McDonald's with her car because she wanted mayonnaise on her cheeseburger.

Waynetta Nolan, 37, showed no emotion Thursday as the sentence was read in court following a trial in which the McDonald's manager, Sherry Jenkins, said she gave Nolan the mayonnaise she requested, but she flew into a rage anyway.

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How do speakers show and hearers decide what the center of attention is?

Overview

- **Center(s) of Attention**

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- Center(s) of Attention
  - Syntactic prominence
  - Semantic prominence

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- Experiments

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- Further Work

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- Implications

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Question: How is the center of attention of an utterance determined?

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Most salient entity $\Longrightarrow$ center of attention

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Main Question: Which determines the center of attention: syntactic prominence or semantic prominence?

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- *hit*: HITTER, HITTEE
- *give*: GIVER, THING-GIVEN, RECEIVER
- *admire*: ADMIRER, THING-ADMIRED

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How is semantic prominence determined? From the lexical semantics of the verb.

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- *give*: SOURCE, THEME, GOAL
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Semantic Hierarchy: $AGENT > PATIENT > OTHERS$

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- After a, there is a clear CA: *John*

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- After a, there is a clear CA: *John*
- After b, there is no clear CA

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John$_i$ ** could hardly hit Matt$_j$.		CONTROL
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- In SPLIT condition, neither *paint* nor *wall* more salient than the other

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a. It$_i$ dribbled down and made a mess.	COREF$_{PAT}$
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Preliminary Conclusions

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Further work

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Language Teaching

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- computational representations of pronoun processes
  - pronominalization
  - pronoun resolution algorithms

*References

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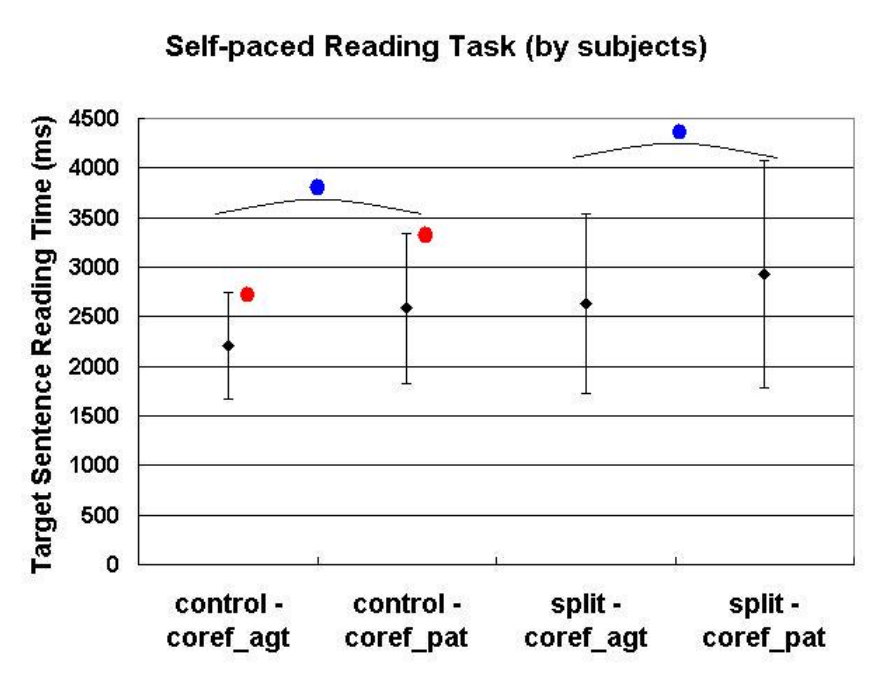
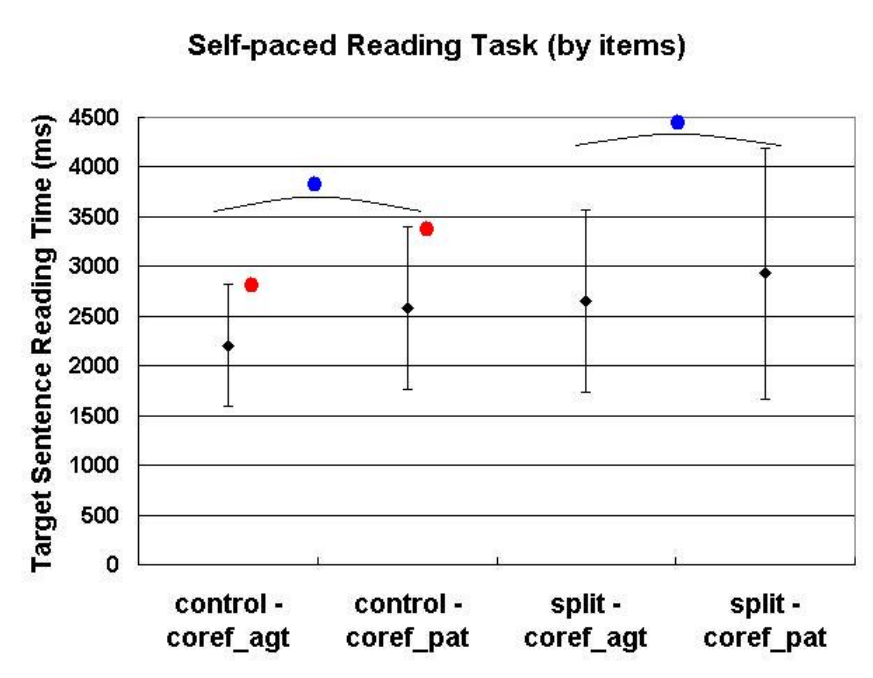
Hudson-D'Zmura, S. and Tanenhaus, M. (1997). Assigning antecedents to ambiguous pronouns: The role of the center of attention as the default assignment. In Walker, M., Joshi, A., and Prince, E., editors, *Centering Theory in Discourse*, pages 199–226. Clarendon Press, Oxford.

Lappin, S. and Leass, H. (1994). An algorithm for pronominal anaphora resolution. *Computational Linguistics*, 20:535–561.

Mathews, A. and Chodorow, M. (1988). Pronoun resolution in two-clause sentences: Effects of amiguity, antecedent location, and depth of embedding. *Journal of Memory and Language*, 27:245–260.

Experiment 3





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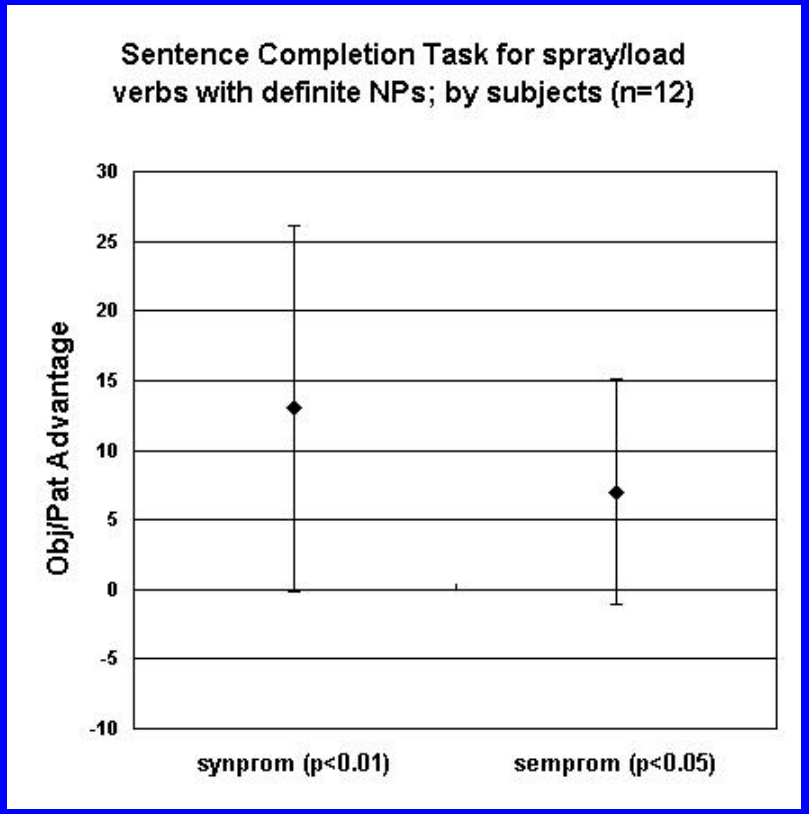
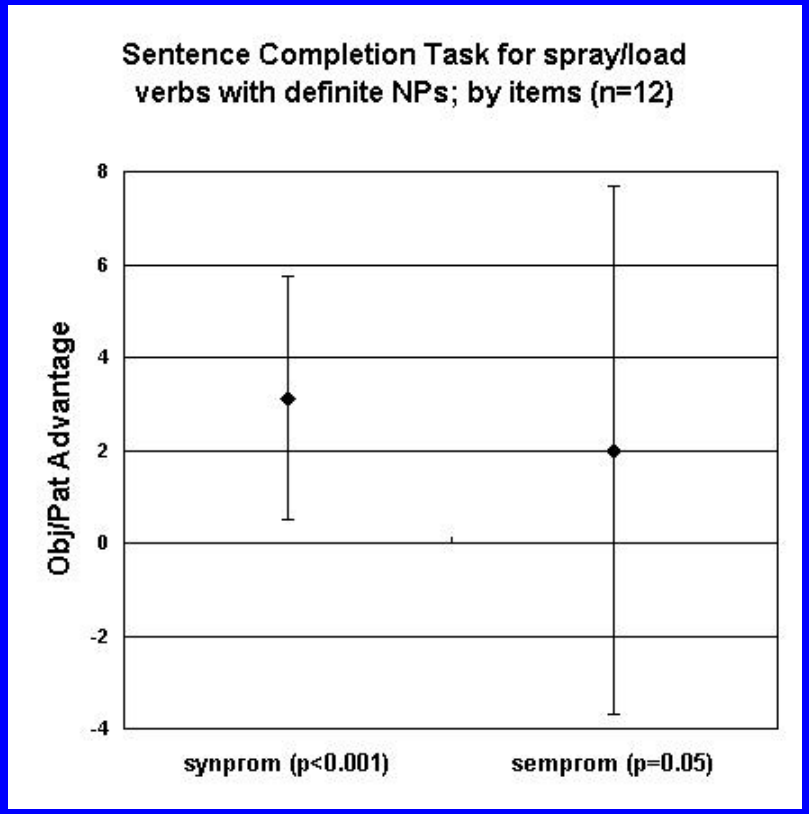
Experiment 2 - definites





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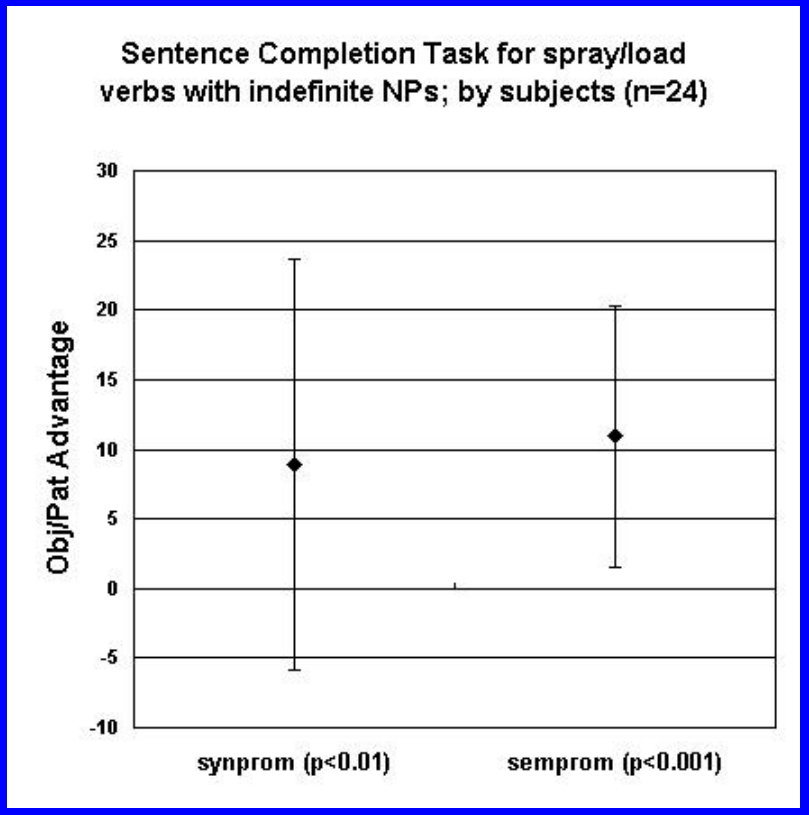

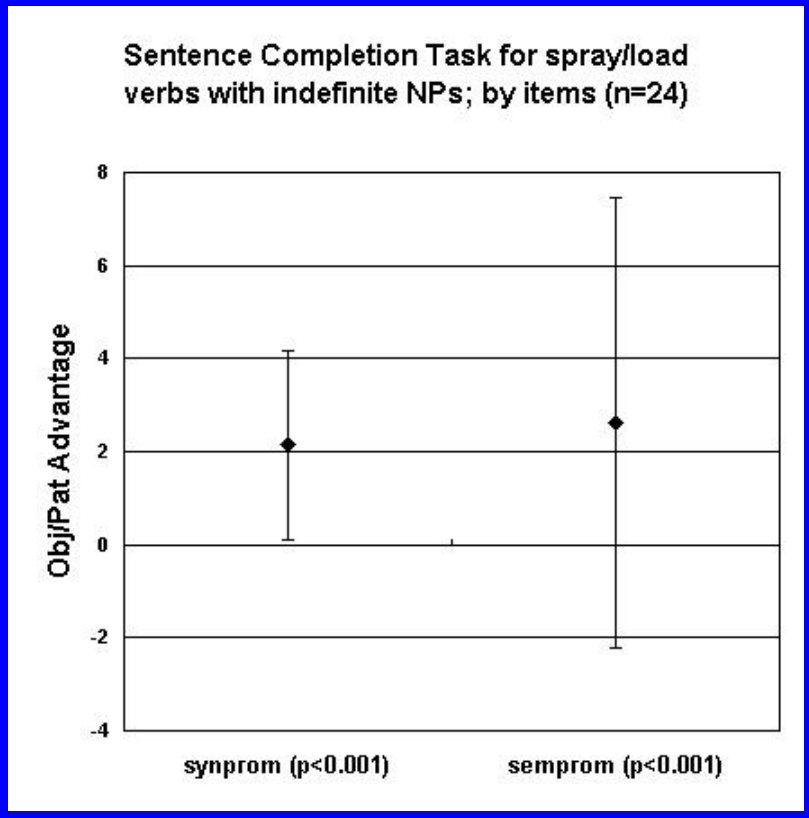

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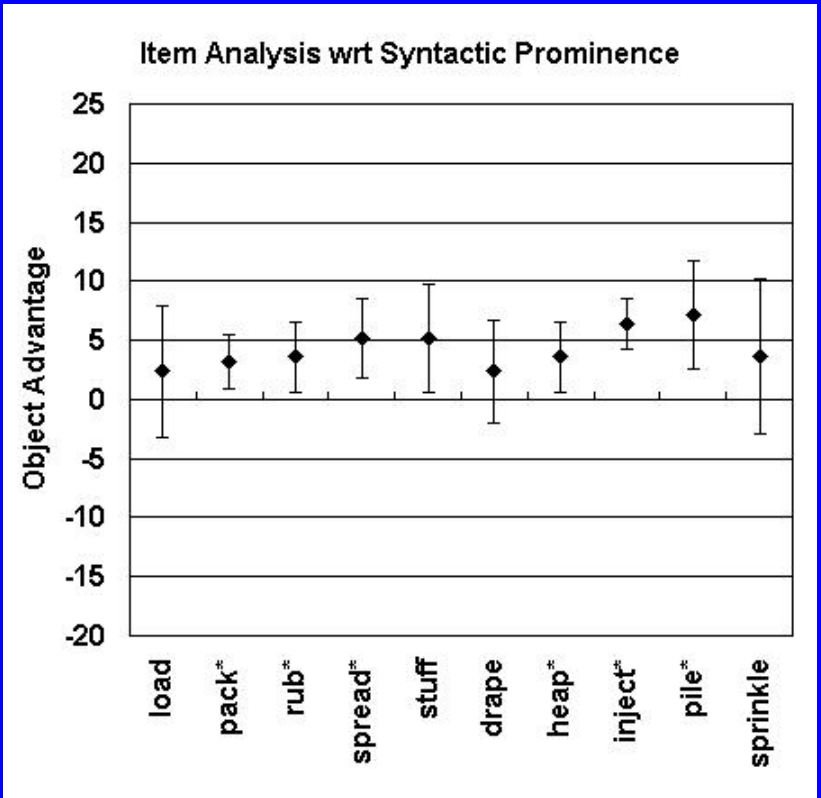
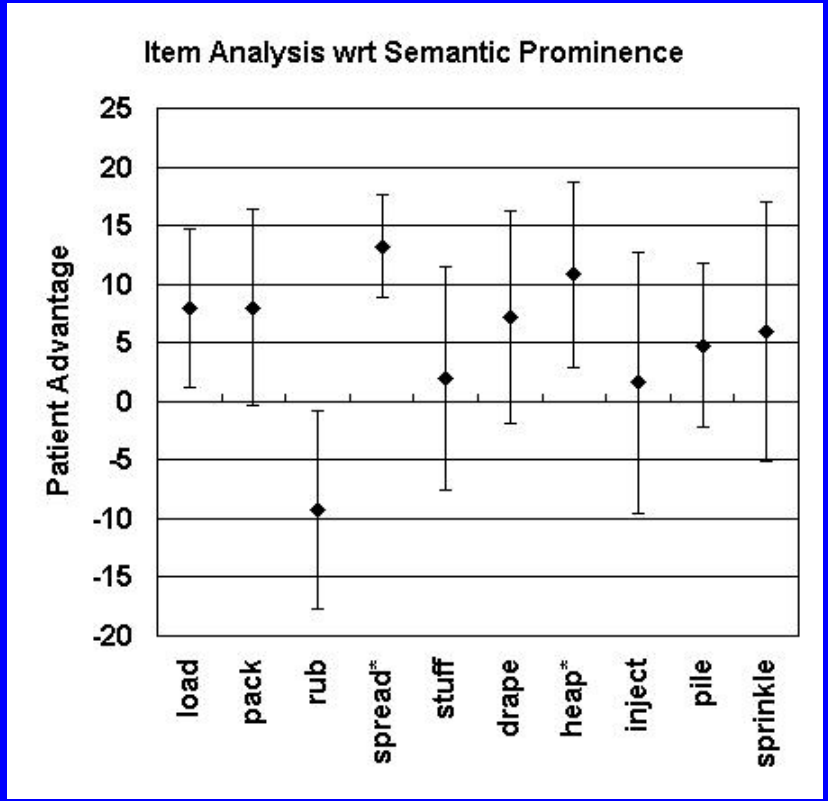
Experiment 2 - Item Analysis





a.	Max rubbed some wax$_i$** on a surfboard$_j$.	CONTROL
a'.	Max rubbed a surfboard$_j$* with some wax$_i$*.	SPLIT
b.	It$_i$ was very soft and easy to apply.	COREF$_{PAT}$
b'.	It$_j$ looked like a glistening rocket.	COREF$_{LOC}$