

This paper reports results from one online and two offline studies investigating locality preferences in satisfying presuppositions. We used sentences with *also*, standardly assumed to entail their propositional content  $\phi$  and presuppose a distinct proposition  $\psi$  having a different value from  $\phi$  for the focused constituent (Horn 1969; Rooth 1985). Thus, the final sentence of (1) entails that Peter got Twizzlers and presupposes that he got something other than Twizzlers. Viewing the trigger *also* as forming a dependency with the discourse content satisfying the presupposition (see e.g. van der Sandt 1992), we asked whether trigger-dependencies are constrained by locality (Hawkins 1994; Gibson 2000) and whether the relevant sense of locality is linear or relativized to hierarchically-structured constituents (Webber & Joshi 1998; Kehler 2000).

Two offline studies compared discourses where multiple possibilities exist for satisfying the presupposition and examining the preferences registered by comprehenders (1)-(2). In (2), a locality preference predicts the final sentence is best interpreted as “*Peter got Twizzlers and Jawbreakers*,” where “*Sometimes he gets Jawbreakers*” is linearly closest to, and in the smallest discourse constituent containing *also*. If dependencies minimize linear distance, the final sentence in (1) should show the same bias as in (2), yielding an interpretation where Peter has Twizzlers and Jawbreakers. However, if locality is hierarchical, interpretations of (1) and (2) should differ: the closest dominating discourse node is the Topic in (1), but Contrast2 in (2). Comprehenders interpreted material introduced in the smallest discourse unit dominating the trigger sentence as the presupposed content, supporting hierarchical locality, and furthermore resisted distinguishing among units with equivalent hierarchical status.

Do these biases influence real-time discourse processing? In a Visual World eye-tracking study (Tanenhaus et al. 1995), comprehenders heard discourses like (1) (and no-*also* controls). Eye movements were recorded as they clicked on e.g. “what Peter got.” Displays contained a subset of mentioned items (3a), a set of discourse-new items (3b), and either a superset of locally-mentioned items (3c) or a superset of all discourse-mentioned items (3d). If hierarchical structure matters, the global superset (respects constituency, violates linear locality) should be preferred over the local superset (minimizes linear distance, violates constituency). Comprehenders dispreferred the local to the global superset—even when it was the only item satisfying the presupposition of *also*—preferring to satisfy the presupposition at the level of the smallest discourse unit containing the presupposition trigger, regardless of linear distance.

In sum, discourse processing favors local dependencies, as in other domains, with the relevant notion of locality defined over hierarchical discourse structures.

- (1) **Topic:** The kids are buying Halloween candy.  
**Contrast1:** Beth bought candycanes.  
**Contrast2:** Chris bought MnMs and Lemonheads.  
**Narrative:** He ran out of money for Jawbreakers.  
**Contrast3:** Peter also got TWIZZLERS.
- (2) **Topic:** The kids buy their own Halloween candy every year.  
**Contrast1:** Peter usually gets MnMs.  
**Elaboration:** He especially likes peanut MnMs.  
**Contrast2:** Sometimes he gets Jawbreakers.  
**Narrative:** He also gets TWIZZLERS.
- (3) a. subset (*MnMs, Lemonheads*)  
 b. discourse-new (*Twizzlers, Smarties, Starburst*)  
 c. superset-local (*Twizzlers, MnMs, Lemonheads*)  
 d. superset-global (*Twizzlers, MnMs, Lemonheads, candycanes*)

## References

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