The Effects of Embedding on Structural Priming
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Speakers’ Sensitivity to Structural Complexity

Speakers tend to match their use of a syntactic structure to its frequency in the input. Bock (1986) Syntactic priming – speakers tend to reuse recently encountered forms – Kaushik et al. (2006) – speakers match the frequency of their use to that occurring in the input. However, learners do not match frequency information in all situations (Hudson Kam & Newport, 2005).

One possible factor: Structural complexity. More complex structures may be difficult to process, leading to failures to match frequency.

Structural Priming and Embedding

Experimental Design

Speakers tend to match their use of a syntactic structure to its frequency in the input.

Materials

Experimental items for Experiment One
18 dative verbs, not overly biased toward DO or PD (Gries, 2005)
- Matrix – boy, feed, issue, lend, pass, related to, throw
- Embedded – award, bake, hand, offer, owe, promise, sell, serve, show

Each prime had a matching target, i.e. it used the same verb with same target position (matrix/embedded)

Experiment Items for Experiment Two/Three
12 dative verbs, each occurred in matrix and embedded position (total of 24 primes), all of them took the PD alternation.
- Verbs – boy, feed, hand, lend, make, offer, owe, promise, sell, show, throw

Data suggest that priming behavior is not sensitive to embedding. However, it is still possible that embedding interacts with priming behavior when the task becomes more demanding.

References


The data used for the analyses consisted of the raw scores (Studebaker 1985) of the proportion of PD responses given the number of DO and PD responses. Each speaker had four scores corresponding to the two positions (embedded/matrix) and the relevant manipulation (e.g. Exp 1 = prime PD or DO and Exp 2 = number of intervening fillers 1 or 3)

Results suggest that priming behavior is not affected by whether the prime is in matrix or embedded position. These results replicate and extend Brangian et al.’s (2006) findings to new embedded domains and at longer intervals.

Conclusions

- The results suggest that priming behavior is not affected by whether the prime is in matrix or embedded position.
- This pattern of behavior does not seem to be affected by the number of intervening items or by whether the prime and target verbs match.
- These results replicate and extend Brangian et al.’s (2006) findings to new embedded domains and at longer intervals.