Active formation of filler-gap dependencies is not accounted for by discourse prominence considerations

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Introduction

The Active-Filler hypothesis (Frazier, 1987) suggests that the parser is eager to resolve filler-gap dependencies and actively postulates their resolution. The motivation for this processing preference can be formulated in different terms, i.e. as a pressure to syntactically license the dependency (e.g. the theta criterion - Pritchett, 1992), a pressure to interpret as much of the sentence as possible (Altmann, 1999), or a preference for potential focus domains (and thus less-embedded positions) as extraction sites (Kuno, 1976). These accounts have different predictions with regard to active formation of non-extraction dependencies.

Syntactic licensing: Active postulation of a resolution only when a syntactic dependency is involved
Maximal interpretation: Active prediction of a dependency for any contextually relevant referent
Discourse prominence: Active prediction of a dependency only in sentences which involve referents (fillers or not) that favour discourse-prominent slots.

Acceptability

(2) The manager checked \{ regarding the nurse with the nurse \} if the patient persuaded

\{ the caretakers \} to curse the doctors.

An acceptability judgments experiment (N = 32) was conducted to further test for differences in the usage of backward referring pronouns in “with” and “regarding” structures, using the design in (2).

Results revealed a significant interaction (p = .01), which reflected a stronger requirement for a corresponding pronoun in clauses following “regarding” type antecedents (p < .001) relative to the one observed following antecedents in “with” constructions (p = .33).

Discussion

Results suggest that although maximal interpretation and pragmatic prominence preferences play a role in comprehension and production of backward referring pronouns, they are not a sufficient condition for active dependency formation, as observed in filler-gap dependencies. This provides evidence for syntactic licensing as the motivation for the active-filler strategy.

Alternatively, could the absence of the active strategy reflect an under-threshold response?


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