

False memories of enriched sentences in context: Evidence from an eye-tracking probe recognition paradigm

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A sentence such as 'We finished the paper' is indeterminate regarding what we finished doing with the paper. By hypothesis, these sentences require 'semantic enrichment'. These sentences constitute a test case for two major issues on language comprehension. First, whether or not semantic composition is simple ('classical') or enriched with content supposedly provided by the lexical complement 'paper' (a procedure known as 'coercion'). And, second, the nature of the linguistic and cognitive resources that help us interpret the event that the sentence conveys. We conducted an eye-tracking study to investigate whether indeterminate sentences embedded within biasing contexts would trigger contextually driven (though false) event interpretations. Following Sachs (1967, 1974), we developed a probe recognition paradigm whereby participants (N=36; 18 in the current analysis) were presented with short discourse contexts (7 to 13 sentences in length), followed unexpectedly by one of three recognition probe types: the identical sentence (e.g., 'Lisa began the book on Saturday'), a contextually-licensed (but false) probe (...began reading the book...) and a contextually-unlicensed probe (...writing the book...). Probes were presented 0 seconds (s) after having read the indeterminate sentence (always the fourth sentence in the context), or following an additional 25s of neutral discourse. We found statistically significant differences in probe reading time (on the target 'book') for both presentation times only in right-bounded duration (identical > licensed = unlicensed; $F(2, 34) = 3.38$, $p = .046$, $\eta^2 = .166$). We suggest that true and enriched but false propositions linger during reading of indeterminate sentences in context.