Parallelism isn't priming: evidence from eye tracking German

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In "and"-coordinated clauses, the second conjunct is read faster when it parallels the first in syntactic structure than when it doesn't. It has been suggested that such facilitation is elicited per a priming-like mechanism (e.g., Dubey, Sturt, & Keller, 2008). Five eye-tracking experiments on German language comprehension investigated whether this is the case by examining (a) the time course of parallelism effects; (b) their presence in the absence of verb repetition; and (c) their potential modulation per the meaning of coordinating conjunctions. Analyses of data from all five experiments confirmed a relatively late time course of constituent order parallelism effects. While repetition of the verb has often been a pre-requisite for priming effects in comprehension, parallelism effects appeared in the absence of verb repetition. Moreover, while we observed robust parallelism effects across four experiments for "and"-coordination, "but"-coordination, excluding likeness of the conjuncts, eliminated parallelism facilitation. For a conjunction that is compatible with likeness of conjuncts but differs in lexical form ("während" 'while'), however, we observed a similar parallelism pattern as for "and"-coordination. Our results suggest parallelism effects depend upon conjunction meaning. Together with the robustly late time course of parallelism effects (e.g., Frazier et al., 1984; Knoeferle & Crocker, 2009) these findings support the view that facilitation through structural parallelism is unlikely elicited by the same mechanism as structural priming.