Context vs. Compositionality: How Do Context-induced Ad-hoc Affordances Interact with Semantically Stored Telic Information? – An ERP Study

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Abstract: In an ERP study we investigate the time course of the interaction between the lexically specified telic role of a noun and the contextually provided ad-hoc affordance induced by a linguistic discourse. If preceded by a neutral discourse context, a verb inconsistent with the telic role in a sentence elicits an enhanced N400 compared to a congruent verb. However, if the preceding discourse context induces an ad-hoc affordance for the object that conflicts with the lexically specified telic role of the referring noun, we observe a crossing-over: compared to the neutral context, the N400 elicited by the inconsistent verb is significantly reduced in this context, whereas the N400 elicited by the congruent verb is significantly enhanced. We interpret these results as a consequence of the immediate functional replacement of the telic role with the contextually triggered ad-hoc affordance, thus supporting a single-step model of sentence meaning composition.