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Proceedings of the Annual Meeting of the Cognitive Science Society

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

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Publication Date

2020

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Peer reviewed

To Move or not to Move: An ERP Study on the Processing of Literal and Fictive Motion Constructions

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Abstract

This study used ERP method to investigate the processing of fictive motion and literal motion during natural language comprehension. A hypothesis is that the motion component of a verb is preserved in both literal and fictive motion constructions (The army/The bridge crossed the river). However, the incorporation of a motion-event frame into fictive motion constructions requires reanalysis or reconstruction both syntactically and semantically. The ERP results reveal that a P300 effect on the subject NPs, a P600 effect on the motion verbs and an N400 modulation on the sentence-final complement NPs were uncovered in the processing of fictive motion constructions in relative to literal motion constructions. These results suggest that the processing of fictive motion requires increased cognitive effort than the processing of literal motion condition.