

*Electrophysiological insights into the processing of nominal metaphors*

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We used event-related potentials (ERPs) to examine the time courses of processing metaphorical and literal sentences in the brain. ERPs were measured to sentence-final (Experiment 1) and mid-sentence (Experiment 2) critical words (CWs) as participants read relatively familiar nominal metaphors (“A is a B”) as well as literal and semantically anomalous sentences of the same form. Sentences were presented word-by-word and participants made plausibility judgments after each sentence. Significant widespread (Experiment 1) or anterior (Experiment 2) N400 effects were evoked by CWs of the anomalous (relative to the literal) sentences. This was followed by a late negativity at the anomalous sentence final CW (Experiment 1) or at the sentence final word following the anomalous CW (Experiment 2.) The CWs in the metaphorical sentences (relative to the literal sentences) evoked a N400 effect that was small, highly localized and variable in distribution in the two experiments, suggesting that figurative meaning is accessed quite quickly and integrated into the context. CWs in the metaphorical sentences also elicited significantly larger late positivities relative to literal CWs (Experiment 1: 550-900 ms; Experiment 2: 750-900 and 1250-1400 ms). We suggest that these later positivities reflected a reanalysis resulting from a conflict between access to both the literal and the metaphorical meanings of the CWs. Taken together, these findings suggest that, although there may be some immediate access to both literal and metaphorical meanings of a CW, the successful interpretation of a sentence’s metaphorical meaning involves a reanalysis of its context.