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# Asymmetric inference towards the antonym: An EEG experiment into the polarity of negated adjectives

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## Abstract

Previous experimental work demonstrates stronger inference towards the antonym (ITA) for negated positive compared to negated negative adjectives. For instance, the inference from *John is not tall* to "he is short" is stronger than that from *Peter is not short* to "he is tall". In the present study, we use electrophysiology to test the hypothesis that ITA is asymmetric. Participants will be presented with an EEG reading task, in which the N400 component will be recorded. As negated positive adjectives increase ITA compared to negated negative adjectives, sentences with the former should be more acceptable, resulting in a smaller N400.

**Keywords:** antonymy, negation, EEG

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