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ERP insights into self-relevance with second-person pronouns during auditory story processing

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Abstract

The study aims to determine if the positive ERP effect associated with self-relevance extends from first to second person pronouns and whether it is independent of the pronoun's referent. Two EEG experiments were conducted with 72 participants listening to two distinct audiobooks, "Tschick" and "Auferstehung der Toten" (AdT). The chosen novels differ in narrative structure, allowing for a comparison of the ERP response of 2sg pronouns that potentially refer to the listener with personal pronouns that do not. The narrative design of "Tschick" directed all 2nd person pronouns to characters in the story, while in "AdT" the listener was the most likely referent. The results reveal a significant positive ERP effect for second person pronouns in "AdT" compared to "Tschick," supporting the hypothesis that the self-relevance effect generalizes to second person pronouns. The findings suggest that this positivity in ERP reflects attentional processes enhancing the cortex's sensitivity to self-other distinctions.

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