

Impact Of Grammatical Voice And Animacy On Verb Processing.

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Using event related potentials (ERPs) we examined neural activation differences to verbs in either the active or the passive voice. Participants read simple sentences, with either animate (gardener) or inanimate (water) subjects. Grammatical voice was manipulated via auxiliary verbs (e.g. ...had soaked [active]/ ...was soaked [passive]). To prevent these auxiliaries from predicting voice, filler sentences used alternative grammatical constructions (...was soaking [active]/...had been soaked [passive]). Verbs in the passive (vs. active) voice evoked a right lateralized negativity between 200 and 250msec, followed by a sustained left lateralized positivity peaking at around 700msec. Additionally, verbs preceded by inanimate (vs. animate) subjects evoked a late, widely distributed positivity peaking at approximately 700msec that was not modulated by grammatical voice. Our data suggest that comprehending passive verbs entails early and late neurocognitive costs, and that animacy exerts effects on verb processing that are independent of the syntactic assignment of thematic roles.