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# **Attention in the mind's eye: using the Navon attention task to track the way the grammatical structure of text passages modulate mental simulation of perspective**

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## **Abstract**

Behavioral and neuroanatomical studies show that reading comprehension is based on mental simulation, as modality-specific sensorimotor representations and processes related to the meaning of the text are activated during reading. Supporting this simulation view of reading comprehension, cognitive semantics analyses show that changes in lexico-grammatical features are accompanied by changes in mental simulation. We hypothesized that Academic Language (AL) texts with different linguistic structuring will alter students' mental simulations, particularly their perspectives differently, which can be tracked through its effect on attention. We first changed the linguistic structuring of AL text – particularly nominalization – to change the encoded perspective. We then tracked the effect of this change on the global and local perspectives of student mental simulations, using the Navon task. Initial results show a trend where changes in the passage structure led to a local attention effect. We discuss the implications of this indicative result, and ongoing work to further examine this finding.