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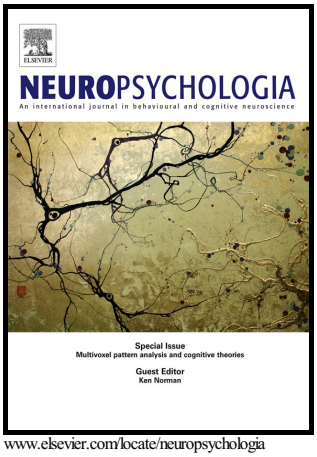

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Remembering and Imagining Alternative Versions of the Personal Past

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Abstract

Although autobiographical memory and episodic simulations recruit similar core brain regions, episodic simulations engage additional neural recruitment in the frontoparietal control network due to greater demands on constructive processes. However, previous functional neuroimaging studies showing differences in remembering and episodic simulation have focused on veridical retrieval of past experiences, and thus have not fully considered how retrieving the past in different ways from how it was originally experienced may also place similar demands on constructive processes. Here we examined how alternative versions of the past are constructed when adopting different egocentric perspectives during autobiographical memory retrieval compared to simulating hypothetical events from the personal past that could have occurred, or episodic counterfactual thinking. Participants were asked to generate titles for specific autobiographical memories from the last five years, and then, during functional magnetic resonance (fMRI) scanning, were asked to repeatedly retrieve autobiographical memories or imagine counterfactual events cued by the titles. We used an fMRI adaptation paradigm in order to isolate neural regions that were sensitive to adopting alternative egocentric perspectives and