

# Moving through time

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Although we can't technically travel through time (yet), when we think of the past or the future we engage in a sort of mental time travel. This uniquely human ability to psychologically travel through time arguably sets us apart from other species. Researchers have recently looked at how mental time travel is represented in the sensorimotor systems that regulate human movement. It turns out our perceptions of space and time are tightly coupled.

University of Aberdeen psychological scientists Lynden Miles, Louise Nind and Neil Macrae conducted a study to measure this in the lab. They fitted participants with a [motion sensor](#) while they imagined either future or past events. The researchers found that thinking about past or future events can literally move us: Engaging in mental time travel (a.k.a. chronesthesia) resulted in physical movements corresponding to the metaphorical direction of time. Those who thought of the past swayed backward while those who thought of the future moved forward.

These findings reported online in *Psychological Science*, a journal of the Association for [Psychological Science](#), suggest that chronesthesia may be grounded in processes that link spatial and temporal metaphors (e.g., future= forward, past= backward) to our systems of [perception](#) and action. "The embodiment of time and space yields an overt behavioral marker of an otherwise invisible mental operation," explains Miles and colleagues.

Provided by Association for Psychological Science

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