Culture as ground for cross modality unidimensional timelines

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Abstract

Current evidence supports the idea that time is mentally represented by unidimensional spaces. One main question is whether the language modality grounds differences on using these spaces when signers and speakers share the cultural framing of time (e.g., by clocks, calendars, etc.). We tested whether past and future events are represented along a Left-Past Right-Future and a Behind-Past Ahead-Future mental timeline in two language modalities. In Experiments 1 and 2 deaf signers of Uruguayan Sign Language (LSU) categorized the temporal reference of LSU sentences by pressing a directional key. The congruency effect was registered for the Left-Past Right-Future trials and for hand setting counterbalanced Behind-Past Ahead-Future trials. Experiments 3 and 4 replicated the congruency effect for Spanish speakers. The findings answered the research question in line with the suggestion that when signers and speakers share the cultural framing of time the tested space-time mappings activates on the same fashion.