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Causal Representation in Foresight: Can We Improve Memory and Novel Understanding?

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Abstract: Learning facts without first considering what they could be can lead to hindsight bias. How might this impact (a) memory and (b) understanding of novel topics? Foresight participants read about five psychology studies, including mean performance of one group; then they estimated the mean performance of another group and stated causes for the difference; finally, they received the second group's actual performance. Hindsight participants learned about both groups' performance at the beginning, then imagined what estimates and causes they would have indicated had they not seen actual means. A week later, half of each group recalled the means they had learned, and other half estimated means for a novel set of studies. We considered the extent to which: 1. foresight promotes long-term memories as opposed to providing an anchor that biases memories; 2. foresight cultivates a habit of considering alternative possible outcomes that might help one understand novel topics.