

Counterfactuals and the psychology of causal selection
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When an event is caused by many factors, we often have the intuition that some of them were more or less causally responsible for the outcome. For example, we may have the intuition that one particular player was most responsible for a sports team victory, or that a success in a swing-state contributed most to a presidential election victory. Where do these intuitions come from?

In this talk I will present a theory of human causal judgment. The theory is expressed as a computational model, and is based on the well-established idea that people assess causal responsibility by simulating counterfactual alternatives to what happened. We also make two simple and natural assumptions. First, people tend to imagine counterfactual possibilities that are both a priori likely and similar to what actually happened. Second, people judge that a factor C caused effect E to the extent that C and E are highly correlated across these counterfactual possibilities.

This theory parsimoniously explains a wide range of existing findings about causal judgment. For example, it explains why factors that were pivotal (i.e. necessary or close to necessary for the outcome) are judged more causal, why the prior probability of an event influences its perceived causal responsibility, why the prior probability of other variables influence the perceived causal responsibility of the focal event, and why these effects can reverse depending on the causal structure. I also discuss the results of new experiments which successfully test new predictions of the account.