

## **UC Merced**

# **Proceedings of the Annual Meeting of the Cognitive Science Society**

### **Title**

People cite future events as explanation

### **Permalink**

<https://escholarship.org/uc/item/61k727hz>

### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

### **Author**

Droop, Stephanie

### **Publication Date**

2023

Peer reviewed

# People cite future events as explanation

Stephanie Droop

University of Edinburgh, Edinburgh, United Kingdom

## Abstract

Causality is often assumed to flow from past to future, but people often cite future events as explanation. We use graph analysis and the event indexing model (Zwaan et al. 1995) to explore the depth of representation and temporal structure of people's explanations of events. In a novel online experiment, 70 adults read four folk tales and chose events from each story as explanation for other events. At key timepoints the texts of the stories were manipulated to emphasise either cause (events in the past) or intention (future). We found people were not sensitive to the manipulation, supporting the idea of an abstract situation model deeper than the surface text. Excitingly, the abstract graphs made by people's connections between events show consistent patterns on the dimensions of the event-indexing model, and people often cite future events as explanations.