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

### **Title**

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### **Permalink**

<https://escholarship.org/uc/item/4512v5x2>

### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

### **ISSN**

1069-7977

### **Authors**

Fränken, Jan-Philipp  
Valentin, Simon  
Lucas, Chris  
et al.

### **Publication Date**

2021

Peer reviewed

# Know your network: Sensitivity to structure in social learning

**Jan-Philipp Fränken**

University of Edinburgh, Edinburgh, United Kingdom

**Simon Valentin**

University of Edinburgh, Edinburgh, United Kingdom

**Chris Lucas**

University of Edinburgh, Edinburgh, United Kingdom

**Neil Bramley**

University of Edinburgh, Edinburgh, Scotland, United Kingdom

## Abstract

To glean information from social networks, people must be adept at distinguishing real evidence from hearsay. Here, we investigate human inferences within a simulated social network. We introduce a novel social learning task in which participants infer their surrounding social network structure while also using social communications to aid judgments about the shared environment. We find that the majority of adults correctly identified independent and acyclic network structures, though they struggled to identify cyclic communications. Comparison of judgments with several social inference models supports a naïve social learning account that integrates social evidence with the learner's own observations in a structure insensitive way. This suggests that people are capable of using communication patterns to identify social influences, but they may still be misled by the distortions of evidence that these network dynamics can produce.