

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Experimental conditions affect how social cues guide the regularisation of unpredictable variation

Permalink

<https://escholarship.org/uc/item/3pv6r84h>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 41(0)

Authors

Feher, Olga

Kirby, Simon

Smith, Kenny

Publication Date

2019

Peer reviewed

Experimental conditions affect how social cues guide the regularisation of unpredictable variation

Olga Feher

University of Warwick, Coventry, Warwickshire, United Kingdom

Simon Kirby

University of Edinburgh, Edinburgh, United Kingdom

Kenny Smith

University of Edinburgh, Edinburgh, United Kingdom

Abstract

Unpredictable variation is widely used to investigate how cognitive and communicative biases impact on language evolution and change. Learning, interactive and cultural biases all contribute to universal linguistic patterns. We explored the effects of social cues using a miniature artificial language exhibiting unpredictable lexical variation distributed either within or between multiple speakers. We compared the effects of testing modality (spoken vs. forced-choice), experimental population (students vs. online workers) and setting (laboratory vs. online). Learners were sensitive to social cues, but reliable differences only emerged in the laboratory. In an online setting, students were much more likely to regularise across conditions. In addition, task difficulty increased rates of regularisation but only online. Online workers showed high levels of regularisation throughout. Our experiments suggest that the conditions in which learning and recall take place have a large impact on the biases which shape language and our ability to measure them.