

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

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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.