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Authors

Patterson, John D.
Schoedel, Nicci C
Karuza, Elisabeth A.

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Language Experience Modulates L2-Related Representational Change when Learning Novel Categories

John Patterson

The Pennsylvania State University, University Park, Pennsylvania, United States

Nicci Schoedel

Pennsylvania State University, State College, Pennsylvania, United States

Elisabeth Karuza

The Pennsylvania State University, University Park, Pennsylvania, United States

Abstract

When learners are exposed to multiple languages, semantic categories have been shown to undergo a process of convergence wherein concepts that overlap across natural languages come to be represented more similarly. Recently, we replicated this convergence effect using a simulated bilingual language learning paradigm in which participants learn one language (i.e., category boundary and associated labels) before then learning a second language with a shifted category boundary. This work, however, only assessed English-speaking monolinguals. In the present study, we extend this paradigm to bilinguals—asking whether extensive experience maintaining different label mapping systems modulates degree of semantic convergence when learners face two novel (artificial) languages. We first assessed the language experience of Polish-English bilinguals then measured representational change via the simulated bilingual language learning paradigm. We report on evidence that language history moderates the extent, and direction, of representational change, and we conclude with implications for theories of bilingual representation.