Title

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

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Publication Date

2020

Peer reviewed

Constructing complex social categories from distinct group membership information

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Abstract

Conceptual combination is the act of building complex concepts from simpler ones. Although previous research has examined how inferences about compound objects (e.g., fuzzy chair) are produced from their constituent concepts, little is known about the combinatorial processes that produce inferences about compound social categories (e.g., Irish Musician). Using a computational approach, we investigated the relationship between trait ratings of 25 nationality-occupation combinations and ratings of their constituent concepts. 25 non-human animal combinations (e.g., circus snake) serve as a comparison. We find that constituent concepts are weighted unequally when combined: head concepts (Musician/Snake) are prioritized over modifier concepts (Irish/Circus) for both combination types. Additionally, ratings of more familiar social combinations diverge increasingly from ratings of their constituent concepts, whereas ratings of more familiar animal combinations instead converge with ratings of their constituents. This raises the possibility that existing knowledge plays different roles in peoples inferences about human versus animal categories.