Implicit Structure in Sensory Metaphors of Personality

Frank Durgin
Swarthmore college , Swarthmore, Pennsylvania, United States

Kiera Parece
Swarthmore College, SWARTHMORE, Pennsylvania, United States

Shelby Billups
Swarthmore College, SWARTHMORE, Pennsylvania, United States

Paul Thibodeau
Oberlin College, Oberlin, Ohio, United States

Abstract

Across many cultures, similar sensory metaphors are used for similar kinds of personality traits, including words like sweet and bitter, straight and crooked, warm and cold (Asch, 1958). Although such metaphors seem to make sense, our post hoc intuitions may be tainted by confirmation bias. We measured the strength of alignments between each of a set of nine sensory pairs (e.g., warm/cold) pictured literally, and a set of eight pairs of literal personality concepts (e.g., friendly/aloof) using dual categorization tasks (IATs), and then extracted principal components from these patterns of alignment between sensory and personality concepts across 72 different pairings. The resulting 2D metaphor space seemed to reflect something akin to the stereotype content model (Fiske et al., 2002), with axes representing both warmth (PC1: warm/soft) and competence (PC2: bright/high). When we repeated the experiment, with new images and labels, essentially the same structure captured these nine sensory metaphor pairs.