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Engaging the comparison engine: Implications for relational category learning and transfer

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Abstract: While comparison is clearly a powerful tool for promoting learning and transfer of relational knowledge, it has been less well explored in the domain of relational category learning. It is actually not straightforward to elicit the expected advantage of giving learners two members of a category to classify on each trial as opposed to one. Nor has it been clear, as predicted by structural alignment theory, that same-category pair types are better for relational category learning than cross-category pairs. The present investigation follows up prior results demonstrating a comparison advantage (versus twice as many single-item trials) when learners made separate classification judgments for training items presented in an equal mix of same- or cross-category pairs (Kurtz, Bourkina, & Gentner, 2013). It remains unclear what exactly underscored the comparison advantage. We report two experiments that help pinpoint the roles of task engagement and pair type in driving comparison-based category learning.