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Perspective Discovery Drives Dynamic Updating in Creativity Evaluation

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Abstract

Creativity evaluation is often treated as a static process, with objects being judged against fixed criteria. However, in real-world contexts, evaluations may change as evaluators discover alternative perspectives toward the same object. This study examined creativity evaluation as a dynamic cognitive process driven by perspective discovery. We used ambiguously interpretable 3D objects to investigate how novelty and usefulness evaluations change as evaluators shift perspectives and whether overall evaluations are updated. Perspective differences were quantified by embedding evaluator-generated descriptions using a large language model and computing the semantic dissimilarity between perspectives. Greater perspective differences predicted larger changes in novelty and usefulness ratings, and overall evaluations were more strongly influenced by post-shift ratings than by initial ones. We manipulated the concreteness of material information-constrained perspective discovery in a phase-dependent manner. The findings provide empirical support for perspective discovery mapping onto representational reconstruction in creative problem solving, facilitating changes in creativity evaluations.