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The Emergence of Insight During Classification and Inference Learning as a Function of Category Structure

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Abstract

We report an experiment on the relationship between insight and analytic-based learning during concept acquisition. Subjects learned featural categories (Type I or Type VI) through either classification or inference. Additionally, some subjects switched from classification to inference, whereas others switched from inference to classification. To assess insight, subjects provided warmth judgments throughout the study. We found that warmth judgments increased more rapidly for classification than for inference on Type I category structures, whereas inference produced more gradual increases. Moreover, when subjects switched from inference to classification, rapid increases in warmth judgments closely matched those found in pure classification learning, but only on Type I categories. However, this increase was not observed for Type VI categories. These findings suggest that classification is driven by insight-based learning processes, but this relationship seems to depend on the learnability of the category structure, whereas inference seems to be driven by analytic-based learning processes.