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Increasing Diversity of Contrast Examples Decreases Generalization from a Probabilistic Target Set

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Abstract

Four experiments explored the effect of diversity of contrasting evidence on inductive inferences drawn from a multi-item target. In Experiments 1 and 2, increasing the diversity of a contrast set led to lower generalization of a novel property that was probabilistically associated with the target. Further, this effect was not sensitive to weak vs. strong sampling assumptions (Experiment 3). Critically, when the property was universal (all target items shared the feature), increasing contrast diversity did not affect generalization to novel members of the target category (Experiment 4). Post-test questioning suggested that people believed that the probabilistic property indicated subordinate categories in the target set (in fact, there werent). Such a change in the default-level representationin this case, from basic to subordinatealters the perceived size of the setswith subordinate, there are more items. Differences in default-level may explain these findings. We discuss implications for accounts of inferential reasoning.