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People use inverse planning to rationally seek social information from objects

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Abstract

People use objects to make social judgments about traits of owners. Do people seek social information in a rational way suggestive of Bayesian inverse planning? In two experiments, participants aimed to learn about a stranger. Each trial showed two sets of objects; the stranger had chosen one from each set, but their choice was hidden. Participants judged which would help them learn more about the stranger: Revealing their choice from set A or B? Participants selected sets rationally, identifying sets with a greater range of options as more informative: Larger sets over smaller; sets varying in style over sets varying only in color (Exp.1). Participants also took into account constraints: They chose sets as more informative when all options were functional vs. when some were not (Exp.2). People consider the generative process behind objects selection, using inverse planning to reason about the informational value of others objects.