Two Heads Are Better than One: Integrating Incomplete Information with Imperfect Advice

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Presentation Abstract Summary Decision-makers rarely have complete information about the world. Social learning can help us make better decisions, but the quality of others' advice also varies depending on their access to information. Thus, integrating our incomplete knowledge of the world with imperfect advice from others is a critical challenge for social learning. Here, we explore how people make better decisions under uncertainty by selectively leveraging social advice depending on others' information access. Participants played a simple game where they chose between a card of known value and a card of a hidden value. Participants' decisions were influenced both by the value of the known card and by advice provided by an advisor. Critically, they selectively leveraged the advice depending on whether the advisor had complete, partial, or no access to information about the cards. We describe a Bayesian model that aligns closely with human decisions, and discuss our hypotheses about neural computations that might support the integration of private information and social advice.

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