

# The Brunswik Society

31<sup>st</sup> International (Virtual) Meeting of the Brunswik Society

– Free Event –

for Zoom Link Register your Name, Affiliation and Email Address with Gijs Holleman [g.a.holleman@tilburguniversity.edu](mailto:g.a.holleman@tilburguniversity.edu)

## Agenda

Friday 5<sup>th</sup> December 2025, 11.45-14.15 EST (16.45-19.15 GMT) via Zoom

**Opening Remarks** – Thomas R. Stewart (University at Albany, USA)

**Title:** On the Ecological Rationality of Socioeconomic Differences in Judgment and Decision-Making

**Presenter/Authors:** Simon Ciranka (Center for Adaptive Rationality, Max Planck Institute for Human Development, Berlin, GER)

**Abstract:** Many assume that heuristics (i.e., fast and frugal decision-making strategies that yield robust results in uncertain environments) are ecologically rational, meaning they reflect useful adaptations to the statistical structure of the environments people experience. A "risk-reward heuristic" for example, exploits the tendency for larger rewards to be less probable in the world. In terms of Brunswik's lens model, this means that reward sizes are a cue that is negatively correlated with the probability of actually receiving the reward, and people rely on this cue when information about the probability is uncertain. I will demonstrate that a stronger negative relationship between rewards and their occurrence probability is expected in environments characterized by scarcity and high competition when foraging for resources. I found that participants with lower socioeconomic status ( $n = 144$ ) rate larger rewards as less probable, but smaller rewards as more probable, than participants with higher socioeconomic status ( $n = 154$ ). The same interaction was observed when comparing the probabilities of success for competitive foragers in environments with scarce versus abundant resources. This suggests that the heuristics used by people with a lower socioeconomic status reflect an adaptation to their experiences of scarcity.

**Title:** The Pick-the-Winner-Picker Heuristic: Preference for Categorically Correct Forecasts

**Presenters/Authors:** Jon Bogard (Washington University in St. Louis, USA)

**Abstract:** People routinely make decisions using others' predictions (e.g., market tips), so properly evaluating forecast quality is vital. While experts characterize good forecasting as minimizing continuous error, we demonstrate that laypeople typically view good forecasting

as merely predicting the categorical outcome (e.g., the winning team). In 15 studies we show this “pick-the-winner-picker heuristic” and its psychological mechanism: People weight (a) categorical correctness and (b) continuous error according to the perceived importance of the categorical and continuous dimensions. Thus, in common cases when the categorical dimension matters most (e.g., sports), people prize forecasts that accurately predicted the categorical outcome (e.g., winner, not margin of victory). However, when the categorical dimension matters less, the effect attenuates. We offer several demonstrations that the pick-the-winner-picker heuristic constitutes a normative mistake, while framing manipulations help debias judgments. From a Brunswikian perspective, our findings show a mismatch between a cue's ecological validity (continuous accuracy best predicts forecaster skill) and cue utilization (categorical correctness getting overweighted). We show that manipulating variables unrelated to the underlying structure of the environment shifts people toward the more intuitive end of the cognitive continuum. Oftentimes use of this pick-the-winner-picker heuristic is an ecologically rational heuristic for identifying good forecasters.

**Title:** Categorical Encoding Disrupts Probability Learning

**Presenters/Authors:** Jay Naborn (Washington University in St. Louis, USA)

**Abstract:** We show that the tendency to group continuous data into crude categories (Fisher & Keil, 2018) disrupts probability learning. People evaluate a continuous cue's validity by whether categorical encodings of cue (e.g., candidate who raised more money) and criterion (e.g., candidate who won) match. We present an analytical model of how categorical encoding may disrupt learning and test its predictions across several experiments. Participants in one experiment were assigned to a High-Divergence (vs. Low-Divergence) condition, in which the candidate who raised more money usually (vs. almost always) won the election. Across conditions, the money-votes relationship was equally strong so, on a standard Brunswik lens model, participants should learn it equally well. However, “High-Divergence” participants made less accurate out-of-sample predictions and gave greater weight to spurious cues.

**Title:** Heuristics: How Simple Models of the Mind can Serve as Tools for Transparent Scientific Justification

**Presenters/Authors:** Ulrich Hoffrage and Julian N. Marewski (University of Lausanne, CHE)

**Abstract:** We present a novel application of Egon Brunswik's lens model. We argue and demonstrate that various decision strategies, including fast-and-frugal heuristics, that were originally proposed as descriptive models of how minds make inferences, can enhance the transparency in model selection, and in so doing, the reproducibility of the conclusions drawn from empirical results. Furthermore, we explain how heuristics might serve meta-analyzing findings, aggregating quantitative indicators and qualitative considerations, identifying disconfirming and converging evidence, and examining the robustness of conclusions across different justification tools. In model recovery simulations, in which the data-generating model is known, the validities of various cues that could be used in model selection can be computed, which essentially means to apply the Brunswikian lens model to model selection in scientific justification.

**Discussion Paper:** Possibilities for neo-Brunswikian Research in the Age of Artificial Intelligence

**Presenters:** Esther Kaufmann (University of Konstanz, GER), Gijs A. Holleman (Tilburg University, NLD), Mandeep K. Dhami (Middlesex University, London, UK)

**Abstract:** Brunswikian research can be resource-intensive and time-consuming because it requires efforts to ensure the representativeness of stimuli, sampling of participants experienced in the task presented, and idiographic data analyses involving computation of many psychological parameters. In this discussion, we explore how the emergence of new technologies such as wearables, and generative AI can be harnessed by researchers to (1) design and conduct experiments following representative design principles, and (2) analyze data using the lens model framework. We provide a concrete example demonstrating how Brunswikian approaches to studying perceptual and cognitive processes can be extended using new eye-tracking technologies. We also demonstrate how ChatGPT can be used to capture judgment policies in applied domains such as the law.

**Closing Remarks** – Robert M. Hamm (University of Oklahoma Health Sciences, USA)

**Virtual Social/Networking Hour!!!**

**Friday 5<sup>th</sup> December 2025, starts 14.30 EST (19.30 GMT)**

**Free Event – Invites/Link will be sent to Meeting Delegates**

**The Organization Team Looks Forward to Seeing You:**

**Mandeep Dhami, Gijs Holleman & Esther Kaufmann**