The Brunswik Society

29th International (Virtual) Meeting of the Brunswik Society

Free event – for Zoom link register your name, affiliation and email address with esther.kaufmann@gmx.ch

Agenda

7th December 2023, 12.00-14.00 EST (17.00-19.00 GMT) via Zoom

Opening remarks - Mandeep Dhami (Middlesex University London, UK)

Title: News from the Brunswik Society.
Presenters: Esther Kaufmann (University of Konstanz, GER)

Title: A Role for Probabilistic Functionalism in Differential Diagnosis.
Presenter/Authors: Frank Papa (Texas College of Osteopathic Medicine, US) & Robert Hamm (University of Oklahoma Health Sciences Center, US)
Abstract: Our research suggests that physicians experience their patient care environment, in part, in terms of gradually abstracted estimates of the frequency with which a given disease's characteristic features are likely to occur in patients suffering from each disease encountered. Over time, physicians gradually develop cognitive processes enabling the use of their knowledge of disease by feature frequency estimates as a means of diagnosing, quasi-probabilistically, which disease is the most likely cause of a given patient's clinical features (signs and symptoms). We suggest that a deeper understanding of the mathematical nature of the cognitive processes that transform disease by feature frequency estimates into quasi-probabilistic diagnostic decisions can lead to training which can improve the probabilistic functionalism of future health care professionals.

Title: Is Numerical Information always Beneficial? Verbal and Numerical Cue-Integration in Additive and Non-Additive Tasks.
Presenters/Authors: August Collsiöö, Peter Juslin & Anders Winman (Uppsala University, SWE)
Abstract: Individuals tend to default to linear additive cue-integration when relying on rule-based integration to make multiple-cue judgments. However, this may hamper learning in non-additive tasks. We hypothesize that this effect is partly driven by the use of numeric formats, through expectations about a simple numerical solution. We predict that while numeric formats will benefit learning in an additive environment, verbal formats will be beneficial in a non-additive environment, and find support for this across two experiments. Cognitive modelling shows that when verbal information is presented, exemplar memory dominates across task environments, whereas cue-abstraction is prevalent in additive environments when numerical information is presented. Application of the Precise/Not

Precise model – on a Brunswikian conceptualization of intuitive and analytic thought – reveals primarily analytic instantiations of the strategies used by individuals.

Title: Congruence-Incongruence Effect – How Different Cue-Saliencies Shape the Dynamics of Multiple-Cue Probability Learning.
Presenter/Authors: Florian Scholten (Tübingen University, GER) & Arndt Bröder (Mannheim University, GER)
Abstract: We used the weather prediction task (Knowlton et al., 1994) in two experiments (N = 257) to examine the influence of cue saliency in multiple-cue probability learning. We examined whether the hierarchy of a face's trustworthiness was either congruent or incongruent to the face's forecasting validity for a positively valenced outcome. Notably, the incongruence group yielded lower accuracy rates than their congruent counterparts, displaying unique learning trajectories – evidenced by distinct cue utilization curves detected by a rolling regression method from Lagnado et al. (2006). Differentiating through two different scenarios, we explored the true nature of the effect, asking whether it reflects a socially relevant dimension affecting a social judgment criterion, or is merely based on the association of similarly valenced cues/outcomes (positive vs. negative).

Title: Extending Cognitive Continuum Theory.
Presenters/Authors: Michael E. Doherty (Bowling Green State University, US), R. James Holzworth (University of Connecticut, US), & Thomas R. Stewart (University at Albany, US)
Abstract: We present an expanded version of Hammond's Cognitive Continuum Theory (CCT), which we call Cognitive Continuum Theory II (CCTII). It includes Hammond's CCT with two new premises. The *intuition-analysis* continuum is taken directly from CCT. In addition, we propose as continua the truth criteria of coherence and correspondence, and also Brunswik's representative design. We describe all four continua — coherence, correspondence, representative design and *intuition-analysis* — as psychological continua that influence the thinking of Social Judgment Theory (SJT) scientists at every stage of research and theory. We believe these continua represent what occurs in the minds of researchers, consistent with Hammond's general conceptual approach. Consideration of our proposed CCTII may help SJT researchers think about design and evaluation of research.

Closing remarks – Jeryl Mumpower (Texas A&M University, US)

Virtual Social/Networking Hour!!!
7th December 2023, starts 14.15 EST (19.15 GMT)
Free event – invites will be sent to meeting delegates

The organization team looks forward to seeing you:
Mandeep Dhami, Gjis Holleman, Esther Kaufmann & Karolin Salmen