

Wednesday, May 13, 2026 at 13:00

Speaker:

**Professor Jan Engelmann**

University of Amsterdam



Distinguishing individual and contextual channels of attention in risky decision-making

**Location:** Room 2.082 | 2nd floor | Am Propsthof 49 | 53121 Bonn

(Online link: <https://shorturl.at/XALsa>)

**Abstract:**

Economists have become increasingly interested in using attention to explain behavioral patterns at both the micro and macro level, resulting in several disparate theoretical approaches. Some, like rational inattention, assume a goal-directed model where attention is driven by individual preferences and goals. Others, like salience theory, assume a stimulus-driven influence where attention is shaped by contextual factors. This distinction is fundamental for the economic implications of attention, but little is known about their relative importance. We addressed this question by decomposing attentional variation into two orthogonal channels: individual average attention, reflecting stable between-subject differences, and trial-wise deviations of attention, reflecting within-subject contextual influences. These parallel the goal-directed and stimulus-driven distinction commonly made in cognitive science. We illustrate this framework across three studies using eye-tracking data from incentivized experiments on risky choice. First, we show that standard individual and contextual variables explain only around 20% of attentional variation, and that individual average attention correlates with loss aversion and significantly improves the fit of random utility models. Second, a follow-up experiment established causal influences of attention on risky choice. Third, we applied the framework to patients with gambling disorder, revealing how attentional profiles differ in clinical populations. Jointly, these results underline the utility of differentiating between individual and contextual channels of attention for identifying the cognitive mechanisms underlying economic choice, and suggest this decomposition is a simple but powerful tool for improving empirical models across a range of decision-making contexts.

**Jan B. Engelmann** is Professor of Neuroeconomics at the Amsterdam School of Economics, University of Amsterdam, where he is a researcher at the Centre for Research in Experimental Economics and Political Decision Making (CREED) and the Tinbergen Institute. His research focuses on the neurobiology of social and economic decision-making, and how cognitive and emotional processes drive decisions under risk and uncertainty. Jan studied Experimental Psychology at the University of St Andrews and completed his PhD at Brown University (2008) at the Laboratory for Cognition and Emotion (with Luiz Pessoa). He subsequently held postdoctoral positions at Emory University (with Greg Berns) and at the Laboratory for Social and Neural Systems Research at the University of Zurich (with Ernst Fehr). He joined the Amsterdam School of Economics as Associate Professor in 2016 and was appointed Full Professor of Neuroeconomics in 2022. He has received several awards, including the Radboud Excellence Fellowship and the John Dickhaut Memorial Grant from the Society for Neuroeconomics. Has published in leading journals across economics, neuroscience, and psychology.

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**Host:**  
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