

NEW DIRECTIONS IN CRIMINOLOGICAL THEORISING: ENDURING PROBLEMS AND INNOVATIVE APPROACHES TO THEORY AND THEORY TESTING FROM THE PERSPECTIVES OF MECHANISTIC AND ANALYTIC CRIMINOLOGY

The Centre for Analytic Criminology is pleased to welcome Richard E. Niemeyer (U.S. Air Force Academy) and K. Ryan Proctor (Avila University), whose work on Mechanistic Criminology (e.g., Proctor & Niemeyer 2019, 2020) has forwarded pioneering ways to strengthen criminological theorizing and a more scientific criminology. In this panel we explore some of the ways in which both Mechanistic and Analytic Criminology (e.g., Wikström & Kroneberg 2022) can identify weaknesses in and contribute to stronger theorizing and theory testing in criminology.

Are Most Published Criminological Research Findings Wrong? Taking Stock of Criminological Research using a Bayesian Simulation Approach

Richard E. Niemeyer, K. Ryan Proctor, Joseph A. Schwartz, and Robert G. Niemeyer

Richard E. Niemeyer, Ph.D., is an Assistant Professor of Sociology in the Department of Behavioral Sciences & Leadership at the U.S. Air Force Academy. His research broadly focuses on developing and applying transdisciplinary theoretical methods to solving long-standing debates in the social sciences. His current research applies a mechanistic philosophy of science to the problem of how to bridge the micro- and macro-level divide in sociological research.

Defensible Theory Integration in Criminology: A New Mechanical Approach

K. Ryan Proctor, Richard E. Niemeyer, Joseph A. Schwartz

K. Ryan Proctor is an Associate Professor of Criminology and Sociology at Avila University. His research applies the new mechanical philosophy science to criminology to facilitate theory falsification and integration in the field.

Analytic Criminology and the Biosocial Underpinnings of Situational Action Theory

Kyle Treiber, P-O H. Wikström

Kyle Treiber is Associate Professor in Neurocriminology at the University of Cambridge. She is Co-Director of the Centre for Analytic Criminology (www.cac.crim.cam.ac.uk) and the Peterborough Adolescent of Young Adult Development Study (PADS+). A key focus of her research is the integration of neuropsychological and criminological knowledge to advance understanding about criminal behaviour.

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Wednesday June 8th | 13:00-14:30

Please join us in the Boardroom for presentations and discussion

Light snacks will be provided

Zoom link to follow
Direct queries to kht25@cam.ac.uk

NEW DIRECTIONS IN CRIMINOLOGICAL THEORISING: ABSTRACTS

Are Most Published Criminological Research Findings Wrong? Taking Stock of Criminological Research using a Bayesian Simulation Approach

This study uses Bayesian simulations to estimate the probability that published criminological research findings are wrong. Toward this end, we employ two equations originally popularized in John P.A. Ioannidis' (in)famous article, "Why Most Published Research Findings are False." Values for relevant parameters were determined using recent estimates for the field's average level of statistical power, level of research bias, level of factionalization, and quality of theory. According to our simulations, there is a very high probability that most published criminological research findings are false-positives, and therefore wrong. Further, we demonstrate that the primary factor contributing to this problem is the poor quality of theory. Stated differently, even when the overall level of research bias is extremely low and overall statistical power is extremely high, we find that poor theory still results in a high rate of false positives. We conclude with suggestions for improving the validity of criminological research claims.

Defensible Theory Integration in Criminology: A New Mechanical Approach

Since the 1970s, criminologists have debated whether scientific theory in the field could best be advanced through theory integration or elaboration. This debate remains unresolved. Opponents to integration claim theories contain irreconcilable assumptions that preclude integration (e.g., Hirschi, 1979). Proponents of integration claim existing theories explain different phenomena (Short, 1985, 1989), the assumptions contained in criminological theories are often unnecessary (Akers, 1989), theories can be integrated if their assumptions are compatible (Tittle, 1995), and theory integration is necessary given the failure of falsification and theory competition in the field (e.g., Bernard & Snipes, 1996; Elliot, 1985). This paper provides a systematic review of existing forms of integration, identifies their weaknesses, and proposes a new method of theory integration that draws from the new mechanical philosophy of science (e.g., Craver & Darden, 2013; Glennan, 2017; Glennan & Illari, 2017; Machamer et al., 2000). The proposed method of "mechanistic scaffolding" sees mechanisms as concrete phenomena in the world, the purpose of scientific theory being to represent the workings of these mechanisms, and interdisciplinary and interlevel understandings of mechanisms as crucial to advancing scientific theoretical progress in criminology. This approach provides a defensible means of integrating biological mechanisms into criminological theory and produces robust theories that guard against replication problems.

Analytic Criminology and the Biosocial Underpinnings of Situational Action Theory

Analytic criminology is an approach to theorizing and studying crime which focuses on the importance of the roles of the people-place interaction, action theory, mechanism-based explanations, and cross-level analysis (Wikström and Treiber 2013; Wikström and Kroneberg, 2022). Analytic criminology is founded on the realization that people are the source of their actions, while the causes of their actions are situational. Situations are therefore the core unit of analysis in the study of crime causation. Situations manifest as mental states encompassing an actor's motivation and related perception of action alternatives from which the actor makes an action-choice (Wikström and Kroneberg, 2022, Wikström 2019). To understand situations and how they arise, it is therefore important to integrate knowledge about the neurocognitive processes and machinery which underlie perceptions and action choices, i.e., knowledge about key biological factors and how they interact with micro-environmental features both developmentally and situationally to explain both crime propensities and criminal action choices (Treiber 2017).

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The Centre for Analytic Criminology (www.cac.crim.ac.uk) aims to advance, through theory development and empirical testing, a general, dynamic and mechanism-based explanation of crime and its causes to inform effective crime prevention policies and practices.