



Natural Kinds in the Mind Conference Programme

Monday, 5th of September and Tuesday, 6th of September 10am - 4.30pm BST.
All times listed in British Summer Time (BST). Vera Anstey Room, LSE.

Monday, September 5, 2022

10:00:10:30am	Welcome and Introduction
10:30:11:30am	Elizabeth Irvine (Cardiff): 'Kinds of Kinds and Borderline Cases' Chair: Liam Kofi Bright
11:30:12:30pm	Hilary Kornblith (UMass Amherst): 'Mental Processes and Natural Kinds: How Should We Think About Inference' Chair: Somayeh Tohidi
12:30:14:00pm	Lunch at the LSE
14:00:15:00pm	Cecily Whiteley (LSE/Cambridge): 'Two Approaches to the Science of Dreaming' Chair: Katariina Hynninen
15:00:15:30pm	Tea and Coffee Break
15:30:16:30pm	Edouard Machery (Pittsburgh): Operationalising Natural Kinds* Chair: Harriet Fagerberg
17: 00pm.	Conference Drinks at the Cittie of York Pub
19:30pm	Conference Dinner for Speakers

Tuesday, September 6, 2022

10:00:11:00am Marion Godman (Aarhus): 'Psychological Kinds in the Mind?'

Chair: Marius Backmann

11:00:12:00am Henry Taylor (Birmingham): 'The Mind's Eye: Natural Kinds and the Science of Working Memory'

Chair: Jonathan Birch

12:00:13:00pm Lunch at the LSE.

13:00:14:00pm Jennifer Corns (Glasgow): 'Promiscuous Kind Terms'*

Chair: Eva Reed

14:00:15:00pm Jeremy Pober (UC Riverside): 'Psychological Construction and Natural Kinds'

Chair: Ali Boyle

15:00:15:30pm Tea and Coffee Break

15:30:16.30pm. Conference Round Table

17:00pm Optional Dinner at South Bank

* Online.

Lists of Abstracts

'Psychological Kinds in the Mind?'

Marion Godman (Joint work with Martin Bellander, Karolinska Institutet)

In this paper we consider how two different models of natural kinds fit the current and dominant correlational or quantitative method in psychology. On the one hand, there is a good reason to think there is a good fit with a scientific success criterion often pronounced when it comes to natural kinds. The dominant use of large data samples has played a major role in the development of psychological theory and especially influential is the work postulating latent variables like personality in terms of the Big Five, or intelligence, in terms of the g factor. We show that in terms of scientific success and robustness, one can make a good case for these constructs being our psychological (natural) kinds. On the other hand, since this research rests in large part on between-individual studies, there is reason to pause. For many psychology as a discipline should be in the business of uncovering stable intra-individual -- kinds in the mind, as it were. On this view of psychological kinds, current latent variables do not represent kinds as they are not necessarily *within* individuals at all.

We then explore the implications of this tension between the views of natural kinds. First we argue that the tension is real and that an alignment between and within-individual "psychological" structure is not forthcoming. This leaves us with the assessment of the relative advantages and disadvantages of the two different perspectives on natural kinds in psychology. A methodological revisionary perspective holds on to the idea that psychological kinds are to be in the mind, but we have yet to see which, if any, kinds such revisionary correlational research can supply us with. The methodologically conservative perspective gives us robust kinds with some predictive purchase, but then they can hardly be said to be uniquely psychological (rather than genetic, sociological or contextual).

Kinds of kinds and borderline cases

Elizabeth Irvine

In this talk I do some basic clarificatory/mapping work in how different approaches to identifying consciousness align with the different kinds of natural kind that consciousness might be. These come with slightly different ways to identify borderline cases of consciousness. I will end with some brief comments about how this discussion fits with the 'practice turn' in talking about natural kinds in philosophy of science more generally.

Mental Processes and Natural Kinds: How Should we Think About Inference?

Hilary Kornblith

If we think about mental processes as natural kinds, how should that influence our views about the nature of inference? I examine a number of views about inference, including Fodor's language of thought approach and Boghossian's account in terms of a taking condition, and I argue that they face insurmountable problems. Far too much thinking about inference, I argue, is shaped by how things seem to us from the first-person perspective, a perspective which we have a good deal of reason to believe fundamentally distorts our view of inference. It is, I believe, quite unclear just how human inference actually works. This not only leaves open the possibility that inference is far different than we have taken it to be, but also the possibility that the very idea that there is such a thing as inference is the product of a bad theory.

Operationalizing natural kinds

Edouard Machery

Abstract: I will examine what kind of evidence allows us to decide whether a class forms a natural kind. In particular I will look at formal methods that are meant to answer these questions, with a special focus on Meehl's taxonomic methods

Psychological Construction and Natural Kinds **Jeremy Pober**

Abstract: Recently, psychologists of emotion have proposed a novel approach called 'psychological construction' in which emotions--and potentially other folk psychological mental kinds--are not realized in dedicated neurocognitive circuits or systems but in novel combinations of domain-general processes. One of the major proponents of this view, Lisa Feldman Barrett, has argued that it is incompatible with the natural kinds approach insofar as emotions are i) emergent and ii) socially constructed. I deny this claim and contend that insofar as emotions are emergent and/or socially constructed, they are so in a way that is innocuous to the natural kinds approach.

The Mind's Eye: Natural kinds and the science of working memory **Henry Taylor**

Working memory is one of the most important posits in contemporary psychology. In this paper, I analyse working memory from the point of view of natural kinds, arguing that working memory is a natural kind. I then use this analysis to address a current debate in psychophysics. Specifically, I argue that it is in principle indeterminate whether any representations in working memory are unconscious.

"Two Methodological Approaches to the Science of Dreaming" **Cecily Whiteley**

The standard approach to the science of sleep experience proceeds by way of phenomenological definitions. Consciousness researchers examine the phenomenological features of sleep experience in order to draw a definitional line between those conscious experiences in sleep that count as 'dreams' as opposed to 'dreamless' experiences. These definitions subsequently form the explanatory targets of empirical research into the biological functions and neural basis of dreaming. This 'phenomenological approach' in consciousness science is most clearly exemplified in the work of the growing number of philosophers and neuroscientists who endorse simulation models of dreaming. According to these models, a large subset (but not all) of our conscious sleep experiences are unified and thus warrant classification into a single neurobiological kind 'dreaming', in virtue of sharing a distinctive simulation-like phenomenology (Revonsuo, Tuominen, & Valli 2015, Revonsuo 2006, Thompson 2015, Windt et al. 2016, Windt 2015, 2018, 2020).

Despite its widespread adoption by consciousness scientists, little philosophical attention has been paid to the question of whether the phenomenological approach is a good approach to adopt in consciousness science -- whether its underlying methodological and metaphysical assumptions are epistemically sound. This is likely due to the fact that it is unclear that there are serious methodological problems associated with this approach, and that there is an alternative methodological framework available for consciousness science to take up. This paper takes up this challenge and offers a critique of the phenomenological approach alongside the provision of a new methodological framework for the science of sleep experience informed by philosophy of science. According to the alternative 'natural kind' framework I propose, consciousness science should proceed by identifying the natural clusters of phenomenological, neurophysiological and

functional properties in sleep which track distinct global states of consciousness. This encourages a theoretical openness to a new possibility viz. that 'dreams' and 'sleep experience' may not form natural kinds.