Book of abstracts
Models of the mind: reasoning about oneself and about other minds

Hacking representations – if you could spray them, they’d be real

Matej Kohár

Thomson and Piccinini (forthcoming) argue that, persistent anti-representationalist worries notwithstanding, neuroscientists have been manipulating neural representations in the lab for a few decades already. The authors explicitly state that their argument for realism about neural representations is inspired by Ian Hacking’s (1983) famous argument for realism about electrons. I argue that Thomson and Piccinini fail to establish the conclusion they are after. I show that an appeal to Hacking-style arguments can only be used to establish the existence of entities, not the truth of theories. The debate about neural representation is, however, a dispute over theory-choice, not over fictionalism about unobservable entities. I also show that the empirical evidence gathered by Thomson and Piccinini is inadequate for initiating a Hacking-style argument, because the studies they cite involve neural representations only in an explanatory, not in an instrumental role. Furthermore, the potential effectivity of Thomson and Piccinini’s argument in fact relies on the acceptance of a specific theory of semantic content. Lastly, Thomson and Piccinini’s way of translating the commitments of this theory into observables is inaccurate, and that the methods used to perform the observations on which they base their argument cannot detect the presence of semantic contents. A principled anti-representational stance is thus possible even if we accept that Hacking-style arguments are sound and cogent.

A Tactical Puzzle. The Free-Energy Approach to Sensorimotor Enactivism

María Jimena Clavel Vázquez

Sensorimotor enactivism (SMEn) and predictive processing are two views about perception and perceptual processing (respectively) that enjoy great visibility nowadays. Furthermore, there have been some attempts of bringing them together under the assumption that the free-energy approach, a view that belongs to the framework of predictive processing, allows SMEn to meet the challenge of providing a mechanistic story regarding the neural dynamics involved in perception (Downey, 2017; Seth, 2014, 2015). The issue I am concerned with is the viability of these
I will focus on Anil Seth’s proposal. I will frame the question of the viability of Seth’s approach within a discussion regarding the adequate explanatory strategy to account for perception. I will claim that SfEn favours a strategy that prioritizes the agent-world dynamics over the inner structure of the agent. I will then offer two interpretations of this priority claim. I will argue that Seth’s account is unable to comply with at least one of these interpretations thus jeopardizing the viability of the free-energy approach to SfEn.

Know Thyself or Control Thyself: Mental Autonomy in the Predictive Mind

Krzysztof Dolega

In his recent article, Thomas Metzinger (2015) argues for a new construal of mental or M-autonomy as a functional property which consists in the deployment of a special kind of model representing the self as an epistemic agent - “[…] a global model of the cognitive system as an entity that actively constructs, sustains, and controls knowledge relations to the world and itself.” (Metzinger, 2015: 273-274).

The aim of this commentary is to evaluate Metzinger’s proposal from the perspective of the recently popular predictive processing (or PP) framework (Clark, 2013, 2016; Friston, 2010; Hohwy, 2013). Such analysis is needed because despite growing popularity, the implications of PP for mental autonomy and agency are still unclear. In his paper, Metzinger alludes to the framework on several occasions, but such references are not comprehensive enough to reveal what consequences can the adoption of PP have for his position. Although both views share the basic assumption that cognition consists predominantly in construction and deployment of mental models, the nature of action under PP (Wiese, 2017) may carry unwelcome consequences for Metzinger.

My investigation into the commitments of Metzinger’s construal of autonomy reveals two problems for his account. Firstly, PP implies that mental agency is enabled by a systematic mis-representation of the self. The misrepresentational nature of the self-model responsible for such agency also reveals an inconsistency in how Metzinger accounts for episodes when subjects lack M-autonomy.

Does Deliberation Provide Privileged Access to One’s Own Beliefs?

Paulius Rimkevičius

Deliberation has been said to provide us with privileged access to our own beliefs. A worry with this suggestion is that deliberating changes rather than reveals them. It persists whether deliberation is defined as a long and careful discussion with oneself or others, or as simply relating a proposition to the reasons one has for holding it true or false at the moment. The prospect of a rationalist theory explaining the role deliberation plays in self-attribution of mental states therefore looks rather dim, and even more so in light of recent research on our reasoning capacities. In contrast to this, a theory assuming that we access our own beliefs in essentially the same way
as other people’s systematically accounts for the data on deliberative self-attributions and when they go awry.

**Modeling the Self as Object**

*Elmarie Venter*

In recent work, Jakob Hohwy and John Michael (2017) propose that the self is identical to a set of endogenous causes modeled by the agent. In this paper, I propose that by sketching the self as a model that is constantly updated, Hohwy and Michael overlook an important distinction made in the philosophical literature, i.e. the self as subject and the self as object. I argue that the agent as object of experience is firmly embedded in the world and capable of interacting with it in various sensorimotor and cognitive ways. This can be accommodated by Hohwy and Michael’s account but I also argue that the self as subject is an important dimension of an agent; this dimension is yet to be accommodated in the predictive processing framework. In this paper, I provide a reconceived account of the self in the predictive processing framework that can explain both dimensions of the self (as subject and as object). I propose that the self as subject enters the conditions of satisfaction partly as a default mode of the whole embodied organism. This process is expressed through active inference which is a state in which the organism is interacting with the world to minimize prediction error.

**Models of the Mind in Dual-process Theories of Mindreading (Keynote)**

*Prof. Stephen Butterfill*

Few things matter more than the mental states of those nearby. Abilities to track another’s mental states and perspectives (that is, mindreading abilities) are widespread. But what might infants, chimps or scrub-jays represent that enables them, within limits, to track others’ mental states? A bad way to answer this question is by appeal to concepts. A better way is to invoke models of the mind. A model of the mind is simply a way mental parts of world could be. Constructing models allows us, as theorists, to see the mind as it is seen by a particular mindreading process. By constructing models, we can provide computational descriptions of mindreading processes (while remaining neutral on whether Godfrey-Smith, 2005 is right that mindreading is modelling). Importantly, we can show by construction that there are multiple, incommensurable models of the mind. By matching signature limits of the models to observed performance, we can identify how different mindreading processes depend on different models of the mind (e.g. Edwards & Low, 2017). Just as there are multiple kinds of physical cognition which depend on various models of the physical, so there are multiple kinds of mindreading which depend on various models of the mind.