Mutual prediction: embodied active inference and active environments

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Abstract:

The pervasiveness of digital technologies in Western society is having profound effects on our ways of being in the world. One recent debate in the public domain focusses on the "attention crisis", the human inability to pay attention to those things that matter to them, and, relatedly, the "attention" economics, the business model of digital platforms based on the ability that they can (and should) direct the attention of their users. Implicit in this debate are a number of philosophical and psychological assumptions about the way humans are (ought to be) directed at the world, what motivates them and the extent to which the mind mingles with the world. Both the threats to and the possibilities of the mind in continuous relation with technology look very different when working from different perspectives in philosophical psychology (such as behaviorism, cognitivism or embodiment).

I will present the framework of embodied active inference to sketch the distinct vulnerabilities of the embodied mind in relation with digital technologies. For the purpose of this talk, I will focus solely on the topic of prediction (although the way attention and embodiment are operationalized in this literature provides also promising avenues for further research). I will explore the analogy between the agent as predicting its exchanges with the environment (central to active inference) and the (smart) environment as actively predicting its exchanges with the user. I show how this analogy helps to think through the threats and possibilities that are latent in our interactions with digital technologies.

Short bio:

Jelle Bruineberg is a Macquarie Research Fellow at the Department of Philosophy of Macquarie University, Sydney, Australia. He works on a research project on attention, embodiment and digital technologies. In 2018, he completed his PhD at the University of Amsterdam with Erik Rietveld on Naturalizing Skilled Intentionality, a project to naturalize habitual forms of intentionality through recent work on the anticipating brain. He consequently worked as an Amsterdam Brain and Cognition Research Fellow and as a post-doctoral researcher on design-informed philosophy with Caroline Hummels at the Industrial Design Group of Eindhoven Technical University.