

# Séminaire: The Bounds of Cognition/Mind (MA3)

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## Description

The *hypothesis of (extracerebrally) extended cognition* (HEC) has been one of the most heatedly discussed topics in the philosophy of mind of the past two decades. In a nutshell, HEC states that not all cognitive processes are located wholly in the brain (CLARK and CHALMERS 1998, 9), or in other words, that there exist cognitive processes that extend outside the brain (DRAYSON 2010, 367). For example, a mathematician's scribbles on the black board, according to some proponents of HEC, are integral parts of her cognitive activities when solving a mathematical problem; or an Alzheimer patient's memory is taken to be partly constituted by the entries in his notebook. HEC has its roots in empirical results from (neuro-)psychology and artificial intelligence indicating that it is advantageous to model certain cognitive processes in such a way that some of their relevant parts are situated in the extracerebral body. The challenging contrast of these externalist conjectures to traditional internalist (i.e. cerebral) accounts of the cognitive quite naturally induced their absorption in philosophy. Some philosophers emphatically endorse the hypothesis of (partly) embodied cognition and do not hesitate to moreover liberate cognition from the confines of the human body (CLARK and CHALMERS 1998; CLARK 2008; ROWLANDS 1999, 2009; WHEELER 2010). Others—with no less emphasis—argue that the proponents of HEC mistake causal coupling for constitutional integration, that is, commit the infamous coupling-constitution fallacy (ADAMS and AIZAWA 2008, ch. 6). According to HEC's critics, cognitive processes are merely causally intertwined with extracerebral systems, but their actual constituents are fully located within the brain (ADAMS and AIZAWA 2001, 2008; RUPERT 2004, 2009).

In this seminar, we will carefully analyze this debate by studying its roots in empirical science and by evaluating the core arguments for and against HEC. On the object level, participants will get a deep insight into one of the currently most topical and fascinating issues in the analytical philosophy of mind. On the meta level, they will learn to scrutinize a philosophical debate by separating content from rhetoric, reconstructing and assessing arguments as well as weighing them against each other.

## Program

**21.9. Introduction**

**28.9. No class**

**5.10. Standard Cognitive Science**

- SHAPIRO, LAWRENCE, *Embodied Cognition*, London, New York: Routledge 2011, ch. 1.

### **12.10. Epistemic Actions**

- KIRSH, DAVID and MAGLIO, PAUL, On Distinguishing Epistemic from Pragmatic Action, *Cognitive Science*, 18 (1994), Nr. 4, 513–549.

### **19.10. Anti-Representationalism**

- BROOKS, RODNEY, Intelligence Without Representation, *Artificial In*, 47 (1991), 139–159.

### **26.10. Dynamical Systems**

- THELEN, ESTHER, Grounded in the World: Developmental Origins of the Embodied Mind, *Infancy*, 1 (2000), 2–28.

### **2.11. The Extended Mind**

- CLARK, ANDY and CHALMERS, DAVID J., The Extended Mind, *Analysis*, 58 (1998), Nr. 1, 7–19.
- **Background:** PUTNAM (1975), The Meaning of ‘Meaning’.

### **9.11. The Bounds of Cognition**

- ADAMS, FRED and AIZAWA, KEN, The Bounds of Cognition, *Philosophical Psychology*, 14 (2001), Nr. 1, 43–64.

### **16.11. Memento’s Revenge**

- CLARK, ANDY, Memento’s Revenge: The Extended Mind, Extended, in: MENARY, RICHARD, editor, *The Extended Mind*, Cambridge, MA: MIT Press 2010, 43–66.

### **23.11. Conservatism, Simplicity, and a System-based Theory of the Cognitive**

- RUPERT, ROBERT, Extended Cognition and the Priority of Cognitive Systems, *Cognitive Systems Research*, 11 (2010), 343–356.

### **30.11. Extended Cognition and the Mark of the Cognitive**

- ROWLANDS, MARK, Extended Cognition and the Mark of the Cognitive, *Philosophical Psychology*, 22 (2009), Nr. 1, 1–19.

### **7.12. Cognitive Extension and Inference to the Best Explanation**

- SPREVAK, MARK, Inference to the Hypothesis of Extended Cognition, *Studies in History and Philosophy of Science Part A*, 41 (2010), Nr. 4, 353–362.

### **14.12. Cognitive Extension and Mutual Manipulability**

- KAPLAN, DAVID MICHAEL, How to Demarcate the Boundaries of Cognition, *Biology and Philosophy*, 27 (2012), Nr. 4, 545–570.

### **21.12. Taking Stock**

- WALTER, SVEN, Situated Cognition: A Field Guide to Some Open Conceptual and Ontological Issues, *Review of Philosophy and Psychology*, 5 (2014), 241–263.

## References

- Adams, Fred and Aizawa, Ken: The Bounds of Cognition, *Philosophical Psychology*, 14 (2001), Nr. 1, 43–64.
- Adams, Fred and Aizawa, Ken: *The Bounds of Cognition*, Malden, MA: Blackwell Pub. 2008.
- Brooks, Rodney: Intelligence Without Representation, *Artificial In*, 47 (1991), 139–159.
- Chemero, Anthony: *Radical Embodied Cognitive Science*, Cambridge, MA: MIT Press 2009.
- Clark, Andy: *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*, Oxford: Oxford University Press 2008.
- Clark, Andy: Memento’s Revenge: The Extended Mind, Extended, in: Menary, Richard, editor: *The Extended Mind*, Cambridge, MA: MIT Press 2010, 43–66.
- Clark, Andy and Chalmers, David J.: The Extended Mind, *Analysis*, 58 (1998), Nr. 1, 7–19.
- Drayson, Zoe: Extended Cognition and the Metaphysics of Mind, *Cognitive Systems Research*, 11 (2010), Nr. 4, 367–377.
- Kaplan, David Michael: How to Demarcate the Boundaries of Cognition, *Biology and Philosophy*, 27 (2012), Nr. 4, 545–570.
- Kirsh, David and Maglio, Paul: On Distinguishing Epistemic from Pragmatic Action, *Cognitive Science*, 18 (1994), Nr. 4, 513–549.
- Menary, Richard, editor: *The Extended Mind*, Cambridge, MA: MIT Press 2010.
- Putnam, Hilary: The Meaning of ‘Meaning’, in: Gunderson, K., editor: *Language, Mind, and Knowledge*, Minneapolis: University of Minnesota Press 1975.
- Rowlands, Mark: *The Body in Mind: Understanding Cognitive Processes*, Cambridge: Cambridge University Press 1999.
- Rowlands, Mark: Extended Cognition and the Mark of the Cognitive, *Philosophical Psychology*, 22 (2009), Nr. 1, 1–19.
- Rupert, Robert: Challenges to the Hypothesis of Extended Cognition, *Journal of Philosophy*, 101 (2004), Nr. 8, 389–428.
- Rupert, Robert: *Cognitive Systems and the Extended Mind*, New York: Oxford University Press 2009.
- Rupert, Robert: Extended Cognition and the Priority of Cognitive Systems, *Cognitive Systems Research*, 11 (2010), 343–356.
- Shapiro, Lawrence: *Embodied Cognition*, London, New York: Routledge 2011.
- Sprevak, Mark: Inference to the Hypothesis of Extended Cognition, *Studies in History and Philosophy of Science Part A*, 41 (2010), Nr. 4, 353–362.
- Thelen, Esther: Grounded in the World: Developmental Origins of the Embodied Mind, *Infancy*, 1 (2000), 2–28.
- Walter, Sven: Situated Cognition: A Field Guide to Some Open Conceptual and Ontological Issues, *Review of Philosophy and Psychology*, 5 (2014), 241–263.
- Wheeler, Michael: In Defence of Extended Functionalism, in: Menary, Richard, editor: *The Extended Mind*, MIT Press 2010.