

THESES OF PHD DISSERTATION

Extending the Extended Mind Hypothesis

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I. Summary of the dissertation

The theory of the *extended mind* (put forward by Andy Clark and David Chalmers in 1998) is in the focus of my dissertation. The paper has given rise to one of the most heated debates in contemporary philosophy of mind, and for good reasons. It posits a challenge to the models of traditional cognitive science, the prevailing philosophical concepts of mind and even to our everyday thinking about ourselves. It also has a distinct metaphysical bite, claiming that cognitive processes (sometimes) can take place *outside of the head*.

My dissertation analyses and defends the original theory of the extended mind hypothesis, but its ultimate aim is to go beyond the hypothesis, and extend the already extended mind a bit further. I argue that we have good reasons to do so. In this way, the extended mind framework can cover cases where the mind is not *augmented* by different props of its environment, but the environment “leaks” into the mind causing all kinds of drastic and, more importantly, *cognitive* changes inside. These processes, just like the ones considered by Clark and Chalmers, deserve cognitive credit. The deeply intertwined nature of mind and world (especially our social and cultural worlds) makes it possible or even necessary to think about them with much less definite boundaries between them. Therefore, I explore and argue for two potential directions the extended mind theory could take us.

In order to achieve these goals, the original criteria by which Clark and Chalmers imagine extended systems need to be modified. The new types of “cognitive coupling” not only follow from the logic and spirit of Clark and Chalmers’ original work, but there is also empirical evidence from the sciences of mind and behaviour to support them. By citing some of the evidence, I argue that a socially and culturally extended mind is just as plausible a notion as the original extended mind; what is more, it accounts for a very important aspect of human cognition.

II. Central claims and theses

- The extended mind hypothesis raises a stark dilemma: given certain assumptions, “mind” will either be too narrow or too extended.
- The extended version, albeit *prima facie* more counter-intuitive, upon closer scrutiny proves to be more plausible.

- The “Extended Mind” can be defended against its counter-arguments.
- With a small, albeit important change in the criteria by which we conceptualise cognitive coupling, at least two other “extensions” can be outlined. These lead to socially and culturally extended minds. Such extensions can be supported by empirical evidence.
- The social and cultural external elements are not only parts of cognition, but oftentimes play much more important roles in driving cognition than the internal elements do.
- A “global mind” follows from the original notion, which, although does not seem plausible at first glance, is a genuine theoretical possibility and might even have social psychological bases to be actualised.

III. Structure of the dissertation

1. The context

I outline the context in which the extended mind hypothesis is articulated. This context is twofold: first, there is the traditional, prevailing “Cartesian” model of mind, which culminates in Jerry Fodor’s methodological solipsism and his theory of the modular mind. I refer to arguments adduced in the literature, and demonstrate that this conception of mind is untenable.

Second, I showcase concepts of the mind that go against this Cartesian conception. These are the “4E’s”: *Enactive*, *Embodied*, *Embedded* and *Extended Mind*. The extended mind is the most extreme of these, as it assumes that external elements of the world play a constitutive role in cognition.

2. The original notion

I present Clark and Chalmers’ original argument, review the most crucial counter-arguments found in the literature of the extended mind hypothesis, and demonstrate that they are not only inconclusive but also improbable. I especially focus on three important aspects: (a) the *parity principle*, the function of which leads to many misunderstandings in the literature; (b) the two sets of criteria that constitute cognitive coupling, one of which proves to be *ad hoc*

and in need to be dismissed entirely; (c) the separation of two distinct “waves” of extended mind arguments, one of which focuses on the *parity* of inner and outer processes, second of which is more interested in how the inner and outer realms *complement* each other.

3. The dilemma

I argue why and how Clark and Chalmers’ line of thought leads to the dilemma of “too narrow” or “too extended” minds. The problem is, standing beliefs or unconscious processes, which are undoubtedly mental, play very similar or often the same functional roles as reminders in a notebook or other props of the environment which augment cognition. We have no clear criteria to demarcate the mental from the non-mental. If we say that the notebook is not part of the mind, because it is not conscious, it does not have phenomenal character, it is not the *locus* of control (or for some other reason), then we claim that these are the marks of the mental. But we can always find internal states and processes that are *not* conscious, that do not have phenomenal character, or have nothing to do with control (etc.). Moreover, *most* of our mental states and processes have nothing to do with these. If we still claim that these are the marks of the mental, we have made the mind “too narrow”, since most of the internal states and processes will not constitute our minds.

On the other hand, if we accept a notebook as a genuine part of cognition, it is hard to see where our minds end. Why stop with a notebook? What about computers, calculators, libraries, the internet, other people and so on? These examples demonstrate the case when the mind is “too extended”.

Whichever we choose, the revision of our notions of mind becomes inevitable. In the dissertation I argue that the latter is a more plausible option, however strange it seems *prima facie*.

4. The modification

I present a critique of Clark’s and Chalmers’s notion of cognitive coupling and propose a minor, but important modification in their set of criteria. This opens up the original framework to other cognitive extensions, where external elements play a more important role in leading cognitive processes.

5. Social coupling

Scientific results from the field of social psychology suggest that our cognitive architectures are often fundamentally changed and influenced by our social interactions with others. These

interactions are so deep that some thinkers consider the human race to be a “superorganism” (like bees and ants); I do not go this far, but I argue that we have such psychological *tendencies*, which more often than not, demonstrate the impossibility of theoretically separating the internal mind and the external social world, and hence they should be treated as a single dynamic system.

In this part of the dissertation I also draw parallels between the Extended Mind and some aspects of Heidegger’s thinking in order to show how invisible, yet frequent and drastic these “social couplings” can be.

6. Transformative coupling

Scientific results from the field of cultural psychology and anthropology suggest that our cognitive processes are fundamentally dependent on the cultures we live in: that they change not only *what* we think about, but also *how* we think. The prevailing paradigm, which treats human cognition as fixed by biology and therefore universal, becomes more and more problematic in the light of new results. And since there does not seem to be a “Cartesian cognitive atom” that is the same everywhere, the mind should be conceptualised in such a way as to account for its closest, transformative external elements.

And since the framework I develop takes these external elements to be parts of the mind, the analysis of these external elements is also necessary to give a satisfactory description of the mind. I use insights of Karl Popper and thinkers of *meme*tics to show that our cultural worlds have a sort of autonomy, from which it also follows that our thoughts and thought processes are mostly not our own. Hence, a very significant part of our minds reside in the outside world.

7. Global Mind

Once we let a single notebook into the mental realm, as Clark and Chalmers do, the mind might seem to “overextend”. The culmination of this overextension could be grasped by the concept of a global mind. I argue that such a concept is not less plausible than the one put forward by Clark and Chalmers. And since we have *superorganismic tendencies* (a topic I discuss when I explicate social coupling), this might well be a non-actualised, yet genuine possibility.

IV. Methodology

Apart from abstract analyses, thought experiments, philosophical arguments – the standard toolkit of the philosopher –, I also use examples, analogies, metaphors and labels in order to make my argument as clear and convincing (and even as entertaining) as possible. I also use empirical results from different fields of the scientific study of the mind and human behaviour. The use of these results is justified by the fact that either other philosophers also rely on them in the literature, or are in line with such results.

V. Conclusion

The argument of the dissertation is far from conclusive. Its virtue and (somewhat) novelty lies in that it systematically separates different types of cognitive coupling, introduces social extension and explicates cultural extension (which is known in the Extended Mind literature, but is not fully explicated). This taxonomy might help the reader to see previously hidden theoretical assumptions and consequences of Clark's and Chalmers' original hypothesis more clearly. It might also help us make up our minds about our minds.

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Publications in the topic of the dissertation

Test-elme-világ. Lépések a kiterjedt elme felé. *International Relations Quarterly*, Vol. 7/2, 2016

Body-Mind-World. Steps towards an extended mind. *International Relations Quarterly*, Vol. 7/2, 2016

In progress:

How the World Leaks into the Mind - Culture and the Extended Mind Hypothesis (America From Across)

Potential Directions of the Extended Mind Hypothesis (SZTElozófia)

Cognitive Extensions (Tisicum)

Publications on other topics:

Objectified tunes. Philosophical etude for piano – Exhibition of Márton Barabás, *Új művészet* – vol. 8, 2016

Knowing not-knowing and not knowing knowing – On Forrai Gábor's Kortárs nézetek a tudásról. *Különbség*, 15/1, 2015

The phenomenology of a world war – On Ernst Jünger's *Storm of Steel*. *Tiszatáj Online*, 2015

Theological phenomenology and the transgression of metaphysics. Jean-Luc Marion – Cartesianism, Phenomenology, Theology - *Különbség* – 14/1, 2014