

Sterelny Defense Against Clark and Chalmers

I will be arguing against Clark's idea of the Extended mind using Sterelny's argument of the Scaffolded mind Hypothesis. Clark argues the idea of the extended mind. This idea presents the thought that what is considered parts of one's cognition is not necessarily limited to what is inside the brain or even the body. This argument pushes that extracranial mind parts should be considered parts of our mind if they satisfy certain requirements: “

- The resource be reliably available and typically invoked.
- That any information thus retrieved be more or less automatically endorsed... It should be deemed about as trustworthy as something retrieved clearly from biological memory.
- That information contained in the resource should be easily accessible as and when required, and that the information has been consciously endorsed at some point in the past "(Clark, 1997).

These key requirements are what are used to justify the classification of extracranial pieces as part of the mind. Sterelny argues that this interpretation is too broad and classifies things that are not necessarily part of the mind as mindparts. He argues that rather than having the mind ‘extend’ to all these components outside of the body, this phenomena is actually quite rare and what really is happening is something Sterelny calls the Scaffolded mind. The Scaffolded mind hypothesis argues that “human cognitive capacities both depend on and have been transformed by environmental resources. Often these resources have been preserved, built or modified precisely because they enhance cognitive capacity”(Sterelny, 472). The mind transforms the environment that surrounds it to enhance its own personal cognition, but this does not necessarily mean that its own cognition is being ‘extended’ to its environment.

Clark and Chalmers defend the ideas of the extended mind through two key examples; the tetris example, and Ottos' notebook example. Within the example of Tetris, we are presented with 3 different methods of playing the game(Clark,193-195). The first method consists of simple mental rotation, where the pieces need to be rotated within one's mind to correctly match them to the game state. This method is seen as the obvious case of cognition; the player is utilizing their internal cognitive powers to assess the outside world and make adequate changes. The second example is one where the player now can manipulate the state of the pieces by utilizing external buttons. This case is the one that is not cognition, the cognition occurs within the mind and then gets represented upon the screen through the buttons. The final example now puts the player into a future state where they are able to manipulate the physical representation of the shapes without the need of a button, but rather through direct thought. From what seems classically difficult to classify, Clark and Chalmers argue that the difficulty of understanding the last two examples stems from the refusal to allow the mind to be considered transcranial. They suggest a solution to this problem which is the parity principle. This principle states that "If, as we confront some task, a part of the world functions as a process which, were it to go on in the head we would have no hesitation in accepting as part of the cognitive process, then that part of the world is part of the cognitive process"(Clark,195). The parity principle is one of the key aspects of the Extended mind hypothesis and is used to present a variety of other ideas as ones that can be deemed as cognitive.

One of these ideas is showcased in the example presented by Clark and Chalmers in Otto's notebook(Clark,201). This example attempts to make the logical conclusion, based upon the parity principle, that the notebook utilized by Otto should be considered part of his cognition because it satisfies all of the requirements that the parity principle presents as well as Clark and

Chalmers claim onto what should be considered part of one's mind. The notebook, to Otto, is reliable as he crafted it himself; it is typically invoked such that Otto consistently uses the notebook in such a fashion that is parallel with him accessing internal information and he has endorsed the information within the notebook as such he has written and created the information within. When Otto wants to know the address of a certain location, if it is stored within the memory in his head, he would then start with the belief that he knows the information is stored within his memory. He would then search his memory until he finds that information and then he would be conscious of that information. If instead he believes that the information is stored within his notebook. He would then instead search the notebook for such information and when he finds it he now is conscious of that information through a slightly different method. Clark and Chalmers argue that the distinction between these two forms of accessing information are actually negligible and should not be defining what is and isn't part of a mind. Simply because Otto is searching a source other than his attained memories for information is not reason enough to disqualify the notebook from being part of the mind. This can be reasoned through the parity principle asserted by Clark and Chalmers.

Sterelny believes that this argument presented by Clark and Chalmers, while not entirely false, is an over extension of what the mind is. The extended mind gives unwanted side effects that seem less than reasonable to assume as true and Sterelny believes that this is reason enough to refute the initial idea of the Extended mind. Instead Sterelny argues for the idea of the Scaffolded mind which incorporates portions of the Extended mind, but in a more limited framework.

Niche construction takes the stance that animals will make changes to their environment that support or externalize some of the actions needed to take place, rather than create an internal

solution. An example of this brought up by Sterelny is earthworms. Earthworms typically cannot survive within soil, as they need to exist in a substance that is more wet. To counteract this, rather than adjust itself internally to the environment, it instead transforms its environment in such a way that allows itself to exist in what was originally an uninhabitable climate. Niche construction does not make the claim that the worm has ‘extended’ its body to the soil it exists within, but rather that it has transformed the environment around it in such a way that it aids its existence. This theory does not completely remove the ideas represented by Clark and Chalmers though. It does give leeway in certain fringe cases such as Otto’s notebook, where these external devices act in placement of some internal process.

One of Sterelny’s key arguments against Clark and Chalmers is the idea of Extended digestion. He argues that if the framework that supports the Extended mind is to be true, then that same framework should support other ideas, such as the idea of Extended digestion. Under the idea of extended digestion, it is thought that the blender and the stove are considered an extension of one's digestion. The idea that a blender is contingent with being a part of digestion rather than an external tool that has aided the process seems rightfully ridiculous. As Sterelny points out “no one has defended an extended stomach hypothesis”(Sterelny,468). The more logical conclusion seems to not be to classify these external resources as part of digestion itself, but rather as tools that are used in the aid of digestion. Rather Sterelny thinks that we should view it as something he terms as scaffolded digestion. The blender is a creation unto which is used in aiding our process of digestion, but is equivalent to the digestion itself.

The argument presented by Sterelny does not completely dismiss the idea of the Extended mind, rather it narrows the criteria for what is part of the mind or not. There are special cases where it seems that cognition does in fact take place outside of the body. One of these such

cases is the case of Otto and his notebook. Here Otto is utilizing the notebook in such a way that it is an extension of his mind. But this case is not representative of the variety of cases. It is not any old notebook that is giving him this information, but rather a very specific one that he has extreme familiarity with (Sterelny, 1996). This can be seen as well with top chefs. Top level chefs tend to have knives that are tailor made towards their individual use. Each chef has used a specific knife for thousands of hours and has become incredibly proficient with that specific knife. If one were to interchange that specific knife for another knife of the same type but not of the same familiarity, then the chef would lose some of his proficiency. This idea of an item being 'entrenched' is how Otto's notebook can be considered as an extension of his mind rather than just a tool that aids the cognitive process.

I argue that Sterelny's rebuttal to the Extended mind is the correct position to take. Not only does it have more internal cohesion when transferred to other fields outside of the mind, such as digestion, but it allows for a more descriptive and useful view of how cognition and the mind function. If we were to begin to view the world through the terms of the Extended mind, then we would be led to some conclusions that don't seem to be in line for what one would be looking for. If, for instance, one was to study the evolution of celestial navigation, it would feel wrong to say that the sky is part of these sailors' minds and cognition as they navigate the oceans. What would feel more comfortable, and in some sense accurate, is the approach that the sailors transformed the sky into a tool through perception that allows for more accurate naval navigation. Interestingly, since these approaches are focused upon the analyses of cognition and mind regardless of the body barrier, it would feel that the Scaffolded mind hypothesis could in some circumstances remove internal portions of the body from being considered part of the cognitive or other bodily experience.

If a medical patient has Alzheimers, then their memories are no longer as reliable as they should be, in some cases it is more reliable to externalize these processes so that they can be true without interference from the disorder. It feels that the path that Sterelny, possibly even Clark and Chalmers as well, may take could lead to someones internal process, in the case of Alzheimers and internal memory, being discounted as part of the cognitive experience and treated as tools instead.

Work Cited

Sterelny, Kim. "Minds: Extended or Scaffolded?" *Phenomenology and the Cognitive Sciences*, vol. 9, no. 4, 2010, pp. 465–481., doi:10.1007/s11097-010-9174-y.

Clark, Andy. *Mindware: an Introduction to the Philosophy of Cognitive Science*. Oxford Univ. Press, 2014.