24. The extended mind

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1 Claims

Clark and Chalmers make two main claims:

(i) A subject S's cognitive processes can be carried out externally (out of her body).

(ii) A subject S's mental states, such as beliefs, can be partly constituted by external features of the environment.

In favor of the first claim, Clark and Chalmers offer a variety of cases in which it would seem arbitrary to say that the cognitive process is not carried out externally. Suppose that you could perform a certain task with certain ease or speed only with the help of a computer. Now suppose that they install in your brain all the relevant parts of the computer (a little chip in your brain, let's say), so that the process can be carried out voluntarily inside your body. It seems compelling to say that the process, when carried out inside your brain, is one of your cognitive processes. So why should we think that it's not one of your cognitive processes when it's carried out by the computer? Both processes are triggered voluntarily, but the details of the process itself are not under your voluntary control. Both processes affect your behavior in roughly the same ways, and both processes allow you to perform a certain activity easier or faster.

We don't need to go that far. Think about the cases in which you need to compute long arithmetical operations, and you either can do it without pen and paper or it would just take longer or would be less reliable. Why should the process inside your head count as part f your cognitive process, but not the one you carry out with pen and paper?

Another reason they give in favor of (i) is what they call *coupling*:

> In these cases, the human organism is linked with an external entity in a two-way interaction, creating a *coupled system* that can be seen as a cognitive system in its own right. All the components in the system play an active causal role, and they jointly govern behavior in the same sort of way that cognition usually does. If we remove the external component the system's behavioral competence will drop, just as it would if we removed part of its brain. Our thesis is that this sort of coupled process counts equally well as a cognitive process, whether or not it is wholly in the head. (p. 9)

Moreover, the external items that are part of these processes are ineliminable: if they were eliminated, there would be a change of behavior.

One possible objection against (i) is that the reason why real cognitive processes are in the head is that they are *portable*: one can bring them with him anywhere, and are always there for one to access.

Clark and Chalmers reply that, though it may be true that portability is an important component of real cognitive processes, it is only so because being portable produces a different, crucial property: portable processes are *reliably coupled* to a cognitive system. It's crucial that cognitive processes can be easily accessed and are available at any time. This is easy to achieve when said processes are effected inside one's head, but that doesn't mean that that is the only way of achieving reliable coupling.

2 A stronger claim

Clark and Chalmers want to claim that not only cognitive processes can be carried out externally, but that even mental states can be external to their owner:

> Consider Otto. Otto suffers from Alzheimer's disease, and like many Alzheimer's patients, he relies on information in the environment to help structure his life. Otto carries a notebook around with him everywhere he goes. When he learns new information, he writes it down. When he needs some old information, he looks it up. For Otto, his notebook plays the role usually played by a biological memory. Today, Otto hears about the exhibition at the Museum of Modern Art, and decides to go see it. He consults the notebook, which says that the museum is on 53rd Street, so he walks to 53rd Street and goes into the museum.
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> Clearly, Otto walked to 53rd Street because he wanted to go to the museum and he believed the museum was on 53rd Street. And just as Inga had her belief even before she consulted her memory, it seems reasonable to say that Otto believed the museum was on 53rd Street even before consulting his notebook. For in relevant respects the cases are entirely analogous: the notebook plays for Otto the same role that memory plays for Inga. The information in the notebook functions just like the information constituting an ordinary non-occurrent belief; it just happens that this information lies beyond the skin.

Clark and Chalmers claim that the annotations in the notebook can play the same functional role as the contents of one's memory, and so, that if the contents of one's memory serve as grounds for the attribution of beliefs, so should the contents of the notebook.

3 Questions

- Can the annotations of the notebook really play the same causal roles as the processes producing memories inside our brain?
- How should we understand the claim that beliefs can be external to us? Clark and Chalmers seem to suggest that Otto's beliefs are somehow located out of Otto's brain, but what does this mean? Are they located in the notebook? What if Otto entertains the claims he previously annotated, where is the belief now? Is it inside his head or in the notebook, or in both places at the same time? Does it make sense to talk about the spatial location of a belief?