## (Dis)continuism and mechanisms

## Matheus Diesel Werberich

Today's philosophers of memory are split between continuists, who claim that episodic memory (EM) and imagination (EI) belong to the same natural kind, and discontinuists, who defend that they don't. This abstract considers how assumptions about which mechanisms are relevant for natural kindness shape this discussion. If the argument is in the right track, the (dis)continuism debate should be characterized as a verbal dispute about the important mechanisms for EM and EI.

The ability to classify individuals based on relevant commonalities, such that this classification is explanatory, are common desiderata for natural kinds. These criteria can be achieved by assigning mechanisms to natural kinds. There are two general types of mechanisms: etiological (the mechanism's causal history) and constitutive (the mechanism's functioning and physical structure).

Discontinuists' arguments often consider the etiological mechanisms of memory: the mechanism for remembering an event is a causal link between it and the recollection. If one considers that EM and EI have distinct etiological mechanisms, the conclusion that they have different operational properties naturally follows, for they would also need different properties. In this case, given EM's etiological mechanism, it would necessitate a trace to act as a causal link with the personal past.

Alternatively, the arguments for continuism often refer to their constitutive mechanisms. Continuists point to how EM and EI share neural substrates and are impaired in similar ways in amnesiac patients, so much so that it would make sense that remembering and imagining have the same physical and operational properties. Thus, considering constitutive mechanisms, EM and EI should be considered as part of the same natural kind.

As such, the two opposing views can be rewritten as follows:

Discontinuism\*: EM and EI don't belong to the same natural kind *iff* they don't share etiological mechanisms *and* these are sufficient to explain their properties;

Continuism\*: EM and EI belong to the same natural kind iff they share constitutive mechanisms and these are sufficient to explain their properties;

So constructed, both parties can agree on each other's views. Even if one is committed to a radical version of simulationism, it would be difficult to disagree that EM has, at least occasionally, a causal connection with the past event. And even if one is committed to a casual theory, it is still possible to accept that EM and EI share neural substrates and, at least, some operational properties. As such, (dis)continuists can agree on the empirical facts, but still argue over the second part of the conjunction - i.e., which are the sufficient mechanisms to explain the properties of EM and EI.

In this context, the (dis)continuism debate is a verbal dispute about which mechanisms are relevant for establishing natural kinds. Given that one desideratum for natural kinds is the explanatory power of the related mechanism, the dispute could be settled by more clearly assigning explanatory roles to etiological and constitutive mechanisms: if one mechanism better accounts for properties of EM and EI, it would be a better candidate for basing a natural kind.