

Body Memory

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August 2021

It is a hypothesis that the body itself is capable of storing memories, as opposed to only the brain. While experiments have demonstrated the possibility of cellular memory there are currently no known means by which tissues other than the brain would be capable of storing memories. Modern usage of BM tends to frame it exclusively in the context of traumatic memory and ways in which the body responds to recall of a memory. In this regard, it has become relevant in treatment for PTSD(Post-traumatic stress disorder - is a mental and behavioral disorder that can develop because of exposure to a traumatic event, such as sexual assault, warfare, traffic collisions, child abuse, domestic violence or other threats on a person's life.).

Peter Levine calls BM implicit memory or more specifically procedural memory, things that the body is capable of doing automatically and not in one's consciousness. He clarifies 3 types of BM and frames his work in terms of traumatic memory consequence and resolution.

- 1.Learned motor actions - Action patterns that can be continuously modified over time by higher brain regions.
- 2.Emergency response - Hardwired instinctual behaviors (i.e., fight or flight response, etc...).
- 3.Attraction or repulsion - We are attracted to sources of nourishment and growth and repulsed from sources of injury or toxicity.

Thomas Fuchs defines 6 different types of BM: procedural, situational, intercorporeal, incorporative, pain, and traumatic memory. He notes that they are not strictly separable from one another but "derived from different dimensions of bodily experience. Michelle Summa further refines this definition as an implicit memory. A pre-thematic, operative consciousness of the past expressed through the body.

Antonio Damasio calls these reactions to memories *somatic markers* or emotions that are expressed primarily as physical feelings.

These memories are often associated with phantom pain in a part or parts of the body – the body appearing to remember the past trauma. The idea of body memory is a belief frequently associated with the idea of repressed memories, in which memories of incest or sexual abuse can be retained and recovered through physical sensations. It may also be associated with phantom limb sensation but this is less common.

- Cellular memory (CM) is a parallel hypothesis to BM positing that memories can be stored outside the brain in all cells. The idea that non-brain tissues can have memories is believed by some who have received organ transplants, though this is considered impossible.
- One of the research in flatworm despite the loss of the brain and head. This may show memory stored in other parts of the body in some animals. A worm reduced to 1/279th of the original can be regrown within a few weeks and be trained much quicker to head towards light and open space for food, an unnatural behavior for a flatworm. With each head removed training times appear reduced. This may just be a sign of epigenetics showing the appearance of memory.
- There are lots of research and theory is given for the body memory(tissue memory) like Epigenetics and immune memory nowadays.