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# History of biological researches on memory

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## Abstract

This paper deals with the main biological researches on memory in the postwar era through the history of three experimental systems developed with three animal models. At first, aplysia, a sea-slug domesticated in marine research stations in the late 30's, served as a boundary-object between neurophysiology, experimental psychology and learning studies. Because of its simplicity, it provided the biological model of the seminal work on the neural supports of memory of Nobel Prize winner Eric Kandel. Hermissenda, another sea-slug studied by Daniel Alkon, was very close to Kandel's model and its most direct competitor. Finally, the chick presented an alternative model, derived from ethology, and enabling more integrative approaches of mnemonic processes, heavily advocated by Steven Rose. I will discuss how these animals, constructed as competing embodiments of mnemonic functions, were a part of broader arrangements which encompass representations of memory, sciences and then human beings. It draws three different styles of biological thought which influenced the first biological understanding of memory in the context of nascent neuroscience.

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