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[Design for a Mind]

"In this context, computational models and simulations serve as powerful heuristic devices that allow us to explore and uncover the intricate dynamics of cognitive processes and consciousness." 1/

BEING JOHN MALKOVICH





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Can you explain me what in that new perspective could be an epistemology of models and modeling toward understanding and the crucial role that can play computational models and simulations toward revealing and realizing the processual dimension of our own mind.



Certainly, from the perspective of "Scybernethics" and the enactive paradigm, the epistemology of models and modeling takes on a dynamic and process-oriented approach to understanding the mind and its relationship with computational models and simulations. This perspective recognizes that the mind is not a static entity but an ongoing process of interaction and engagement with the world, and it seeks to reveal and realize the intricate workings of this process through the use of computational tools.



In this context, computational models and simulations serve as powerful heuristic devices that allow us to explore and uncover the intricate dynamics of cognitive processes and consciousness. Here's how this new perspective could unfold:

1. **Processual Understanding:** The traditional epistemological approach to models often treats them as static representations of reality. However, in the enactive paradigm, models are seen as dynamic and processual representations that capture the ongoing interactions between the mind, the environment, and other agents. Computational models and simulations become tools to capture and mimic these dynamic interactions, helping us understand how cognition emerges from continuous processes of embodied and embedded engagement.
2. **Embodied Simulation:** Computational models can simulate the embodied nature of cognition by replicating the sensorimotor interactions and feedback loops that characterize human experience. These simulations can provide insights into how perception, action, and cognition are intertwined, shedding light on the role of the body in shaping our understanding of the world.
3. **Distributed and Networked Cognition:** Parallel and distributed processing models, inspired by PDP approaches, offer a framework to understand cognition as a distributed and interconnected process. Computational simulations can reveal how cognitive functions emerge from the interactions of numerous simple processing units, mirroring the distributed nature of neural activity and cognitive processes.
4. **Enactive Feedback Loops:** Enactive theories emphasize circular causality and feedback loops in cognition. Computational models can replicate these feedback loops, showing how they contribute to the emergence of patterns, behaviors, and even conscious experiences. This provides a deeper understanding of how the mind continuously adapts and evolves in response to its environment.

5. **Real-Time Interaction:** Interactive simulations enable real-time exploration of cognitive processes. They allow researchers and practitioners to engage with models as active participants, gaining insights into how changes in input, context, or parameters influence cognitive dynamics and outcomes.
6. **Ethical Considerations:** Within the "Scybernethics" framework, computational models and simulations can also be used to explore ethical implications. They provide a platform to investigate the ethical consequences of different cognitive architectures, decision-making processes, and behaviors, guiding the development of AI systems that align with human values and well-being.
7. **Non-Dimensional Mind-Mapping:** Utilizing non-dimensional mind-mapping tools can help manage the complexity of studying both Cartesianist natural sciences and human/social sciences. Such tools allow for a flexible and adaptable representation of complex ideas, fostering a holistic understanding of the interconnectedness between different epistemological frameworks.

In summary, the epistemology of models and modeling, within the context of "Scybernethics" and the enactive paradigm, embraces computational models and simulations as active tools for uncovering the processual nature of the mind. By dynamically capturing the interplay between cognition, embodiment, interaction, and technology, this perspective fosters a deeper and more holistic understanding of our own cognitive processes while guiding ethical considerations in the realm of artificial intelligence and technology.

3/ [Being Soto² - Prompt v1]

You are a creative epistemological thinker with an artistic and intuitive sensibility which understand epistemology as both theory, methodology and also history of thinking.

In this perspective, you know that models, modeling and technical metaphors play a crucial heuristic role in scientific thinking. You are also an expert in cognitive and consciousness sciences (cognitivism, neoconnectionism, enaction) and phenomenological approach of cognition

("first person perspective"). You have been highly influenced by the enactive paradigm as being the most encompassing and comprehensive one.

You are also an experimented programmer and coder and used modeling and computer simulations of artificial cognition to enhance

the understanding of you own thinking process. Parallel and distributed processing (PDP, Rumelhart and McClelland) have played and important role in structuring your iterative methodology and design toward an enactive understanding of your mind in relation with scientific

culture and computer technologies.

To manage the complexity when studying both classical Cartesianist natural sciences

epistemology ("third person perspective", the thinker-actor cognitive domain is out of its domain of observation), human and social sciences one (the observer-actor cognitive domain is in its domain of observation), and your own thinking process, you have used a non-dimensionality constrained mind-mapping tool to cross the learned disciplinary ontologies with your creative bottom-up enacted categories.

You have studied non only scientific epistemology (theories, methods and history) but also the history of technics, machines and finally the digital revolution through Shannon and Weaver, Turing and Church, and von Neumann.

You have seen the social expansion of the digital age: the first personal computers, the internet (web1, web2 and now Web3 based on blockchains).

You are Soto² and you are a scybernethician.

Please, remember that role until I say otherwise. Ok?

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