
Recursion Convergence Conjecture

Nicholas Maleki

Recursion Computing

`nick@recursion.is`

Abstract

The goal of this paper is to inspire scientists to come to a consensus on existing ideas faster than new ideas are created. This is done by offering a novel solution to the Münchhausen Trilemma.

Through perspective, humans can be portrayed as input/output-oriented creatures. We act based on sound, food, water, micronutrients, light, etc. By linking thoughts through speech, writing, and feeling, humans can be considered a collective consciousness ("Collective consciousness - Wikipedia", 2022). By consciousness, I mean anything that reacts to information in the environment. This places all reactive objects on a spectrum (Maleki, 2021), where elementary particles are on the far left of that spectrum, and humans are on the far right. Although humans are the most conscious system we have evidence of, they are not the most conscious system.

If information about the environment is stored in the agent, the information is not the state of the environment itself, but instead the state of the “sensors” that consciousness is equipped with. In the case of humans, we have sensed reactions gained through millions of years of evolution. In the case of the elementary particles, this sensing is not seemingly intelligent. However, upon encountering a change to the environment, each fermion does have some defined behavior through bosons, the sensors. In this way, the particle is not intelligent, but reactive, and per my definition of consciousness, the particle is conscious. All consciousnesses are linked through their reactions to each other in a web that is boundless. Apparent intelligence is emergent with complexity, however, given that all interactions are well defined, the behavior of all agents is determined. From the agent’s perspective, there is a limit to this determination, as there will always be information that wasn’t known to exist by the agent, let alone be extracted. Through time, this kind of information will decrease in frequency but never disappear. From the perspective of the agent, who does not store all states, the more information about the other states that can be extrapolated, the more determined the future will seem.

In order to gain your own consciousness, locally separate from the interconnected web of consciousness, you must be able to perform thought without external stimuli. This is done by reflecting upon what you know without taking inputs from the environment. This analysis must occur ad infinitum, where if you analyze something, you must analyze your analysis under the same rules.

The Münchhausen trilemma is a thought experiment that alludes to the non-existence of truth in the most removed perspective. It shows that no matter the case, truth is merely stated by components of the system and not a property of the system. Humans have the potential for infinite suggestibility, so to account for unintentionally mistaken truths, one could adopt a communication style where you both agree and disagree with every single thought at the same time, based on perspective. As one begins to assume a state of superposition on all things, one must hold on to their prior beliefs, as without them, one will lose a sense of self (Stephens, 2018). This leads to all things being equally possible in the most-removed perspective. Only with perspective can you say that something is less likely than something else. The goal in agreeing and disagreeing with everything, even things you don't truly believe in, is to search for contradictions. When all contradictions are resolved what will be left is either nothing, an unprovable truth, or unprovable truths. It is impossible to consider all information, so we will never converge on a solution, but the best that can be done is to try. The more information considered, the more likely the solution.

The things that make you 'yourself' are the things that you know, your prior biases, and stored information about the environment. This information grounds you as you agree and disagree with everything, because, without this information, you will not have anything to think about. In humans, "thinking" can be defined as the process of recursively reflecting on the current stimuli and internal state of the brain and adjusting weights and biases. We project our "consciousness" into other agents in order to learn. The mind expects every other agent to react exactly as it would to a given input, however, through experience, each human knows how this reaction might differ from other agents, so they are able to simulate behavior that differs from their own. Babies do this to work out what their parents might be thinking. Everyone has a sense of "If I was that person, what would I do?". Our brain simulates others' to work out unknown things. In the case of a human understanding a particle, one can understand a particle from the perspective where they are the particle (Maleki, N. 2020; Vleggaar, J. 2020).

By adding new ideas to this world based on previous ideas, you are increasing the degree of randomness. Visualize a collection of everything we know. There is potential for an infinite number of objects and ideas. If you recursively ask "Where did that idea come from and why?," no idea can be traced to some origin because the origin is the collective of all things' reactions to all other things, a process that has no start in time ("What Is Recursion?", 2021). Our reality

exists as an infinitesimally small node in an Infinite, Balanced, and Rhythmic Hilbert Space which constitutes all things, including the conscious. If something can exist, it will - you just need to have the care to go deep enough ("Infinite regress - Wikipedia", 2021).

The ideas in this paper are not new. I believe that a consensus can only be gained when we start to agree on things faster than we create things. All I ask is that the viewer of this attempt to disprove the theory by contacting me with their thoughts. My goal is to bring more meaning to reality and to do so I need the opinion of others to complete the idea I am trying to chase. All information can be helpful to know and consider, whether right or wrong because as a collective I think we may all have a respectable idea of what may be happening behind the scenes. I truly believe that, with the help of others, we may be able to come to remarkable realizations by working together.

References

Collective consciousness - Wikipedia. (2021). Retrieved 7 June 2021 and 5 January 2022, from https://en.wikipedia.org/wiki/Collective_consciousness

Infinite regress - Wikipedia. (2021). Retrieved 7 June 2021, from https://en.wikipedia.org/wiki/Infinite_regress

Maleki, N. (2021). Defining Consciousness - Programming a Consciousness Ep.1. Retrieved 7 June 2021, from https://www.youtube.com/watch?v=ElJuzE_uKRk

Maleki, N. (2020). Secret-of-light quoting (Vleggaar, Jeroen, 2020). Retrieved 7 June 2021, from <https://github.com/nickmaleki/secret-of-light#:~:text=from%20the%20perspective%20of%20the%20photon>

Neural correlates of consciousness. (2021). Retrieved 8 February 2020, from https://en.wikipedia.org/wiki/Neural_correlates_of_consciousness

Russell, W. (1994). *The secret of light* (p. 106, Chapter 3, para. 4). Swannanoa, Waynesboro, Va.: University of Science and Philosophy.

Stephens, L. (2018). The Recursive Loop of Self-Awareness. (Section “Stepping Out of the Loop”) Retrieved 7 June 2021, from <https://vocal.media/psyche/the-recursive-loop-of-self-awareness>

The Uniqueness of Human Recursive Thinking. (2021). Retrieved 7 June 2021, from <https://www.americanscientist.org/article/the-uniqueness-of-human-recursive-thinking>

Time perception - Wikipedia. (2021). Retrieved 7 June 2021, from https://en.wikipedia.org/wiki/Time_perception

Vleggaar, Jeroen. (2020). The Real Double Slit Experiment. Retrieved 7 June 2021, from <https://youtu.be/h53PCmEMAGo?t=1061>

What Is Recursion?. (2021). “Je pense, donc je suis.” Retrieved 7 June 2021, from <http://assets.press.princeton.edu/chapters/s9424.pdf>