

Peer Review

Review of: "Evolution, Through the Lens of a Physicist"

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Nice article that puts forth some arguments that I also feel it is high time that science clarifies.

I like the idea that we must distinguish between the notions of chance, randomness, stochasticity, and purposefulness, teleology, and “aim” (whatever that could mean...) in Nature. I myself wrote a couple of articles on this, even though in a more specific context. There I showed not only how random behavior isn't a signature for the lack of purpose but, especially, how quantum indeterminacy could even be a requirement for purposeful behavior. The author might check them out here:

<https://doi.org/10.53765/20512201.30.5.032>

<https://doi.org/10.53765/mm2024.31>

As to the second part (the whole more than the sum of its parts), I would highlight the fact that, at least according to the current discussion, people dealing with the subject distinguish between strong and weak emergence. The author seems to favor the existence of strong emergence, which is a highly controversial subject. Many deny that the latter exists at all. Therefore, I suggest he defends his position better with more references (for example, the works of Stuart Kauffman on the Kantian whole, or George Ellis's works on the down- and upward causation, just to mention a few.)

Declarations

Potential competing interests: No potential competing interests to declare.