

Review of: "Mindful Mechanisms: Drawing Parallels Between the Quantum Domain and the Three Bodies (Trikaya) of Buddhist Ontology"

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The article is interesting and explores a thought-provoking parallel between the three bodies of Buddhism ontology and some of the fundamental principles of quantum mechanics. The article describes these analogies/parallels, but it does not appear to explore what these analogies/parallels say about the relation of the material (physical world) with the spiritual (consciousness level) and how these two realities are connected. Although the relation between the three bodies ontology in Buddhism and some of the fundamental principles in quantum physics (e.g., particle-wave duality, collapse of the wavefunction, and superposition of quantum states) is discussed in detail, the explanation of the quantum mechanics concepts mentioned in the manuscript could be improved. For example, the article relates the concept of particle-wave duality to the principle of superposition of quantum states; however, the type of relation described in the manuscript seems to be a little bit different from how quantum theory describes these two fundamental ideas. In fact, the article seems to imply that a particle and wave are two states of a quantum system and that the collapse of the wavefunction caused by the observation of the system will cause the latter to act as a particle or a wave. But, according to quantum theory, the particle-wave duality is about matter manifesting particle-like properties or wave-like features depending on how we observe the system, rather than a collapse of the wavefunction of the system under study. There are some good quantum physics textbooks that it would be worth referring to (e.g., Feynman Lectures Vol. III, Principles of Quantum Mechanics by Paul Dirac, Quantum Physics by Eisberg and Resnick).

The argument presented in the manuscript seems to imply that the quantum world underlies the macroscopic world but that it is not a real world (i.e., it is a metaphysical reality that does not have any proper physical reality). However, quantum theory and experiments tell us that the quantum world is a physical reality that differs from the world we experience in our daily lives on a magnitude level: nanoscale (quantum world) and macroscale (world we experience daily).

Another aspect of quantum theory that would need some further clarification is that of possibility/probability. The manuscript talks about “undifferentiated possibilities” that are responsible for the macroscopic phenomena that we experience, but it is unclear what this means. Quantum physics tells us of “probability distributions” because particles can be indistinguishable, but probabilities are distributed.

To conclude, the article is interesting and original, but it would require some further polishing on the quantum side. It

would also be advisable to explore what the parallels between the three bodies of Buddhist ontology and quantum physics tell us about the relation between the material and spiritual levels, and how to bridge these two realities.