

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

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**Potential competing interests:** No potential competing interests to declare.

It is indeed enticing to draw parallels. The title itself attempts to fuse the scientifically-under-described Mind with the non-deterministic Quantum Mechanics by coining a brand-new phrase – ‘Mindful Mechanisms’. How far is the conceptual fusion convincing enough for the reader? That’s the question to be reviewed.

Taken separately, the description of the two different topics - the quantum world and Buddhistic Metaphysics -- is sound and authentic. The independent exposition as such falls in line with the respective subject matter. There’s no problem here. It’s also granted that the references are adequate and they pertain to the original texts. The exhaustive and scholarly nature of the description, as far as the separate topics are concerned, is hardly in question.

The deeper issue is something else altogether. Buddhism was concerned about the nature of mind and the elimination of illusion and suffering. It was undoubtedly successful in putting forward a revolutionary new idea of mental liberation. Quantum Mechanics, on the other hand, is an outcome of attempting to measure the physical base at its most elementary level. Apart from the indeterminate features of the quantum world or the puzzling fact that the observation activity of humans turned out to be an inseparable factor in the measurement of the ultimate base, quantum physics doesn’t necessarily venture to speak on the issue of mind. Hence the parallels sought to be drawn continue to remain as mere parallels. One doesn’t get to see a whole new insight of a unified description of reality starting from these two topics, which is precisely what the article claims.

This over-riding comment, however, is not something exclusive to this particular piece of writing; it pertains rather to any article that attempts to unify quantum mechanics with the evolutionary nature of consciousness. A long list of literature is certainly out there as an outcome of many spooky attempts to unify the lowest substratum of physical evolution with the topmost fruits of individual consciousness.

However, broad imaginative parallels do exist, and they are intriguing as well. If no single wave, particle, or physical feature can determine or describe the whole of reality, it’s also equally true that no single sensation or perception defines what we call self, Atman, soul, or consciousness. Such universal statements have been validated both in quantum mechanics and in neuroscience, and hence they serve as unquestionable evidence or support for the traditional insights of Buddhism.

But extrapolating the parallels to the point of theorizing that the modern view of physics and the traditional view of

Buddhism have rendered one and the same, or a fully satisfying description of the entire spectrum of reality, definitely remains a far-fetched, unsubstantiated claim. A lot more evidence and new insights, and a much deeper analysis of the respective subject matters, especially of the interconnecting subject of neuroscience, might be required to come up with a seamless and fully integrated description of the entire evolutionary process.

One obvious drawback of both quantum mechanics as well as the Buddhistic conception of reality can never be overstated. The haziness of quantum waves hasn't necessarily dethroned the beauty and the practicality of the law-abiding technological world. The haziness of memory, sensation, or perception hasn't necessarily dethroned the abiding aspirations and the deep emotions of the human mind.

From the quantum entanglement of distant particles, we haven't yet explained the inter-connectedness of all reality. Dark energy and gravitation that connect inter-stellar objects are just not the formula-based derivatives of quantum mechanics. Given such irresolute difficulties in the realm of Physics itself, it is still early days to draw parallels between the Buddhistic description of Dharmakaya, Nirmanakaya, and the Sambhogakaya - basically the intermediate objects of human brains and bodies - with the hazy substrate world of quanta.

Directly linking the quantum field theory of energy fluctuation with the concept of samskara that presented a broad and blind idea of how beings were in a cyclical path of birth and rebirth, emerging all the way from emptiness and returning back to emptiness, is no doubt enticing. But the real question is: how many stages of evolutionary interconnections have been left unaddressed?

Again, the change of perception from illusion and attachment to the liberated world of dharma is sought to be linked with the wave-particle duality of nature. How convincing such a parallel between the deep memories of the mind and the ultimate form of reality is remains the question raised.

Having raised such hard issues, one should also admit that the author is not unmindful of the distinctive settings of traditional Eastern metaphysics and the modern scientific views sought to be interconnected. Perhaps the answer lies in the more holistic understanding of the fundamental reality advocated by the article itself.