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Tinkering with the Unbearable Lightness of Being: Meditation, Mind-Body Medicine and Placebo in the Quantum Biology Age

Appendix #4

The Limits of Contemplating Mind and Consciousness

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I have long been an advocate of classical occult and mystical views as superior paradigms for addressing the types of questions queried here [1]. Seeking legitimization of occult and mystical phenomena in the framework of accepted and legitimized modern science is a futile and unsatisfying exercise. The effort should be the other way around: what we call "science" needs morph to accommodate these other frameworks.

There is a core paradox at the center of any discussion of consciousness or mind. Lack of awareness or acknowledgement of this paradox leads only to confusion. The following quote from Chapter 16 of Swami Krishnananda's *The Study And Practice Of Yoga, Vol. 1* [2] captures this core paradox of our being (statements in parenthesis and emphases are mine):

"Often we have a very queer notion of the mind (*e.g. thinking it is some aspect of the physical* body - DJD)....It is not located physically in any part of the body, because the mind is not a physical substance. It is non-physical in its nature. Though it controls the movements of the physical body, and it has intimate relationships with our physical system, it itself is not physical...

Our language itself is a defect, inasmuch as it sometimes contorts the significance of what it tries to explain. We have a grammatical way of thinking when we express ideas through sentences. There is a subject of reference in every sentence, and when we speak of the mind, we regard the mind as a kind of subject in a grammatical manner...

But the mind is neither this nor that. It is neither a substance nor an object - not anything whatsoever imaginable in the ordinary manner. ... One cannot, even with the farthest stretch of

imagination, conceive what the mind can be, because all conceptions of the mind fall short of its real nature....

The mind is what we ourselves are...

It is not someone thinking through the mind - "I think through the mind." We do not stand apart from the mind when we think through the mind, and so this linguistic expression, "I think through the mind," is not a proper way of expressing the fact...

We ourselves are the mind...**How will we define ourselves?**...When we are defining the mind, we have to take into consideration our own selves...."

Stated in simpler terms, the mind trying to define itself is like the eye trying to see itself. Can the mind, one of whose functions is to give meaning and definitions, define its own nature? To assume 'yes' is to not understand the massive depths through which this paradox resonates. Any definition of mind or consciousness that the mind contrives is simply another image, or thought, within the mind. The mind moves very much and exerts much effort contemplating its own nature, and goes nowhere, staying only within itself.

Western science, at its genesis in the 1600s, was confronted with the dualism between the empirical realism of Bacon and the Cartesians, or the rational idealism of Leibniz and Berkeley [3]. History shows that the practitioners of early modern science chose the former over the latter. Kant's transcendental idealism [4] sought to blend these approaches, but was ignored in science until modern times.

The recognition that the brain involves intrinsically active circuits in which sensory input parameterizes, but does not generate, brain electrical activity [5], has caused some neuroscientists to embrace Kantian idealism [6, 7]. In efforts begun by Gödel [8] and Turing [9], it is now known that simple and fundamental mathematical structures can display completely unordered behavior. This has been interpreted to indicate that the few cases of successful scientific-mathematical formalisms (e.g. relativity, quantum mechanics) appear to be exceptions, rather than the rule [10, 11]. Thus modern understanding reveals the deep intrinsic limits of our ability to mathematically describe nature.

In short, honest application of the scientific method has revealed to us, not the inner workings of nature, but the inherent limits of our ability to understand nature. In this context, insights such as those provided by Swami Krishnananda above become valuable guides to extricate ourselves from the problems and paradoxes we have generated over the ~400 year adventure in Western civilization that we today call "science". We conclude again with Swami Krishnananda's insights:

"How does the scientist take for granted or imagine that he is an unconditioned observer and everything that he observes is conditioned? It is not true, because the observing scientist is as much conditioned by factors as the object that he observes. So, who is to observe the conditions of his own observing apparatus: his body, his senses - the eyes, for example, and even the mind...? Inasmuch as the observing scientist - the observing individual, the knowing person - is as much conditioned and limited as the object that is observed or seen, it is not possible to have ultimately valid knowledge in this world.

All our knowledge is insufficient, inadequate, temporal, empirical - ultimately useless. It does not touch the core of life.

The condition of our being is the knowledge that is really worthwhile, and any other knowledge is an external growth which can be washed away by a bath with soap; therefore, it will not help us. But that knowledge which has become a part of our being - the knowledge which we are living, the knowledge which is inseparable from what we ourselves are - is worthwhile, and that is to grow into greater width and depth in its profundity"

Citations

[1] DeGracia DJ. Beyond The Physical: A Synthesis of Science and Occultism. Amazon Digital Services, Inc. ASIN: B003X9774C. 2006.

[2] Krishnananda S. The Study And Practice Of Yoga/Volume 1. The Divine Life Society; Himalayas, India. 2006.

[3] Tarpley W. How the Dead Souls of Venice Corrupted Science In: Against Oligarchy: Essays and Speeches 1970-1996. Online at http://tarpley.net/online-books/against-oligarchy/

[4] Kant I. The Critique of Pure Reason. Penguin Classics. Penguin Books, LTD, London, England. Revised edition, 2008.

[5] Llinás RR, Paré D. Of dreaming and wakefulness. Neuroscience. 1991;44(3):521-35.

[6] Behrendt RP (2003) Hallucinations: synchronisation of thalamocortical gamma oscillations underconstrained by sensory input. Conscious Cogn. 12(3):413-51

[7] MacLean JN, Watson BO, Aaron GB, Yuste R (2005) Internal dynamics determine the cortical response to thalamic stimulation. Neuron. 48(5):811-23.

[8] Gödel K. On Formally Undecidable Propositions of Principia Mathematica and Related Systems. Reprinted in Davis M (ed). The Undecidable: Basic Papers on Undecidable Propositions, Unsolvable Problems and Computable Functions, Raven, New York. 1965. Reprint, Dover, 2004.

[9] Turing A. On Computable Numbers With an Application to the Entscheidungsproblem reaches (1937). Reprinted in Davis M (ed). The Undecidable: Basic Papers on Undecidable Propositions, Unsolvable Problems and Computable Functions, Raven, New York. 1965. Reprint, Dover, 2004.

[10] Chaitin G. Meta Math!: The Quest for Omega. Vintage Books, Random House, New York, NY. 2005

[11] Wolfram S. A New Kind of Science. Wolfram Media, Inc. Champaign, Il. 2002.