The Necessary Conjunction of the Western and Eastern Thought Traditions for Exploring the Nature of Mind and Life

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Special Theme Issue on Integral Biomathics (iBioMath)

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Timeline:

Deadline for abstracts: 1st October 2016 Deadline for submitting papers: 1st May, 2017 Deadline for submitting revised papers: 1st August, 2017 Final deadline for GE's to accept all papers: 1st October, 2017 Publication deadline: November/December 2017

Scope

This special journal issue continues the tradition of the previous three volumes of the series on Integral Biomathics in 2015, 2013 and 2012 ([1, 2, 3]), which originated from the 2011 EC FP7 collaboration initiative INBIOSA [4] (www.inbiosa.eu) and a 2010 programme vision paper [5] and its 2013 and 2015 updates [6, 7]. The project is now carried forward as a periodic JPBMB focused report made possible by the generous support of Prof. Denis Noble, FRS and the members of our worldwide multidisciplinary research community. This time we take on an essential aspect of our discourse that was touched upon in some of the previous contributions, but still has not been considered sufficiently in contemporary biomathematical and biocomputational models. We experience a global crisis in many aspects of science and philosophy today [5, 8-15]. Therefore, the intention of this volume is to put the emphasis on the connection between the Eastern and Western thought traditions because we consider this relation and exchange as central and leading elements of scientific development. Well-known examples in this respect are the Einstein-Tagore and Bohm-Krishnamurthi discussions, as well as Capra's book "The Tao of Physics". But now we wish to explore how life sciences can be advanced by Eastern thought.

Eastern and Western approaches to knowledge are opposite. The West demands primary emphasis on objective (reproducible) experiments to test research hypotheses specified in crisp and logically sound (causal) language, while the East holds that our language employed for addressing possible implications latent in the reported experiments may allow for an infusion of something [*vague*]¹.

¹ Bracketing is a technique known in both photography and phenomenology. In photography bracketing is used to capture sufficient detail of the object by taking a number of image shots with different camera settings such as exposure (<u>http://www.wikiwand.com/en/Bracketing</u>). In phenomenology bracketing ("Einklammerung" or "epoché", Husserl) "involves setting aside the question of the real existence of a contemplated object, as well as all other questions about the object's physical or objective nature" (<u>http://www.wikiwand.com/en/Bracketing</u> (phenomenology)).

Placing brackets around a concept within a context as above prevents from messing up the clarity of the overall message, and thus alludes to the concept without having a precise definition, while still allowing it to be cited and discussed. In our case, vagueness corresponds to both uncertainty and potentiality known in quantum mechanics, but it goes beyond them. Uncertainty in statistics usually refers to which of several distinct possibilities will eventuate. Through observation and measurement it becomes certainty and fact in physics.

The Eastern tradition implies methods to acquiring knowledge such as the practices of Taoism (Wu Wei) and Buddhism (Sahaja) that have not been systematically studied in the West. This special issue on Integral Biomathics intends to elucidate the complementation between the Eastern and Western paths to exploration, and show how the foundations of a unified approach to knowledge and science can be rigorously formulated to accommodate both approaches.

We welcome original contributions exploring the borderlines between Eastern philosophy and cognitive science, neuroscience, biology, ecological/ environmental science, biosemiotics, autopoiesis, second-order cybernetics, artificial intelligence, pure mathematics and computation, chaos and complexity science. They can be developed along the lines of thought of both Eastern and Western philosophical traditions in exploring the nature of mind and life.

Note to Authors

Manuscripts and their abstracts should be written in clear, straightforward language suitable for an interdisciplinary readership. The Guest Editors are happy to discuss the substance of papers with authors, but, since we do not have copy editors for our Special Issue, we ask authors to assume responsibility for their own copy editing (spelling, grammatical construction, consistency, etc.). Abstracts should be submitted by October 1st, and should not exceed 400 words.

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In biology we also have the vague possibility for phenotype changes as a result of genetic mutations, with the former being validated by fitness and natural selection. Here vagueness is more appropriate than in physical systems because the living being can be modified virtually in an unlimited number of different ways (not all of which are survivable options). Similarly through contemplation an idea ("Einfall") from the vast ocean of possible vague thoughts becomes reality when it resonates with desire/feeling followed by physical action. But the number of possible actions will be much less than the number of possible conceptions. This can be also a spontaneous way of doing science "a la Poincaré" driven by vague emotions or impressions like an artist's creative act and not always led by rigorous reason. But again, the available 'machinery' will be much more limited than the vague hunch in the teachings of the East.

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also: <u>http://arxiv.org/abs/cs.NE/0703002</u>.

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Organization

<u>http://www.inbiosa.eu/</u>, <u>http://ibiomath.org/</u> For more information about the project please contact: Plamen L. Simeonov, email: <u>plamen@simeio.org</u>