

EDITOR'S NOTE

This issue of *Philosophy Pathways* contains three articles which would be of interest both to philosophers and scientists. The first article is entitled “Materialism, Non-Materialism and the Problems of Consciousness” by Catherine Nickford. The second article, by Charles Sullivan, describes the “Theory of Useful Belief”. The third and final article, by Paul Arendse, focuses on the “Concept of Reality”.

Key questions in this issue are: How do we interact with the external world? Can we bridge the gap between the physical and mental worlds? What is consciousness? What is the significance of information in connection with reality? Can our beliefs be stable enough to qualify as knowledge? Our authors revisit such questions throwing them into new light.

In the first article, Catherine Nickford examines consciousness and its ontological physical correlates. The author starts with an account of classical theories based on deterministic processes. Later, she reviews quantum theory. Within that theory, Hameroff and Penrose argue that consciousness is primarily a *quantum* phenomenon. For the author, the human mind is not a mere receptacle for sense-impressions and ideas but rather a complex structure ordered in determinate ways. Time and space are abstract/mental constructs used to organize perceptions. According to the Hameroff-Penrose model, the basis of consciousness lies in some *external* reference frame which receives impressions within the space-time surrounding their occurrence.

The Hameroff-Penrose model utilizes a theory formally known as Orchestrated Objective Reduction (Orch-OR) theory. The theory is elegant but has its limitations; furthermore, it has been criticized by scientists who work in quantum physics and brain physiology. Perhaps, the main problem arises from the fact that there is no generally agreed definition of consciousness. In our view, the following question seems reasonable: How do subjective experiences arise from a series of complex brain functions? For instance, as noted by Susan Blackmore (2005): “How on earth can the electrical firing of millions of tiny brain cells produce my private, subjective, conscious experience?” Let us remember that the human brain as a kind of neural network with complex circuitry. Modern biology has shown that the human brain contains several billion neurons and trillions of synapses. Artificial neural networks (from AI research) come nowhere near those figures.

The second article, by Charles Sullivan, describes the theory of useful belief. According to this theory, a person must *not* hold a belief until that belief has been tested against his or her own personal experiences. Essentially, the author questions our understanding of reality. Many of the actions we normally take are influenced by the beliefs we hold; consequently, our future actions are modified by our beliefs. Then, a belief that we use to modify our behaviour can be defined as a useful belief. The author proposes three *tests* by which we can determine whether a belief of ours is useful or not. The theory of useful belief postulates that we can know no facts but can only have beliefs about reality.

In our view, the strength of this theory lies in the specific formulation of its tests. However, the author's statement that “science is not the search for truth, it is the search for useful beliefs” is not in line with well-known scientific views. Further, we must consider changes in memory when a new event occurs. As Nobel laureate Daniel Kahneman writes (2011): “A general limitation of the human mind is its imperfect ability to reconstruct past states of knowledge or beliefs that have changed. Once you adopt a new view of the world, you immediately lose much of your ability

to recall what you used to believe before your mind changed.” Nonetheless, the theory of useful belief provides a new insight into important philosophical questions.

The third article, by Paul Arendse, is a lengthy essay on the concept of reality. The author adopts a methodology in which we may conceptualize knowledge of reality as tacit knowledge innate to all beings. Knowledge can be considered as part of an interconnected and interacting living network of information processing and communication exchange within the physical sphere. Therefore, information exists *everywhere* as a fundamental element. For the author, reality is rooted in outer space. Information and its interpretations by outer space intelligence produces knowledge, which then becomes the primary source of consciousness.

The essay concludes with the thesis that reality is an information *ecosystem* which supports a life system of evolutionary consensus; the latter seeks organization for the manifestation of knowledge. The author illustrates very clearly the pathways from information to knowledge. Then, knowledge emerges as a core ingredient of life.

Of course, apart from the natural world, i.e. the *cosmos* of this article, much of the information we receive today comes from Internet sources. Our interaction with the Internet creates a new kind of evolving “cosmos” which could be called “Infoworld”. This world is the “product” of information systems and networks, both of which create a web of new knowledge. In such a world, as Robin Mansell (2012) writes, “we might be able to create an information society in which our ‘machines of loving grace’ operate in a way that contributes to a new environment in which people can achieve greater empowerment, freedom, and responsibility.”

References

- Blackmore, Susan (2005). *Consciousness*. Oxford University Press. See pp.17-18.
Kahneman, Daniel (2011). *Thinking, Fast and Slow*. Penguin Books. See p.202.
Mansell, Robin (2012). *Imagining the Internet*. Oxford University Press. See p.176.

© Georgios Constantine Pentzaropoulos 2017

Email: gcpent@econ.uoa.gr