Quantum Consciousness in Animals

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Abstract

Consciousness occurs when one is in a state of awareness of one's self and the external environment. Quantum consciousness is computed within the cytoskeleton of the cells; basic units of life which comprise of unicellular and multicellular animal life. Consciousness has always been linked to the nervous system but there are several studies that have recorded conscious behaviors in animals with and without nerve cells. Animal behavior is represented as conscious moment, which occurs due to an event, which may be intentional or unintentional. The existence of consciousness in animals can be based on the exhibited behaviors and its comparison to multifaceted conscious behaviors observed in higher beings; which is driven by protein conformational changes within the cytoskeleton network of cells, performed within the domains of space time geometry.

Key Words: Animals, Quantum, Cytoskeleton, Consciousness

Introduction

Human based consciousness comprises of, what we see, hear, touch, taste, smell, feel, etc, which is termed as 'phenomenal consciousness' and this has led to a one-way thinking in determining the existence of true consciousness (Clark 2001). Humans evolved at a much later stage in evolution, before which the earth was dominated by organisms which survived and are still surviving based on their manipulative intelligence, to perceive and understand the environment. Conscious behaviors observed in animals may not be similar to human consciousness but are unique in their own space. Superiority does not exist and cannot be falsely determined by the brain size or its capacity, as organisms much smaller have demonstrated capabilities which cannot be matched to human intelligence, especially when the human genome has almost 150 genes that have originated from microorganisms and viruses (Crisp et al., 2015).Several forms of conscious behaviors are known to exist in organisms ranging from viruses to humans and there is no reason why arguments for possession of consciousness must be backed by the existence of the nervous system, which is a wonderful system, but in its own place and organism. Failure to behave like humans does not mean the absence of capability.

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Many years ago, humans realized that in order to survive they needed to form communities with people of different talents which could be achieved through proper communication and cooperation. Animals ranging from micro to macro levels such as cell, worms, ants, bees, mammals, etc are known to display conscious behaviors and are known to engage in Hamiltonian descriptions of cooperative interactions such as altruism, where interactions are beneficial to the recipient but costly to the actor and mutualism, that provides a direct fitness benefit to the organism that performs the behavior, which outweighs the cost of performing the behavior (Neilands 1995). Lynn Margulis, in the endosymbiotic theory of organelle evolution, suggested that not only animals but every organized being is conscious (Margulis and Sagan 1995). Humberto Maturana was the first to propose that living systems though cognitive systems are applicable to all organisms with and without a nervous system (Maturana 1970). At the first annual Francis Crick memorial conference on consciousness held on 7th July, 2012, a group of scientists formally declared a document entitled "Cambridge Declaration on Consciousness in Non-Human Animals" which stated that the capacity of consciousness emerged very early in evolution and those processes that support consciousness in humans are likely characteristics of many living organisms (Low 2012).

Animal Consciousness is Purely Quantum Computed

Consciousness is the ability to be aware of and to be able to perceive the relationship between one's self and one's environment. It is to be associated with the ability to process, store and act on information gathered from the external environment (Miller and Bassler 2001) while quantum consciousness proposes the existence and creation of a conscious moment through a computational event (Hameroff and Penrose 2014). The information of consciousness gained by the movement of the energy, resides in patterns of matter and energy, which are built up in the cell based on prior experiences with more interaction and knowledge. The quantum hologram theory by Marcer proposes that, life at the most basic level such as primitive cells exchange information with the environment by utilizing quantum coherence of non-locality (Mitchell and Staretz 2011). Evolutionary comparison of the cytoskeleton and its structures suggests that consciousness existed from the very beginning and has been propagating by means of the cytoskeletal network of the cell by means of quantum computing (Pereira 2015) and therefore forms the basis of consciousness for every living being. Animal consciousness originates within the cytoskeletal structures at a cellular level. The microtubules in the brain cells have demonstrated this message transfer via the Orch OR theory penned by Roger Penrose and Stuart Hameroff (Hameroff and Penrose 2014). The cytoskeleton is expected to be a source of vibrations that generate cellular electromagnetic forces at kilohertz to gigahertz range, which is also connected to the metastatic growth of this network (Sahu et al., 2013).

Penrose and Hameroff claim that constant formation and reformation of tubulin states in the cytoskeleton are governed by quantum mechanical effects within each tubulin interior and these effects function as a quantum computer using "quantum bits" that interact non-locally with other tubulins and with quantum holograms. When enough tubulins are entangled long enough to reach a certain threshold, a "conscious event" occurs with the collapse of the wave function within the domains of space-time geometry (Hameroff 1998). Quantum based consciousness originates within every cell of all unicellular and multicellular organisms and therefore forms the support mechanism for important functions managed at a cellular level such as cell proliferation and differentiation, apoptosis, DNA synthesis, RNA transcription, protein expression, ATP synthesis and metabolic activity. Quantum consciousness enables animals to understand and judge perceptions, which gives the animal a prospect to behave as per will.

Conclusion

Conscious behavior is prevalent in the animal kingdom and in comparison to the neural system, is in lower form, but by division of labor in cells it propagates and attains a higher state, as observed in higher organisms. Whether unicellular or multicellular, we all depend on our past experiences and observation and use this for several actions that need to be performed in our day to day life, which is managed by the conscious decisions that we take, which may be new or retrieved from memory. Quantum generated consciousness or sentience within the cytoskeleton, has the ability to make an animal conscious of its surroundings and its main effort is to gain a clear perception to associate and recognize favorable and unfavorable conditions, just like the brain in higher animals and the protoplasm in unicellular organisms.

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