

The cosmic energy bridge, cellular quantum consciousness and its connections

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Abstract

A conscious moment occurs when an individual is in a state of awareness of one's self and the external environment. The human brain has been extensively studied to understand the phenomena of human thought and behavior in the context of consciousness. Consciousness has always been linked to the nervous system but there are several studies that have recorded conscious behaviours in organisms without nerve cells. This paper hypothesizes that quantum energy generated consciousness emerges in each and every living cell and traverses by means of electromagnetic radiation; an oldest form of energy that exist in the cosmos and which utilizes the cellular structures to flow by means of a coherent, invisible, powerful, recyclable process; a connection with the cosmic energy bridge.

Key Words: Electromagnetic field, Cell, Consciousness, Quantum, Cosmic energy



The cosmic energy bridge connects the body with the cosmos

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Introduction

Electromagnetic force and gravitational force is some of the oldest forces of energy that exist. Cosmic energy is the cause of the universe, which is a form created from nothingness but its principle of action is expressed through change managed by entropy. At the level of a biological cell, entropy reduction arises from internal self-organization, information storage and transfer, and the only way to support the laws of thermodynamics is by balancing these free energy changes with metabolic energy expenditures (Davies et al 2013) which might be true for all matter. The universe is a living, evolving, adapting universe, which utilizes information to organize itself and to create ever-increasing levels of complexity (Mitchell and Staretz 2011). Matter is an asymmetric form of light, which molds and creates e.g. a living cell, with the capability to interact and capture energy from the cosmos.

The living cell is an organization of elementary particles, which requires a symmetric energy state, for it to come into existence. Cosmic energy obtained in the form of electromagnetic radiation is highly conserved in the universe and a confederation of these two forms can form a bridge which may hold the answer to consciousness. Information for the formation and progression of the universe is stored in atoms as charge and spin, with the electron providing low energy to support life and the nuclear constituents such as protons and neutrons providing high energy for the stars (Teilhard de Chardin 1959). Photons are stable, massless quantum objects that exhibit properties of both wave and particles with observable facts, such as diffraction and interference, on the length scale of its wavelength (Mead 2000; Okun 2006). Quantum tunneling is a concept derived from quantum computing wherein photons travel through specialized cell organelles and elicits signaling by means of movement and interaction of photons within the cell (Hameroff 1998a; 1998b) a process more rapid than any biochemical or electrochemical process that exists in the cell and can be compared to quantum computing. This paper is a compilation of quantum based factors which hypothesizes the existence of consciousness in every single living cell via the cosmic energy that resides in the cosmos.

Electromagnetic radiation and the formation of cosmic energy bridge

Phototrophic way of life in living systems is by means of trapping of electromagnetic radiation energy, converting it to chemical energy to use it for cellular maintenance and growth (Overmann and Garcia-Pichel 2006). The effect of electromagnetic radiations on biological systems depends on radiation strength and its frequency; these properties play an important role in energy transfer. Photon penetration was first demonstrated by Popo and Klimek by a process known as photon sucking, which involves active absorption and re-absorption of emitted radiation that supports biological regulation within the cells and tissue (Popp and Klimek 2007). Vogel et al demonstrated this phenomenon in bacteria, where some bacterial species suck up radiations from their nutrition medium (Vogel and Sübmuth 1998). Photons that interact with the

cell, can be absorbed, scattered or reflected. The scattering behavior of the cell is an important feature, because it determines the volume distribution of light intensity in the cell (Chung et al 2012; Tuchin 1997). Scattered photons are eventually absorbed or escape in the form of diffused reflection, but absorbed photons interact with organic molecules or photo molecules. Absorption of photons occurs, when a charged particle moves from a higher energy excited state to lower energy ground state i.e. $hf = E_2 - E_1$, where h is the Plank's constant, f is the frequency of the photon, E_2 is the energy of the excited state and E_1 is the energy of the ground state and brings about a release of a photon (Marston 1999) leading to an optical window effect in the cell.

According to Schrödinger, high level of organization in living cells can only be maintained because the cellular system within the cell continually obtains order from the environment, through sunlight (Chang et al 1998; Popp and Belousov 2003). Herbert Fröhlich introduced the concept of coherence in a living system, where he considered absorbed light as an ultra-weak radiation that is calm, with stable intensity and can superpose like a laser (Hyland 2000). He also postulated that biological systems exhibit coherent longitudinal vibrations of electrically polar structures (Fröhlich 1968; 1967). Most communications within or between cells occurs via chemical or electrical signaling. The first known cellular signaling was demonstrated by Alexander Gurwitsch, where he showed an increase in mitosis in a set of chemically isolated onion root cells present in a zone of actively dividing cells and called it "mitogenetic radiation" "which was electromagnetic in nature (Gurwitsch 1923; 1924; Gurwitsch and Gurwitsch 1924). Low frequency electromagnetic force is known to affect various cell functions, including cell proliferation and differentiation, apoptosis, DNA synthesis, RNA transcription, protein expression, ATP synthesis and metabolic activity (Foletti et al 1999; Lisi et al 2006; 2008).

Biophotons or ultra-weak photon emission is a well-researched concept under the studies conducted by Popp and his group, where cells are known to emit one to thousands of photons/cm². Biological cells are known to show increased intensity of these emissions, when they undergo physiological changes under chemical or physical stress (Slawinski 1990; 2003) or a "flash of death" when the cells get damaged beyond repair (Slawinski 2005). 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 (Pokorný 2005; 2006; 2009). Cells obey the laws of physics, such as the first law of thermodynamics and hence can be viewed as a thermodynamic machine but simultaneously it locally acts against the second law of thermodynamics by creating structural and functional order i.e. it creates and maintains information by expending energy produced from nutrient in the form of ATP and GTP molecules. Living cells can therefore be viewed as both micro-factories with nano-machines performing individual tasks and biological computers whose nano-chips are the various proteins and peptides in addition to DNA and RNA (Davies et al 2013).

Every living cell is conscious....

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). 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). 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 2013). 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 (Hameroff 1998a) which is an attribute demonstrated by the photon activity. The trapping of electromagnetic radiation and propagation of the energy in the cell wholly depends on the organization of matter, which makes up the cell, its components and biochemical systems. On disentanglement or release, the photons are released and it merges with the electromagnetic radiation in the cosmos, an involuntary cycle that cannot be changed or altered. . The photons interact within the cell, only if its structure and cellular processes are primed; in the absence of these structures, the propagation gets altered. Propagation by electromagnetic radiation can be demonstrated in processes like, photobiomodulation or low-power laser therapy, which is used to pump-up the cell when under stress, by generating ATP. During this process the cell membrane and cytoplasm act as the first barrier for penetration of electromagnetic radiation and protects the cell, by mechanisms such as selective absorption, scattering, reflection and re-absorption.

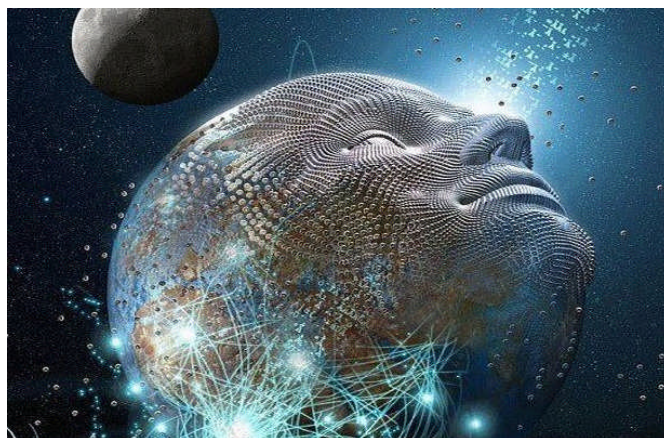
Cytoskeletal structures such as microtubules in the brain cells have demonstrated this message transfer via the Orch OR theory penned by Roger Penrose and Stuart Hameroff (Hameroff and Penrose 2013). The cytoskeleton is expected to be a source of vibrations that generate cellular electromagnetic forces at kilohertz to gigahertz range, which is also connected to the metastatic growth of this network (Sahu et al 2013a; 2013b). 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

Journal of Metaphysics and Connected Consciousness Vol 2, 2015.

Pereira, Contzen. The cosmic energy bridge, cellular quantum consciousness and its connections

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 (Hameroff 1998a; 1998b). 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).

Pop and Klimek have shown the principle of photon sucking by which radiation becomes partially re-absorbed as soon as it is emitted by the tissue or cell (Popp and Klimek 2007). As per the laws of physics, a molecule cannot absorb low energy photons to emit high energy photons, but this can be overcome by the cell through the property of multi-photon excitation, which results in emission of a higher energy photon, if two low energy photons are absorbed (Sun et al 2010). Transmission of photons is ultra fast in comparison to any of the cellular biochemical processes, where searching, processing and retrieval of stored information from previous experiences are analyzed and then used to activate the processes required by the cell, which advances consciousness in the cell. Upon death, biological cells are known to show increased intensity of biophoton emissions, when they undergo physiological changes under chemical or physical stress (Slawinski 1990; 2003) or a "flash of death" when the cells get damaged beyond repair (Slawinski 2005) which concludes the involuntary cycle of the flow of electromagnetic radiation within the cellular structures and merges with the cosmos. Quantum based consciousness traverses within every cell and therefore can be hypothesized a support mechanism for important cellular functions such as cell proliferation and differentiation, apoptosis, DNA synthesis, RNA transcription, protein expression, ATP synthesis and metabolic activity. Quantum consciousness therefore enables the cell to understand and judge perceptions, which gives the cell a prospect to behave as per will which is released into the cosmos. The relationship between the universe and consciousness can therefore be explained by the concept of cosmic-symmetry wherein a cell comes to know the real world (King 2011) through the uninterrupted flow of radiation that prevails in the universe.



We are all wired and so is the universe!!

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Conclusion

Single celled organisms demonstrate the presence of intelligence in its lowest form, which has evolved to a higher state as a form of adaptation by means of cell division and cell differentiation in higher organisms depicted by similarity in social behaviours (Marijuán et al 2013). Every single biological cell is conscious and goes through the voluntary and involuntary cycles of consciousness generated by means of the quantum processes within the cells. Consciousness emerges in each and every living cell and traverses by means of electromagnetic radiation; an oldest form of energy that exist in the cosmos and which utilizes the cellular structures to flow by means of a coherent, invisible, powerful, recyclable process; a connection with the cosmic energy bridge. Quantum consciousness though present within a cell becomes much more complex with multicellularity and cell diversity. Cellular functioning can be accomplished when the flow of consciousness is smooth, alert and expansive, but gets deformed when consciousness is taut, disordered and apart.

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Journal of Metaphysics and Connected Consciousness Vol 2, 2015.

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