Exploration

Quantum Fields of Consciousness & the Mind (Part I)

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Abstract

Some scientists are striving very hard to unveil the mystery of consciousness. For that purpose they have been utilizing not only quantum theory but also the Grand Unified Theory. In my perspective, to lay consciousness in the ambit of our awareness, one needs a three-tier system. The first tier is consciousness, the second is mind and the third is brain. My hypothesis is based on the Vedanta (Hindu Religious Scriptures), which says "Ahm Brahmasmi" meaning "I am God" or another statement as "Tatvamasi" meaning "You are That". In the first statement "I" refers to mind and "God" means consciousness; whereas in the second statement "You" represents mind and "That" represents consciousness. I refer to John Keely's work of Sympathetic Vibratory Science developed in 19th century to postulate my proposition of consciousness and mind and then use the postulates made by Hu and Wu to support it. Thereafter, Chalmers' questions are answered without ambiguities.

Part I of this two-part article includes: Introduction, the Quantum State of Our Thoughts, Quantum State of Dream, Quantum State of Dream, Consciousness as the Source of "I", Spin-mediated Consciousness Theory, and Answers to Chalmers' Questions.

Keywords: quantum field, consciousness, mind, brain, I, Self, God.

Introduction

All saints from all the religions had revealed our existence as a universal consciousness. Before the existence of universe, energy existed in the form of "Oneness" of the universal consciousness. Science has proposed that the energy was the fundamental cause of big bang followed by the manifestation of the entire universe. Body and mind are two different forms of energies in their respective appearances. This universal energy has taken numerous forms such as matter, forces and the sentient beings in this world.

Our desire is also a kind of energy which assumes its superposition state in the quantum field of mind. If we work accordingly, it manifests to give us the result of the intended acts. Such acts cause numerous changes in the universe transforming energies through sentient beings and the material objects. These energy transformations are very subtle in their nature therefore they never come in the ambit of our senses, but they create reverberations in the universe. Due to the chain of stimuli and responses the world changes its form time and again compelling us to change our desires to start the new chain of acts. Thus, single change in quantum energy causes numerous quanta of energies to undergo changes, and in this manner the energy conversions are being continuously propagated in the universe. Therefore, this shows that we all are inherent

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part of the universal energy and directors of the universe. Thus every conscious being is the corporeal manifestation of the universal consciousness.

After the big bang energy manifested in its different forms. Numerous transformations of energy in a specific manner created the cosmic system along with the Earth with life on it. The transmission and transformation of energy through matter and the living things is called as work done obeying the law of conservation of energy.

We have seen that there would be no existence of the universe without energy. Energy is responsible to form atoms, molecules and thus the matter. As the transmission and transformation of energy from one entity to the other is inherent activity in the universe, we see that every matter decays and transforms into another one over the period of time. At quantum level of energy the system never remains stable and the energy constantly flows from one state to the other changing the constitution of the matter.

The elements of Nature came in contact with each other in such a form and amount that the biochemical reactions gave birth to the DNAs and RNAs to form the bodies of every living thing on the Earth. Scientists found that the DNAs and RNAs convey energy at quantum level and brain is acting as a Seat for the quantum state to take place as an existence of mind. In all living things there is an inbuilt system that receives the sensations coming from the universe and generates responsiveness to the stimuli. Every living thing thus can store and retrieve the experiences from its memory to maintain their existence. Every experience is a wave of energy which triggers the biochemical reactions in the brain and activates the electromagnetic field at material level and then permeates down to the quantum level. All these wave forms are stored in the memory part of the brain in their superposition state. Thus the energy constituted in the form of complex systems in the brain, through which it manages the energy transmissions with the help of body and the objects surrounding it. The design of brain is beyond imagination through which the energy itself senses its own sensations coming from outside universe, stores them as experiences, controls and regulates them and generates responses through body.

Birth, life and death are the stages through which the living things must go. This process must be the purposeful design of the universe. Thus the energy must be known about all the causalities and beyond them. And the quantum energy level is the only energy level at which it could happen to explore its intelligence, tendencies, wisdom and manifestations through minds and bodies of the living things. We can say that the universe is now trying to identify itself by bringing the consciousness in its ambit of awareness using its own quantum state of energy.

But as the quantum science insists the very presence of an observer that causes the material manifestation or the quantum collapse of the waveform, the question arises that who was the first conscious observer to bring the gigantic potential wave-function to appear in the form of our universe. Before appearance of the living things on this planet as the sentient observers, who was the conscious observer? This is the biggest mystery of all times prior to the mystery of the bigbang. We shall try to see through the crevices appeared on the shield of deterministic materialism and unveil this mystery. Vedic scriptures say that the consciousness is eternal and so beyond infinity. It is such a principal entity of the universe that is beyond all the physical, quantum and spiritual world. When we identify our Self in the realm of physical world; the quantons in the brain hide our identity of being eternal and infinite. As soon as these quantons enter into the wave form, the conscious mind realizes that the consciousness is omnipresent and omnipotent. In the state of deep meditation or near death experience or out of body experience, the consciousness goes out of body momentarily overcoming the limitations of space-time. When these quantons reappear in their particle form, then such celestial experience disappears and the consciousness stabilizes in the material world. Thus the scientists have now agreed that the memory is subtle and it can work irrespective of changes in the states of the quantons. The sensations being transmitted through various organs to the brain are analyzed by millions of neurons and this information in the form of quantum energy transforms into experiences.

This means that we; as an essence of universe are consciousness and immortal in nature. Death belongs to body and mind but not to the consciousness. But due to the habit since millions of our past lives, we experience our consciousness through our body and mind. Therefore if our body becomes unconsciousness, then we experience that we were unconscious as such. But the scientists have found that even though our brain goes unconscious for some time, it responses as usual to all the artificial sensations given to it.

The Quantum State of Our Thoughts

According to Heisenberg, when we observe quantons or when we measure them or when we quantify them, they change their own state and physical parameters. If we try to measure the position, its momentum becomes uncertain and vice a versa. Similarly, when we observe any one thought out of a chain of unprecedented thoughts, that chain changes its state. The thought which comes in the ambit of knowledge acquires the status according to Heisenberg's Uncertainty Principle. This means, within the realm of senses, the quantons in the brain acquire their particle state and we realize the state of being known. Those thoughts which are not lucid in their nature possess property like the momentum and uncertainty. Such thoughts or the energy of thoughts keep the quantons in brain in their wave form. Therefore, we see here that the quantons in brain activate in either of their states.

The thought process in the brain and the transformations in quantum energy behavior are similar phenomena. Not a single thought process can be studied separately. There is no independent existence to any of the entities in nature. Numerous consequences among numerous entities in the universe give meaning to the existence of a particular entity under observation as such. Similarly, behavior of thoughts and quantons are comparable with each other. Therefore, Dana Zohar [1] concluded that the consciousness is being experienced by virtue of quantum state in the brain consistent with the hypotheses and theories of quantum mechanics.

The computational model of brain does not possess any sense of its own activities. But when our brain works, we possess strong feeling of being connected with the consciousness. Consciousness is a non-mathematical entity, said Roger Penrose [5] and hence its computer model cannot be generated. This means brain does not produce consciousness. On the contrary,

the brain provides a strong Seat of quantum field within to let the consciousness permeate. Brain simply works as a hardware in which the mind works as software and the consciousness and the quantum of energy play the role as electricity.

Quantum State of Dream

When we go into the state of dream, or when we experience delusions, the quantons in the brain assume their wave form. The subconscious mind unknowingly shifts, carry some random portion of memory and project it randomly on the mind screen. The subconscious mind experiences that projection using its subtlest organs. These are the quantum superpositions entangled with the memory unit of the desires undergo decoherence within the mind itself. The internal uncontrolled collapse states are projected on the mind screen to receive the experience of the dream. But the question is who the experiencing entity within the brain was? How mind can perceive those collapses? There will be no other answers to all these questions than consciousness.

At first we will decipher consciousness. Consciousness is the "Self-Existed" Principle being maintained by variety of reactions and processes in the brain. The peculiar structure of the brain becomes the Seat for consciousness through the quantum field to take place which facilitates the conscious mind to cope up with and to get synchronized with the various functions of the brain.

Consciousness as the Source of "I"

We always say that "me" and my mind are separate and I do not agree with my thoughts. Is it true that the "I"ness and the mind are separate from each other? We will try to understand this with the help of quantum mechanics, and subsequently see the source of "I" or the "Self". Here I am postulating that the very existence of consciousness is the source of supreme sense of "I" or the "Self".

In the 19th century, John Keely proposed and developed "Sympathetic Vibratory Science" [2]. He described the relationship between matter and energy as "matter is bound up energy and energy is liberated matter." He revealed that consciousness is found in two different layers of elements of universe. The first one is Compound Interetheric and the second is Interetheric. Table 1 and Table 2 below from [2] categorize the elements of matter in the universe in their respective 7 subdivisions. The seventh element is Compound Interetheric, and its quantons of universal energy possess qualities such as super-consciousness, cosmic, undifferentiated and neutral and thus shall be termed as the Divine Principle. These quantons undergo quantum entanglement with the mind particles and give birth to the supreme sense of "I" or "Self". The quantons or mind particles on Interetheric level also undergo quantum entanglement in the brain to be identified as mind. This is my presumption to build this postulate on which further research is necessary.

Therefore, I propose here that the Compound Interetheric is the neutral element at the seventh subsection of the periodic table designed by Keely and its quantum entanglement with mind

particles create supreme sense of consciousness within the brain. Conversely, the Interetheric level which is the sixth subsection of this periodic table and said to be the quantons of mind. These quantons are comprised of quarks and gluons which are physically very active in nature. As these are the quantons of the mind which are present in every atom of the universe, the mind field of the quantum state compels every living thing to receive the sensations and act as a doer/consumer/survivor. And this is the potential event of the quantum causality.

The combined effect of quantum entanglement and quantum decoherence cause consciousness and brain to work together. Therefore, they cannot separate their identities at that instance. The combined effect of this harmony or the synchronicity creates the sense of "I". Thus, we see that even though brain and consciousness come together, they still remain apart from each other.

Till the time quantons do not change their state in the brain cells, the position of consciousness prevails in the brain. Thus we can say that till the time the energy level of quantum field in the brain and energy level of quantons of the mind are same, the sense of the consciousness get stabilized in the brain. The electrons in the atom also follow the same principle within atoms. In this way the quantum field within the brain becomes source of mind and becomes the Seat for the vivid appearance of the consciousness. Consciousness is not generated either by the brain or by any other process but on the contrary brain along with its ability to create quantum field within allows universal consciousness to produce its effects and thus it becomes the Seat for the incarnation of consciousness.

Subdivisio n	Keely's Element	Keely Name	Form	Mental	Ancient	Tenuity	Quantum	Bearden	Vedic
7th	Compound Interetheric	Neutral Center	Void	Super conscious	God	Vacuum	Gluon	4-space / Time	
6th	Interetheric	Interetheron	Atomolini	Conscious	Awareness	Vacuum	Quark	4-space / Time	
5th	Etheric	Etheron	Etheron	Mind Activated	Ether	Plasma	Photon	4-space / Time	Akasa
4th	Interatomic	Interatom	Atomole	Electroma gnetic	Fire	Gas/ Plasma	Electron	3-space	Marut
3rd	Atomic	Atom	Atom	Matter	Air	Gas	Atom	3-space	Tejas
2nd	Intermo- lecular	Intermolecule	supercritical fluid	Matter	Water	Liquid	Molecule	3-space	Aap
1 st	Molecular	Molecule	Solids	Matter	Earth	Solid	Molecule	3-space	Kshiti

Table1

I would like to focus on one important phenomenon that though the quantum theory proved the transformation of particle state of quantons to wave and vice versa, these quantons themselves cannot take note of such transformation. The sense of being transformed is only possible in case of the observer. Thus, after the quantum entanglement and quantum decoherence arise in the brain, the sense of consciousness prevails but it cannot be perceived through itself. Brain is a part of a material body and cannot perceive the sensations. The supreme sense of "I" will never get perceived by the supreme energy or the element of consciousness itself. There must be another quantum field within the brain which is responsible to sense these sensations and give meaning to that individual sense separately. There should be a distinct quantum field in brain, which shall let the mind play its role of an observer to achieve the decoherence state within. Therefore, we need to call this another quantum field as a "conscious mind" which is doing its role as the conscious observer.

7th Subdivision - Compound Interetheric - CI - Non-Observable - God - Time - 4- space											
Supe	rconscious	1 - Celestial U	ndifferentiated	Mind Force - Akasha	- Life Force						
Indig#	Walter Russel No.	WR Octave	WR Element	Physical	Endocrine						
0=	100=	1	Alphanon	Neutral Center	Void						
6th Subdivision - Interetheric - E + CI - Non-observable - Time - 4-space											
Atomolini - Conscious - Mind which permeates Brain											
1+	101+	1	Irenon?	+Atomolini Gluon	Pituitary						
2+	102+	1	Vijaon?		Pineal						
3+	103+	1	Marvaon?	Quark	Thyroid						
4+	104+	1	Tomium		Thymus						
3-	103-	1	Alberton?	Antiquark?	Adrenals						
2-	102-	1	Blackton?		Lyden						
1-	101-	1	Boston?	-Atomolini Anti- Gluon?	Gonads						

Table 2

Spin-mediated Consciousness Theory

Since 2002, Hu and Wu have proposed and developed the spin-mediated theory of consciousness with the quantum spin as the Seat of consciousness [3]. The spins provide an interface between the composition of the brain and the electromagnetic waves that cross the brain. Consciousness as awareness or perception is seen as emerging from the collapse of spin states that are entangled with one another. Hu and Wu postulated that [3]:

- (a) Consciousness is intrinsically connected to quantum spin. The relationship between quantum spin and consciousness are defined based on the fact that spin is the origin of quantum effects in both Bohm and Hestenes quantum formulism and a fundamental quantum process associated with the structure of space-time.
- (b) The mind-pixels or the quantons of the brain are comprised of the nuclear spins distributed in the neural membranes and proteins, the pixel-activating agents are comprised of biologically available paramagnetic species such as O2 and NO, and the neural memories are comprised of all possible entangled quantum states of the mind-pixels. They also propose that neural memories are comprised of all possible entangled quantum states of mind-pixels. This concept of memory is an extension to the associative memory in neuroscience.
- (c) Action potential modulations of nuclear spin interactions input information to the mind pixels and spin chemistry is the output circuit to classical neural activities. Thus, the neural spike trains can directly input information into the mind-pixels made of neural membrane nuclear spins. Further, spin chemistry can serve as the bridge to the classical neural activity since biochemical reactions mediated by free radicals are very sensitive to small changes of magnetic energies.
- (d) Consciousness emerges from the collapses of those entangled quantum states which are able to survive decoherence, said collapses are contextual, irreversible and noncomputable and the unity of consciousness is achieved through quantum entanglement of the mind-pixels. Thus, they adopted a quantum state collapsing scheme from which conscious experience emerges as a set of collapses of the decoherence-resistant entangled quantum states. We further theorize that the unity of consciousness is achieved through quantum entanglements of these mind-pixels.

As manifestation of quantum entanglement, the role of gravity in consciousness is to achieve binding. In their spin-mediated consciousness theory, such role played by gravity is not hard to see, since spin is the Seat of consciousness and the linchpin between mind and the brain, that is, spin is the mind-pixel. According to their theory, the nuclear spins and possibly electron spins inside neural membranes and proteins form various entangled quantum states through action potential modulated nuclear spin interactions and paramagnetic O2/NO driven activations and, in turn, the collective dynamics of the said entangled quantum states produces consciousness and influences the classical neural activities through spin chemistry.



Figure 1. The universal process of appearances of consciousness and Mind

The above scientists say that the consciousness is seen as emerging from the collapse of spin states that are entangled with one another, and spin is the Seat of consciousness. In my opinion though the above postulates certainly explain the phenomenal appearance of the consciousness in the brain, this entire chronology of actions narrates the transfer of supreme sense or the feelings of consciousness being perceived by the mind and not the consciousness as such. Consciousness cannot be created out of any quantum phenomena and/or by the functions of the brain. Its material grounding is just next to impossible. We need to consider the phase entanglement between the quantum states of two elements of John Keely; as explained above; as an emergent event of the feeling of consciousness. As an extension and support to my postulate we can refer 4 postulates (as envisaged by H. Hu and M. Wu) to say that the nature by virtue of quantum entangled states within brain provided a Seat for the impulsive collapse of the spin effect as a sense of consciousness in the ambit of awareness of the mind. Figure 1 represents the flow chart which summaries the process of appearances of consciousness and mind through sentient beings

and the cycle of energy transmission and transformation to generate experiences and their awareness.

Answers to Chalmers' Questions

David Chalmers posed several questions on the nature of consciousness [4]:

What is it?
Why is it present at all?
Why is it so different from the various aspects of reality?
Why is it personal?
Why is it so fleeting, whereas matter is permanent and conserved?
Can it be reduced to matter?
Can any purely physical account explain it?
Is the material of which the brain is made crucial, or is it only the functional aspect that is critical?
Why is it so closely connected to function?
How do functional aspects become ontological aspects?
Is experience a fundamental element of nature, or derivative, or emergent?
What are the bridging laws that connect mind to matter?

Chalmers says that right now we have no candidate theory that answers these questions. But I think that we do!

What is consciousness? Why is it present at all? Consciousness is an emergent experience of "I"ness by virtue of phase entangled state of the super conscious element of energy of the universe with the mind particles such as quarks and gluons within the quantum field supported by the functions of the brain. The supreme sense of the consciousness of "I" is a collapse state of spin of mind particles within the quantum field in brain. Therefore by virtue of quantum effects in the brain it is said to be always present in all the sentient beings.

Why is it so different from the various aspects of reality? The consciousness is different from the all the aspects of reality because it is the enlightening entity of all the happenings in the universe. It is the supreme most entity with the help of which the reality and the region beyond it is defined.

Why is it personal? Here I say that the observer is "I" that is mind in every sentient being is the supreme sense of consciousness. The perception of all the experiential become the part of thoughts those are observed by the "I" or "Self". Therefore, consciousness is a personal and subjective to all sentient beings.

Why is it so fleeting, whereas matter is permanent and conserved? Consciousness is never said to be a fleeting entity. Consciousness is beyond the states of position and momentum of the matter and energy as such. It is the mind that fleets due to the measurement problem. The trend of ever

changing thoughts; create a kind of fleeting experience. Matter having interaction with energy emits photons (Quantons) of varied frequencies in the form of ensembles of sensations. Thus matter acts as an element of quantum causality possessing potential to stimulate the sentient beings. On the contrary I would like to mention here that the consciousness is the supreme most entity which either enlightens the all the position or the momentum of the matter including all its characteristics.

Can it be reduced to matter? Not, at all. The matter is a potential media to stimulate the sentient beings. All these stimulations create sensations in them, which are being perceived in light of consciousness and retained and owned by their individual Self.

Can any purely physical account explain it? No. consciousness is the supreme most entity which enlightens the quantum representation of the physical world into the realm of our awareness. Only on account of quantum effects the sense of consciousness prevails.

Is the material of which the brain is made crucial, or is it only the functional aspect that is critical? Neither the material of brain nor its functional aspects are critical in manifesting the consciousness. It is the quantum actualization which is supported by the physical substrate, provides a strong Seat for consciousness to spread its supreme senses in mind.

Why is it so closely connected to function? It is closely connected to function because all the functionalities in the universe either envisaged or activated by the sentient beings, are in light of consciousness only.

How do functional aspects become ontological aspects? All the functionalities in the universe either envisaged or activated by the sentient being therefore automatically all functional aspects become ontological aspects.

Is experience a fundamental element of nature, or derivative, or emergent? The matter possesses the potential of being experienced. As the matter is a fundamental ingredient of the universal, its experience is said to be the fundamental element of the nature.

What are the bridging laws that connect mind to matter? The bridging laws that connect mind to matter are the laws and postulates of quantum mechanics supporting the process of experience of consciousness along with the process of manifestation of the classical world.

(Continued on Part II)