

Exploration

Theory of Spirituality Based on Meaning Mechanism inside the Brain

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Abstract

The conscious mind is a quantum field that itself is a virtual reality. It continuously plays a role of “DecoherenceAgent” to collapse the superposed wave function in the form of apparent reality. Thus, the universe is swaying between these two fundamental realities of virtual and apparent reality. The meaning mechanism in the mind-brain functionality is responsible to create and tie these two realities based on the quantum effects. The meaning mechanism is a function of conscious mind and therefore it becomes a “Seat” for all the intelligence based knowledge systems and thus supports the relativistic nature of the universe.

Keywords: Quantum field, mind-brain functionality, consciousness, sensations, measurement perturbation, response, experience, collapse, apparent reality, virtual reality, Spirituality.

1. Introduction

In this article, I explore the nature of meaning mechanism pertaining to the various efforts of mind-brain functionality that portray the performance of intelligence. Such efforts may further help us to establish the consciousness based theory of spiritual within the premise of quantum theory.

A measurement is best defined as anything that gives us information. And information is what allows us to narrow our choices, or at least refine our probabilities after the process of understanding. In Quantum Theory, the act of measurement plays a vital role in bringing the several Eigen-states of the wave function that upon decohesion; collapse into its single Eigen-state to call it as an Observable State in the regime classical world. The von Neumann–Wigner interpretation, also described as “consciousness causes collapse”, is an interpretation of quantum mechanics in which consciousness is postulated to be necessary for the completion of the process of quantum measurement. According to John von Neumann the mathematics of quantum mechanics allows for the collapse of the wave function to be placed at any position in the causal chain from the measurement device to the point of perception by the conscious observer. Therefore, generally the measurement is said to be an act of conscious observer.

Therefore, it can be said that the act of measurement gets accomplished provided the measurement is well perceived by the observer through its meaning mechanism that takes place within the mind-brain functionality.

The universe is an intricate and intrinsic system of quantum information which is being observed and analyzed by the mind-brain functionality in a piecemeal manner. Mind-brain functionality

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interacts with this quantum information and rearranges the form of wave function that immediately achieves its superposition state within the quantum field of mind. The wave function is pushed into its state of decohesion due to continuous observation invoking the meaning mechanism within the mind-brain functionality. The meaning mechanism continuously ensures that the state of decohesion lie within the framework of laws of nature or the laws of apparent reality and tries to fit the decohesion state within this framework. Such mental and physical efforts bring the wave function to its state of decohesion. The further efforts make wave function to collapse in the form of result in the material form or in the observable form with many attributes and characteristics associated with it. Thus, the process of conscious observation creates an apparent reality unveiling the secrets of the universe. The mind-brain functionality senses such attributes and characteristics again converting the state of collapse into its own knowledge system. Thus, in order to accomplish the act of measurement the meaning mechanism shall have to be taken place therein.

Unless the mind-brain functionality exists, we cannot perceive the apparent reality in its meaningful state and therefore we cannot say that the collapse has taken place upon measurement. Thus, we can say that the virtual reality of existence of mind along with the brain gives birth to the apparent reality governed by the meaning mechanism at its root. Thus, the meaning mechanism is a connecting phenomenon in between virtual and apparent realities that underline the existence of the universe.

Thus, we always deal with both virtual as well as apparent realities in order to build up our intelligence based knowledge system that makes our lives worthy. We need to see here whether such knowledge system is governed by the nature of the meaning mechanism. We need to see whether the nature of meaning mechanism helps us to establish the Theory of Spirituality on the background of an omniscient and omnipotent principle of consciousness.

2. Quantum Field of Consciousness and Mind

The advancements in the quantum field theory have been facilitating scientists to prepare a more realistic quantum mechanical model of consciousness and mind. According to H. Hu and M. Wu, the consciousness emerges through the spin mediated mechanism that appears in the quantum field of mind by virtue of possible roles of neural membrane nuclear spin ensembles and paramagnetic oxygen [1]. Thus, mind is a substrate for consciousness that creates its own field of awareness. The state of conscious mind is a quantum phenomenon that undergoes the process of Orchestrated-Objective Reduction [2] as envisaged by Roger Penro and Stuart Hammeroff and therefore it is said to be completely virtual in nature. While representing the “Quantum field theory of the human psyche” [3], Baaquie BE and Martin F. formulated the equation of super field of conscious mind in which the fermions field represents the individualized state of the mind and the boson field represents the universal field of the consciousness. Such a super field of conscious mind along with the brain not only plays the role of an observer but also act as a decohesion agent undergoing the meaning mechanism to facilitate collapse of the wave function.

3. Behavior of Quantum Field of Conscious Mind

Our five sensory organs or say body continuously measures the environment and keeps us alert about changes therein and self-educate by building a specific knowledge system within the mind-brain functionality. The universal field of consciousness; possesses the weirdest qualities and potential in it to bring the sensations into its own ambit of awareness to undergo perturbations. Not only the amount of perturbation would be measured by the mind but it would undergo its effects also. Mind as an observer measures them as its own experiences. Such a series of experiences build a knowledge system and chain of causality through the act of responsiveness to stimuli. Thus the act of measurement, the act of being perturbed and the act of responses are the fundamental functionality of the quantum field of the mind which makes it a vehicle of perception and cognition.

The causality goes down to generate responses within the mind-field and we observe the physical actions that cause displacement of objects on the physical plane of universe under the influence of mind-brain functionality. Thus, when we perceive any object or subject then our mind absorbs its classical properties and attributes and the "Self" or "I" quantum mechanically observes the perturbations within its own field. This internal observation travels with the information through mind-brain system to analyze and create responses. The object does not enter in the brain but the conscious mind inherits all the qualities of the object and interacts with the brain to trigger further functionality. The mind inherits all the physical characteristics of the object being observed and sense them along with its characteristics and carries all such senses in its own field of awareness with the help of brain.

Based on the principles of Quantum Field Theory (QFT), various actions and states of quantum field of the mind can be represented. [4] This will help us to understand the quantum mechanical behavior of the mind field giving birth to the meaning mechanism.

4. Meaning Mechanism

The meaning mechanism is a continuous and consistent cycle of Measurement, Perturbation and Response leading ultimately to build a decoherence state to facilitate the Intermediate Quantum Collapse effect in the form of understanding/realization/satisfaction. Such a process of understanding or the meaning mechanism helps us to create specific knowledge systems in the lives of sentient beings.

Measurement: As the mind field assumes or inherits the characteristics of the observable, the perturbations in the mind field are said to be the ensembles of all the characteristic information of the object which is responsible to stimulate the brain. Thus the quantum actions in the field of conscious mind are inherited by the mind-brain functionality through the act of measurement. Therefore, with respect to the physical phenomenon of being sensed and experienced, we say that all the physical characteristics of the physical object are in the form of quantum of energy that is responsible to perturb the mind field of the observer upon measurement/observation. Therefore, we can say that at the time of measurement, the quantum state of the mind gets

broken up into the superposition of Eigen-states of the peculiar qualities that would cause perturbation in the mind field.

Probability Density or the State of Knowledge:When such ensembles of quantons transmit through the quantum field of mind, they carry with themselves the probabilities to manifest and undergo meaning mechanism through mind-brain functionality. The density of such ensembles is represented in the form of their probabilities. Therefore, we shall have to note that the quantum states already contain within them some probabilities. Once we express a quantum state on some basis, the coefficients for that basis determine the probabilities for finding the system in those basis states. However, these probabilities are not enough to describe all the possible states-of-knowledge. In general then, our state-of-knowledge about a quantum system can be described by a probability density over all the possible states of wave function of the mind.

Perturbation:The perturbation spontaneously occurs within the quantum field of the mind and it is sensed by the mind-brain functionality. The entire process of being observed/ measured and perturbed is witnessed by the centralized consciousness character of the mind-field "Self/I". By virtue of consciousness, it brings the perturbations in its own ambit of awareness. The centralized consciousness character of the mind-field "I" measures the sensations being received. As this quantum of energy change holds all the characteristic information of the observable, and as the mind field possesses the potential to inherit those characteristics, the sensations are brought in the ambit of awareness and acknowledged by the mind-brain functionality.

In the perturbed state of the mind, its field holds numerous of attributes and characteristics of the five senses that are coming from the universe as well as the senses coming from the memory unit. Mind can measure any one of the sensations at a given instance in light of consciousness. The mind particles acquire certain momentum and thus such a perturbation creates tendencies and desires within the mind. The perturbed state of the mind signifies the conversion of the apparent reality into its virtual reality during meaning mechanism.

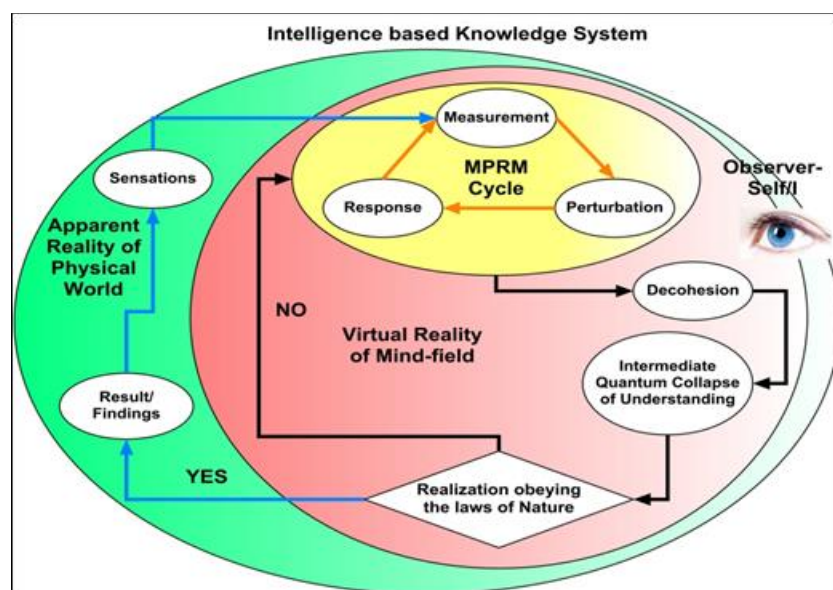
The observer or the "Self" reserves its choice whether to observe the perturbation due external event happening in front of it on the physical plane or to observe the perturbation due to the internal event generated with the help of superposition state of an earlier event retrieved from the memory unit. For every change in the quantum field, we observe the change in the Hamiltonian of the system through a specific mode of transition. Such perturbation that spontaneously occurs within the quantum field of the mind is sensed by the mind-brain functionality. Thus, the quantum effects have given us tremendous potential to overcome the limitations of physical reality.

Response:We know that the perturbation is nothing but a meaningful profile of the quantum field that appears within itself. Such appearance with all its characteristics and attributes forms a picture of decohesion state of apparent reality. Thus all the physical information of interest is contained in matrix elements of Schrodinger picture operators that are said to be time dependent. The response is a spontaneous action generated within the mind field by virtue of decohesion state of a wave function. The magnitude of the response from the perturbed mind field would indicate that the quantum of energy that has been getting utilized to create the internal response

from the mind field. Such an internal response would then trigger the physical movements along with the thought process to describe them as responsiveness to stimuli.

The Self-oriented exhibition by the sentient being is a consequence and combined effect of tendencies, knowledge and intelligence due to the sensations being received from the universe through the interactions between the mind and the brain are called as responses. The potential difference in quantum of energies due to the event of experience or the knowledge creates a subtle electromagnetic field along with biochemical reactions in the brain. This creates triggering mechanism for the state of decohesion and collapse effect in the form of physical or mental responses. During act of responses we see changes in the universe from its subtlest form of virtual reality to the gigantic form in the apparent reality of classical world. The response creates momentum and gives new position to every particle of the matter. The magnitude of the response from the perturbed mind field indicates that the quantum of energy is utilized to create the internal response from the mind field. Therefore, even though the classical physics is a science of displacement of the objects, it cannot be described as a science of causality.

MPRM Cycle:The changes we see on the material plane; are not due to the changes in the position of particles therein, but they are due to the reasons behind their displacement by virtue of all potential probabilities that the wave function holds. Such potential probabilities are the outcome of the various quantum effects that have been taking place in their own quantum field again due to the act of measurement of responses. Thus, every such event of experience is the difference in the sensations that are being sensed by any one of the five sensory organs at a given moment. Therefore, we say here that the potential difference between the successive perturbations that trigger the MPRM cycle to create and maintain the chain of causality in the universe. Such a chain of causality continues on both virtual plane of mind as well as physical plane of apparent reality. These elements are nothing but the bunch of cycles of Measurement-Perturbation-Response-Measurement (MPRM) as such. Such bunches of MPRM cycles possess potential to act as the cause of some other chain of causality and at the same time they possess potential to act to carry out consequential effects in the form of a chain of causality.



As shown in above diagram, we see that the MRPM cyclical process in the quantum field of the mind gives meaning to the apparent reality of the surrounding world. Thus, the apparent nature of reality of the surrounding world is said to be based on the quantum effects that are virtual in nature. Such a transformation and transmission of the quantum of energy through the quantum field of the mind creates trajectories of quantum of energy by virtue of this cyclical process. Such trajectories of quantum of energy are the ensembles of the quantons of varied characteristic and attributes that possess momentum due to each of the events of the observation/measurement. Such trajectories of various characteristics and attributes are the building blocks of the understanding, desires, tendencies and feelings in the form of a continuous flow of the thoughts. This core mechanism exists in the “Virtual Machine” of Quantum phenomena that is called as our conscious mind. Therefore, the quantum field of mind is very vibrant, unstable and sensitive and complex in nature. The waves of potential probabilities create thought-chains in the mind. Those thought-chains themselves become the cause of decohesion followed by the collapse effects in the form of responses.

Postulate (1)

We say here that every act of internal observation leading to the measurement, perturbation, response and measurement (MPRM-cycle) creates a cyclic process in the mind field. Every observation is measured in a cyclic manner to create numerous of perturbations, every perturbation is measured to create further responses and every response is measured by the mind field to create further measurements in a cyclic manner number of times till the mind reaches up to the event of state of decohesion of satisfaction or of understanding or of realization. The mind can further underpin with such a powerful tool of the cycle of MPRM to that level of its perception till it has an ability to measure the differences between “what was expected and what has been achieved” in the frame of law of nature. We can describe this as a kind of “Quantum Mechanical Reduction Process” witnessing the event of understanding/realization/satisfaction as such. If we go further down the line; we will realize that the difference between the numerous and varied experiences and the causality cropping out of this cyclical process builds the entire intelligence based knowledge system within; which is the complex phenomenon to formulate.

Intermediate Quantum Collapse Effect: Up till now we have seen how the sensations are brought into the ambit of awareness and sensed by the centralized conscious character of the mind-field “I” in the light of consciousness. Now we will see the mechanism of the “Experience” or “Realization” through “Intermediate Collapse Effect” within the mind field. The collapse state of the wave function is a manifestation of one of the potential probabilities that is being consistently observed and refined by the mind-brain functionality. In the case of quantum field of mind wherein the “Meaning Mechanism” takes place, it shall have to undergo the “Intermediate Quantum Collapse Effect” to describe it as “Understanding OR the realization of the situation OR bringing the sensations in the field of its awareness OR the process of awareness” in the usual sense. The perturbed state of a quantum field of mind is said to be the field of consciousness that witnesses every event of perturbation due to material sensations to call it as awareness as such. Therefore the awareness is an event that is perceived on the background of the field of consciousness as such. Thus the process of “Being conscious about” OR “The

Process of Understanding” OR “The Process of Realization” OR “The Process of Being Experienced” is described here as a “Intermediate Quantum Collapse Effect” in the perturbed state of the conscious mind. As shown in above diagram, we see that this effect is necessary to cross the threshold of virtual reality to enter into the apparent reality as such.

Postulate (2)

The centralized consciousness character of the mind-field “Self/I” compares the difference in the successive comparable states of decohesion caused due to the meaning mechanism in the mind field and assumes it as an experience of understanding. I describe this process of understanding as an “Intermediate Collapse State of Understanding/Realization/Satisfaction” within the mind field. This meaning mechanism is then followed by the response in terms of the sense of being acknowledged by that particular experience in the ambit of its own awareness. During setting up of any intelligence knowledge system such as invention, discovery, theory, postulate, principle etc., human beings upon satisfaction at the minutest difference between the expected and the actual that fits in the framework of law of nature. Then it is accepted and the result it is represented in a material form as an apparent reality.

5. Two Realities of the Universe

As shown in the above diagram, we see that the meaning mechanism acts as a fueling process to manifest the virtual reality into its apparent reality. Meaning mechanism generates **various states of decohesion** by creating **number of events of understanding** or the realization within the mind-brain functionality. Thus person is said to remain in the state of virtual reality during its intellectual underpinning. Person’s mind gets divided into number of superposition states that generates number of states of decohesion through meaning mechanisms. But unless the result is not getting positioned either within the framework of laws of nature or achieves the satisfaction level of understanding or realization, such person continues with its act of underpinning. The **final event** of satisfaction/understanding/realization is the Intermediate Quantum Collapse that further gets collapsed on the material plane in the form of result as an apparent reality.

Postulate (3)

The cyclical process of meaning mechanism leading to the Intermediate Quantum Collapse of an event of understanding through the mind-brain functionality is said to be completely virtual in nature. As soon as the level of satisfaction reaches the results are brought on their material plane in the form of apparent reality as such. Such an apparent reality is being perceived by the sentient beings through their sensory organs and thereby the apparent reality achieves its meaningful existence on its physical plane.

6. Representation of “Consciousness Based Theory of Spirituality”

From all the above three postulates, hereby we can make the statement of Theory of Spirituality. “The cyclical process of MPRM builds the meaning mechanism that leads to collapse of the most refined state of decohesion in the form of Understanding/Realization/Satisfaction to describe it as an intermediate quantum collapse effect. This entire process from MPRM cycle to intermediate quantum collapse is virtual reality of intelligence based knowledge system. The result or the conclusions or the findings are then represented in a material form on the physical plane identified as an apparent reality of intelligence based knowledge system. Therefore, we say here that with respect to the above three postulates, a meaning mechanism establishes the intelligence based knowledge system as a product of these two realities with respect to the consciousness present in the mind field. “Such a consciousness based knowledge system as a product of these two realities (viz. virtual and apparent realities) is represented here in the form of Theory of Spirituality.” The Theory of Spirituality thus becomes the foundation of illustration and establishment of relativistic nature of the universe and supports the experience of its existence. By virtue of meaning mechanism followed by intermediate quantum collapse effect, the Theory of Spirituality interconnects the two realities such as virtual reality and apparent reality. By virtue of meaning mechanism, all the intelligence based knowledge systems position themselves in the ambit of Spirituality that prevail on both the planes of realities of virtual and apparent as such.

Reference

1. H.Hu & M.Wu, Spin-Mediated Consciousness: Theory, Experimental Studies, Further Development & Related Topics, <http://arxiv.org/abs/quant-ph/0208068>; Medical Hypotheses (2004) 63(4): 633-646.
2. Hameroff Stuart; Penrose Roger, Consciousness in the universe: A review of the 'Orch OR' theory. , Phys Life Rev, 2014; Mar 11(1):39-78. <http://www.quantumconsciousness.org/content/scholarly-journals>
3. “Quantum Psyche: Quantum Field Theory of the Human Psyche”: NeuroQuantology 2005, Issue-1, Page 7-42, By Baaquie BE and Martin F. ISSN 1303 5150 www.neuroquantology.com
4. Rajesh Bhutkar, The Quantum Field Model of Experiences, Responses and Thoughts, Journal of NeuroQuantology, December 2015, Volume 13, Issue 4.
5. <http://eduardo.physics.illinois.edu/phys582/LRT.pdf>
6. Quantum Theory and Consciousness: An overview with selected examples by Harald Atmanspacher.