



Dual and Non Dual Nature of Indian Philosophy and Planck's constant as Soul in Human and Non Human

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ABSTRACT

Introduction: It is found that after the death, the soul comes out like an invisible or immaterial from a Human or non-human body, there does not seem to be a reason for this to happen. Therefore, this creates an interest to know about the soul of human and non-human in terms of science.

Aims/Objective: This study was done so that it can be known that human and non human have the same soul as given in Indian philosophy.

Method: The facts given in Indian philosophy were analyzed from the point of view of science. The Upanishads, which are the essence of the Vedas, contain ideas about the soul. They were analyzed with assertion and reason. The facts of modern science and philosophy were compared together to find out the similarities and differences.

Result: Sun's spontaneous chemical reactions and energy generation, fills it with the quality of being alive. The age of the sun is calculated from the electromagnetic radiation emanating from it. Similarly, the calculation of human age is done by the electromagnetic radiation emitted by it. The Planck's constant tells about the nature of the electromagnetic radiations. These electromagnetic radiations circulate the messages. These messages like thinking in brain or brain to brain speak and view by human brains are a type of electromagnetic radiations.

Conclusion: So on behalf of above and evidences from Indian philosophy, the Planck's constant from living to inert may be rendered as soul.

Key Words: Energy, Electromagnetic Radiation, Planck's constant, Indian Philosophy, Human Soul, Non-human Soul

INTRODUCTION

The *atma* is not a body like structure, neither is it sense organ nor is it a mind or intellect. It is different from all of these. Five elements of this universe have made the human body. The body consists of *Indriyas* or sense organs. The brain controls all *indriyas*¹ This is the case for human body or one can say for human life. The *Upanishad* or abstract of Indian *Vedas* describes three types of *atma* or soul in human body, first one is external body, second one is the inner soul and the third one is the highest soul, God, *paramatma*, or *eswar*.^{2,3,4,5} Saint Vashishtha told to Lord Rama on his question, whether there is any difference between men and women, then Vashishtha said that there is no difference at the level of the soul in the period of epic Ramayana. This difference is only due to the influence of nature and composition of the body. Saint Vashishtha also told him the story

of Chudala and Shikhidwaj.⁶ But without this, the question what is the soul and where it is, it is difficult to understand what life has been. Lord Krishana said in Shrimad Bhagvat Geeta: "*nainam chindanti shastrani nainam dahati pavaka, na cainam kledayantyapo na sosayati marutah*". It means weapons cannot shred the soul, nor can fire burn it. Water cannot wet it, nor can the wind dry it.⁷ In the Non Dual philosophy, Saint Sankaracharya said in half a verse: "*Brahma Satyam Jagat Mithya Jivo Brahmaiva*". *Eswar* or *Brahman* or God or *Paramatama* is alone real; this world is unreal; and the Jiva or the individual soul is non-different from Brahman. The *Advaita* or Non Duality is a rigorous, absolute one, whatever is, is *Brahman* or God or *Paramatma*. *Paramatma* Itself is homogeneous. All difference and individuality are illusory.⁸ In the *Dvaita* or Duality, Saint Madhvacharya said that the *Eswar* or *Brahman* or God or *Paramatama* is supreme but there is also existence of *Atma* or Soul. The life is Dual in

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Nature, as a whole there is God or *Parmatma* and at the state of individual, it is *atma* or soul.⁹

The Boltzmann constant symbolized as k_B or k and is the proportionality constant that correlates relative thermal energy of particles of a gas to the thermodynamic temperature of the gas. The Boltzmann constant is defined to be exactly 1.380649×10^{-23} Joule per Kelvin.¹⁰ Planck's constant, expressed as h , is a basic universal constant that defines the quantum nature of energy and act as proportionality constant in between the energy of a photon to its frequency because photon is a basic constituent of energy emitted in the form of electromagnetic radiation. In the International System of Units (SI), the constant value is $6.62607015 \times 10^{-34}$ Joule per Hertz or Joule-Seconds or Joule per Cycle per Second.¹⁰ De Broglie introduced a theory of duality of subatomic matter in 1924 that the particles, such as electrons, could be identified not only as particles but also as waves. This concept was used by E. Schrödinger in Quantum Mechanics for sub atomic or microscopic particles for wave functions and energies. E. Schrödinger had expressed his views on life in his book "What is life?; with mind and matter".¹¹ In this book, he had discussed about the different aspects of life and its existence. DNA of viruses and living cells emits electromagnetic radiations in the form of messages^{12, 13} as by the living brains.

METHOD OF STUDY

The facts given in Indian philosophy were analyzed from the point of view of science. The Upanishads, which are the essence of the Vedas, contain ideas about the soul. They were analyzed with assertion and reason. Analyzing the thoughts given on the soul by the sages of Ramayana and Mahabharata period and they were seen from the point of view of science. The work has been done to compare the views of other sages of ancient times and pictures of one thousand years including the ideas of sages and scientists and to match the received patterns with the modern science.

RESULT

Saint Vashistha said in Yoga Vashistha that the Man and Woman are same at the level of soul; it means there is no difference in man, woman and even the all other living bodies at the level of soul. The difference is only of physical structure of the all living bodies that is affected by nature. Lord Krishna said in Shrimad Bhagwat Gita that the soul is ageless and indestructible or which cannot be destroyed or changed. This means, the soul is constant.⁷ There are two types of constants, first in the current environment and second that are universally constant. The idea of soul is universal so it must be universal constant. The soul must belong to something immaterial and also beyond the sub atomic discussion because after

far sub atomic state, the state of immaterial will start. The least materialistic state that is part of atom is electron and it is quite stable from the time of the creation of matter. Any materialistic state that is sub atomic is also destructible then what will happen to macroscopic, these are also destructible. The idea of Photon of electromagnetic radiation can correlate with immateriality state but it has also nature of material, although it is mass less but cannot be soul. This all is beyond the discussion of classical mechanics so it is included in quantum mechanics. First immemorial idea for quantum mechanics was given by Max Planck by introducing Planck constant. After this Debroglie's view such as substances are of dual in nature, became very useful to understand the dual nature of microscopic or quantum size of matter which is necessary for quantum mechanics. Debroglie's view such as substances are of dual in nature and the idea of Planck's constant are the main features behind the strange and amazing world of quantum mechanics and being transcultural. We were also able to understand Duality and Non-duality theory of Saint Madhavacharya and Saint Shankaracharya respectively, while it was given before Debroglie and Planck. Saint Shankaracharya discussed about the *advait* or non-duality of the things and lives present in the universe. These are mortal and contained in divine power that is *Eswar* or God or *parmatama* or *Brahmn* like the classical mechanics of the science. *Eswar*, God, *parmatama*, or *brahmn* is called as whole energy of the universe. The concept of classical mechanics also expresses energy as continuous. The last true existence of energy is electromagnetic radiation. Non-duality of classical mechanics denies the discrete form of energy of electromagnetic radiations. Saint Shankaracharya also believes in non-duality or *advait* means believe in existence of supreme divine power and rest is mortal and false and so all is continuous. Continuous nature of energy of electromagnetic radiation emitted by a black body that may be a DNA or other biological molecules gives the results that do not match with experimental results. So the classical mechanics does not give the correct result and so there is a need of other concept like quantum mechanics that believe in dual nature of matter at sub atomic or microscopic level given by Debroglie. It also believes in discrete form of energy of electromagnetic radiation. Saint Madhvacharya named the existence of dual nature of life means existence of soul and *Eswar* or God or *parmatma* or *brahmn*. It means the things and lives of the universe exist in the discrete form as soul or it may be a body and nothing is continuous.

DISCUSSION

The energy in discrete form is extensive in nature. It means, it depends on mass of the body. It cannot be soul for human and non human. Any microscopic, atomic or subatomic particle has the properties of wave and matter and if the matter

is microscopic so it moves like a wave. Due to this subtle property, it is possible to measure the wave speed generated but as the size of the material becomes large, it is not easy to measure the wave speed. In this, the size of matter can be considered as non-dual on larger consideration and dual on smaller consideration. Planck constant is very useful to understand the nature of waves in matter and energy-rich particles or to fill the property of waves in micro or macro particles or to become wavelike. The life is dual in nature means it has wave like as well as microscopic particle like DNA or living cell. DNA of Virus and of any of living cell emits the electromagnetic radiation. It is necessary to become wave-like in order to convert matter into consciousness. The soul is necessary for the body to remain dual as wave like and matter. Planck's constant is necessary for an energetic micro particle to become a wave like. The smallest packet of energy is the photon and Planck's constant is needed to understand the wave nature of the photon particle. Electromagnetic radiation emitted by sun is spontaneous by chemical reactions like fusion and fission. The DNA inside the living cell or living cell individually also emits the electromagnetic radiations by its own metabolic energy resources or one can say it is also spontaneous. The life is within the cell. The mechanism to revive the individual cell is different than the living cells in the group or in the mass. As in humans and other living non-humans the life is inside the each cell but these are revived by the different mechanisms like respiration through lungs and flow of blood for nutrition by heart and many others. The difference of living and non living things is virus DNA and the sequence of virus DNA does not produce the electromagnetic radiations that form cell wall or cover or other organelles as in mycoplasma then blue green algae and then euglena and other living organism having unicellular or multicellular but they do produce the messages of electromagnetic radiation to destroy the other living cell, they are inside it. These electromagnetic radiation messages are responsible for life in a living cell emitted through living DNA. The living and non-living DNA both emit the electromagnetic radiation in the form of messages. Who can decode these messages? Which kind or nature of emitted electromagnetic radiation? Only Planck's constant can tell or decode the nature and type of electromagnetic radiations. Planck's constant value is $6.62607015 \times 10^{-34}$ Joule per Hertz or Joule-Seconds or Joule per Cycle per Second. It means it is energy per cycle per second and it can correlate itself to total energy of universe. The Planck's constant is special intensive in nature; it does not depend on amount of any physical or chemical value. The life depends on the cycles per seconds of electromagnetic radiations of DNA of living cells, if these cycle per second of electromagnetic radiations decreases and comes to cycles per second of electromagnetic radiations as in non living bodies due to age of DNA or some accidents or some other reasons, the cell or group of cell death occurs. Who can identify the change in cycle per second of electro-

magnetic radiation of living DNA; it is only Planck's constant. Indian philosophy and other philosophy, all of together think that numerical or mathematical value of God is 1 and if one can round up the number value of Planck's constant, it becomes 1×10^{-33} . This tells us that the numerical value of God as 1 is 10^{33} times greater than Planck's constant. This difference may be between *atma* or soul and Eswar or God or *paramatama*. Therefore, the Planck's constant that is energy per cycle per second of waves emitted by living DNA of human and for non-human, can be considered as soul.

CONCLUSION

The smallest packet of energy is the photon and Planck's constant is needed to understand the wave nature of the photon particle. The wave speed of the photon is spontaneous and the wave like nature of the living DNA or living cell or body is spontaneous. These have own resources of energy. Soul is the cause of spontaneous motion in the living DNA or living cell or living body and Planck's constant is the cause of spontaneous motion in the photon. The quality of the body being large is extensive, that means the mass depends on the sum of the subtle particles. The Planck's constant is special intensive in nature. This constant has a fixed numerical value which does not change anywhere in this universe. Planck's constant (h) and Boltzmann's constant (k) are related to energy, which serve as constants in quantum mechanics and classical mechanics respectively. The Boltzmann constant does not explain the wave-like nature of matter, while the Planck constant explains the wave-like nature of matter. If the soul of a photon with wave motion is Planck's constant, then the soul of a living DNA or living cell with electromagnetic wave motion may be considered as Planck's constant. The energy source at living Sun is also spontaneous in nature for self-electromagnetic wave motion.

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