

THE PRINCIPLES, BENEFITS AND PRESENT DAY  
**PRACTICES OF YOGA**



EDITOR

**DR. BIBEKANANDA SAU**

# **THE PRINCIPLES, BENEFITS AND PRESENT DAY PRACTICES OF YOGA**

EDITED BY

**Dr. Bibekananda Sau**

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*by Dr. Bibekananda Sau*

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**ABSTRACT**

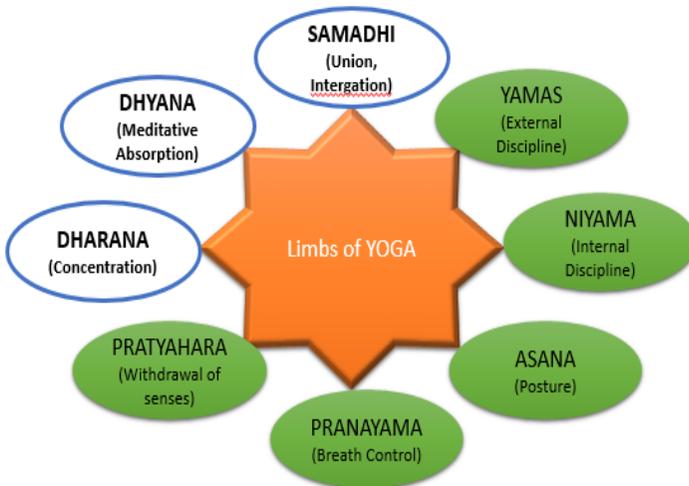
Newtonian and Non-Newtonian mechanics are closely related to the practice and outcome of Yoga. The practices of Yoga not only lead to the physical well-being but also awaken the human mind to pure consciousness of the universe. The practices of five external parts of Yoga namely Yama, Niyama, Āsana, Prāṇāyāmā and Pratyāhārā provides body fitness by regulating the energies of the body and the process can be easily explained by Newtonian mechanics. On the other hand, awakening of internal human consciousness to the universal consciousness can be achieved through the three internal parts of yoga viz. Dhāranā, Dhyāna and Samādhi that can be explained by the concept of modern physics. In this article, process of quantum awakening and release of mind from matter embodiment through the practices of Yoga will be discussed in the view of the theories of modern physics like quantum theory, string theory, field theory etc. In addition, evolution of consciousness in human being and psychic rejuvenation will be introduced using the theories of biophysics and biopsychology.

***Keywords:** Yoga; Physics; String Theory; Field Theory; Biophysics; Biopsychology.*

**Introduction**

**P**hysics is a branch of science that involves nature and natural phenomena enlightening us about energy, matter, space, time and their interaction. Since its inception, physics was more mechanical in nature dealing with macroscopic systems governed by the laws of Newtonian mechanics, electromagnetism etc. However, since the introduction of quantum mechanics, physics has been more philosophical and started to explain the microscopic phenomena of atomic and sub-atomic systems.

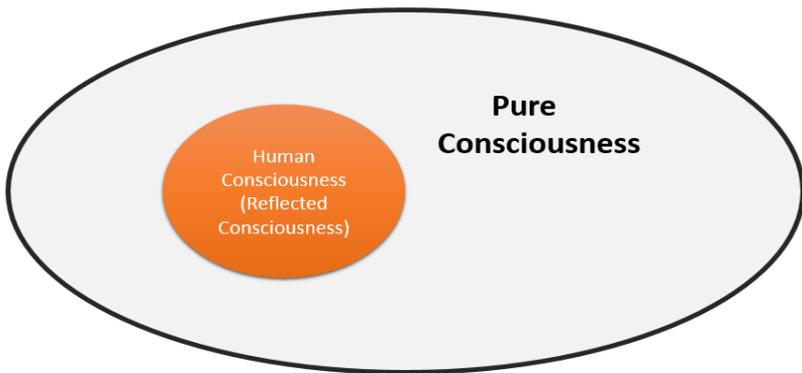
Yoga is an ancient practice for physical and mental fitness. The word ‘Yoga’ roots from the Sanskrit word ‘Yuj’ meaning to join or to unite. Yoga aims to connect human mind and body to work together and also unites the human consciousness with the universal consciousness i.e., the consciousness of nature. In his ‘Yoga Sutra’, Patanjali classified classical yoga in terms of eight limbs namely ‘Ashtanga Yoga’ (Fig. 1). The five external limbs or parts are yamas (abstinences), niyama (observances), asana (posture), pranayama (breathing) and pratyahara (withdrawal) while the three internal parts consist of dharana (concentration), dhyana (meditation) and samadhi (absorption) [1]. The ultimate goal of Yoga (i.e., to re-unite with our real nature (Pure Consciousness) or in other words with Atma, Divinity or God) can be achieved through both the external and internal limbs of Yoga. The five external parts harmonize the relationship of human being with other beings and to the transcendental reality by spiritual transformation of the personality resulting from the surplus of energy through the physical practices of Yoga. On the other hand, practicing the three internal parts of Yoga, human mind maintains flow of energy at the functioning level which results in a focused mind free from external stimuli. In this paper, the quantum awakening of human mind, i.e., the connection of human mind to the cosmic mind (Pure consciousness) through the practices of Yoga will be discussed. The true nature of consciousness and how our consciousness can be awakened to its true origin will be elaborated through Yoga science and scientific theories of physics, biophysics and biopsychology.



**Fig. 1: Patanjali’s Eight Limbs of Yoga**

**Pure and Reflected Consciousness:**

The word ‘consciousness’ is derived from the Latin ‘consciūs’ where con- means “together” and “scio” refers to “knowledge”. Although there is no definite definition of consciousness, in simplest words consciousness can be attributed to the awareness of internal and external existence of oneself or the relationship between human mind and the universal mind. It can be imagined as a closed glass container containing ocean water (human mind) put inside the ocean (Universal mind) itself. Einstein once said: “The idea that there is separateness is but an illusion, we are all one thing in this universe, and our job is to widen our circles of compassion till it surrounds everything in the universe.” By means of practices of Yoga, the wall of the glass container can be broken to emancipate internal mind into the universal one. According to the description of Patanjali Yoga, the universal mind contains the pure consciousness which is known as ‘citi’ [2] and the human consciousness is the subset of this consciousness. Our thoughts arrive because of our ‘citta’ or ‘buddhi’ [3] that is the means of cognition in the complete cognitive process while consciousness is the object of cognition. The universal consciousness can be reflected inside the human mind in form of reflected consciousness which can be achieved through the proper utilization of ‘citta’ or ‘buddhi’ (Fig. 2).



**Fig. 2: Schematic diagram describing pure and reflected consciousness**

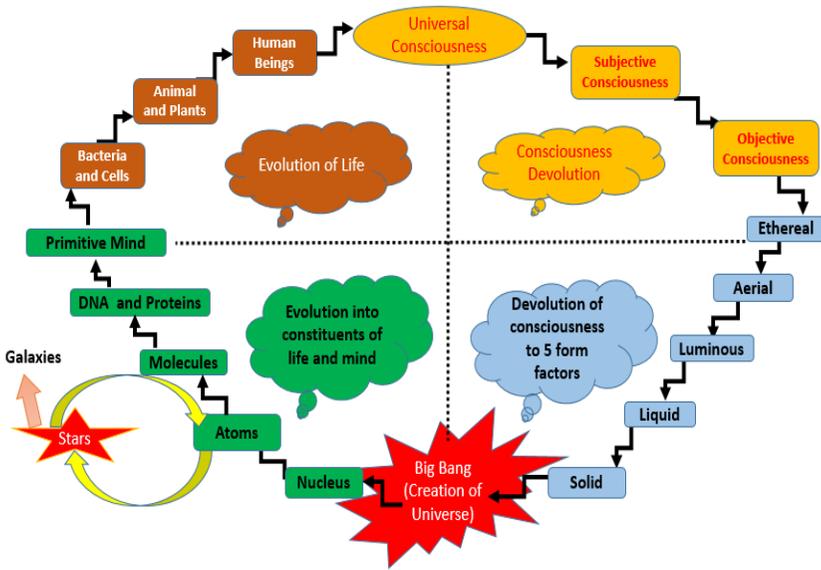
Erwin Schrodinger once said “The total no. of minds in the universe is one. In fact, consciousness is a singularity phasing within all beings”. On the other hand famous physicist Max Planck considered consciousness as fundamental entity of existence and thought every

matter to be derived from absolute or universal consciousness [4]. In the perspective of physics, the universal or pure consciousness can be assumed to be contained in the primary field which is the philosophical step towards 'Unified Field Theory'. In nature, there are two types of field namely force fields and matter fields which are assumed to be originated from a single unified or primary field. Everything that exists is simply an activity in the primary field-including our own consciousness. Primary field stores energy in dormant or potential energy. When universe is created, this energy is being converted into the kinetic energy or entropy of the universe and this energy gradually returns back to the dormant state by means of entropy over trillions of years. Hence, it can be concluded that there is no start and no end while creation seems to be a process which repeats itself infinitely. Similarly, consciousness is likely to be a field activity while our memories arrived from the modification of the primary field. Human consciousness and physical world are thus can be assumed to be quantum mechanically entangled as presumed from Bell's theorem and hence universal consciousness can be reflected in human consciousness also from the point of view of physics.

### **Devolution of Consciousness and Evolution of Universe and Human Mind**

In the previous section, we have logically concluded that human consciousness is the reflection of the universal or pure consciousness and the universal consciousness is supposed to be evolved from some of the primary field activity. The universal consciousness first develops into cosmic mind (universal mind) and then this cosmic mind takes the form of matter. The universal mind is expressed into 5 fundamental factors (FF) namely ethereal, aerial, luminous, liquid and solid which are the constituents of physical universe [5]. The physical universe is created through the Big Bang phenomenon and evolved gradually into atoms, molecules, stars, plants, animals and finally human being containing these five factors within itself. This cycle of devolution of pure consciousness followed by the evolution of life is known as cosmological cycle [6] and this is shown schematically in Fig. 3. The five factors are associated with the five sensory attributes of the human being and can be imagined as a spectrum of wave form with decreasing wavelength from ethereal to solid factor. The five fundamental factors are created through the pressure of 'Prakriti' which can be referred as 'bala' or Operative principle of nature. Once these factors are formed they create structures either visible or invisible. If the structures contain

only ethereal, aerial and luminous factors then they are invisible and if they contain solid and liquid factors too then the structures are visible. This 'bala' of Yogic science resembles fundamental forces in physics. In the visible or invisible structures two opposing forces develop: one outward or exterior centrifugal force tending to dismantle the structure and another inward or interior centripetal force to maintain it. If internal force wins then solid structure is formed with a nucleus within and solidarity is maintained. These physical solid structures are composed of the five fundamental factors as mentioned before. The energy developed inside the structures resulting from the two forces is known as 'prana' and all 'prana' of the universe are collectively called 'pranah' or vital energy [6]. Under the influence of higher internal force, a subtler factor namely crude mind or ectoplasm in addition to the 5 FFs is formed. This primitive mind finally evolves into the expressions of life. Life does not get expressed in absence of the congenial environment of pranah. In that case, exterior force dominates and hence physical structure disassociates into the five fundamental factors and solid constituents explode into hot matter particles which also contains these 5 FF. This explosion corresponds to the Big-Bang which is assumed to be the cause of creation of the universe according to the theories of physics (Fig.3). This hot matter particles produce elementary matter particles (e.g. electrons, protons, neutrons etc.), photons etc. which together evolve to the different atoms, molecules followed by various material structures of the universe like galaxies, stars, animals, plants and finally human being. Thus, we can conclude that human being contains the universal consciousness inside the mind though it is often shielded which can be fully or partially removed through the practices of Yoga. It is worth mentioning here that the invisible structures of the universe containing only ethereal, aerial and luminous factors can also be dissociated into dark energy and dark matter.



**Fig. 3: Cosmological Cycle: Devolution of universal consciousness and evolution of human being from primitive mind**

### Quantum Awakening of Mind through Yoga:

Quantum awakening of human mind refers to the changes of physico-chemical processes of mind through which one become conscious about the existence of universal consciousness (referred as ‘citi’). The pure consciousness can form image through the reflection in the mirror of ‘citta’ or ‘buddhi’ of a human being which is known as reflected consciousness. This image is not same as pure consciousness because of the properties of the mirror called ‘citta’ which comprises of three gunas-‘Sattva’, ‘Rajas’ and ‘Tamas’ [7]. However, presence of these triads in equal quantity cancel the effect of each other and inhibits the manifestation of either of the three. In this state, maximum reflection of the pure consciousness occur inside the human mind.

The primary purpose of Yoga is the realization of universal consciousness which is omnipresent in conscious, sub-conscious and unconscious mind, body, breath and all of our sense organs. As mentioned earlier, Yoga has 8 limbs among which 5 are external and 3 are internal (Fig. 1). We will briefly discuss here how each part of Yoga facilitates the connection of human mind to the universal consciousness.

- 1.1. **Yamas:** Yamas refer to the external discipline through which energies of the body is regulated and produce huge amount of energy inside which helps to connect the internal soul to the universal one. The five Yamas are i) Ahimsa (non-violence), ii) Satya (truthfulness), iii) Asteya (non-stealing), iv) Brahmacharya (chastity) and v) Aparigraha (non-avarice).
- 1.2. **Niyamas:** Niyamas indicate the internal discipline which not only leads to a free and joyful mind required for optimum reflection of pure consciousness but also ceases external pleasure to negatively influence the path of the connection to the eternal soul. As described in Patanjali Yoga there are five Niyamas: i) Shaucha (purity of mind), ii) Santosha (Optimism of self), iii) Tapas ( self-discipline), iv) Svadhyaya (study of self), and v) Ishvarapranidhana (Contemplation of supreme being)
- 1.3. **Asana:** Asana is the posture which should be held for a period of time staying comfortable, motionless and relaxed. The postures of Asana immediately change mood and enhance the concentration of mind. There are different forms of asana often resembling different physical structures of the universe e.g. Padmasana imitates posture of Padma or lotus, Ustrasana resembles posture of camel etc.
- 1.4. **Pranayama:** The conscious and systematic control of breath is referred to as Pranayama. Practicing pranayama one can experience subtle factors as in pranayama internal energy of prana reaches the topmost psycho energetic system (chakra) and hence the consciousness is felt at higher magnitude.
- 1.5. **Pratyahara:** Pratyahara is the removal of all environmental stimuli which affect the concentration of mind. This leads to a state of sensory inhibition where a person becomes alive in the inner environment of their mind.
- 1.6. **Dharana:** Dharana is the practice of holding mind in motionless states focusing on any particular object that may be a part of the body, internal image of any external object, image of a deity etc. While practicing dharana, energy flows at functional level hence highly concentrated state of mind is achieved.
- 1.7. **Dhyana:** Concentrating the mind for prolonged time leads to a state of meditative absorption or Dhyana where every internal objects are filled with consciousness. Dhyana often leads to a peaceful, calm, and free mind prepared to achieve the final state of consciousness.
- 1.8. **Samadhi:** Samadhi is the last stage to omit the gap between reflected and pure consciousness. Samadhi is all about

nothingness where all the fluctuations stop and citta is also non-functioning. However, in this state citta works as the medium to coincide reflected consciousness with the temporary self-realisation or the unification with pure consciousness.

The effect of Yoga on human mind is also explained through the concepts of quantum mechanics and biology. Quantum physicists started to find how the Yogis can restructure their minds through the re-wiring of synapses which is the electrochemical pathways of neurons or nerve cells [8]. Human brain is made up of materials particles and fields. A field is an area where force of the field exerts at every point and carry information regarding the force. Fields can be physical or subtle and according to Albert Einstein universe is composed of interconnected force fields. Thus, deciphering or altering a field outside leads to a corresponding changes in the energy field inside the body. As all human beings are made up of physical and subtle fields, the inner bio-fields interact with the external stimuli like electromagnetic forces like light, heat, sound etc. [9] On the other hand, string theory or the ‘theory of everything’ also indicates the interaction of human body with nature. According to the string theory all particles originate from the oscillation of string and interaction between particles arise from the different intensity of oscillations [10]. This vibration of string is often referred to ‘the dance of Shiva’ which is the point of creation of everything in universe and it is believed in ancient eastern meditation theory that these vibrations can be controlled through practices of Yoga. Biopsychology and biophysics showed that the brain is viable to change while Yoga and meditation facilitate to do so by flowing more blood to the brain and in turn making it thicker and stronger [11]. Additionally it is also claimed in the theory of biophysics that practices of Yoga can lengthen telomeres which prevents the unwinding of DNA double helix. This is a quantum phenomenon which neurologically rewires and enriches the brain neurons and hence produce a change in a person’s state of being that leads to consciousness.

### **Conclusion:**

In summary, quantum awakening or the spiritual awakening of human mind is the process of being aware about the universal or pure consciousness which arises from the primary field activity. Practices of both external and internal parts of Yoga facilitates the connection of human mind to the universal mind which is manifested from the

universal consciousness. The pure consciousness is reflected inside human mind from the mirror of citta or buddhi as reflected consciousness. The five external limbs of Yoga namely Yamas, Niyamas, Asanas, Pranayama and Pratyahara prepare the body and mind for the ultimate connection of human consciousness to the universal consciousness while internal limbs dharana, dhyana and samadhhi finally help to connect to the pure consciousness. Scientifically speaking, Yoga not only enhances the blood flow in the brain leading to its increased size but also increase the length of telomeres preventing unwinding of DNA double helix structure and rewires synapses of neurons. This is how Yoga keeps oneself devoid from external stimuli and helps to connect to the primary consciousness. Thus, Yoga science, quantum physics, biophysics, biopsychology together conclude that the awakening of human mind is substantially possible through the uninterrupted practices of Yoga.

### **References:**

1. Huet, Gerard, “Sanskrit Heritage Dictionary”, Sanskrit, inria.fr. Retrieved 2020-08-31
2. Dr. Suresh Chandra Srivastava, Pātañjalayogadarśanaṁ of Maharṣi Patañjali, Caukhambā Surbhāratī Prakāśaka, Vārāṇasī, 2006, 9. (cittaṁ hi prakhyāpravṛttisthitiḥ śīlatvāt triguṇaṁ)
3. Dr. Suresh Chandra Srivastava, Pātañjalayogadarśanaṁ of Maharṣi Patañjali, Caukhambā Surbhāratī Prakāśaka, Vārāṇasī, 2006, 9. (citiśaktiraparīṇāminyāpratisaṅkramā darśitaviṣayā śuddhā cā anantā cā)
4. M. Planck, The Observer, January 25th, 1931
5. M. Towsey and D.N. Ghista, Towards a Science of Consciousness, in *Biomedical and Life Physics: Proc. of Second Gauss Symposium*, Munich, 2-8 August 1993, ed Dhanjoo N. Ghista, Vieweg & Sons Verlagsgesellschaft mbH, Braunschweig/Wiesbaden, 1996
6. P.R. Sarkar, *Idea and Ideology*, Ananda Marga Publications, Tiljala, Calcutta 700039.
7. Dr. Surabhi Verma, Cognitive Science and Experience of Yoga (As an evidence of motion from finitude to infinitum) International Journal of Sanskrit Research 2016; 2(4): 12-17.
8. Schwartz, J. M., Stapp, H. P. & Beauregard, M. Phil. Trans. R. Soc. B. 360, 1309–1327 (2005).

9. Dale, R., Dietrich, E., & Chemero, A. (2009). Explanatory pluralism in cognitive science. *Cognitive Science*, 33(5), 739–742.
10. Youvan, Douglas. (2023). Harmonizing Dimensions: An Exploration of String Theory and the Spiritual Theory of Everything Model (STOEM). 10.13140/RG.2.2.28469.86247.
11. S. Blackmore, Consciousness: Science tackles the Self, *New Scientist*, 1st April 1989.