



Vivekananda Center for Consciousness Studies and Research
School of Indian Heritage
Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI),
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INTERNATIONAL WEBINAR

“CONSCIOUSNESS STUDIES AND RESEARCH: ANCIENT AND MODERN”

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ABSTRACTS OF TALKS

‘Consciousness as discussed by Sri Ramakrishna in the Kathmrita (The Gospel of Sri Ramakrishna)’ By Swami Atmapriyananda, Vice Chancellor, RKMVERI, Deemed University, Belur Math

Chaitanya, the Sanskrit term for Consciousness, is the central theme of Sri Ramakrishna’s teachings in Sri Sri Ramakrishna Kathamrita (The Gospel of Sri Ramakrishna). Sri Ramakrishna repeatedly emphasized that the ‘awakening of higher Consciousness’ is the one Supreme Goal of human life and existence. He gave an interesting definition of a human being, called manush in Indian languages (following Sanskrit) as maan-hush, one whose inner divine potentiality has been awakened. Swami Vivekananda elaborated this idea in Raja Yoga in the form of a few aphoristic lines that have now become the modern chatus-sutri, literally meaning the four sutras or aphorisms (a la the first four aphorisms or sutras of the well-known Brahma Sutras or Vedanta Sutras of Badarayana Vyasa). These four modern sutras (aphorisms) are as follows:

- (1) Each soul is potentially divine.
- (2) The goal is to manifest this Divinity within by controlling nature, external and internal.
- (3) Do this either by work, or worship, or psychic control, or philosophy, by one, or more, or all of these, and be free; this is the whole of religion.
- (4) Doctrines, or dogmas, or rituals, or books, or temples, or forms, are but secondary details.”

Swami Vivekananda defined his ‘Ideal’ in another aphorism as follows:

“My ideal indeed can be put into a few words and that is: to preach unto mankind their Divinity, and how to manifest it in every movement of life.” Explaining the modus operandi of this manifestation, Swami Vivekananda said: “Infinite power is in the soul of man, whether he knows it or not. Its manifestation is only a question of being conscious of it. ...With the full consciousness of his infinite power and wisdom, the giant will rise to his feet.”

Following the Upanishadic rishis (seers) who exhorted: Uttishthata, Jagrata, “Arise, Awake”, Swami Vivekananda preached the same doctrine of the awakening of the inner power of the Atman or the Divine Self in all beings. In fact, he said that he preached nothing else except the great mantra: “Awake, awake”. Sri Ramakrishna’s blessings on the humankind, as pithily articulated by him a few

months before he passed away in mahasamadhi, shines as a luminous inspiring mantra: Tomader Chaitanya hok! “May your Consciousness be awakened!” Always remaining immersed in the infinite ocean of Divine Consciousness (vijñana- piyusha-nimagna-murtih) Sri Ramakrishna’s every thought, word, action emanated from that Divine Source of Infinite Consciousness in which he found everything in the universe fully soaked and saturated: Chaitanya jorey ache as he said in Bengali. His realizations made him aver a state of Consciousness that he felt was higher than that wherein one remains absorbed in God as Chaitanya-swarupa (Embodiment of the highest Consciousness). One who is unaware of the higher Consciousness is an ajnani (ignorant), while one who has realized that higher Consciousness is a jnani (one endowed with Knowledge); but there is a still higher state realized by a vijnani (literally, one with special Knowledge) wherein one sees, feels, realizes that the higher Consciousness or God is enveloping, saturating, interpenetrating the whole universe of living and non-living beings. Such a one, vijnani, is as it were seeing God with open eyes as with closed eyes (to use Sri Ramakrishna’s own description), he sees nothing but God, he feels nothing but God, he lives, moves, breathes, has his very being saturated and soaked in God-Consciousness, seeing and realizing that ‘all that exists is verily He, the Brahman’— sarvam khalvidam brahma as the Upanishad says. Attaining this state of a vijnanai is the acme of realization wherein the demarcation between the secular and the sacred vanishes and everything merges into an infinite mass of Divine Consciousness, complete, indivisible, homogeneous—akhanda-vijñanaghana-ekarasam as Vedanta puts it. This message reverberates through and through, loud and clear, passionately and powerfully, in Sri Sri Ramakrishna Kathamrita (the Gospel of Sri Ramakrishna).

Consciousness Studies in Ancient India – Mandukya Upanishad Perspective, By Swami Sarvapriyananda, Minister-in-Charge, Vedanta Society of New York, USA:

We are now living in a time of unprecedented interest in consciousness. The present interest in consciousness studies has been fuelled and inspired by advances in brain science, especially by new and sophisticated technologies of brain imaging. But consciousness studies is not by any means only a modern phenomenon; it is also one of oldest areas of human investigation. The ancient Indians studied consciousness intensively five thousand or more years ago and their discoveries are found in the Upanishads. This presentation will trace the deep phenomenology of consciousness found in the shortest of these texts, the famed Mandukya Upanishad. In this Upanishad, we find an investigation in the nature of self and consciousness through a contemplation of the three states of waking, dreaming and deep sleep. A recent scholarly work which recognizes the significance of the Upanishads in modern consciousness studies is “Waking, Dreaming, Being” by Prof. Evan Thompson of the University of British Columbia (pub. Columbia University Press, New York, 2015). In this work, which is itself organized on the structure of the Mandukya Upanishad, Prof. Thompson explores how the insights of the Upanishads can help advance the neuroscience of consciousness. Regarding the importance of the Upanishads, he goes so far as to hold that global history should be divided into before Upanishads and after Upanishads – BU and AU, rather than BC and AD! In this presentation we shall probe into the core insights of the Mandukya Upanishad and consider what that might mean for modern consciousness studies.

Understanding consciousness from the meditative brain : a neuroscientific perspective by Prof. Bindu M. Kuty, Professor, Department of Neurophysiology, Associate Dean of Basic Sciences and Officer In-Charge, Centre for Consciousness Studies, NIMHANS, Bengaluru

Deciphering the underlying scientific basis of consciousness is one of the greatest challenges confronted by scientists across various disciplines. In this context, empirical understanding on the neural basis of consciousness will be of great importance. The past one hundred years of research studies have made great strides in our understanding on the neural basis of mental process like perceiving, thinking, and feeling, learning and remembering. Thanks to the advancement in both conceptual and methodological tools that gave us greatest impetus to explore the neural substrates of highly complex behaviours. These neuroscientific studies provide us many dimensions towards exploring the nature of consciousness with brain dynamicity. Studies on brain oscillations and coherence, brain network dynamicity etc. showed their role in integrating information and would provide important insights on the neural basis of consciousness.

Meditative practices are intense sensory, cognitive and emotional experiences that bring enduring changes in our mental functions. Neuroscientific studies on meditation in the past one decade demonstrated meditation practices enhance brain oscillations and coherence, network efficiency and brain resilience in different ways and at different levels. Such studies have revealed the impact of meditation on neural plasticity, cognition, attention, awareness and memory functions. Our own studies in the last two decades support the meditation proficiency based enhancement of brain dynamicity during rest, meditation, and cognitive task performance with lasting effects on brain and behaviour. We have found a direct correlation between wellbeing and meditation proficiency. Such studies provide valuable insights on brain's adaptive capacity to enhance the network efficiency and brain resilience and to experience newer perspectives of self and consciousness. With its ability to enhance cognition and awareness, meditation practices are thought to sustain the experience and thus would modulate the content consciousness. No doubt, neuroscientific studies on meditation have helped us to realise the infinite capacities of our brain and mind, but how exactly meditative practices would deduce the neural basis of consciousness is yet to be explored in future studies.

Sleep Consciousness: Neuroscience perspective, by Dr..PN Ravindra, Associate Professor, Department of Neurophysiology, Centre for Consciousness Studies, NIMHANS, Bengaluru

To unravel the mysteries of Consciousness continues to be the pursuit across the knowledge systems of the world since time immemorial. The core issue in this pursuit is to understand the meaning and how the sense of Self or Iness emerges. The contemporary neuro-cognitive theories and hypothesis have attempted to know this based on psycho-neurophysiological events triggered due to sensory stimuli in wake state. However, due to complex network and activities in the web of neural connections the biological underpins of how the 'I ness' is generated is not yet completely resolved. Therefore, there is a need of varied approach decipher the challenge with a natural and universal behavioural model where the sense of self or I ness persist, and neural network is not bombarded with any external or internal input. Deep Sleep state is probably the best suited behavioral model in this aspect.

The default view of consciousness 'it is what vanishes every night when we fall into a dreamless sleep and reappears when we wake up or when we dream' is challenged with emerging evidence. Reports are there reports demonstrating that newer associations between two stimuli can be learnt in both NREM and REM sleep without being aware of it. From our laboratories we have demonstrated that long term meditation practice has a tremendous influence on sleep by enhancing deep sleep & REM sleep, increased cardiorespiratory synchrony & better connectivity in default networking which could aid in increased interoceptive awareness. In addition, sensory processes and awareness

to certain extent is known to be present during deep sleep in meditators. Thus, challenging the default view of consciousness. With this background, how the sense of I ness could be preserved during sleep especially in deep sleep will be hypothesized which could be empirically tested. Further, how scaffolding the ideas from Indian philosophical system of deep sleep phenomenology with neuroscience will strengthen consciousness research with sleep as an investigative model will be discussed.

Consciousness: Yoga perspective with special reference to Swami Vivekananda's Raja-Yoga, Swami Sarvasthananda, Minister-in-Charge, Ramakrishna Vedanta Centre, Bourne End, UK

A lot of uncertainty and confusion is encountered if one undertakes a materialistic approach to the study of consciousness. An alternative perspective of the concept of consciousness in the light of Yoga Philosophy is made easy by a study of Swami Vivekananda's works, especially his Raja Yoga. The state of consciousness research, particularly in the fields of neuroscience and philosophy of mind is focussed on the paradigm that consciousness is simply a product of the neural network in the brain for many decades now.

Consciousness as presented in the Upanishads, which forms the theoretical framework to Swami Vivekananda's ideas makes a demarcation between pure consciousness and phenomenal consciousness. The former is the essence of the Atman or the real nature of man, which animates the body-mind complex, while the latter is reflection of the buddhi. Pure consciousness as self-luminous, witness and substratum are identified to be vital dimensions of the Atman, which facilitate cognition, conation, and affection.

Swami Vivekananda's thoughts on the self-luminosity, witness attitude and substratum of consciousness attempts to take care of the main limitation of the contemporary approach -- that is the absence of a substratum to coordinate and integrate everything in the brain to provide coherence and a complete experience. While scientists search for such a substratum at the quantum level, Swami Vivekananda argues that such a substratum must ultimately be unchanging and immaterial (spirit), which can only be the Atman—the real nature of man.

SV's discussion of the states of consciousness – unconscious, conscious, super-conscious and ultra-conscious are incredibly significant. His discussion of the unconscious seems to synthesise the Freudian idea with Patanjali's conception of adrista samskaras. Ultra-consciousness was identified as separate and an intensification of the super-consciousness state. SV's thoughts on this seem closer to the teachings and experiences of Sri Ramakrishna than to the Upanishads. In addition, he made the case for the utility of making ultra-conscious practicable.

SV's contribution by way of juxtaposition of the evolution of nature and the manifestation of consciousness is another important theme. Even though Darwin's ideas on evolution and Indian ideas on evolution were present at the time of SV, he seems to have synthesised and developed it. SV agrees with the Darwinian survival of the fittest and natural selection at the animal level. But at the human level these are more likely to hinder rather than help the process of evolution. At the human level, evolution through education, culture, concentration, sacrifice, service, and other spiritual practice are more conducive to manifesting pure consciousness. Scientists are only now contemplating the relationship between consciousness and evolution.

Swami Vivekananda, during his lifetime worked extremely hard to bridge the gap between science and spirituality. A more comprehensive study of consciousness according to SV by researchers working in this field will help fill the vacuum that currently exists for genuine alternative perspectives, which lie outside the dominant materialistic paradigm.

চেতনা : ধর্ম দর্শন ও বিজ্ঞানের আলোকে: Dr. Subrata Chattopadhyay, Professor of Physiology, West Bengal University of Health Sciences

চেতনশীলতা বা সচেতন অভিজ্ঞতার চেয়ে প্রত্যক্ষভাবে বেশি পরিচয় আছে এমন কিছুই আমাদের নেই অথচ সে-সম্বন্ধেই আমাদের অজ্ঞানতা সর্বাধিক। জ্ঞান-বিজ্ঞানের বিভিন্ন শাখায় বিশ্বজগৎ সম্পর্কে বিস্তর জানা গেছে কিন্তু সে জানা-বোঝা বা জ্ঞানের সঙ্গে চেতনার সেতুবন্ধন করা যাচ্ছে না, থেকে যাচ্ছে যোজন ফারাক। সায়েন্স-টেকনোলজির চোখ ধাঁধানো সাফল্যে যখন জীবনে বিস্ময় বলে কিছু অবশিষ্ট নেই, চাঁদ কিম্বা মঙ্গল গ্রহে যখন মনুষ্য উপনিবেশ স্থাপন করার কথা ভাবা হচ্ছে, সেই যুগে আবিষ্কৃত হল চেতনা নামক এক পরম বিস্ময় নিজেই মধ্যে।

চেতনা কী? তার সংজ্ঞাই বা কী? কোথায় তার বাস? কী তার কাজ? কেনই বা তার অস্তিত্ব? মস্তিষ্কের স্নায়ু থেকে কি চেতনার উদ্ভব? কম্পিউটার কি সচেতন? দেহমধ্যে হৃৎপিণ্ড প্রতিস্থাপন করলেও আমি 'আমি'ই থাকি, মাথা বা মস্তিষ্ক প্রতিস্থাপন হলেও আমি কি এই 'আমি' থাকব? চেতনাকে কেন্দ্র করে এইরকম অজস্র প্রশ্ন জ্ঞান-বিজ্ঞানের বিভিন্ন শাখায় সারস্বত জগতে।

এই উপস্থাপনায় ধর্ম ও দর্শন সংক্রান্ত কয়েকটি প্রশ্ন সায়েন্স-এর আলোকে আলচিত হবে।

Consciousness and Modern Brain Research, by Dr. Arkadeb Dutta, Assistant Professor, Department of Sports Science and Yoga, RKMVERI

We have different states of consciousness. One of the most intriguing questions in consciousness research is whether, we can physically quantify consciousness. How can we define the level of consciousness of a person whom we are communicating to? Or, how different or similar is his conscious perception of the world? We humans develop a plethora of subjective experiences in our lifetime through interactions with the world around us. Some of these are manifested through the ways we act. So to some degree we understand consciousness from behavioural correlates. But do we really quantify 'neural signatures' of our conscious behaviour? So the talk will basically discuss on the possibility of various neurophysiological approaches for understanding the neural correlates of consciousness involving different brain regions.

Consciousness as taught in Bhagavad Gita, by Swami Kaleshananda, Controller of Examinations, RKMVERI

Bhagavad Gita, the wisdom of Lord Sri Krishna, one of the three pillars of *Prasthanatrayee* (the sources of Vedantic knowledge), contains the essence of the Upanishads. This popular handbook of spiritual evolution helps one to expand one's individual consciousness till it merges with the cosmic consciousness (not physical merger but merger by knowledge) and then only one realizes one's essential oneness with the Infinite Consciousness. According to Veda realizing this oneness is the *summum bonum* of human life by which one gains supreme knowledge about one's true nature and transcends sorrows, duality and transmigration.

The distinctive feature of Bhagavad Gita is that, the knowledge gained by expanding one's consciousness can be used to solve any problem in one's practical life. In fact Bhagavad Gita as a part of the epic Mahabhrata, was a discourse by Lord Sri Krishna to Arjuna on the battlefield of Kurukshetra just before the start of the war, not to desist him from fighting the righteous war (*Dharma-yuddha*) but to engage him in war by imparting him the true knowledge of the Self. Moreover it not only contains principles and techniques of Advaita Vedanta & but also also have the flavours of the teachings of other spiritual traditions like Samkhya and Yoga. The teachings of this book is meant for use by one and all to gain knowledge about one's real nature (consciousness), to change the quality of one's awareness and to change the quality of one's life.

The pure consciousness mentioned in Bhagavad Gita (chapter 13 and elsewhere) as the non-dual Brahman, is super-sensuous and cannot be objectified by the instruments of knowledge like senses,

mind or intellect, because it is eternal subject and most subtle. It is the only conscious principle. The instruments of knowledge are inert principles. A conscious principle can only be aware of itself and others. The consciousness is the substratum on which the creation is apparently expressed as names and forms. It is all pervading and in its presence the *Prakriti* (nature) acts and seems to be conscious. The inert principle *Prakriti* is the *maya-shakti* (power) of the pure consciousness which evolves itself as ether, air, fire, water, earth, mind, intellect and “I” principle (*ahamkara*) in the presence of another superior principle – the consciousness. From the view point of Advaita Vedanta this creation is apparent but Samkhya philosophy view it as real and expounds that *Prakriti* and *Purusha* (consciousness) have their respective roles to play in it. The pure consciousness is birthless, deathless, eternal, unmanifest, inconceivable, infinite, omnipresent, unmoving, changeless and is of the nature of existence (*sat-svarupa*).

The apparent consciousness mentioned in Bhagavad Gita (chapter 11) is the cosmic consciousness in which the whole gross and subtle universes remain as its part. As the lord of the *Prakriti*, this level of consciousness creates, preserves and destroys the universe.

At individual level this apparent consciousness (Bhagavad Gita chapter 15) appears as individual consciousness (*jivatma*) and behave as separate entities and undergo transmigration according to the Law of Karma. The three gunas of *Prakriti*, namely, the *Sattva*, *Rajas*, and *Tamas*, apparently binds the individual consciousness to the *Prakriti* (mainly to the *Antahkarana* – intellect etc). When the consciousness expresses through the intellect one feels aware/conscious of the physical world. The consciousness is unaffected by any change during its association with the *Prakriti*, like the real sun is unaffected by the colour or the changes in the properties of the water in the pot where it is associated as the reflected sun. The individual consciousnesses are the reflections of the one pure consciousness on the *Antahkaranas*. The quality of apparent consciousness varies according to the preponderance of the dynamic gunas. By spiritual practice one should make the *Antahkarana* predominantly *Sattvik* in nature, so that the reflection of light of consciousness on it becomes more clear. With pure *Antahkarana* one realizes the difference between the pure consciousness and the *Prakriti* and realizes one’s oneness with cosmic consciousness and pure non-dual consciousness.