

# **GI4QC Forum's Vision Statement**

find something (forgotten or ignored) again by following an alternate path of exploration without letting the current knowledge bias the integrity of the quest put to use, especially for some practical and relevant purpose fundamental things that you have to learn first about a subject cumulative body of know-how, practices and representations (encompassing the complexities of life and nature) developed and maintained by communities with extended histories

# Rediscover and apply the elements of Ancient Knowledge Systems

to resolve the existing mysteries of science and nature

'solve' implies finding the correct answer whereas 'resolve' means settling or finding a conclusive solution to a problem or a contentious matter during its astounding journey of understanding how nature works, science encountered some phenomena which could not be explained despite applying all available scientific know-how use the combined understanding of the ancient and the current knowledge systems with the hope to objectively find evidence-supported explanations to the long-standing and perplexing queries of mankind

www.gi4qc.org

# **GI4QC Forum's Mission**

Conduct innovative cutting-edge experiments to ascertain the potential impact of the observer(s) conscious intent on the observed outcome.

Develop spinoff technologies which enhance the Happiness Index of the individuals as well as the society and are also aligned with the UN Sustainability Goals.

Highlight and publish the credible evidence-based results of the research/study projects.

Make GI4QC Forum the most respected and valued networked association known for unhindered exchange of ideas.



### International Journal on Eternal Wisdom and Contemporary Science

Volume 1 Issue 2 December 2024

**Publication Information -**

**Format of Publication:** Online – Open Access – Peer Reviewed Journal

**Starting Year of Publication:** 2024

**Periodicity of its Publication:** Half-yearly (June and December)

Language: English

**Subject:** Multidisciplinary

**Central Theme of This Issue:** Open Issue with no Pre-defined Theme

Central Theme of Subsequent Issues: No central theme, unless announced by the

Editorial Board (For latest updates: www.gi4qc.org)

**ISSN:** Applied For

**Issue:** December 2024

**Published by:** GI4QC Forum

(CIN U85300OR2022NPL040416),

Plot No. 9B/66, Bhagabanpur, Khandagiri,

Bhubaneswar, Odisha, India – 751030

**Aims and Scope:** GI4QC Forum is formed with a vision to "Rediscover and apply the elements of Ancient Knowledge Systems to resolve the existing mysteries of science and nature". The Forum hopes to use the combined understanding of the ancient and the current knowledge systems to objectively find evidence-supported explanations to the long-standing and perplexing queries of mankind, without letting the current knowledge bias the integrity of the quest.

This global platform of professionals is working towards generating innovative solutions that are practical and relevant for holistic development of the society. The Forum aims to disseminate the findings of the integrated approach of research through publication of papers and through organization of conferences, seminars, lectures, etc.

This Journal is an initiative to cater to the above-mentioned objectives. It is an online open-access peer-reviewed journal which will publish original research papers, review articles, case studies, and perspectives on various topics related to the integration of eternal wisdom and contemporary science from authors across the globe.

**Guidelines, Agreements, Policies:** To know more about existing agreements and policies visit www.gi4qc.org or write to <a href="mailto:query@gi4qc.org">query@gi4qc.org</a>

### **Editorial Board**

### **Advisory Board:**

Prof. K. Ramasubramanian,

Cell for Indian Science and Technology in Sanskrit, Dept. of Humanities and Social Sciences, IIT Bombay, India

### **Editor-in-Chief:**

Prof. Ajit K Verma,

Western Norway University of Applied Sciences, Haugesund, Norway

### **Managing Editor:**

Brigadier Shitanshu Mishra,

Indian Army Veteran, Lucknow, India

### **Editorial Board:**

Prof. Anil Kumar Gourishetty,

Department of Physics and Centre for Indian Knowledge Systems, Indian Institute of Technology Roorkee, Uttarakhand, India

Prof. Ashish Pandey,

Shailesh J. Mehta School of Management, Indian Institute of Technology – Bombay, India

Prof. (Dr.) Manish Khanna,

Dean Academics, KNS MIMS, Lucknow

Dr. Prakash Venglat,

Phytocentric Consulting and Coaching ©, Department of Plant Science, College of Agriculture and Bioresources, University of Saskatchewan, Saskatoon, SK, Canada

Mr. Rameshchandra Ketharaju,

Quantum Ecosystems and Technology Council of India, Hyderabad, India

Dr. Ranbir Sinha,

Sinha Research, Switzerland

### **Guest Editors for the Inaugural Issue:**

Mr. Anand Prakash,

Director - GI4QC Forum, Greater Noida, India

Mr. Vinod Kulkarni,

IT Consultant, Pune, India

Mr. Anurag Jain,

DIY Gadgets, Greater Noida, India

Digital Design and printed by -AEKAIS - D 363, 2nd Floor Sector 10 Noida Gautambudha Nagar U.P. 201301 (India)

# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 · Issue 2 · December 2024

### Open Issue with no Pre-defined Theme

### **Table of Contents**

From the Editor's Desk	iv
Prof. Ajit Kumar Verma	
Reader's Column	vi
Primacy of Universal-Consciousness: Insights and Revelations from the declassified US Army Stargate Project – Manish Pajan and Switi Gupta	1
The Mind's Sky: On Computers and Consciousness  Dr. Subhash Kak	17
The ways of future correspondence and harmony: Intertwining Mind and Meditation in the Microcosm & Machines and Mathematics in the Macrocosm  Prof. Joy Sen	22
Bhoutika Shastra To Adi Bhoutika Shastra: A Methodological Exploration Through Quantum Mechanics and Neo-Quantum Physics Rameshchandra Ketharaju	36
Integration of Enneagram with J Krishnamurti's Thoughts:  An Effective Tool for Personal Growth – A Case Study  Dr. V. Vijaykumar	69
The Sanatana Concept of the Five Pranas and its Interrelation with Human Health and Well-being (Svastha) Dr. David Frawley (Pandit Vamadeva Shastri)	81
A Primer on Phytocentric Awareness: Ancient and Recent Insights  Dr. Prakash Venglat	95
Holistic Wellness of Counselors and Health Care Professionals through Mindfulness Self-Care Techniques and Conscious Living Prof. Suneetha B Manyam	106

### FROM THE EDITOR'S DESK

Welcome to the second issue of the International Journal on Eternal Wisdom and Contemporary Science. As we continue our journey of exploring the profound intersections between ancient wisdom and modern scientific inquiry, we are thrilled to present a collection of articles that push the boundaries of our understanding and inspire new ways of thinking.

In this issue, we delve into a diverse array of topics, each offering unique insights and revelations. We have selected seven Research and/or Review Papers and one Perspective for your readership. Each Research and/or Review Paper has gone through one or more peer review cycles and was found to meet the various criteria of research publication.

- 1. Primacy of Universal-Consciousness: Insights and Revelations from the declassified US Army Stargate Project by Manish Pajan and Switi Gupta. This paper explores the intriguing findings from the Stargate Project, shedding light on how a framework built on the concept of Universal-Consciousness can provide a better understanding of reality.
- 2. The Mind's Sky: On Computers and Consciousness by Dr. Subhash Kak. Dr. Kak's article shares his perspective on the current philosophical and scientific debates surrounding artificial intelligence and consciousness by analysing the nature of mind and machine.
- 3. The ways of future correspondence and harmony: Intertwining Mind and Meditation in the Microcosm & Machines and Mathematics in the Macrocosm by Prof. Joy Sen. The paper delves into the interplay of the two worlds the world of mind (microcosm) and the world of machines (macrocosm) and attempts to initiate an understanding of their possible overlaps that may determine an 'emerging new science' integrating the two worlds.
- 4. Bhoutika Shastra To Adi Bhoutika Shastra: A Methodological Exploration Through Quantum Mechanics and Neo-Quantum Physics by Rameshchandra Ketharaju. This work bridges ancient Indian metaphysical concepts with cutting-edge quantum theories, offering a methodological exploration that challenges conventional scientific paradigms and makes a bold and revolutionary proposal in the evolution of scientific thought a 'new science' called Neo-Quantum Physics.
- 5. Integration of Enneagram with J Krishnamurti's Thoughts: An Effective Tool for Personal Growth A Case Study by Dr. V. Vijaykumar. This article sheds light on how the Enneagram personality system, along with the philosophical teachings of J Krishnamurti, provides a powerful framework for personal development and self-awareness and then outlines how this approach helped the author in his life.
- 6. The Sanatana Concept of the Five Pranas and its Interrelation with Human Health and Well-being (Svastha) by Dr. David Frawley (Pandit Vamadeva Shastri). Dr. Frawley explains the concept of the five pranas as outlined in the ancient Indic knowledge repositories. There is no equivalent concept of pranas in contemporary science though the nascent theories of biofields seem to be heading in the same direction.
- 7. A Primer on Phytocentric Awareness: Ancient and Recent Insights by Dr. Prakash Venglat. This piece revisits ancient wisdom regarding plant consciousness and awareness, juxtaposing it with recent scientific discoveries to offer a comprehensive overview of phytocentric awareness.

8. Holistic Wellness of Counselors and Health Care Professionals through Mindfulness Self-Care Techniques and Conscious Living by Prof. Suneetha B Manyam. Prof. Manyam shares the importance of mindfulness and conscious living for those in the helping professions, offering practical techniques for self-care through her comprehensive and systematic review of literature from 2003-2024.

Each of these contributions reflects our journal's commitment to fostering a dialogue between the timeless wisdom of the past and the innovative discoveries of the present. We hope that this issue will not only inform but also inspire our readers to explore these intersections in their own lives and work.

We extend our deepest gratitude to the authors for their insightful contributions and to our reviewers for their meticulous evaluations. As always, we welcome feedback from our readers and look forward to continuing this intellectual journey together. You may share your observations and thoughts with us at <a href="mailto:ijewcs@gi4qc.org">ijewcs@gi4qc.org</a>

Warm regards,

Ajit Kumar Verma,

Editor-in-Chief

International Journal on Eternal Wisdom and Contemporary Science

(editor in chief@gi4qc.org)

We acknowledge the contrubution towards the printing of the this Journal

Mr. Vinod Kulkarni Brig. Shitanshu Mishra Mr. Vinod Tiwari Mr Vijay Pandey

### Reader's Column

Nice paper, liked the interpretations of Samyama and related siddhis as a possible outcome of Mirror neurons being actively fored due to audio/visual ques like visualisation etc...

I will come back at this with a more detailed view. For now really liked the correlational interpretations. Congratulations to the authors

Kavan Ganapathy on "Inquiring into the Foundations of Yoga by Exploring the Subconscious Mind and Placebo Effect by Pareekshit Dahal and Kaudinya Arpan"

Very well articulated. In my opinion to know the absolute we have to come out of the limitation of our brain/knowledge as it can only understand relative. Maybe we have to put our heart/consciousness into action

Nawneet Kumar on "The Scientific View of Yogaśāstra in the Bhagavad Gītā by Uday Karanjkar"

Nice share and profound at the same time – but very few will understand. *Jiski rahi bhaavna jaisi, tin dekhain moorat taisi.* 

It takes a different level of humility, teachability, and base level knowledge / understanding before we can even appreciate the sheaths of junk that is piled up on who we really are. The level of avidya is appalling to say the least.

The conditioning we go through based on our current school systems (ever since the British system was imposed) / curricula gets in the way of understanding our true nature.

Rai Chowdhary on "Human Consciousness - An Emergent Property of the Brain or A Fundamental Property of the Universe? by Manish Pajan, Dr. Anish Rakheja, Switi Gupta"

Great work team GI4QC! "IJEWCS" will become the emergent knowledge base about the convergence of Science into Spirituality to reveal the unanswered questions of contemporary Sciences.

Nixon Patel (Adjunct Professor at Indian Institute of Technology, Hyderabad) on Journal and GI4QC Forum

Many congratulations for this remarkable achievement and thanks to you for your endeavour advancing such a noble cause.

Harihar Prasad Srivastava on Journal and GI4QC Forum

Great paper. Coming CTP sites will include repositories and resources for 1000s of such papers. We're looking forward to as many papers and submissions as possible.

Years and years ago (even before I became associated with Drazen/CTP), I believed the 'revolution in consciousness' was just some new-age gimmicky.

This truly is indeed the case. The 'revolution in consciousness' is truly here. And the dawn of a new era approaches; with new sciences, new innovations, and new coming technologies we cannot yet truly begin to fathom the implications of.

Alfred T. on "Human Consciousness - An Emergent Property of the Brain or A Fundamental Property of the Universe? by Manish Pajan, Dr. Anish Rakheja, Switi Gupta" I write to appreciate this endeavor that may contribute significantly in enhancing and consolidating the fundamentals of consciousness studies. I believe that we should make the endeavor for searching the deeper meaning of our life and make efforts to discover our true self.

We should inculcate in our mind that we have come to this world to do something important otherwise we simply would not be here. As long as we have not identified this belief we will be wrestling with dissatisfaction, powerlessness, frustration and fatigue. It is in fact our responsibility to discover our mission and get things under way. Even the cells of our body react to this lack of purpose. In fact, the best way to rebuild our fragile self is to make the search for our mission and living according to the unique way of our personal evolution. We will experience a new level of inner peace and by expressing our true nature we will be strong enough not to be shaken by outward happenings.

I think need of the hour is to present an alternative world view, fundamental choice between what we have been doing for ages and what can be done in the service of humanity which has become vulnerable and helpless despite rapid scientific and technological advancements.

on Journal and GI4QC Forum

### International Journal on Eternal Wisdom and Contemporary Science

### **Advertising:**

Current advertising rates and specifications may be obtained by contacting the advertising coordinator by sending an email to info@gi4qc.org . Acceptance of advertising in this journal in no way implies endorsement of the advertised product or service by GI4QC Forum, the journal's affiliated society or the journal editor(s). No endorsement is intended or implied. GI4QC Forum reserves the right to reject any advertising it deems inappropriate for this journal.

### **Submission of Manuscripts:**

Authors should submit their articles to International Journal on Eternal Wisdom and Contemporary Science online to facilitate quicker and more efficient processing. Electronic submission substantially reduces the editorial processing and reviewing and shortens the overall publication time. Please log on to the site: www.gi4qc.org or write to <a href="mailto:ijewcs@gi4qc.org">ijewcs@gi4qc.org</a> for detailed author guidelines

### **Copyright Information:**

As soon as an article is accepted for publication, authors will be requested to assign copyright of the article (or to grant exclusive publication and dissemination rights) to the publisher. This will ensure the widest possible protection and dissemination of information under copyright laws.

While the advice and information in this journal is believed to be true and accurate at the date of its publication, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may have been made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, on video disks, etc., without first obtaining written permission from the publisher. The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations. To request permission for republishing, reproducing, or distributing material from this journal, please contact the managing editor (ijewcs@gi4qc.org) or the editor-in-chief(editor in chief@gi4qc.org)

### **Subscription Information:**

All correspondence regarding individual and society subscriptions and advertisements should be addressed to: info@gi4qc.org

### **Ownership/Distribution Rights:**

GI4QC Forum has exclusive rights and license to publish and distribute the journal worldwide. The views expressed in this publication do not necessarily reflect those of GI4QC Forum. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without written permission of the publishers.



### International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 1-16

# Primacy of Universal-Consciousness: Insights and Revelations from the declassified US Army Stargate Project

Manish Pajan
Co-founder, Altru Advisors, Mumbai, India
Switi Gupta
Founder, Broad Strokes Ventures, New Delhi, India

### **Abstract:**

In this paper we review the now declassified CIA report on the analysis of the gateway process which was used in the Stargate Project for gaining access to information distant in space and/or time (remote viewing). While there was no ambiguity on the statistical significance of the results produced by the Stargate Project, doubts were raised on the explanation of remote viewing in terms of its mechanics. The success of the project was downplayed because the mechanics were built on some axioms and premises which were not readily acceptable in the prevalent materialist worldview. The focus of our paper is to present the mechanics, as specified in the "Analysis and Assessment of Gateway Process" report, so that readers are able to comprehend the insights revealed in it. The mechanics detailed out in the report categorically support the idea of primacy of Universal-Consciousness, which is also an integral part of many ancient and present belief systems of the world. Our paper also brings out that all the axioms and premises mentioned in the "Analysis and Assessment of Gateway Process" report were known to mankind for thousands of years and they are even part of ancient Indic texts. In light of these facts we can also summarise that the statistically significant results obtained by Stargate Project demonstrate, beyond any reasonable doubt, the primacy of Universal-Consciousness and related concepts as available in ancient Indic texts reaffirming the trustworthiness of this ancient knowledge repository for understanding life.

**Keywords:** Remote Viewing, Stargate Project, Gateway Process, Universal-Consciousness, the Absolute, Hemi-Sync

#### INTRODUCTION

The Stargate Project was a secret \$20 million research program, funded by the US government between 1972-1995, which attempted to determine potential military applications of related psychic phenomena. Robert Allan Monroe (1915–1995), founder of The Monroe Institute, was known for his technology called Hemispheric Synchronization (Hemi-Sync) which he was using to study out-of-body experiences and to gather scientific evidence to prove the existence of other dimensions. Given Robert's extensive background and various patented applications, he was invited by the Central Intelligence Agency (CIA) to join this highly classified military project. As his techniques involved opening portals to other dimensions, researchers aptly named the assignment Gateway Process.

The key psychic phenomenon investigated by the Stargate Project was remote sensing or remote viewing. Page 119 of "Proposed Downgrading of Classified Documents for Cognitive Sciences Laboratory - Volume 2 of 2"[1] contains a meticulous definition of remote sensing which we reproduce here. "Remote Sensing: The acquisition and description, by mental means, of information blocked from ordinary perception by distance or shielding, and generally believed to be secure against such access."

After the CIA declassified the files related to Stargate Project, some people directly associated with this project shared their perspectives in the documentary titled "Third Eye Spies"[2]. This documentary covers many aspects of the Stargate Project including what led to its initiation, some hard-to-believe remote viewing cases and how the project was ultimately discontinued. Our paper will not be re-exploring the information already contained in this documentary.

### **SCOPE**

The Stargate Project team hypothesised that remote viewing is a latent ability that every human being has; and it can be turned on (stimulated) by sustained learning and practice of certain well-defined techniques like the Gateway Process. Wayne M. McDonnell was assigned the task to provide an assessment of the Gateway Experience in terms of its mechanics and ultimate practicality. He submitted his findings to US Army Operational Group on 9 Jun 1983 in the report "Analysis and Assessment of Gateway Process"[3].

The report by Wayne M. McDonnell contains some axioms and premises which are not readily acceptable in the prevalent materialist worldview. However, they form the basic presumptions on which the entire Gateway Process technique was developed.

We reproduce here the first two findings as recorded in the "Conclusions" section (page 136 & 137) of another report "An Evaluation of Remote Viewing: Research and Applications" [4].

- "A statistically significant effect has been observed in the recent laboratory experiments of remote viewing."
- "The experimental research conducted as part of the current program does not unambiguously support the interpretation of the results in terms of a paranormal phenomenon."

These two statements clearly bring out that there was no ambiguity on the statistical significance of the results. However, doubts were raised on the explanation of remote viewing in terms of its mechanics. There were apprehensions on interpreting remote viewing as a paranormal phenomenon. The Stargate Project was finally discontinued in 1995, based on the recommendations of this report.

The focus of our paper is to present the mechanics, as specified in the "Analysis and Assessment of Gateway Process" report, and provide our review of the same, so that readers are able to comprehend the insights revealed in it.

### **METHODOLOGY**

To maintain the authenticity of our research we have only referred to the documents declassified by CIA. To avoid any unintentional misinterpretation of concepts contained in these reports we have reproduced the key points from the original text of these declassified documents before sharing our observations. Readers are encouraged to refer to the original reports in case they find the extracted text too cryptic to understand.

The declassified "Analysis and Assessment of Gateway Process" document[3] contains a covering letter and a 28-page report which, in turn, is divided into 38 sections and a bibliography section. While discussing the original report, we have divided these 38 sections into 7 parts and shared our observations at the end of each part. This division of the report into 7 parts does not exist in the original report but has been introduced by us for ease of presenting our work.

It should be noted that the document uploaded on the CIA Reading Room has a missing page – Page Number 25. The page resurfaced in 2021 and is reproduced in Annexure 1. While discussing the "Analysis and Assessment of Gateway Process" report we have included the contents from the resurfaced Page 25. Readers should, however, remember that the authenticity of this resurfaced page has not been confirmed by CIA, hence they may choose to ignore this particular section while drawing their conclusions on insights and revelations from the declassified US Army Stargate Project.

#### ANALYSIS AND ASSESSMENT OF GATEWAY PROCESS

### **Covering Letter**

Before sharing the key points of this report, let us understand the context set by Wayne M. McDonnell in the covering letter.

As I set out to fulfill that tasking it soon became clear that in order to assess the validity and practicality of the process I needed to do enough supporting research and analysis to fully understand how and why the process works. Frankly, sir, that proved to be an extremely involved and difficult business. Initially, based on conversations with a physician who took the Gateway training with me, I had recourse to the biomedical models developed by Itzhak Bentov to obtain information concerning the physical aspects of the process. Then I found it necessary to delve into various sources for information concerning quantum mechanics in order to be able to describe the nature and functioning of human consciousness. I had to be able to construct a scientifically valid and reasonably lucid model of how consciousness functions under the influence of the brain hemisphere synchronization technique employed by Gateway. Once this was done, the next step involved recourse to theoretical physics in order to explain the character of the time-space dimension and the means by which expanded human consciousness transcends it in achieving Gateway's objectives. Finally, I again found it necessary to use physics to bring the whole phenomenon of out-of-body states into the language of physical science to remove the stigma of its occult connotations, and put it in a frame of reference suited to objective assessment...Paradoxically, having gone to such great lengths to avoid trying to render judgements based on an occult or dogmatic frame of reference in the end I found it necessary to return, at least briefly, to the question of the impact of the Gateway Experience on common belief systems. I did so because although it was essential to avoid attempting to render an assessment in the context of such systems, I felt that it was necessary after having completed the analysis to point out that the resulting conclusions do not do any violence to the fundamental mainstream of either eastern or western belief systems. Unless that point is clearly established, the danger exists that some people will reject the whole concept of the Gateway Experience in the mistaken belief that it contradicts and is therefore alien to all that they hold to be right and true ... '

### PART 1: The mechanics by which the tuned body-mind system receives information

- "I. Introduction...In order to describe the Monroe Institute technique for achieving altered states of consciousness(the "Gateway Experience") involving brain hemisphere synchronization or "Hemi-Sync", the most effective way to begin is to briefly profile the basic mechanics which underlay operation of related methods such as hypnosis, transcendental meditation, and biofeedback..."
- "2. Hypnosis ... hypnosis is basically 'a technique which permits acquisition of direct access to the sensory motor cortex and pleasure centers, and lower cerebral(emotional) portions(and associated pleasure centers) of the right side of the human brain following successful disengagement of the stimulus screening function of the left hemisphere of the brain... if the left hemisphere can be distracted either through boredom or through reduction to a soporific, semi-sleep state, external stimuli to include hypnotic suggestions are allowed to pass unchallenged into the right hemisphere where they are accepted and acted upon directly..."
- "3. Transcendental Meditation...In this technique, intense and protracted single minded concentration on the process of drawing energy up the spinal cord ultimately results in what appears to be creation of acoustical standing waves in the cerebral ventricles which are then conducted to the gray matter in the cerebral cortex on the right side of the brain...the standing acoustical waves are the result of the altered rhythm of heart sounds which are occasioned by prolonged practice of meditation, and which set up sympathetic vibrations in the walls of the fluid filled cavities which comprise the third and lateral ventricles of the brain... exposure to mechanical or acoustical vibrations in the range of 4-7 Hertz(cycles per second) for protracted periods may achieve the same effect..."
- "4. Biofeedback. Instead of suppressing the left hemisphere as is done in hypnosis, or largely bypassing and ignoring it as is done in transcendental meditation, biofeedback teaches the left hemisphere first to visualize the

desired result and then to recognize the feelings associated with the experience of successful right hemisphere access to the specific lower cerebral, cortex, pain or pleasure or other areas in the manner needed to produce the desired result..."

- "5. Gateway and Hemi-Sync...Fundamentally, the Gateway Experience is a training system designed to bring enhanced strength, focus and coherence to the amplitude and frequency of brainwave output between the left and right hemispheres so as to alter consciousness, moving it outside the physical sphere so as to ultimately escape even the restrictions of time and space. The participant then gains access to the various levels of intuitive knowledge which the universe offers. What differentiates the Gateway Experience from forms of meditation is its use of the Hemi-Sync technique ..."
- "6. Lamp vs Laser:...the human mind under the discipline of Hemi-Sync acts after the fashion of a laser beam which produces a disciplined stream of light. ... Gateway assumes that once the frequency and amplitude of the human brain are rendered coherent, it is possible to begin accelerating both so that the human mind is soon resonating at ever higher vibrational levels. ... The mind, when operating at these increasingly rarified levels is assumed to be capable of processing the information thus received through the same fundamental matrix by which it makes sense of ordinary physical sensory input to achieve meaning in a cognitive context."
- "7. Frequency Following Response. To achieve synchronization of brain hemispheres, the Hemi-Sync technique takes advantage of a phenomenon known as the Frequency Following Response(FFR) which means that if a subject hears a sound produced at a frequency which emulates one of those associated with the operation of the human brain, the brain will try to mimmick the same frequency pattern by adjusting its brainwave output. ... If the human brain is exposed to one frequency in the left ear which is 10 Hertz below another audible frequency played in the right ear, rather than hearing either of the two audible frequencies, the brain chooses to "hear" the difference between them, the "beat" frequency."
- "8. Role of Resonance. Yoga, zen or transcendental meditation, if practiced long enough, will produce a change in the sound frequency with which the human heart resonates throughout the entire body. ... this change in resonance results from elimination of what the medical profession calls "the bifurcation echo" so that the sound of the heartbeat can move synchronously up and down the circulatory system in harmonious resonance approximately seven times a second. By placing the body in a sleeplike state, the Gateway tapes achieve the same goal as meditation in that it places the body in such a profoundly relaxed state that the bifurcation echo slowly fades away as the heart lessens the force and frequency with which it pushes blood into the aorta. The result is a regular, rhythmic sinewave pattern of sound which echoes throughout the body and rises up into the head in sustained resonance. The amplitude of this sinewave pattern, when measured with a sensitive, seismograph type instrument is about three times the average of the sound volume produced by the heart when it is operating normally."
- "9. Brain Stimulation. ... this resonance is of considerable importance since it is directly transmitted to and impacts upon the brain. ...An electromagnetic pulse is then generated which stimulates the brain to raise the amplitude and frequency of brainwave output, ...As the coherent resonance produced by the human heart in a state of profound relaxation reaches the fluid layer surrounding the brain, it sets up a rhythmic pattern in which the brain moves up and down approximately 0.005 to 0.010 millimeters in a continuous pattern. ... In this way, the entire body, based on its own micromotion, functions as a tuned vibrational system which transfers energy in a range of between 6.8 and 7.5 Hertz into the earth's ionospheric cavity, which itself resonates at about 7-7.5 Hertz...This is occurring at a very long wavelength of about 40,000 Km... Such a long wavelength knows no obstacles, and its strength does not attenuate much over large distances. Naturally it will go through just about anything: metal, concrete, water, and the fields making up our bodies. ..."
- "10. Energy Entrainment. As the body is turned into a coherent oscillator vibrating in harmony with the surrounding electrostatic medium, the specific exercises included in the Gateway tapes enjoin the participant to build up the energy field surrounding his body, presumably by using energy from the earth's field which the body is now entraining because of its ability to resonate with it. This puts the body's energy field into homogeneity with its surrounding environment and promotes movement of the seat of consciousness into the surrounding environment partly in response to the fact that the two electromagnetic medians are now a single energy continuum..."

**Our Observations** – The mechanics of receiving information by the body-mind system as described above is analogous to how a radio receives signals from the environment. The circuit

of the radio receiver has a natural resonant frequency which can be tuned by altering the inductance and/or capacitance of the circuit. When this tuned resonant frequency of the receiver matches the frequency of the desired radio signal, that signal is passed on for further processing in the radio while all other signals are filtered out.

# PART 2 – The mechanics by which the human mind exercises the function known as consciousness and deduces meaning from the stimuli which it receives

- "11. Consciousness and Energy. ...we will first consider the fundamental character of the material world in which we have our physical existence in order to accurately perceive the raw stuff with which our consciousness must work...Solid matter, in the strict construction of the term, simply does not exist. Rather, atomic structure is composed of oscillating energy grids surrounded by other oscillating energy grids which orbit at extraordinarily high speeds...The point to be made is that the entire human being, brain, consciousness and all is, like the universe which surrounds him, nothing more or less than an extraordinarily complex system of energy fields. The so called states of matter are actually variances in the state of energy, and human consciousness is a function of the interaction of energy in two opposite states(motion vs rest) ..."
- "12. Holograms...Energy creates, stores and retrieves meaning in the universe by projecting or expanding at certain frequencies in a three dimensional mode that creates a living pattern called a hologram...The whole concept of holography, despite its scientific implications, has only been known to the physicist since the underlying mathmatical principles were worked out by Dennis Gabor in 1947(he later won a Nobel Prize for his work)..."
- "13. The Part Encodes the Whole...The key to creating any hologram is that energy in motion must interact with energy in a state of rest(nonmotion)...To activate or, in effect, to "perceive" the meaning of a holograph, energy...must be passed through the interference pattern generated by interaction between the moving energy and the energy at rest...Another feature of a hologram is its efficiency. Billions of bits of information can be stored in a tiny space..."
- "14. The Consciousness Matrix. The universe is composed of interacting energy fields, some at rest and some in motion. It is, in and of itself, one gigantic hologram of unbelievable complexity...With respect to states of expanded or altered consciousness such as Gateway uses, the process operates in the following way. As energy passes through various aspects of the universal hologram and is perceived by the electrostatic fields which comprise the human mind, the holographic images being conveyed are projected upon those electrostatic fields of the mind and are perceived or understood to the extent that the electrostatic field is operating at a frequency and amplitude that can harmonize with and therefore "read" the energy carrier wave pattern passing through it. Changes in the frequency and amplitude of the electrostatic field which comprises the human mind determines the configuration and hence the character of the holographic energy matrix which the mind projects to intercept meaning directly from the holographic transmissions of the universe. Then, to make sense of what the holographic image is "saying" to it, the mind proceeds to compare the image just received with itself. Specifically, it does this by comparing the image received with that part of its own hologram which constitutes memory."
- "15. Brain in phase: ...In states of expanded consciousness, the right hemisphere of the human brain in its holistic, nonlinear and nonverbal mode of functioning acts as the primary matrix or receptor for this holographic input while, by operating in phase or coherence with the right brain, the left hemisphere provides the secondary matrix through its binary, computer-like method of functioning to screen further the data by comparison and reduce it to a discreet, two dimensional form."
- "16. Evaluation. To the extent that Gateway succeeds in bringing about a refinement in energy matrix of the mind, it succeeds in expanding or altering human consciousness so that it can perceive without recourse to the intercession of the physical senses such that ever more of the universal hologram(not, of course, accessible by sense perception) can ultimately be perceived and understood..."
- "17. Self Cognition...Humans not only know, but they know that they know. They are able to monitor the process of their own thinking and maintain an awareness of it. Moreover, they can conduct a comparitive assessment, evaluating the functioning of "objective" standards they have adopted ..."

Our Observations – Of the various theories available at that time, McDonnell singled out the holographic universe theory as the best fit to explain how the human mind exercises the function known as consciousness and to describe the way in which human consciousness operates to deduce meaning from the stimuli it receives. This theory states that reality is an extraordinarily complex interplay of energy fields and what we experience does not exist in the form in which we experience it. In other words, reality is an illusion. The point to be noted here is that however counterintuitive this theory may sound, physicists have not been able to categorically dismiss the holographic universe theory and even today, as we write this paper, it is one of the viable theories to describe reality. The holographic theory of the universe finds remarkable parallels in  $Advaita\ Vedanta$ , an ancient Indic school of philosophy. It posits that the universe, as we see it, is an illusion  $(m\bar{a}y\bar{a})$  and is indeed a mere projection of the supreme reality (brahman).

### PART 3 – The concept of the Absolute

"18. Time-Space Dimension. Up to this point our discussion of the Gateway process has been relatively simple and easy to follow. Now the fun begins. Gateway involves more than just perception of those aspects of the universal hologram which can be accessed in the dimension of time-space as we know it. To explain how and why human consciousness can be brought to transcend the limitations of time-space is the next task which must be addressed. To do this we must first appreciate what time and space are in order to understand how the dimension that they constitute can be transcended. Physicists define time as a measurement of energy or force in motion. In other words, it is a measurement of change. However, in order for energy to be in motion it must first be limited in some way within the confines of some sort of vibratory pattern so that its confinement gives it the capacity for being contained at a specific location which is distinguishable from other locations(space). Energy which is not confined is force without limit, without dimension, without the limits of form. It is infinity, cannot move because there is nothing beyond infinity, and is therefore outside the dimension of time. It is also beyond space because that concept implies that a specific energy form is limited to a specific location, and is absent from other locations. But if an energy is in the state of infinity, there are no boundaries, no "here" to differentiate from "there", no sense of area. Energy in infinity means energy uniformly extended without limit. It has no beginning, no end, no location. It is conscious force, the fundamental, primal power of existence without form, a state of infinite being. Energy in infinity is said to be completely at rest and, therefore, cannot generate holograms so long as it remains utterly inactive. It retains its inherent capacity for consciousness in that it can receive and passively perceive holograms generated by energy in motion out in the various dimensions which make up the created universe but it cannot be perceived by consciousness operating in the active universe. Energy in this state of inactive infinity is termed by physicists as energy in its absolute state, or simply "the Absolute." Between the Absolute and the "material" universe in which we experience our physical existence are various intervening dimensions to which human consciousness in altered states of being may gain access. Theoretically, human consciousness may continue to expand the horizons of its perceptual capability until it reaches the dimension of the Absolute at which point perception stops because the Absolute generates no holograms of or about itself."

Our Observations – As also mentioned by McDonnell above, up to point 18 the discussion of the Gateway process is relatively simple and easy to follow. However, point 18 is the stage wherein the conflict of the two supposedly divergent worldviews – materialist and non-materialist – surfaces. Most people are reluctant to give credence to the non-material or non-physical concept of "the Absolute" or Universal-Consciousness (a term that we prefer to use). Hence, they reject the mechanics described in "Analysis and Assessment of Gateway Process" report.

In our previous work[5] we have discussed at length why there is no valid reason to reject the non-materialist paradigm in favour of the materialist paradigm and we have also shown that

the current scientific know-how suggests that the materialist framework should be recognised as a special case (subset) of non-materialist framework. Acknowledging such an inclusive framework will imply that the contemporary materialist knowledge system continues to provide an understanding of things that are manifested in our visual world of experience whereas the non-materialist framework provides the explanation for all known human phenomenology.

To make a specific point on McDonnell's point 18 above, we draw your attention to the remark on the multiple intervening dimensions which human consciousness is thought to have the ability to access. The expanded form of the *Gayatri Mantra*, one of Hinduism's most venerated and ancient mantras that appears in the *Yajur Veda*, invokes as many as seven planes of consciousness starting from the physical plane, going through space, heaven and intervening subtle planes, and culminating in the plane of the Absolute Truth (one that coincides/merges with the Universal-Consciousness). The terminating nature of the Absolute plane is again strikingly similar to the conclusions in the closing line of the extract above.

# Part 4 – The mechanics by which human consciousness can be brought to transcend the limitations of time-space

"19. Intervening dimensions. ...any oscillating frequency(such as a brainwave) reaches two points of complete rest which constitute the boundaries of each individual oscillation(i.e. movement up or down). Without these points of rest, an oscillating wave pattern would be impossible since the points of rest are required to permit the energy to change direction and thus continue vibrating between rigid limits. But it is also true that when, for an infinitesimally brief instant, that energy reaches one of its two points of rest it "clicks out" of time-space and joins infinity... That critical step out of time-space occurs when the speed of the oscillation drops below  $10^{-33}$  centimeters per second(Planck's Distance). ... To return to our case in point, the human consciousness wave pattern reaches such high frequency that the pattern of "clickouts" comes so close together that there is virtual continuity in it. Then, a portion of that consciousness is actually postulated to establish and maintain its information collection function in those dimensions located between time-space and the Absolute."

- "20. Subatomic Particles. The behavior of subatomic particles provides an interesting example of the phenomenon of "clicking out" discussed in the preceding paragraphs. ... It is this cause which accounts for the cross-communication at what in terms of time-space velocities, would seem to involve speeds in excess of light. In reality Einstein's Theory of Relativity is not being invalidated but, rather, the communication concerned is taking place outside the dimension of time-space to which the Theory of Relativity is strictly confined."
- "21. Dimensions In-between. ...inside the dimension of time-space where both concepts apply in a generally uniform way there is a proportional relationship between them. A certain space can be covered by energy moving in either particle or wave form in a certain time assuming a specific velocity virtually anywhere in the time-space universe. The relationship is neat and predictable. However, in the intermediate dimensions beyond time-space the limitations imposed on energy to put it into a state of oscillating motion are not uniform as they are in our physical universe. A myriad of various distortions and incongruities are thus likely to be encountered such that our nice neat assumptions concerning the relationship between time and space as we know it in this dimension do not apply. But even more important, access is opened to both the past and the future when the dimension of current time-space is left behind."
- "22. Special Status, Out-of-Body Experience. Although human consciousness can, with enough practice, move beyond the dimension of time-space and interface with other energy systems in other dimensions, the entire process is appreciably enhanced if that consciousness can be detached in large measure from the physical body before such interface is attempted. In other words, since he is starting from a point much "higher up", to use an analogy from the time-space context, that part of his consciousness involved in "clicking out" will have that much

more time to interact in dimensions beyond time-space because less time is required to traverse the intervening layers."

Our Observations — McDonnell used the idea of "clicking out" of time-space to elucidate how human consciousness transcends the limitations of time-space to access information available in other dimensions where restrictions imposed by Theory of Relativity do not exist. To establish his point, he used the example of how sub-atomic particles can cross-communicate (or access information) instantaneously across any distance when they are entangled. Readers should note that the first loophole-free entanglement experiment was performed in 2015 and McDonnell submitted this report in 1983, decades before quantum entanglement was confirmed experimentally. Way back in 1983 or even in 1995, when the Stargate Project was discontinued, the scientific community was still questioning this concept. Hence, using quantum entanglement as an example to explain and establish the concept of "clicking out" appears to have been a case of attempting to rationalise and justify one un-established concept by drawing an analogy with another un-established concept. It is only as recently as in 2022 that the Nobel Prize was awarded to three physicists who had been working for years to demonstrate entanglement.

### **PART 5 - Nature of Reality and Consciousness**

- "23. Absolute in Perspective. It may be helpful at this point to pause and recap the major aspects of our intellectual journey from time-space to the realm of the Absolute. We have spoken at some length concerning the incredibly complex hologram which is created by the intersection of energy patterns generated by the totality of all dimensions of the universe, time-space included. We have noted that our minds constitute energy fields which interact with various aspects of this hologram to deduce information which is ultimately processed through the left hemisphere of our brains to reduce it to a form that we employ for the process we call thinking. We have implied that this hologram is the finite embodiment in active, energy form of the infinite consciousness of the Absolute."
- "24. From Big Bang to Torus. Working from the widely accepted "Big Bang" theory Bentov presents a conceptual model to depict the process of time-space evolution the relative position of the universal hologram. That hologram is often called a "Torus" because it is thought to have the overall shape of an immense, self-contained spiral. ... In such a model, time is observed to be a measure of the change which occurs as energy evolves into new, more complex forms as it progresses along the distance from the white hole side of the nucleus, around the shell of this "cosmic egg" until it enters the black hole..."
- "25. Our Place in Time...Layered over this cosmic egg is the Absolute which sustains the radiating nucleus from which the original jet of matter issued forth. As the stream of matter moves around the ovoid towards its destination at the black hole where it will be reabsorbed into the radiating nucleus and then the Absolute, it generates the interference pattern within the cosmic egg which constitutes the universal hologram or Torus. Since the Torus is being simultaneously generated by matter in all the various phases of "time", it reflects the development of the universe in the past, present and future(as it would be seen from our particular perspective in one phase of time). ... All of the movements of the energies which comprise the universe leave their mark and hence tell their story throughout time."
- "26. Quality of Consciousness...When consciousness reaches a state of sophistication in which it can perceive itself(its own hologram) it reaches the point of selfcognition. Human beings have this form of elevated consciousness as does the Absolute but in case of the latter, it is a function of energy and its associated quality of consciousness in infinity(omniscience and omnipotence in perceptual unity). Our consciousness, therefore, is that differentiated aspect of the universal consciousness which resides within the Absolute. It accounts for the organization of the energy patterns which constitute our physical body but is distinctly separate from and superior to it. Since consciousness exists quite apart from and outside of reality, beyond the bounds of time-space, it, like the Absolute, has neither beginning nor end. Reality has both a beginning and an end because it is bounded within

time-space, but the fundamental quantum of energy and its associated consciousness is eternal. When reality ends, its constituent energy simply returns to infinity in the Absolute."

"27. Consciousness in Perspective. ...Since memory is a function of consciousness and therefore enjoys the same eternal character as the consciousness which accounts for its existence it must be admitted that when consciousness returns to the Absolute it brings with it all the memories it has accumulated through experience in reality. The return of consciousness to the Absolute does not imply an extinction of the separate entity which the consciousness organized and sustained in reality. Rather, it suggests a differentiated consciousness which merges with and participates in the universal consciousness and infinity of the Absolute without losing the separate identity and accumulated self-knowledge which its memories confer upon it. What it does lose is the capability for generation of independent thought holograms, since that can be done only by energy in motion. ...In exchange, however, this consciousness participates in the all-knowing infinite continuum of consciousness which is a characteristic of energy in the ever present..."

**Our Observations** – This is where things get a little slippery. In an attempt to explain the nature of the reality and consciousness, McDonnell takes the help of statements that cannot be substantiated using accepted contemporary scientific research methodologies. As a result, they sound made-up to the materialist scientific community. However, people who are exposed to belief systems which are based on the primacy of Universal-Consciousness will maintain that these statements are inspired (or even re-scripted) from their belief systems. In fact, McDonnell himself acknowledges in Point 34 that these ideas are available in many ancient belief systems and also lists out a few of them.

We are of the opinion that the statistically significant results produced by the Stargate Project should have been acknowledged with an open mind. And, the scientific community should have dedicated time and effort to ascertain whether these results call for a relook at the prevalent materialist paradigm.

### PART 6 - Information collection potential & various techniques of Gateway Process

- "28. Gateway Method...the participant is introduced to a method of encouraging his mind and body to strive to achieve a state of resonance through utterance of a single tone, a monotonous, protracted humming sound that sets up a feeling of vibration particularly in the head... Following this, the participant is exposed to the Gateway affirmation...This affirmation is a statement to the effect that the individual realizes that he is more than merely a physical body and that he deeply desires to expand his consciousness."
- "29. Hemi-Sync Introduced. After that, he is exposed for the first time to the Hemi-Sync sound frequencies...Next comes the technique of progressive and systematic physical relaxation ...Once all of this is achieved, the participant is invited to envisage creation of an "energy balloon"..."
- "30. Advanced Techniques. ...Once the participant has achieved this state of greatly expanded awareness, he is ready to begin employing a series of specific techniques or "tools" ...
- A. Problem Solving. B. Patterning. C. Color Breathing. D. Energy Bar Tool. E. Remote Viewing. F. Living Body Map. G. Focus 15: Travel into the Past. H. Focus 21: The Future."
- "31. The Out-of-Body Movement...the Gateway program was not established solely for the purpose of enabling participants to obtain the out-of-body state nor does the program guarantee that most participants will succeed in doing it during the course of the training at the Institute. Only one tape out of the many which make up the Gateway Experience is devoted to the techniques involved in the out-of-body movement..."
- "32. Role of REM Sleep. It is interesting to note that Bob Monroe informed the Gateway class that finished 7 May 1983 that an ex-trainer of his operating in Charlottesville, Virginia found that he could guarantee out-of-body movements by bringing participants down into a rapid eye movement(REM) state of sleep and then use the Hemi-

Sync tape technique. ... The difference between those states and the condition of the mind in REM sleep seems to be that the left hemisphere is almost totally disengaged in the latter experience such that memory of what was achieved in the altered states of consciousness cannot usually be retrieved by conscious desire because the left hemisphere has no knowledge of its existence or its location in the right hemisphere."

"33. Information Collection Potential...information distortion...remains a major concern... This seems to be a function of the fact that physical reality in the present is not the only holographic influence which the individual may encounter...There are also energy patterns left by people or events occurring at the same physical site being viewed, but from the past rather than the present. In addition, ... it may also be possible that individuals encounter thought forms while in an out-of-body state which mingle with physical reality and are not easily differentiated..."

**Our Observations** –Point 32 clarifies that even though using Hemi-Sync tape technique during REM Sleep substantially improves the chances of attaining out-of-body state, the waking mind may not be able to retrieve all the memory of the gateway experience. Even otherwise, there is a high probability of information distortion as the physical site being remote viewed contains energy patterns not only of events occurring in the present but also from events that occurred in the past. This leads to information mingling and distortion.

The point to be noted here is that inspite of the information distortions, due to reasons explained above, the Stargate Project experiments produced statistically significant results. Another fact worth mentioning is that while the Stargate Project was terminated in 1995, there are many institutes which continue to pursue research in Extra Sensory Perceptions, including remote viewing. These include Stanford Research Institute and Monroe Institute - two institutes which were an integral part of the Stargate Project.

### Part 7 - The real promise of the Gateway Experience

"34. Belief System Considerations... the concept of the universe which at least some physicists are now coming to accept is identical in its essential aspects with the one known to the learned elite in selected civilizations and cultures of high attainment in the ancient world..."

{The section picked up from the missing page 25 which resurfaced in 2021 starts here}

- "...Mystics the world over, it seems, have perceived the universal hologram in the same spiral form and have incorporated that intuitive knowledge in their religious writings from antiquity to the present."
- "35. Left Brain Limitations. Twentieth Century physics would seem to be revisiting insights belonging to mankind as far back as written records can take us. The only difference is that Twentieth Century physics is using a left brain, linear, quantitative style of reasoning to approach the same knowledge which the mystics of old apparently acquired in a holistic, intuitional, right brain style. As a tool in the hands of our left brain culture, Gateway would seem to be a promising method for achieving the intuitive, holistic type of interface with the universal hologram..."
- "36. Self Knowledge. It was axiomatic to the mystic philosophers of old that the first step in personal maturity could be expressed in the aphorism: "Know thyself." To them, the education of a man undertook, as its primary step, achievement of an introverted focus so that he learned what was within himself before attempting to approach the outside world. They rightly assumed that he could not effectively evaluate and cope with the world until he fully understood his personal psychological balance. The insights being provided by Twentieth Century psychology in this context through the use of various kinds of personality testing seem to be a revalidation of this ancient intuition. But no personality test, or series of tests, will ever replace the depth and fullness of the perception of self which can be achieved when the mind alters its state of consciousness sufficiently to perceive the very hologram of itself which it has projected in to the universe in its proper context as part of the universal

hologram in a totally holistic and intuitional way. This would seem to be one of the real promise of the Gateway Experience from the standpoint of its ability to provide a portal through which, based on months if not years of practice, the individual may pass in his search to find self, personal effectuality, and truth in the larger sense."

{The section picked up from the missing page 25 which resurfaced in 2021 ends here}

"37. Motivational Aspect...the rate of progress is so much faster with the Gateway approach than it is with transcendental meditation or other forms of mental self-discipline and its horizons seem to be so much wider that the discipline needed to practice it would seem to be within the means of even the impatient, result oriented, skeptical pragmatist of our society..."

"38. Conclusion. There is a sound, rational basis in terms of physical science parameters for considering Gateway to be plausible in terms of its essential objectives..."

**Our Observations** –We agree that the real promise of the Gateway Experience is not in 'remote viewing'. The real potential lies in giving a quick experience of the true nature of Self and Universe and their interrelationship. This self-discovery will lead to personal maturity and a blissful and fulfilling life.

# PARALLELS BETWEEN THE FRAMEWORKS OF THE GATEWAY PROCESS AND THE ANCIENT INDIC PHILOSOPHIES

(We are assuming that readers are familiar with the basic framework of ancient Indic philosophies. If not, we suggest that the reader refers to any text on ancient Indic philosophies or refers to the previous works of the authors[5],[6])

McDonnell listed out, in Point 34, a wide range of belief systems which contain ideas and notions similar to the underlying axioms and premises on which he had built the framework to assess and analyse the mechanics and the ultimate practicality of the Gateway process. This list had references to ancient Indic texts too. However, we would like to add that these Indic texts contain not only the concepts he explicitly acknowledged but also all the underlying axioms and premises he utilises to build the framework to analyse the Gateway Process.

We have listed them here for ready reference and also mentioned the corresponding Point number from the declassified CIA report.

- "the so-called states of matter are actually variances in the state of energy" (Point 11)
- "the fundamental character of the material world in which we have our physical existence is nothing more or less than an extraordinarily complex system of energy fields" (Point 11)
- "universe is a hologram" (Point 14)
- "the concept of the Absolute (*brahman* or Universal-Consciousness a term that we prefer to use) It is the conscious force, the fundamental, primal power of existence without form, a state of infinite being with no beginning, no end, no location. It is beyond space and time" (Point 18)

- "energy in infinity (the Absolute or Universal-Consciousness) is said to be completely at rest and, therefore, cannot generate holograms so long as it remains utterly inactive. Though it retains its inherent capacity for consciousness in that it can receive and passively perceive holograms generated by energy in motion out in the various dimensions which make up the created universe but it cannot be perceived by consciousness operating in the active universe" (Point 18)
- "existence of dimensions beyond the time-space dimensions" (Point 18)
- "human consciousness can be brought to transcend the limitations of time-space" (Point 18)
- "human consciousness may continue to expand the horizons of its perceptual capability until it reaches the dimension of the Absolute at which point perception stops because the Absolute generates no holograms of or about itself" (Point 18)
- "in the intermediate dimensions beyond time-space the nice neat assumptions concerning the relationship between time and space as we know in our physical universe do not apply" (Point 21)
- "although human consciousness can, with enough practice, move beyond the dimension of time-space and interface with other energy systems in other dimensions, the entire process is appreciably enhanced if that consciousness can be detached in large measure from the physical body before such interface is attempted" (Point 22)
- "our minds constitute energy fields which interact with various aspects of the hologram (i.e. universe) to deduce information. This hologram is the finite embodiment in active, energy form of the infinite consciousness of the Absolute" (Point 23)
- "visible reality (i.e. the "created" world) emanating from the Absolute; visible reality emerging from a "white hole" (point of singularity) and ultimately merging back (or dissolving) into a "black hole" (point of singularity) or the Absolute; the cosmic egg; the Torus of creation; the cyclic nature of time; the coexistence of past & present in the universal hologram; future is a consequence of the past and present and can be predicted" (Point 24 and 25)
- "human consciousness is that differentiated aspect of the universal consciousness which resides within the Absolute. It accounts for the organization of the energy patterns which constitute our physical body but is distinctly separate from and superior to it. Since consciousness exists quite apart from and outside of reality, beyond the bounds of time-space, it, like the Absolute, has neither beginning nor end" (Point 26)
- "reality has both a beginning and an end because it is bounded within time-space, but its associated consciousness is eternal. When reality ends, its constituent energy simply returns to infinity in the Absolute" (Point 26)
- "when consciousness returns to the Absolute it brings with it all the memories it has accumulated through experience in reality. The return of consciousness to the Absolute does not imply an extinction of the separate entity which the consciousness organized and sustained in reality. Rather, it suggests a differentiated consciousness which merges with and participates in the universal consciousness and infinity of the Absolute without losing the separate identity and accumulated self-knowledge which its memories confer upon it" (Point 27)

The ancient Indic texts also contain the practices or techniques to gain insights regarding the true nature of human consciousness ( $\bar{a}tman$ ). These practices help in the realisation that we ( $\bar{a}tman$ ) are nothing but the Absolute (brahman) projecting a hologram of itself and then perceiving it. This concept is summarised in the famous  $mah\bar{a}v\bar{a}kya$  (The Great Saying) - tat  $tvam\ asi$  or 'thou art that'. The  $Yoga\ S\bar{u}tras$  also include techniques to develop the capability to access information distant in space and/or time.

### **OUR CLOSING REMARKS**

We are not implying that McDonnell has re-scripted the Indic texts in his report. Our review paper is also not at attempt to discredit or downplay the innovative work done by the Stargate Project team. Our humble attempt, through this review paper, is to assemble all information that we have come across till date and create the most coherent picture that we possibly can.

Credit goes to the teams of scientists and researchers who have systematically and comprehensively studied and analysed the psychic phenomena and collected enough data to clearly bring out that there is no ambiguity on the statistical significance of the results. We would also like to state that our conclusions are not based solely on the experiments of the Stargate Project. There are substantial number of similar experiments which have been conducted over the last few decades and which have demonstrated statistically significant effects[5].

All available information indicates that the mainstream scientific community has no valid reason to downplay the significance of The Stargate Project and the Gateway Process. There were apprehensions raised on whether remote viewing is a paranormal phenomenon. We reserve our comments on this because there is no meticulous definition of paranormal. However, in light of the facts shared in this paper, we can summarise that the results obtained by Stargate Project demonstrate, beyond any reasonable doubt, the primacy of Universal-Consciousness and related concepts as available in ancient Indic texts reaffirming the trustworthiness of this ancient knowledge repository for understanding life.

\*\*\*\*

### **Brief Profile of the Authors:**

**Manish Pajan:** As leadership consultant and coach, Manish is committed to helping organisations and business leaders find their next level of empowerment, growth and excellence. He regards it as his *swadharma* (one's designated duty) to be a humble enabler of human evolution, one interaction at a time.

In pursuing this objective, he draws on his 25-year varied experience with leading organisations, and the formal education he is fortunate to have received at some of India's top institutions (IIM Ahmedabad, IIT Roorkee, DAV Gopalapuram Chennai).

Born to Kashmiri Pandit parents who instilled in him good values and exposed him to Indic wisdom from childhood, he believes he is guided on his path by the *anugraha* (grace) of his spiritually-elevated ancestors.

**Switi Gupta:** A chemical engineer (IIT Roorkee) with a master's in management systems (IIT Delhi), Switi's key focus area in the last 25+ years has been to design and develop easy-to-use systems for recording, managing and analysing data to successfully run enterprises. As founder member of Broad Strokes Ventures, she uses this experience to design IT solutions for remote business management, B2C marketplace and ERP solutions for Dairy & Food businesses.

She is also founder member at not-for-profit R&D organisation, GI4QC Forum, which is scientifically exploring the fundamental realm of reality in a balanced and structured way. She actively collaborates with other organisations and brings together like-minded people with the aim to transform the existing worldview to embrace a comprehensive spirito-scientific framework.

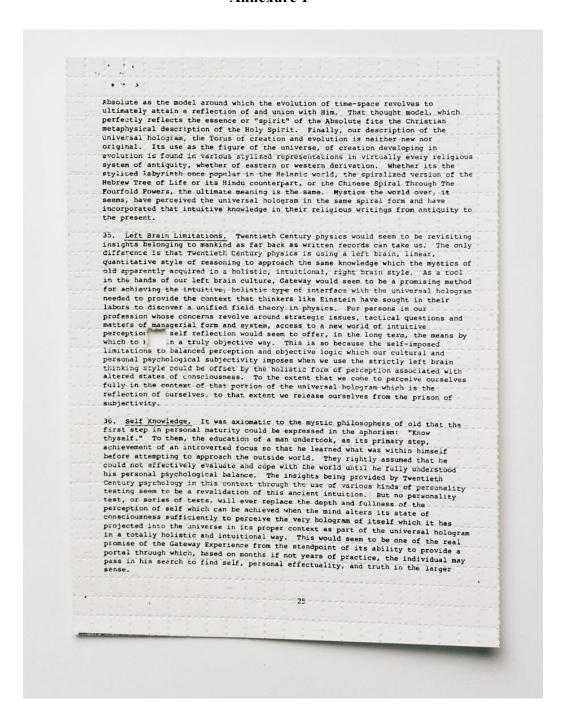
**Statements and Declaration:** No financial support was received for the work within this manuscript. The authors declare they have no conflict of interest.

### **References:**

- 1. Proposed Downgrading of Classified Documents for Cognitive Sciences Laboratory Volume 2 of 2
  - https://www.cia.gov/readingroom/document/cia-rdp96-00789r003200160001-9
- 2. Third Eye Spies
  - https://topdocumentaryfilms.com/third-eye-spies/
- 3. Analysis and Assessment of Gateway Process https://www.cia.gov/readingroom/document/cia-rdp96-00788r001700210016-5
- 4. An Evaluation of Remote Viewing: Research and Applications <a href="https://www.cia.gov/readingroom/document/CIA-RDP96-00791R000200180006-4">https://www.cia.gov/readingroom/document/CIA-RDP96-00791R000200180006-4</a>
- 5. Manish Pajan, Anish Rakheja, Switi Gupta (2024). Human Consciousness An Emergent Property of the Brain or A Fundamental Property of the Universe?. *International Journal on Eternal Wisdom and Contemporary Science*.1(1), 15-43

  <a href="https://drive.google.com/file/d/1vMzRbKM-QuvpH0">https://drive.google.com/file/d/1vMzRbKM-QuvpH0</a> V8oFCkyRA8QShBr3J/view
- 6. Manish Pajan, Switi Gupta, (2022). Universal Consciousness: Actuality or a Fragment of Imagination?
  - https://drive.google.com/file/d/10PXb00FhAAgdCfSEaZFYSEn6T-xtvY3j/view

### Annexure 1



Source: https://www.vice.com/en/article/found-page-25-of-the-cias-gateway-report-on-astral-projection/



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 17-21

### The Mind's Sky: On Computers and Consciousness

### Subhash Kak

Regents Professor, Electrical and Computer Engineering Department, Oklahoma State University, Stillwater OK 74078, USA

### **Abstract:**

In this paper I present the significance of a theorem that I recently discovered – One Observer Theorem. This theorem goes against the view that consciousness emerges from the complexity of the brain's interconnections and shows that consciousness is like a light that makes our awareness possible, in which the brain plays the role of an instrument. The theorem also means that what we normally do in our lives and at our jobs, which are procedural tasks, will eventually be done by computers/AI-machines, however, they will not become conscious. I augment these proclamations by illustrating how the human mind operates and how some of its actions are not governed by logic and consistency, unlike those in a computer/AI-machine.

**Keywords:** One Observer Theorem, AI, artificial intelligence, consciousness, sentient

### INTRODUCTION

The world is worried about where technology is going. We are in thrall of AI and like what it does for us. But what if machines became conscious? Could it be that these machines will kill us off? Will humanity's stories be forgotten?

I was relieved — for myself, and for everyone else — when I recently discovered a theorem showing why computers will never become conscious [1]. This One Observer Theorem shows that consciousness is like a light that makes our awareness possible, in which the brain plays the role of an instrument. Thus, for example, we see with the eye, but the eye does not see.

The theorem has implications for many entrenched ideas. For one, it goes against the view that consciousness emerges from the complexity of the brain's interconnections that many scientists would like to believe. Furthermore, the argument that consciousness is non-material is proof of the existence of a "higher being" who is already present in our consciousness. This also means

that whereas the idea of the evolution of animal minds is logical and reasonable, one cannot speak of an evolution of consciousness.

The theorem reinforces the idea that most popular belief systems are arbitrary storylines, and it undermines tribal religions in which if one doesn't submit to the authority of the tribe, then one deserves to die, or once one is in the tribe, then an attempt to walk away is blasphemy, which is punishable by death.

The world will change irrevocably. As we submit to ideas that see the world in purely procedural terms, the asuric (आसुरी) forces (purely materialistic) will become strengthened. History of the next few decades will be about the struggle to win back freedom.

### The Mind's Eye

Another way to understand why computers will not become conscious is to realize that they are governed by logic and consistency. However, the mind, unlike the computer, has the capacity to hold opposites together at the same time. These could be a secret wish for an outcome opposite to the publicly professed one. I have heard of people speaking of a beautiful and oceanic feeling that made them so happy that they just wished to die.

It is possible to believe two opposing ideas without being a hypocrite. One may be pushing to advance a relationship with a secret desire to break it. Someone plugged into a seemingly happy and successful life could one day just walk out and disappear.

A tension based on contradictions in our minds becomes the driving force in life.

- 1, You know it when you know you don't know it. You are special when you realize you are not special.
- 2. To seek perfection, you must acknowledge you are imperfect. To be able to love someone you must love yourself.
- 3. To truly love someone, you must set them free. To have freedom you must embrace discipline.
- 4. To have an easy life you must do hard things. To help others you must first help yourself.

Consider the very rich and handsome Richard Cory, admirably dressed, the envy of all in the town:

So on we worked, and waited for the light,

And went without the meat, and cursed the bread;

And Richard Cory, one calm summer night,

Went home and put a bullet through his head.

– Edwin Arlington Robinson

### The Razor's Edge

Life is a dance between two ever-changing poles, where one needs to find the sweet line in the middle to step on, which is narrow as a razor's edge.

Beneath the larger declared objective is its opposite hidden in a corner of one's mind.

George Orwell berated doublethink, which is holding two contradictory beliefs in one's mind simultaneously and accepting both, and truth be told, this has been used by tribal religions for mind-control. But to a certain extent it is part of everyone's life.

To live life to the fullest, one must be ready to die at any moment: this is the biggest contradiction we carry in our hearts.

Here's one stanza from a poem in Path of Light and Shadow [2]:

To live/ one must die everyday and not even make a sound/ or sigh

Speaking of the more prosaic matter of physics, we can never explain how the electron (or photon) travels through two slits at the same time. It means that the language we use for explanations is not powerful enough to describe reality, and likewise it has insufficient power to communicate felt experience.

### The Mind's I

The computer screen with the tabs of open windows is the perfect example for how the mind works. One flits from one tab to another, become one with the story on the tab, and as the attention wanes, one moves to another tab; or one simply waits for the updating feed on one's SM timeline.

There is no mind's "I" in this process, for the self within one identifies with the characters that scroll in front of one.

We are an attention process, completely governed by the environment, be it social forces around us, or the algorithms that project different stories on the screen.

There is no freedom in this process. The attention sags if there is too much certainty in the unfolding of images, and, therefore, one also seeks a zone of uncertainty. If there is too much certainty, one's bored and depressed whilst with too much uncertainty, one's scared and anxious.

Navigating through this uncertainly space makes it appear that we have freedom, but it is just a simulacrum of freedom.

So, one must hurry slowly.

Once one learns to enjoy solitude, it becomes easier to have friends.

The more one wishes to control events, the more the situation slip out of one's hands.

The harder one tries to please, the less one is liked.

### **Closing Remarks**

Computers/AI-machines are governed by logic and consistency. What we normally do in our lives and at our jobs, which are procedural tasks, will eventually be done by computers/AI-machines. However, as shown above, these machines cannot become conscious because, unlike the mind, they do not have the capacity to hold opposites together at the same time.

In other words, even though we are replaceable at *nearly all* we do, AI-machines will not become conscious.

\*\*\*\*

#### **Brief Profile of the Author:**

**Subhash Kak** is an Indian-American computer scientist, an archaeoastronomer and a Vedic scholar. He is the Regents Professor of Electrical and Computer Engineering Department at Oklahoma State University–Stillwater, and a member of the Indian Prime Minister's Science, Technology and Innovation Advisory Council.

Born in Srinagar, Kashmir, he was educated in various places in Jammu & Kashmir and completed his PhD in Electrical Engineering from IIT, Delhi. His research has spanned the fields of information theory, cryptography, neural networks, and quantum theory. He has recently advanced a theory that physical space is e-dimensional and shown that this helps solve some problems of cosmology and that it explains certain features of the genetic code. He is the author of 30 books including technical works and books on Indian science, yoga and art. These include "The Nature of Physical Reality", "The Architecture of Knowledge", "Mind and Self", and "The Idea of India".

**Statements and Declaration:** I hold the copyright to this article which was earlier published in 'Medium' (medium.com) with the same title. I also warrant that the manuscript is my original work and does not infringe on any rights of third parties. I permit IJEWCS (International Journal on Eternal Wisdom and Contemporary Science) to re-print the same in their Journal.

### **References:**

- 1. S. Kak, No-go theorems on machine consciousness. *Journal of Artificial Intelligence and Consciousness*, 10, 237–247, 2023. <a href="https://doi.org/10.1142/S2705078523500029">https://doi.org/10.1142/S2705078523500029</a>
- 2. <a href="https://www.academia.edu/59131925/Path">https://www.academia.edu/59131925/Path</a> of Light and Shadow



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 22-35

# The ways of future correspondence and harmony: Intertwining Mind and Meditation in the Microcosm & Machines and Mathematics in the Macrocosm

Joy Sen

Professor, Department of Architecture and Regional Planning
Indian Institute of Technology Kharagpur

### **Abstract:**

All of our existence is an interplay of the two worlds - the microcosm and the macrocosm. The microcosm determines our internal world, mostly governed by mind and the deep or intrinsic parameters that govern our mind. The macrocosm determines our external world, mostly governed by the external environment as determined by the parameters of sciences and its language, which is the language of analytics and computation i.e., mathematics. The present article makes an attempt to initiate an understanding of their possible overlaps that may determine an 'emerging new science' integrating the two worlds i.e., scientific pursuits at a particular level of knowledge, with pursuits and inputs drawn from other levels such as deep culture, deep philosophy, and even the normative sciences like psychology and bioanthropology, which can extend up to 'deep ecological' concerns having moral, ethical, and spiritual dimensions.

**Keywords:** microcosm, macrocosm, non-local universe, EPR paradox, non-duality, advait

### **FOREWORD**

'Agni, who has encompassed everything - all gods, and it is like the felly, a dynamic circuit encompassing the spokes of a wheel of change and evolution.'

Rig Veda: 5th Mandala: 13.6

'Returning is the motion of the Tao; going far is returning.'

Lao Tzu in 'Tao Te Ching'

'The modern physicist experiences the world through an extreme specialization of the rational mind; the mystic through an extreme specialization of the intuitive mind.....to paraphrase an old Chinese saying, mystics understand the roots of the Tao but not its branches; scientists understand its branches but not its roots. Science does not need mysticism and mysticism does not need science; but men and women need both'

Fritjof Capra in 'Epilogue: The Tao of Physics'

### **PRELUDE**

There are the two worlds, the microcosm and the macrocosm. And all of our existence is an interplay of the two worlds. The microcosm determines our internal world, mostly governed by mind and the deep or intrinsic parameters that govern our mind. The macrocosm determines our external world, mostly governed by the external environment as determined by the parameters of sciences and its language, which is the language of analytics and computation i.e., mathematics. However, in most cases, the two worlds are incompatible and much of the conflict and misunderstanding that we have in our lives and in this world is due to the gaps, the large swings or the large amplitudes between our two worlds, the inner and the outer worlds. The two worlds and their relationships are evident in the following words:

"There are two worlds, the microcosm, and the macrocosm, the internal and the external. We get truth from both of these by means of experience. The truth gathered from internal experience is psychology, metaphysics, and religion; from external experience, the physical sciences.

Now a perfect truth should be in harmony with experiences in both these worlds. The microcosm must bear testimony to the macrocosm, and the macrocosm to the microcosm; physical truth must have its counterpart in the internal world, and the internal world must have its verification outside. Yet, as a rule, we find that many of these truths are in conflict.

At one period of the world's history, the internals become supreme, and they begin to fight the externals. At the present time the externals, the physicists, have become supreme, and they have put down many claims of psychologists and metaphysicians."

Swami Vivekananda COSMOLOGY

However, there are also some intervening times or periods of transition, when the two worlds have sent ripples to each other minimizing the conflict between themselves and establishing a dialogue. Perhaps, with the advent of 20th century, we may find some indicators of these ripples, and these are probably growing strong as the external world features are growing strong enough to trace back the depths of the internals.

In the present article, the two ripples are briefly discussed. One is from the world of latest sciences that is governing the current material growth of humanity. Much of that comes from the advent of machine driven computation sciences and the new Physics called the Quantum

Sciences. And much of that has occurred with the progress of the western civilization. The other side is an attempt to retrace the wisdom of the archaic Orient. And they are available from the re-interpretation of constructs of ancient Vedic cosmology explaining our inner growth and evolutionary spirituality in relationship with the cosmos.

### In other words,

- The first represents the macrocosm, the external world of ours mostly governed by the controls of machines, and the communications that represent the material sciences behind the operation of these machines, and the language of science, i.e., the system of mathematics and its derivative i.e., computational sciences that govern the machine learning processes. These advents in the external world have led to higher capacities of our outer communications. We may term this as *bahir-samyoga* for the sake of the present article, and these communication systems have now advanced further to very large integrated systems of circuit sciences (VLSI) governing interaction between worldwide web and localized nodes of information networks. This is the latest in communication technology governed further by advances in machine intelligence called AI.
- The second represents the microcosm, the internal world of ours. And these internal networks are mostly governed by the control of the human mind through a system of inner control systems which is *Yoga*. In this case, the nature of communications that emanate from the inner neural and psychological configurations (*nadis* and networks) are based on refinements or improvements of hormonal and neuro-physiological transmutations (*nadi suddhi*). On the whole, it leads to a gradation of higher capacities of inner communications, which may be *antara-samyoga* in the context of the present article. And the deep embedded science of the parameters is represented by a system of evolutionary construct called the *Samkhya* philosophy, which is a strand or hierarchy of elements of design based on 24 principles of nature (*prakriti*) and a governing but free conscious or sentient being behind it (*purusha*). And the inter-related web of *nadis*, that govern the biological system of inner evolution is called the *tantras*.

### The Current Inter-Twining and The Overlap

Now we may be in at a certain time in human history and progress, where a time of cross-over of the two has perhaps come. In other words, the systems world of external communications (bahir-samyoga) and the systems world of inner communication (antara-samyoga) are about to become reciprocal and complementary to each other. And that complementarity is only evident on the mirror of human consciousness, which determines both the external and the internal world. The present article makes a simple attempt to initiate an understanding of these possible overlaps that may determine an 'emerging new science' integrating the two worlds.

Currently, both the worlds are drifting and expanding; and very interestingly, the two drifts are mirroring each other.

- On the one hand, the analytical science of the outer world, governed mainly by advent
  of machines and machine learning by virtue of large computation abilities and deep
  mathematics is expanding and drifting from a reductionist and linear programmingdriven framework to a larger whole that exhibits features of non-linearity and
  complexity.
- On the other hand, the intuitive science of our inner world, is increasingly seen as a trickle-down from its older paradigm of a beyond-the-world transcendental state or level to a more inclusive, all-encompassing immanence world of 'being and becoming'.
- And as a result, the two drifts and expansion now appear to be symmetrical and mirroring each other:
  - a) the unfolding of the multiplicity, where the various microcosms are heading towards that unity or the macrocosm, and
  - b) the enfolding of the macrocosm or a vast unity of the cosmos which is becoming or trickling down to the multiplicity of the many and many microcosms
  - c) In effect, a hierarchy as a two-way ladder is evident.

At this point, let us begin with a discussion with the external world (Part A). Then we shall take up events in the internal world (Part B). Finally, the article will conclude with a note that may be just a beginning to understand their overlaps and possibilities of complete interpenetration.

### Part A: The Theory of Non-Locality – Its Current Evolution

In the last 100 years of physics, the idea of non-locality has emerged to be the stronger. The older order i.e., the Cartesian and Newtonian world of reductionism still exists, but it is taking a back seat. These shifts may be understood by briefly reviewing a sequence of events that underscores the advent of the latest in physics. We call that Quantum and Relativistic Physics:

- 1. In May 1935, Sir Albert Einstein and two of his colleagues, Boris Podolsky and Nathan Rosen (acronym EPR) published the first description of a reality that is non-local (meaning traveling faster than the speed of light) as something unbelievable. Einstein called this 'spooky action' and this publication was eventually called the EPR paradox. It includes two major enigmas:
  - The collapse of the wave function as interpreted through the wave equation of Erwin Schrödinger

- A probabilistic notion that every part of a quantum system responds instantaneously to a stimulus affecting any other part of a system. They suggest instantaneous connection with the universe as a whole.
- 2. The EPR experiment inspired other areas of research like polarization of light¹ seen from a quantum viewpoint. These emissions suggested information transfer in opposite directions to points far apart. Whether such transfer actually takes place at a speed exceeding that of light is another question. Such questions were raised by the classical physicist by virtue of the interpretation in favour of the Newtonian world. Today, we know it as the 'Copenhagen interpretation' (initiated in the 1920s, but expanded by the arguments between Werner Heisenberg and Niels Bohr in the 1950s).
- 3. Two later works emerged as a counter-response to the Copenhagen interpretation. One was the idea of the 'Implicate order' by physicist David Bohm (London, U.K.) in the 1950s and the other was by John Bell at CERN (European Center for Particle and Nuclear Physics, Switzerland) in the 1960s. Bohm proposed the 'Scattered-Matrix' theory with the 'Enfolding order' of the Universal becoming to all things and their interconnectedness in this universe. John Bell, with his 'Bell's Theorem', proposed to take the notion of 'non-locality' further. But all these were theories. Classical physicists still played the dominating role governing the principles of local determinism and reductionism.
- 4. In the 1980s, a team of physicists namely Alain Aspect and his colleagues (in Paris) for the first time experimentally confirmed the EPR enigma and posed new avenues to review the Copenhagen interpretation of Schrödinger.
- 5. Then in the early 1990s, John Cramer at the University of Washington, Seattle, pointed out a unique thing implied in Schrödinger's wave equation. Cramer reviewed the equation and explained a bi-polarity meaning *a conjugate of opposites*.

His wave equation is based on the simple idea of complex numbers which is:

$$Y = A + Bi$$
  
and Y here stands for a complex number

If 
$$Y = A + B$$
 then  $Y*Y = (A + B)*(A + B)$   
In case of complex numbers, we know that  $Y*Y = (A + Bi)*(A - Bi)$ 

In other words, this complex conjugate form implied both backward and forward linkages of the B factor, which stands for *Time* in the wave equation.

<sup>&</sup>lt;sup>1</sup> It is a property of light giving it a kind of orientation vertically and horizontally across in the lines of motion.

So, implicitly or explicitly, the use and application of the wave equation involves backward and forward linkages in time (Gribbin, 1995)<sup>2</sup> in any quantum calculation or experiments. Cramer's deliberations imply that a wave function has a bi-polarity of backward and forward linkages of time. Backward linkage of time takes creation backward to its roots, its origin determining the unfolding order, as if the statistical dendrogram (a vast data distribution in a tree form) is tracing it's seed over backward linkages in time. If backward linkage is established, then forward linkages of time, on the contrary, take us to future in the enfolding order. This is what David Bohm had proposed two decades back. The two linkages are however juxtaposed in the above equation.

- 6. Finally, in 2022, the most important event occurred in favor of transcending 'The Copenhagen Interpretation'. It is the 2022 Nobel Prize in Physics. The Nobel Prize in Physics 2022 was awarded jointly to Alain Aspect, John F. Clauser and Anton Zeilinger 'for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science'.
- 7. Now as per latest in Quantum Sciences, we know that the Universe is deeply 'non-local' and 'interconnected' enfolding within its folds the many. It is like a Matrix. In the reverse order, the unfolding of many happens. One such is human evolution itself to mirror the understanding. The twin is best understood as the Q-entanglement or as an interpenetration of the two i.e., 'A whole or a totality containing all the parts' where 'All the parts individually contain properties that represent the whole'.

The review shows that the latest in science has come close to what was eternally contained in Indian spirituality. We are not saying that this is equal to that. But what we imply is that the patterns (iterations in the plan) in the macrocosm perfectly correspond to that in the microcosm. The match point is precisely an intertwined reality where 'All things essentially contain in themselves properties of the Whole' and 'The Whole contains the seed to formulate and express all'. The ancient Isha Upanishad Verse 6 explains that as a body of intertwined realization.

### यस्तु सर्वाणि भूतान्यात्मन्येवानुपश्यति । सर्वभूतेषु चात्मानं ततो न विजुगुप्सते ॥ ६ ॥

(Translation: But he who sees everywhere the Self in all existences and all existences in the Self, shrinks not thereafter from aught)

Thus, the advancement of science in the macrocosm has brought us to the other side, the science of the internal world. And we shall see in the next part how a counter response or mirroring is also evident in the other side.

<sup>&</sup>lt;sup>2</sup> The idea comes from Schrödinger's parable of two kittens – Dead or alive (1995) – readers may refer John Gribbin in 'Down to Earth', August 15, pg 29-36.

#### Part B: The Meet and a Letter

After the great triumph on the World Stage at 1893 Columbian Exposition at Chicago, USA and with the closing of the Parliament of Religions on September 27, 1893, Swami Vivekananda had an invitation to the house of Elisha Gray, the noted inventor of electrical equipment<sup>3</sup> to meet some of the best scientific minds of America. It is interesting to see how a man of deep gnostic spirituality attracted scientists from a liberal and secular world!

Later, on September 28 and 29, 1893 Swami Vivekananda had gone to Highland Park<sup>4</sup>. Some of the important guests at Highland Park were the British physicist Sir William Thomson (also known as Lord Kelvin); the German scientist Herman Von Helmholtz; and the French delegate to the International Electrical Congress, Professor Edourd Hospitalier. Here the name of scientist and electrical expert Nichola Tesla was never heard, at least officially. But some researchers<sup>5</sup> suppose that he was there as evidence of further interaction emerged as presented later. Nikola Tesla, as we all know, was the inventor of the alternating current<sup>6</sup> generating machine, which was being demonstrated at the Chicago World Exposition, and one of the pioneering scientists of 19<sup>th</sup> century whose contribution also gave us wireless transmission, the Tesla Coil, and the first constructs of a world wide web (WWW) of communication. It is of great probability that Nikola Tesla had met the Swami at Chicago during and after the Fair, as both of them were centers of attraction as great speakers. But real interactions happened later and these were in New York City.

It was Swami Vivekananda, who was explaining Cosmology on the basis of three variables. First, *Prana*, a life-current constituting all dynamism and waves of action and reaction from small to large in this universe; second, *Akasha*, which is an all-pervading space from small to large; and third and the last, *Kalpa*, the single cycle of time representing a unitary cosmic creation and dissolution. Recalling Tesla's reaction to the invocation, Swami Vivekananda writes:

"...... Our friend (Tesla) was charmed to hear about the Vedantic Prana and Akasha and the Kalpas, which, according to him, are the only theories modern science can entertain. Now both Akasha and Prana again, are produced from the Cosmic Mahat, the universal mind, the Brahma or Iswara. He (Tesla) thinks he can demonstrate mathematically that force and matter are reducible to potential energy. I am to go and see him next week, to get this new mathematical demonstration".

Two constructs emerged from what they had shared:

1. First, a conceptual framework of the parallels of Vedanta and modern Science.

<sup>&</sup>lt;sup>3</sup> Life, Vol. 1, page 448, Udvodana, A publication of the ramaKrishna Mission, Kolkata.

<sup>&</sup>lt;sup>4</sup> This was wealthy suburb on Lake Michigan, USA, about twenty miles north of Chicago.

<sup>&</sup>lt;sup>5</sup> 'Swami Vivekananda in Chicago: new findings' by Asim Chowdhuri (Adwaita Ashram), pg 127.

<sup>&</sup>lt;sup>6</sup> An alternating electric current (A.C) mode has replaced the direct current now. It is popularly known as the A.C. which varies in strength and it periodically reverses its direction. The frequency of an A.C. is the number of times the current passes through its zero value in the same direction in unit time.

2. Two, the plans of Tesla outlining his advent in the later years in pursuit of the holistic truth as implied by the framework.

Sister Nivedita<sup>7</sup> (earlier known as Margaret Noble), an Irish born lady and later an important disciple of Swami Vivekananda puts it in the following words:

".... Swamiji attacks the whole problem (while explaining Tesla) of the relation between force and matter, making at the same time a brief but 'pregnant epitome' of what he regards as significant, in Indian conception or lore about death. It is easy as one read this letter, to see how he has been thrilled by the congruity of ancient Indian thought with modern science".

#### The Evolving Hierarchy and Its Inner Orders

It will be appropriate to review the rest of the letter. Swami Vivekananda was confident in what he was intending. His explanations were based on the Upanishadic descriptions of mind heading for meditation. These are features from the inner world, representing the unfolding of the microcosm through mind and meditation.

Meditation is a psychic depth where the soul of the person sojourns beyond the physical body (the *pinda*) and enters an inner (or the cosmic expanse – comparable to the *Brahmanda*). At times, the soul touches the transcendental unity beyond the cosmos and shines forever as the 'one and only one'. This journey is the very foundation of Vedantic cosmology and also of Christian eschatology<sup>8</sup>. In the letter Swami Vivekananda further added:

"...In that case, the Vedantic Cosmology will be placed on the surest of Foundations. I am working a good deal now, upon the Cosmology and eschatology of the Vedanta. I clearly see their perfect unison with modern Science, and that of the other will follow the elucidation of the one. I intend to write a work later on, in the form of questions and answers. The first chapter will be on Cosmology, showing the harmony between Vedantic Theories and modern science".

Swami Vivekananda had provided a conceptual framework by correlating the two explained in five levels and explaining the enfolding and the unfolding orders within the hierarchy of the whole.

<sup>&</sup>lt;sup>7</sup> From 'Master as I saw Him', in the Chapter on 'Death and transmigration of souls'.

<sup>&</sup>lt;sup>8</sup> Eschatology means the doctrine of the last things; according to Christianity – Death, Judgment, heaven and Hell. In other words, it is the fate of the soul.

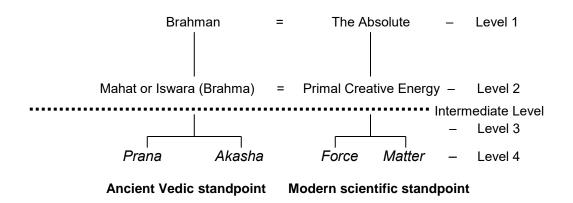


Figure 1: Constructs and analogy of between the inner and the outer world [Composed and conceived by Swami Vivekananda]

Figure 1 has been interpreted as a hierarchy of both the resolution and differentiation of the two elemental variables, *Prana* and *Akasha*. The whole journey of the individual soul i.e. from level 4 to level 1 represents the entire ladder of evolution.

In the dualist (*dvaitic*) viewpoint, the soul passes from level 4 (solar or material sphere) to level 3 (lunar or mental sphere); thence to the intermediate level (electric or cosmic sphere); and then to level 2 (cosmic unitedness or *Hiranyagarbha* identified as *Brahma-loka*) and finally to the Absolute (the level 1 of an unchanging and transcendent unity beyond all levels).

The non-dualist (*advaitic*) viewpoint says that the soul neither comes nor goes, and all these levels are varying products of *Akasha* and *Prana*.

#### **Reconciliation Within the Hierarchy**

The current framework is based on the *advaitic* viewpoint only. This monistic viewpoint says that the levels are visions, which arise in succession before the individual soul (*Jiva*), who neither goes nor comes, and in the same way this present vision gets projected or dissolved. The projection (*srishti* or creation) and dissolution (*pralaya*) must take place in the same order - only one means going backward and the other coming out.

In other words, the enfolding order is the 'Seed form' manifesting within itself the Tree that represents the becoming of the whole manifested universe in all its variety and multiplicity at various levels. The Seed is the condensed or unmanifest form or the *Avaktya*. In counterresponse or as feedback, the unfolding order of each Seed form contained in the fruits of all the future Trees contain Seeds that contain properties of the original Tree. Thus, each later Seed can manifest as a 'Tree Form' by tracing the property of the original Seed.

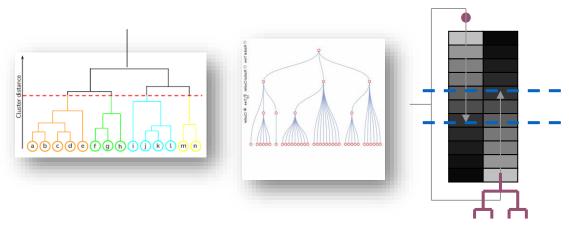


Figure 2: The seed (upper crown or Origin) and branches (lower ramifications) as a setup of indispensable iterations within the hierarchy (enfolding and unfolding order)

[Composed and conceived by the author as abstracted from the Gita 15.1]

Thus, the two movements are reciprocal and complementary. They are called the *Chhandas* or the infinite Rhythms of truth (see Figure 2). It is explained in the Gita 15.1 as the Inverted Knowledge Tree, the symbolic Bodhi Tree, The *Ashwattha*.

- The Chhandas are the very Vedas that are heard over eternity. This is spirituality.
- Hence, they are also known as *Shrutis*. Tracing it back, as achieved by various Mahayogis, is a reciprocal part in recorded history. That is called *Smritis*. They lead to various religious movements. But *Shrutis* always precedes *Smritis*. Each involution or enfolding order precedes the evolution at our end, the unfolding of our Self to be the Self of the universe. *Shrutis* are always no. 1 to which *Smritis* communicate as no. 2.
- The two together, makes the equation complete. It may be called Complete Concept of Religion. If both are present, the religion becomes eternal or *Sanatana*.

Now let us get back to the two movements which are equivalent to the Schrödinger's wave equation as discussed before. Cramer reviewed the equation and explained the bi-polarity meaning a conjugate of opposites that contain both the implicate and explicate orders as designed by physicist David Bohm.

Schrödinger's wave equation is based on the simple idea of complex numbers which is:

$$Y = A + Bi$$

and here Y here stands for a complex number:

If 
$$Y = A + B$$
 then  $Y*Y = (A + B)*(A + B)$ 

In case of complex numbers, we know that Y\*Y = (A + Bi)\*(A - Bi)

Or.

Y = (Seed in later Tree tracing back first Seed) \* (First Seed manifesting as Trees)

Thus, a two-way ladder of involution containing the enfolding order from the other side of infinity and a counter evolutionary sequence containing the unfolding order from this side or our side of infinity is evident. The network, feedback loop within the network, and the returns to scale in the hierarchy from Many to ONE and ONE to many is constantly iterating in the inner hierarchy of the ladder. In Indian epistemic knowledge, this cyclic iteration is called the *Mandala*.

- Thus, in the language of external sciences, it is now known as Quantum Entanglement that explains the non-locality across galaxies in the universal becoming of systems.
- In the language of internal sciences, it is the interpenetration of *Anulama* (*Unmana*) and *Viloma* (*Samana*) where the unit Self of a particular *Yogi* (among many and many *yogis*) is in communion with the Master Self of the Universe as one orchestrated system of identity. *A Yogi is just one wave among many and many waves in the sea of Yoga*.
- This deeper connect and controls (*Yoga*) between the two ends, the linkages and communication between the two (*Samyoga*), and the constant iteration of the turning around is best explained in the language of Cybernetics today.
- Cybernetics therefore has the immense possibility of holding an inner key to bridge the two worlds (see Figure 3). It assures self-automation within the enfolding of any system, so that the system contains parts, where each part reflects the system itself. This may be the beginning of an understanding to reach the foundation of the sentient self-generation in the universe, from Large to Small. In Indian epistemic systems it is known as *Chiti, Chaitanya* or *Chaitya*, i.e., the self-contained-unit of consciousness.

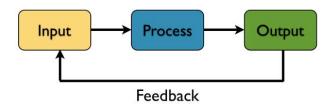


Figure 3: The essence of a Cybernetic System

The network of Causality and Retro-causality (Progression, Feedback, Nonlinearity and Self-Automation) [Composed and conceived by Norbert Weiner, MIT]

• The ancient Rig Veda earmarks it as the all-pervading Matrix of all, the *Chit-Shakti* 7.68.8 - यावध्यामिपन्वतमपो न स्तर्यं चिच्छक्यिश्वना शचीभिः ॥ But more than the *Vaidiki* system, the *Tantriki* system has expanded in depth on the *Shakti* part and her sutras, the threads of the cosmos. The *Vaidiki* and its ends (*Vedanta*) have mostly touched the Absolute part, The *Mahat* or *Mahato-mahoriyan*.

• But now we need a two-way dialogue between the two, between the Origin, the Absolute and the Original power, the *Chit-Shakti* to best explain the Cybernetics of Universal being and becoming.

#### WAY FORWARD

The languages are different. But the complementarities between the two worlds, mirroring each other as the two worlds, the macrocosm and the macrocosm, is a matter of interpenetration. What is evident in the inner laboratory of mind and meditation garnered by our rishis is now increasingly visible in the external laboratory of machines and mathematics. This is indeed a great turning point in human history as 2022 Nobel Prize in Physics has closely echoed the pattern contained in the ancient wisdom, which says:

# सर्वभूतस्थमात्मानं सर्वभूतानि चात्मनि | ईक्षते योगयुक्तात्मा सर्वत्र समदर्शन: || 6.29||

The above sutra is quoted from the ancient scripture called the Gita where Sri Krishna and Arjuna, were engaged in a highest discourse amidst the battlefield of life:

"Oh Arjuna! The Mahayogis, uniting their consciousness with the all-pervading divine consciousness, see with equal eye and empathy, all living beings unfolding and remaining in that One being and that One Being containing and enfolding within all living beings."

In the words of Evolutionary philosopher and Mahayogi Sri Aurobindo in our own times, the same can be reiterated as:

"Nothing to the Supramental sense is really finite: it is founded on a feeling of all in each and of each in all"

(Quoted from - Synthesis of Yoga)

The present article forwards the need to redraw complementarities between the two sides, i.e., scientific pursuits at a particular level of knowledge, with pursuits and inputs drawn from other levels such as deep culture, deep philosophy, and even the normative sciences like psychology and bio-anthropology, which can extend up to 'deep ecological' concerns having moral, ethical, and 'spiritual' dimensions. We have earmarked these two as the two worlds, the macrocosm and the microcosm. In doing so, we have reached a double-laddered hierarchy, an intertwined system of response, feedback to response and cyclic iterations over time, which is evolution itself. The key objective of this deliberation as underscored herewith is to set indispensable iterations within the hierarchy as proposed in this article. The need of the hour is to evolve a holistic framework of an emerging "new science of complementarities" transcending the preceding limitations and myopia of an 'Either-Or dialectics of reductionism' as it was

governed by Cartesian classical approaches of the yesteryears. I thus end with a great hope contained in the great saying of a master scientist:

"It is probably true quite generally that in the history of human thinking the most fruitful developments frequently take place at those points where two different lines of thought meet."

Werner Heisenberg

\*\*\*\*

#### **Brief Profile of the Author:**

**Dr. Joy Sen** is a Professor of the Department of Architecture and Regional Planning, Indian Institute of Technology, Kharagpur, West Bengal, India and Former Head (June 2017 - July 2020). Prior to that, he had been the former Head of Ranbir and Chitra Gupta School of Infrastructure and Design, IIT Kharagpur (Aug 2014 – June 2017). His areas of research are Community and Regional Planning Analyses & Programming and Architecture and Planning related Heritage Studies and Documentation.

He has a long working experience with the various Environmental Design programs under DFID Government of the United Kingdom (1995-96) and ISU-UNDP program (1987-89) and IR3S (2011-12) in the University of Tokyo, Japan. He is currently associated with the two mega projects sponsored by MHRD Govt. of India, i.e., the SandHI - Science and Heritage mega initiative (acronym SandHI) and the Future of Cities. He has authored seven books on Indian Heritage, Iconographic Documentation and a Text book on Sustainable Planning in India.

#### **Statements and Declaration:**

The present article is extracted from Annexures 4 and 5 of a Book by the Author entitled 'Sustainable Urban Planning' - published by THE ENERGY RESEARCH INSTITUTE (TERI), Government of India id: https://bookstore.teri.res.in/books/9788179933244 (2012), and later developed in last chapter of GLOBAL HISTORY OF INDIAN ARCHITECTURE, Copal Publishing, New Delhi (2015). But the key concepts are originally extracted from the master book entitled SANTA PRASANGA (2004), which was further deliberated as a CONCEPT OF COMPLETE RELIGION (2007) by the author in form of another book.

#### **References:**

- 1. Capra, Fritjof, THE TAO OF PHYSICS, HarperCollins; Latest edition (5 September 2007), Bantam; Reissue edition (1 August 1984).
- 2. Capra, Fritjof, THE TURNING POINT, Bantam; Reissue edition (1 August 1984).

- 3. Cramer, John G., THE QUANTUM HANDSHAKE: Entanglement, Nonlocality and Transactions, Springer International Publishing AG; 1st ed. 2016 edition (6 January 2016).
- 4. Gribbin, John, SCHRODINGER'S CAT, RHUK (15 February 1985).
- 5. Ramananda, Swami (2004), SANTA PRASANGA, Dey's Publication, Kolkata
- 6. Sen, Joy (2012), SUSTAINABLE URBAN PLANNING, a TERI (THE ENERGY RESEARCH INSTITUTE) Publication, New Delhi.
- 7. Sen, Joy (2015), GLOBAL HISTORY OF INDIAN ARCHITECTURE, Copal Publishing, New Delhi [Excerpts from Chapter 6].
- 8. Sen, Joy (2019), A macro-micro systems approach to frame holistic studies on the culture and philosophy of science in India, Ch 12 in New Perspectives in Indian Science and Civilization, 1st Edition, Routledge INDIA, DOI https://doi.org/10.4324/9780429244148.
- 9. Sen, Joy (2024), SORAB BHAROOCHA MEMORIAL LECTURE 1.0 Unravelling the Depths of inter-reflective macrocosm and the microcosm, Journal of Indian institute of Architects, pp 40-44.
  - https://indianinstituteofarchitects.com/pdf/jiia/2024/JIIA\_August\_2024.pdf.
- 10. Von Foerster, Heinz, (1995), Ethics and Second-Order Cybernetics Archived 2014-01-28 at the Wayback Machine.
- 11. Wiener, Norbert (1948). Hermann & Cie (ed.). Cybernetics; or, Control and Communication in the animal and the machine. Paris: Technology Press.
- 12. Wiener, Norbert (1950). Cybernetics and Society: The Human Use of Human Beings. Houghton Mifflin.



## International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 36-68

# Bhoutika Shastra To Adi Bhoutika Shastra: A Methodological Exploration Through Quantum Mechanics and Neo-Quantum Physics

#### Rameshchandra Ketharaju

Co-Founder and Board of Director, Quantum Ecosystems and Technology Council of India

#### **Abstract:**

This article delves into the multi-faceted understanding of reality as presented through the ancient Bharatiya philosophy of Bhoutika Shastra (भौतिक शास्त्र), the empirical and theoretical framework of Quantum Mechanics, and the emerging paradigm of Neo-Quantum Physics. Through a comparative analysis, we explore the gross (Sthula; स्थूल), subtle (Sukshma; सुक्ष्म), and causal (Karana; कारण) states of reality, offering perspectives that range from the measurable aspects of classical physics to the abstract and metaphysical dimensions. The article emphasizes the role of direct observation (Pratyaksha; प्रत्यक्ष), inference (Anumana; अनुमान), and metaphysical wisdom (Agama; आगम) in understanding the universe. By integrating the insights from Mundaka Upanishad, Mandukya Upanishad, Brihadaranyaka Upanishad, and Lalita Sahasranama we explore the relationship between the individual's journey through different states of Consciousness and the sheaths (koshas; কীয়া). This perspective synthesizes the foundational concepts of Vishwa (विश्व), Taijasa (तैजस), Prajna (प्रज्ञा) and the transcendental state of Turiya (त्रीय) to bridge metaphysical realities with contemporary philosophical discourse. These spiritual insights illuminate profound connections between modern quantum theories and ancient metaphysical wisdom, offering a unified framework for understanding reality. The discussion unfolds through three primary perspectives: the measurable aspects of classical and quantum physics, the theoretical implications of Neo Quantum Physics, and the metaphysical dimensions of Adi Bhoutika Shastra (आदि भौतिक शास्त्र). The article concludes by outlining potential research directions that integrate empirical science with metaphysical inquiry to explore Consciousness as a fundamental principle of reality.

**Keywords:** Bhoutika Shastra, Adi Bhoutika Shastra, Quantum Mechanics, Neo-Quantum Physics, Mundaka Upanishad, Mandukya Upanishad, Brihadaranyaka Upanishad, Lalita Sahasranama

#### INTRODUCTION

The quest to understand the fundamental nature of reality has long been a driving force in both ancient philosophy and modern science. This paper explores two key frameworks that bridge these domains: Neo-Quantum Physics and *Adi Bhoutika Shastra*.

- 1. **Neo-Quantum Physics**: Neo-Quantum Physics extends traditional quantum mechanics by integrating the role of Consciousness as a fundamental aspect of reality. Unlike traditional models that treat the observer as an external participant, Neo-Quantum Physics posits that Consciousness actively shapes quantum phenomena, bridging empirical findings such as the observer effect with metaphysical concepts like *Turiya* from *Mandukya Upanishad*. This paradigm shifts the focus from particles and waves to the interplay between matter, energy, and awareness.
- 2. Adi Bhoutika Shastra: Adi Bhoutika Shastra is a metaphysical framework rooted in Bharatiya philosophy that examines the unmanifest (Avyakta Prakriti; अव्यक्त प्रकृति) as the foundational state of reality. It integrates the gross (Sthula), subtle (Sukshma), and causal (Karana) dimensions of existence, culminating in the transcendental state of Turiya. This framework complements Neo-Quantum Physics by offering a metaphysical perspective on the primordial forces underlying both material and immaterial realities.

Across centuries, thinkers have sought to uncover the layers of existence, from the observable world to the unmanifest forces shaping the *brahmanḍa* (ब्रह्मांड). This paper adopts a systematic approach, beginning with the gross material world as explored by *Bhoutika Shastra* and classical physics, progressing through the subtle probabilistic realities of quantum mechanics, and culminating in the causal and primordial dimensions addressed by Neo-Quantum Physics and *Adi Bhoutika Shastra*.

Classical physics, akin to *Bhoutika Shastra*, has provided a robust framework for understanding the gross, material world (*Sthula*), where phenomena are measurable and observable. However, the advent of Quantum Mechanics has revolutionized our understanding by revealing a subtler, probabilistic nature of reality at the microscopic level. This subtle state (*Sukshma*) challenges classical notions of determinism, introducing abstract principles such as non-locality, waveparticle duality, and the crucial role of the observer. As science continues to probe deeper into these complexities, questions about Consciousness and its relationship to the physical world become increasingly central.

Neo-Quantum Physics, as defined in this paper, represents a paradigm shift that extends traditional quantum mechanics by integrating metaphysical principles and exploring the role of Consciousness as a foundational aspect of reality. It posits that Consciousness is not merely an epiphenomenon but a foundational element of the universe, aligning with ancient Bharatiya

philosophical traditions that describe the causal state (*Karana*). This perspective suggests that the observer is not separate from the observed, and that understanding the universe requires acknowledging the interconnectedness of the material, subtle, and causal dimensions.

This article seeks to compare and integrate these three perspectives by drawing upon both modern scientific theories and ancient metaphysical insights from the *Vedas, Upanishads*, and texts like *Lalita Sahasranama*. These sources offer profound reflections on the nature of existence, Consciousness, and the layers of reality—gross, subtle, and causal—paralleling the discoveries of classical physics, quantum mechanics, and Neo-Quantum Physics. The study culminates in the concept of *Adi Bhoutika Shastra*, which goes beyond these realms to explore the unmanifest forces that underpin all of existence.

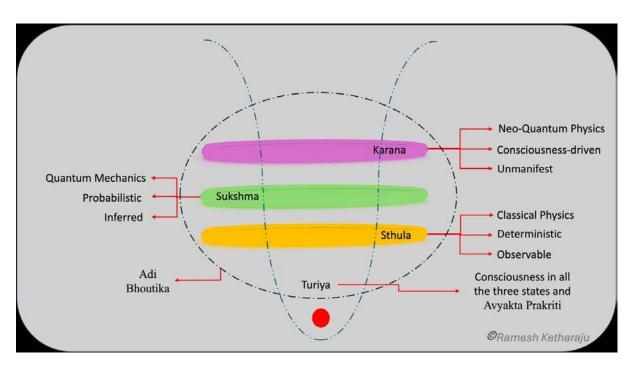
In this article, we explore how these perspectives align, overlap, and ultimately point toward a unified understanding of reality, where Consciousness is the ultimate principle of existence. By drawing upon ancient texts such as *Mundaka Upanishad*, *Mandukya Upanishad*, *Brihadaranyaka Upanishad*, and *Lalita Sahasranama*, we aim to bridge the gap between scientific inquiry and metaphysical wisdom, offering a framework that encompasses both the material and the metaphysical dimensions of existence.

#### GLOSSARY OF KEY TERMS AND CONCEPTS

This paper uses the following terms to explore the connections between ancient metaphysical insights and modern scientific paradigms:

- 1. **Neo-Quantum Physics**: Neo-Quantum Physics is an emerging paradigm that builds on quantum mechanics by incorporating Consciousness as a causal principle. This framework explores how quantum phenomena, such as wave-function collapse and entanglement, might be influenced by awareness. It aligns with the metaphysical idea of the observer (*Drashta*; রস্থা) in *Vedantic* philosophy and seeks to unify material and immaterial aspects of existence.
- 2. *Adi Bhoutika Shastra*: *Adi Bhoutika Shastra* is a philosophical model derived from Bharatiya traditions. It investigates the unmanifest reality (*Avyakta Prakriti*) that precedes and sustains the manifest universe. The framework organizes reality into three states—gross, subtle, and causal—culminating in the transcendental *Turiya* state, which represents pure Consciousness and unity.
- 3. Sthula, Sukshma, Karana:
  - o **Sthula (ম্থুল or Gross)**: Observable, measurable reality, corresponding to classical physics.
  - o Sukshma (सुक्ष or Subtle): Probabilistic and inferred dimensions of reality, aligned with quantum mechanics.

o **Karana (কারেण or Causal)**: The foundational state from which gross and subtle phenomena emerge, central to Neo-Quantum Physics.



These definitions will guide the systematic exploration of the connections between metaphysics and quantum mechanics.

TERM	DEFINITION		
Neo-Quantum	An emerging paradigm that explores the integration of Consciousness		
Physics	into the framework of quantum mechanics.		
Adi Bhoutika	A metaphysical framework exploring the unmanifest, causal state from		
Shastra	which all gross and subtle realities arise.		
Turiya	The fourth state of Consciousness described in Mandukya Upanishad,		
	transcending waking, dreaming, and deep sleep.		
Sthula	Gross or material reality that is measurable and observable, aligned		
	with classical physics and Bhoutika Shastra.		
Sukshma	Subtle reality that includes probabilistic and inferred phenomena, akin		
	to quantum mechanics.		
Karana	Causal reality, representing the foundational state from which gross		
	and subtle realities emerge, central to Vedanta.		
Avyakta Prakriti	The unmanifest primordial essence that serves as the source of all		
	creation, explored in Adi Bhoutika Shastra.		
<b>Observer Effect</b>	A quantum mechanics principle where the act of observation influences		
	the state of a quantum system.		

#### **METHODOLOGY**

This paper adopts a comparative approach, drawing illustrative parallels between ancient metaphysical insights, particularly from *Mandukya Upanishad*, and contemporary scientific paradigms. However, it is crucial to recognize that these analogies serve to inspire a deeper understanding rather than provide direct mappings. While scientific frameworks, such as quantum mechanics, describe observable phenomena, metaphysical insights often operate on abstract, experiential, or philosophical planes.

The concepts of *Vishwa*, *Taijasa*, *Prajna*, and *Turiya* offer metaphysical frameworks for understanding Consciousness. Comparisons with states described in quantum physics, such as superposition or entanglement, are intended as metaphoric tools to bridge conceptual gaps rather than as direct equivalencies. This distinction safeguards the integrity of both scientific and metaphysical domains.

This study integrates insights from ancient Bharatiya metaphysics and contemporary quantum mechanics by juxtaposing textual analysis of *Mandukya Upanishad* with empirical findings in physics. For example, the *Aum* (3) mantra's division into *Vishwa*, *Taijasa*, *Prajna*, and *Turiya* provides a metaphysical framework paralleled by quantum mechanical states such as superposition and decoherence.

To ensure rigor, references to primary sources, such as the *Upanishads*, are mentioned alongside contemporary physics literature, including experimental studies on quantum entanglement and consciousness theories. For consistency, the terms used in this paper, such as 'Neo-Quantum Physics' and 'Adi Bhoutika Shastra,' follow standardized definitions provided in the glossary shared in the previous section. This will ensure clarity in interdisciplinary discussions and avoids interpretative ambiguities.

This paper mirrors the *Upanishadic* approach by systematically exploring reality through progressively subtler states—gross, subtle, and causal—culminating in the unmanifest primordial essence. This layered progression aligns with the methodical rigor of texts such as *Mandukya Upanishad*.

#### EXPERIMENTAL FOUNDATIONS FOR THEORETICAL CLAIMS

• **Delayed-Choice Experiment:** Wheeler's delayed-choice experiment illustrates the fundamental role of the observer in determining a particle's state, supporting the interplay between observation and reality central to quantum mechanics. This aligns with the metaphysical idea of the observer (*Drashta*) in *Vedanta*, where observation shapes manifestation.

- **Delayed-Choice Quantum Eraser:** The delayed-choice experiments demonstrate that measurements made in the present alter events that occurred in the past, illustrating retro causality which resonates with metaphysical causality concepts.
- Quantum Zeno Effect: The Quantum Zeno effect shows that continuous observation can 'freeze' a quantum state, offering a potential mechanism for consciousness-driven stabilization in quantum systems. This phenomenon bridges empirical quantum mechanics and metaphysical claims about the observer's active role in shaping reality.
- Casimir Effect: The Casimir effect demonstrates the tangible influence of quantum fluctuations, offering a physical correlate to metaphysical discussions about the unmanifest (Avyakta Prakriti) as a state of latent potentiality.
- Quantum Entanglement: Entanglement experiments, such as those conducted by Alain Aspect, reveal the non-local interconnectedness of particles, echoing the metaphysical principle of universal unity (Advaita; अद्वेत) found in Vedantic philosophy.

#### **Experimental Evidence Supporting Theoretical Claims**

Experiment	Key Insight	Relevance to the Paper
Wheeler's Delayed-	Observation retroactively	Supports the active role of
Choice	determines particle behavior.	observation in shaping reality
		(Drashta).
Delayed-Choice	Choices about measurement	Illustrates retro causality,
Quantum Eraser	affect past quantum states.	resonating with metaphysical
		causality concepts.
Quantum Zeno Effect	Continuous observation can	Aligns with consciousness-
	freeze quantum states.	driven stabilization of potential
		states.
Casimir Effect	Measurable forces arise from	Highlights latent potentiality
	quantum vacuum	(Avyakta Prakriti).
	fluctuations.	
Aspect's	Non-locality demonstrates	Mirrors Vedantic principles of
Entanglement	universal interconnectedness.	unity (Advaita).
Experiments		

#### FRAMEWORK FOR INTERDISCIPLINARY ANALOGIES

This paper employs analogies to bridge complex metaphysical principles and quantum phenomena. These analogies are intended as heuristic tools to foster interdisciplinary understanding, rather than as claims of direct equivalence or causality. For example, comparisons between the quantum vacuum and *Avyakta Prakriti* (unmanifest reality) serve to

highlight conceptual parallels in their descriptions of latent potentiality, not to assert a scientific identity.

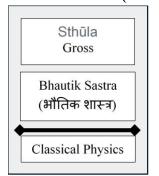
While such analogies provide valuable insights for framing interdisciplinary dialogue, they are not substitutes for rigorous scientific or philosophical proof. This distinction preserves the integrity of both metaphysical and quantum frameworks while encouraging exploration of their shared conceptual landscapes.

Quantum Concepts	Metaphysical Principles
Wave-Particle Duality	Duality of Sthula (Gross) and Sukshma
	(Subtle)
Represents the coexistence of particle and	Reflects the interplay of material and subtle
wave states in quantum systems.	realities in Vedanta.
Quantum Vacuum	Avyakta Prakriti (Unmanifest Reality)
A state teeming with potential energy and	Describes the latent, unmanifest foundation
fluctuations, yet unobservable.	of all creation.
Observer Effect	Drashta (Observer as Consciousness)
Observation collapses quantum potentials	Consciousness actively shapes perception
into specific outcomes.	and reality.

#### GROSS STATE – BHOUTIKA SHASTRA AND CLASSICAL PHYSICS

Bhoutika Shastra, rooted in ancient Bharatiya sciences, aligns closely with classical physics in its exploration of the physical universe. Both systems aim to understand the material or gross (Sthula) aspects of reality through empirical observation and logical inference. This alignment between the ancient Bharatiya science and modern physics forms a foundation for the examination of reality through quantifiable means. In this perspective, the measurable aspects of matter, energy, and forces are the central focus, offering a bridge between ancient metaphysical frameworks and contemporary scientific thought.

#### The Gross State (Sthula) And Classical Physics



This perspective mirrors the *Upanishadic* focus on the *Vishwa* state, which corresponds to waking Consciousness and aligns with the observable material world explored in classical physics.

Bhoutika Shastra derives from the Sanskrit words "Bhoutika," meaning physical or material, and "Shastra," meaning a body of knowledge or science. It focuses on what can be observed and measured, akin to the empirical methods of classical physics. The gross state (Sthula) in

*Bhoutika Shastra* can be likened to the surface of a lake, where all phenomena are clearly visible and measurable. Classical physics explores this surface, examining the predictable movements and interactions that occur, like the ripples caused by a thrown stone.

In classical physics, these measurable quantities are governed by deterministic laws like Newton's laws of motion, thermodynamics, and electromagnetism. These laws describe the behavior of matter and energy on a macroscopic scale, where the universe operates in an orderly and predictable fashion.

The *Bhoomi Suktm* (भूमि सूक्त) of the *Atharva Veda* (12.1) illustrates this idea, describing the universe as governed by a cosmic order that ensures balance and harmony.

सत्यं बृहदृतमुग्रं दीक्षा तपो ब्रह्म यज्ञः पृथिवीं धारयन्ति । सा नो भूतस्य भव्यस्य पत्युरुं लोकं पृथिवी नः कृणोतु ॥१॥

(Satyam Brhad-Rtam-Ugram Diikssaa Tapo Brahma Yajnyah Prthiviim Dhaarayanti | Saa No Bhuutasya Bhavayasya Patny[i]-Urum Lokam Prthivii Nah Krnnotu ||1||)

Translation: "(Salutations to Mother Earth) The Truth (Satyam), the Cosmic Divine Law (Rtam), the Spiritual Passion manifested in Mighty Initiations, Penances and self-dedications to the search of Brahman (by the sages); these have sustained the Mother Earth for ages (Who in turn have supported these in Her Bosom).

She, Who is to us the Consort of the Past and the Future (being its witness), May She expand our inner life in this World towards the Cosmic Life (through Her Purity and Vastness)."

In this context, the universe functions under a system of laws similar to the deterministic principles of classical physics.

#### Pratyaksha In Bhoutika Shastra

In both *Bhoutika Shastra* and classical physics, knowledge is obtained essentially through *Pratyaksha* (direct observation), emphasizing the importance of empirical investigation. Classical physics has built its foundation on observable phenomena, where experiments are designed to quantify forces and interactions in the natural world. This method aligns with *Bhoutika Shastra's* emphasis on the gross state, where physical reality can be measured, observed, and analyzed.

For example, the mechanics of planetary motion, the behavior of gases, and the principles of electromagnetism all fall within the realm of *Sthula*, or gross phenomena. Newton's laws of motion provide a clear example of how physical quantities like force, acceleration, and mass are interrelated through empirical observation and mathematical formalism.

Moreover, the Vedic concept of *Pratyaksha* echoes the empirical nature of classical physics. It emphasizes the role of the senses and instruments in comprehending reality, which is the same approach taken by modern scientific methods. The physical sciences, including astronomy and material sciences, rely on direct measurement and observation to explain the functioning of the material world, much as *Bhoutika Shastra* did in ancient Bharat.

#### Limits of Classical Physics and The Subtle State (Sukshma)

While *Bhoutika Shastra* and classical physics excel in explaining the gross material world, they reach their limits when exploring phenomena that are not directly observable. In modern physics, the transition from classical physics to quantum mechanics marks a shift from the gross (*Sthula*) to the subtle (*Sukshma*) realm. Quantum mechanics, dealing with atomic and subatomic particles, introduces probabilistic models where certainty and direct observation give way to probability and inference.

Chandogya Upanishad provides a philosophical parallel to this transition, describing a progression from the physical (gross) to the vital (subtle). The text emphasizes that the gross is only one layer of reality, and deeper truths lie beyond what is immediately observable. In quantum physics, this corresponds to the realization that at the microscopic level, particles behave in ways that defy classical intuition, governed by uncertainty and wave-particle duality. In this realm, observation itself influences the outcome of experiments, a phenomenon starkly different from the deterministic view held by classical physics.

Bhoutika Shastra acknowledges the existence of these subtle dimensions of reality, which cannot be captured by direct measurement. Lalita Sahasranama, for instance, refers to "Sthūla-sūkṣma-karī" (স্থুল-মুঞ্জা-কাरী; She who creates both the gross and subtle), indicating the interconnectedness of the gross and subtle states. This highlights that reality consists of both observable and unobservable dimensions, each governed by different principles.

#### Bhoutika Shastra, Rta (ऋत), And Cosmic Order

In both *Bhoutika Shastra* and classical physics, the universe is seen as governed by laws. The concept of *Rta* from the *Atharva Veda* resonates with the principles of natural laws in classical physics, which describe the predictable behavior of matter and energy. The term Rta- $r\bar{u}p\bar{a}$  ( $\pi \bar{d}$ ); She who is the embodiment of cosmic order) from *Lalita Sahasranama* symbolizes this alignment, suggesting that the physical world is a manifestation of cosmic law and order.

The deterministic nature of classical physics, where cause and effect follow a linear, predictable pattern, is reflected in the Vedic view of the universe. In *Bhoutika Shastra*, the gross state operates under this order, much like classical physics, where phenomena such as gravity, thermodynamics, and electromagnetism are governed by consistent laws. This view of a well-ordered, lawful universe extends from the observable to the cosmic scale, where planets move according to predictable laws of motion.

#### The Subtle (Sukshma) Realm and Quantum Mechanics

As we move from the gross (*Sthula*) to the subtle (*Sukshma*), the limitations of classical physics become evident. Quantum Mechanics challenges the deterministic worldview by introducing concepts such as wave-particle duality, quantum entanglement, and the uncertainty principle. These phenomena, which operate at the atomic and subatomic levels, cannot be fully understood through classical models.

In the *Bhoutika Shastra* framework, this shift from the gross to the subtle corresponds to the transition from directly measurable phenomena to those that require inference and abstract models. The subtle state, or *Sukshma*, operates beyond the reach of direct sensory perception, much like quantum particles that can only be inferred from experimental outcomes and mathematical predictions. This shift in understanding aligns with ancient teachings that the *Sthula* (gross) world is only a surface manifestation of deeper, more abstract *Sukshma* (subtle) layers of reality.

Thus, *Bhoutika Shastra* and classical physics share a common foundation in their exploration of the gross material world. However, they both reach a boundary when confronted with the subtle dimensions of reality, where quantum mechanics and metaphysical philosophy offer alternative models for understanding existence.

#### **Toward An Integrated Perspective**

The convergence of *Bhoutika Shastra* and classical physics offers valuable insights into how ancient and modern systems of knowledge can complement each other in exploring reality. While classical physics excels in describing the gross state of reality, it encounters limitations at the quantum level, where the subtle state begins to dominate. *Bhoutika Shastra*, grounded in ancient metaphysical thought, similarly acknowledges the transition from the observable gross to the unobservable subtle, emphasizing that reality operates on multiple levels.

As science continues to probe deeper into the quantum realm, a holistic understanding of reality may require integrating empirical methods with metaphysical principles. *Bhoutika Shastra* provides a framework for this integration, offering a philosophical foundation that recognizes the existence of both gross and subtle states. This approach can bridge the gap between classical physics and quantum mechanics, leading to a more comprehensive view of the universe, where material and immaterial aspects are seen as interconnected.

In this evolving exploration of reality, *Bhoutika Shastra* and classical physics serve as complementary perspectives. They each provide valuable tools for understanding the material world, while also pointing toward the deeper, more elusive truths that lie beyond direct observation and measurement. This synthesis of ancient wisdom and modern science offers a promising path forward in the quest to understand the full nature of existence.

#### **SUBTLE STATE – QUANTUM MECHANICS**

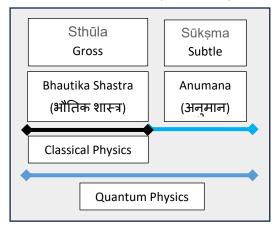
Quantum Mechanics presents a profound departure from the deterministic worldview of classical physics, introducing a framework where reality is governed by probabilistic laws and abstract phenomena. These include concepts such as wave-particle duality, quantum entanglement, and superposition, which offer a glimpse into the subtle (*Sukshma*) state of reality. The subtle state in quantum mechanics parallels the *Taijasa* state described in *Mandukya Upanishad*, where Consciousness is dreamlike and layered with potentialities. This

analogy is used as a heuristic device to draw conceptual connections, rather than as a claim of equivalence. Quantum phenomena such as superposition and entanglement reflect this state's complexity. This perspective requires us to look beyond direct empirical observation (*Pratyaksha*) and embrace inference (*Anumana*) required in both metaphysical exploration and quantum experiments, suggesting that much of what we perceive about the universe is not directly observable but inferred from indirect evidence, mathematical models, and probabilistic outcomes.

At the heart of quantum mechanics lies the idea that particles do not behave in predictable, classical ways but instead exist in a state of potentiality until observed. This challenges our conventional understanding of reality as purely objective and deterministic. Instead, quantum mechanics proposes a universe where uncertainty and probability govern the behavior of particles, offering parallels to metaphysical and philosophical ideas from ancient Bharatiya texts.

The Copenhagen interpretation, one of the most influential frameworks for understanding quantum phenomena, posits that observation collapses a quantum system from a state of potentiality (superposition) into a state of actuality. This perspective elevates the role of Consciousness in shaping reality, a concept echoed in various *Upanishadic* teachings where Consciousness is central to the manifestation of the universe. Thus, quantum mechanics can be seen as a bridge between the empirical and the metaphysical, offering insights into the subtle dimensions of reality that go beyond what is directly observable.

#### The Role of Inference (Anumana) In Understanding Quantum Phenomena



One of the key challenges posed by quantum mechanics is that many of its phenomena cannot be directly observed. Instead, they are inferred from experimental outcomes and mathematical predictions. For example, the concept superposition suggests that a particle can exist in multiple states simultaneously, a notion that defies classical logic and cannot be directly witnessed. Similarly, quantum entanglement proposes that particles can remain interconnected over vast distances, influencing each other instantaneously,

despite being separated by space.

This reliance on inference aligns with the ancient Bharatiya philosophical approach of *Anumana*, which emphasizes reasoning and indirect knowledge as essential tools for understanding the *Sukshma* (subtle) aspects of reality. Quantum mechanics represents a modern scientific approach to exploring the subtle state, where deterministic laws of classical physics give way to probabilistic models and abstract reasoning. Wheeler's Delayed-Choice experiment and Delayed-Choice Quantum Eraser experiment, for instance, demonstrate that

the act of observation retroactively determines a particle's behavior, aligning with the subtle (*Sukshma*) state's emphasis on potentiality. Similarly, experiments on wave-particle duality demonstrate the coexistence of potential states until observed, a phenomenon that parallels the metaphysical description of potentiality in the subtle state (*Sukshma*).

In Vedantic philosophy, particularly in texts like Brihadaranyaka Upanishad and Mundaka Upanishad, there is a deep exploration of the manifest and unmanifest aspects of reality (Vyaktāvyakta-svarūpiṇī; व्यक्ताव्यक्त-स्वरूपिणी), with Consciousness playing a central role in bridging these two realms. The phrase "Asato mā sad gamaya, tamaso mā jyotir gamaya, mṛtyor mā amṛtaṃ gamaya" (असतो मा सद्गमय । तमसो मा ज्योतिर्गमय । मृत्योमी अमृतं गमय) from Brihadaranyaka Upanishad can be seen as an invocation to move from the unreal to the real, from darkness to light, and from death to immortality. Quantum mechanics reflects this transition from the "unreal" (asat; असत) of classical determinism to the "real" (sat; सत) of probabilistic, interconnected reality, where the observer plays a crucial role in the manifestation of outcomes.

#### **Quantum Mechanics and the Observer Effect**

This phenomenon draws philosophical comparisons to the role of Consciousness in *Vedanta*, as articulated in *Mandukya Upanishad*. However, these comparisons should be viewed as thematic parallels to aid conceptual exploration rather than direct correlations between metaphysical and scientific principles. Before observation, a particle exists in a state of superposition, embodying multiple potential realities. However, once observed, the system collapses into a single, definite state. This challenges the classical view of an objective, independent reality and introduces the idea that Consciousness may play a role in shaping the material world.

This concept resonates with ancient metaphysical teachings, particularly in *Mandukya Upanishad*, where Consciousness is seen as the ultimate reality and the observer of all phenomena. *Lalita Sahasranama* captures this idea with names such as "Citsvarūpiṇī" (चित स्वरूपिणी; She who is pure Consciousness) and "Sarvopādhi-vinirmuktā" (सर्वीपाधि विनिर्मुक्ता; She who is free from all limitations), emphasizing the central role of Consciousness in the creation and manifestation of the universe.

In quantum mechanics, this observer effect introduces a level of subjectivity into what was previously considered an objective and measurable reality. The principle of superposition, where multiple possibilities coexist until measured, can be likened to the dream state (Swapna; स्वप्न) described in the Vedantic concept of Avasta Traya (अवस्ता त्रय; the three states of Consciousness). Here, the dream state represents a realm of potentiality, much like the quantum world, where particles exist in multiple states until collapsed into a single reality by observation.

#### Quantum Entanglement and the Interconnectedness of Reality

Quantum entanglement further challenges the classical notion of locality, where objects are assumed to be independent of one another unless physically connected. In quantum mechanics, entangled particles remain interconnected, even when separated by vast distances, such that the state of one particle instantaneously affects the state of another. This phenomenon defies classical physics and suggests a deep interconnectedness at the quantum level, where the boundaries of space and time dissolve.

This interconnectedness parallels the concept of *Brahman* (রুর) in *Vedanta*, the ultimate reality from which all things emerge and to which all things are connected. *Mundaka Upanishad* captures this idea with the analogy of sparks emerging from a blazing fire, representing the multiplicity in this universe arising from a single source. In *Lalita Sahasranama*, this interconnectedness is reflected in names like "*Sarvajña*" (सर्वज्ञा; She who is all-knowing), which emphasizes the omniscience and unity of all existence.

Quantum mechanics, through the phenomenon of entanglement, reveals that the universe is not a collection of isolated, independent entities but rather a deeply interconnected web of relationships. This notion echoes the metaphysical teachings of *Advaita Vedanta* (अद्वेत वेदांत), where the ultimate truth is seen as the oneness of all existence, transcending the duality and separation perceived at the gross level of reality.

#### **Neo-Quantum Physics and the Integration of Consciousness**

The implications of quantum mechanics extend beyond the scientific realm into the philosophical and metaphysical, raising profound questions about the nature of reality and the role of Consciousness. Neo-Quantum Physics, an emerging field of study, seeks to integrate these abstract quantum concepts with the metaphysical, particularly the role of Consciousness in shaping the universe. This perspective aligns with the *Vedantic* idea of the causal state (*Karana*), where reality is seen as arising from a deeper, unmanifest source.

In Vedanta, the concept of Avasta Traya (अवस्ता রয) describes the three states of Consciousness—Jāgrat (जাप्रत; waking state), Swapna (स्वप्न; dream state), and Sushupti (सुप्रप्ति; deep sleep state)—which correspond to different levels of reality. The waking state (Jāgrat) represents the gross, observable world of classical physics, where objects are distinct and measurable. The dream state (Swapna) represents the subtle realm of potentialities, much like the quantum state of superposition. Finally, the deep sleep state (Sushupti) represents a state beyond both gross and subtle, where all distinctions dissolve, akin to the unmanifest quantum potential.

Neo-Quantum Physics hypothesizes that Consciousness may influence quantum outcomes, supported by models such as Orch-OR, which theorize quantum coherence in biological systems as a mechanism for awareness, suggesting that the universe is not a passive, objective system but a dynamic interplay between matter, energy, and Consciousness. This perspective invites a deeper exploration of the subtle and causal states of existence, where the boundaries

between science and spirituality blur, and the ultimate nature of reality is revealed to be far more interconnected and mysterious than classical physics ever imagined.

#### The Emerging Paradigm of Neo-Quantum Physics

Quantum Mechanics, with its focus on the subtle, probabilistic nature of reality, offers a profound shift in our understanding of the universe. It challenges the deterministic worldview of classical physics and opens the door to exploring the deeper, interconnected aspects of existence. Through inference, observation, and abstract reasoning, quantum mechanics reveals that reality at its most fundamental level is not fixed or objective but dynamic and influenced by the observer. This invites parallels with ancient Bharatiya metaphysical teachings, where Consciousness is seen as central to the manifestation of reality.

As quantum mechanics continues to push the boundaries of science, the emerging field of Neo-Quantum Physics seeks to integrate these abstract concepts with metaphysical ideas, particularly the role of Consciousness in shaping the universe. This exploration of the subtle and causal states of existence offers a glimpse into the deeper mysteries of reality, where science and spirituality converge.

#### CAUSAL STATE - NEO-QUANTUM PHYSICS AND CONSCIOUSNESS

#### **Defining Neo-Quantum Physics**

Neo-Quantum Physics represents an emerging paradigm that builds upon the principles of classical quantum mechanics while incorporating the role of Consciousness and metaphysical dimensions into its framework. Unlike traditional quantum mechanics, which focuses on the probabilistic behavior of particles at the atomic and subatomic levels, Neo-Quantum Physics extends this inquiry to explore the foundational role of Consciousness in shaping reality. This perspective seeks to answer questions that conventional quantum mechanics leaves unresolved, such as the nature of the observer effect and the implications of entanglement on a universal scale.

#### 1. Key Features of Neo-Quantum Physics:

o Inclusion of Consciousness: While classical quantum mechanics views the observer as an external entity influencing quantum states, in Neo-Quantum Physics, Consciousness acts like a spotlight in a dark room, illuminating one potential reality from many possibilities. Just as light selects what we see, Consciousness selects which quantum potential becomes actual. Neo-Quantum Physics posits that Consciousness plays a fundamental role in collapsing quantum potentialities into observable realities, resonating with the *Turiya* state. This parallel is intended to facilitate interdisciplinary dialogue and does not imply a scientific equivalence between quantum mechanics and metaphysical principles. This perspective finds parallels in competing theories such as Orch-OR, which grounds consciousness in quantum coherence, and the Quantum Zeno Effect, which emphasizes the

stabilizing influence of observation. However, Neo-Quantum Physics uniquely positions Consciousness as a universal principle, transcending biological systems and integrating metaphysical insights. This aligns with *Advaita Vedanta's* non-dualistic philosophy, particularly the teachings of Shankara, which emphasize the unity of observer and observed. Philosophical works like Bertrand Russell's *The Analysis of Matter* (1927) also explore the connection between subjective experience and physical reality, supporting the notion of Consciousness as a causal agent.

- o Causal Reality and the Unmanifest: Neo-Quantum Physics explores the *Karana* (causal) state, positing that Consciousness plays a fundamental role in collapsing quantum potentialities into observable realities.
- o **Integration with Metaphysics**: It incorporates metaphysical ideas, such as the indivisibility of existence (*Brahman*) and the interconnectedness of all entities, aligning them with quantum concepts like non-locality and superposition.

#### 2. How Neo-Quantum Physics Diverges from Quantum Mechanics:

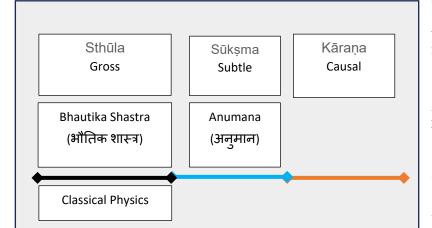
- Philosophical Scope: While quantum mechanics remains rooted in empirical and mathematical models, Neo-Quantum Physics integrates metaphysical insights to address the philosophical and experiential aspects of reality.
- Consciousness as a Core Principle: Quantum mechanics acknowledges the role of the observer but does not define Consciousness as a causal agent. Neo-Quantum Physics positions Consciousness as integral, proposing models such as Penrose and Hameroff's Orch-OR theory to bridge this gap.
- o **Focus on Universal Interconnectedness**: Classical quantum mechanics examines localized phenomena; Neo-Quantum Physics emphasizes the global interconnectedness of quantum systems, drawing metaphors from *Mandukya Upanishad's* depiction of *Turiya*.

#### 3. Examples of Neo-Quantum Physics:

- Quantum Coherence in Biological Systems: Theoretical studies suggest that biological systems, such as the human brain, may utilize quantum coherence to process information, hinting at a deeper connection between Consciousness and quantum states.
- o **Unified Field Theories**: Neo-Quantum Physics contributes to the search for a unified field theory by considering Consciousness as a fundamental field interwoven with quantum phenomena.

Neo-Quantum Physics represents an emerging frontier in scientific thought, seeking to extend the boundaries of classical and quantum mechanics by integrating Consciousness, metaphysics, and unmanifest dimensions of reality. This paradigm proposes that understanding the universe requires more than just the exploration of particles, forces, and probabilistic phenomena—it demands a deeper inquiry into the role of Consciousness and the fundamental, causal state of existence. In this comprehensive view, Neo-Quantum Physics aligns with metaphysical and

philosophical frameworks, such as *Vedanta*, and incorporates elements from ancient texts like *Mandukya Upanishad*, *Shiva Purana*, and *Lalita Sahasranama*. The interplay between Consciousness, energy, and matter is central to this approach, offering a holistic vision of reality that transcends the empirical limits of conventional physics.



Quantum Physics

The Causal State and Consciousness as a Fundamental Reality

The causal state in Upanishad, Mandukya represented by Prajna (deep sleep Consciousness), suggests a state where all potentialities are unified. Neo-Quantum **Physics** explores this unmanifest domain through models such as the quantum vacuum and the role of Consciousness in collapsing quantum states.

One of the most profound contributions of Neo-Quantum Physics is the introduction of the causal

state (Karana), a concept rooted in ancient Bharatiya metaphysics. Unlike the gross and subtle states typically discussed in classical physics, the causal state represents the unmanifest source from which all phenomena arise. This state is explored in Mandukya Upanishad, which describes Turiya, the fourth state of Consciousness that exists beyond waking, dreaming, and deep sleep. In this state, Consciousness is pure, non-dual, and unobservable through empirical means, yet it forms the foundation of all experience and reality. This perspective is bolstered by the work of Penrose and Hameroff (2014) on orchestrated objective reduction (Orch-OR), which posits that consciousness arises from quantum processes within microtubules. Similarly, the Quantum Zeno Effect demonstrates how continuous observation can 'freeze' a quantum state, suggesting a possible mechanism for the influence of consciousness.

**Neo-Quantum Physics** 

Neo-Quantum Physics, as defined in this study, suggests that Consciousness is not merely a by-product of physical processes but a fundamental aspect of the universe, rooted in the *Ka*rana (causal) state. {Please note: consciousness (with a small c) denotes awareness or the ability to respond to an experience as displayed by living beings whereas Consciousness (with a capital C) stands for the non-dual foundation of all experience and reality which is unobservable through empirical means}

The causal state is further elucidated in *Lalita Sahasranama*, where the Divine is often described in terms of pure Consciousness. Names like *Citsvarūpinī* (चित स्वरूपिणी; She who is

pure Consciousness) emphasize the primacy of Consciousness over material existence. In Neo-Quantum Physics, this notion extends into discussions about the observer effect in quantum mechanics, where the act of observation collapses a quantum system into a definite state. This underscores the idea that Consciousness is not just a passive observer of reality but an active participant in shaping it. The dynamic interplay between Consciousness and the physical universe is key to understanding the causal state, where the material and subtle realms merge with Consciousness to form the ultimate source of reality

#### Metaphysical Integration: Vedanta, Shiva-Shakti, & the Unified Field of Consciousness

Neo-Quantum Physics draws heavily from metaphysical traditions, particularly *Vedanta* and the concept of *Brahman*, the infinite, unchanging reality that underlies all creation. In *Shiva Purana*, the relationship between *Shiva* (খিব; unmanifest Consciousness) and *Shakti* (খিবি; manifest energy) illustrates the dynamic interaction between Consciousness and the material universe. Neo-Quantum Physics aligns with this view, positing that the universe is not simply a collection of particles and forces but a complex interplay between Consciousness and energy. The name *Bindu-mandala rūpiṇī* (चिंदु-मंडल रूपिणी; She who is the form of the point and the circle) from *Lalita Sahasranama* encapsulates this principle, symbolizing both the singularity of Consciousness (*bindu*) and the expansive nature of the universe (*mandala*).

In this context, Neo-Quantum Physics introduces the idea of a unified field of Consciousness, where Consciousness is not an emergent property of the brain but a fundamental aspect of existence that permeates the universe. This view challenges the materialist assumptions of classical physics and offers a more holistic understanding of reality. The notion of a unified field echoes the concept of *Purusha* (पुरुष; Consciousness) in *Sankhya* philosophy, where *Purusha* is the silent witness to all manifestations of *Prakriti* (प्रकृति; nature). Similarly, Neo-Quantum Physics suggests that Consciousness exists beyond measurable phenomena and interacts with the universe at a fundamental level.

#### Bliss and the Ultimate Nature of Reality

A key theme in Neo-Quantum Physics is the recognition that Consciousness is not only fundamental to reality but is also inherently associated with bliss (आनंद; Ananda), a concept mirrored in both Taittiriya Upanishad and Lalita Sahasranama. In Taittiriya Upanishad, the Anandamaya Kosha (आनंदमय कोष; the sheath of bliss) is described as the innermost layer of the self, aligning with the Neo-Quantum Physics notion that the causal state is one of pure Consciousness and bliss. The name Sarvānandamayī (सर्वानंदमयी; She who is the embodiment of all bliss) from Lalita Sahasranama further reinforces the idea that the universe, at its core, is not a random collection of particles and forces but a conscious, blissful existence.

This perspective shifts the focus of scientific inquiry from purely material and probabilistic phenomena to the metaphysical and experiential dimensions of reality. Neo-Quantum Physics suggests that at the deepest level, reality is not devoid of meaning or purpose but is imbued with Consciousness and bliss. This insight challenges the reductionist view of classical physics,

which tends to view the universe as a mechanical system, and instead proposes a more integrated, holistic understanding of existence.

#### A New Paradigm for Science and Consciousness

Neo-Quantum Physics represents a bold and revolutionary step in the evolution of scientific thought, bridging the gap between empirical observation and metaphysical inquiry. By introducing the concept of the causal state and integrating Consciousness as a fundamental aspect of reality, this paradigm challenges the materialist and probabilistic assumptions of classical and quantum mechanics. It draws from ancient philosophical and metaphysical systems, such as *Vedanta*, *Sankhya*, and the teachings of *Upanishads*, to propose a more holistic view of the universe—one where Consciousness plays a central role.

The exploration of the causal state and the interplay between Consciousness and the material universe opens new avenues for understanding reality. In Neo-Quantum Physics, Consciousness is not a mere by-product of physical processes but the very ground of all being. This perspective aligns with the metaphysical traditions of Eastern philosophy, particularly the ideas of *Turiya*, *Brahman*, and the dynamic interaction between *Shiva* and *Shakti*. Moreover, the recognition that Consciousness is imbued with bliss offers a more profound and meaningful understanding of the universe, one that transcends the cold, mechanistic view of reality presented by classical physics.

In the future, Neo-Quantum Physics may pave the way for a new scientific paradigm, one that fully integrates the metaphysical dimensions of Consciousness, energy, and matter. By embracing the causal state and the unified field of Consciousness, this new approach has the potential to revolutionize not only our understanding of the universe but also our perception of ourselves as conscious beings interconnected with the fabric of reality.

#### COMPARATIVE THEORIES OF CONSCIOUSNESS

The exploration of consciousness draws upon diverse theoretical frameworks. Below, we present a comparative analysis of leading theories, focusing on their alignment with quantum mechanics and metaphysical perspectives.

#### 1. Penrose and Hameroff's Orchestrated Objective Reduction (Orch-OR):

Overview: Proposes that consciousness arises from quantum processes within microtubules in the brain. Quantum coherence at the subcellular level is suggested to collapse through orchestrated objective reduction, linking consciousness to fundamental quantum phenomena.

#### o Strengths:

- Explains the non-computational aspects of human cognition.
- Provides a testable model, with implications for understanding free will and perception.

#### o Weaknesses:

- Relies heavily on speculative interpretations of quantum mechanics.
- Criticized for lack of direct experimental evidence linking microtubules to cognitive processes.

#### 2. Integrated Information Theory of Consciousness (IIT):

Overview: Suggests that consciousness arises from the integration of information within a system, quantified as "phi." This framework posits that any system with sufficient information integration is conscious to some degree.

#### o Strengths:

- Offers a measurable framework for consciousness.
- Provides a plausible explanation for the emergence of subjective experience.

#### o Weaknesses:

- Does not directly connect consciousness to quantum phenomena.
- Lacks metaphysical depth, focusing solely on information theory.

#### 3. Quantum Zeno Effect and Consciousness:

Overview: Suggests that the observer's continuous interaction with a quantum system stabilizes its state, offering a mechanism for the role of consciousness in shaping reality.

#### o Strengths:

- Directly connects consciousness with observable quantum phenomena.
- Provides a mechanism for the observer effect in quantum mechanics.

#### • Weaknesses:

- Does not address the experiential or qualitative aspects of consciousness.
- Lacks a biological or neurological foundation.

#### 4. Neo-Quantum Physics and Consciousness:

**Overview**: Neo-Quantum Physics posits that Consciousness plays a fundamental role in collapsing quantum potentialities into observable realities. This concept resonates with the delayed-choice quantum eraser experiment, where the choice to observe or not observe retroactively influences the outcome, suggesting a deep interplay between observation and reality. This aligns with metaphysical principles such as those found in *Mandukya Upanishad* and *Vedantic* philosophy.

#### o Strengths:

- Integrates empirical quantum phenomena with metaphysical insights.
- Offers a holistic view, bridging material and immaterial realities.
- Explains the interconnectedness of Consciousness and the universe, resonating with quantum entanglement.

#### o Weaknesses:

- Faces challenges in providing direct empirical evidence.
- Heavily reliant on philosophical assumptions that require further validation.

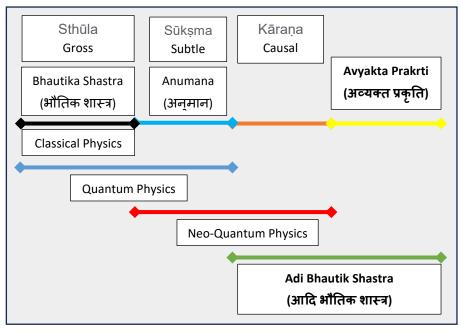
#### THE PRIMORDIAL ESSENCE - ADI BHOUTIKA SHASTRA

The exploration of reality, as conveyed through *Bhoutika Shastra*, Quantum Mechanics, and Neo-Quantum Physics, reveals a spectrum of understanding from the gross (*Sthula*) and measurable to the subtle (*Sukshma*) and probabilistic, and further into the causal (*Karana*) dimensions of existence. To fully understand the nature of reality, we must explore its deepest layer: the unmanifest, or *Adi Bhoutika Shastra*. Like the roots of a tree that remain hidden yet sustain all visible life, this primordial state forms the foundation of the gross and subtle worlds. This section introduces *Adi Bhautik Shastra* as the science and philosophy of the ultimate unmanifest, the source of all physical and metaphysical manifestations. It serves as the foundational principle that bridges the causal, subtle, and gross states, thus offering a more comprehensive framework for the synthesis of ancient metaphysical thought and modern scientific paradigms.

This perspective, as a continuation of the synthesis between *Bhoutika Shastra*, Quantum Mechanics, and Neo-Quantum Physics, introduces the concept of *Adi Bhautik Shastra*, which goes beyond these domains to explore the most fundamental and primordial aspects of reality. We elaborate below how *Adi Bhautik Shastra* integrates with these other frameworks, providing a unified understanding of reality that encompasses the gross, subtle, causal, and unmanifest states.

#### Adi Bhautik Shastra: The Unmanifest and Primordial Reality

Adi Bhoutika Shastra aligns with the Turiya state described in Mandukya Upanishad, representing the transcendence of Sthula, Sukshma, and Karana states.



This unmanifest essence parallels the quantum vacuum, a state teeming with potential energy, as observed in Casimir effect experiments, which reveal measurable forces arising from quantum fluctuations in apparently empty space. The notion of Turiya resonates with Kant's concept of the 'thing-in-itself' (*Ding* 

an sich), which exists beyond human perception, suggesting a metaphysical substratum akin to the quantum vacuum. It represents the ultimate reality beyond dualities, offering insights into the interconnected nature of Consciousness and the universe.

Adi Bhautik Shastra, represents the primordial unmanifest state from which all manifested reality arises. "Adi" (आदि) means "primordial" or "beginning," and "Bhautik" (भौतिक) refers to the physical or material world. Thus, Adi Bhautik Shastra can be seen as the science that seeks to understand the unmanifest forces that serve as the source of both the gross and subtle manifestations of reality.

This unmanifest, or Avyakta Prakriti (अञ्चल प्रकृति), represents the causal foundation of the universe, existing beyond the waking (Jāgrat), dreaming (Swapna), and deep sleep (Sushupti) states, as described in Mandukya Upanishad. This level of reality is where all phenomena, gross and subtle, remain in their unmanifest form, waiting to emerge as the material universe. In the classical and quantum domains, science grapples with the challenge of defining the origins of reality. For instance, Mandukya Upanishad's emphasis on Turiya as the foundation of all states aligns metaphorically with Wheeler's concept of quantum foam, which postulates the universe's emergence from quantum fluctuations. These parallels reinforce the integration of metaphysical and scientific paradigms. This field is the source of gross, subtle, and causal states.

From a comparative perspective, *Adi Bhautik Shastra* aligns with the causal state (*Karana*) explored in Neo-Quantum Physics, where Consciousness plays a pivotal role in shaping reality. In Neo-Quantum Physics, the observer is not simply a passive entity but a fundamental part of the process that brings the potentialities of the universe into manifestation. This interaction between the observer and the unmanifest can be understood as the process by which the gross and subtle layers of reality emerge from the primordial state.

#### The Role of Consciousness in Adi Bhautik Shastra

The philosophical underpinnings of *Adi Bhautik Shastra* resonate with the idea that Consciousness is not an emergent property of the physical world but a fundamental element that governs both the manifest and unmanifest realms. In both *Bhautik Shastra* and Quantum Mechanics, the role of the observer is crucial in shaping reality. However, it is in Neo-Quantum Physics and *Adi Bhautik Shastra* that Consciousness is elevated from a mere participant to the catalyst of creation itself.

This metaphysical understanding is supported by ancient Bharatiya texts, which describe Consciousness as the ultimate reality—*Brahman*. In *Adi Bhautik Shastra*, the primordial state is intricately linked with Consciousness, where the *Avyakta Prakriti* serves as the canvas upon which the gross and subtle realities are painted. This view aligns with the teachings of the *Upanishads*, which suggest that reality is a continuum between the manifest and unmanifest, and Consciousness is the bridge that connects these dimensions.

From the perspective of modern science, the exploration of Consciousness as a fundamental force in Neo-Quantum Physics opens up new avenues of inquiry into how reality is constructed at the most basic level. The collapse of quantum systems into definite states upon observation

suggests that Consciousness is not merely an observer but a participant in shaping the structure of reality.

This synthesis challenges the classical separation between observer and observed, matter and Consciousness. It suggests that Consciousness is not merely a passive observer of the universe but an active participant in its creation. This idea mirrors the Copenhagen interpretation of quantum mechanics, where observation is integral to the manifestation of physical reality. In both *Adi Bhautik Shastra* and Neo-Quantum Physics, Consciousness is the field from which all material forms emerge, and the causal state represents the most fundamental layer of existence.

#### The Causal State and Avyakta Prakriti

In *Adi Bhautik Shastra*, the causal state (*Karana*) is seen as the source of all manifestation. This state is explored not just as an abstract metaphysical concept but as a critical part of the fabric of reality. As outlined in Neo-Quantum Physics, the causal state is where the interaction between Consciousness and the unmanifest occurs, giving rise to the quantum world of probabilities and the material world of certainties.

The concept of Avyakta Prakriti within Adi Bhautik Shastra adds another layer to this understanding. It represents the subtle manifestation that exists just before the emergence of the gross and subtle states, serving as the transitional bridge between the unmanifest and the manifest. (It is the subtle realm that lies between the Causal and Subtle states, representing the first form of manifestation from the causal essence.) In this context, Adi Bhautik Shastra and Neo-Quantum Physics are not only concerned with understanding the physical and quantum realms but also with the primordial forces that precede them. This corresponds to the quantum vacuum or zero-point field in modern physics, where the potential for all matter exists but has not yet emerged into a physical form.

The metaphysical framework of *Adi Bhautik Shastra*, with its emphasis on *Avyakta Prakriti*, suggests that the universe is not a collection of independent entities but a unified, interconnected field of potentialities. This concept aligns with Neo-Quantum Physics, which explores the unification of Consciousness, energy, and matter in the causal realm. *Lalita Sahasranama* supports this view by describing the Divine Mother as both the manifest and unmanifest, implying that reality exists on a continuum that spans from the gross physical world to the subtle and causal realms.

Adi Bhautik Shastra bridges this gap by exploring the primordial interactions between Consciousness and matter. The Avyakta Prakrti represents the subtle, primordial energy that gives rise to the universe, like the quantum foam hypothesized by John Wheeler in 1955, where space-time and matter continuously arise and dissolve. Here, the Turiya state and the causal dimensions merge, offering a glimpse into the non-local, non-temporal origins of reality.

In both *Adi Bhautik Shastra* and Neo-Quantum Physics, there is an acknowledgment that the universe is deeply interconnected, with no clear separation between the observer and the observed, subject and object, Consciousness and matter. This interconnectedness is embodied in *Lalita Sahasranama* as names such as "*Sarvajña*" (She who is all-knowing) and "*Citsvarūpiṇī*" (She who is pure Consciousness), reflecting the understanding that Consciousness pervades all of reality.

#### Toward a Unified Field Theory: Adi Bhautik Shastra and Neo-Quantum Physics

Both *Adi Bhautik Shastra* and Neo-Quantum Physics share a vision of a unified field of Consciousness that governs the entire cosmos. In quantum physics, this manifests in the form of entanglement, superposition, and the observer effect, where particles exist in multiple states until observed. Similarly, *Adi Bhautik Shastra* suggests that the gross and subtle realms are interdependent and arise from a common causal field—the unmanifest primordial source.

This unified field is also conceptualized in the *Shiva-Shakti* framework, where *Shiva* represents unmanifest Consciousness, and *Shakti* symbolizes the dynamic energy that brings forth creation. Neo-Quantum Physics reflects this in its exploration of matter-energy-Consciousness interactions, suggesting that Consciousness itself is the substratum of all physical and metaphysical existence. The *Bindu-mandala rūpiṇī* (She who is the form of the point and the circle) in *Lalita Sahasranama* encapsulates this idea of unity in diversity, where all of creation emanates from a single point of Consciousness (*Bindu*) and expands into the universe (*Mandala*).

In this context, *Adi Bhautik Shastra* proposes a holistic vision of reality, where the boundaries between science, spirituality, and metaphysics blur. This is not only a theory of matter and energy but also a philosophy of Consciousness, where the gross, subtle, and causal aspects of reality are integrated into a single unified framework. This perspective pushes modern science toward a unified theory of reality that includes both the empirical and metaphysical dimensions of existence.

# COMPARATIVE ANALYSIS: SYNTHESIZING BHOUTIKA SHASTRA, QUANTUM MECHANICS, NEO-QUANTUM PHYSICS, AND ADI BHOUTIKA SHASTRA

Aspect	Bhoutika Shastra (Classical Physics)	Quantum Mechanics	Neo-Quantum Physics	Adi Bhautik Shastra
Scope	Gross, observable reality	Subtle, probabilistic phenomena	Consciousness as an active participant in reality	Causal, unmanifest reality as the origin of all manifestations

Determinism vs. Probability  Wave-Particle Duality	Deterministic laws governing macroscopic objects  Not applicable	Probabilistic outcomes at quantum levels  Observes wave-particle duality	Consciousness interacts with probability  Consciousness as a determining factor	Consciousness transcends both deterministic and probabilistic aspects, functioning at a causal level All dualities are unified within Consciousness— beyond wave- particle duality, integrating material and immaterial aspects
Observer Effect	Passive observation, no influence on reality	The observer affects quantum states	The observer is integral, co-creating reality	The observer is the source—manifesting and dissolving reality based on conscious intent
Reality Framework	Gross, physical framework	Reality is both a wave and a particle, and collapses with observation	Reality as a construct shaped by Consciousness	Reality emerges from the unmanifest causal state and returns to it; Consciousness is the sole principle guiding manifestation
Consciousness	Not considered	Passive, indirect role as an observer	Active participant, shaping reality	The primordial source—the seed from which both the gross and subtle realms emerge
Causality	Classical causality (cause-effect relations)	Non-classical, probabilistic causality	Causality influenced by Consciousness	Causality rooted in Consciousness; reality emerges from the unmanifest and returns cyclically based on the conscious will
Unification	Separate from metaphysical inquiry	Begins unifying the gross and subtle	Bridges physical and metaphysical	Unifies the gross, subtle, and causal states—suggesting that all aspects of reality are interconnected and originate from Consciousness

Metaphysical Integration	Limited, primarily empirical	Hints at metaphysical principles (observer effect)	Explores Consciousness as a metaphysical force	Fully integrates metaphysical concepts, positing that Consciousness is both the field and the observer, unifying physical laws and spiritual principles
Philosophical Implications	Materialist view of reality	Challenges materialism, opens space for subjectivity	Moves toward idealism, Consciousness-centric	Consciousness is the source of all reality, aligning with ancient Bharatiya philosophy (e.g., <i>Upanishads</i> , <i>Vedanta</i> )
Mystical Insights	Not relevant	Some mystical parallels (observer effect, uncertainty)	Deepens mystical inquiry with scientific analysis	Aligns directly with ancient metaphysical systems, offering a holistic view that includes empirical and transcendent realities

#### FUTURE DIRECTIONS: BRIDGING METAPHYSICS AND QUANTUM MECHANICS

The integration of metaphysical insights and quantum mechanics offers fertile ground for exploring Consciousness, reality, and their interconnections. Below are practical frameworks and experimental approaches to make the discussed theories more tangible:

#### 1. Experimental Models on Consciousness and Quantum Mechanics

- Proposed Experiments:
  - Quantum Coherence and Consciousness: Inspired by the Orch-OR theory, experiments could investigate whether quantum coherence in neural microtubules correlates with states of Consciousness (e.g., meditation, deep sleep, or transcendental experiences). Advances in neuroimaging and quantum biology can help measure this relationship.
  - o **Observer Effect in Human-Centric Systems**: Building on studies of the observer effect, researchers could test whether human intention or Consciousness can influence quantum systems (e.g., double-slit experiments performed under varying levels of observer focus, such as meditative states).

#### 2. Practical Applications in Technology

- Quantum Computing Inspired by Metaphysical Models: The hierarchical framework of *Sthula* (gross), *Sukshma* (subtle), and *Karana* (causal) states could inspire algorithms in quantum computing. These algorithms may optimize problem-solving by modeling Consciousness as an active agent in collapsing states.
- Consciousness-Driven AI: Drawing on metaphysical principles, new paradigms for artificial intelligence could simulate Consciousness-like feedback loops, inspired by the interdependence of observer and observed in quantum systems.

#### 3. Thought Models for Philosophical and Scientific Integration

- Philosophical Inquiry Using Mandukya Upanishad: A structured comparative analysis could explore how Turiya's transcendental state relates to superposition and entanglement. This analysis could be a thought model for understanding the experiential dimensions of quantum mechanics.
- Unified Field Models: Inspired by the concept of *Avyakta Prakriti* (unmanifest primordial reality), physicists could refine quantum field theories to incorporate non-local, Consciousness-driven effects, creating a testable unified field hypothesis.

#### 4. Collaborative Research Programs

- Interdisciplinary Studies: Collaborative research between physicists, neuroscientists, and philosophers could formalize the exploration of metaphysics within experimental frameworks. For example, the philosophical implications of *Turiya* could be explored through models like Orch-OR and experimental setups investigating the Quantum Zeno Effect, as discussed in Misra and Sudarshan's foundational 1977 paper. Topics may include the role of meditation in altering quantum phenomena or exploring Consciousness as a universal principle.
- Integration of Ancient and Modern Frameworks: Workshops and studies blending *Vedantic* insights with contemporary physics could develop experimental frameworks. For instance, the relationship between *Pratyaksha* (direct observation) and *Anumana* (inference) parallels the methodologies of empirical and theoretical sciences.

#### 5. Ethical Implications

• **Responsibility in Consciousness Research**: With the potential to manipulate Consciousness or quantum systems, researchers should ensure ethical guidelines, aligning with the spiritual principle of *Rta* (cosmic order) to prevent misuse of advanced technologies.

Future experimental work could build on existing setups to explore the metaphysical dimensions of Consciousness. For example:

• Customized Delayed-Choice Experiments: Test whether conscious intention can influence particle behavior in delayed-choice setups, expanding on Wheeler's framework.

• Quantum Zeno Effect in Neural Systems: Investigate whether sustained focus or meditation impacts quantum coherence in biological systems, linking human consciousness with observable quantum phenomena.

The experimental frameworks proposed, such as testing quantum coherence in biological systems, align with the principles of Neo-Quantum Physics, emphasizing the interplay between Consciousness and quantum phenomena.

#### PROPOSED FRAMEWORK FOR RESEARCH AND COLLABORATION

To bridge the concepts of Neo-Quantum Physics and *Adi Bhoutika Shastra* with practical research and interdisciplinary inquiry, this paper proposes the following actionable steps:

#### 1. Establish Interdisciplinary Conferences

- **Objective**: Facilitate dialogue among physicists, philosophers, neuroscientists, and *Vedantic* scholars to discuss common ground in Consciousness Studies and Quantum Mechanics.
- **Format**: Organize annual symposia featuring:
  - o Panels on the intersections of quantum mechanics and metaphysics (e.g., *Turiya* and quantum superposition).
  - Keynote presentations on experimental advancements, such as studies on quantum coherence in biological systems or the observer effect in meditative states.
  - o Collaborative workshops to identify shared research questions and develop testable hypotheses.
- **Outcome**: Foster long-term interdisciplinary collaborations and publish conference proceedings as foundational resources.

#### 2. Propose Collaborative Experiments

#### a. Observer Effect and Meditation

• **Objective**: Test whether meditative states influence quantum systems, building on existing research into the observer effect.

#### • Design:

- o Equip meditation practitioners with quantum experiments e.g., double-slit setups.
- o Measure variations in wave-function collapse rates under meditative focus versus non-meditative states.
- **Expected Insight**: Determine whether altered states of Consciousness correlate with quantum phenomena.

#### b. Quantum Coherence in Neural Systems

• **Objective**: Investigate whether quantum coherence exists in neural microtubules, as suggested by Penrose and Hameroff's Orch-OR theory.

# • Design:

- o Conduct neuroimaging studies during deep meditation or sleep to identify quantum-level activity.
- o Compare results across different Consciousness states (*Jāgrat*, *Swapna*, *Sushupti*).
- **Expected Insight**: Validate potential quantum mechanisms underlying Consciousness and align findings with metaphysical frameworks like *Karana* (causal state).

# 3. Develop Testable Models of Consciousness

# a. Metaphysics-Inspired Quantum Models

- **Proposal**: Use *Vedantic* concepts, such as *Avyakta Prakriti*, as inspiration for developing mathematical models of unmanifest states.
- **Application**: Translate metaphysical principles (e.g., latent potentiality of *Turiya*) into quantum field equations for exploring unobserved dimensions of reality.

# b. Unified Field Theory and Consciousness

- **Proposal**: Extend existing unified field theories to include Consciousness as a fundamental component, building on the interconnectedness demonstrated in entanglement experiments.
- **Outcome**: Refine the integration of Consciousness into Physics, linking Neo-Quantum Physics with *Adi Bhoutika Shastra*.

# 4. Initiate Cross-Disciplinary Academic Programs

• **Objective**: Create university-level programs combining quantum mechanics, neuroscience, and Bharatiya philosophy.

# • Format:

- Dual-major degrees offering courses in metaphysics, Consciousness Studies, and Quantum Physics.
- Practical research components involving meditative practices and experimental physics labs.
- **Outcome**: Train a new generation of scholars with expertise in both scientific and metaphysical frameworks.

### 5. Publish a Theoretical Manifesto

• **Objective**: Outline a comprehensive theoretical framework integrating Neo-Quantum Physics and *Adi Bhoutika Shastra*.

# • Content:

- Detailed analysis of Consciousness in quantum systems, supported by metaphysical insights.
- o Proposed methodologies for future experiments and theoretical developments.
- **Outcome**: Create a foundational text for guiding interdisciplinary research.

# CONCLUSION: TOWARD A UNIFIED UNDERSTANDING OF REALITY

By adopting a systematic methodology inspired by the *Upanishads*, this paper provides a structured exploration of the gross, subtle, and causal states, offering a comprehensive framework for integrating ancient metaphysical insights with modern scientific paradigms. This approach underscores the interconnectedness of material and metaphysical realities, leading to a unified understanding of existence.

The exploration of reality, as seen through the lenses of *Bhoutika Shastra* (classical physics), *Quantum Mechanics*, *Neo-Quantum Physics*, and *Adi Bhoutika Shastra*, offers a multi-dimensional framework that integrates the physical, probabilistic, metaphysical and unmanifested aspects of existence. These perspectives, each rooted in distinct scientific and philosophical traditions, converge to provide a comprehensive understanding of the universe.

# Bhoutika Shastra and Classical Physics

In classical physics, the world is perceived as a deterministic system governed by well-defined laws. *Bhoutika Shastra* offers a solid foundation for understanding the gross (observable), measurable aspects of the physical world (observable aspects of reality). However, it offers a more spiritual perspective by suggesting that the material world is one layer of a larger, interconnected existence. The laws of classical physics, such as Newton's laws of motion or Einstein's theory of relativity, help explain the mechanics of this physical layer but remain confined to the gross, material realm.

# **Quantum Mechanics and the Subtle Realm**

The rise of Quantum Mechanics challenged the deterministic framework of classical physics by introducing the concept of probability and uncertainty. Quantum phenomena, such as the wave-particle duality, superposition, entanglement, uncertainty and the observer effect, showed that at the subatomic level, particles behave in ways that defy classical understanding, challenge classical deterministic views, suggesting that reality operates on more abstract, probabilistic principles at the quantum level. Quantum Mechanics acknowledges that the act of observation plays a significant role in determining the state of a system, which points to a more subtle, non-material influence. Yet, even quantum mechanics, with all its groundbreaking insights, does not fully explain the role of Consciousness or the metaphysical dimensions of existence. This observation has parallels with ancient metaphysical philosophies, where the material and subtle realms are interconnected and influenced by Consciousness.

# **Neo-Quantum Physics and the Role of Consciousness**

This is where Neo-Quantum Physics steps in, seeking to unify these scientific perspectives with metaphysical inquiries into Consciousness and the ultimate nature of reality. Neo-Quantum Physics builds upon the foundations of Quantum Mechanics by positing that Consciousness is a critical component of the physical universe. It moves beyond both the gross and subtle states of existence to explore the causal or unmanifest state, where Consciousness plays a fundamental role in shaping reality. Rather than being separate from the material world,

Consciousness is an active participant in shaping reality. This branch of modern physics aligns closely with metaphysical ideas by suggesting that the observer's Consciousness is not merely a passive element but an active force that can influence outcomes at the quantum level. This integration of Consciousness into the scientific paradigm is reminiscent of ancient Bharatiya metaphysical teachings, as articulated in *Upanishads*, *Puranas*, and *Lalita Sahasranama*. These texts present a vision of reality where the physical and metaphysical, the manifest and the unmanifest, are interwoven, and Consciousness is seen as the foundational fabric of the universe.

The journey from *Bhoutika Shastra* to Neo-Quantum Physics thus reflects the evolution of human understanding from the material to the metaphysical. While *Bhoutika Shastra* offers insights into the observable universe, quantum mechanics challenges its assumptions, pushing us toward a more abstract understanding of the subtle, interconnected nature of reality. Neo-Quantum Physics, with its focus on Consciousness, seeks to bridge the gap between these scientific frameworks and metaphysical philosophies, offering a pathway to a more integrated and holistic view of existence.

# Adi Bhautika Shastra: Consciousness as the Primordial Source

A key insight emerging from this synthesis is the recognition that Consciousness is not merely an observer of the universe but an active participant in its formation. *Adi Bhautika Shastra* brings the analysis of reality to an even deeper metaphysical level. In this framework, Consciousness is the primordial cause of all manifestations—gross, subtle, and causal. *Adi Bhautika Shastra* holds that the gross and subtle worlds are simply different expressions of the same underlying Consciousness, and that all dualities and distinctions collapse into oneness within this Consciousness. Unlike *Bhoutika Shastra* and classical physics, which primarily deal with the physical, *Adi Bhautika Shastra* places the emphasis on the causal realm of Consciousness, from which both the gross and subtle emerge.

This ancient Bharatiya perspective teaches that Consciousness is not only an influencing force, as suggested by Neo-Quantum Physics, but the origin of all creation. In *Adi Bhautika Shastra*, both the observer and the observed are seen as manifestations of the same Consciousness. The cyclic process of creation and dissolution—where the universe manifests from an unmanifest state and eventually returns to it—can be understood as a process governed by Consciousness itself. This perspective aligns with *Vedantic* philosophies, which see *Brahman*, or ultimate reality, as the source and destination of all that exists.

This holistic view unites the physical and metaphysical, offering a unified theory of existence where Consciousness is not a passive observer but an active participant in the formation of reality. The teachings of *Lalita Sahasranama* provide a profound spiritual dimension to this understanding. Names like *Citsvarūpiṇī* ("She who is pure Consciousness"), *Mahāmāyā* ("She who is the great illusion"), and *Sarvānandamayī* ("She who is the embodiment of all bliss") encapsulate the idea that the material and metaphysical, the gross and subtle, and the manifest and unmanifest aspects of reality are all interconnected. The Divine Mother, as described in

these teachings, embodies the continuum of existence, offering a vision of reality that aligns with the scientific exploration of Consciousness and the universe.

# **Toward a Unified Understanding**

The synthesis of *Bhoutika Shastra*, Quantum Mechanics, Neo-Quantum Physics, and *Adi Bhoutika Shastra* perspectives holds profound implications for our current understanding to a more integrated understanding of reality. *Bhoutika Shastra* and classical physics provide the framework for understanding the gross, material aspects of the universe. Quantum Mechanics extends this by exploring the probabilistic, subtle realm. Neo-Quantum Physics takes the next step by acknowledging the influence of Consciousness on the material and subtle worlds. Finally, *Adi Bhautika Shastra* offers a complete metaphysical framework by positioning Consciousness as the causal source of all existence, where Consciousness is recognized as a driving force in both the manifest and unmanifest realms, providing a bridge between empirical science and metaphysical inquiry. This convergence suggests that the universe is not just governed by physical laws but also shaped by Consciousness, a perspective supported by both ancient philosophical traditions and modern scientific thought.

Future studies should focus on exploring the intersections between these realms, particularly the role of Consciousness in shaping the fabric of reality. By embracing both the empirical and the metaphysical dimensions of existence, we may uncover deeper truths about the nature of reality, leading to a more unified theory of the universe. This research should not only examine the physical forces governing the universe but also consider the metaphysical principles that influence its underlying structure.

In conclusion, the integration of *Bhoutika Shastra*, Quantum Mechanics, and Neo-Quantum Physics provides a multi-layered framework for understanding the universe, from the gross material world to the subtle probabilistic phenomena of quantum mechanics, furthermore to the causal, Consciousness-based dimensions explored by Neo-Quantum Physics and culminating in the concept of *Adi Bhoutika Shastra* provides a multi-layered framework for understanding reality. By acknowledging the role of Consciousness and grounding it in both the metaphysical insights of *Mandukya Upanishad* and empirical studies in quantum mechanics, such as Aspect's work on entanglement, we move closer to uncovering the true nature of reality and a unified theory of existence. This holistic vision has profound implications for both scientific inquiry and metaphysical understanding, we move closer to uncovering the true nature of reality, and perhaps, a unified theory of existence itself.

The proposed experiments and thought models outlined in the 'Future Directions' section provide actionable pathways for validating the interdisciplinary integration of metaphysics and quantum mechanics. By grounding these theories in empirical and technological advancements, we move closer to realizing their practical implications in understanding Consciousness and reality.

\*\*\*\*

### **Brief Profile of the Author:**

**Mr. Rameshchandra Ketharaju:** Rameshchandra's journey began with corporate quality management. Later he was drawn to process and product improvement as a master black belt and became a TRIZ practitioner too. As a self-motivated inventor, he delved into the intricate world of cybersecurity, distributed ledger, IoT, AI, quantum technologies, communication, and sensing.

His fascination for quantum science was developed with the inspirations from *Sanatana* shastras during his sadana. He is voluntarily contributing to the Quantum Ecosystems and Technology Council of India (QETCI), where he provides thought leadership to the Indian Quantum Economy.

**Statements and Declaration:** I declare that I have no conflict of interest with my places of employment or anybody else in publishing this article. No financial support was received for the work within this article.

# **Bibliography:**

# Primary Texts

- Mandukya Upanishad. (Translated by Eknath Easwaran). Ancient Indian Text.
- Brihadaranyaka Upanishad. (Translated by Swami Madhavananda). Advaita Ashram Publication.
- Lalita Sahasranama. (Commentary by Swami Tapasyananda). Sri Ramakrishna Math.

# Quantum Physics

- Aspect, A., Dalibard, J., & Roger, G. (1982). Experimental Test of Bell's Inequalities Using Time-Varying Analyzers. *Physical Review Letters*, 49(25), 1804–1807.
- Wheeler, J. A. (1978). The "Past" and the "Delayed-Choice" Double-Slit Experiment. *Mathematical Foundations of Quantum Theory*.
- Misra, B., & Sudarshan, E. C. G. (1977). The Zeno's Paradox in Quantum Theory. *Journal of Mathematical Physics*, 18(4), 756–763.

### Consciousness and Neuroscience

- Penrose, R., & Hameroff, S. R. (2014). Consciousness in the Universe: A Review of the 'Orch OR' Theory. *Physics of Life Reviews*, 11(1), 39–78.
- Stapp, H. P. (1993). Mind, Matter, and Quantum Mechanics. Springer.
- Tononi, G. An information integration theory of consciousness. *BMC Neurosci* **5**, 42 (2004).

# Metaphysics and Neo-Quantum Physics

• Russell, B. (1927). *The Analysis of Matter*. Kegan Paul, Trench, Trubner & Co.

### **References:**

# Sanskrit Texts and Philosophical Concepts

- Mandukya Upanishad: Insights into the Turiya state as the foundational consciousness.
- Brihadaranyaka Upanishad: Philosophical explorations of reality and the invocation "Asato mā sad gamaya."
- Lalita Sahasranama: Names like "Citsvarūpiņī," "Sarvānandamayī," and "Bindumandala rūpiņī," providing metaphysical insights into consciousness.
- Mundaka Upanishad: Parallels between sparks from a blazing fire and the multiplicity of the universe.
- Chandogya Upanishad: Descriptions of transitions from gross to subtle realities.
- Atharva Veda: Cosmic order as described in Bhu Suktam (12.1).

# Quantum Mechanics and Physics

- Aspect's Experiments: Foundational studies on quantum entanglement.
- Wheeler's Delayed-Choice Experiment: Exploration of the retroactive role of observation.
- Quantum Zeno Effect: Phenomena linking observation and stabilization of quantum states.
- Casimir Effect: Demonstrations of quantum vacuum fluctuations.
- Penrose and Hameroff (Orch-OR Theory): Theoretical connections between consciousness and quantum coherence.

# Integrated and Emerging Theories

- Neo-Quantum Physics: Paradigm integrating consciousness into quantum mechanics.
- Adi Bhoutika Shastra: Metaphysical framework for unmanifest and primordial reality.
- Interdisciplinary Connections: Bridging the Mandukya Upanishad's metaphysics with quantum mechanics principles.



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 69-80

# Integration of Enneagram with J Krishnamurti's Thoughts: An Effective Tool for Personal Growth – A Case Study

V. Vijaykumar, PhD

Chief Development Officer, Apna Vikas Online Services Private Limited, Bangalore, India

### **Abstract:**

Enneagram is a powerful and intense system for personal transformation. It classifies personalities into nine types and provides vivid descriptions of the types with pin-point depth and accuracy. It describes movements in personalities also. It has helped millions of people around the world to improve their relationship, leadership and to touch their spirituality. The first publication of the Enneagram came up a hundred years ago. The personality Enneagram came up in the 1960s. Since then there has been a lot of research to evolve the model further. I have studied the Enneagram and J Krishnamurti's thoughts for decades and integrated them to create a very interesting and profound tool to assess the psycho-spiritual aspect of any individual and assist them in their personal growth.

**Keywords:** Enneagram, Psycho-spirituality, Personal Growth, Psychological Injury, Conditioning

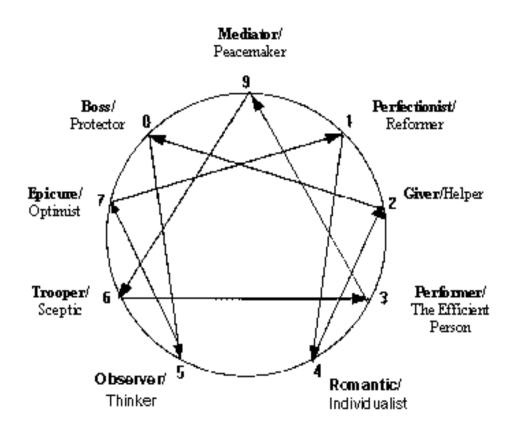
# **INTRODUCTION**

The Enneagram is a psycho-spiritual system offering help to millions of people worldwide. Its origins are obscure though Gurdjieff is said to have found it in the Middle East, near Afghanistan, in the early 1900s [1]. The personality Enneagram was developed by Oscar Ichazo in Bolivia in the 1960s [2]. Claudio Naranjo taught the Enneagram secretly to a few students in San Francisco in the 70s [2]. Since then there has been a lot of research, primarily in the United States of America, to evolve the model further.

I was introduced to Enneagram and related concepts in 2001 through a book on Integral Psychology [3] by the American philosopher Ken Wilber. This was also the time I was studying J Krishnamurti's philosophy [4,5,6,7,8,9,10]. In the following years I integrated Krishnamurti's teachings and the Enneagram concepts to create a very interesting and profound

tool to assess the psycho-spiritual aspect of any individual and assist them in their personal growth. The Enneagram has helped people appreciate the viewpoints of other individuals and redeem their relationships. It has also helped businesses improve their performance and capabilities. Some people have found deep inner peace and others love and hope. You can find some examples of how I have used this integrated approach later in this paper.

# WHAT IS ENNEAGRAM?



Source: Internet; image was available freely and does not belong to any organization

The Enneagram is a nine-pointed figure with arcs and lines. Ennea in Greek means nine and gram means something written or a figure. The Enneagram classifies the people in this world into nine personality types. They are *Type One*, *Type Two*, *Type Three* and so on. Each Type is represented by a point on a circle. The lines connecting the points denote integration and disintegration and the arrow denotes the direction of disintegration. The arcs denote transformation and conformation. For example, *Type One* disintegrates to *Type Four* under stress. *Type One* integrates to *Type Seven* under security. *Type One* may transform to *Type Two* or conform to *Type Nine* depending on the situation.

# **SCOPE**

Today we live in the times where the traditional systems of well-knit societies are continuously disappearing. As a result, the need for assistance and support from specialists for psychological growth and development is ever increasing. This is where the tools such as the Enneagram are immensely useful. A full description of the fundamental principles by which Enneagram addresses human problems is not the context of this paper. The reader is advised to refer to any book on this subject [2, 11]. This paper is also not about J Krishnamurthy's thoughts on choiceless awareness, psychological injury and freedom from religious, spiritual and cultural conditioning, however, a brief overview on him has been included in Annexure 1 for the benefit of the readers.

The focus of this paper is to introduce the nine personality types and to understand the application of the integrated tool of Enneagram with J Krishnamurti's thoughts in different scenarios and its broad relevance to modern living.

# PERSONALITY TYPES

**Type One:** Ones want to see themselves and the world as one perfect place. They have high degree of self-criticism and this often overflows into criticizing others. Some Ones control their sexual impulses and often have a high sense of morality. Ones are also good people because being bad is socially unacceptable. Ones correct others and have a high sense of right and wrong. Under stress their thinking tends to be black and white with no room for grey. Ones exercise excellent judgement and mature Ones set up and follow processes in everything. An outstanding quality with Ones is that they try to understand. Some of them are leaders and change agents. A very strong quality about Ones is that they use a lot of "what should be" in their talking. When they are very healthy they come close to "what is". Some Ones go on to become great reformers. Mahatma Gandhi is an example.

**Type Two:** The attention of the *Twos* goes on people. An outstanding feature of the *Type Two* personality is that they want to be associated with good quality people in nurturing relationships. Of all the types it is *Type Two* that gives most importance to relationships. They also give to get. Another feature of *Type Two* is that they are helpers. They deeply care for people they come across and are the embodiment of what we know as Human Resources in companies. Being feelers *Twos* have a poor mind. The social *Twos* are leaders. Some *Twos* like to be the power behind the throne. *Twos* are givers. They are conscious of the community and are drawn to humanitarian causes. Once again Social *Twos* are ambitious and go on to do well in life by attaching to the right people. Perhaps the greatest quality they have is that they are compassionate. Mother Teresa, the Nobel winner is an example of a *Type Two*.

**Type Three:** *Type Three* are the most attractive type in the Enneagram. The world beauty pageant winner Aishwarya Rai is an example. *Threes* are also the most hard-working type in

the Enneagram. Often industrious, they are found mostly in corporate companies. Many *Threes* are intelligent and like titles, positions and the money that comes with these accolades. *Threes* like leadership and the often unhealthy and heartless CEOs caricatured in videos are *Threes*. *Threes* are out of touch with their feelings and find it hard to relate well with people. They also don't know what their desires are and may play into the hands of authority figures. Of all the types it is the *Threes* that completely succumb to the expectations of the society and try to fit roles. One outstanding quality is that they become leaders of corporations, know exactly what each one is capable of and use their charisma to run successful organizations.

**Type Four:** Of all the types unhealthy *Fours* have the severest inferiority complex. Often very temperamental and dauntless they may try to coerce others into submission. *Fours* have the best emotional intelligence. They take time to process their feelings, are highly empathetic, show depth in their work and, when healthy, are evolved with great artistry and creativity. The ordinary *Four* is unfit to work in corporates and find comfort in non-profits. Often quite dramatic, they are the best actors amongst the nine types in the Enneagram. Hollywood actors Marlon Brando and Jonny Depp are examples. The common *Four* may not be very competent and commercial but healthy and evolved *Fours* display outstanding qualities of authenticity, vulnerability and sensitivity. *Fours* have a poor mind but, in some cases, may have perfect knowledge of their domain.

**Type Five:** Of all the types in the Enneagram *Type Five* is the most intelligent. They are highly intellectual and the true thought leaders in the industry. Many of them are imaginative and have deep knowledge in their expertise. They are also likely to know something about everything. *Type Fives* are also the most emotionally detached and withdrawn of all types and for this reason may run into problems in their marriage. Often inventive and innovative, they are the technocrats of the world. They have multiple degrees and are the bedrock of the education system and philosophies of the world. Many *Fives* are highly evolved and are difficult to understand. They may have wonderful ideas and deep insights in areas they choose to work on. The great Albert Einstein is an example. When healthy, *Type Fives* can open their heart and become highly social and offer themselves for service of the world.

**Type Six:** The thing about the *Six* is that they have multiple competencies. They are good at arts, science, sports, politics, family, everything. Like a *Five* and a *Seven* they are a mind type. They have a well-developed intellect and excellent analytical abilities. They go on to become scientists. They also believe in social cohesion and teamwork. More than anything they are workers. Wherever they go their immediate tendency is to work, only to find a problem with that. The typical *Six* is always looking for threats and dangers. The typical *Six* is highly anxious, worrying and mistrusting of people. They blame others and have self-doubt and deep feelings of inferiority. If they come out of these problems they can contribute a lot and be excellent family men and a glue to the community. Trust and security are most important for a *Six*. The Indian politicians Subramaniam Swamy and Arvind Kejriwal are perfect examples.

**Type Seven:** Sevens are the type that mostly want to live a good life. They respond to stimuli immediately, are often quite commercial and want enjoyment more than anything in life. Their life has to be fun and exciting. The infamous Indian businessman Vijay Mallya, King of Good Times, comes to mind. Sevens are a mind type. Some healthy Sevens are quite wonderfully imaginative visionaries. They get many ideas and can cross-fertilize ideas from different domains. They are thinkers and would like to work somewhat but are not doers at all. Like the Six and Five they have fear. They may fear that their ideas might fail and they will lose all the money. The uneducated Seven is unintelligent and full of conflict and anger. They speak what comes to mind which may be scattered sometimes. If they know how to overcome fear and get along with people they can become worthy contributors because of their instinct to plan and intense futuristic thinking.

**Type Eight:** *Eights* are the bosses of the Enneagram. They have natural leadership or at least it appears so. *Eights* know where the power is and how to use it. They also believe in authority. *Eights* may sometimes care for people and will fight for the justice of the underprivileged. They are based on their bodies and can be aggressive at times. They know how to use their anger and are always wary of people who try to control them. Ordinary *Eights* are very good at bringing resources and always have some projects and people lined up. Mature *Eights* may be found leading companies and departments and will usually do a good job of it. They are very good in converting ideas to action and sometimes be strong in their views of people and society. Very healthy *Eights* have qualities like magnanimity and compassion. Charlton Heston in the movie Ben-Hur is an excellent example of an *Eight*.

**Type Nine:** *Nines* are calm, gentle, compliant and soft people. They are most averse to conflict among Enneagram types. They love peace and will create a harmonious environment wherever they go. Usually not leaders but followers, they are the ones that treat people the best if they do get to lead. Some *Nines* can be incompetent and have problems in the job. They don't work or think but are excellent doers. They can get quickly angry and generally tend to have a locus of control outside of themselves like an *Eight* or a *One*. *Nines* have an extremely simple mind. They are not feelers but brilliant in accepting people as they are. They easily get along with people and are strong collaborators in the workplace. They are the ones who have a long tenure in an organization. Some *Nines* can be creative and commercial. Walt Disney and JK Rowling are excellent examples of the *Nine* type.

# INTEGRATED ENNEAGRAM APPROACH IN PERSONAL TRANSFORMATION

Life conditions us so much. And it is a huge task to come out of this conditioning. When we were young we were exposed to so many things. There was academics. There was sport that we didn't watch but actually took part of. There were hours and hours of non-stop talking with friends and relatives. There was music and films. And of course, there were television programs and political discourses. There was even religious discourse. All this took place in the context of a family. While these seemed engrossing, enlightening and entertaining, they were also

conditioning some of us. People go abroad and encounter a new culture. There is also the pressure of having to understand advanced study material and then perform research. All this puts pressure on the individual. As the rubber meets the road the pieces come apart. The person may suffer mental disorders like clinical depression and bipolar disorder. Add to this an abusive advisor. Even staying alive becomes challenging. The conditioning takes a full grip on him. Performance is not as good as desired. Relationships are at the worst. Still the person is fighting. He is working fourteen hours a day, for six years, to complete his degree. At some point the wheels come apart. There are even murderous thoughts. All these come to an end with the obtainment of a degree certificate. And father's death.

At some point there is a bit of perception. There is this feeling that there is definitely a better way of living life than what was encountered. The person starts looking for some help. He does the only thing he knows. Go looking for books and libraries. Slowly the Enneagram finds him. And around the same time he encounters J Krishnamurthy's thoughts on choiceless awareness, psychological injury and freedom from religious, spiritual and cultural conditioning. He begins to devour reams and reams of psychological literature. His curiosity grows. He asks questions. He tries to understand. Only to realize that he is falling short each time. The work continues. He meets other people like himself. They are onto the search too. For something much bigger than his little self. Ironically, he realizes that it is the self that is at the root of the problem. Slowly he gathers strength. He knows his inner work has begun. He continues to show interest in understanding the world of relationship. Slowly he begins to understand what it is to live life actually. His intellect supports him. His intelligence is awakened. He is able to converse with people freely. He is also able to direct his activities. He finds a job. With that some money. There are recurring problems but this time he is not overwhelmed. His quest for something big continues. There are people to appreciate his journey. He realizes that because of all his inner work he is quite evolved. He continues to show interest in this kind of education. He meets new people. Or rather people want to meet him. He has assimilated a body of knowledge. He has made strides on wisdom too. He is quite healthy, psychologically speaking. He finds new modes of employment. People are easily able to appreciate his capability. He continues to stay engaged in learning new areas. It could be environment or economics or politics or science. His intelligence declines a bit but is still sharp. He helps a lot of people. Years or even decades pass. He has grown a heart. He is now a service leader, which very few people get to. He is even physically healthy. He knows his life has been a journey. But he has no time to call it the end. In fact, he makes plans for what to do with the remaining years of his life. He integrates his family, which he had once denounced because they were toxic. There is no old nemesis like anxiety, worry, intention, desire, conflict, enjoyment or fear. His life is free. (This section is nothing but the author's own experience).

# INTEGRATED ENNEAGRAM APPROACH IN FAMILY AND COMMUNITY

When a new situation arises like people moving into an apartment community, several things can happen. Outwardly it may seem like a government employee, a banker, an engineer, a

scientist, a company worker and a housewife are all occupying their new homes. But deep down it is the psychological types at work!! A *Four* will be interested in pursuing his ideas. A *Six* will begin to work and quickly see who else is working. A *Three* will look to see who is recognizing him. Another *Three* will be scared that she has to work. The *Eight* will look at who to assign work. The *Nine* will try to get along while internally fuming. The *One* will find the whole environment utterly disgusting. The *Seven* will be angry that his needs are not met and that he is being restricted. Add to this a deficit rainfall and the problem of distributing water. There is utter chaos. There is practically no trust and understanding. There is only anger and aggression.

This is the reality of today's living in a city in India or for that matter elsewhere in the world. There are constant conflicts. People have huge egos to defend their frail, highly inferior selves. How do you live sanely in this situation? The first thing to realize is that these are all habitual patterns. They are not real. Really speaking, if you could just look at the situation there is no work. Work is there only in the mind. The habitual patterns, values and beliefs have been ingrained since childhood – that is one has to work. The only thing to do is to just distribute water. What will be insightful and important is to see whether work or learning or relationship is aggravating or reducing conflict. Very often work increases the disintegration and conflict. And learning, which is merely acquiring knowledge, breeds conformity. Relationships are stressful. So, once we identify the source of the conflict it can be removed.

Having said all this, a small bit of work like fixing the motor or the valves or studying the permeation to resolve the water issue, does happen. But the dominant force is one of conflict, disintegration and chaos. On a rare occasion people show a bit of gentleness. Since the dominant trait is one of broken relationships and fights, this has a way to affect in the long run. People don't see face to face and do anything productive. There are constant arguments. There is no competence. People are leaving the place. On rare times, there is abuse.

The Enneagram and J Krishnamurti's philosophy teaches us that these are nothing but patterns in thinking and acting. These are illusory, the reality is something else. One has to work on his blaming, anxiety, doubt and mistrust. Only then there will be normalcy and trust. One has to slowly develop some capability – to face the world. So, the next time you enter a situation, don't be blindly happy. The Enneagram teaches us to ask – is this stressful or securing? What are the habitual patterns? How old are the mental models and beliefs? What is dominant and how will that affect in the long run? Is the conflict aggravating or subsiding? And so on.

# INTEGRATED ENNEAGRAM APPROACH IN THE WORKPLACE

Take the case of a small biotechnology company in the backdrop of beautiful Pennsylvania in the US, in the late 1990s. They were trying to develop a DNA based vaccine. It may seem from the outside like the latest technology with lots of monetary incentives. But once you get inside the workplace you would notice the reality is completely different. There is a *Six* trying to work

and getting a few others to work. There is a *Three* CEO openly putting pressure on people. There is a *Seven* that supports creativity. There is a *Nine* wanting to develop himself. There is a *One* rookie. There is an *Eight* senior manager. And then a *Two* woman who partners with the *Six*. All of this may seem okay but the truth is there are bitter fights. No one seems to get along. The main conflict is between the *Six* and the *Nine*. They both want the other out of the company. The *Seven* doesn't like the *One* because he doesn't work. The *Two* is toxic and is merely loitering around. The *Three* doesn't have a clue what to do but wants everyone to work hard. To cut to the chase, the company didn't survive and got sold.

There are also *Six* and *Seven* influences. All three types want to work. That is the dominant culture in the country and the company. But the reality is that work isn't helpful. It helped the company somewhat but then stopped. Because relationships were not developed. Research was not done. Proper knowledge was not available. There was undue aggression and intensity. Deep down the *One* who was from India knew this. He very well knew that work and intensity were increasing the rift between people. And that there is an absolute need for people to get along. There is very badly a need for leadership. No one was listening to anyone. They were only pushed by their egos. There was a real need to sit and talk. There was a need to develop trust. There was a dire need for understanding.

Another perspective the Enneagram offers is, what is the current model that the company is following? Being a technology company, the company was following a typical academic style of functioning led by senior researchers. But the thing to do was to look where the company was in its evolution. It raised money, it did some clinical trials and it tried some ideas, now what? Now it had to do some development. That required trying out certain things that look like research. This subtlety and nuance were completely overlooked by the company management. Had they only consulted the young *One* and *Nine* they would have gently suggested what needs to be done. But the *Three* CEO was calling the shots, so to speak. The thirty million dollars that was raised got wasted. No product was developed. At some point the *Six* threatened the *One* for insubordination. The *One* quickly left the company. He learns later that the *Six* was completely insecure, had severe fights later in his career, left a trail of mess and never contributed to the industry or the economy. (The author was the Type *One* in the story above and went on to gather more such experiences).

# INTEGRATED ENNEAGRAM APPROACH AND THE PLANET

If you take the Indian societal landscape, there is widespread violence, apathy and loneliness. Life in India is not how it was fifty years ago when there was trust, community and overall safety. If you take the United States, there are just any number of divisions. Arrogance and aggression. There is open racism and violence in Australia. So, it is in Western Europe. Take the Israel-Palestine conflict. So many innocent children are losing their lives while India and much of the West are supporting Israel. There is genocide. There is any degree of terrorism in

the world. Even countries like England have teething poverty problems. There is a strong nexus between the private sector companies and the government leadership. The rich are not taxed as much and the older generation has to pay the price. Consumerism is way too much. Just in the last six years the world has consumed more than what it did in the previous century says a LinkedIn post. The environment is at its worst. There is so much trash that goes into the oceans that affect the subtle ecology there reducing oxygen production that is so essential to human life. Elephants are being butchered in Nairobi for food. Just the city landfills are teeming with trash and stench. There are floods and forest fires almost regularly. The heat wave and cold waves are totally changing life on earth. What is the one reason for all this? Human activity and greed!!

I have been studying psycho-spirituality for the last twenty-six years. I have particularly spent over two decades on the Enneagram and J. Krishnamurti. From an aggressive, competitive man I changed into an intelligent and compassionate man. I am mostly not violent and intense. I live my life with a great deal of peace and harmony. I do research and some coaching. People like me and come to talk to me internationally. I consume very little food and other things. I live a simple life. More than anything I have unconditional love for children. I am also highly evolved. I attribute all this to the Enneagram and my patient work. My curiosity and the desire to understand the world have got me into this position. As I said earlier, millions worldwide are changing their lives as we speak with the help of teachings such as the Enneagram. It is my goal to take the Enneagram to the masses of India. It is not so much the knowledge but the transformation that comes with it that is important to notice here. Depending on the interest level an individual can spend five years or twenty years or a lifetime in psychology and spirituality. Depending on the level of involvement the teachings will have an impact on the person. One may wonder, how will a mere knowledge of types and movements will cause changes in the personality? Continual application of understanding will provide for deep psychological development in people. What will this do? It will change the worldview of the person. He won't choose the same tired relationships anymore. He won't make the same old career choices. He will change his eating and drinking habits. He will have time for his children. He will develop the community. All this means he is not consuming much in terms of planetary resources. He can do a lot more like science and arts with a lot less. He will get a chance to live a transformed life not just minimizing damage to the planet but actually regenerate the world with his thoughts and actions.

# **CONCLUSION**

Whether it is India or Europe or America, humanity is the ultimately the same nine types. And challenges exist in everyone's lives. At an individual level and at a collective level, we are all grappling with our issues. There are various paths to life and work. Every person has undergone a different journey and, hence, every person has a different perspective and worldview. A deeper understanding of the various personality types, using Enneagram as guide, and our inner

world, using J Krishnamurti's thoughts, can provide some direction on how to navigate or overcome these challenges.

Enneagram and other such models have paved the way for greater understanding of the psychology of individuals and provides a workable approach to resolve our issues and to regain our mental health. I was once a little student with thoughts of dying due to ultimate depression. From there I am at a point looking for opportunities to help the country's citizenry come out of their myriad problems and deficiencies. This journey continues in other people that I may have touched and those who have learnt from me.

In conclusion, the Enneagram is an enticing way to enrich oneself with profound psychological knowledge and it offers a key to understanding self, others and the world. Integrating this psychological knowledge with insights from J Krishnamurti, on how to navigate psychological injury and how to free oneself from various conditionings, will give individuals a chance to live a life which is fulfilling in every respect.

\*\*\*\*

# **Brief Profile of the Author:**

V. Vijaykumar started his career in science with an undergraduate degree from BITS, Pilani. He then moved to the US to do research in drug delivery and get a Ph.D. degree from the University of Kansas. Unhappy with life in the States, he returned to India and started to study psychology and spirituality. He came across Enneagram in June 2001 and went on to learn the system and add knowledge to the ancient model through his observations, experiences, thinking and reading. In the process he integrated J Krishnamurti's teachings into the Enneagram thus shaping his mind with profound psycho-spiritual thinking and knowledge.

Vijaykumar has made several attempts at working in the industry which only reinforced his unsuitability to live the corporate life. Over a period of time Vijay studied various other systems and developed a capability to transform organizations. In the last five years he spent time on LinkedIn learning about various problems in the world and adapting his knowledge to address those issues in a fundamental manner. This led to his interest in large scale societal transformation using psycho-spirituality as a tool. He is currently the Chief Development Officer for Apna Vikas, a Bangalore based start-up focused on bringing self-development to the Indian public.

**Statements and Declaration:** I declare that I have no conflict of interest with my places of employment or anybody else in publishing this article. No financial support was received for the work within this article.

# **References:**

- 1. The Enneagram of Passions and Virtues, finding the way home, Sandra Maitri, Penguin Group, 2009.
- 2. The Complete Enneagram, 27 Paths to Greater Self-Knowledge, Beatrice Chestnut, She Writes Press, 2013.
- 3. Integral Psychology, Consciousness, spirit, psychology, therapy, Ken Wilber, Shambala, 2000.
- 4. Freedom from the known, J Krishnamurti, Krishnamurti Foundation of India, 1969.
- 5. The first and last freedom, J Krishnamurti, Krishnamurti Foundation of India, 1954.
- 6. The awakening of intelligence, J Krishnamurti, Krishnamurti Foundation of India, 1973.
- 7. On fear, J Krishnamurti, Krishnamurti Foundation of India, 1994.
- 8. Krishnamurti's notebook, J Krishnamurti, Krishnamurti Foundation of India, 1976.
- 9. The urgency of change, J Krishnamurti, Krishnamurti Foundation of India, 1970.
- 10. <a href="https://www.jkrishnamurti.in/the-store/">https://www.jkrishnamurti.in/the-store/</a>
- 11. Principles of the Enneagram, Karen A. Webb, Singing Dragon, 2013.

### Annexure 1

J Krishnamurti was born in Madanapalli in India in 1895. He started giving talks on various topics including life, love, spirituality, society, philosophy and religion since the age of twenty-five and went on almost till his death in 1986. When he gave talks, it didn't just come from his knowledge or intellect but from his being. One of the outstanding things about his talks was his razor-sharp intellect and the ability to cut through any topic of his interest with precision and depth. He is still remembered for his intense discussions with David Bohm, the physicist.

J Krishnamurti produced a huge body of work and wrote over a hundred books. His work has given strength and has awakened the intelligence of millions of people in the world and, in my experience, whatever he has said was so profound that it could never be challenged. Krishnamurti was not only a philosopher but a spiritualist and a social transformer too. He started numerous schools and has foundations in India, America. England and Switzerland.

In today's world, where there is so much fragmentation, his teachings bear the torch for what he would say the society was doing – going towards a self-destructive path and ruin. "It is not a measure of health to be well adjusted to a profoundly sick society" said Krishnamurti.

In all his teachings he has talked about how society conditions man and how man should dedicate his life to come out of this conditioning, as he himself did. Just what are the things that the society throws at man? Comparison and competition. Desire. Greed. Pleasure. Arrogance. And the like. Krishnamurti would dissect each one these qualities and point out how deleterious it is to live a life of such qualities and how man is limiting himself and others around him by following such a life. For example, "Effort is an abomination" said Krishnaji (as he was affectionately called). This went against what people commonly knew – that effort brings prosperity. He was not against making money. "Do what you love and money will follow" he said. And actually went on to do the same in his life. Krishnamurti made thought the cornerstone of his teachings. He said that it was thought that was at the root of all suffering. It is one thing to actually suffer in a situation but quite another to keep thinking about it all the time. In this sense he was much like the Buddha. Knowledge too is a huge problem in life. In fact, Krishnaji said, "Knowledge is the enemy of love". Love to him was not just sexual or romantic love. Love was intelligence. In such a love there was no other. It transcended many of the dualities and the self.

Krishnamurti developed ideas of psychological living, psychological evolution, psychological time, psychological memory and so on. He said humans should come out of such psychological living and live a truly liberated life. Krishnamurti experienced the highest spirituality such as thoughtlessness, wholeness, emptiness and perception.

Krishnamurti is now considered one of the greatest philosophers of all time.



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 81-94

# The Sanatana Concept of the Five Pranas and its Interrelation with Human Health and Well-being (Svastha)

Dr. David Frawley (Pandit Vamadeva Shastri)
Padma Bhushan Recipient - Govt. of India
Director of American Institute of Vedic Studies, www.vedanet.com

### **Abstract:**

Prana is not the breath, though it is closely related to it at a physical level. Prana, broadly speaking, is our vital energy that operates body and mind and has not only physical but also mental and spiritual aspects, with the qualification that it is the broader life energy in the world of nature, and specifically our own life energy as individual creatures, extending to the reincarnating soul. Many people define prana as the breath or call it the breath. This can help us approach the vast subject of prana but can be misleading if we take it literally. In this article we will examine what prana is on different levels, its connection with the breath and its energy behind and beyond the breath, including various pranayama practices. Pranayama practices can help us connect to the prana not only outwardly but inwardly, including leading us to the higher prana of the breathless state.

Keywords: Prana, Samana, Vyana, Apana, Udana, Pranayama

# INTRODUCTION

Life is immortal and eternal. The Earth, nature, and the entire universe is full of life, ever overflowing with life on different levels, dimensions and in innumerable forms and expressions. Though all embodied creatures must eventually die, as many more are continually being born. Death is a renewal of life, not the end of life, like our daily sleep that leads to a new day.

Life in Sanskrit is called *Prana*, which is not merely the breath as often translated, but the vitality, life-force and cosmic energy of life and consciousness as a whole. While *Prana* is common in Yogic thought and different forms of *Prana* may be introduced, the subject of *Prana* and its different subtypes is seldom examined in depth. In this detailed article we will

look into this vast subject, that we might be awakened to the great expanse of *Prana* in all of its manifestations.

*Prana* has many levels of meaning from the breath to the energy of consciousness itself. *Prana* is not only the basic life-force, it is the master form of all energy working on the level of mind, life and body. Indeed, the entire universe is a manifestation of *Prana*, which is the original creative power. Even Kundalini Shakti, the serpent power or inner power that transforms consciousness, develops from the awakened *Prana*.

The human being consists of five *koshas* or sheaths from the physical to subtle and causal principles:

- Annamaya kosha food physical the five elements
- Pranamaya kosha breath vital the five pranas, subtle body energies, motor organs
- Manomaya kosha impressions outer mind sense organs, deeper imagination, astral
- Vijnanamaya kosha ideas intelligence directed mental activity, deeper wisdom
- Anandamaya kosha experiences memory, subliminal and superconscious mind, repository of karmas, causal

### PRANAMAYA KOSHA

The *Pranamaya Kosha* is the sphere of our vital life energies. This sheath mediates between the body on one side and the three sheaths of the mind (outer mind, intelligence and inner mind) on the other and has an action on both levels. It meditates between the five gross elements and the five sensory impressions.

The best English term for the *Pranamaya kosha* is probably the "vital sheath" or "vital body," to use a term from Sri Aurobindo's Integral Yoga. *Pranamaya kosha* consists of our vital urges of survival, reproduction, movement and self-expression, being mainly connected to the five motor organs (excretory, urino-genital, feet, hands, and vocal organ).

Most of us are dominated by the vital body and its deep-seated urges that are necessary for us to remain alive. It is the home of the vital or subconscious ego which holds the various fears, desires and attachments which afflict us. We most of us spend our time in life seeking enjoyment through the vital in the form of sensory enjoyment and acquisition of material objects.

A person with a strong vital nature becomes prominent in life and is able to impress their personality upon the world. Those with a weak vital lack the power to accomplish much of anything and have little effect upon life, usually remaining in a subordinate position. Generally, people with strong and egoistic vitals run the world, while those with weak vitals follow them. Such a strong egoistic vital is one of the greatest obstacles to the spiritual path.

A strong vital or *Pranamaya kosha*, however, is important for the spiritual path as well, but this is very different than the egoistic or desire oriented vital. It derives its strength not from our personal power but from surrender to the Divine and its great energy. Without a strong spiritual vital we lack the power to do our practices and not fall under worldly influences.

Yet *Prana* in various forms exists in all five *koshas* and is ultimately rooted in the *Atman* or inner Self beyond them. This *Atmic Prana* is the highest *prana* and grants healing and immortality of consciousness.

#### THE FIVE *PRANAS*

*Pranamaya kosha* is composed of the five *Pranas*. The one primary *Prana* divides into five types according to its movement and direction. This is an important subject in Ayurvedic medicine as well as Yogic thought.

### Prana

*Prana*, literally the "forward moving air," moves inward and governs reception of all types from the eating of food, drinking of water, and inhalation of air, to the reception of sensory impressions and mental experiences. It is propulsive in nature, setting things in motion and guiding them. It provides the basic energy that drives us in life. Ultimately it connects to the *Purusha* or the higher Self within.

# Apana

Apana, literally the "air that moves away," moves downward and outward and governs all forms of elimination and reproduction (which also has a downward movement). It governs the elimination of the stool and the urine, the expelling of semen, menstrual fluid and the fetus, and the elimination of carbon dioxide through the breath. On a deeper level it rules the elimination of negative sensory, emotional and mental experiences. It is the basis of our immune function on all levels.

### Udana

*Udana*, literally the "upward moving air," moves upward and qualitative or transformative movements of the life-energy. It governs growth of the body, the ability to stand, speech, effort, enthusiasm and will. It is our main positive energy in life through which we can develop our subtle and causal bodies and evolve in consciousness.

### Samana

*Samana*, literally the "balancing air," moves from the periphery to the center, through a churning and discerning action. It aids in digestion on all levels. It works in the gastrointestinal tract to digest food, in the lungs to digest air or absorb oxygen, and in the mind to homogenize and digest experiences, whether sensory, emotional or mental.

At a higher yogic level, it provides the balance to take us into *Samadhi*, the yogic state of unity consciousness.

# Vyana

Vyana, literally the "outward moving air," moves from the center to the periphery. It governs circulation on all levels. It moves the food, water and oxygen throughout the body, and keeps our emotions and thoughts circulating in the mind, imparting movement and providing strength. In doing so it assists all the other Pranas in their work. On a higher level it allows our energies to expand into the infinite.

The five *Pranas* are energies and processes that occur on several levels in the body and mind. However, we can localize them in a few key ways particularly relative to the physical body.

- *Prana Vayu* governs the movement of energy from the head down to the navel, which is the Pranic center in the physical body.
- Apana Vayu governs the movement of energy from the navel down to the root chakra.
- Samana Vayu governs the movement of energy from the entire body back to the navel.
- *Vyana Vayu* governs the movement of energy out from the navel throughout the entire body.
- *Udana* governs the movement of energy from the navel up to the head.

As a simple summary we could say that *Prana* governs the intake of substances. *Samana* governs their absorption. *Vyana* governs the circulation of nutrients. *Udana* governs the release of positive energy. *Apana* governs the elimination of waste-materials.

This is much like the working of a machine. *Prana* brings in the fuel, *Samana* converts this fuel to energy, *Vyana* circulates the energy to the various work sites. *Apana* releases the waste materials or by products of the conversion process. *Udana* governs the positive energy created in the process and determines the work that the machine is able to do.

The key to health and well-being is to keep our *Pranas* in harmony. When one *Prana* becomes imbalanced, the others tend to become imbalanced as well because they are all linked together. Generally, *Prana* and *Udana* work opposite to *Apana* as the forces of energization versus those of elimination. Similarly, *Vyana* and *Samana* are opposites as expansion and contraction.

# HOW PRANA CREATES THE PHYSICAL BODY

Without *Prana* the physical body is no more than a lump of clay. *Prana* sculpts this gelatinous mass into various limbs and organs. It does this by creating various channels or *Nadis*, through which it can operate and energize gross matter into various tissues and organs.

Prana Vayu creates the openings and channels in the head and brain down to the heart. There are seven openings in the head, the two eyes, two ears, two nostrils and mouth. *Udana* assists *Prana* in creating the openings in the upper part of the body, particularly those of the mouth and vocal organs. The mouth, after all, is the main opening in the head and in the entire body. It could be said that the entire physical body is an extension of the mouth, which is the main organ of physical activity, eating and self-expression.

Apana Vayu creates the openings in the lower part of the body, those of the urino-genital and excretory systems. Samana Vayu creates the openings in the middle part of the body, those of the digestive system, centered in the navel. It opens out the channels of the intestines and the organs, like the liver and pancreas, which secrete into it. Vyana Vayu creates the channels going to the peripheral parts of the body, the arms and legs. It creates the veins and arteries and also the muscles, sinews, joints and bones.

In summary, *Samana Vayu* creates the trunk of the body (which is dominated by the gastro-intestinal tract), while *Vyana Vayu* creates the limbs. *Prana* and *Udana* create the upper openings or bodily orifices, while *Apana* creates those below.

*Prana* however exists not just on a physical level. The navel is the main vital center for the physical body. The heart is the main center for the *Pranamaya Kosha*. The head is the main center for *Manomaya kosha*.

# PRANA AND THE MIND

The mind also has its energy and *Prana*. This derives from food, breath and impressions externally. The Five *Pranas* work upon the mind in ways a little different than they do on the physical body as their action is at a subtle level.

- *Prana* governs the intake of sensory impressions.
- Samana governs mental digestion.
- Vyana governs mental circulation.
- Apana governs the elimination of toxic ideas and negative emotions.
- *Udana* governs positive mental energy, strength and enthusiasm.

On a psychological level, *Prana* governs our receptivity to positive sources of nourishment, feeling and knowledge through the mind and senses. When deranged it causes wrong desire and insatiable craving. We become misguided, misdirected and generally out of balance.

Apana on a psychological level governs our ability to eliminate negative thoughts and emotions. When deranged it causes depression and we get clogged up with undigested experience that weighs us down in life, making us fearful, suppressed and weak.

Samana Vayu gives us nourishment, contentment and balance in the mind. When deranged we cling to things and become possessive in our behaviour.

Vyana Vayu gives us free movement and independence in the mind. When deranged it causes isolation, hatred, and alienation. We are unable to unite with others or remain connected in what we do.

*Udana* gives us joy and enthusiasm and helps awaken our higher spiritual and creative potentials. When deranged it causes pride and arrogance. We become ungrounded, trying to go to high and lose track of our roots.

### HIGHER YOGIC ASPECTS OF THE FIVE PRANAS

The *Pranas* have many special actions in Yogic practices. On a spiritual level, *Samana Vayu* governs the space within the heart (*antar hridyakasha*) in which the true Self, the *Atman* dwells as a fire with seven flames, governs the central internal space or *antariksha*. *Samana* regulates *Agni* with fuel, which must burn evenly. Without the peace and balance of *Samana* we cannot return to the core of our being or concentrate the mind.

Vyana governs the movement of *Prana* through the *Nadis*, keeping them open, clear, clean and even in their functioning. *Apana* protects us from negative astral influences and false teachers. *Prana* itself gives us the proper aspiration for our spiritual development.

*Udana* governs our growth in consciousness and takes the mind into the state of sleep and into the after-death realms. *Udana* also governs the movement up the *sushumna*, including the awakening of the *Kundalini*. The mind moves with *Udana Vayu*. This takes us to the states of dream and deep sleep. After death it leads the soul to the astral and causal planes. *Udana* is often the most important Prana for spiritual growth. It also governs *mantra*.

As we practice Yoga the subtle aspects of these *Pranas* begin to awaken. This may cause various unusual movements of energy in body and mind, including the occurrence of various spontaneous movements or *kriyas*. We may feel new expanses of energy (subtle *Vyana*), great peace (subtle *Samana*), a sense of lightness or levitation (subtle *Udana*), deep groundedness and stability (subtle *Apana*), or just heightened vitality and sensitivity (subtle *Prana*).

# PRANA, THE BREATH AND SENSES

First let us examine the role of the breath relative to *prana*. The breath serves to keep the *prana* or life force in the body and feeds it. Breathing is the main function of the *prana* to sustain our physical life. *Prana* derives from various external sources starting with the air taken by the

lungs. This action of breathing is the main and most immediate life function we have. If a person fails to breathe, life cannot be sustained for very long afterwards.

We also take in pranic life energy from our sensory openings or orifices in the head. These include the 2 eyes, 2 ears, 2 nostrils and mouth, called the seven *pranas* in Vedic teachings. Air is taken in by the nostrils, sensations of light through the eyes and of sound by the ears, food and beverages and air through the mouth.

The mind is connected to the senses and brings in the life energy of words, emotions and thoughts, and through human contact at a mental level. The breath also energizes the senses and mind and promotes digestion. We also take in life energy from the skin and the sense of touch that covers the entire body. The breath is only one part of this, though central in its function.

# PRANA AND AGNI

The human body is built around the digestive fire or *Jatharagni* in the navel region that extracts the *prana* from food and beverages. This is a kind of material fire digesting the earth and water elements. There is a second gaseous or pranic fire in the lungs and heart region that digests the *prana* from the air that we breath. This is called *Pranagni* or the *Agni* of *Prana*.

That *prana* so nourished by external pranic inputs runs all of our vital activities including through the other four *pranas*, *Udana* and *Apana*, upward and downward moving forces of vital energy, *Samana* and *Vyana*, contraction and expansion movement of vital energy.

Yet these outer physical pranic sources sustain a deeper inner *prana* or life energy, whose ultimate origin is not physical, but our own *Atman* or inner Self, the immortal Divine consciousness at the core of our being. We have an inner spiritual pranic core which bodily processes of breathing, eating, sensing and thinking support at a physical level.

This inner pranic core or flame, like a pilot light in a gas stove, endures during deep sleep and goes on to another body after death. It supports all vital activities of body, senses and mind. This inner *Prana* is beyond the breath, though held in the body by the breath.

# WORKING ON PRANA - PRANAYAMA

Proper nutrition brings about the increase of *Prana* on a physical level. This also requires proper elimination. In Ayurvedic thought the *Prana* from the food is absorbed in the large intestine, particularly in the upper two-thirds of this organ, which is not simply an organ of elimination. For this reason, *Apana Vayu* is the most important *Prana* for physical health and treating *Vata dosha*.

The main method for working on *Prana* is *Pranayama* or mainly Yogic breathing exercises. Yoga emphasizes purification of the body (*deha suddhi*) and purification of the mind (*chitta suddhi*) as the means to Self-realization. For this reason, Yoga emphasizes a vegetarian diet rich in *Prana* or foods full of the life-force and a mind rooted in ethical values like truthfulness and non-violence. An impure, toxic or disturbed body and mind cannot realize the higher Self. However, the key to purifying body and mind is *prana*. For this purpose, the main method is purification of the *nadis* or channels through which *Prana* flows (*Nadi-shodhana*).

While all *Pranayama* aids in this regard, most important is alternate nostril breathing, which aids in the balance of the right and left *Prana* currents. According to the Yogic system the body and all of its channels follow a right or left predominance. The right side of the body is masculine or solar in nature. The left side is feminine or lunar in nature. The left or the lunar *nadi*, is *Kapha* or water predominant, and increases energy on the left side of the body. It aids in such activities as rest, sleep, relaxation. The right or solar *nadi* is *Pitta* or fire predominant and increases energy on the right side. It aids in such activities as digestion, work, and concentration.

Regular alternate nostril breathing is the most important method for keeping our *Pranas* or energies in balance. It helps create the unitary *prana* necessary to sustain unitary awareness.

Another method is uniting *Prana* and *Apana*. *Apana*, which is aligned with the force of gravity, usually moves downward resulting not only in disease and death but in the downward movement of consciousness. *Prana*, on the other hand, tends to disperse upward through the mind and senses, as it is our opening to the energies above.

Yogic practices require bringing *Apana* up. *Prana* must be brought down to unite with *Apana*. This helps unite and balance all the *Pranas*. In doing so the inner fire or Kundalini gets enkindled in the region of the navel. *Mula Bandha* is an important practice in this regard. The goal is to balance our outer and physical *pranas* and awaken higher and inner *pranas* of deeper awareness.

### MANTRA AND MEDITATION

The *Pranas* or energies in the mind can be dealt with directly as well. Color and sound (music) are important ways to direct energy in the mind. The best technique is *mantra*, particularly single syllable or bija *mantras* like OM, which create vibrations (*nada*) that can help direct energy into the subconscious.

Meditation, creating space in the mind, serves to create more *Prana* in the mind. When the mind is brought to a silent and receptive condition, like the expanse of the sky, a new energy comes into being within it that brings about great transformations.

Indeed, all the paths of Yoga are based upon *Prana*. *Bhakti Yoga* or the Yoga of Devotion brings about Pranic transformation by uniting us with the Divine Will and Divine *Prana*. All *Karma Yoga* or service is based upon alignment with the Divine Will as well. This also gives us more *Prana*, not only to act outwardly but for inner development.

Classical Yoga or *Raja Yoga* is based upon the control of mental activities (*Chitta-vrittis*). The vibration of the mind (*Chitta-spanda*) follows the vibration of *Prana* (*Prana-spanda*). Therefore, *Pranayama* helps control the mind. It also helps control the senses (*Pratyahara*) because it withdraws our awareness inward from the senses. *Hatha Yoga* itself is mainly concerned with *Prana* and even *Asana* occurs as an expression of *Prana*. Many great Yogis did not learn *Asana* through mechanical practice but were taught *Asana* by the power of their awakened *Prana*.

Even *Jnana Yoga* or the Yoga of Knowledge depends upon a strong will and concentration. Without a well-developed *Udana Vayu* it cannot succeed. In the Yoga of Knowledge, the *Prana* of inquiry must be created, which is to inquire into our true nature not merely mentally but in all of our daily activities. This requires that inquiry occurs through *Prana* and not simply through the outer mind.

Indeed, as the Vedas say, we are all under the control of *Prana*. *Prana* is said to be the Sun that imparts life and light to all and dwells within the heart as the Self of all creatures.

# THE POWER OF PRANA IN YOGA AND AYURVEDA

Yoga and Ayurveda constitute a way of life that allows us to arrive at longevity and immunity, and to provide the basis for the pursuit of Self-realization and *Moksha*. Their approach to healing is based upon right values, right behaviour, and right relationship with our natural environment and humanity overall.

The medical side of Ayurveda is important for the treatment of disease. The wellness side of Ayurveda Healing remains relevant to all and interfaces with the practices of Yoga, which aid in wellness of body and mind. Yoga therapy (*Yoga chikitsa*) is an integral part of this Ayurvedic wellness approach for body and mind.

The link between Ayurveda and Yoga in terms of wellness (svastha) is Prana.

In Ayurvedic Healing, *Prana* is the motivating life force behind the three *doshas* or biological humors of *Vata* (air), *Pitta* (fire) and *Kapha* (water), which are the prime factors both determining individual constitution and understanding the disease process. As a power of air and energy, *Prana* is most connected to *Vata dosha* or *Vayu*. *Vata dosha* is the main *dosha* 

behind the disease process as it is most connected to subtle imbalances and disturbances of *Prana*.

### TYPES AND LEVELS OF PRANA

Yoga and Ayurveda recognize five forms of *Vayu*: *Prana* as its basic propulsive force; *Udana* as its ascending and motivating energy; *Vyana* as its expanding and circulating energy; *Samana* as its contracting, centering and balancing force; and *Apana* as its downward and outward movement. These five *Vayus* are the subtypes of *Vata dosha* in Ayurveda crucial in both the diagnosis and treatment of disease.

*Prana* is also the link between the body and the mind. The body, food sheath or *annamaya kosha*, is kept alive and moving by the flow of *Prana* through it, facilitated by the processes of breathing, eating and drinking, which sustain the *Prana* in the body, and forms the basis of the functioning of our internal organs.

Between body and mind is the sheath of *Prana* or *pranamaya kosha*, closely connected to the breath, the motor organs and sense organs. It is the electrical force that runs both body and mind.

The mind or mental sheath (manomaya kosha) is sustained from a physical level by food, water and breath. It extends to subtler mental energies, with the mind having its own five pranic movements as expansion and contraction, ascending or descending energy, and over all propulsive force. These connect to the yet more subtle koshas of intelligence (vijnana) and bliss (Ananda).

### WORKING WITH PRANA AND THE BREATH

Mind and *Prana* are said to be like the two wings of a bird as the powers of knowledge and action. Our thoughts are reflected in our breathing and circulatory processes. Our breath is affected by our emotions and mental state, which can weaken and disturb it.

Through the power of *Prana* and its five subtypes or movements, we can regulate body and mind and sustain their right functioning and positive development. We can learn to make our awareness expand or contract, ascend or descend at will moving through the greater universe of consciousness.

Yet *Prana* is not simply the breath. The breath is the main factor that sustains *Prana* in the body, but *Prana* as life-energy never dies. It is part of the subtle body (*sukshma sharira*), which after death transmigrates into another body for a new incarnation.

The breath is our main means of working with *Prana* in our physical lives and the basis of most forms of *Pranayama*. Yet *Pranayama*'s aim is to calm the breath so that we can connect to deeper Pranic energies of mind and consciousness beyond the body. The yogic goal is to remove the knot of attachment of the mind with the body, which constitutes the ego and all of its illusions, leading us to sorrow.

The main factor of wellness in Yoga and Ayurveda is to deepen the breath and unify the pranic forces within us. There is a higher unitary *prana* behind the breath and the senses, just as there is a higher unitary consciousness behind the mind. Unitary *prana* and unitary mind go together and are mutually transformative.

### PRACTICING PRANAYAMA

Various *Pranayama* practices have been developed to strengthen and balance the *Prana* through working with the breathing process. These ultimately aim at the breathless state (*kevala kumbhaka*) which is often misunderstood. It is not simply holding the breath, but accessing the deeper Prana behind the breath.

Yogic *pranayama* works to balance the *pranas* within us. This begins with alternate nostril breathing to balance the *Ida* and *Pingala Nadi* pranic flows through the left and right nostrils, which have lunar and solar energies. It extends to balancing *Udana* and *Apana* as ascending and descending *pranas*, and *Samana* and *Vyana* as contracting and expanding energy flows (like the circulation of the blood or contraction and expansion of the muscles).

Balancing and concentration of *Prana* connects us back to our inner *Prana* at the level of consciousness. This unitary *Prana* allows the *Kundalini Shakti* to awaken and ascend through the *Sushumna*. As long as our *Prana* is divided, scattered and caught in dualistic currents, there can be no real awakening of *Kundalini* or opening of the *chakras*. Unitary *Prana* is the basis of the *Yoga Shakti* overall.

This unitary *Prana* in turn is connected to unitary mind and Awareness. Both go together. Only if our vital energy and will power is unified and focused can we access a higher awareness. Yet only if our mind and consciousness is unified and focused can we access the higher *Prana* beyond the breath.

The breathless or *samadhi* state (*kevala kumbhaka*) is not just a state of the breath. It is a state of unitary *Prana* and mind. In this unified state our deeper Self-awareness is able to witness both the breath and our thoughts from a standpoint of detachment, no longer identified with them. This removes our pranic attachment to body and mind, and all external sources of *prana*, and reconnects our *Prana* with the Self within. Then whether the outer breath continues we remain inwardly in state of awareness no longer defined by the breath or by the processes of birth and death.

Alternate nostril breathing (*Nadi Shodhana*) is the key practice to develop a unitary *Prana*, balancing the flow of the breath between the right and left nostrils, solar and lunar *nadis*, taking the *Prana* from duality to unity. This allows the *Prana* to enter into the central channel or *Sushumna*, as the unified *prana* that connects us to the *Ananda* or bliss within, which holds the deeper healing energies of *amrit* and *Soma*.

# AYURVEDA AND PRANAYAMA

Ayurveda has special herbs and oils that aid in developing a deeper *Prana*. This is part of its rejuvenation or *rasayana* therapy, which usually requires a preliminary *Pancha Karma* purification therapy first. *Brahmi rasayana* is very important in this regard. We should all learn to access the power of *Pranayama* for healing the body and purifying the mind, along with its Ayurvedic support practices, and above all recognize the deeper and deathless *Prana* behind and beyond any breathing practices. This is one of the great secrets of Yoga. Becoming one with *Prana*, we go beyond birth and death.

The highest *Prana* is the power of the *Atman* or inner Self of pure consciousness. This is the *Prana Purusha* of the Upanishads and *Shiva Mahadeva* as the ruler of *Prana*. In addition, there are various connections of *Prana* with deep sleep, *yoga nidra* and *samadhi*, that are worthy of profound study and practice. We not only live through *Prana*, we can connect to the forces of immortality through it.

### FROM HUMAN LIFE TO THE UNIVERSAL LIFE

As mortal human beings, we have an embodied consciousness or mind, but also an embodied life energy or personal *prana*. Our minds, senses, breath, vitality and organic rhythms are ever moving and changing. Yet behind our individualized mind, life and body, is a universal consciousness, *prana*, energy and expression.

True healing and rejuvenation of body and mind requires embracing this universal *Prana*, which is beyond birth and death. This process of integration with the universe begins with embracing the world of nature around us from the Earth to the sky. You are not simply chemical patterns that occur in the body or brain that can be adjusted merely at a chemical level. You are not just a physical structure or mental memory system. You are an expression of the universal life and consciousness, connected to the totality of all existence. Your current embodiment is just a particle and moment of your unending being.

Please take adequate time and attention every day to join in your true place in the universal life *dharma* for the benefit of all, to allow the universal *Prana* to flow through you into all that you experience, uniting with the life around you. If our awareness of life is limited to the physical

body and personal self, we are just touching the surface of our real cosmic identity. We are not alive in our real universal potential.

If we understand the life as consciousness in manifestation, then we can find our true Self, the *Vedic Prana Purusha*, in all beings and in all existence and at every moment taking us beyond all death and sorrow. Life never dies but can take on innumerable forms or rest in pure formless Being beyond all time.

\*\*\*\*

# **Brief Profile of the Author:**

**Dr. David Frawley (Pandit Vamadeva Shastri)** is a Vedacharya and one of the leading exponents of Vedic knowledge in an interdisciplinary approach worldwide. The American Institute of Vedic Studies serves as a vehicle for his work, offering on-line access to go along with his many published writings. His work is highly esteemed by numerous students and followers as well as by many organizations worldwide – he was awarded India's prestigious Padma Bhushan award for his distinguished service to the nation.

Dr. David Frawley has a D. Litt. (Doctor of Letters), the highest educational title possible in the field of Yoga and Vedic sciences, from SVYASA (Swami Vivekananda Yoga Anusandhana Samsthana), the deemed Yoga university recognized by the Government of India. Vamadeva received a Pandit award as part of a special Brahmacharya Vishvanathji yearly award in Mumbai in 1994. His role as a pandit and Vedic teacher (Vedacharya) has been honored by many groups in India. These include Swaminarayan (BAPS), Arsha Vidya Gurukulam (Swami Dayananda), and the Chinmaya Mission (Swami Mitrananda). Such a traditional title as a Pandit and Vedacharya implies having written and taught on the four Vedas and Upanishads, which Vamadeva has done in his many Vedic books that include original translations from the Sanskrit, starting with the most ancient Rigveda. Most of his books can be found in India through Motilal Banarsidass (MLBD).

**Statements and Declaration:** I hold the copyright to this paper which was earlier published, in parts, as a series of articles on my website - https://www.vedanet.com/knowledge-center/. I also warrant that the manuscript is my original work and does not infringe on any rights of third parties. I permit IJEWCS (International Journal on Eternal Wisdom and Contemporary Science) to print this consolidated version.

# This paper draws content extensively from my following writeups:

1. Secrets of the Five Pranas https://www.vedanet.com/the-secrets-of-the-five-pranas/

- 2. The Power of Prana in Yoga and Ayurveda <a href="https://www.vedanet.com/the-power-of-prana-in-yoga-and-ayurveda/">https://www.vedanet.com/the-power-of-prana-in-yoga-and-ayurveda/</a>
- 3. The Universal Life-Energy, Vishvaprana <a href="https://www.vedanet.com/the-universal-life-energy-vishvaprana/">https://www.vedanet.com/the-universal-life-energy-vishvaprana/</a>
- 4. Prana Beyond the Breath and Life Beyond Death <a href="https://www.vedanet.com/prana-beyond-the-breath-and-life-beyond-death/">https://www.vedanet.com/prana-beyond-the-breath-and-life-beyond-death/</a>



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 95-105

# A Primer on Phytocentric Awareness: Ancient and Recent Insights

Prakash Venglat

Phytocentric Consulting,

10 Neilson Crescent, Saskatoon, S7H3N5, SK, Canada

### **Abstract:**

This article advocates for a plant-centered (phytocentric) perspective, drawing from Vedic and Vedantic traditions, to challenge human-centric views. It explores the historical roots of phytocentrism in ancient cultures. The article examines plant intelligence, sentience, and interconnectedness, offering methods to deepen our connection with the plant world, including the use of plant medicine. It discusses the transformative potential of phytocentrism for achieving a blissful state of being ("bliss body"), emphasizing alignment with natural rhythms and plant-centered practices. Practical applications include cultivating a deeper connection with plants through techniques like meditation and mindful observation, contributing to a more sustainable future by promoting plant-based diets and eco-conscious living.

**Keywords:** Phytocentrism, Plant-centered awareness, Ancient wisdom, Modern science, Psychedelics, Ecopsychology, Sustainability, Consciousness, Transformation, Vedic traditions, Vedanta, Bliss body, Stress body

### INTRODUCTION

In an era marked by unprecedented ecological challenges, the need for a fundamental shift in human consciousness and behavior has become increasingly apparent. The dominant anthropocentric worldview, which places humans at the center of the universe and prioritizes their needs above all else, has contributed to widespread environmental degradation and a disconnection from the natural world. As a counterpoint to this anthropocentric paradigm and plant blindness, the concept of phytocentrism, or plant-centered awareness, has emerged as a potential pathway toward a more sustainable and harmonious relationship with the planet [1, 2].

Phytocentrism challenges the anthropocentric hierarchy by recognizing the intrinsic value and agency of plants, acknowledging their vital role in sustaining life on Earth. This perspective draws inspiration from ancient cultures that revered plants as sacred beings and sources of wisdom, as well as from contemporary scientific research that reveals the complex intelligence and interconnectedness of the plant kingdom [3].

This primer article delves into the multifaceted dimensions of phytocentric awareness, exploring its historical roots, theoretical foundations, practical applications, and transformative potential. It examines how the integration of ancient wisdom and modern science can illuminate a path toward a more balanced and interconnected way of being, fostering individual well-being and planetary flourishing.

# **OBJECTIVES**

This article aims to:

- **Define and contextualize phytocentric awareness:** To provide a clear understanding of the concept of phytocentrism and its significance in the current global context.
- Trace the historical roots of phytocentrism: To explore the ancient origins of plantcentered perspectives and their expression in various cultures and traditions, including the Vedic and Vedantic traditions of India.
- Examine the theoretical foundations of phytocentrism: To delve into the scientific and philosophical underpinnings of plant intelligence, sentience, and interconnectedness.
- Investigate the methods and practices of cultivating phytocentric awareness: To explore various approaches to deepening one's connection with the plant world, including mindfulness, nature immersion, and plant medicine ceremonies.
- **Discuss the transformative potential of phytocentrism:** To illuminate how embracing a plant-centered perspective can foster individual healing, spiritual growth, and ecological responsibility.
- Offer recommendations for integrating phytocentric awareness into daily life: To provide practical guidance on how readers can cultivate a deeper connection with plants and contribute to a more sustainable future.
- Explore the concept of the "bliss body" and its relationship to phytocentric awareness: To delve into the physiological and psychological aspects of achieving a state of optimal well-being through alignment with natural rhythms and plant-centered practices.
- Analyze the shift from a reward-driven to a bliss-oriented existence: To examine the

neurological and psychological processes involved in transcending the limitations of the reward system and accessing deeper states of fulfillment and interconnectedness.

# THE HISTORICAL ROOTS OF PHYTOCENTRISM

The reverence for plants is deeply ingrained in human history, with evidence of plant-centered perspectives found in numerous ancient cultures. From the sacred groves of the Celts to the animistic traditions of indigenous communities, plants have been honored as sources of sustenance, healing, and spiritual guidance [4].

- Sacred Groves and Tree Worship: Many ancient cultures held trees and forests in high regard, often considering them sacred spaces inhabited by deities or spirits. Specifically in India, historical roots of phytocentrism in ancient cultures, include the reverence for sacred groves and tree worship, where specific species were considered sacred, and groves were protected as dwelling places of deities [5]. This reverence stemmed from a deep understanding of their role in providing sustenance, shelter, and medicine.
- Herbalism and Plant Medicine: Ancient healing practices heavily relied on plants. The knowledge of their medicinal properties was often passed down through generations, reflecting an intimate connection with the plant world and its healing potential [6].
- Animism and Plant Consciousness: Some cultures viewed plants as possessing souls or consciousness, capable of communication and interaction with humans. This perspective fostered a sense of kinship and respect for the plant kingdom [4].

### VEDIC AND VEDANTIC PERSPECTIVES ON PHYTOCENTRISM

The Vedic and Vedantic traditions of India offer a rich tapestry of insights into the interconnectedness of life and the sacredness of the natural world, including the plant kingdom. A few highlights to explore further:

- Vedic Hymns and Deities: The Vedas, ancient scriptures of India, contain numerous hymns dedicated to plants and trees, recognizing their vital role in sustaining life and their connection to the divine. Many Vedic deities are associated with specific plants, reflecting their importance in the cosmological and spiritual worldview of the time [7].
- The Concept of Prana: Prana, the vital life force that pervades the universe, is believed to be particularly abundant in plants. This concept highlights the interconnectedness of all living beings and the vital role of plants in sustaining life [8].
- Ayurveda and Herbal Medicine: Ayurveda, the traditional system of medicine in India,

places great emphasis on the use of plants for healing and maintaining balance in the body and mind. The knowledge of herbal remedies and their applications has been passed down through generations, reflecting a deep understanding of the interconnectedness between humans and plants [6]

- The Ashvattha Tree: The Ashvattha tree (sacred fig) holds a prominent place in Vedic and Vedantic symbolism, representing the interconnectedness of life and the cosmic order. Its roots are believed to extend into the heavens, while its branches spread across the earth, symbolizing the link between the spiritual and material realms [7].
- The Concept of Brahman: In Vedanta, the ultimate reality or universal consciousness is referred to as Brahman. This concept emphasizes the interconnectedness of all beings and the inherent divinity within all of creation, including the plant kingdom [9].

# THE RESURGENCE OF PHYTOCENTRISM IN MODERN TIMES

While the anthropocentric worldview has dominated for centuries, recent decades have witnessed a resurgence of interest in plant-centered perspectives [10]. This renewed appreciation for plants stems from various factors, including:

- **Growing Environmental Awareness:** The escalating ecological crisis has prompted a reevaluation of humanity's relationship with nature, leading many to seek more sustainable and harmonious ways of living [11].
- Scientific Discoveries: Advances in plant biology and ecology have revealed the complex intelligence and interconnectedness of plants, challenging traditional notions of their passive and insentient nature [12].
- **Indigenous Knowledge Revival:** The revitalization of indigenous knowledge systems has brought to light the profound ecological wisdom and plant-centered perspectives of traditional cultures [13].
- **Psychedelic Renaissance:** The increasing use of psychedelics across the world has opened new avenues for exploring human consciousness and deepening our connection with nature, including the plant kingdom [14].

# THE THEORETICAL FOUNDATIONS OF PHYTOCENTRISM

Phytocentrism is supported by a growing body of scientific and philosophical inquiry that challenges anthropocentric assumptions and highlights the unique capabilities of plants.

- Plant Intelligence: Research suggests that plants exhibit complex behaviors, including communication, learning, and problem-solving. They can sense and respond to their environment, communicate with each other through chemical signals, and even exhibit rudimentary forms of memory [15].
- **Plant Sentience:** While the concept of plant sentience remains controversial, some researchers argue that plants possess a form of consciousness or subjective experience. They point to evidence of plant behavior that suggests an awareness of their surroundings and the ability to make choices [16, 17].
- **Plant Neurobiology:** The emerging field of plant neurobiology explores the complex signaling pathways and communication networks within plants, drawing parallels to the nervous systems of animals [3].
- Ecological Interconnectedness: Plants play a fundamental role in maintaining the balance of ecosystems. They provide oxygen, food, and habitat for countless other organisms, and their interactions with the environment shape the very fabric of life on Earth.

# METHODS AND PRACTICES FOR CULTIVATING PHYTOCENTRIC AWARENESS

Cultivating phytocentric awareness involves actively engaging with the plant world and developing a deeper appreciation for their role in sustaining life. Various methods and practices can facilitate this process:

- Mindfulness in Nature: Spending time in nature and mindfully observing plants can enhance our awareness of their presence and cultivate a sense of connection.
- Nature Immersion: Immersing oneself in natural environments, such as forests, gardens, or wilderness areas, can deepen our appreciation for the interconnectedness of life and foster a sense of belonging.
- Plant Medicine Ceremonies: Participating in traditional plant medicine ceremonies, under the guidance of experienced practitioners, can provide profound insights into the healing potential of plants and their ability to facilitate spiritual growth.
- Gardening and Plant Care: Cultivating a garden or caring for houseplants can foster a sense of responsibility and connection with the plant world, allowing us to witness first-hand the cycles of growth, decay, and renewal.
- **Plant-Based Diets:** Adopting a plant-based diet can be a way of honoring the plant kingdom and reducing our ecological footprint.

Environmental Activism: Engaging in environmental activism can be a powerful way to
express our commitment to protecting the plant world and advocating for a more sustainable
future.

# THE TRANSFORMATIVE POTENTIAL OF PHYTOCENTRISM

Embracing a phytocentric perspective can lead to profound personal and collective transformation.

- **Individual Healing:** Connecting with plants can foster physical, emotional, and spiritual healing. Spending time in nature has been shown to reduce stress, improve mood, and boost the immune system. Plant medicine ceremonies can facilitate deep emotional processing and spiritual awakening [18].
- **Spiritual Growth:** Plants can serve as teachers and guides on the spiritual path. Their resilience, adaptability, and interconnectedness offer valuable lessons for navigating life's challenges and cultivating inner peace [19].
- Ecological Responsibility: Recognizing the intrinsic value of plants fosters a sense of responsibility for their well-being and the health of the planet. This can lead to more sustainable lifestyle choices and a commitment to environmental stewardship.
- Expanded Consciousness: Engaging with plants through mindfulness, nature immersion, or plant medicine ceremonies can expand our consciousness and deepen our understanding of the interconnectedness of life [20].

# THE SHIFT: FROM ANTHROPOCENTRIC TO ECOCENTRIC AND PHYTOCENTRIC

The journey toward phytocentric awareness involves a gradual shift away from the anthropocentric worldview and toward a more ecocentric and ultimately phytocentric perspective.

- **Anthropocentric:** The anthropocentric perspective prioritizes human needs and desires, often at the expense of natural rhythms and ecological balance. This can lead to a "stress body" state, characterized by disharmony and disease.
- **Ecocentric:** Shifting to an ecocentric perspective involves recognizing our interconnectedness with nature and aligning our lifestyle with natural rhythms. This supports a healthier "bliss body" state.

Phytocentric: The phytocentric perspective takes this further, drawing inspiration from the
plant kingdom, which embodies stillness, slow time, growth, and regeneration. This
represents a state of deep harmony with nature, transcending the need for excessive
consumption and mental agitation.

# **EQUIPOISE: BALANCING REWARD AND BLISS**

- **Reward System:** While the reward system is essential for survival and motivation, its overactivation in the anthropocentric state can lead to addiction, instant gratification, and a constant pursuit of external validation [21].
- **Bliss System:** Cultivating the "bliss body" involves accessing a deeper state of contentment and fulfillment that arises from within, independent of external rewards [22].
- Equipoise: The shift towards an ecocentric and phytocentric perspective allows us to find a balance between the reward system and the bliss system, experiencing both the joy of engagement with the world and the peace of inner stillness [23].

#### DELVING DEEPER INTO THE MIND'S BLISSFUL STATES

The concept of the "bliss body" goes beyond mere physical health; it encompasses a state of holistic well-being characterized by inner peace, joy, and a deep connection to the natural world. This state can be cultivated through various practices that align us with natural rhythms and foster a sense of interconnectedness.

- Circadian Rhythms and the Bliss Body: Aligning our lifestyle with natural circadian rhythms is crucial for optimizing health and well-being. This includes regular sleep-wake cycles, exposure to daylight, and timed eating patterns. Disruptions to these rhythms can lead to stress, hormonal imbalances, and impaired metabolic function [24].
- **Dietary Rhythms and the Bliss Body:** Incorporating practices like intermittent fasting or periodic fasting mimicking diets can promote cellular repair, reduce inflammation, and enhance metabolic flexibility. These practices align with the natural rhythms of the body and support its innate healing mechanisms [25].
- Exercise and the Bliss Body: Regular physical activity, including both aerobic and strength training, provides hormetic stress that strengthens resilience and promotes longevity. Exercise also stimulates the release of endorphins, contributing to a sense of well-being and reducing stress [26]

- Neuroendocrine Balance and the Bliss Body: The neuroendocrine system plays a crucial role in regulating stress responses and maintaining homeostasis. Chronic stress can lead to HPA axis dysregulation, affecting cortisol levels, immune function, and overall well-being. Practices that promote relaxation, such as meditation, yoga, and spending time in nature, can help to restore balance to the neuroendocrine system and support the transition to a bliss body state [27].
- The Role of Neurotransmitters: The experience of bliss is often associated with the release of "happy hormones" such as dopamine, serotonin, endorphins, and endocannabinoids. These neurochemicals play a crucial role in regulating mood, motivation, and pleasure. By engaging in practices that promote their release, we can cultivate a more positive and joyful state of being [28].
- From Reward System to Bliss System: The reward system, while essential for survival and motivation, can also lead to addiction, instant gratification, and a constant pursuit of external validation. The shift to a bliss body state involves transcending the limitations of the reward system and accessing a deeper sense of fulfillment that arises from within. This can be achieved through practices that cultivate self-awareness, emotional regulation, and a deeper connection to the present moment [22].

### INTEGRATING PHYTOCENTRIC AWARENESS INTO DAILY LIFE

Integrating phytocentric awareness into daily life involves making conscious choices that honor the plant kingdom and support a more harmonious relationship with nature.

- Cultivate a Garden: Growing a garden, even a small one, can be a deeply rewarding way to connect with the plant world and witness first-hand the cycles of growth, decay, and renewal.
- **Spend Time in Nature:** Make time for regular nature immersion, whether it's a walk in the park, a hike in the forest, or simply sitting under a tree.
- **Practice Mindfulness in Nature:** When spending time in nature, engage your senses fully and observe the plants around you with curiosity and appreciation.
- Adopt a Plant-Based Diet: Consider reducing your consumption of animal products and incorporating more plant-based foods into your diet.
- **Support Sustainable Practices:** Choose products and services that are environmentally friendly and support sustainable agriculture and forestry practices.

• Educate Yourself and Others: Learn more about the plant kingdom and share your knowledge with others. Advocate for policies that protect plants and their habitats.

### **CONCLUSION**

In a world grappling with the consequences of anthropocentric overreach, phytocentrism offers a beacon of hope, illuminating a path towards a more harmonious and sustainable future. By embracing a plant-centered perspective, we can rediscover our interconnectedness with nature, cultivate a deeper sense of well-being, and contribute to the healing of the planet. The journey toward phytocentric awareness involves a gradual shift away from the dominant anthropocentric worldview and toward a more ecocentric and ultimately phytocentric perspective. This shift involves aligning our lifestyle with natural rhythms, cultivating inner balance, and accessing a deeper state of contentment and fulfillment that arises from within.

By integrating the ancient wisdom of traditions like Vedanta with the insights of modern science, we can gain a deeper understanding of the transformative potential of phytocentric awareness. This holistic approach can empower us to move from a stress-ridden existence to a blissful state of being, characterized by inner peace, joy, and a profound connection to the natural world.

This extended framework offers a more comprehensive approach to well-being, integrating scientific understanding with ancient wisdom and recent scientific insight. By aligning ourselves with natural rhythms, cultivating inner balance, and embracing a plant-centered perspective, we can move from a state of stress and disease to one of vitality and bliss, contributing to both individual and planetary flourishing.

\*\*\*\*

### **Brief Profile of the Author:**

Dr. Prakash Venglat is a Plant Biology Researcher at University of Saskatchewan, Canada and he has spent over 30 years in understanding plant growth, development, and adaptation by building models to understand how plants build structures which become part of our food.

He has worked in several research organizations and some of his works include G x E of drought stress in wheat - root development; phenotyping; Genomics of seed and embryo development in angiosperms (Flax, Lentils, Brassica, Arabidopsis, Wheat); Developmental genetics of Arabidopsis and Brassica plant architecture; Plant evolutionary biology and adaptation; Plant tissue culture (Research and Industry); Plant biodiversity.

Dr. Venglat is also a science communicator who has given several public presentations regarding the importance of agriculture, biodiversity and evolution. He has a deep interest in Buddha's and Adi Shankaracharya's teachings and is exploring whether these philosophies can be applied to develop a Phytocentric perspective that is rooted in the wisdom traditions.

One of the projects which is very close to his heart is <sup>©</sup>LEARNING UNDER THE EVOLUTIONARY TREE - To build an organization to teach children and adults the importance of evolution of plants not just as food, medicine and produce but as a process of understanding our environment and our interactions with natural resources.

**Statements and Declaration:** I declare that I have no conflict of interest with my places of employment or anybody else in publishing this article. No financial support was received for the work within this article.

# **References:**

- 1. Sanders DL: **Standing in the shadows of plants**. In., vol. 1: Wiley Online Library; 2019: 130-138.
- 2. Marder M: **For a phytocentrism to come**. *Environmental Philosophy* 2014, **11**(2):237-252
- 3. Gagliano M: Thus spoke the plant: A remarkable journey of groundbreaking scientific discoveries and personal encounters with plants: North Atlantic Books; 2018.
- 4. Farmer J: Elderflora: a modern history of ancient trees: Basic Books; 2022.
- 5. Gadgil M, Vartak VD: **The sacred groves of Western Ghats in India**. *Economic Botany* 1976, **30**(2):152-160.
- 6. Sivarajan VV, Balachandran I: **Ayurvedic drugs and their plant sources**: Oxford and IBH publishing; 1994.
- 7. Prajapati A, Nath R: Understanding Vedic Texts Through the Lens of Eco-Spiritualism. Obnovljeni Život 2024, 79(3):281–294-281–294.
- 8. Manasa B, Jois SN, Prasad KN: **Prana—the vital energy in different cultures: Review on knowledge and practice**. *Journal of Natural Remedies* 2020:128-139.
- 9. Dubois JA-M: The hidden lives of Brahman: Śaṅkara's Vedānta through his Upaniṣad commentaries, in light of contemporary practice: SUNY Press; 2014.
- 10. Rachel C: **Silent spring**: Penguin Books London; 1962.
- 11. Bouteau F, Grésillon E, Chartier D, Arbelet-Bonnin D, Kawano T, Baluška F, Mancuso S, Calvo P, Laurenti P: **Our sisters the plants? Notes from phylogenetics and botany on plant kinship blindness**. *Plant Signaling & Behavior* 2021, **16**(12):2004769.
- 12. Gilroy S, Trewavas T: **Agency, teleonomy and signal transduction in plant systems**. *Biological Journal of the Linnean Society* 2023, **139**(4):514-529.
- 13. Abas A, Aziz A, Awang A: A systematic review on the local wisdom of indigenous

- people in nature conservation. Sustainability 2022, 14(6):3415.
- 14. Pollan M: How to change your mind: What the new science of psychedelics teaches us about consciousness, dying, addiction, depression, and transcendence: Penguin; 2018.
- 15. Calvo P, Gagliano M, Souza GM, Trewavas A: **Plants are intelligent, here's how**. *Annals of botany* 2020, **125**(1):11-28.
- 16. Narby J: Intelligence in nature: An inquiry into knowledge: Penguin; 2006.
- 17. Trewavas A, Baluška F, Mancuso S, Calvo P: Consciousness facilitates plant behavior. *Trends in Plant Science* 2020, **25**(3):216-217.
- 18. Frost S, Kannis-Dymand L, Schaffer V, Millear P, Allen A, Stallman H, Mason J, Wood A, Atkinson-Nolte J: **Virtual immersion in nature and psychological well-being: A systematic literature review**. *Journal of Environmental Psychology* 2022, **80**:101765.
- 19. Barrow E: **Our Future in Nature:: Trees, Spirituality, and Ecology**: Balboa Press; 2019.
- 20. Polz-Watzenig A: Complex Mindfulness in Experiencing the Forest—14 Exercises. In: The Healing Effect of the Forest in Integrative Therapy: With Numerous Exercise Examples for Practice. Wiesbaden: Springer Fachmedien Wiesbaden; 2023: 27-36.
- 21. Banich MT, Floresco S: **Reward systems, cognition, and emotion: Introduction to the special issue**. *Cognitive, Affective, & Behavioral Neuroscience* 2019, **19**:409-414.
- 22. Church D: Bliss brain: The neuroscience of remodeling your brain for resilience, creativity, and joy: Hay House, Inc; 2020.
- 23. Loizzo JJ: The subtle body: an interoceptive map of central nervous system function and meditative mind-brain-body integration. Annals of the New York Academy of Sciences 2016, 1373(1):78-95.
- 24. Panda S: The Circadian Code: Lose weight, supercharge your energy and sleep well every night: Random House; 2018.
- 25. Longo VD, Panda S: Fasting, circadian rhythms, and time-restricted feeding in healthy lifespan. *Cell metabolism* 2016, **23**(6):1048-1059.
- 26. Wolff CA, Esser KA: **Exercise timing and circadian rhythms**. *Current opinion in physiology* 2019, **10**:64-69.
- 27. Kim EJ, Kim JJ: Neurocognitive effects of stress: a metaparadigm perspective. *Molecular Psychiatry* 2023, **28**(7):2750-2763.
- 28. Garg M: Neurotransmitters: Foundations of Cognition. In: Spiritual Artificial Intelligence (SAI) Towards a New Horizon. Springer; 2024: 59-71.



# International Journal on Eternal Wisdom and Contemporary Science

Volume 1 • Issue 2 • December 2024 • pp 106-120

# Holistic Wellness of Counselors and Health Care Professionals through Mindfulness Self-Care Techniques and Conscious Living

Suneetha B Manyam, PhD, LPC, CRC, CPCS

Professor, Department of Counseling, Mercer University,

Atlanta, GA 30341, United States of America

### **Abstract:**

Holistic wellbeing of health care professionals and counselors is crucial to avoid burnout, work fatigue, and related impairment. The current paper focuses on articulating the definitions of key terms like holistic wellness, self-care through mindfulness techniques and conscious living. With the help of a conceptual diagram, the author also discusses research findings and common themes emerged from the systematic review of literature from 2003-2024 in this context. The author further explores eight areas (occupational, social, environmental or relational, financial, physical, spiritual, emotional, and intellectual) of holistic wellness with examples of self-care activities. In addition, the author illustrates the vital role of conscious living and mindfulness techniques for the optimal holistic wellness of counselors and health care professionals. Finally, the implications for counselors and health care professionals are presented along with future recommendations.

**Keywords:** Holistic Wellness, Conscious Living, Counselor Burnout, Self-Care Techniques, Mindfulness, Mental Health, Meditation, Areas of Wellness

# INTRODUCTION AND PURPOSE OF THE STUDY

Wellness through self-care is fundamental for the counseling profession and allied health care fields. While self-care though mindful and conscious living is important for anyone in general, it is essential for counselors and healthcare professionals for their optimal functioning. However, self-care through mindfulness practices often is challenging and one needs to be patient until it becomes habitual (McCurdy et al., 2024). Mindful and conscious living brings a paradigm shift through positive thinking and develops one's own resiliency to deal with life's challenges and difficulties (Cook-Cottone, 2015). Mindfulness grants one to fully experience the current moment by being aware of what is happening and by engaging in the observation

of that thought (Puig, 2012). According to Hassan (2024), our minds are always busy-"thinks all through the day, dreams in the night and mindfulness is a way to give a break to the chatter or noise of thoughts" (p. 9). Being present in the moment is nothing but conscious living. McCabe-Maucher (2019) reports that it is essential for health care professionals to practice conscious living through thinking deeper, by nourishing the private-talk and by designing a customized self-care plan that nurtures ones own body, mind and spirit.

As healthcare professionals and therapists deal with human emotions of clients from a wide variety of mental health and psychiatric issues daily, they are more susceptible to compassion fatigue, countertransference, vicarious trauma etc. (Trippany et.al, 2004) and need regular self-care geared towards their holistic wellness (Cook-Cottone, 2015, Blount et al., 2016; McCurdy et al., 2024). Failure to take care of themselves adequately may result in work fatigue, burn out, and in extreme cases impairment because the health care field especially mental health counseling is a demanding field. (Cashwell, 2007; Lee et al., 2020; Reiner & Dobmeier, 2014). Moreover, counselors and health care professionals are bound by ethical codes of respective fields formulated by American Counseling Association (ACA, 2024), American Psychological Association (APA, 2024), National Association of Social Workers (NASW, 2024) etc. for their optimal functioning and wellness. For example, ACA 2024, Standard C.2.g requires counselors to continuously self-screen themselves 'for the signs of impairment from their own physical, mental or emotional problems', and to 'refrain from offering or providing professional services when such impairment is likely to harm a client or others' (ACA 2024, Standard F.5.b).

Further, the need for holistic wellness of counselors has increased significantly in recent years as research findings suggest that there is a multifold increase in the mental health issues worldwide due to the impact of Coronavirus (COVID) disease (Coley & Baum, 2021). For example, World Health Organization (WHO, 2022) reported 25% increase in anxiety and depression throughout the globe due to the COVID-19 pandemic while there is already tremendous shortage of healthcare professionals and workers especially in low-income countries. As a result, health care professionals are faced with gigantic caseloads, with complex issues in highly stressful environments resulting in increased chances of burnout. On top of it, counselors are not usually inclined to take care of themselves adequately (Lee et al., 2010). In Comprehensive Mental Health Action Plan 2013-2030, WHO calls for counselors' and health care workers' burnout preventive measures like strengthening the resources, increasing the collaborations at the macro level and by appropriate self-care measures at the micro level (WHO, 2022). Despite these crucial needs, counselors and health care professionals often lag in making self-care through mindfulness and conscious living a priority for them. Research suggests that this may be due to the lack of awareness and resources to educate counselors on the vital importance of holistic wellness, the role of self-care techniques for healthy and conscious living (Cook-Cottone, 2015; Brown et al., 2015; McCabe-Maucher, 2019; WHO, 2022; Hassen, 2024). Based on these needs, the purpose of the present study is to conduct an extensive systematic review of two decades of literature in this context. More specifically the current study aims at exploring the following research questions.

- 1. What themes emerge from the systematic review of literature pertaining to the holistic wellness of counselors and health care professions with an emphasis on self-care through mindfulness and conscious living?
- 2. What are the different types of wellness models and associated domains if any?
- 3. How mindfulness self-care practices and conscious living impact the holistic wellness of counselors and healthcare professionals?

# **METHODOLOGY**

This conceptual paper utilized a qualitative systematic literature review approach. According to Green et al. (2006), qualitative systematic review consists of rigorous and explicit methods aimed at exploring a focused research topic or question, i.e., Holistic Wellness of Counselors and Health Care Professionals through Mindfulness and Conscious Living. Khan et al. (2003) formulated 5 essential steps of conducting a systematic review as listed below and the author followed each of the steps meticulously.

Step1: Framing questions for review: The questions should be clear, unambiguous and structured

Step 2: Identifying relevant work: The studies should be based on extensive search from multiple sources

Step 3: Assessing quality of studies

Step 4: Summarizing the evidence

Step 5: Interpreting the results

For step 1 from the above, the author aimed at exploring the three research questions listed in the earlier section regarding the holistic wellness, self-care practices of counselors and health care professionals.

For step 2 or for data collection, an initial data search was conducted in author's University library web page by using the key word search of 'Wellness for Counselors and Health Care Professionals'. Search from multiple data sources like Psych Articles, EBSCO host, ERIC, PsycInfo etc. yielded extensive data of 6302 studies. Then, by using multiple filters, only studies with key words like 'Holistic Wellbeing', 'Counselor burnout', 'Self Care for Clinicians', 'Mindfulness', and 'Conscious Living' from 2003-2024 are included, and the rest of the studies were excluded. This process reduced the data set to 2009. A thorough and careful screening was conducted to exclude the studies that are duplicates or appeared irrelevant to the present topic. Out of the 93 records identified, the author purposively selected a total of 30 studies (majority of which are peer reviewed journals, information from some websites, a few textbooks etc.) for the current review.

For steps 3-5, the finalized literature was thoroughly reviewed and analyzed to identify the common themes that will be presented in the next section. As per Cresswell (2014), credibility

and transferability are vital for a qualitative researcher. To ensure these measures are taken care of properly and to avoid researcher bias, the author maintained a reflective journal all through the process in addition to triangulating the data by cross checking with a colleague on the themes emerged.

# RESULTS AND DISCUSSION

Based on the extensive review of literature dated from 2003 to 2024, the author identified the following five themes as illustrated in figure 1 below.

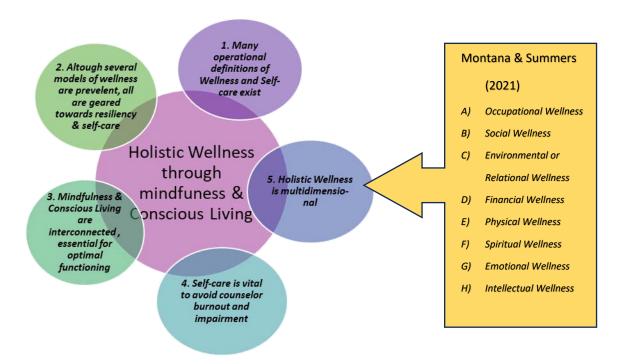


Figure 1. Conceptual depiction of five themes emerged from the literature review on Counselor Wellness

# 1. Many operational definitions of Wellness and Self-Care exist.

The research on the basic concepts of Wellness and Self-Care dates back from several decades. Few of those definitions from the literature reviewed are discussed below.

• According to The Global Wellness Institute (n.d.), wellness is defined as "the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health". It is multidimensional and often consists of physical, mental, emotional, spiritual, social and environmental domains. The goal of holistic health is to bring harmony or balance among these dimensions, so the individual achieves a state of optimal functioning.

- Myers, Sweeny and Witmer (2000) defines Wellness as "a way of life oriented toward optimal health and wellbeing, in which body, mind and spirit are integrated by the individual to live life more fully within the human and natural community" (p. 252). They designed the popular wheel of wellness for counselors that consists of 16 characteristics of healthy people and encourage counselors to collaborate in developing wellness goals.
- The National Wellness Institute (n.d.) summarizes wellness as a conscious, self-directed, evolving process encompassing multiple dimensions geared towards multicultural and holistic lifestyle for optimal functioning. The six dimensions (Intellectual, Occupational, Spiritual, Social, Emotional and Physical) of Wellness model that they present are interconnected and assist educators/ healthcare professionals to bring awareness for one's own conscious living and healthy lifestyles.
- In his review article, Friedman (2017) reports that counselor self-care consists of the holistic practices aimed towards attaining and maintaining physical, mental, spiritual well-being. These practices are not only aimed at practicing self-compassion but also gives equal importance to the self-awareness of one's overall well-being.
- According to McCabe-Maucher (2019), self-care is a phenomenon of knowing oneself intimately. It is a dynamic process that changes constantly based on one's past experiences and deep introspection.

# 2. There are several models of wellness, but almost all are geared towards resiliency and self-care.

Blount et al. (2016) discussed seven types of Wellness models with main tenets and intended populations to whom those models may be helpful. These include

- i. Hettler's Hexagonal Model of Wellness
- ii. Lifespan Development Model by Sweeney and Witmer
- iii. Wheel of Wellness by Witmer, Sweeney and Myers
- iv. Zimpher's Wellness Model
- v. Model of Spiritual Wellness by Chandler, Miner Holden and Kolander
- vi. Perceived Wellness Model by Adam, Benzer and Steinhardt
- vii. Clinical and Educational Model of Wellness by Granello.

Although there are slight differences in the basic philosophy and main tenets of each of these, the primary goal of these models is to enhance individuals' sense of wellbeing through a variety of self-care modalities and techniques. In addition, these models also aim at assessing or identifying the challenges or obstacles to counselor wellness and ways of building resiliency. Cook-Cotton (2015) adds that bringing harmony or attunement

between the different internal aspects of self (like physiological, emotional, cognitive) and the external aspects (like ecological context of micro, exo and macro systems) requires resiliency and adaptation through different self-care strategies like yoga and meditation.

# 3. Self-care is vital to avoid counselor burnout and impairment.

A phenomenological study conducted by Blount et al., in 2016, explored the clinical supervisors' perceptions of their supervisee wellness. They identified 5 themes that are vital for supervisee wellness. They are intentionality, self-care, humanness, support and wellness identity. Blount et al., concluded that regular self-care is a must for counselors and health care professionals due to their nature of job like 'frequent encounters with difficult and challenging client life occurrences' (p.360). According to Cook-Cottone (2015), one's own balance of external and internal selves in these domains through formal and informal mindfulness practices is key for self-regulation. McCabe-Maucher (2019) adds that a key self-care strategy that counselors should practice is creating healthy boundaries and failure to maintaining them will often result in burnout and fatigue.

# 4. Mindfulness and Conscious Living are interconnected and are essential for optimal functioning of clinicians.

Mindfulness as described by Khabat-Zinn (2005) involves paying attention to the here and now without any preconceived notions or judgements. In his book on mindfulness, Hassan (2024) states, "It's not easy to think straight when your mind is overwhelmed and confused; it is hard to see through the mental clutter. Mindfulness allows you to make clear decisions more easily..." (p. 10). He adds that being mindful makes one's thinking more flexible and without judgements or getting caught up in past behaviors or experiences or future expectations. Through conscious living, counselors can be cognizant of the common mind traps that they experience in today's life and try to break those thought patterns for a calmer and more grounded approach to handle them. While discussing about the evaluation of mindful science, Brown et al., (2015) reported that researchers over the years (dated from 1890 to the early 20<sup>th</sup> century) focused on one or more aspects of consciousness like outcomes and behaviors of cognitions and emotions. However, there was a huge surge of interest in mindfulness-based interventions from the early 2000's. According to Brown et al., (2015) in today's world mindfulness predominantly refers to consciousness itself. Cook-Cottone (2015) reports that mindfulness practices of noticing and allowing insight to explore one's own phenomena of experiences results in raising the consciousness and ultimately paves a way for an empowered self.

McCurdy et al., (2024) studied the program evaluation of mental health and wellness curriculum in 460 school children and found a relative improvement in their emotional regulation. They reported that the growing trend of interest to engage in mindfulness-based

interventions like yoga and meditation for students, counselors and educators is promising. They encouraged policy makers to foster incorporation of mindfulness practices into the curriculum as training the staff to identify the challenges in implementation may reduce stress and yield positive academic outcomes.

### 5. Holistic Wellness is multidimensional.

Over the years, wellness models have been changed, advanced to add more domains and prongs or life tasks or dimensions. Hettler's Wellness wheel is a visual self- exploration tool with six dimensions initially but now includes a seventh dimension. Many models are widely prevalent today concluding that holistic wellness is an integral part of conscious mind, body and spirit with several dimensions as discussed in earlier sessions. However, the author focusses on the illustration of the 8 dimensions described by Montana and Summers (2021) along with examples of self-care strategies or the common mindfulness practices for each.

According to Montana and Summers (2021), there are 8 dimensions of holistic wellness that impact the work fatigue and burnout levels of counselors. They are A) occupational, B) social, C) environmental or relational, D) financial, E) physical, F) spiritual, G) emotional, and H) intellectual.

# A) Occupational Wellness

Occupational Wellness pertains to the sense of self-efficacy that one experiences to perform job duties and roles (Montana & Summers, 2021). Work life balance is an important factor that is attributed to the positive mindset and feeling productive at work (Mihelič & Aleksić, 2017). Other factors of positive occupational wellness include career growth, promotions and incentives received at work; sense of gratification associated with the professional responsibilities at work including volunteer work etc. while work overloads, stressful and toxic settings negatively influence occupational wellness (The National Wellness Institute (n.d.); Montana & Summers, 2021; Vidic, 2021). Being cognizant of one's own work fatigue, setting up healthy boundaries at work, accepting the truth of not being able to serve all, and observing one's own clinical areas of expertise are some of the mindfulness practices that will help with developing/maintaining occupational wellness.

# B) Social Wellness

Human beings cannot live in isolation. However, relationships can be overwhelming sometimes. Since majority of mental health client issues surround on the complexities of emotions from different relationships, counselors and health care professionals often may bring them home or experience counter transference. (McCabe-Maucher, 2019; McCurdy et al., 2024). Many researchers in this context concluded that it is very important to have a good support system to feel a sense of connectedness and belonging,

and to develop interdependence to identify and resolve challenges or stressful events in life (Barden et al.,2015; Puig et al., 2012; Montana & Summers, 2021; Vidic, 2021). With the technological advances, perspective on Social Wellness has changed over years. People are spending more time behind the screens, getting connected in virtual world which has its own disadvantages. In this context, McCabe-Maucher (2019) emphasizes the importance of external boundaries like limiting the screen time to specific hours of the day, clearly communicating with clients, friends and family members about one's virtual accessibility etc. He further discussed the importance of physical boundaries, external or social media boundaries, internal boundaries like intentional self-disclosing, time/ temporary boundaries and its impact on social wellness.

### C) Environmental or Relational Wellness

Robino (2019) reports that Global Compassion Fatigue – a term used to describe the process of how health care professionals are affected by global events like wars, sociopolitical climates, or issues of troubling world. McCurdy et al.,(2024) describes the detrimental impact of COVID on the psychological wellbeing of clients, counselors on their environmental and relational wellness. In their paper on Eco Wellness: The Missing Factor in Holistic Wellness Models, Reese and Myers (2012) report the positive influences of natural environments on the physical and mental health of counselors. Access to nature, environmental identity, and transcendence are the three important components that help with relational wellness. They further quote an example of how viewing nature decreases the self-reported minor illness and headaches in a study and how it improved student test scores and academic performance (as cited on p. 401). Mindful walking, hiking, walking meditation, gardening etc. are some of the self-care strategies that counselors may have to build into their wellness plan.

# D) Financial Wellness

Financial wellness is one of the key dimensions of holistic wellness. Montana and Summers (2021) define financial wellness as "the ability make informed financial decisions. It includes ability to live comfortably, invest in savings, save for retirement, and prepare for unexpected emergencies" (p.91). Global Wellness Institute (n.d) and Vidic (2021) reported that this dimension is one of the most affected one for many individuals around the globe due to the COVID pandemic. Research suggests that credibility of counselors and health care professionals plays a big role on their financial wellness. For example, Hassen (2024) reports that the more certifications and credentials that a health care provider have, the higher the earnings. He adds that private practice clinicians need to design customized financial goals like setting up emergency fund, contracting with insurance panels, estimating the ways to meet annual revenue goals etc. for a thriving practice.

# E) Physical Wellness

Research suggests that physical activities like exercise, walking, jogging etc. are positively correlated with the other domains of holistic wellness like psychological well-being, cognitive functioning, life satisfaction, decreased symptoms of anxiety and depression. Through multiple logistic regression, Goodwin (2003) analyzed national comorbid survey data of 8098 adults between 15-54 years of age in the United States. Results indicated a significant negative association between regular physical activity and anxiety, social phobia, specific phobia, agoraphobia, and depressive symptoms. In addition, counselors aim to build resilience through mental wellness by thinking, connecting, feeling and functioning. In this context, the Global Wellness Institute (n.d) illustrates internal and external mental wellness pathways through the below figure. According to it, there are four pathways through which internal (mental) aspects are connected to external (physical) aspects of one's psychological wellbeing or conscious living.

## MENTAL/INTERNAL PHYSICAL/EXTERNAL Activity & Creativity Self-Help Therapy, Coaching & Mentoring Cognitive Enhancement **Growth & Diet & Nutrition Nourishment Drugs & Supplements** & Brain Training Sleep Mind-body Practices Rest & Sensory Experiences (light, sound, aroma, touch) Mindfulness Reiuvenation Religion, Spirituality & Beliefs Altruism, Gratitude & Compassion Connection & Meaning Nature & Animals Volunteering & Civic Engagemer © 2020 Global Wellness Institute

Pathways to Mental Wellness

Figure 2. Adapted from The Global Wellness Institute's (n.d.) website <a href="https://globalwellnessinstitute.org/what-is-wellness/mental-wellness/">https://globalwellnessinstitute.org/what-is-wellness/mental-wellness/</a>

They are (1) Activity and Creativity, (2) Growth and Nourishment, (3) Rest and Rejuvenation, (4) Connection and Meaning. All of these pathways are interconnected and extremely important for one's conscious living. Some of the self-care strategies that contribute to physical wellness include (but not limited to), walking, running, jogging, yoga of any form, dance, gardening, cooking, cleaning etc.

# F) Spiritual Wellness

Spirituality is one of the coping skills that impact resiliency of not only the clients but also the counselors (McCabe-Maucher, 2019). Cashwell et al., (2007) operationally define spirituality as an active and passive developmental process through which one's

'beliefs, disciplined practices, and experiences are grounded and integrated to result in increased mindfulness, heartfulness, and soulfulness' (p. 67). According to them, spiritual wellness is a conscious altering process, and a hallmark of this path is mindfulness. They further describe that mindfulness practices can be either formal selfcare techniques like different types of meditations while informal modalities entail conscious decisions to be nonjudgmentally aware of like mindful eating, mindful walking, mindful bathing etc. Reese and Myers (2012) reported that nature aids in selftranscendence and is positively associated with community connectedness thus contributing to spiritual wellness. According to Cook-Cottone (2015), attaining harmony or balance through the 12 embodied practices is the ultimate spiritual goal for mental health professionals. These practices like living in inquiry, being mindfully aware of, cultivating nonattachment, prioritizing self-care etc. will help us to manage the challenges of internal and external selves. Mindfulness meditation techniques such as body scans, progressive muscle relaxation, deep breathing, mantra mediation, chakra meditation, yoga etc. have several benefits to bring the balance or harmony through relaxation. Below chart out lines some of such benefits based on the literature review.

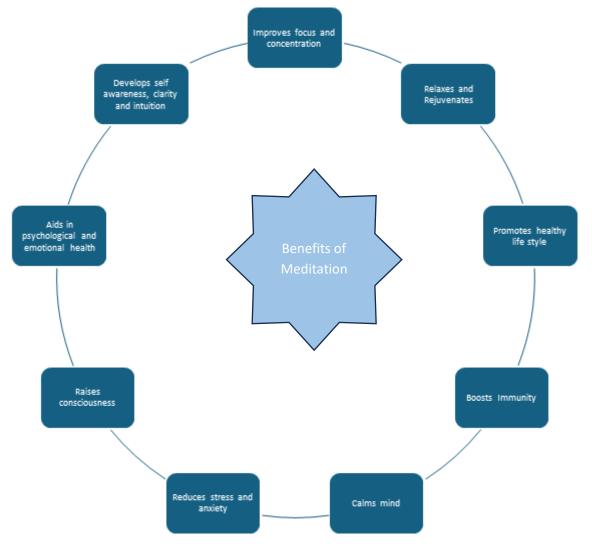


Figure 3. Benefits of meditation chart

# G) Emotional Wellness

According to Montana and Summers (2021), emotional wellness pertains to management of one's own emotions by being aware of them and accepting them. Since healthcare professionals deal with a range of extreme emotions of clients including different types of trauma, it is vital for them to unwind or process their own emotions on a daily basis. Puig et al. (2012) examined the relationship between job burn out and personal wellness of mental health professionals. They concluded that vicarious trauma and counter transference are two of the many factors that are associated with counselor burnout thus contributing towards negative emotional wellbeing of counselors. Lee et al. (2010) and Compassion fatigue (n.d.) urged the counselors about the vital need to mindfully observe and monitor one's own emotions. Yoga, different types of meditations, listening to music, seeing their own therapy etc. are some of the self-care techniques that counselors can adapt into their emotional wellness routine.

# H) Intellectual Wellness

Intellectual wellness is attributed to one's own ability and motivation for new/continuous learning either based on real life experiences or by designing and applying new knowledge through discovery and innovation (Montana & Summers,2021; Vidic, 2021). It involves active brain processing, organizational, and meta-cognitive skills to process and retain information through assimilation (Hassen, 2024). As the field of counseling is dynamic, therapists and health care professionals need to keep up with the research and best practices in the field by continuing education. Moreover, ACA code of ethics requires a set number of continuing education credits for license and certification renewals. Attending workshops, conferences, reading about research and the innovations in the field, multicultural immersion experiences, travels, participating in retreats, study abroad programs etc. are some of the self-care strategies that promotes intellectual wellness.

# SIGNIFICANCE OF THE WORK AND IMPLICATIONS FOR COUNSELORS

This conceptual paper provides insight into the evolution of the concept of wellness over two decades. It highlights the vital importance of self-care for counselors and health care professionals. The paper discusses several wellness models and how they are connected to holistic health. Thorough discussion of common themes emerged from this extensive systemic review adds to the existing body of literature. The paper yields several counseling implications. For example, knowledge gained through this conceptual paper can aid in increasing counselor awareness and in educating the health care professionals about the importance of self-care through mindfulness practices and conscious living. The multidimensional nature of holistic wellness focusses on several self-care strategies that counselors need to build into their short-term and long-term wellness plans.

### CONCLUSION AND FUTURE RECOMMENDATIONS

From common themes generated from this extensive review discussed above, it is evident that counselor wellness through self-care is crucial due to the demanding nature of the profession. To avoid burnout and impairment of health care professionals, counselors should design their own wellness plan targeted towards all 8 dimensions of holistic wellness and thrive for their optimal functioning and wellbeing through conscious living.

In future, the current study may be replicated to examine the common themes of holistic wellbeing and self-care practices of culturally diverse populations. As the current study is limited to reviewing information from only two decades, future conceptual papers may extend the review to several decades, from more sources of information, and with a greater number of studies. Systematic review quantitative reviews like meta-analysis and content analysis on this topic might add to the field of counselor wellness. Qualitative exploratory studies like counselor perceptions on wellness models, wellness assessment studies and or phenomenological inquiries or case studies on holistic wellness of clinicians from different health care fields would be helpful. Quantitative studies or mixed methods on different dimensions of holistic wellness would add to the field of counseling.

\*\*\*\*

### **Brief Profile of the Author:**

Suneetha B Manyam,PhD, LPC, CPCS, CRC, BC-TMH is a tenured professor at Mercer University in the Department of Counseling, Atlanta, Georgia, USA. As a counselor educator for 16+ years, she has been training and supervising the future counselors in the masters and PhD programs in Clinical Mental Health, Clinical Rehabilitation, School Counseling, Counselor Education and Supervision programs. Dr. Manyam actively engages in scholarly research in the areas of counselor wellness, mindfulness meditation and self-care techniques, relationship issues, microaggressions, and multicultural advocacy. Further, she has several scientific paper publications in the above areas of expertise. Dr. Manyam has also presented at several local, national, and international conferences and workshops including as a keynote speaker. As a licensed clinician, Dr. Manyam is serving couples, families and clients from 5-75 years in the areas of anxiety, stress management, trauma, grief, acculturation issues for the last two decades.

**Statements and Declaration:** I declare that I have no conflict of interest with my places of employment or anybody else in publishing this article. No financial support was received for the work within this article.

### **References:**

- American Counseling Association. (2024). 2024 ACA code of ethics. Alexandria, VA: Author.
- American Psychological Association. (2010). Ethical principles of psychologists and code of conduct. Retrieved from <a href="http://www.apa.org/ethics/code/index.aspx">http://www.apa.org/ethics/code/index.aspx</a>
- Barden, S., Conley, A., Young, M. (2015). Integrating Health and Wellness in Mental Health Counseling: Clinical, Educational, and Policy Implications. Journal of Mental Health Counseling, 37(2), 152-163. <a href="https://doi:10.17744/mehc.37.2.1868134772854247">https://doi:10.17744/mehc.37.2.1868134772854247</a>
- Bernstein, E. E., & McNally, R. J. (2018). Exercise as a buffer against difficulties with emotion regulation: A pathway to emotional wellbeing. *Behavior Research and Therapy*, 109, 29–36. https://doi.org/10.1016/j.brat.2018.07.010
- Blount, A. J., Taylor, D. D., Lambie, G. W., Anwel, A. R. (2016). Clinical Supervisor's Perception of Wellness: A Phenomenological View on Supervisee Wellness. The Professional counselor, 6 (4), 360-374, doi:10.15241/ab.6.4.360
- Brown, K. W., Creswell, J. D., Ryan, R. M (2015). Introduction: The evolution of Mindful Science. In Handbook of Mindfulness: Theory, Research and Practice (2<sup>nd</sup> ed.) Guilford Press. ISBN 9781462557004. Pages. 1-6
- Cashwell, C S., Bentley, D. P, Bigbee, A. (2007). Spirituality and Counselor Wellness. Journal of Humanistic Counseling, Education and Development. 46, 66-80.
- Charisiou, A. (2020). Simple Self Care: Reset and Restore. Affirm Press
- Cook-Cottone, C.P. (2015). Mindfulness and Yoga for Self-Regulation: A Primer for Mental Health Professionals (4th ed.). Springer. ISBN- 13: 978-0826198617.
- Compassion fatigue (n.d.). Retrieved on October 29, 2024 from <a href="https://www.psychologytoday.com/us/basics/compassion-fatigue">https://www.psychologytoday.com/us/basics/compassion-fatigue</a>
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed method approaches (4th ed). Sage.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062. <a href="https://doi.org/10.1037/a0013262">https://doi.org/10.1037/a0013262</a>
- Friedman, K. (2017). Counselor Self-care and Mindfulness. *Contemporary Buddhism*, 18(2), 321–330. https://doi.org/10.1080/14639947.2017.1373437

- Goodwin, R. D. (2003). Association between physical activity and mental disorders among adults in the United States. *Preventive Medicine*. *36*(6), 698-703. <a href="https://doi.org/10.1016/S0091-7435(03)00042-2">https://doi.org/10.1016/S0091-7435(03)00042-2</a>
- Global Wellness Institute. (n.d.). What is wellness, what is mental wellness? Retrieved on 11/1/2024 from https://globalwellnessinstitute.org/what-is-wellness/mental-wellness/
- Hassen (2024). Mindfulness: Be Mindful. Live in the Moment. (2nd ed.). John Wiley and Sons. ISBN-13: 978-0857089892.
- Intellectual well-being. Intellectual Well-being | Student Health and Wellness. (n.d.). https://www.studenthealth.virginia.edu/intellectual-well-being
- Lee, S. M., Cho, S. H., Kissinger, D., & Ogle, N. T. (2010). A Typology of Burnout in Professional Counselors. *Journal of Counseling & Development*, 88(2), 131–138. https://doi.org/10.1002/j.1556-6678.2010.tb00001.x
- Kabat-Zinn J. (2005). Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life. Hachette Books; 2005.
- Khan KS, Kunz R, Kleijnen J, Antes G (2003). Five Steps to Conducting a Systematic Review. *Journal of the Royal Society of Medicine*. 96(3),118-121. doi:10.1177/014107680309600304
- McCabe-Maucher, A. (2016). Complete Self-Care: Transformation through Yoga and Beyond (1<sup>st</sup> ed.). Cognella Academic Publishing. ISBN- 13: 978-1516587667.
- McCurdy BH, Bradley T, Matlow R, Rettger JP, Espil FM, Weems CF, et al. (2024) Program evaluation of a school-based mental health and wellness curriculum featuring yoga and mindfulness. *PLoS ONE*, 19(4): e0301028. https://doi.org/10.1371/journal.pone.0301028
- Mihelič, K. K., & Aleksić, D. (2017). "Dear Employer, Let Me Introduce Myself" Flow, Satisfaction with Work–Life Balance and Millennials' Creativity. Creativity Research Journal, 29(4), 397–408. <a href="https://doi.org/10.1080/10400419.2017.1376503">https://doi.org/10.1080/10400419.2017.1376503</a>
- Montoya A L, Summers L L. (2021). IDEAS Educator Well-being: 8 Dimensions of Wellness for Educators. The *Learning Professional*, 42(1), 50-62
- Myers, J. E., Sweeney, T J., & Witmer, J M. (2000). The Wheel of Wellness for wellness: A holistic model for treatment planning. *Journal of Counseling & Development*, 78(3), 251–266. https://doi.org/10.1002/j.1556-6676.2000.tb01906.x

- National Association of Social Workers. (2008). Code of ethics of the National Association of Social Workers. Washington, DC: Author.

  <a href="https://www.socialworkers.org/About/Ethics/Code-of-Ethics">https://www.socialworkers.org/About/Ethics/Code-of-Ethics</a>
- National Wellness Institute. (n.d.). The six dimensions of wellness. Retrieved on October 25, 2024 from <a href="https://nationalwellness.org/resources/six-dimensions-of-wellness/">https://nationalwellness.org/resources/six-dimensions-of-wellness/</a>
- Puig A, Baggs A, Mixon K, Park YM, Kim BY, Lee SM (2012). Relationship between job burnout and personal wellness in mental health professionals. *Journal of Empirical Counseling*. 49(3), 98–109.
- Rebekah Levine Coley., Christopher F Baum. (2021). Trends in mental health symptoms, service use, and unmet need for services among U.S. adults through the first 9 months of the COVID-19 pandemic, *Translational Behavioral Medicine*, 11(10), 1947–1956, https://doi.org/10.1093/tbm/ibab030
- Reiner, S. M., & Dobmeier, R. A. (2014). Counselor preparation and the Association for Spiritual, Ethical, and Religious Values in Counseling Competencies: An exploratory study. *Counseling and Values*, *59*, 192-207. doi:10.1002/j.2161-007x.2014.00051.2
- Vidic, Z. (2021). Multi-year investigation of a relaxation course with a mindfulness meditation component on college students' stress, resilience, coping and mindfulness. *Journal of American College Health*, 1–6. <a href="https://doi.org/10.1080/07448481.2021.1987918">https://doi.org/10.1080/07448481.2021.1987918</a>
- World Health Organization. (2022). *COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide*. Retrieved from <a href="https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide">https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide</a>
- You Can't Pour From an Empty Cup: A Phenomenological Study Exploring Experiences of Black Counselor Wellness Practices and Barriers to Wellness. (2024). Mercer University.

# **Editorial Board**



Prof. K. Ramasubramanian IIT Bombay



Prof. Ajit K Verma Western Norway University of Applied Sciences



Brigadier Shitanshu Mishra Indian Army Veteran



Prof. Anil Kumar Gourishetty IIT Roorkee



Prof. Ashish Pandey IIT Bombay



Prof. (Dr.) Manish Khanna Dean Academics, KNS MIMS, Lucknow



Dr. Prakash Venglat University of Saskatchewan



Mr. Rameshchandra Ketharaju Quantum Ecosystems and Technology Council of India



Dr. Ranbir Sinha Sinha Research



Mr. Anand Prakash GI4QC Forum



Mr. Vinod Kulkarni IT Consultant



Mr. Anurag Jain DIY Gadgets



Published by: GI4QC Forum

Website

www.gi4qc.org info@gi4qc.org; ijewcs@gi4qc.org; Emails

query@gi4qc.org
Plot No. 9B/66, Bhagabanpur, Khandagiri,
Bhubaneswar, Odisha, India - 751030 Address