

# **BOOK OF ABSTRACTS**

**INTERNATIONAL CONFERENCE  
ON  
THOUGHT, PERCEPTION  
AND REALITY**

**27 - 28 DECEMBER, 2025**

**ORGANISED BY**

**SCHOOL OF HUMANITIES, SOCIAL  
SCIENCES & MANAGEMENT,  
IIT BHUBANESWAR**

**&**

**CENTRE FOR FOUNDATION OF SCIENCE  
& CONSCIOUSNESS,  
BI BHUBANESWAR**

The abstracts included in this book are as received from the participants and presented at the International Conference on Thought, Perception, and Reality held on the 27th and 28th of December 2025, at IIT Bhubaneswar.

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**“The world in our heads is not a precise replica of reality; our expectations about the frequency of events are distorted by the prevalence and emotional intensity of the messages to which we are exposed.”**

**— Daniel Kahneman, Nobel Laureate in Economic Sciences**



**“Awareness, I take to be one aspect—the passive aspect—of the phenomenon of consciousness. Consciousness has an active aspect also, namely the feeling of free will.”**

**— Roger Penrose, Nobel Laureate in Physics**



Bhaktivedanta Institute, Bhubaneswar

Dedicated to

**Dr. T. D. Singh**

(His Holiness Bhaktisvarupa Damodara Swami)

(1937-2006)

*Scientist and Saint*

Founder Director, Bhaktivedanta Institute and  
Founder President, Vedanta and Science Educational Research Foundation



School of Humanities, Social Sciences and Management  
IIT Bhubaneswar

Dedicated to

ALL HUMANITY





राष्ट्रपति  
भारत गणतंत्र  
**PRESIDENT  
REPUBLIC OF INDIA**



**Smt. Droupadi Murmu**

**MESSAGE**

I am happy to know that Bhaktivedanta Institute, Kolkata along with School of Humanities, Social Sciences and Management, IIT Bhubaneswar, is organising an International Conference on Thought, Perception and Reality on its Golden Jubilee on 27<sup>th</sup> and 28<sup>th</sup> December, 2025.

This conference aims to explore the multifaceted concept of perception through an interdisciplinary approach. Such conferences play an important role in bringing together scholars from diverse disciplines to engage in meaningful exchange. I am confident that the discussions and deliberations will shed light on the metaphysical foundations of thought and reality, consciousness and the limits of knowledge.

On this occasion, I extend my warm greetings and felicitations to all those associated with the event. I also wish the Golden Jubilee celebrations every success.

**(Droupadi Murmu)**

**New Delhi  
December 23, 2025**

डॉ. हरि बाबू कंभमपाटि  
Dr. Hari Babu Kambhampati



राज्यपाल, ओडिसा  
GOVERNOR OF ODISHA

राज भवन  
भुवनेश्वर - 751 008  
RAJ BHAVAN  
BHUBANESWAR - 751 008

December 24, 2025

## MESSAGE

I am pleased to know that Bhaktivedanta Institute, Kolkata along with School of Humanities, Social Sciences and Management, IIT Bhubaneswar is organising an International Conference on '**Thought, Perception and Reality**' from December 27-28, 2025.

I am hopeful that this conference will represent a significant endeavour to engage with fundamental questions concerning thought, perception and the nature of reality, drawing upon diverse intellectual traditions and interdisciplinary approaches.

I extend my best wishes to the organizers, speakers and participants. I am confident that the conference will foster insightful exchanges and contribute meaningfully to the ongoing exploration of knowledge and truth.

I wish the event all success.

(Hari Babu Kambhampati)

## Message from the Director, IIT Bhubaneswar



It is with great pleasure that I welcome all delegates, esteemed keynote speakers, and scholars to the International Conference on Thought, Perception, and Reality. This is a collaborative effort between the School of Humanities, Social Sciences, and Management, IIT Bhubaneswar, and the Centre for Foundation of Science and Consciousness Bhaktivedanta Institute, Bhubaneswar. Our campus, situated in the peaceful foothills of the Barunei hills, offers a lush and calm setting that creates a wonderful space for academic exchange and discussion. The theme of the conference addresses some of the most profound questions concerning human cognition, including how we think, perceive, and construct reality. It also provides an interdisciplinary platform to critically analyse how theoretical and empirical approaches connect aspects of consciousness, reality, and cognitive mechanisms.

I congratulate the organizing team for their efforts and initiatives in fostering collaborations that transcend disciplinary boundaries.

I believe that the discussions and deliberations during the conference will benefit the participants and contribute significantly to ongoing research in the field. I wish the conference every success and extend my best wishes.

Prof. Shreepad Karmalkar  
Director  
Indian Institute of Technology Bhubaneswar

## Message from the President, Bhaktivedanta Institute



Dear Delegates/Scholars,

It is a privilege and a pleasure to extend my warm greetings to all participants of the International Conference on Thought, Perception, and Reality. This conference is dedicated to exploring questions that lie at the heart of human inquiry: How do we come to know what we know? In what ways does the mind shape our perception of the external world? Where do the boundaries between perception and reality truly lie? And what is the fundamental role of consciousness in this ongoing construction of experience?

These themes have engaged philosophers, scientists, and spiritual thinkers for centuries. Today, however, we stand at a unique confluence of disciplines. Advances in quantum physics, cognitive science, neuroscience, psychology, and artificial intelligence intersect with the insights of philosophy, psychology and the contemplative traditions, opening new possibilities for understanding the nature of mind and reality.

Despite the remarkable progress of modern science, the central mystery of consciousness remains unresolved. As scientific models increasingly indicate the connection between observer and observed, it becomes evident that a comprehensive understanding of reality must take alternative paradigms of consciousness research seriously, not just as an emergent by-product, but as a key ontological dimension. This open approach, led by our founding director, Dr. T. D. Singh, continues to guide the research of the Bhaktivedanta Institute.

Indian knowledge systems, especially Vedic knowledge systems, have profound paradigms to describe and connect our inner and outer worlds. When combined with cutting-edge modern research, they have the potential to lead to fundamental breakthroughs that are relevant to philosophy, science and our life. In science and philosophy, we generally deal with the questions of ‘To what extent does the mind perceive the world as it truly is, to what extent does it construct the world it perceives, and what is the mechanism of our perception?’ However, we do not find a satisfactory answer to the question, ‘why the world and our perception apparatus are so constructed that we perceive a meaningful world?’ Spirituality can help us have meaningful answers to these ‘purpose’ questions. Take the example of a computer game, we may philosophize it in terms of pixels on the screen and the number of frames per second, and then our eyes and brain, which interpret the frames as motion. One may say that there is neither a car nor the motion of it in a car race computer game. However, the game is purposed to give us the experience and entertainment of car and race. This indicates that the car and race exist in the real world we live in and that we are capable of and are very interested in such perception, thoughts and experience. Similarly, the

thoughts that are the result of perception and reality only indicate the existence of a more real or absolute world where there is a reality which we are capable of perceiving and experiencing. Bhagavad-gita 15.6 indicates that there is an absolute realm of which this world is a shadow,

na tad bhāsayate sūryo na śāsāṅko na pāvakaḥ

yad gatvā na nivartante tad dhāma paramaṁ mama

“That supreme abode of Mine is not illumined by the sun or moon, nor by fire or electricity. Those who reach it never return to this material world.”

The themes of this conference—from cognitive biases and perceptual construction to quantum reality, ontology, belief formation, artificial intelligence, and the philosophy of mind—highlight the need for integrative and interdisciplinary inquiry. Both ancient wisdom and contemporary research affirm that perception is not a passive reception of external facts but an active, conscious, mediated process. Understanding this process is essential for building bridges between scientific, philosophical, and spiritual worldviews.

The challenges before us are profound:

- reconciling subjective experience with objective scientific methodology;
- including investigations on consciousness without using reductionism;
- integrating empirical rigor with philosophical and spiritual insight; and
- fostering interdisciplinary frameworks capable of genuine explanatory depth.

These challenges are not only academic but are also socially imperative in this world which is increasingly shaped by a crisis of meaning, perception, and identity. Science, philosophy, and spirituality—each illuminating different facets of human experience must work together to advance a more complete and compassionate vision of reality.

We are grateful to the patronage of the Director, IIT Bhubaneswar and to the Head and team of School of Humanities, Social Sciences and Management for their partnership in this important initiative. We also extend our appreciation to all speakers, researchers, and participants who have gathered to contribute their insights and scholarship to this dialogue.

As we embark on this conference, I hope it becomes a vibrant forum for the exchange of ideas one where inquiry is rigorous, discussions are open and respectful, and new perspectives emerge with clarity and purpose. May the sessions ahead inspire deeper reflection on the nature of thought and perception, and may they nurture a culture of intellectual humility, collaboration, and curiosity.

I wish every participant a rewarding and enriching experience. May this conference contribute meaningfully to our collective understanding of mind, consciousness, and reality, and inspire continued inquiry in the years ahead.

Shri Vasudeva Rao  
President, Bhaktivedanta Institute.

## **Message from the Head of the School of Humanities, Social Sciences and Management, IIT BBS**



Dear Participants and Guests,

Namaskar and Welcome to the School of Humanities, Social Sciences, and Management, IIT Bhubaneswar!

My heartiest congratulations to Dr. Sreetama Misra and Dr. Aparna Pandey from the School of HSS&M, IITBBS and Shri Jitun Dhal, Director, Bhaktivedanta Institute, Bhubaneswar, for organizing such a thought-provoking and timely conference titled 'Thought, Perception and Reality'. The dictionary meaning of 'thought' is 'idea', 'perception' is 'awareness', and 'reality' is 'the state or quality of being real'. And it is a fact that the meanings of these nomenclatures are ever shifting in this cyber age where thought is constructed synthetically, perception is generated artificially and reality is viewed virtually. I am sure the conference will encourage participants and speakers to engage in stimulating deliberations on how we observe the tangible world around us and how symbiotic the nature of the relationship is with it.

I am sure the conference will provide a vantage point for discussions ranging from the various theological concepts like God, Consciousness, and Reality, the ontology of the terms, the beliefs aligned with them, understanding space and time to psychological disorders and perceptual barriers, Artificial Intelligence, and quantum reality to comprehending utopias and dystopias in the 21st century.

I commend the dedication and efforts of the organisers for putting together this conference. And I am sure the participants and guests will enjoy their visit to our beautiful and verdant campus. I wish the conference every success.

Dr. Amrita Satpathy  
Head, SHSSM  
Indian Institute of Technology Bhubaneswar.

## **Message from the Conveners**

At the outset, we extend a heartfelt welcome to all whose participation has made this conference possible. Over the years, we realised that many of the research questions we were facing about how we think, how we perceive the world, how consciousness works, and how reality is shaped, and so on, could no longer be understood from only one perspective. These were the questions that need both philosophical depth and psychological insight, along with contributions from other disciplines. What began as simple, informal exchanges soon became a common vision: to create a platform where scholars from various backgrounds could explore how we understand and experience the world. This conference is the outcome of that shared effort. It reflects the collaboration of two institutions and the enthusiasm of many scholars and students. Our aim has been to build a warm and thoughtful environment where new ideas and long-standing questions can be discussed openly from multiple viewpoints. We extend our gratitude to the organizing committee of SHSSM, IIT Bhubaneswar, and to the entire team of Bhaktivedanta Institute for their unflinching support and coordination. We express our gratitude to our institute, IIT Bhubaneswar, for supporting our initiative of hosting the conference. We deeply acknowledge and appreciate the enthusiastic response from all participants.

We hope you use these two days to engage actively, exchange ideas, and build meaningful academic connections.

Regards,  
Aparna and Sreetama.



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## Keynote Addresses

### Attention and Experience

Prof. Narayanan Srinivasan, Department of Cognitive Science,  
Indian Institute of Technology Kanpur

#### Abstract

The relationship between attention and perceptual experience has been debated in the literature. One attempt has been to investigate the effects of selective attention on conscious perception. While perception can be studied using objective measures like accuracy, here we focus on appearance-based measures and psychophysical methods to study conscious experience. We study both differences in the content as well as properties of our perceptual experience.

One aspect of attention is scope of attention. We have studied the effects of scope of attention on visual awareness using afterimages and statistical summary perception tasks. Results indicate the scope of attention influences what we see. We have also investigated the influence of selective attention (cuing) on visual phenomenology using emotional faces. While others have shown that cuing influences appearance of basic visual features like contrast, we showed that spatial cuing enhances the perceived intensity of happy and sad expressions.

One way to study consciousness is to investigate the properties of conscious experience. One question that influences theorizing regarding consciousness is whether is discrete or graded. We have investigated gradedness by using perceptual awareness ratings. We first showed that scope of attention or hierarchical processing influences gradedness with more gradedness for global processing or broad scope of attention. More recently, we have investigated gradedness in scene gist perception, which some have claimed to be not influenced by attention. We manipulated attention in terms of perceptual load of a primary task and investigated the effect of this load on gradedness of scene gist perception (a secondary task). Results showed that scene gist perception is graded and depends on perceptual load with more gradedness in the high load condition. In addition, we manipulated external noise and showed that noise suppression is a potential mechanism that underlies the load dependent gradedness effects.

In addition to vision, we have investigated the effects of attention on time perception. I will discuss recent results on the effect of load and scope of attention on different aspects of perceived time

Attentional processes are utilized and themselves change due to practices like meditation. I will discuss some findings on the effects of meditation training on visual and temporal experience. The results indicate that attention influences the way we experience the world.



## **Reality and Thought: Embodiment and Lived Experience**

Prof. Pius V Thomas, Department of Philosophy, Assam University, Silchar

### **Abstract**

Phenomenology, from the very beginning, challenges and refashions the conventional metaphysical sense of reality that grounds thought and being in the ultimate principles of absolute 'ideality' or 'materiality'. As reality is understood as a product of human consciousness and subjective, lived experience of the "life-world" (*Lebenswelt*), phenomenology, in all its major theoretical variants from Husserl to Heidegger and Merleau-Ponty, which emphasized different conceptual conglomerates like Transcendental Ego - Dasein /Human Existence - Embodied Faculty, but aimed to locate thought and reality as culturally constructive, ontologically lived-embodied, and ethically constituted by an inter-subjectively shared world of values. Merleau-Ponty highlights it when he defines phenomenology as "a philosophy which places essences back into existence and does not think that human beings and the world are comprehensible except on the basis of their 'facticity'" (Phenomenology of Perception, i; vii1). The later Post-phenomenological endeavours of constructive and deconstructive positions make effort to challenge the mechanically, instrumentally rational or computational understanding of the mind, thought and reality, in the same vigour, and link embodied, lived experience with the mediation of the shared world and socially embedded schemata of reality.

Taking a cue from the above, the presentation/paper attempts to critically examine the concepts of thought and reality used by the General AI, which are modeled after naturalistic and scientific ideals of intelligence

The paper further explores briefly:

1. Artificial Intelligence, facticity and normativity
2. AI and the phenomenology of consciousness
3. AI and the matrix of the lived world of care

## **Quantum Processes in the Brain and Conscious Experience**

Prof. Sisir Roy, National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore.

### **Abstract**

We revisited the age old question " what generates conscious experience" which perplexed the scientists and philosophers for many centuries. Recently, the internationally well-known neuroscientist Koch and his group proposed a thought experiment to verify their proposal for getting conscious experience within the preview of quantum theory with a conjecture that one can experience qualia in a state like superposed state in quantum theory. Infact, the traditional Indian Texts like Yogavasistha Ramayana indicate the existence of a thoughtless state within the two thoughts in different contexts. In Yogavasistha sloka the two states like life and death or other classes of states in cognitive domain. the two states like life and death or other classes of

states in cognitive domain. it states that as the mind moves from one thought to another, right in between the two, there is an unthinking state or state associated with sandhi. This is indeed to be nature of Pure Consciousness. Here, we explore the concept of Sandhi or interval between thoughts, and how meditation on it can be effective method for realizing one's swarupa of Brahman. This study will be based on slokas from the text Laghu vaakya vritti which deals with meditation on pure consciousness.

New frontiers in modeling cognitive science and use of quantum principles are emerging based on some kind of controlled experiments by many eminent scientists all around the globe which is elaborated in the recent book of the speaker. Here, one does not require specifying the existence of quantum processes in the brain but the observational results clearly indicate the existence of quantum probability for the cognitive domain. This very fact of existence of quantum probability raises new possibility of having conscious experience in this superposed state like death and living state of the Cat in Schoringer's Cat paradox in quantum theory. The challenging issue is whether and how one can verify it within the laboratory experiments? One proposal is to look for EEG or MEG data for the meditator concentrating on Sandhi state and investigate the noise spectrum in EEG data. The methodology of this analysis of noise spectrum from EEG data will be discussed.

### **Fresh Perceptions of Reality**

Prof. Andrew Briggs, Department of Materials, University of Oxford

It comes as a surprise to many, even some trained in statistics, to learn that probability is subjective, in so far as it depends on what you already know. This is an example of how truth itself depends on a subtle interplay of objective reality and subjective choices. It achieves a fresh poignancy in quantum science, where there is no consensus even among experts about what happens when you make a measurement, even though measurements are fundamental to all experimental science including quantum experiments. Similarly, there is no consensus about the nature of consciousness, though we are beginning to understand more about degrees of consciousness, and how they might relate to what it means to be me [1].

Truth, purpose and meaning constitute three pillars of human flourishing, whereby we construct the reality of our lives [2]. We can choose where to look for reality, and what intellectual resources to deploy in our search. We can then make the transition from being merely observers of reality to creators of whatever reality we decide, within our system of values, will make the world a better place.

[1] *It Keeps Me Seeking: The Invitation from Science, Philosophy and Religion*. Andrew Briggs, Hans Halvorson, and Andrew Steane (Oxford University Press 2018)

[2] *Human Flourishing: Scientific insight and spiritual wisdom in uncertain times*. Andrew Briggs and Michael J. Reiss (Oxford University Press 2021)

## Dimensions of Consciousness in Organisms

Dr. Nesin Mathew Shubin, Department of Psychology, Christ University, Bangalore

### Abstract:

Across centuries, consciousness has remained a central topic of inquiry spanning diverse disciplines, including philosophy, mathematics, computer science, neuroscience, behavioral science, evolutionary biology, life sciences, medicine, and psychology. Collectively, these fields have generated more than thirty distinct theoretical frameworks—and hundreds of variations thereof—aimed at explaining the nature of conscious experience. Historically, most physicalist and non-physicalist accounts have focused predominantly on human consciousness, often neglecting its broader biological manifestations. One notable exception is panpsychism, which extends the notion of consciousness to all matter.

The absence of direct empirical evidence and the methodological difficulty of quantifying subjective experience have compounded the challenge of understanding consciousness. As Papineau (2020) observes, several foundational questions remain unresolved: How does consciousness relate to other features of reality? Where are conscious phenomena located within it? And what is the very nature of consciousness? Investigating the evolutionary origins of consciousness, therefore, may illuminate its underlying mechanisms and ontological status.

A pivotal milestone in this discourse was the Cambridge Declaration on Consciousness (2012), which affirmed that many non-human animals—including aquatic species—exhibit conscious states. Subsequent debates have centered on the cognitive, emotional, and subjective dimensions of animal consciousness. Some researchers posit that consciousness emerged alongside the evolution of complex nervous systems in early vertebrates such as fish, whereas others argue that primitive forms of awareness may predate the vertebrate lineage and even exist among invertebrates.

The Cellular Basis of Consciousness (CBC) hypothesis proposed by Arthur Reber (2016), and later expanded by Baluška and Reber (2019), advances an even more radical perspective: that consciousness might exist in unicellular organisms, suggesting that sentience could be an inherent property of life itself rather than a late evolutionary development. Yet, the question of consciousness's true origin remains a profound and enduring conundrum.

In pursuit of a more systematic approach, Birch et al. (2020) delineated five dimensions of animal consciousness—perceptual richness, evaluative richness, integration across time (diachronic unity), integration at a time (synchronic unity), and self-consciousness. These dimensions provide a comparative framework for examining consciousness across taxa, from primitive to highly complex organisms. Current research increasingly adopts this multidimensional perspective, revealing that consciousness is not a monolithic entity but a constellation of interrelated capacities that vary in degree and form across species. Recognizing this multidimensionality does not negate the possibility of a unified concept of consciousness; rather, it underscores the importance of addressing the fundamental question: What is the nature of consciousness itself?

## **Quantum Psycho Religio Therapy**

Prof. Mathew Chandrankunnel, JIS University, Kolkata

### **Abstract**

The pervasive spread of profound human suffering, manifesting as fragility, vulnerability, unhappiness, frustration, alienation, and failure, have escalated into a mental health crisis, evidenced by alarming rates of depression and suicide across all strata of society, from prominent film stars and business leaders to medical doctors and schoolchildren. While effective psychological interventions are critical, the Indian psyche often rejects them, viewing mental health treatment as an enduring taboo. It is within this urgent context that a groundbreaking new therapeutic modality emerges: Quantum Psycho Religio Therapy (QPRT).

QPRT is a comprehensive, synthesized method that inextricably intertwines the foundational discoveries of modern neuroscience, the probabilistic nature of quantum mechanics, deep psychological insight, vast cosmological principles, and profound religious and spiritual values. Its origins trace back to the highly successful Psycho Religio Therapy, originally evolved and practiced over five decades by Reverend Father Geo Kappalaumackal. A renowned psychologist and hypnotherapist, Fr. Kappalaumackal has served and healed over fifty thousand patients in Kerala, India, through his praiseworthy and dedicated service.

This time-tested therapeutic process has now been integrated with contemporary scientific paradigms, refined relaxation techniques, and the nuanced approaches of Ericksonian Hypnosis. Under the tutelage of great psychologists, medical doctors, and world-renowned hypnotherapists, Quantum Psycho Religio Therapy has been designed, practiced, and promoted by Professor Dr. Mathew Chandrankunnel, CMI. It stands as an effective and powerful tool aimed not only at the elimination of deep-seated illnesses but, crucially, at the vital enhancement of psycho-spiritual capabilities, offering a holistic path to well-being in an increasingly fractured world.

The human being is best understood as a sophisticated Neuro Somatic System, functioning essentially as an advanced information construct that encompasses physical, psychic, and pneumatic dimensions. Drawing from advanced quantum psychological perspectives, this system points toward a quantum consciousness, namely a field of potential profoundly influenced by subtle gravito-electromagnetic signatures and the mechanism of non-local intentionality. These interventions are capable of initiating deep quantum healing processes. The aim is a perfect individuation of the human individual through the systematic elimination of ingrained illnesses and the comprehensive optimization of inherent human potential.

This holistic framework skilfully integrates the foundational conscious/unconscious divide explored by psychiatric pioneers. It synthesizes the instinctual Freudian Depths, the archetypal Jungian Heights, the social Adlerian Horizons, the ethical Frommian Walls, and the meaning-focused Franklin Purposiveness. From this integrated understanding, Quantum Psycho Religio Therapy is born. This approach functions as a specialized psycho-spiritual surgery, guiding an essential journey of existential healing. It works to systematically eliminate the deeply embedded scars imprinted onto the unconscious mind by the history of suffering and pain, thereby restoring psychological integrity and promoting optimal well-being.

## **Special Address**

### **What is a Thought? Explorations from Quantum Physics, Neuroscience and Vedanta**

Varun Agarwal, Bhaktivedanta Institute, Kolkata

What is mind? Is it different from brain or an epiphenomenon of brain? Is it same as 'self' or different from 'self'? If it is different, how it is different, and what makes it different? How do we perceive the external world? What actually is a perception? Is there a 'universal mind' behind the Cosmos? Is this universe a product of thought of that 'universal mind'? What is the relationship between our mind and the universal mind, if that exists? Interestingly, developments in modern science in last century, especially in quantum physics and neuroscience, has a lot to contribute to these perennial questions and issues in philosophy and psychology.

What insights can Vedanta provide about mind – its nature, its working and channelising it for flourishing our human life? What applications the study of mind and perception we can have in our daily life to enhance our life's experiences and happiness? Can it also help us towards the perfection of our life - to be a better person, a loving and caring person, a person with virtues?

Blending insights from developments in modern disciplines of neuroscience and quantum physics with the age-old wisdom of Vedanta\_ and personal contemplative experiences, this lecture will make an attempt to explore and better understand our mind and perceptions and the world we live in. Thus a synthesis of modern science, philosophy and ancient Vedantic wisdom is called for in our search for the reality.



## **Abstracts of Paper Presenters**

### **Cognitive Flexibility Among Adolescence: A Bio-psychosocial and Educational Narrative Review**

Jyoti Shankar Tripathy and Akhilesh Singh, Lovely Professional University

#### **Abstract**

The current narrative review explores the developmental trajectory of cognitive flexibility through cognitive neuroscience, developmental psychology, and education. It also examines the factors that support or hinder its development in adolescents, such as stress, learning environments, and social context.

#### 1. Introduction

Adolescence represents a significant change with respect to cognitive, emotional, and social transformations. One of the most essential components of cognitive flexibility is learning, problem-solving, and emotional stability which helps to shift focus, adapt to new rules, and respond to changing goals or environments. This ability gradually develops alongside with maturation of the brain during childhood and adolescence, it does not emerge on its own. Brain development during middle childhood plays a significant role in a young person's cognitive flexibility.

#### 2. Methodology

The current study adopts a narrative review using thematic synthesis of literature. This narrative review was gathered through sources, including Scopus, PubMed, and PsycINFO. More Priority was given to articles published from 2020 onwards to ensure the relevance of this research. Keywords like “cognitive flexibility”, “adolescence”, “developmental neuroscience,” and “educational interventions” helped the search process to find these articles. Studies were chosen based on their contribution to understand cognitive flexibility. Rather than offering a simple summary, this research adopts an integrative approach to see connections across various disciplines to emphasize recurring patterns, inconsistencies, and emerging insights.

#### 3. Overview of cognitive flexibility

Adolescence is a dynamic stage marked by adjusting behavior, solve problems and adapt to new situations. The following sections explores about neurodevelopmental processes, academic experiences and social interactions collectively shape this formative period.

##### 3.1 Neurocognitive Foundations

Cognitive flexibility is a key component of executive function related to working memory and inhibitory control. It works closely with frontoparietal and frontostriatal circuits and is mainly guided by the dorsolateral and ventrolateral regions. A systematic review outlines how increased neural variability, dopamine sensitivity, and exploratory behaviour supports during adolescent stage helps their decision making (Parr et al., 2024). According to research in reversal learning tasks, adaptive flexibility in early adolescence is interlinked with puberty and maturation (Bamberg et al., 2025).

##### 3.2 Academic Experiences

Academic experiences are shaped by cognitive flexibility. Cognitive flexibility and its educational correlates have been linked to improved performance in complex tasks, digitally mediated learning environments (Zheng et al., 2024). Teaching methods like project based learning helps students to adapt new situations, process new information's and helps then take constructive feedback.

### 3.3 Social Influences

Cognitive flexibility is ideal for social stimulating and emotionally validating environments. Cross-cultural research shows that peer discussion, perspective-taking, and role-negotiating improve adolescents capacity to change their opinions, according to cross-cultural research (Pagano & Parnes, 2022.). A recent global study found that cognitive flexibility is enhanced by social support system (Wang et al., 2025). Adolescent emotional resilience and cognitive shifting have been demonstrated to improve with emotion regulation training such as mindfulness-based techniques (Paulus et al., 2021).

### 4. Practical Implications

There are many advantages in both educational and developmental setting. Recent study found that combining both physical and cognitive task in schools can boost flexibility and motor skills (Tseng et al., 2022). For example, a tablet-based program in school settings can improve student's working memory (Lewis et al., 2023). By implementing these activities in classroom setting, it can help in problem solving, and adjust their behaviour accordingly. Moreover, teacher led activities can nurture their peer collaboration, and critical thinking.

### 5. Conclusion

Cognitive flexibility develops from the combination of brain development, social support, experiences and other factors involved. Rapid changes in the prefrontal cortex enhance executive functions, enabling more adaptive responses and make them resilient. With time, supportive relationships, coping strategies and guidance from other individuals also play an important role in cognitive flexibility. Academic experience promotes critical thinking and strengthen cognitive flexibility. Mindfulness-based learning, and social emotional learning can strengthen flexibility, while future research should use culturally responsive, long-term approaches to track its development.

Keywords: *cognitive flexibility, executive function, adolescence*

## **A Clinical Case Study on How Perception and Thoughts Shapes Reality Through Cognitive Bias and Reflective Awareness**

Shelly Sharma and Akhilesh Singh, Lovely Professional University.

### **Abstract**

#### 1. Introduction

Perceptual disorders involve abnormalities in sensory experiences, illusions and distortions in the perception of reality. Disturbance in thoughts is the prominent feature in such disorders and lead to distorted realities influenced by cognitive biases and subjective perspectives. ICD-11 developed and edited by WHO in 2022 refer the Perceptual disturbance as abnormality in the way sensory information is interpreted by brain and lead to distortions in perception of reality.

For many years, there are questions about the validity of human experiences in those things which are not always as real what they seem. Recent studies show that disorganized thoughts and faulty perceptions are not separated. Thinking becomes illogical, fragmented and senses misfire and ultimately it is leading to experience the unusual perceptions like hallucinations. In this context, the distinction is there between sensation and perception. Our senses capture the different information from environment in various form of physical energy (stimulus). An accomplishment by receptors of cells convert this energy into neural signals to perceptual processes. Lived experience play an important role to understand what happens with the individual who is suffering with such mental health concern and also helpful in developing some effective psychotherapeutic interventions. In this case study, patient is struggling with specific personality disorder (F 60) from last many years. She has been taking pharmacological treatment since 2019. Patient often experiences the unusual perceptions such as visual/audio hallucinations. Thought process as confused, vague and elliptical. These perceptual disturbances contribute to misinterpretations of social cues and reality testing. The disrupted thought process caused a certain cognitive rigidity and impaired her self-awareness. These symptoms impede the patient's daily functioning and prolonged the treatment. This is first time when this patient was being introduced to psychotherapeutic sessions. Eventually, it resulted in positive outcome in diffusion of distorted thoughts and learning coping mechanism to deal with unusual sensory experiences. During the process of building rapport and collecting background information, an intense sexual Childhood trauma with an early onset of suicidal attempt was notified that fostered the negative schemas, cognitive biases and shaped the distorted perceptions of self and for others. In this case study, these early adverse experiences appeared to exacerbate thought disorganization and vulnerable psychological foundation for any perceptual disorder.

## 2. Methodology

The current study adopts a case study method in which the researcher has explores the clinical journey of a 32-year-old woman diagnosed with specific personality disorder traits accompanied by thought disorganization and episodic perceptual distortions.

### 2.1 Aim

The aim of the current case study is to examine how dysfunctional thoughts, conformational cognitive bias and perceptual schemas influence the construction of subjective reality in a female patient with personality disorder.

### 2.2 Patient's case history

The patient's clinical history revealed significant childhood trauma that caused adverse experiences. Such trauma is recognized as a strong contributing factor in the development of personality disorders and dysfunctional emotional patterns. To evaluate the effectiveness of psychotherapy in reducing these distortions to enhance emotional regulation, interpersonal functioning, and social adaptability, thereby contributing to improved mental health outcomes and societal integration Patient was first girl child but family was expecting a boy. After the birth of her younger brother, she felt ignored by her mother (perceived rejection and displacement of attachment). She felt jealous and insecure since her childhood (emotional deprivation). Patient had experienced a sexual assault in her teenage. Ultimately, she turned into an introvert child of home and a socially inept child in school. Later this unaddressed and unresolved traumatic childhood experiences contributed to this condition of patient. There was no active family history of mental health issue in patient's family. This case study helps to reflect how emotional, social and environmental events participate in human perception. It

depicts that how clarity of thoughts not merely reshapes the perceptions in such disorders but also enlightens the individuality of human being rather merely a perceptual disorder.

### 2.3. Therapeutic/ Therapy plan

A psychotherapeutic plan of six sessions was developed, integrating elements of schema-focused, REBT, other strategies and supportive interventions for dysfunctional thoughts and abrupt emotional behaviour. Treatment facilitated the patient's ability to recognize distorted cognitions, reframe perceptual anomalies, and gradually establish more cohesive self-concepts. It demonstrates the process of shifting the dysfunctional and self-defeating pattern of thinking into positive cognition and constructive beliefs of a patient with a personality disorder, focusing on changes in her perception, awareness, and reflective functioning.

### 3. Results

Notably, the patient showed significant reductions in distortions of perception and reported greater emotional stability. These changes shown the measurable improvements in her social functioning and overall quality of life. Psychotherapeutic intervention not only reduced symptomatic distortions but also facilitated a broader transformation in self-awareness, functional thoughts and relational understanding. This 32-year-old woman diagnosed with personality disorder exhibiting thought and perceptual disturbances underwent six sessions of integrative psychotherapies like SFT, REBT combined with supportive psychological interventions and therapeutic technique like Mandala Art. The treatment focused on identifying and restructuring maladaptive schemas into functional thoughts and affected cognitive biases in restoring as adaptive and constructive behaviour. Behavioural activation was initiated with the help of this process of treatment. Assessments included clinical interviews, cognitive and perceptual evaluations, and self-report measures. Experiential interventions while behavioural tasks encouraged real-world application of cognitive restructuring. Progress was tracked through qualitative and quantitative measures of cognitive coherence, perceptual clarity, reflective insight and behavioural changes.

Though the patient has been medication from last many years 'however, significant improvements in patient were being observed in thinking, cognitive rigidity and perceptual coherence by following the intervention provided through integrative psychotherapeutic sessions. Notably results shown in facilitating a reduction in cognitive rigidity and thought disorganization that enable the patient to achieve greater insight into her distorted perceptions and awareness of underlying cognitive biases. These therapeutic interactions driven improvements surpassed the limited benefits of medicines. Sessions enhanced the reflective functioning and allowed the patient to reframe healthy schemas. Thus, this process leading to improve emotional regulation and interpersonal relationships. This prominent change in cognitive clarity and perceptual accuracy developed a better daily functioning and quality of life. Reflective awareness and meta cognitive insight increased, aiding her reinterpretation of past experience and adaptive decision making. These psychological gains corresponded with improved executive function as evidenced by neuropsychological assessments. The strong therapeutic alliance was integral to facilitating trust and openness required for deep cognitive perceptual restructuring.

### 4. Conclusion

This clinical case study depicts the fundamental role of perception, thoughts and cognitive bias in shaping subjective reality in perceptual disorders. Certain psychotherapies and tools are effective in reducing the thought and perceptual disturbances by fostering cognitive flexibility

and reflective capacity. The outcome and results of this case study highlights the potential for integrative therapeutic approaches to promote healthy and potential change in self-awareness and relational functioning of such patients in terms of their behaviour and daily life.

## 5. Future Suggestions

Further research will be helpful if can be employed with more such cases and longitudinal designs to unravelling the neurocognitive mechanisms underlying thought distortions and perceptual disorders. Pharmacological treatment of Perceptual disorders in early onset can be combine with cognitive bias correction, trauma focused approaches, developmental preventions of psychotherapies. By integrating modern technology, metacognition and resilience can be developed in various mental health issues of current times.

*Keywords: perceptual disorder, dysfunctional thoughts, cognitive bias, perception, psychotherapeutic intervention, reflective awareness*

## **Externalism in Mind and Cognition: A Philosophical Defense of the View that Cognition is not Confined to the Brain**

Sohini Sarkar, IIT Kanpur.

### **Abstract**

This paper discusses the philosophical debate between internalism and externalism concerning the nature of cognition and the mind. Internalism argues that cognition is 'brain-bound', situated within the internal structures and processes of the individual, while externalism claims that cognition is an 'extended' process which is inclusive of the environment, shaped through interactions with external factors, tools, and social contexts. The paper's primary focus is to argue that cognition cannot be explained as an isolated process of the brain, but it emerges from the dynamic interplay between the brain, body, and environment.

The first section describes the internalist tradition, tracing its roots to Cartesian dualism. In the traditional era, René Descartes introduced the famous mind-body dualism, asserting that mind and body are two distinct substances. The mind is defined by thought, and while the body is characterized by extension. Descartes argued that the mind is a substance whose entire essence is to think, and it does not depend on any physical location or material entity for its existence. Thus, the mind exists independently of the body, and everything outside the mind is considered external to it. Hence, the debate begins with the mind-body problem.

Later, several reductionist theories emerged, one of which was the Identity theory (U.T. Place, J.J.C.Smart, D.M.Armstrong). According to this theory, mind and body are not two different substances; rather, mind is the product of the brain. The Cartesian view laid the foundation for internalist theorists, including the Identity theory which posits that mental states are identical to brain states. Internalism holds that our cognitive processes such as decision-making, perception, and consciousness, occur entirely within the boundaries of the skin and skull.

However, the internalist view has been challenged by externalist perspectives, which argue that cognition is not confined to the brain but is distributed across external factors. In Hilary Putnam's paper 'The Meaning of 'Meaning'', the debate centers on the content of mental states and their role in the individuation of those states, a discussion commonly indicated as the externalism versus internalism debate. Externalism about the mind is the thesis that claims that

there exists a deep individuating relation between an individual's mental states and the nature of their social and physical environment. Thus, according to externalism, our cognitive processes are not confined to the brain but are constituted in relation to the external world.

The Extended Mind hypothesis, developed by Clark and Chalmers (1998), represents one of the most influential externalist arguments. This theory demonstrated that both internal memory and external memory play functionally equivalent roles in cognition. External tools such as calculators, notebooks, and smartphones function as extensions of memory, reasoning, and problem-solving capacities. If internal memory is accepted as cognitive, then external aids should likewise be regarded as cognitive, provided they are reliably accessible and integrated into an agent's cognitive routines. Thus, cognition is best understood as a coupled system between the agent and the environment, rather than a closed neural loop.

This paper also employs functionalism as a supporting theory for externalism. Functionalism holds that a mental state is identified by the causal roles within a cognitive system, rather than by its physical substrate. This principle of multiple realizability allows mental states to be instantiated in diverse materials, such as biological, artificial, or hybrid. Philosophers such as Michel Wheeler introduced extended functionalism, which integrates functionalism with the extended mind hypothesis. Wheeler argues that if external processes play the same functional roles as internal ones, then they must be granted equal cognitive status. This functionalist perspective dissolves 'neural chauvinism' and considers cognition across the brain, body, and environment.

Despite its appeal, externalism faces several criticisms. Adam and Aizawa challenge the extended mind hypothesis with the coupling constitution fallacy, which states that just because an external factor aids in a cognitive process, it does not necessarily mean that the external process is reliably integrated or functionally equivalent to internal processes. For example, using a calculator to solve a mathematical problem reflects the agent's cognition, but not the calculator's. In response, Clark and Chalmers propose three external conditions under which external processes can count as genuinely cognitive: reliably accessible, automatic endorsement, and functional integration. Through thought experiments such as 'Memento's Revenge,' they defend the claim that external memory systems have genuine parts of cognition.

In conclusion, this paper argues that 'cognition is not in the brain', but is distributed across the brain, body, environment, and social contexts. Internalist theories, such as identity theory, fall short in explaining the distributed, situated, and integrative nature of real-world cognition. By construction, Externalist approaches, whether semantic, social, or extended, offer a more compelling framework that better reflects how we think, act, remember, decide, and learn in everyday life. Embracing this perspective enriches our understanding of what it means to have a mind, and where that mind truly resides.

Keywords: *mind, cognition, internalism, externalism, extended mind hypothesis*



# **Reconstructing the Past, Reshaping the Future: An Experimental Study of False Financial Memories, Risk Perception, and Investment Decision-Making**

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## **Abstract**

**Objectives and Scope:** The analysis of decision-making under uncertainty has gained prominence in behavioural economics, emphasising that human choices often deviate from the predictions of conventional rational models. Cognitive biases, framing, and emotional responses systematically influence individuals' assessments of risks and rewards. Psychological research has shown that memory, long viewed as a reliable archive of past experiences, is in fact reconstructive, adaptable, and highly prone to distortion. A significant finding in cognitive study is the phenomenon of false memory, wherein individuals distinctly recall events that are either inaccurate or entirely fabricated. This study aims to investigate the impact of erroneous memories on economic decision-making. The objectives are explicitly threefold. Initially, to examine whether constructed memories of financial profit or loss affect risk preferences in subsequent financial decisions. Secondly, to investigate whether risk perception acts as a mediating variable linking memory distortion to decision-making results. Third, to situate this investigation within the broad interdisciplinary dialogue concerning the relationship between cognition, perception, and reality. This subject lies at the intersection of cognitive psychology and behavioural economics. This approach situates decision-making inside "constructed realities," addressing a core question posed by the conference: how subjective perceptions, shaped by memory and cognition, alter reality. The significance of this work extends beyond mere theory. In reality, individuals generally formulate their financial judgements based on recollections of previous occurrences, regardless of their accuracy. Individuals' perceptions of risk regarding policies, investments, and consumption are influenced by their collective recollections of crises, booms, or failures. Understanding the impact of memory distortions on economic conduct is crucial for both individuals and society at large.

**Methodology:** This study has employed a controlled experimental methodology to assess the causal relationship between false memory induction and financial decision-making.

**Research Design:** The research employed a between-subjects design with three groups:

1. Participants were implanted with constructed memories of prior financial successes.
2. Participants were induced to think they had incurred financial losses previously.
3. A control group directed to recall a neutral, non-monetary life event.

**Participants:** The project had recruited 200 individuals, including university students and early-career professionals, to ensure enough statistical power and demographic diversity, encompassing gender, socio-economic position, and field of study.

The experiment had occur in two stages. During the preliminary stage, participants allocated to the treatment groups partake in a false memory induction task based on existing paradigms (Loftus & Pickrell, 1995). Participants is been guided by narrative prompts and visual indicators to "recollect" a financial event that did not occur, such as receiving a monetary prize or experiencing a significant financial loss in a prior activity. Control participants participated in a neutral recall task, such as recalling a classroom setting.

In the second stage, all participants performed two activities that require decision-making. The Holt–Laury Lottery Task (Holt & Laury, 2002) assesses individuals' aversion to risk by requiring them to choose between lotteries with varying probabilities of winning, categorised as either safer or riskier options. The second game is an investing simulation wherein participants allocated a specified quantity of tokens between a secure asset with assured returns and a volatile asset offering greater potential rewards but accompanied by a risk of loss.

*Measures:* The dependent variable is the proportion of hazardous decisions executed in the investment decisions. The independent variable to the study is risk perception, assessed by Likert-scale questionnaires enquiring about estimated probabilities of profits and losses. Participants also assessed the clarity and certainty of their recalled memories to validate the effectiveness of false memory induction.

*Statistical Analysis:* ANOVA used to evaluate the mean risk-taking behaviour across various groups. Logistic regression evaluated the probability of choosing hazardous options based on memory circumstances. Structural equation modelling (SEM) has been employed as a robustness verification, incorporating latent notions of memory vividness and conviction.

**Results and Implications:** False memories of financial loss will increase risk aversion, leading to safer choices even when the riskier choice has a larger expected value. However, persons who remember financial success are anticipated to take more chances and spend more in risky enterprises. The control group behaved moderately, reflecting baseline risk preferences. Subjective risk perception may affect these effects: negative fake memories makes losses seem more likely, while positive false memories makes the gains seem more likely. The results have numerous major impacts. The findings contribute to behavioural economics by showing that biases in present perception or framing and inaccuracies in past reconstruction cause rationality deviations. This combination of memory research and economic decision theory shows that memory accuracy limits rationality as well as knowledge and intellect.

Practically, the research is important across fields. Incorrectly remembering past victories and losses may alter how people invest, buy insurance, and save money. Advertising uses nostalgic or recreated memories to sell products, showing that memory distortions may be exploited. Collective memories—accurate or not—of economic crises or success impacted public opinion on fiscal policy, globalisation, and social welfare. Memory shapes individual results and economic and political trends, as shown by this study on financial decision-making and manufactured realities. False memories show that perception is a creative process that creates illusions with serious consequences. This study links cognitive science, economics, and philosophy by showing that these illusions affect financial decisions. This fits the conference's purpose of bringing together diverse fields.

**Keywords:** *false memory, risk perception, financial decision-making, behavioural economics, cognitive bias, constructed realities*



## **Reconsidering Responsibility: Plausible Reasoning, Conscious Experience and bounds of Determinism – David Hodgson’s Perspective**

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### **Abstract**

Deterministic interpretations of neuroscience and physics are often taken to imply that human decisions are wholly explicable in terms of brain processes governed by physical laws, thereby excluding free will and undermining responsibility. This paper develops a structured counterargument in three stages. Section I, advances seven premises showing that human beings engage in *plausible reasoning*: a non-algorithmic form of judgment where premises support conclusions without entailment. Such reasoning depends on conscious experiences apprehended as *gestalts*-feature-rich wholes, such as melodies or artworks—that cannot be reduced to rules yet make positive, non-random contributions to decision-making. Section II demonstrates that modern science accommodates such agency: Bell’s theorem and Aspect’s experiments refute locality; the Conway–Kochen theorem renders strict determinism improbable; the block universe view is inconsistent with changing conscious experience; and neuroscience’s current limitations cannot disprove conscious efficacy. Section III addresses Galen Strawson’s “luck” argument, concluding that while genes and environment shape our alternatives and tendencies, decisions in response to *gestalts* are not wholly determined by them. Moreover, our choices feed back into and reshape our characters, making us partly responsible for both what we do and who we become. The paper concludes that the law should acknowledge scientific insights into character formation without abandoning criminal responsibility, which restricts state coercion to deserved punishment for voluntary conduct, thereby protecting both the innocent and the guilty.

## **Depression as a Distorted Reality: How Thought and Perception Construct a Negative World**

Iqra Tariq, Himanshu Pramod Padole, and Aparna Pandey, IIT Bhubaneswar.

### **Abstract**

Individuals’ thoughts, perception and experiences around the world is influences greatly with a complex condition called Depression. Depression is a neurological and psychological condition in which individuals struggle with persistent negative thoughts and find it difficult to make decisions. Their thinking patterns are very different, distorting reality and leading them to generalize a single negative event to all areas of life. Not only do thought patterns change, but depression also alters how people perceive everyday life experiences: even positive or neutral situations can be viewed as negative, which leads to hopelessness and low self-esteem. These expressions are not merely emotional in nature; but also they cause changes in the brain that affect functions and neurochemistry. Scientific studies have shown that these changes originate in the brain itself. The main regions involved in emotion, memory, and reasoning—the prefrontal cortex, amygdala, and hippocampus—undergo structural and functional changes in individuals with depression. It has been observed that the functioning of the healthy brain is disrupted due to the imbalances in neurotransmitters like serotonin, dopamine, and norepinephrine. This leads to disturbed emotional well-being. Understanding the influence of these neurotransmitters on persons’ state of depression is crucial for developing effective,

holistic treatment strategies that address both brain and mind. To this end, this paper combines insights from psychology and neuroscience to understand how depression affects not just mood, but entire cognition and perception. The emphasis is drawn to multidimensional approaches for early detection to protect long-term mental health and cognitive resilience

## **Decoding Thoughts Through Waves: Classification and Reconstruction of Imagined Speech**

Prayash Panda, Himanshu Pramod Padole, and Aparna Pandey, IIT Bhubaneswar.

### **Abstract**

The interplay between thought and reality has always fascinated researchers, especially how thought can be translated in linguistic reality has been a challenge in cognitive science. Imagined speech - silent verbalization without overt articulation - provides this unique window which can allow this transition from inner cognition to externalized meaning. Recent studies show that electroencephalography (EEG) can effectively decode imagined words and phonemes from neural activity. Machine learning algorithms show great potential, highlighting the interpretability and robustness in mapping neural activity which helps in distinguishing mental representations of language. And with the advent of Generative Artificial Intelligence, the mapping between EEG to acoustic or latent speech representations has become easier due to advances in Neural Network architectures such as Diffusion model and Transformer encoders. Research in these fields has demonstrated that domain-adapted models with ASR-guided restrictions can help in artificially generating the user's voice from EEG collected during imagined speech, illustrating the feasibility of converting thought into audible, shared output. These studies show that computational modeling can convert thoughts and abstract ideas into accessible signals, showcasing interrelation between inner speech and perception.

Keywords: *imagined Speech, electroencephalography, machine learning, transformers, diffusion models*

## **Understanding Depressive Thought and Perception Through Comprehensive Analysis of Speech-Based Acoustic and Deep Feature**

Sweta Minj, Sagarika Barman, and Nitya Tiwari, IIT Bhubaneswar.

### **Abstract**

Depression is a serious mental health condition that affects a person's emotions, movement, and thinking process. Since speech is a natural form of expression, it carries important signals about a person's emotional condition, including pitch, loudness, rhythm, and overall voice quality. Individuals experiencing depression often show noticeable changes in their speech, such as less pitch variation, a flatter tone, reduced vocal strength, and increased voice irregularities like jitter and shimmer. Because of these patterns, speech becomes a valuable and non-invasive way to gauge how severe depression may be. This study explores how different types of speech-related features are connected to continuous depression severity scores. It focuses on MFCCs, which describe the spectral shape of speech; paralinguistic features from sets like eGeMAPS, which capture prosody, spectral balance, and voice quality; and deep embeddings from pretrained audio models that encode broader emotional and timing-related characteristics. We analyze

these features using several correlation methods—Pearson, Spearman, and mutual information—to understand linear, monotonic, and nonlinear relationships between speech and depression severity. The ultimate goal of this work is to guide the selection of feature groups that are most informative for future depression severity prediction models. Identifying strongly correlated features provides insight into the underlying psychophysiological mechanisms of depression and supports the development of more transparent, reliable, and clinically useful speech-based mental health assessment technologies.

Keywords: *depression, speech features, acoustic analysis, deep learning, mental health assessment*

## **AI, Free Will, and Determinism: A Philosophical and Consciousness-Oriented Inquiry**

Y Monalisa, IIT Bhubaneswar.

### **Abstract**

#### Introduction

AI, it is the most heard word nowadays . It has stimulated so many emotions in humans like excitement, fascination and also the fear of being replaced, considering its speed, accuracy and memory. People already began calling AI as their best friend may it be chat-GPT or Gemini .This brings various questions like, Did AI completely replace us ? Is there any difference between us and it? Does it have a free will? The paper explores into the deeper insights on these aspects i.e AI, freewill and determinism, proceeding towards the fundamental property of us i.e. Consciousness. The AI systems we talk about irrespective of their largeness and neural networks are based on deterministic principles. Whatever decisions are made, they are purely based on algorithm, ability of pattern recognition through huge data, meaning that they do not have any experiential data or intent. Referencing John Searle's Chinese Room Argument, this paper underscores that even the most advanced AI systems only manipulate symbols — they do not understand them. AI doesn't make any choice as humans do; it just follows the instructions, with no personal, individual interest and no sense of self hence it we doesn't have any free will.

#### AI VS its creator!

The critical misconception –that the creators of AI i.e. humans have unlimited free will. AI developers have many constraints in terms of thinking, surroundings, moral grounds, finance, culture, technological limitation and cognition. Their choices are based on economy and market demand.

On the other hand, Human experience agency which means that the inner sense that we are the authors of our actions and decisions. We feel burden, freedom and joy of deciding. Here comes the long-standing philosophical question between free will and determinism, are humans as well just more complexly programmed biological machines? Or do we have a free will or is a common ground in the middle?

To understand this, there are many theories from classical Newtonian determinism to biological and psychological determinism-to depict that even the so-called human agency is bound by causes and influences. Yet, the ability to contemplate, deliberate and transform depict layer of consciousness which is completely absent in AI. There comes Compatibilism –stating Free will and determinism coexist in humans.

Taking into consideration the Indian Philosophical tradition specifically Vedanta and Bhagavad Gita, free will easily be decoded. It is described that the human action is under three modes of material nature -sattva (goodness), rajas (passion), and tamas (ignorance). And the true freedom free will is utilised when ne transcends the modes of nature which can only happen through spiritual realisation. Hence, the pure free will is not material but spiritual – the soul's free will to rise above. Therefore if the architects of AI are not fully free what to talk about the product made by them i.e the free will of AI which doesn't even have conscious system and are bound.

On the whole, AI may have evolved to perform various tasks with great sophistication and much efficiency, yet it doesn't and can never possess free will. Free will is a function of cognition, awareness and moral intentionality it cannot be algorithms, computations etc. AI is a powerful tool but point to be noted that it is not a conscious being. It mimics the surface level of human behaviour with no experiential depth. It invites a deeper thought and contemplation on not only what AI can do and cannot do but also what is its impact on and for humans. By contrasting deterministic processes in machines and humans, and exploring the spiritual potential of free will, it underscores that the real challenge of AI is not just technological, but existential.

To conclude, while Artificial Intelligence may evolve to perform tasks with astonishing sophistication, it does not and cannot possess free will in its current or foreseeable form. Free will, if it exists, is not a function of complexity or computational speed, but of conscious awareness and moral intentionality. AI is a tool — powerful, fast, and increasingly adaptive — but it is not a conscious agent. The resemblance to human behaviour is surface-level mimicry, not experiential depth. As we continue to integrate AI into our personal, professional, and ethical spheres, it is essential to remember that simulated autonomy is not true autonomy.

The paper thus invites a deeper dialogue — not only about what AI can or cannot do, but also about what it truly means to be human. By contrasting deterministic processes in machines and humans, and exploring the spiritual potential of free will, it underscores that the real challenge of AI is not just technological, but existential.

**Keywords:** *artificial intelligence, free will, determinism, consciousness, chinese room argument, compatibilism, vedanta, moral agency, neuroscience, bhagavad gita*

## **Revising Turing’s Functionalism Arguments on Free Will**

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### **Abstract**

This paper will critically examine Alan Turing’s conception of free will and machine intelligence by analysing his use of the response-dependent emotional concept and exploring whether free will can be meaningfully applied to machines. One of the most ancient and ongoing philosophical debates is that of ‘Free Will and Determinism.’ Not only philosophers but also individuals from other fields actively participate in this discourse, offering strong opinions that can influence the public.

Today’s AI systems—whether it is GPT, ChatBots, or autonomous vehicles—often behave in ways that surprise us. So, can we conclude that they possess ‘free will’? Alan Turing, a renowned computer engineer, acknowledges that the classic free will vs. determinism debate is a longstanding philosophical issue that AI must address.

Turing's ideas about machine intelligence are often linked to behaviourism and computer science, but his thoughts on free will remain relatively unexplored. This paper aims to explore how Turing's conception of machine behavior—especially its capacity to surprise us—challenges the traditional philosophical dichotomy between determinism and free will.

This paper reanalyses Turing's well-known writings—'Intelligent Machinery', 'Can Automatic Calculating Machines Be Said to Think?', 'Nature of Spirit', and his radio broadcasts—to trace how his ideas evolved from traditional metaphysics to a response-dependent understanding of intelligence and free will. Turing does not offer a classical libertarian or compatibilist theory of free will. Instead, he suggests that free will—like intelligence—may be response-dependent: something is free if, under normal circumstances, it appears to be free to a typical observer.

Turing acknowledges that intelligence depends not only on what something does but also on how we perceive it. This insight is reflected in his imitation game, which he argues does not merely test the machine—it evaluates the human response to the machine. Rather than defining intelligence and free will through philosophical theories, he explores how these concepts may depend on the observer's behaviour.

This paper will examine whether a machine's capacity to surprise—much like a student surpassing a teacher—could be sufficient to justify ascribing free will to it. This viewpoint aligns with Turing's approach to randomness in machines. He discussed using random elements, such as a roulette wheel or a radium decay source, to introduce non-determinism into machines. Turing proposed that a machine's unpredictable but fully determined behaviour could still seem free if its underlying reason was too complex for an observer. For him, surprising behavior can arise from complex systems or hidden factors, not just randomness.

Turing's idea of "child machine" that could learn and eventually act creatively—was key to his argument. He argued that such a machine might produce intelligent or unexpected outcomes beyond its original programming. This Turing's answer to critics like Lady Ada Lovelace who claim that machine can't originate anything new and Geoffrey Jefferson, who argues that true intelligence required independent thought. Turing's analogy of a student surpassing their teacher, suggesting machine might achieve autonomy through learning, even within a preset rules.

This paper also properly examines these views and attempts to address some substantial criticisms. Philosophers like John Searle argue, through the "Chinese Room Argument", mimicking understanding isn't equivalent to having it—raising the same concern about simulating free will. Libertarians like Robert Kane argue that free will requires the agent's ultimate control, not mere appearance. Others, like Susan Schneider critiques modern AI systems, including large language models, as lacking authentic selfhood and computer engineers like Ben Schneiderman caution that surprising behaviour might programming flaws rather than autonomy.

These critiques highlight the tension between performative agency and genuine agency—a tension that Turing anticipated. His approach was practical: since we cannot truly know another's inner thoughts or can't access other's mind, we must rely on the observable behaviour. In this view, either we accept surprising and complex behaviour as a signs of free will or we fall into solipsism. Then we have to claim that only our own freedom is knowable.

This response-dependent framework might seem illusionist at first glance, but advocates like Mark Johnston and Philip Pettit maintain that it remains fully realist. They claim that judgments

about response-dependent properties—such as free will or intelligence—can still be evaluated as true or false when assessed under a natural environment by a normal observer.

To conclude, this paper asserts that Turing's approach to free will reflects his broader philosophical orientation: one that favours pragmatic, behaviour-based, and emotionally resonant criteria over metaphysical concepts. By applying his framework of emotional concepts to free will, Turing implies that the key question is not whether machines have inherent autonomy, but whether their actions elicit responses that lead us to attribute freedom to them. This shift redefines the classic free will and determinism debate, opening the door to a more sophisticated discourse on artificial agency, ethical responsibility, and the dynamics of human-machine interaction.

Keywords: *free will, response-dependence, artificial intelligence, moral agency.*

## **Artificial Intelligence and Ethical Decision-Making**

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### **Abstract**

What exactly is artificial intelligence? It is perhaps philosophers who recognise more than anyone else the challenge of accurately defining a field in a way that satisfies all parties involved, including practitioners. Generally, artificial-intelligence is characterised by its aim to replicate human abilities, to attain perfect logic, to build systems that can think and reason, and to make decisions. Therefore, artificial intelligence concentrates on creating artificial beings (or at least entities that can, in appropriate contexts, seem to be human). (Russell and Norvig, 1995, 2002, 2009) The concept of personhood (regardless of its exact definition) has gained importance in assessing whether an entity possesses complete moral status and, based on that moral status, whether one should receive the entire range of moral rights. A moral agent is characterised as a rational and self-governing entity (Mautner, 1997). In this context, it has been proposed that artificial intelligence could be recognised as persons once they achieve a specific degree of autonomy in making ethical choices. Artificial moral agents are thus, capable of identifying the ethically significant elements of a situation and incorporating them into their choices and actions (Anderson, 2005). As present-day machines are becoming more autonomous, it appears to be just a matter of time before they reach this moral benchmark. Artificial morality addresses and explores the issues and ethical dilemmas that arise such as: which ethical framework should be integrated into an AI system? Is it possible for AI systems to align with human morality, or do they require a morality unique to machines? Are there decisions that should never be delegated to machines? Could artificial morality have impacts on human morality if it becomes more pervasive? (Misselhorn, 2020) Artificial Intelligence has ushered in a new era in the ever-evolving domain of decision-making, shaping how decisions are crafted and executed. The importance of ethical considerations increases as we navigate through this transformative shift. However, a core element of human decision-making is empathy, which refers to our ability to acknowledge and feel the emotions of others. This inherent trait is what sets our thought processes apart when simple figures and statistics fail to convey the complexities of human experiences. Furthermore, the incredible cognitive mechanism known as human intuition aids individuals in making choices when there is inadequate information available. (Roughly & Schramme, 2018) Most importantly, by continuously referencing the conventions and ideologies of the surrounding social world, we enact that reality; in the performative act of speaking, we incorporate that reality through our

bodily expressions, yet that reality remains a social construction. In performing the conventions of reality and embodying those narratives through our actions, we inadvertently make those artificial conventions seem natural and essential. Specifically, gender acts, which similarly bring about material changes in one's life and even in one's physical self, one is not simply a body, but, in some very key sense, one does one's body and, indeed, one does one's body differently from one's contemporaries and from one's embodied predecessors and successors as well. Just as the way we reference the social norms that influence our perception of reality has tangible impacts, we may consider our selfhood as the source of our behaviours, our feeling of being independent and self-directed is actually a reconstruction that occurs as we engage in the performance of societal conventions. (Butler, 1993). AI systems find it challenging to replicate the unique cognitive abilities exhibited by humans as they adeptly manage the intricate relationships between contextual and subjective elements. Responsibility is a complex concept. It is a cluster of moral concepts that are overlapping. 'Responsibility', 'responsible', 'morally responsible', 'blameworthy', 'accountability', 'liability' are sometimes used interchangeably and sometimes distinctly. Thus, it is not surprising that the concept of responsibility in terms with AI is a point of contention. A major challenge to the claim that human beings and only human beings can be responsible for the behaviour of machines (technologies) comes from those who focus on artificial Intelligent agents that have the capacity to learn as they operate. Some argue that, because certain artificial agents learn as they operate, those who who designed or deployed those agents may not be able to control or predict what the agents will do. As these artificial agents become more autonomous, the argument goes, no humans will be responsible for their behaviour. This possible situation may be termed as the 'responsibility gap' (Matthias, 2004). The possibility of AI being responsible for their own behaviour, converges with with a stream of analysis suggesting that artificial agents of the future could acquire the status, not of persons, but of moral agents at least in the sense that they could have a moral standing. Now, free will, by definition, requires consciousness of some sort. The basic idea is that one thing that matters when it comes to being a free agent is that things can really matter to the agent. Moreover, in order for anything to matter to an agent, she has to be able to experience the negative and positive consequences of her choices, to be able to feel pain, suffering, and disappointment for bad choices, and to feel pleasure, joy, and satisfaction for good choices, and plausibly to foresee experiencing these feelings when evaluating these choices. Feeling pain and pleasure, and emotions such as anxiety and joy, requires phenomenal consciousness. The purpose of this paper is to examine Artificial Intelligence through the lens of Ethical Decision-Making, to define the distinctions in decision-making between artificial and human moral agents, and to analyse the degrees of responsibility and accountability associated with the choices made and their underlying reasons. This paper also intends to investigate the rationale behind the transfer of moral responsibility from human moral agents to artificial moral agents, and to consider the implications of assuming that artificial agents possess free will. (Keywords: Artificial moral agent, free will, responsibility, moral intent, disappearing agency)



## A Debate on Free Will and an AI-Agent

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### Abstract

Among the many classic debated issues in philosophy, the theory of “Free Will” remains a prominent problem throughout the history of philosophy due to its diverse applications across different fields, each alluding to unique contexts. Additionally, it is notable for the contrast between its intuitive apparentness and the unresolved empirical mystery surrounding it. The debate over free will is a complex and multifaceted issue, extending beyond philosophy to encompass neuroscience, cognitive science, biology, and folk psychology. The problem of free will is interconnected with other issues, particularly coercion and control, necessity and probability, right and wrong, crime and punishment, blameworthiness and moral accountability, mind and body, reality and deception, intuition and inference, assumption and certainty, and so forth. There are many claims surrounding the metaphysical question ‘whether the existence of free will is real or not,’ and this question remains a mystery and an unresolved challenge not only for philosophers but also for scientists. It would be sensible to consider the various ‘meanings of free will and its application’ before we firmly define what we mean by the concept of free will. The general understanding of ‘free will’ is the power of rational agents to make decisions or choose a course of action from available options. The term ‘free will’ is understood to mean having the capacity to choose differently, or as a person being the true origin of their choices and decisions. We are capable not only of performing actions (e.g., going to a philosophy job talk or watching a Sci-Fi movie) but also of deciding for ourselves which activities to undertake, that is, whether to accomplish tasks or to refrain from doing so. However, being free does not mean that we are entirely exempt from natural laws or that scientific evidence of causal laws operating in the universe does not exist; rather, different factors may causally influence or affect our choices and decisions, but they do not determine them outright. In other words, we can say that an agent needs to be free from both internal and external limitations and constraints when acting or making a choice. The exercise of free will is not the power to make decisions controlled by God, fate, or other external forces; instead, it is more about deliberately and consciously making decisions without external or internal pressure. The conceptual meaning of free will involves a relationship between being the ultimate source of one’s will and being able to do otherwise.

There are several conflicting views on the issue of free will, including whether human actions are free or determined by constraints, emotions, or situations over which individuals have no control. If all human activities are governed by scientific laws and forces entirely beyond our control, then what is the point of making plans for the future? From a legal standpoint, could we hold an agent responsible for a crime if their actions were simply the result of impersonal, mechanical forces? How could the legal machinery of the state punish individuals if there were no freedom of choice? Furthermore, from an ethical perspective, if human beings are not free, is ethical behaviour even possible? When we examine these issues closely, we may find ourselves mainly concerned with two different sets of assumptions: one is theoretical, where we accept the scientific doctrine of hard determinism, and the other is practical, where we act as if we are free.

Free Will appears to be a central characteristic. To some extent (any form of deterministic approach), both human and non-human agents—such as intelligent machines, computers, robots, games, autonomous cars, and humanoids—are deterministic devices because someone familiar with their programming can predict their behaviour in advance. Artificial Intelligence

(AI) aims to develop intelligent machines and has become a vital part of the technology industry. Research related to artificial intelligence is highly technical and specialised. The main challenges of artificial intelligence include programming computers for specific traits such as Knowledge, Reasoning, Problem-solving, Perception, Learning, Planning, and the ability to manipulate and move objects. For effective knowledge engineering, AI must access objects, categories, properties, and relations among them. Implementing common sense, reasoning, and problem-solving capabilities in machines is a complex and demanding task. The most debated questions surrounding non-human agents remain significant concerns for us.

Martin Heidegger (1927) suggests that a phenomenological analysis of human experience, that is, a person might need to experience the emotion of dread in the face of finitude (death) to understand “isness” and be fully conscious. As LaChat states, it is undoubtedly true that the idea of mind as an artefact—namely, a humanly constructed artificial intelligence—forces us to confront our self-image (1986). There are certainly cases where paralyzed or drugged individuals experience no pain yet remain conscious, but such individuals might still be said to suffer. This vital distinction (Beoyink 1974) must be kept in mind. Emotions and body awareness are essential components of personal intelligence. These are complex issues that probably can only be resolved through trial and error in experimentation. Now, questions arise such as: How can AI provide a broad understanding of the nature of consciousness? Why do we have subjective and self-awareness? Is it possible to consider the capacities and potential of non-human agents in moral decision-making? Can Artificial Intelligence be moral, and if so, what distinguishes human persons from the rest of creation? The tentative answer may be their cogito, reason, and nous. These questions cannot be answered without considering the perennial philosophical problems of free will, emotions, and moral decision-making. However, I will discuss in this paper whether ‘does the non-human agent (or AI-Agent), like the humanoid robot Sophia, exhibit free will?’ and if so, whether ‘Sophia is (morally) responsible for her actions and their consequences?’ and whether ‘she exercises her subjective judgment when making decisions?’

Keywords: *decision-making, agent, ai-agent, subjective judgement, free will.*

## **Cognitive Penetrability and Its Challenges in Philosophy of Perception**

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### **Abstract**

The cognitive penetrability of perception has sparked a lively debate in philosophy, psychology, and cognitive science, challenging our naive understanding of the world. The cognitive penetrability thesis suggests that what we believe, hope, desire, expect, and so on can influence our way of experiencing things. In other words, our cognitive states shape the content or character of our perceptual experiences (Stokes 2013; Silins 2016; Varga 2017; Siegel 2012). If perceptual experiences are subjected to massive penetration, it challenges our basic beliefs about the world; are we really seeing things the way they are, or is the world out there just our mental construction? To be more sophisticated, if visual experience is cognitively penetrable, then it is possible for two subjects to have visual experiences with different phenomenology and contents while seeing the same distal stimuli under the same external conditions, due to the differences in other cognitive states (see Brogaard and Chomaski 2015: 470-1). These observations go against our common-sense understanding of the world.

In philosophy, the cognitive penetrability thesis poses considerable challenges, especially to ‘direct (or naïve) realism.’ According to direct (or naïve) realism, perceptual experiences (veridical) are direct presentations of mind-independent objects—chairs, trees, computers—and their properties—colors, shapes, size (Searle 2015). The phenomenology of perceptual experience is largely constituted by the externally located physical objects and their properties, not the internal mental states (Martin 2002). The role of perception, as the naïve realists advocate, is to reveal the external world, not to construct or alter it through internal cognitive states. Since perception presents the world as it is, not as filtered or shaped by our thoughts, beliefs, or desires, naïve realism appears to be intolerant of the cognitive penetrability thesis.

This paper focuses on the following phenomenological and metaphysical concerns raised by the cognitive penetrability thesis against direct (or naïve) realism:

**a.** Penetrating states significantly influence the phenomenal character of the penetrated experiences; phenomenological worries.

For naïve realists phenomenal character of experience is primarily constituted by the external mind-independent world, not the internal states (Campbell 2002; Martin 2006). If perceptual experience is subjected to massive penetration, then the phenomenal character is not just a matter of what’s out there in the world—it’s also shaped by what’s going on inside the perceiver’s mind. This challenges the naïve realists’ characterisation of the phenomenal character of experience.

**b.** The penetrated states alter the representational content of the penetrated experiences; representational worries.

If penetrated states alter the representational content of experience, then it supports that the mind-independent world does not solely determine representational content. Instead, it’s partly shaped by your internal cognitive states. This outcome poses a serious challenge for naïve realists who are committed to the idea that perceptual experience involves representational or intentional content (Martin 2002: 196). For if such content is subjected to cognitive penetration, then the basis for determining the veridicality of experience is weakened. To make sense of whether perceptual experiences are veridical, the content of the experience must be object-dependent.

**c.** Perceptual experience involves cognitive phenomenology, other than perceptual phenomenology; phenomenological worries.

If cognitive penetration is true, then perceptual experience also involves cognitive phenomenology. Since cognitive phenomenology is explained through relevant non-sensory properties, it creates a problem for the naïve realists because for them, phenomenology of experience is solely explained through perceptual phenomenology, i.e, sensory phenomenal properties are sufficient to explain the phenomenology of perception. If perceptual experience is directly influenced by non-sensory properties, then it challenges naïve realists’ claim that perceptual experience is constituted by sensory properties of the external world. This suggests that the phenomenology of perception is not fully world-presenting—it also reflects internal, conceptual structure. If perceptual experience involves cognitive phenomenology other than perceptual (Gow 2016, 2029), then naïve realists are compelled to undertake a significant revision of their position.

d. Perception of high-level properties (being a natural kind or artifact) is intelligible

only if experiences are cognitively penetrable; metaphysical worries

Perceptual experience involves high-level properties (e.g., being a cup, screwdriver, etc). Higher-level properties are not basic sensory properties; recognition of them requires a high-level cognitive background, i.e., seeing something as a cup or a screwdriver involves top-down processing. This supports the idea that the perception of high-level properties requires cognitive penetration. If perception of high-level properties requires cognitive penetration, then naïve realism cannot account for this kind of perception without conceding cognitive penetration, which it resists.

Recently, the cognitive penetrability thesis gained extensive empirical support from cognitive science and psychology. So, denying or ignoring it goes out on an empirical limb and goes against the current working theories of perception in cognitive science. Although attempts have been made (e.g., Fish 2009; Johnston 2006) to identify and bridge the tension between naïve realism and cognitive penetrability of perception, especially with respect to the above concerns, the issue remains unsettled. Some of the recent attempts (e.g., Brogaard and Chomanski 2015; Cavedon-Taylor 2018) claim that naïve realism leaves no room for accommodating the cognitive penetrability thesis. Even though naïve realism has become increasingly popular in recent times (due to its physicalist metaphysics, ability to provide a strong epistemological foundation, and support our intuitive understanding of the perceptual experience), it requires addressing the cognitive penetration of perception and its challenges to gain scientific credibility. Having recognized the unprecedented support for naïve realism and the empirical credibility of cognitive penetrability, this paper aims to address some of the above concerns raised by the cognitive penetrability thesis without compromising the true spirit of naïve realism. The paper may attempt to restrict the scope of cognitive penetrability or reinterpret its implications in ways compatible with direct (or naïve) realism. It may reformulate the metaphysical boundaries of naïve realism to align with the cognitive penetrability thesis. In short, the paper will be a modest contribution to a more nuanced understanding of perceptual experience that is both philosophically robust and empirically informed, and emphasizes a cross-disciplinary engagement between philosophy, psychology, and cognitive science.

Keywords: *perception, naïve realism, cognitive penetration, metaphysics, phenomenology*

### **The Crisis of Thought in the Age of Technology: Heidegger on Thinking and The Question of Being**

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#### **Abstract**

The rapid advancement of Artificial Intelligence (AI) technologies over the past decades has posed a problem of immense weight and unease for society. The discomfort arises not so much from the visible economic and societal changes that AI has caused in recent years - although these changes warrant serious concern - the discomfort seems to arise from a deeper ontological concern for our species regarding its essence and place in the world. The proliferation of AI has reintroduced an ontological tension that has been on the decline since the Enlightenment, the question of “What it means to be Human?”. Since antiquity, the answer to the question ‘What it means to be Human?’ has always included that which our species claims exclusive dominion over: thought. Aristotle defines humans as *animalitas rationalis*, whose ability to think,

privileges its existence in this world. Yet even such confident assertions regarding the essence of humanity do not bring clarity to the difficult questions whose answers hold and sustain its entire edifice, namely: Why do we think? And what constitutes thinking? In an age where humanity is forced upon the epochal task of redefining its own essence and its place in the world, such originary questions demand their due diligence.

It is in this spirit I propose that we must revisit an enigmatic passage from Martin Heidegger's 1951-52 lecture course delivered at the University of Freiburg, subsequently published as part of *Gesamtausgabe* Vol.7, titled "Was heißt Denken?/ What Is Called Thinking?". Despite its relevance to our modern predicament the course remains one of the lesser-studied works of Heidegger's later corpus. The passage in question reads as follows: "Only that which keeps safely can preserve - preserve what is to be thought. The keeping preserves by giving harbor, and also protection from danger. And from what does the keeping preserve what is to-be-thought? From oblivion." The passage captures in its entirety the central concerns of the lecture course: 1) Why do we think? 2) What constitutes thinking? Heidegger writes that thinking or thought is not merely an exercising of a capacity that is present in us but is rather an answering to a call by that which is thought-provoking, an answering that unfolds as a letting-be and of taking-in/grasping of that which provokes thought. Essential to thought is this sense of 'preserving', as a letting be, and 'harboring', as a taking-in. What calls for such preserving and harboring, Heidegger argues, is the most fundamental question of philosophy, the question of the Being of beings (*Seinsfrage*). What is needed today is precisely this fundamental understanding of what thinking is, to ensure a responsible future that doesn't conflate thinking with computation or generation, in order to prevent the catastrophic effacement of the difference and by virtue of it, our ontological ground. By the end of the lecture course the enigmatic passage obtains some grounding and much-needed clarity, except for one particular section which finds no further attention or mention throughout the lecture course: the "protection from danger". The nature of this danger and its significance remains untended throughout the work, but when placed in relation to another text (not available to the readers till 1995), the danger of which Heidegger speaks emerges in its full force, bringing the interpretation of this enigmatic passage to completion, the text we are referring to here is the dialogue titled "A Triadic Conversation on a Country Path between a Scientist, a Scholar, and a Guide" found in "Feldweg-Gespräche/Country-Path Conversations / *Gesamtausgabe* Vol.77".

In the conversation the task of redefining the essence of humanity (*Menschenwesen*) takes shape through a sustained meditation on the essence of thinking, repeatedly stated at various stages of the conversation is the sameness of the two, a question about the essence of thinking as also simultaneously a question about the essence of humanity. What is immediately brought to question in the conversation is the essential provenance of the essence of humanity as "thought/thinking" which is traditionally understood as representing (*vorstellen*) and as willing. The "danger" that looms over thinking and that which calls for thinking, reveals itself to be the historical tendency of Western thought which understands and approaches thinking and thought as representation (*vorstellung*) whereby things become objects (*gegenstand*) standing-counter (*entgegensteht*) to a subject, and thinking becomes an understanding, thematizing and controlling. Fundamental to all technological thought is this representational thinking, that forcefully discloses things as objects that are present-at-hand (*vorhanden*) for the subject, waiting for manipulation and utilization. Such disclosure has been for Heidegger the history of Being in the modern technological age where everything is revealed as resource (*bestand*) and its destiny as calculative-mastery (*machenschaft*). The paper seeks to present Heidegger's notion of 'Gelassenheit' as a fundamental character of thinking. The reading of the enigmatic passage from GA.7 along with GA.77, opens us a novel avenue where we can meaningfully

engage with the question of “What is called thinking?” and what could be, the most important question of our age, “Could AI ever think?”.

Keywords: *heidegger, thought, metaphysics, technology, being, ontology*

## **The Cinematic Phenomenology of Caste: Thought, Perception, and Reality in Indian Cinema**

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### **Abstract**

Caste in India is simultaneously a material reality of life, a way of thinking, and a perceptual prism in which social life is mediated. As a cultural machine, Indian cinema both reflects the hierarchies of the caste system and actively creates and subverts it, using narrative and visuals, as well as the perception of the audience. This paper is an exploration of the phenomenology of caste in movies and how the triad of thought, perception, and reality jumps into the filmmaking. Based on phenomenology, psychoanalysis and the study of film, the paper identifies cinema as a place in which ideology, unconsciousness, and lived experience intersect.

The philosophical background of the work is based on, first, phenomenology (Husserl, Merleau-Ponty) which concerns the creation of reality in consciousness and lived experience. With this, it is possible to say that Caste does not simply exist as a sociological category, it is also an actual horizon of perception. Invisibility and visibility, dignity, and humiliation, intimacy, and violence, is a matter of caste to the marginalized communities. These experiences are mediated by cinema, which offers an aesthetic phenomenology, in other words, the display of caste as not content, but as the organization of perception of the seeing act.

Meanwhile, the other point of entry is psychoanalysis. The unconscious is organised around power and prohibition as Freud suggests in his idea of repression and Lacan in his idea of the symbolic order. Cinema is particularly a play of a repressed caste, a caste that cannot be named, cannot be alluded to when it is present, that is coded by some form of metaphor. Films, like *Vikram Vedha* (2017) and *Asuran* (2019), explore how violence, morality, and justice are bound up in caste without necessarily calling it as such. *Pariyerum Perumal* (2018) dramatizes caste humiliation when the main character wants to be recognized and accepted, and when shame, aspiration, and repression are all unconscious processes. In this case, psychoanalysis reveals that caste is an underlying organizing principle of cinematic desire and guilt and fear.

To discuss this in more detail, the paper uses case studies of the Tamil cinema, with emphasis on:

- *Vikram Vedha* - where caste-coded moral ambiguity and justice are presented, and the perception of the audience changes with social location.
- *Asuran* - in which the phenomenology of humiliation and resistance becomes enacted by living out the symbolized experience of caste subjugation.
- *Pariyerum Perumal* - the phenomenological and psychoanalytical exploration of humiliation, desire to be socially mobile, and violence of recognition.

This analysis shows that caste in cinema occupies three registers simultaneously through these films:

- Thought - the narrative choices and ideological placement of the filmmaker, caste either foregrounded, repressed or symbolically displaced.
- Perception - interpretive horizon of the audience, pre-conditioned by their own caste status, and defines which things become legible, invisible, or disturbing in a film.
- Reality - The material, historical basis of caste oppression, which the cinema is capable of reproducing or intervening upon, and in which the slide towards representation and lived truth is frequently observed.

This triadic analysis interacts with the themes of the conference very well. This paper mainly dwells into Phenomenology of Reality and looks at cinema as phenomenological means through which caste is organized by the characters in the story as well as the audience. It addresses the differences in perceiving caste among the audiences according to their respective social and cognitive orientations. With its Postmodernism and Reality element, it cites the influence of non-linear and fragmented storytelling to destabilize caste as a fixed identity and therefore the divisibility and contradictions of caste. Lastly, by including psychoanalysis, the paper relates to the interest in the conference on the topic of thought and perceptual disorders, and proposes that cinema reveals the unconscious distortions and disavowals of which caste still continues to be perpetuated.

This paper is conceptually interwoven with interdisciplinary analytical tools: philosophical study of perception and being; film theory with its focus on narrative, mise-en-scene, spectatorship; and application of psychoanalysis as means to unveil secret anxieties and desires. It is possible to provide a more detailed description of caste in the cinema through this triangulation as a dynamic relation or play between ideology, perception, and the unconscious.

The value of this paper is that the argument is made that cinema is not just a representation of caste but a phenomenological reality of caste among its viewers. Through foregrounding phenomenological experience and psychoanalytic forms, the paper shows how films mediate the lived contradictions of caste society, and how the films structure the way people think about, see, and practice caste in their daily lives.

Lastly, in conclusion, the sociological explanation of caste in films needs to be substituted with an interdisciplinary phenomenological-psychoanalytical explanation of the phenomenon. In that manner caste is recognized as being visible, an object of perception, as well as latent, an object of thought, and a constituent of social reality. Presenting this perception on Thought, Perception and Reality, the paper attempts to establish new platforms through which cinema can intervene in the formation, distortion and even alteration of one of the most tenacious social realities in India.

**Keywords:** *caste, phenomenology, psychoanalysis, indian cinema, perception, social reality.*



## **From Brain to Belief: Neuroatheism and the Sociocultural Mediation of Thought, Perception, and Reality**

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### **Abstract**

It is almost a convention in contemporary epistemological discussions one's weltanschauung (worldview) colours and controls one's perceptions too. Even in science, it is argued by historians and philosophers that observations are theory laden. This theory known as the social constructivist theory of meaning advocated by Thomas Kuhn (1979) in philosophy of science has found its resemblance in the recent research on psychology of religion.

Lately, neurocognitive research has significantly influenced the studies on the psychology of belief formation, especially of religious belief. It conversely has opened a new area of research in psychology of religion, popularly known as Neuroatheism. The capstone conference of the 2022-2024 international research project on "Explaining Atheism" held in the Natural Museum of Oxford in 2024 concluded that Absence of Religious Socialisation is the leading cause of atheism in the contemporary world (Lanman 2024). It implies that more than an informed rational choice, disbelief results from the lack of adequate social initiation to religious practices and consequent inadequate cognitive orientations necessary for religious belief. It implies that religion, despite all its supernatural attributes, is as much a social phenomenon and its construction of meanings are deeply intertwined with the perceptual and cognitive interplay between the individual mind and the society. This finding also explains why the number of atheists are not increasing while there is a significant increase in the number of religious "nones" (those who do not belong to any religion) across the world.

This finding is consistent with the neurocognitive research on belief and non-belief that the study of factors and processes leading to belief or non-belief is more important than analysing the content of belief or non-belief.

Research on brain and belief today correlates a wide range of human beliefs with specific perceptual, social, and biological factors. Though the biology of the brain can influence belief or nonbelief, the biological structure is in turn shaped by parents, peers, and society. Andrew Newberg and Mark Robert Waldman in *their Why We Believe What We Believe: Uncovering Our Biological Need for Meaning, Spirituality, and Truth*, examined the neurological underpinnings of different belief systems, including atheism (Newberg & Waldman, 2006). They discussed how the brain constructs beliefs and the impact these beliefs have on our perceptions and behaviors. In *Neurotheology: How Science Can Enlighten Us About Spirituality*, Newberg (2018) provides a comprehensive overview of how the brain engages in both religious and non-religious beliefs, offering insights into the neurological processes that underlie atheism. These initial studies claimed biological differences between the brains of atheists and believers, saying that that for atheists, there is increased activity in frontal Lobe - responsible for analytical thinking, reasoning, skepticism, critical thinking, problem-solving, and decision-making - and less in temporal lobe and religious believers have greater activity in limbic system structures in temporal lobe and areas related to emotion, spirituality, and social connectedness.

Going beyond the findings of Newberg and companions, recent neurocognitive studies have significantly altered the traditional understanding of atheism which focused on elements such as

genetic factors, religious scandals, domination of analytical thinking, tension between the empathetic and analytical brain, etc., as the leading causes of atheism (Strhan, Lee, and Shillitoe, 2024). Various fMRI studies cognitive inhibition (Farias 2021; Gervais & Norenzayan 2012; Lindeman et al., 2013) have produced inconsistent and even contradictory results. These experimental results only indicate the cultural embeddedness of atheism and it cannot be reduced to biological or neurological factors. A 2017 experimental study concluded that there is no “no relationship between intuitive or analytical thinking and supernatural belief. We conclude that it is premature to explain belief in gods as ‘intuitive’, and that other factors, such as socio-cultural upbringing, are likely to play a greater role in the emergence and maintenance of supernatural belief than cognitive style” (Farias et. al, 2017).

Current neurocognitive research on belief and nonbelief formation shares some analogical proximity with the Indian mystical understanding of the nature and understanding of the Reality, especially as captured in the Vedic Metaphor of *Yajna*. *Yajna*, beyond its ritualistic sense, is a metaphor of harmony or cosmic wholeness integrating God, world and the human. The social and cognitive perspectives of the current research can be taken to an ontological if rightly intersected with the Hindu vision. In this mystical vision, even a piece of stone partakes in the *yajnacakara* and as such have “faith” in its own way. More than the profession of a creed, the very state of being in harmony with the Totality, or *Sarvah* (the One-Who-is-the-All) (Zaehner, 1969; D’Sa, 1980) is an act of faith. Neurocognitive Studies help us appreciate the spiritual nuances of the seemingly atheist contention that “being is believing.” Appropriated by the Hindu mystical mindset, “being is believing” can be rephrased as “being is ecstatic being.”

## **Food, Gender and Consciousness: A Phenomenological Approach**

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We begin the paper by critiquing three dominant perspectives within food studies taken up in four selected papers (Druckman, 2010; Leer, 2016; Cairns, Johnston and Baumann, 2010; and Williams-Forsen & Cognard-Black, 2014). Each of these works engages with the intersections of food, media and gender, helping us to articulate a critique from the Indian perspective. Some discernible conceptual patterns are evident to be recurring across these works. First, the portrayal of male dominance, both professionally and socially, has led to the sidelining of their women counterparts. Second, the re-chefisation of the cooking individuals is an ongoing phenomenon that brings in expectations regarding gender roles. Third, the association of femininity and care work, largely perceived to be a commonplace norm, wherein women are said to often seem to enjoy taking care of their family through managing food provisions. And the last one is mastery in culinary preparation skills as a validation of the feminine identity to men (Cairns et al., 2010). A careful reading of the above literature informs us that the gender gap is not only ingrained institutionally but also through the invisible circular movement between thought, perception, and reality. We find that our social perception is shaped by the thought structures embedded in our socio-cultural narratives, which consequently generate a reality that appears as inevitable and universal, despite when it is historically produced. Hence, western scholarships project how perception, informed by thought, constructs the misleading lived realities of gender disparities in food studies.

The literature in the Indian context addressing the aforesaid shortcomings is almost non-existent. In this backdrop, the unique contribution of the study lies in critically examining the above-stated dominant western perspectives by contextualizing them in the

Indian popular culture and social philosophies. We do so by (i) examining the representation of male chefs in Indian television and enunciating women in culinary roles with a focus on their gender norms. Drawing on social-media content, documentaries, and newspaper archives, we attempt to understand how Indian cultural thought produces distinct perceptions of male and female chefs and how these, in turn, construct a reality that cannot be reduced to or visualized through the Western dominant ideological paradigms and (ii) proposing an onto-epistemic embodied form of consciousness in which knowing and being are co-emergent processes that are disclosed through lived, qualitative experiences.

Keywords: *gender, food, embodiment, consciousness, media.*

## **Bayes' Theorem and the Nature of Truth: A Probabilistic Epistemology**

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### **Abstract**

#### Introduction

The nature of truth has long been a central question in philosophy, theology, and science. Classical epistemology often seeks certainty—a definitive correspondence between belief and reality. However, in many domains, such certainty is unattainable. We often work with partial information and make our best guess about what is true. Bayes' Theorem is a mathematical tool that helps us update our beliefs when new evidence comes in. Instead of thinking of truth as something we either know completely or not at all, Bayes' Theorem lets us see truth as a matter of probability—how confident we are in a certain idea, given what we know so far. This way of thinking forms the foundation of what is called probabilistic epistemology—the study of knowledge when we are not completely sure.

#### The Logic of Bayes' Theorem

At its heart, Bayes' Theorem is about updating. We start with an initial belief, called a prior probability, which reflects what we think before seeing the latest evidence. Then, we collect new information—this is our data. Using Bayes' Theorem, we combine our prior belief with this new evidence to get an updated belief, called the posterior probability. In simpler terms, it's a way of saying:

“Given what I thought before, and what I've just learned, how confident should I be now?”

For example, suppose a person thinks there's a 30% chance it will rain tomorrow (prior belief). Then, they see that the weather radar shows a big storm moving in (new evidence). Bayes' Theorem lets them update the 30% to maybe 80%—a new, more accurate belief.

#### Why This Matters for Understanding Truth

In traditional thinking, truth is absolute—you either have it or you don't. But in real life, especially in complex situations, this is not how our minds work. We often need to make decisions based on incomplete knowledge. Bayesian thinking accepts this and offers a flexible way to measure uncertainty. It doesn't claim that probability is the same as truth, but rather that it measures our degree of belief in something being true, given the information we have.

#### Spiritual and Theological Relevance

Interestingly, Bayesian reasoning is not limited to science or statistics. It can also be applied to matters of faith and theology. Faith often involves belief without complete proof, but this belief can still interact with evidence and experience. Consider the statement:

“Doubt is an integral part of faith.”

From a Bayesian perspective, faith begins with a choice (a prior belief) among many possible beliefs. Because we have chosen one, it naturally comes with doubt regarding the others. As we gain new spiritual experiences, study scripture, or witness events in life, we can update our confidence in our chosen faith—just like we would update a scientific hypothesis. This doesn’t reduce faith to mere numbers, but it provides a framework for understanding how belief can grow stronger or weaker in response to life’s “data.”

### The Power and the Challenge

One of the great strengths of Bayes’ Theorem is that it makes the logical chain of reasoning clear:

- Input = prior belief + new evidence
- Output = updated belief

However, the challenge lies in translating verbal or qualitative information into numbers. In physics, probabilities can often be measured precisely. In history, theology, or philosophy, this is much harder. If two historians have different prior beliefs about a historical event, even when they see the same evidence, they might end up with different updated beliefs because their starting points (priors) differ. This is not a flaw in Bayes’ Theorem—it is a reflection of the fact that prior beliefs matter.

### Example of Decision-Making When Uncertain

Imagine a pilgrim deciding whether to travel to a distant holy site. They are unsure if the journey will bring them spiritual benefit. Initially, they estimate a 50% chance it will be worth the effort. Then, they meet a trusted elder who shares their own positive experience of the pilgrimage. This is new evidence. Using Bayesian reasoning, the pilgrim updates their belief to perhaps 80%—still not certainty, but now much more confident. This process captures the heart of probabilistic epistemology: we adjust our confidence in light of new evidence, making more informed decisions even without perfect knowledge.

### Principle of Insufficient Reason

Sometimes, we have no strong reason to favor one belief over another. This is where Laplace’s Principle of Insufficient Reason comes in—it says that if all possibilities seem equally likely, we should assign them equal probabilities. For example, if someone has never heard of any faith before, and they are told about ten different religions, without further evidence they might consider each equally probable. As they learn more (study scriptures, observe traditions, see followers’ lives), they can update those probabilities—strengthening belief in some, weakening it in others.

### Conclusion

Bayes’ Theorem offers a bridge between uncertainty and decision-making. It doesn’t claim to give absolute truth, but it helps us navigate toward truth by combining what we already believe with what we newly learn. In a world where complete certainty is rare—whether in science,

history, or spiritual life—this approach gives us a structured way to think clearly, avoid bias, and make better decisions.

By framing truth as something we can approach gradually through evidence and reasoning, Bayesian epistemology offers a humble yet powerful vision: truth is not a fixed possession but a journey of continual refinement. Whether in the laboratory, in the pages of history, or in the quiet places of the heart, Bayes' Theorem reminds us that every new insight is a step closer to understanding.

## God Consciousness and Reality

Vasudeva Murthy Vadlakonda, Independent Researcher.

### Abstract

#### Introduction

1. This topic is on the higher end of one's own personality, and unless one faces mysteries in life, he cannot get access to this terminal phase experience. This topic does not cover the routine life, that we all go through, thinking that we are our own making. We are unaware that there is something beyond our life experience, that is guiding our destiny. It is a highly painful experience of knowing about ourselves, that we all (Jivas) stem from a heavenly seed (only ONE) that gives us birth, sustains, and also withdraws back into its womb. The key word here is Personality and covers both genders.

1.1 We take birth in Mother's womb (all Jivas – birds, animals, and also human), and a Divine Spirit in charge of life is infused in the womb, direct from what we call Para Brahma or God. It is deluding us to be performers of our routine, which turns out to be false at the end. Parents give us only the material body, but the life experience comes from the Divine Spirit, we call Atma, the Eternal Nature of God. Atma has nothing to do material body (image), but without Atma, there is no life experience.

#### Genesis

2. Both God ( ), the creator and his Eternal Nature (Ādhyātma - आयाम) are from immaterial origin, we call Atom ( परमाणु ). They (Nucleus and Electron Charge) are indivisible monolithic core of creation. It is said that the creation stemmed from the desire ( पदन or vibration) of the creator to dwell in infinite (Chandogya Upanishad and Rig Veda). The desire created Storm, that culminated into atomic explosion (big-bang), releasing Ether, the core material from Neutron. It became elastic Ether Medium with sub-sonic content of AUM ( ).

2.1 The vibration in Ether Medium created Air, then came Fire, and from fire water, and from water Earth. Ether, Air, Fire, Water and Earth are called five great elements (प चमहाभूता न), and everything in creation is the composition of only these five elements (no exception). It includes Sun God, Moon, Mother Earth and its inhabitants (land, oceans, and sky); and entire material Universe.

#### Life on Mother Earth

3. The Primordial Root Syllable AUM ( ), a phenomenon; is called the first-born Ultimate Personality - Puruṣa ( पु षः), enveloping entire globe (Mother Earth). It is a creative essence,

that gives birth, sustains, and withdraws every other Particle in the material world. Hence everything in creation in general, and on Mother Earth in particular, is a phenomenal existence.

3.1 Therefore, we are all the particles of nature, the Embodied Souls, uniquely and independently. It is all about evolution of hard material energy, engaged in routine or Karma, powered by Spirit; that delivers us to realize the Ultimate Personality. It means that the core Personality is same, but the nature (or image) is transcendental.

#### Human birth

4. The inner constitution of man (includes both genders – he and she) is the same as that of Ultimate Personality, we call Atman. We take birth with our core nature Atman (subtle body shown in the schematic), same as Ultimate Personality. Soul has no gender. Chakras represent our present evolutionary status.

4.1 Enveloping and Permeating our material body (our own space or Aura), it becomes our image (Artificial Ego). We are therefore images of Ultimate Personality ( ). The image has no expression its own. It gets its expression from core. We are engaged in cycle births of Soul, the death being an illusion, Soul is unborn. But we come with reserve material energy (Proton) to be expended for life span as activity. It becomes our image (Material Energy or Nature), as shown in the schematic.

4.2 The image functions with three-fold material Nature, namely Sattva, Rajas and Tamas (protons in various orbital planes). The characteristics of material nature decide our behavioural tendencies as given below.

4.2.1 Sattva (resilience and illumination): Persons born with this nature are highly noble. They have empowering features. Ego bends to such personalities. They isolate none, and derive best out of everybody, causing no tension. There are several such personalities, spread throughout the globe, heading premier institutions.

4.2.2 Rajas (passion and activity): Persons born with such nature are highly passionate and engage themselves in development tasks and service to humanity. They are Sattva Predominant. They take care of themselves and the persons working with them. All progress that we see in the world, is only because of such personalities.

4.2.3 Tamas (lethargy and delusion): Persons born with such nature are highly selfish. They put themselves above everybody, and look for shortcuts to come up in life. Some of them are very cruel. 4.2.4 Infinite humanity are born with mix of this three-fold material Nature. But this all about our present evolutionary state. God holds no one guilty, entire humanity functions in unconscious zone (explained below), and material expressions coming from Soul.

#### 5.0 Material Energy (Prakṛti) – a whole by itself.

5.1 As already explained, entire humanity is born with three-fold material nature, with a potential to rise to the Ultimate Personality. They come with reserve material energy to redeem for life, expending it for their destiny guided activity (Karma). They are vehicles of consciousness or Embodied Souls, at various transcendental states (particle energy or mind substance in various spectral levels). They have no connection with one another whatsoever, except through mind or individual consciousness, creation of subtle body, Para Brahma.

5.2 It is a kind of optical delusion (time and space), that they think that they function together. Each is an instrument of world, with every other becoming an image on mind screen one's own.

All worldly impressions are stored in the innate mind substance (see the schematic above). The world is a theatre (रंग मंच) for each Embodied Soul.

5.3 It is persons born at higher transcendental states, that are closer realise the Ultimate Personality or Consciousness. The means is Yoga or union of individual consciousness with Ultimate Consciousness. Redeeming material energy also means offering every activity as ablation to Para Brahma, so that he dissolves into Ultimate Personality. Material decay is natural, but for those, who are closer to realization of God, it becomes a painful near-death experience.

6. Material evolution to realize Soul, and liberate oneself from the activity to rise to the status of 'Seer'; is governed by Divine Ordinance, namely Principles of Conservation of Energy (the three laws of thermodynamics). No one can be special, as nothing can exist without Soul. It happens at ripe time at the end of Karma (cycle of births).

Conclusion

7. Human birth is mysterious. Everybody, takes birth as Soul, with a reserve material energy to be expended for life, and with a potential to rise to Ultimate Personality. 7.1 It is better to have unalloyed faith in God (inner grace), lose proprietorship and tune with everything in nature, controlling emotions (Alchemy). This is the only means to harmony.

8.0 Prayer ॐ पूणमदः पूण मदं पूणा पूणमुद ॐ शिा तः शिा तः शिा तः ॥ यते । पूण य पूणमादाय पूण मेवाव शयते ॥

1: Om, that (Outer World) is Purna (Full with Divine Consciousness); This (Inner World) is also Purna (Full with Divine Consciousness); From Purna is manifested Purna (From the Fullness of Divine Consciousness the World is manifested),

2: Taking Purna from Purna, Purna indeed remains (Because Divine Consciousness is Non-Dual and Infinite),

3: Om, Peace, Peace, Peace.

### **Conservation of Conscious Experience: A Quantum Information Approach**

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#### **Abstract**

The observation of the natural world gives rise to unique conscious experiences in living beings, characterized by their deeply personal, subjective, and first-person nature. These experiences referred to as qualia are fundamentally inaccessible to objective, third-person perspective. No amount of external measurement like electrical signals from EEG, neuroimaging data from fMRI, or chemical analysis can fully convey or reconstruct what a person subjectively feels or experiences. In recent years, a growing body of interdisciplinary research has begun to explore whether these subjective experiences may be grounded not in classical physics, but in quantum information. Quantum theory, unlike classical mechanics, permits features such as non-locality, superposition, and entanglement. These phenomena are inherently inaccessible and indeterminate until measured. Interestingly, these characteristics bear a striking resemblance to the private nature of consciousness. For instance, just as a quantum system cannot be cloned or

perfectly copied due to the No-Cloning Theorem, conscious experiences cannot be duplicated or fully shared; they remain inherently individual and irreducible.

The No-Cloning Theorem, a foundational result in quantum information theory, states that it is impossible to create an identical copy of an arbitrary unknown quantum state. This principle highlights a deep asymmetry between classical and quantum information. In the classical domain, one can duplicate any piece of data like books, files, or digital bits. But quantum systems resist such replication, maintaining an inherent uniqueness and privacy. If qualia or subjective experiences are expressions of quantum information encoded within the brain, their irreproducibility is not just a philosophical observation but a physical law. This offers a novel and potentially transformative framework for understanding the privacy of consciousness.

In this work, I propose a hypothesis: if conscious experience is indeed quantum in nature, then its apparent disappearance such as during coma, brain injury, dementia, or pruning, does not necessarily mean that it has been destroyed or lost. Instead, it may still exist, preserved within the broader quantum state of the system. This leads to the principle of conservation of conscious experience, grounded in quantum information theory. This idea draws on the No-Hiding Theorem, which states that when quantum information disappears from one part of a system, it reappears elsewhere in the system rather than being disappeared. Applying this principle, it suggests that memory or subjective states may remain embedded in less obvious subspaces of the brain.

There is compelling clinical evidence to support this possibility. One of the most famous modern cases is that of Terry Wallis, a man who entered a minimally conscious state after a car accident in 1984 for two decades and one day spontaneously began to speak, recognizing family members and recalling personal memories, suggesting that long-dormant neural circuits and conscious contents were somehow conserved and later re-accessed. Similarly, patients with advanced dementia, who typically exhibit little to no verbal or emotional expression can display vivid reactions when exposed to personalized music from their youth. Songs trigger smiles, tears, even moments of clarity, as if emotional and autobiographical memories had never been lost but merely silenced.

Even outside clinical settings, meditators practicing advanced techniques frequently describe sudden, vivid recollections of early childhood or forgotten events. These phenomena collectively indicate that experiences believed to be lost or inaccessible may, under the right conditions, reemerge into conscious awareness.

To formalize this process scientifically, I propose using the quantum metric called Fidelity to measure the similarity between an original quantum state and its retrieved or reconstructed counterpart. In the context of consciousness, Fidelity can be adapted to assess the integrity of recalled experiences. A high Fidelity score would imply that the memory or subjective state, though inaccessible for some time, has retained its structure and internal coherence. This offers a quantitative pathway to test the conservation of conscious experience under a quantum framework.

The classical paradigm, in which the brain is viewed as a machine that loses data irretrievably with damage or decay, would need to be reconsidered. Instead, conscious experience might be seen as a distributed, coherent, and conserved phenomenon, one that persists across time and perhaps across different substrates—waiting for the right conditions to re-emerge.

Keywords: *qualia, quantum information, memory retrieval, decoherence.*

## Unlocking Inspiration: From Mechanistic Models to Higher Dimensions of Reality

Sushant Sharma, Quixentapps

### Abstract

Modern Scientists acquire knowledge (in principle) by what is called hypothetico-deductive method. They first formulate hypotheses and then validate them by a series of experimental observations. Any hypothesis that doesn't comply with the resulting observations is rejected else it is accepted as valid. These are post-hypothesis activities. However the question may arise "what happens before hypothesis" or "what essentially is the source of hypothesis". Or "what is the source of inspiration?".

In this talk, a detailed account of mechanistic approaches has been outlined along with their limitations to identify the source(s) of inspiration. Finally, a model from ancient wisdom has been presented as a source of inspiration, which has non-mechanistic and mystic components that belong to the higher dimension of reality.

Generally an inspiration appears as a sudden awareness of the problem's solution, accompanied with the fact that the solution is correct and final. One perceives the solution in its entirety, though it may be quite long when written out in full. Karl Gauss's sudden awareness of proof of certain theorem about numbers, Henri Poincare's sudden inspiration about theory of functions, Wolfgang Mozart's creativity behind his musical works, support that

- (a) source of inspiration lies beyond the subject's conscious perception; and
- (b) it provides the subject with information unobtainable by any conscious effort.

Both Turing and Russell proposed the view of the mind as a classical physics "computing machine". While the former talks about a Universal Turing Machine, which essentially is the formalization of algorithmic behavior, the latter supports Logical Atomism. Logical atomism proposes that the theory of atomism extends to other areas beyond matter—most important for Russell, to the fields of language and of knowledge. Both of these ideas find their pitfalls in the sense that the Universal Turing Machine being highly deterministic can't explain the element of Free Will. And Logical Atomism suffered a huge blow by the argument presented by famous Logician WittGenstein, the argument being based on his famous language game strategy.

The hard AI proponents support the idea of Connectionism to explain the emergence of inspiration. However, this idea too suffers from many shortcomings. Henri Poincare's mechanistic explanation of inspiration based on his idea of Subliminal Self has its own flaws. Poincare also favoured Process of Choice, which has tenets such as:

1) Process of Choice can make use of basic principles that are very elaborate and sophisticated. The wonderful example of German mathematician Bernhard Riemann and that of French mathematician Evariste Galois and of many others support this. Riemann conceived of and described various fundamental properties of zeta-function that pertained to the theory of prime numbers without mentioning any proof. Even after the elapse of so many years these properties have not all been proven though they are very much the Truths. Similarly Galois also conceived of a theorem without proof that completely revolutionized the field of Algebra. This proof could not be laid out for many years until later when certain basic principles were discovered. The idea is: these basic underlying principles behind mathematical relationships have in several

instances been an outcome of sudden inspiration. These erupted out in the minds of greats without any formal proof.

2) Process of choice must also make use of certain subtle selection criteria which encompass traits like emotional sensibility and delicate aesthetic qualities like beauty, harmony. This is true for both mathematical works as well as artistic creations like music by Mozart.

All these explanations essentially fail to address two vital concepts, though all are based on these only:

a) Binding Problem

b) Logical Atomism being impossible owing to no Basement Language.

And they all fail to answer foundational questions such as:

a) Origin: What possibly could be the origin of an algorithm, if any, that becomes the source of emergence of Inspiration? How did this algorithm come into being? This algorithm, if there is any, cannot be a simple one but the one which is behind so many revelations and inspirations.

b) Subjective Experience: If there is an algorithm as a cause of inspiration then why is this the case that the subject like Riemann and Galois, though having been benefitted with the realization of COMPLETE solution, remains unaware of the intermediate steps?

The prospect of a higher reality is worth considering wherein the inspiration draws its source from a higher source and the object of inspiration is a person who might have earned sufficient eligibility to be so. That's what seems to be supported by the words of Carl Friedrich Gauss

“Finally, two days ago, I succeeded— not on account of my hard efforts, but by the grace of the Lord. Like a sudden flash of lightning, the riddle was solved. I am unable to say what was the conducting thread that connected what I previously knew with what made my success possible.”

## **Reality and its Expression as Represented by Computing Machine**

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### **Abstract**

In this article we attempt to argue that the reality has its original existence and it can't be reproduced in its original form by its byproduct. However the byproduct can reproduce or recreate a replica of original reality, but that replica can never transform or evolve to the original reality. An specific case of computational machine such as the modern computer or Turing machine is being considered for argument. In this case we argue that a modern computer (which is based on semiconductor technology) or a theoretical computer like Universal Turing machine can never reproduce the reality in its originality. A machine can however, reproduce the replica of reality in representation or explanation/description.

## Consciousness, Perception & Reality - Journey towards Holistic Approach

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### Abstract

Reality, at its most fundamental level, is assumed to be the totality of all that exists—whether observable or not. Understanding reality has been a prominent research area among scientific, philosophical communities and spiritual seekers; as it holds the secrets of our existence, origin and purpose. In the process many prominent thinkers understood reality as objective reality, or & and subjective reality based on our perceiving ability. So “reality” is the perceivable reality—what can be seen, heard, touched, or otherwise sensed and interpreted by the human mind. This perceived reality is not a direct reflection of the external world but rather a construction shaped by our perceptual systems & logic, and scientific tools that support our perception. Perception being the cognitive process by which sensory data is selected, organized, and interpreted, bridges the gap between the external world and our internal representation of it. However, this bridge is not neutral or transparent; it is filtered through many factors like emotions, prior experiences, cultural conditioning, limitations of neural architecture, etc.

At the core of this entire process lies consciousness, the faculty that enables awareness, intentionality, and subjective experience. Consciousness allows us not only to perceive but to know that we are perceiving—to interpret, react, and reflect. Without consciousness, perception would be blind and reality, however defined, would remain inaccessible. Consciousness imbues perception with meaning and transforms information into lived experience. In this way, consciousness is not merely a byproduct of neural computation but possibly a foundational element that determines how and whether reality is experienced at all. So understanding consciousness becomes crucial in understanding reality as it is.

In understanding consciousness recent technological developments like fMRI and EEG aided us to track the neural basis of attention, decision-making, and even some emotional responses. Computational models and AI research have attempted to simulate aspects of perception and cognitive awareness. Nevertheless, these approaches have limitations—they often try to address the “easy problems” of consciousness, such as how stimuli are processed and behaviors are produced.

The central mystery, the “hard problem of consciousness”, lies in explaining why these neural processes are accompanied by subjective experience. Why does the firing of neurons give rise to the feeling of pain, the redness of red, or the taste of salt? This gap between objective function and subjective experience remains unbridged. Furthermore, modern science still grapples with the notion of unperceivable reality—dimensions of existence that lie beyond our senses or instruments. From quantum mechanics to cosmology, phenomena have emerged that defy intuitive understanding and suggest that reality may be far stranger and deeper than it appears to the conscious mind.

Moreover, the limitations of purely materialist approaches have led many thinkers like Eugene P. Wigner, Roger Penrose to consider alternative perspectives, resonating the concepts drawn from ancient Indian wisdom. Ancient Indian texts like the Bhagavad Gita and Bhagavatam offer profound insights into the nature of consciousness and reality. The Gita describes consciousness as an eternal quality of the self (soul/atma), distinct from the physical body and mind. Reality, according to these texts, is not merely the material world (prakriti), but also includes a higher spiritual dimension, perceivable only through purified consciousness and introspection. The Bhagavatam describes multiple layers of reality and perception, emphasizing that the

conditioned mind distorts the true nature of existence, which can be transcended through devotion (bhakti), introspection, and spiritual discipline.

In conclusion, a holistic understanding of consciousness, perception, and reality requires integrating scientific research with philosophical reasoning and experiential insights from ancient Indian texts. While empirical science provides indispensable tools, it must be complemented by introspective and fundamental inquiry beyond the physical realm to approach the full spectrum of human awareness, perceiving reality to the maximum extent in true sense.

Keywords: *objective reality, subjectivity, consciousness, prakriti, atma*

## **Exploring Spirituality and Life Satisfaction among People of different Environment Backgrounds**

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### **Abstract**

Influence of physical environment always has been a great source of concern to human's behavior. The physical environment which relates to individual's surroundings that are his or her locality, group or society's culture, lifestyle, beliefs, norms, rituals, and traditions where the individuals grow and nurture in emotional, social, psychological and spiritual form. Richerson and Boyd (2005) have given the emphasis on advancing the study of culture through evolutionary theories. To understand the human culture, it is also necessary to acknowledge humans' physical beings as they come under the same law of nature i.e. evolution by natural selection. Secondly, evolutionary mechanism i.e. selection, inheritability, adaptation through which human behaviors are themselves shaped or formed. Bioecological theory of human development also explained that increase in positive development may be the result of stronger human relationships and his environments or surroundings (Bronfenbrenner & Ceci, 1994; Bronfenbrenner, 2001b). This theory stressed on Individuals developmental processes enhanced by holistic combination of interpersonal relationships with larger societal, cultural, and political forces and thus culminating into enhanced development by understanding strength and needs of the families (Brendtro, 2006; Swick & Williams, 2006). Spirituality is the way one lives out one's faith in daily life, the way a person relates to the ultimate conditions of existence (Hart, 1994). Chapman, and Seaward (1995) mentioned that spirituality includes a sense of meaning and purpose in life. Westgate (1996) mentioned four major themes of spirituality, wellness that were: purpose and meaning in life, intrinsic values, transcendence and community of shared values. Westgate (1996) also further mentioned about spiritual community which enables the person with the ways of expression of spiritual values and mutual support extended to the other members of the community. Sheldrake (1998) stated that spirituality is a term preferred by those who saw continuities, between the "ordinary" and "extraordinary". Later, the word "spirituality" progressed, recognized and studied in various fields and it is not only investigated in formal religion, but also outside of traditions. According to O'Murche (1998) "spirituality was the whole life of a person, "the core part of who we are". Further, life satisfaction represents an overarching criterion or ultimate outcome of human experience (Andrews, 1974). Shin and Johnson (1978) even described that life satisfaction is determined by an individual's assessment of a 'good life' and is described as a "global assessment of a person's quality of life according to his own chosen criteria". Diener (1984) also posits the life satisfaction as a "cognitive and judgmental process in which one assess a global assessment of his own life as a whole". Life satisfaction is one of three main contributors to wellbeing (Diener et al., 1985). It is an active decision to consider one's life as satisfying or not and this decision can be

influenced by internal factors (that is spirituality) as well as external factor (that is relationships). Then, life satisfaction is also defined as an evaluative appraisal of something the satisfaction also refers to “contentment and enjoyment” It includes cognitive as well as affective appraisals. The current study is being done to examine how spirituality fosters life satisfaction among people of different sociocultural environmental backgrounds (i.e. rural, urban, and religious places). The people who are residing over last 20 years are included in the study to observe the substantial effect of sociocultural environmental backgrounds. The sample size is 400 (200 rural and 200 urban) age between 35 to 60 years. The Spirituality and life satisfaction are assessed with the help of Spirituality Assessment Inventory and Satisfaction with Life Scale. Descriptive statistics, Pearson Product Moment Method of Correlation, Simple Regression is applied for the analysis of obtained data through SPSS Version 22. The findings revealed that Spirituality was significantly associated with life satisfaction. Further, rural people showed high level of Spirituality as compared to other regions. In conclusion environment play significant role in fostering spirituality and life satisfaction.

Keywords: *life satisfaction, spirituality, environment backgrounds.*

### **AI-Powered Superbrain Yoga and the Construction of Reality: An Interdisciplinary Inquiry**

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#### **Abstract**

Thoppu Karanam (in Tamil), Dhorbi Karanam (in Sanskrit) and Uthak Baithak (in Hindi) are Traditional Knowledge Systems of India. The great Indian Rishis have developed this technique to increase the intelligence of the people, based on the principle of ear acupuncture and the science of energy movement through various chakras. All these now have been transformed into 'Superbrain Yoga' (SBY) which attained international status and is practiced as brain stimulating scientific exercise. SBY is a scientifically validated method that helps to energize the brain and enhance its sharpness and clarity. It is a simple technique which proposes to increase intellectual capacity and sharpen both memory and concentration.

According to Master Choa Kok Sui, Superbrain Yoga increases brain power by harnessing the body's primordial energies. The transmutation of energy from lower chakras to the crown is believed to elevate consciousness, refining how reality is sensed and understood.

SBY, a technique rooted in Pranic healing influence cognitive development and emotional regulation, thereby shaping an individual's perception and construction of reality. According to Pranic healing principles, pressing the earlobes with the thumb and index finger energizes the brain's subtle energy centres, particularly the prefrontal cortex and parieto-occipital regions. Stimulation of the parieto-occipital region by SBY involves in spatial awareness and visual processing, the key components in constructing our sense of reality. By energizing the brain, auricular acupressure may heighten sensory integration and attentional control, the key ingredients in how we interpret and construct reality. Stimulated cognition can lead to more fluid schema processing, allowing individuals to reframe experiences and adaptively interpret their environment. EEG studies show increased amplitude in brainwave activity after SBY, suggesting heightened neural engagement and synchronization. Auricular acupressure becomes a subtle tool for reshaping one's lived experience.

Dr. Joie P. Jones, Department of Radiology, University of California has conducted research to prove the authenticity of SBY and found that the practice activated the acupuncture points on the earlobes, leading to mind stimulation when practiced regularly. Through enhanced oxygenation to the nervous system and the brain, SBY helps in better concentration and the ability to learn. The research revealed that, after doing the exercise, an EEG scan exhibited the right and left hemispheres of the brain were synchronized. SBY involves crossing arms and pressing earlobes, which stimulates both hemispheres simultaneously, promoting hemispheric integration. Synchronization leads to better communication between brain regions, enhancing memory, focus, and emotional regulation. It also fosters integrated thinking, allowing for more coherent and multidimensional interpretations of experience.

Dr. Paul Nogier, French Neurologist, researched on ear acupuncture and revealed that when the right earlobe is gently squeezed with the left thumb and left index finger with the thumb outside, it produces necessary connection. This connection causes left brain and Pituitary gland to become energized and activated. Similarly, when the left earlobe is gently squeezed with the right thumb and right index finger with the thumb outside, it produces necessary connection which causes the right brain and pineal gland to become energized and activated.

Research on SBY revealed that it increases and balances the Bio-Plasmic energy in the brain contributing to the enhancement of psychological, physiological and action-oriented skills. Recent studies showed that regular practice of SBY increases alpha wave activity of the brain. When the alpha wave activity is improved, the left and right hemispheres of the brain become synchronized and enter into a deeper relaxation state. It induces creativity, alertness, strengthens immune system, relieve anxiety and reduce stress related disorders.

SBY can be justified with Kundalini Yoga, an Indian practice of Yoga. During Kundalini yoga, when the air is blocked inside the body with inhalation and exhalation, it moves towards the brain with upward pressure. As the energy moves upward and fills the heart energy centre, the student is filled with love and experiences inner peace. When the energy moves up further into the throat and ajna energy centre, the student's intelligence and creativity are enhanced. Once the energy gets up to forehead and crown chakra, it is transformed into subtle pranic energy. Once Kundalini reaches the Pineal gland, the gland secretes Melatonin hormone which is also called as Amrita. This hormone regulates all nervous and glandular system in the body. Thus, it not only motivates the memory power but also many powers of thought. Stimulation of the Melatonin production in the Pineal gland is a part of mystery of Kundalini Yoga.

Regular somatic ritual like SBY can recalibrate neural pathways and enhance neuroplasticity.

Regular practice enhances the brain's adaptability, enabling individuals to reshape their mental models and beliefs about reality.

SBY supports the idea that reality is not passively received but actively constructed through intention, attention, and energetic alignment. Practitioners often report heightened sensitivity to internal and external stimuli, suggesting a shift from reactive to reflective perception. According to a study published in the *Indian Journal of Odyssey of Ayurvedic Research*. SBY improves psychological stability and emotional regulation, which are key to interpreting reality with clarity and balance. The physical movement and breathwork influence cognition and perception, reinforcing the holistic nature of reality construction.

To use artificial intelligence (AI) for identifying and optimizing the gestures and breathing involved in SBY, we can leverage several technologies, including computer vision, deep learning, and wearable sensors. Setup, data collection, real-time analysis, feedback, and post-session analysis are all included in the design of workflow. By leveraging AI in this way,

practitioners of SBY can receive guided assistance and improve their technique, potentially enhancing the benefits of their practice.

SBY facilitates a more fluid and expansive engagement with reality. AI Powered Superbrain Yoga can be considered as reality shaping practice. This inquiry bridges ancient somatic ritual with contemporary theories of consciousness, suggesting that reality is co-constructed through bodily practice, cognitive schema, and technological mediation.

Keywords: *Superbrain yoga, Artificial Intelligence, Brain Synchronization, Neuroplasticity, Mind-Body Integration.*

## **The Role of Direct Perception in Overcoming Logical Fallacies: Insight from Jiddu Krishnamurti**

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### **Abstract**

Jiddu Krishnamurti, an influential philosopher and spiritual teacher, developed a philosophy centered on self-inquiry, inner freedom, and the dissolution of psychological conditioning. His teachings highlight the importance of self-awareness, psychological revolution, and transcending the self to promote a holistic approach to mental well-being. In parallel, the field of informal logic examines everyday reasoning, argumentation, and the identification of logical fallacies that arise not within strict formal systems, but in ordinary language and thought. Informal logic serves as a critical tool for evaluating the arguments we encounter in daily life, highlighting how cognitive biases and habitual patterns can distort perception and lead to flawed reasoning.

This paper explores the transformative role of direct perception in overcoming logical fallacies, drawing on the radical insights of Jiddu Krishnamurti. In both traditional epistemology and informal logic, the mind often operates within the confines of past knowledge, linguistic constructs, and inherited patterns of thought. Such conditioned information processing, as Krishnamurti argues, gives rise to entrenched logical fallacies—errors in reasoning rooted in the persistence of bias, memory, and belief. Fallacies such as ad hominem, straw man, and false dilemma persist because perception is filtered through accumulated knowledge and conceptual abstractions instead of being an immediate apprehension of 'what is'.

Krishnamurti's philosophy challenges this prevailing paradigm by advocating for direct perception: an unmediated observation, free from psychological residue such as judgment or expectation. For him, direct perception is not merely an intellectual act but a quality of attention so complete that the observer and the observed are no longer divided. This undivided awareness dissolves the fragmentation responsible for logical distortions and errors; rather than relying on established rules and authority, the mind perceives reality as it truly is, in the present moment.

The central proposal of this work is that direct perception, as described by Krishnamurti, circumvents the mechanisms of fallacy by negating the habitual tendencies of the analytical mind: projection, comparison, and interpretation. Logically fallacious arguments are not merely technical missteps but indicators of a deeper failure to perceive without bias or division.

The paper elaborates on several facets:

#### 1. Critique of Knowledge-Based Perception:

Krishnamurti demonstrates that while knowledge is crucial for practical matters, it can obscure psychological clarity when it becomes the lens through which we interpret reality, making genuine insight and the exposure of fallacies nearly impossible.

#### 2. The Observer is the Observed:

This foundational insight dissolves the false separation between the observer and the observed, curbing the internal dialogue and division that fuel logical errors.

#### 3. Application to Thought, Perception, and Reality:

Genuine, direct perception allows the mind to apprehend reality without bias or conceptual filters, thereby loosening the grip of habitual fallacies.

#### 4. Implications for Dialogue and Inquiry:

Krishnamurti's method of dialogue, characterized by relentless questioning, aims not merely for answers but for revealing the limitations of conceptual thinking. This radical inquiry contrasts with merely technical approaches in informal logic, inviting a more fundamental transformation in reasoning.

The method employed involves a critical philosophical analysis of Krishnamurti's public dialogues and texts, compared with key frameworks in informal logic and related insights from contemporary cognitive science.

#### Findings:

The analysis suggests that Krishnamurti's concept of direct perception provides a solid foundation for overcoming logical fallacies, transcending the limitations of both inherited knowledge and the habitual patterns examined in informal logic. He encourages alert, freedom from know, choiceless awareness capable of perceiving truth directly—a stance that aids in avoiding logical errors and fundamentally transforms one's relationship with thought, perception, and reality.

#### Conclusion:

Krishnamurti does not advocate for abandoning logic but urges us to recognize its limitations. This approach to direct perception, when integrated with the tools of informal logic, offers a path beyond both technical error correction and inherited mental patterns. The promise is a mind that perceives without distortion, illuminating and transcending the roots of fallacious thinking.

*Keywords: Jiddu Krishnamurti, direct perception, informal logic, logical fallacies, perception, observer-observed, philosophy of mind.*



## **Bridging the Eternal: A Comparative Study of Cosmic Consciousness in Saint Dnyaneshwar's Philosophy and Modern Physics**

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### **Abstract**

This paper presents a comparative analysis of the concept of cosmic consciousness as interpreted in Saint Dnyaneshwar's seminal philosophical works—*Dnyaneshwari* and *Amrutanubhav*—and its resonances with contemporary scientific theories, particularly those related to the observer effect and quantum consciousness. Saint Dnyaneshwar's exposition emphasizes the non-dualistic unity between the observer and the observed, the dissolution of subject-object distinctions, and the realization of the Self as coextensive with the universe. His insights suggest a view of the cosmos as an intrinsically conscious and interconnected whole.

In parallel, developments in quantum physics challenge classical paradigms of objective reality. The observer effect, wave function collapse, and theories proposed by researchers such as Roger Penrose, Stuart Hameroff, David Bohm, and John Wheeler suggest that observation is not merely passive but actively shapes physical phenomena. Furthermore, emerging interpretations propose that consciousness may be a fundamental constituent of the universe rather than a derivative phenomenon.

By juxtaposing key passages from *Dnyaneshwari* and *Amrutanubhav* with selected principles of quantum mechanics, this study aims to uncover philosophical parallels and assess the extent to which ancient metaphysical concepts align with contemporary scientific models. While the methodological frameworks differ—poetic-spiritual for Dnyaneshwar and mathematical-empirical for modern science—the thematic convergence on consciousness as a central aspect of reality is significant.

The findings suggest that Saint Dnyaneshwar's philosophical visions, often categorized as mystical or allegorical, demonstrate a conceptual proximity to certain interpretations within quantum physics. This interdisciplinary dialogue invites a broader reconsideration of consciousness in both scientific and philosophical discourses, advocating for integrative approaches that bridge metaphysical inquiry and empirical investigation.

Keywords: *cosmic, consciousness, modern physics, observer effect, quantum consciousness, eternal*

## **The Emptiness of Reality: Rethinking the Search for Ultimate Foundations**

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### **Abstract**

Philosophical inquiry has long been preoccupied with the question of reality's ultimate nature. From ancient metaphysics to contemporary philosophy of science, the assumption driving this inquiry has been that there must exist some foundational substrate or intrinsic principle that accounts for the way things are. Whether this foundation is cast in terms of matter, form, consciousness, structure, or natural law, the shared aim has been to disclose what reality is in itself. This trajectory of thought, however, is precisely what the Buddhist notion of *śūnyatā*

(emptiness) disrupts. Rather than positing a determinate essence behind phenomena, the philosophy of emptiness—systematically articulated by Nāgārjuna —argues that reality has no intrinsic nature (svabhāva) (Garfield, 1995; Siderits & Katsura, 2013).

Things exist only insofar as they are dependently arisen, relational, and contingent. This claim does not amount to nihilism, nor does it deny the appearance of phenomena. Instead, emptiness reframes the metaphysical project by exposing the contradictions inherent in the assumption of a self-sufficient foundation. To say that reality is “empty” is to deny that there is anything that exists independently or in and of itself. Suppose one examines any phenomenon—whether physical objects, mental states, or abstract entities—its existence is found to be conditioned by other factors. It lacks independent self-existence, but it is not thereby unreal. The reality of things is their relationality, their dependence, and their impermanence.

In contemporary philosophy, debates around realism and anti-realism map onto this concern in a striking way. Realist positions, whether scientific or metaphysical, often assume that there is a mind-independent structure or ground to reality. Anti-realist or constructivist positions, by contrast, highlight the dependence of our knowledge of reality on human practices, languages, or perspectives, sometimes leading to the charge of relativism. The Madhyamaka account of emptiness offers a critical middle path that avoids reification on one side and dissolution on the other (Westerhoff, 2009). By denying intrinsic nature, it undercuts the realist search for ultimate foundations. However, by affirming dependent origination, it resists the anti-realist tendency to collapse reality into mere appearance or discourse.

The implications of this approach are significant. First, it reorients the philosophical task: instead of seeking what reality is in itself, inquiry shifts toward understanding how phenomena arise and function within webs of dependence. This is not a descriptive metaphysics in the classical sense but a methodological critique of metaphysical essentialism. Second, it provides a framework for dissolving certain intractable philosophical problems. For instance, disputes about whether mind or matter is more fundamental, or whether universals or particulars are more real, are revealed to rest on reifying assumptions. Once these assumptions are dismantled, the disputes lose their force, not because the questions are ignored, but because the conditions that made them appear compelling are exposed as incoherent.

Furthermore, the conception of emptiness resonates with several contemporary strands of thought. In philosophy of science, relational and process-oriented ontologies challenge substance-based metaphysics. In phenomenology, the focus on intentionality and interdependence parallels the Madhyamaka rejection of isolated essences (Kalupahana, 1986). Even in analytic metaphysics, recent work on dependence and grounding can be read as a partial move away from reified foundations toward a more structural account. The notion of emptiness can enrich these debates by offering a rigorously developed critique of intrinsic nature, while also cautioning against reifying “relations” or “processes” themselves as ultimate grounds.

This paper argues that to speak of the “emptiness of reality” is not to deny reality but to reconceptualize it. Reality is neither an ultimate essence to be uncovered nor an illusion to be dismissed (Nāgārjuna, trans. Garfield, 1995). It is, rather, a dynamic interplay of dependent relations without an underlying core. Such a view undermines the very demand for metaphysical closure and instead opens space for philosophy as an ongoing practice of critical examination. By shifting the focus from discovery of foundations to dismantling of reifications, the Madhyamaka approach offers not only a distinctive perspective on reality but also a methodological resource for contemporary philosophy.

In conclusion, the extended abstract makes three contributions: (1) it situates the Buddhist concept of emptiness within the broader history of debates about the nature of reality; (2) it articulates how emptiness dissolves the binary between realism and anti-realism by reframing the issue in terms of dependent origination; and (3) it highlights the relevance of this framework for current philosophical discourse, showing how the idea of emptiness can speak to concerns in metaphysics, phenomenology, and philosophy of science. By doing so, the paper aims to demonstrate that the question “what is the nature of reality?” may itself be misguided, and that the more fruitful path lies in recognizing reality’s emptiness: its lack of intrinsic essence and its constitutive interdependence.

Keywords: *emptiness, reality, Nāgārjuna, dependent origination, metaphysics*

## **An Exposition of the Effect of Non-Implicative Negation on Ontological Nominalism and Epistemological Realism in Prāsaṅgika Madhyamaka Doxography**

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### **Abstract**

Unlike the Western method of philosophising under four distinct philosophical disciplines of metaphysics, epistemology, logic, and ethics, the classical Indo-Tibetan Buddhist doxography employs a threefold framework of view, meditation, and conduct, or basis, path, and result, to elucidate its entire philosophico-soteriological tenets. When Buddhist philosophy is studied and reflected through the lens of Western scholarship or in modern academic circles, it is bound to arouse curiosity to enquire into the metaphysical and epistemological standpoints of respective Buddhist tenet systems; the logic behind their distinctive onto-epistemological commitments; and the relevance of these onto-epistemological commitments to the efficacy of ethics. This practice of historical comprehension of interdisciplinary philosophical tenets extends to traditional Buddhist doxographers too, as they also resort to fundamental Buddhist philosophical frameworks for making sense of any non-Buddhist philosophy of East and West.

With the aim of introducing the classical Indo-Tibetan Buddhist doctrines in a relatable and comprehensive manner to the non-Buddhist readership in general, and Western academic circles in particular, for the exchange of thoughts, dialogue, and debate, modern scholars worldwide have adopted the methodology of presenting various nuanced Buddhist philosophical doctrines through the philosophical frameworks and terminologies that are familiar and well established in Western philosophy.

In line with this methodology, modern academic scholarship on Mahāyāna Buddhism has significantly delved into Nāgārjuna’s Madhyamaka philosophy, with special attention to its negative approach to establishing the onto-epistemological reality of all phenomena. Following Nāgārjuna’s Madhyamaka commentators—Buddhapālita, Candrakīrti, Śāntideva, Atīśa, and Tsongkhapa’s Indo-Tibetan Prāsaṅgika Madhyamaka interpretive tradition—a number of contemporary Madhyamaka scholars employ Western philosophical terms, ontological nominalism and epistemological realism, to represent the final onto-epistemological commitments of Madhyamaka philosophy. According to the Madhyamaka tradition, understanding the twofold truths unfolded by such onto-epistemological exposition is held imperative to solve the problem of internal and external worlds. The wisdom of ultimate and conventional truths helps validly cognise all things and events as they are, freeing oneself from the veil of innate self-grasping ignorance that invalidly views everything as possessing a

self-existent nature. After the negation of the self-grasping view, the righteous view accomplished by the final onto-epistemological analysis reciprocates to the everyday world of experience the way things arise, endure, and pass away depending upon various relevant causes and conditions, where not even a single particle exists through its own nature. Thus, the union of the empty and dependently co-arising natures of all phenomena parts ways with all forms of reifying ultimately existent onto-epistemological entities. Conversely, it prioritises the conventionally existent and dependently originated objects of our everyday experience. In the world of dependent origination, every single unit of things and events is related to karmic causal relationships, and this essence-free causal relationship provides the very basis for Madhyamaka philosophy to explicate the doctrine of intentional karma-oriented origination and cessation of saṃsāra and nirvāṇa, as well as the other-oriented ethics of the bodhisattva and its path to non-abiding liberation.

The Madhyamaka presentation of all these interconnected dependently originated things and events related to person (pudgala) and phenomena (dharma) is established solely through its adherence to the unique methodology of non-implicative negation (prasajyapratishedha) to posit Madhyamaka's onto-epistemological commitments. Therefore, in order to understand the contribution of the method of non-implicative negation (prasajyapratishedha) in illuminating the ultimate intent of Nāgārjuna's Madhyamaka onto-epistemological commitments, this paper focuses on three points of critical discussion as follows:

Firstly, it examines Nāgārjuna's methodology of non-implicative negation in detail. Secondly, it critically evaluates the tenability of validity or genuine experience of the person and phenomena through the knowledge of ontological nominalism (ultimate truth = emptiness) and epistemological realism (conventional truth = dependent origination). Here, it delves into a detailed account of how the knowledge of ontological nominalism and epistemological realism can be obtained through the methodology of non-implicative negation. Thirdly, it presents Prāsaṅgika Madhyamaka's critique of the lack of genuine experience in essentialist onto-epistemological commitments that result from the methodological use of implicative negation (paryudāsapratishedha), as posited uniquely by Realist (Vaibhāṣika and Sautrāntika), Idealist (Vijñānavāda), and Autonomist (Svātantrika Madhyamaka) Buddhist tenet schools.

Keywords: *ontological nominalism, epistemological realism, Prāsaṅgika Madhyamaka, non-implicative negation.*

### **The Unknown and Unknowable: Sri Aurobindo's Kenotic Spiritual Perspectivism in Conversation with Kant's Ideas of Transcendental Reason**

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#### **Abstract**

This essay reconstructs and examines what I call the kenotic spiritual perspectivism of Sri Aurobindo (1872-1950), the 20-century philosopher-mystic in response to Kant's controversial account of the legitimate function of the 'ideas of theoretical reason' in his *Critique of Pure Reason* (1998). The issue can be framed as follows: given the limits of theoretical cognition of supersensible entities in Kant's Critical project – in particular his critique of transcendental illusion and the refutation of metaphysics in the *Critique* and later in *Prolegomena to any Future Metaphysics* (2004) –, what epistemic warrant do the ideas of theoretical reason possess in relation to noumenal knowledge claims, i.e. claims about the nature and existence of supersensible entities like God, Nature and the Soul?

Kant considers this question in the Appendix to the Transcendental Dialectic of the *Critique*. For him, transcendental ideas ‘imagine[]’ the corresponding real object as the *focus imaginarius* of our cognitions – an optical metaphor Kant reworks from its Newtonian context to serve as the focal point of our transcendental imagination – to serve the ‘indispensably necessary’ immanent function of ‘directing the understanding to a certain goal’, i.e. the goal of the ‘the greatest’ or most ‘systematic unity of the manifold of empirical knowledge ...’ This goal emanates from the inferential capacity of pure reason, where it searches for explanatory completeness and queries – via an indefinite and ascending regress of inductions – the unconditioned ground of all conditioned phenomena, i.e. noumena, to arrive at the highest unity or systematicity of rules, ‘the supreme principle of reason’. Yet, as Kant argues earlier in the *Dialectic*, reason cannot proceed beyond the bounds of sensible experience without committing the transcendental illusion Kant attributes to the metaphysical lawlessness of his predecessors in the Prolegomena. Accordingly, Kant is caught between a rock and a hard place: transcendental ideas are necessary to guide the understanding in its empirical cognition of phenomena, but they are illegitimate if they are stated to correspond to any knowable (or real) entities. Transcendental ideas are thus granted the elevated and ambiguous status of being ‘objective’ in their regulative capacity – i.e. capable of universal and not merely private use – but ‘indeterminate’ in terms of their real possibility and content. Reason’s irrepressible demand for the unifying, unconditioned ground of all phenomena is accordingly satisfied asymptotically without ‘overflying’ its mark – such that our understanding proceeds purposively to a ‘hypothetical’ systematic unity without the possibility of reaching its imagined, noumenal goal.

There is a long-standing scholarly controversy over how the regulative role of reason in the Appendix accomplishes this ‘indispensably necessary’ task without violating Kant’s criticisms of transcendental illusion earlier in the *Dialectic*. Following Kraus (2025), we can broadly identify three interpretive responses that make sense of this seemingly “unKantian” notion of “merely regulative yet transcendental” principles. Noumenalists, like Ameriks (2003) and Schafer (2023), read Kant as defending a thin commitment to the objective existence of noumenal realities without specifying their content. Fictionalists, like Guyer (1979) and Allison (2004), argue that the ‘noumenalist’ commitment is too metaphysically robust and stress on Kant’s remark that regulative principles are merely “heuristic” devices without any corresponding ontological commitment. Perspectivalists, like Kraus (2020, 2025) and Massimi (2021, 2023), propose a *via media* that retains the noumenalist push on the normative power and (functional) objectivity of regulative principles and the fictionalist stress on the merely conceptual nature of transcendental ideas.

In this essay, I reconstruct Aurobindo’s response to this Kantian problem from his philosophical *magnum opus*, *The Life Divine* (1997a), and his primary work on methods of spiritual practice, *The Synthesis of Yoga* (1997b). This account – Aurobindo’s kenotic spiritual perspectivism – rests on his *soft epistemic claim*: that transcendental ideas of reason do not violate any epistemic limits in *seeking* – or in Kantian terms, *exploring* the real possibility of – supra-rational faculties that can access knowledge of things as-they-are-in-themselves beyond the possible limits of experience *qua* unaided reason. I make three claims:

First, I show that, *contra* Kant and building on the insights of *jñāna yoga*, Aurobindo develops a novel and sophisticated philosophical position that the ideas of reason can serve as vehicles of transcendence that exceed their merely regulative capacity without committing a transcendental fallacy. They can aid the practitioner’s efforts at a graded ‘transition’ from phenomenal to the noumenal realm through a kenotic concentration on the concept of the Self as a *focus imaginarius*. I demonstrate that Aurobindo sees the transcendental ideas of reason as an indeterminate yet necessary field-structuring transcendental *presupposition* to guide *itself*

(rather than the understanding, as in Kant) in seeking super-sensible and supra-rational knowledge.

Second, I argue that these ideas only presuppose, but do not take as given, the existence of super-sensible truths or faculties capable of such cognition. I argue that Aurobindo's account offers a philosophical advantage to Kant's critical project and the three lines of interpretation. It provides grounds to *explore* the real possibility of supra-sensible experience and so of valid knowledge of noumenal entities rather than *foreclose* the question by a noumenalist acceptance, fictionalist rejection or perspectivalist imagination of their existence as transcendental presuppositions. In doing so, it steers clear of the transcendental fallacy Kant identifies in the Dialectic, yet also avoid the fallacy of transcendental denial that Aurobindo attributes to the Kantian position, where the rational unknowability of noumenal entities is conflated with their knowability *in toto*.

Finally, I go on to show that this position traces a deeper fault line in the Aurobindonian critique of Kant's limits to theoretical cognition – namely the question-begging and circular rejection of the possibility of supra-sensible and supra-rational experience – that Kant does not adequately address in his dual rejection of the transcendental illusion of rationalist metaphysics and Swedenborgian mysticism. Simply put, Aurobindo agrees with Kant's counsel of epistemic humility, yet rejects his epistemic denial of noumenal knowability as premature.

## **Deconstructing Permanence : Buddhist Thought on Social Constructs and Maya**

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### **Abstract**

The Buddhist philosophical idea offers one of the most incisive critiques of the frameworks erected by the human societies that sustains their idea of “reality.” In its central doctrine of impermanence (*anicca*), suffering (*dukkha*), and non-self (*anatta*), Buddhist philosophy challenges the assumption that identity, social categorisation and cultural narratives have any intrinsic essence. Also, the cultural depiction of Maya (understood as illusion) demonstrates how myths, ideologies and symbolic representation strengthen contingent arrangements that appear to be permanent truth. When read together, the Buddhist insights into three marks of existence and concept of Maya generate a hermeneutics of deconstruction: one that destabilises rigid constructs and illuminates the contingent, illusionary and conditioned nature of social reality.

Societies are created around categories such as caste, gender, and collective identity. These categories are deeply embedded in practice and reinforced through language, tradition, and ideology. They present themselves as natural and permanent, yet from a Buddhist perspective, they are expressions of clinging to what is unsatisfactory and empty of selfhood. In contemporary contexts, such categories are strengthened by myths and ideological narratives that function much like Maya. The Buddhist critique addresses precisely this point, exposing how social categories operate through illusion and attachment.

Rupert Gethin (1998) explains how the three marks of existence highlight the unstable and conditioned nature of all phenomena, showing that fixed notions of identity are illusions. Steven Collins (1982) further studies non-self, demonstrating that the idea of a stable self is a fabrication, identities taken as natural are in fact aggregates without essence. David Kalupahana

(1975) work on dependent origination and impermanence, offers a framework to understand social systems as conditioned processes rather than eternal truths.

Peter Harvey (2000) shows how Buddhist ethics challenge rigid social norms like caste and gender, by emphasising flexibility and moral responsibility over inherited identity. Gananath Obeyesekere (2002) highlights the role of ideas of karma and rebirth in shaping cultural understandings of hierarchy, functioning much like Maya by legitimising inequality through narratives of cosmic order. These studies together provide a strong base for showing how Buddhist thought deconstructs rigid categories and reveals their illusionary character.

The study follows a hermeneutical and analytical approach. It interprets Buddhist doctrines of impermanence, suffering, non-self, and illusion in relation to social constructs such as caste and gender. Instead of empirical fieldwork, the method relies on textual analysis and comparative interpretation. The aim is to apply these philosophical insights as tools for questioning how social categories gain permanence and how they can be dismantled.

Buddhist doctrine of impermanence suggests that all conditioned phenomena (including social systems) are in constant shift. The established institutions of caste hierarchies and gender norms are thus an appearance of permanence rather than actuality. Suffering arises when individuals cling to these categories, experiencing exclusion and dissatisfaction as a result. Non-self goes further, rejecting the very basis of essentialised identity by showing that what is considered a fixed self is only an aggregate of conditions.

Maya explains how these constructs gain the appearance of permanence. In cultural life, myths, rituals, practices and ideological narratives operate as mechanisms of illusion. They help in shaping perception, normalise hierarchies and create a false sense of permanence. Maya does not deny appearances but shows how they are fabricated and misperceived as eternal truths. In this way, illusion sustains systems of hierarchy and inequality. Together, impermanence and illusion create a hermeneutics of deconstruction. This hermeneutics of deconstruction does not aim only at negation but also at unveiling the conditions under which the social constructs gain solidity. It reveals how perception is shaped, how reality is fabricated and how liberation requires the ability to see through these illusions. When applied to contemporary context, this idea enables the dismantling of entrenched boundaries of caste, gender and identity—not by replacing them with alternative rigidities but by exposing their true conditioned nature. Hence it opens space for new ways of thinking about self and society.

Buddhist idea discloses that social institutions, though appearing permanent and natural, are actually impermanent and unsatisfactory. At the same time it explains how these constructs persist through the illusion of Maya, which fabricates appearances into accepted reality. When brought together, they provide a powerful intellectual resource for interrogating not only classical metaphysical assumptions but also the contemporary social and cultural frameworks.

Future research can extend this hermeneutics to wider issues of nationalism, ecological crisis, globalised identity etc. Each of these areas also depends on illusions of permanence that can be challenged through the Buddhist perspective. In exposing the illusionary and conditioned nature of the social reality, Buddhist philosophy offers both critique and possibility.

Keywords: *Impermanence (Anicca), Non-self (Anatta), Maya (Illusion), Social Constructs, Caste, Gender*

## **Language Makes Thought Free and Reality Cognised Hegel's Account of Reality, Thought, and Language**

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### **Abstract**

The relationship between reality, thought, and language is among philosophy's most complex problems, intersecting with psychology and linguistics, offering a fertile ground for an interdisciplinary exploration. This paper turns to Hegel, as a paradigmatic philosopher whose systematic, encyclopaedic scope remains unsurpassed till date. In the discussion of language, Hegel rarely figures as an important interlocutor. I will argue, however, he is in fact, one of the few thinkers – well before the 'linguistic' turn – who explicitly defends the indispensable role of language in thinking and cognition of reality.

Hegel gives his philosophical account of language and thought in his *Encyclopaedia Philosophy of Spirit/Mind*, particularly in the part called Psychology. It emerges as the third, last stage of the Subjective Mind, when it reaches theoretical cognition, as the unity of anthropology (soul) and consciousness (phenomenology). In the former mode of existence the mind is immersed in the immediately given naturalness, while in the latter it comes to relate to the world in the form of immediately given objects as different from itself. In neither, however, is it certain of fully knowing the world. Only with reason at the end of phenomenology, does it become certain of the identity of its own rational structures and that of the world.

Hegel's philosophical psychology, thus, begins with the presupposed — but already justified — certainty of finding itself in the world, or the world in its own self. But it is not immediately given to the mind but has to go through various logical, not necessarily temporal, 'stages' to fully achieve this. It is in this process of theoretical cognition of the world by mind that language and thought proper emerge. It starts with intuition, which takes the immediately given material from the world around it and the things are immediately apprehended in their particularities and existing externally as something on their own. Next comes representation, where the intuitions are converted into subjectivised images and recollected from the 'nocturnal pit' of the unconscious to subsume the intuition in whenever they are again present by recollecting them. By the repetition of this, the 'I' reaches the stage where it is able to recall those images at will, without the presence of any empirical material. Hegel calls this stage imagination, and it is crucial to our central concern here.

Imagination, Hegel states, is initially only reproductive imagination, which can recall at will any previously received and familiar images, then it is associative, by which it universalises and reorganises the already subjectivised images in ways it wants. And lastly, it assumes the form of symbolisation and sign-making, by which it becomes productive, which carries the possibility of the emergence of language proper. By symbolisation, the internal subjective representations or images are given an immediate actual, objective form in some material form, but still the meaning of the symbol and the symbol itself share some common feature. Imagination, therefore, still is dependent on something immediately given. This is radically altered with sign-making, where the sign, in the form of objective, external intuition, and the meaning of the sign share nothing at all in common immediately. Nevertheless what is expressed by the sign is the universal of that which was given immediately by intuition.

This proves to be a breakthrough for the mind, for the mind can express the universal in the world without getting dependent or lost in the world of empirical material, which can never, by itself, go beyond mere apprehension of particulars. The sign, for Hegel, is invested with 'soul'

(of meaning). Further, when this sign assumes the form of a system, it becomes language, with its own lexicons and grammar, the sources of which lie in the intuitive and categorial material. The next stage in this logical schema is that of memory, in which the externality of inner representation with the sign is recollected. Firstly being merely name-retaining, proceeding to being reproductive, it culminates into mechanical memory. With the last, the meaning and sign becomes absolutely external to each other. Yet paradoxically this very externality frees the sign from subjective association, making it a universal medium, which can become the stable vehicle of meaning. This prepares the transition to thinking proper, in which subjectivity and objectivity are reconciled, and is aware of own self as the nature of the thing. Hegel thus demonstrates, on the basis of his philosophical account, that language is an absolutely necessary part of thinking; indeed there is no genuinely universal and conceptual thinking without language, for language is the immediate actuality of thought, although there could very well exist pre-linguistic forms – intuitions, representations and images. But equally he shows that language itself is not thought, but only an expression thereof. There is, therefore, no experience and knowledge of the world unmediated by language and thinking. In fact, reality is only cognised truly with language and thinking, although, of course, there could be individual defective thinkers.

Furthermore, Hegel's account escapes both empiricist reduction of language and meaning into mere representations of reality as such, and the subjectivist, constructivist one of treating language as something totally arbitrary, by giving each their dialectical due. Hegel, thus, shows how perception becomes thought and how thought cognises reality through language. Indeed, many of his philosophical insights also later get empirical and experimental verification in the works of psychologists like Vygotsky. Thus, Hegel anticipates many philosophers of mind and language, and psychologists, who came later, albeit on a very different – and systematic – ontology and psychology making his project distinctive and worth revisiting in the current debates on perception, mind, language, meaning, cognition and thought.

Keywords: *Hegel, language, thought, reality, imagination, sign, meaning, philosophical psychology.*

## **The Ontology of Mental States That Inhabit No-Thought**

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### **Abstract**

#### Introducing

Can there be mental states with no thought? Common sense would hold the answer in the negative. That is, if we know anything about consciousness at all, we know that it inhabits the same realm (or category) of phenomena as thought. Therefore, to talk about a consciousness without thought seems as if one were to talk about water without its aqueousness, or fire without its blaze, or air without its non-solidity, among other examples. However, we shall undertake this very task of investigating philosophically the two different phenomena of thought and consciousness, and see if one can occur without the companionship of the other.

To begin with, on a less sophisticated methodology, we may say that as far as the similarity of the two phenomena is concerned, consciousness as a subject matter of philosophical investigation is familiar, and perhaps often overlapping with the investigation of thought. However, ontologically, they do not seem to be the same. Thought is often had in language, whereas it is difficult to characterise the medium in which consciousness is had. Indeed, this

expression might not even be appropriate, for consciousness is often identified as that which has other things, like perception, emotions, and other such phenomenological states, including thought. So while one observes, the other is observed. There is reliable literature on this matter stemming primarily from Jiddu Krishnamurti, who holds that the self containing the consciousness may be equated with the observer, and thought of things as that which is being observed. This is a simple explanation, of course. Krishnamurti's philosophy is much more intricate. At one point, for instance, he holds that the observer is the observed (Krishnamurti, 1969).

## Objectives and Method

Nonetheless, this is a reliable starting ground—we shall demarcate consciousness as the primary observing force and thought as something that can be obtained mentally, and is thus a mental phenomenon. While consciousness observes, thought is that which is observed. Of course, one may observe other things, like emotions, feelings, and pain. However, for most individuals, any such phenomenological states are observed in thought. That is, if I am experiencing pain, joy, glee, sadness, or any such emotion, I not only have the experience as such, but also an accompanying voice that affirms to me the experience as it occurs. This accompanying voice is in the medium of language, or in some sort of replication of sensual data (Wittgenstein, 2009). To explain, we may report to ourselves that we are in pain by speaking it in language. Or we may visualise ourselves in pain. Similarly, we may recreate the sensation of taste in thinking about how a particular meal last evening felt, the smell of a particular fragrance that moved us, the touch of a beloved that we had in the past, and so forth.

This distinction has interesting implications, metaphysically speaking. That is if consciousness and thought are ontologically separate, then it might be possible to have one without the other. This is not allowed in cases where two terms refer to different substances. For instance, if a is identical to b, then whenever a occurs b occurs as well. This is, as Kantians would hold it, analytic and necessary. However, if both are separate, a synthetic relation must be established between them. We shall analytically investigate these two separate phenomena and their relation. Our objective would be to reach a deeper understanding of consciousnesses that inhabit no thought.

## Core Thesis

With the previously established distinguishing feature as our primary axiomatic assumption, we move forward. The paper then attempts to elaborate on two separate cases, namely:

1. Thought without consciousness, and
2. Consciousness without thought.

§1 is established to be reflective of a contemporary occurrence, that of artificial intelligence. The primordial problems in the philosophy of AI stem from Alan Turing, who at the turn of the twentieth century argued that machines can indeed think. This was based not on some intractable measurement of consciousness, but on a simple functionalist test. He argued that if a machine can imitate human behaviour to the point of perfection, whereby a human observer is unable to differentiate between whether he is talking to a machine or another person, the machine wins something Turing called the Imitation Game (Turing, 1950). Upon such success, Turing held that we should attribute to machines the capability of thinking. Or at least, they are capable of producing thought-behaviour that is indistinguishable from that produced by humans. Another major contribution was by John Searle, who argued that such computers can

only manipulate symbols following a set of rules without interpreting the meaning behind those symbols, today identified as the syntax versus semantics debate (Searle, 1980). All these considered, it is commonly agreed even in contemporary cognitive sciences that machines can functionally think (Boden, 1990), without necessarily owning the meaning of the words they use. To put it into a practical example, look at large language models, trained on a multitude of linguistic data and honed to be mathematical tools capable of matrix manipulation and probability calculation. When engaging in a conversation, the LLM is capable of predicting, based upon the input of the user, what the next linguistic symbol is most compatible with the string of symbols inputted by the user. It then produces an output that mimics human linguistic engagement. I argue that machines are the best contenders for entities that generate thought but possess no consciousness.

With §2, one is to find a category of entities (as in §1) that are conscious but do not think. This is difficult indeed, but not impossible. One's closest source of investigation, I believe, is people who claim to be enlightened. Especially, two figures will be considered—Jiddu Krishnamurti and Osho. Of course, the scientific and thereby empirical data on such individuals are dim. However, there seems to be a great deal of truth to what these individuals happen to talk about. The common theme, as it appears in both these claimed-to-be enlightened individuals, is the idea of suspension of thought: that one could reach a state where only the observer remains, and all inclination for thought disappears. What such states are, how they affect a functionalist understanding of mental phenomena, and what the phenomenology of consciousness without thought is, form the primary thesis of our paper.

## Conclusion

If machines can be shown to think without being conscious, and if certain states of consciousness can be shown to persist without the accompaniment of thought, then the presumed similarity of the two phenomena collapses. This collapse has consequences both for our understanding of artificial intelligence and for the phenomenology of human experience. It urges us to recognise that reality, as lived and perceived, may not always be mediated by thought, and that perception and awareness might at times stand apart from the structures of thinking altogether. I consider the investigation a necessary re-examination of the relation between thought and consciousness, and as an extension of the ontology of the world in which such separation can occur. This necessarily draws us back to not one, but many of the sub-themes which the international conference in question attempts to emulate discussions on.

Keywords: *functionalism in philosophy of mind, enlightenment, artificial intelligence, consciousness, absence of thought*

## **Language: The Arbiter of Thought, Perception, and Reality**

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### **Abstract**

The term 'thought' has diverse connotations in the philosophical literature. Standardly, the term has taken on several meanings in various philosophical studies encompassing themes like mental processes, ideas, consciousness, the nature of a thinking being etc. However, in the present context, my use of this term does not bear any semblance to any of the aforesaid topics. My aim in this paper is to examine the importance of language in understanding the relationship between thought, perception, and reality, and, in addition, to argue for the inevitable role of

language in shaping our conception of reality. The conception of the Thought, Perception and Reality that I wish to advocate is deeply Fregean in spirit. Frege defined terms like ‘Sense’ and ‘Thought’, in a way that is starkly different from their customary usage. Sense, he opined, is the mode of presentation of an object, it is the way in which an object is given to us; and Thought is the sense of a sentence for which the question of truth and falsity arises. Frege regards Thought as belonging to a third realm; a realm that neither touches upon the external world of physical objects nor does it belong to the mind of the perceiver. Frege’s treatment of thought gives it a pristine purity, such that it is not contaminated by any inkling of our perceptible world. For brevity purpose, I list a few characteristics of thought in order to express a fair idea about its nature:

- Thoughts are not produced by us, but they are apprehended
- Thoughts are expressed by declarative sentences
- Thoughts are not to be confused with sensations and ideas
- Thoughts are objective
- Thought is a form of reality
- Thoughts are bearers of truth value
- Thoughts are language independent.

With this view, Frege presents a highly independent nature of thought, which, I contend, creates a tension. The issue with Frege’s idea is that it seems as if situations (facts) are already pre-determined or pre-given in a particular way, and thoughts are merely apprehended in accordance with them. In Fregean terms, a thought seems to be a cohesive whole that simultaneously defies having a particular structure, which is inconsistent. Frege grants that in order to render a complete thought, a temporal reference must be indicated. For instance, the thought that ‘The tree has shed all of its leaves’ is true now but it will be false in six months. This not only implies the existence of incomplete thoughts but it also demonstrates that thoughts have or exhibit a structure, with time as one of their parts. This also suggests that a thought has parts, one of which is spatio-temporal, and anything that has parts is, of course, structural in nature. Furthermore, if Frege considers time an important indicator for the expression of a complete thought, then it challenges the view that thoughts are timeless and objective. Time belongs to the external perceptible world, a realm from which Frege clearly disassociates thoughts. The point I wish to advance is that it is impossible to apprehend thoughts without any connection to the perceptible (which also includes language) and mental realms. Just as the appeal to time undermines the supposed purity of thought, so too does Frege’s claim of thought being language-independent raise similar difficulties. An inquiry into the question of how thoughts are apprehended inevitably leads to language, because one cannot answer- ‘What it is to apprehend?’ without using language itself. Our access to thoughts is undeniably linguistic. Thus, language stands as the arbiter of thought, perception, and reality. It articulates what we perceive, transforms our perceptual experiences into shareable thoughts, and maps them onto reality. Of the trio, Frege regards thought and reality as belonging to the third realm, as he believes thought is a form of reality, while he places perception in the external realm. This creates a tension, because a crucial point that goes unnoticed is that thoughts are apprehended through perception and language. The question of how thoughts are apprehended is worthy of discussion, a point that Frege completely overlooks. A thought’s truth value is dependent on facts existing in the external realm. If thought exists purely in the third realm, detached from the external world, it becomes inconsistent to claim that we apprehend thoughts at all. It’s impossible to consistently maintain that we apprehend thoughts without bridging the realms, which is something Frege himself argues against by keeping the three realms distinct. Frege’s three-realm ontology exposes a fundamental tension in the being of thought. While he seeks to situate thought in a timeless, objective third realm, its dependence on perception, time, and language shows that

thought's being cannot be divorced from human experience. Language thus emerges as the mediator of ontological domains, reconciling subjective perception with objective reality. It is as absurd to claim that thoughts have no bearer as it is to say that the notes of a symphony have no composer. This paper explores this linguistic dependency to argue for a more grounded, integrated understanding of thought, perception, and reality.

Keywords: *Frege, thought, perception, reality, language, ontology*

## **Is Consciousness an Emergent Phenomenon? Revisiting the Puzzle**

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### **Abstract**

Investigating the origin of consciousness is a puzzle that spans all disciplines, including Philosophy. The history of thought has been continually striving to uncover the origin of consciousness since its earliest antiquity. The current research on the genesis of consciousness has concentrated mainly on three concerns: (a) Consciousness is a fundamental element of the universe, (b) consciousness is the inherent property of the mind (soul), (c) consciousness is the emergent entity. But consciousness itself has an enigmatic nature, and it is viewed only from a subjective way of experience. It is consciousness that cannot be explicated from the third-person point of view.

There are multiple theories regarding the origin of consciousness, which can be categorized into two ways: the reductionist and the non-reductionist. The reductionist wave promotes that consciousness can be reduced to matter. It echoes the by-product nature of consciousness. The non-reductionists upheld that consciousness cannot be reduced to physical interactions. It echoes that consciousness is the fundamental stuff of the universe. Panpsychism, Cosmopsychism, Micropsychism, and Macropsychism fall under the non-reductionist group, explored by Vedānta, Sri Aurobindo, Thales, Leibniz, and modern thinkers like David Chalmers, Philip Goff, and Galen Strawson. Reductionism, on the other hand, is reflected in the philosophies of Skinner, Churchland, Whitehead, Cārvāka, and certain strands of Buddhism. Now, for our present purpose of our paper, we will take up the view of emergentism regarding the genesis of consciousness. Emergent theory of consciousness holds that consciousness originates or is produced out of (from) physical processes. But there is a general agreement among the scholars that consciousness is a complex phenomenon. It emerges from various simple neural activities, which are completely material.

After presenting the views of a famous scholar regarding the genesis and nature of consciousness, we will address the shortcomings of the theory. David Chalmers claims that how a physical mechanism gives rise to a new conscious phenomenon is inexplicable. He states this problem as 'the hard problem of consciousness'. Due to holding the philosophy of naturalistic dualism, he takes a turn towards the fundamentality of consciousness, like space and time, as a grounding figure of nature. He returns to the ideal of panpsychism. Searle advocates that consciousness is a biologically emergent property. He rejects the naturalistic dualism and the panpsychist account of defining consciousness. But an interesting point is that he is also unable to define how a conscious subjective experience comes from the objective unconscious activity. Another philosopher, Thomas Nagel, faces the same problem: how does the objective processing of material things suddenly give rise to subjective consciousness? It is consciousness

that is likely to be an object. Again, this announcement invites the hard problem of consciousness. The Nagelian approach is more phenomenological in nature than metaphysical. The constant endeavor to make reconciliation between the objective fact of neural, i.e., physical interaction, and subjective experience is still an unbridgeable gap. To avoid this problem, he has also taken the side of panpsychism.

Now it is clear that emergentism cannot bridge the gulf between subjective mental state and objective brain state. But weak emergentist hopes that the explanatory gap can be repaired through the existing physical laws. Strong emergentist, on the other hand, declines the former and states that emergentism as a theory of the origination of consciousness in the context of the mind-body problem is intractable. They appeal for a new law – a ‘psychophysical law’ as Chalmers holds. The current debate among the neuroscientist-cum-philosophers regarding the emergent view of consciousness is incomplete. If we analyze their problem by bringing them together on the ground, then we will see that the ground level of their approach is two-layered – firstly, they attempted to investigate the origination of consciousness in terms of physical complexities. And when it is found unsatisfactory, it proposes a high-level physical law that could explain the existing gap. But it is tempting that both of their approaches have failed. And it is also found that the culmination of their theory is nothing but Panpsychism, be it one form or another. Why? Actually, as we have noticed, the philosopher in the current age contemplates only how the emergent account fails to explain the nature of consciousness. They have focused more on ‘how’ and less on ‘why’. For the advantage of our purpose, we are turning towards the view of the Indian philosophical systems. Most of them paid their attention to why an ontologically existing primal matter gives rise to something conscious, which is also ontologically independent. Even the laws of physics also disprove this. This is one of our objectives to look at this problem.

Now we are returning to this problem again by referring an example of the transformation of crude oil to methane (solid pitch → kerosene → petrol → methane gas). There is a law of physical sciences to go through the process when the entire process of emergence is mechanical or physical. Similarly, in the emergence of consciousness, the entire process is mechanically processed. If so, why does physical neural processing in their accustomed law-bound activities suddenly give rise to an uncommon phenomenon like consciousness? However, it remains unclear at what level of physical complexity or interaction of consciousness emerges, unlike processes such as crude oil refining as mentioned above. For consciousness, the exact threshold or mechanism of emergence is still unresolved. The present paper critically examines the views and concerns of the above philosophers regarding consciousness. We shall view the objective of the paper in two ways, where the first one leads to the other: (1) why does a physical interaction of a neuron (brain event) suddenly give rise to a subjective consciousness instead of how? And if so, (b) at what level of physical complexity or interaction does consciousness emerge?

*Keywords: Consciousness, Neural processing, Physical interaction, Subjective experience, Strong emergence, weak emergence, Panpsychism.*



## Direct Social Perception and the problem of Transcendence

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### Abstract

How do we know others? What sort of mechanisms enable us to attribute minds to others? These questions form the basis of all our social communication. At present, there are two major approaches that try to answer these questions. Firstly, there is the mainstream Theory of Mind (ToM). Following Descartes' idea of the mind to a major extent, ToM argues that all our attempts to know other minds are indirect and inferential. It holds to the Unobservability Principle (UP) that others' mental states are hidden. Thus, we can't perceive but must assign mental states to another person based on specific reasoning. Initially, ToM was based on purely theoretical and folk psychological reasoning capacities, which is known as the Theory-Theory (TT) approach.

Later, due to various developments in social psychology and cognitive neuroscience, the idea of ToM as exclusively a theoretical and folk psychological reasoning machinery has undergone significant developments. Some of the main developments are the emergence of simulation theories (ST) and hybrid TT-ST accounts. Nonetheless, all of these approaches follow two major principles – 1. mental states are not directly observable, and 2. ToM is necessarily a system of inferences, at some level of description. However, emerging perceptual accounts of mind challenge ToM's claims regarding the understanding of other minds. These approaches come under the umbrella of Direct Social Perception (DSP) approach. DSP argues that we can directly perceive others mental states through their expressive behaviours, without any help of theories or inferences.

Drawing their arguments from Phenomenology, DSP states that all individual minds are embodied in an intersubjective world. This interrelatedness helps us to understand others directly. Philosophers like Shaun Gallagher, Dan Zahavi argue that for ToM, to know others is to their mind. This assumes mind as something hidden, which has to be accessed, not given in body or behaviours. They call it a mentalistic supposition. DSP rejects this supposition and all other background, contextual knowledge in major mindreading cases. It rejects the access problem, which is the fundamental basis of ToM, and argues for 'rich, smart perception' as sufficient for knowing others mental states. Gallagher writes, 'the smarter the perception is, the more work it does; the dumber it is, the more it requires extra cognitive processes (theory, simulation) to get the job done. The direct perception theorist is claiming that social perception is very smart and that in the usual circumstances of social interaction it does most of the work without the need of extra cognitive (theoretical and simulationist) processes' (Gallagher 2008a). On the other hand the 'not-so-smart' perception, which is implicit in the ToM, picks up meaningless sensory stimuli that have to be processed by some ToM processes to enable mindreading. Gallagher views smart perception as the grasp of rich, meaningful content without the aid of ToM. For example – 'directly' seeing the mental state of anger on someone's face rather than seeing a meaningless red mass.

Thus, we can see that according to phenomenological accounts of DSP we have direct access to others minds. But a major objection stems from the observation of a stark asymmetry between self- experience and other-experience. When I experience an emotion, say, I feel it immediately and know it directly as mine. However, I lack this sort of first- person access to the others' experiential lives. This stark asymmetry is what generates the epistemological problem of other minds (Hyslop 2015). But in claiming we enjoy direct access to other minds, DSP appears to deny or overlook this asymmetry. This asymmetry can be viewed as the 'transcendence' of

other minds. Husserl, for instance, argues this asymmetry is phenomenologically constitutional for intersubjectivity. Without it, I would be incapable of experiencing another's mind as other but would instead experience it as "merely a moment of my own essence, and ultimately he himself and I myself would be the same" (Husserl 1999, p. 109). Similarly, Merleau-Ponty observes that "the grief and anger of another have never quite the same significance for him as they have for me. For him these situations are lived through, for me they are displayed" (Merleau-Ponty 2002, p. 415).

Another example in support of this transcendence can be drawn from the metaphor of physics. We all live in a world governed by physical laws. Still, we emphasize the study of physics as a specialization. Thus, perceptual access and living a life in a world governed by physics are not sufficient for a practical, comprehensive understanding of physics. Therefore, we can see that while criticizing ToM on the basis of the access problem, DSP itself faces the challenge of the transcendence problem. In this paper, I shall try to investigate whether DSP has overlooked the notion of 'transcendence' and whether it is possible to find a social perception account that incorporates both the access problem and the transcendence problem. In addition to that, some weak versions of perceptual account of other minds have argued that DSP needs to accept some forms of theoretical background knowledge necessary for mindreading. They argue that theory informs our perception thus must be given an epistemic priority. For example, consider the case of theory-laden perception of shingles (Lavelle, 2012). To an untrained eye, shingles appear simply as red spots on the body but a trained medical practitioner may immediately perceive the medical condition of having shingles. The practitioner has a repertoire of background knowledge and, at the personal cognitive level, is arguably drawing a number of inferences. This argument raises another question: is perceiving DSP and ToM as having mutually exclusive domains plausible, or not? This perspective may lead to a stalemate situation.

Keywords: *perception, social cognition, problem of access, problem of transcendence*

## **Moods and Time**

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### **Abstract**

Moods means we are attuned with the world prior to any reflection which tend to present things objectively. Like thrownness we also not choose moods, now in the mood of love, then hate, then grief, then dread, the reason for this is that mood neither comes from inside nor from the outside. They arise out of the being-in-the-world. Attunement is one of the existential structures in which the being of there dwells. Equiprimordially with it, understanding constitutes this being. Attunement always has its understanding, even if only by suppressing it. The common understanding of the moods is that love is the counter of hate but if we look according to the existential structure, it is not love which is counter of hate. In Heidegger's philosophy the notion of time is understood in terms of existence means the objective conception of time as infinite linear flow as past, present and future no longer has priority. Temporality can be authentic as well as inauthentic. Authentic temporality depends on comprehending the finitude of human existence and this is possible out of anticipatory resoluteness, encountering the phenomenon of death. Authentic temporality is the ground for authentic possibilities of Dasein and they are only disclosed in the anticipation of death. The origin of inauthentic temporality lies in a faculty that a human being possess "turning towards itself" and most of the time we tend to priorities this over lived experience. I call this domain of thought, reflective state. Time as

infinite has origin in this domain. It is termed as vulgar conception of time or inauthentic temporality. So, what is the existential understanding of time? Time is woven into the existential structure of Dasein according to Heidegger temporality first showed itself into anticipatory resoluteness.

It often asked what is the point of these pre-reflective existential categories? The reason to have these categories is that they show where do actual freedom lies. The moment we are being aware of it we are free of it, to be free of something is to know the limits of it. To free of inauthentic temporality is to see true limits of Dasein.

In this paper I propose that moods and time are interrelated. There are moods which falls with the inauthentic temporality which we can call moods of publicness fear, anger, hate, and love and there are moods which falls with authentic temporality and dread is one of them.

Keywords: *moods, time, temporality, Dasein, love.*

### **Adopting a Zetetic Framework**

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#### **Abstract**

Rudolph Carnap in his influential 1950 paper titled “Empiricism, Semantics and Ontology” talks about the ontology of abstract entities. In this paper, his distinction of internal questions and external questions points to this idea of adopting frameworks in which certain abstract entities would be more clear and understandable. To clarify, in the framework of, say, numbers, internal questions could be something like “Do you have five fingers?”, “Is seven greater than two?” etc. The internal questions assume the existence of the entities to be true. External questions, on the other hand, question the existence of the framework itself. The answer to external questions is sought keeping in mind, practicality. The process of answering the external question is thought to be far more interesting. It defines not only what presently seems to be the most appropriate alternative to choose, but also in doing so, defines in a greater sense, the future of the field. The adoption of a framework involves a set of rules which are not only necessary but also sufficient.

In this paper, I explore Carnap's idea of adopting frameworks with respect to the shifting paradigm from doxastic to zetetic in contemporary epistemology. Doxastic relates to belief as zetetic relates to inquiry. Many proponents of this shift like Jane Friedman, Christopher Kelp among others have discussed the importance of introduction of zetetic norms and that this shift will lead to a more coherent, effective and holistic approach to epistemology. I defend the claim that adopting a zetetic framework fits well with Carnap's idea that in order to make sense of certain abstract (epistemological, in this case) entities, we need to adopt certain frameworks, and the validity of that can be proved practically, not metaphysically. I will attempt to answer (internal) questions like “What is Inquiry?”, “What should one do during the process of inquiring?” and the (external) question of “Why adopting the zetetic framework is desirable?” or “Is worrying about this zetetic framework even worth our time?” or “What is it that the zetetic framework provides us that the epistemic framework fails to provide?”. I will also look at the criticisms posed against the adoption of such a framework holistically considering the negative consequences and attempt to pose solutions, if any possible.

There are a great many cultural and social factors that I see relevant to the zetetic framework and wish to dive into in this topic regarding inquiry. Social epistemologist Emily C. McWilliams talks about how decentering inquiry in our lives is moving our world towards a dystopic future epistemically, because if one's belief in the practice of inquiry is deemed unnecessary or superficial, one will not be able to make sense of their experiences (of injustice). She builds on Miranda Fricker's concept of epistemic injustice highlighting the injustices that impede on even the possibility of inquiry such as dialogic silencing, structural exclusion or disruptions to joint questioning. Further, another scholar David Ebrey directs our attention towards the virtue of inquiry itself as held by Socrates. Plato's dialogue brings out how reaching the answer or the solution is only the secondary concern, the primary concern being the process of inquiry itself.

The goal of inquiry is given less importance than the process of inquiry itself. Susan Haack, with her theory of foundherentism combining the elements of foundationalism and coherentism leading to a new direction given to evidence in epistemology. Evidently, she too is interested in a reconstruction of epistemology. My paper gives not only a theoretical and conceptual but rather also a practical reimagining of the practice of epistemology. I believe this holds a great impact on belief formations and decision making. In this paper, I have argued that a zetetic framework, one that centers inquiry rather than belief or knowledge, in epistemology, is as necessary as it is justified.

Keywords: *inquiry, zetetic epistemology, frameworks*

## **The Interplay of Emotional Words and Relevant Context on Sentence Processing and Spillover in Non-Native English Reader**

Aarushi Srivastava and Aparna Pandey, IIT Bhubaneswar.

### **Abstract**

#### **Introduction**

The interaction of emotion and language has shown processing advantage of emotion words over non-emotion words (4). However, when these emotion words are placed in sentence or discourse settings, there have been mixed results (5,6). Emotion words also influence the reading speed of the neutral words that come after them. This is called the emotional spillover effect. While prior research has explored the spillover effect of emotion-laden words (words that have an emotional association, e.g. gift, funeral) (3), the spillover effect of inherently emotion words remains underexplored. Also, researchers have found that the emotional context of the sentence also influences comprehension (1,7). Self-relevance shapes sentence comprehension at multiple processing stages. Early visual-sensory ERPs (P1, N1, P2) are enhanced when a discourse context is explicitly self-relevant, indicating top-down attentional bias that speeds word-by-word analysis (2). The present study explores the effect of relevant emotional and non-emotional context on the reading time of target words in the sentences, and further it examines the spillover effect on the post-target words of the sentence.

#### **Method**

Fifteen participants (age=18-35years, non-native English speakers) were included. The experiment involved three emotional-content conditions (Positive, Negative and Non-Emotion word) and four context conditions (Positive, Negative, Non-Emotional and Meaningless

contexts). The emotional-content words were the target words (T) and the context occurred before them. Target words were adapted from Knickerbocker et al., (2019) and validated via survey (N=50), with 15 words chosen per category based on valence ratings. These 45 target words were embedded into three context conditions resulting in 135 English sentences. Target-word and sentence lengths were controlled, and the post-target region (T+1, T+2, T+3), on which spillover effect was observed, was kept identical across conditions to ensure variations in reading times could be attributed completely to target word and context effects. All the sentences were in the first person and had pronouns like 'I, me, my, mine' to make it relevant for the reader. Participants read sentences aloud in a self-paced, word-by-word presentation, with reaction times recorded for each word. Example Item:

#### Emotional Context (Positive)

During my most awaited competition, I kept thinking about my (success / fear / cup) as I walked.

#### Non-Emotional Context

When he called me, I spoke to him about my (success / fear / cup) as I walked.

#### Meaningless Context

Spoke he about me, I when to my called him (success / fear / cup) as I walked.

### Results

The study revealed a significant main effect of context ( $F(3, 131) = 5.665, p < .001, \eta^2 = .120$ ) with reading times of target word being longer in meaningless sentences ( $M=0.536, SD=0.048$ ) compared to positive emotional ( $M=0.503, SD=0.053$ ), negative emotional ( $M=0.500, SD=0.037$ ) and non-emotional ( $M=0.502, SD=0.040$ ). This trend was also seen in the post-target region suggesting that contextual-coherence enhanced processing efficiency beyond T. For sentences with a positive target word, there was a significant effect of context ( $F(3, 41) = 3.582, p < .05, \eta^2 = .208$ ) seen having difference in reading time of T and T+1 words when placed in a negative emotional context ( $M=0.474, SD=0.042$ ) and meaningless context ( $M=0.544, SD=0.043$ ). Reading of positive target words in positive emotional context ( $M=0.515, SD=0.060$ ) took longer than negative emotional and non-emotional ones.

For total reading times, a significant effect of context was seen ( $F(3, 131) = 22.76, p < .001, \eta^2 = .34$ ). Total time taken to read positive ( $M=7.64, SD=0.41$ ) and negative emotional ( $M=7.73, SD=0.38$ ) sentences were significantly different compared to meaningless sentences ( $M=8.26, SD=0.41$ ). Looking at the mean trends for the experiment, target word reading was slower for emotional words (Positive- $M=0.511, SD=0.052$ ; Negative- $M=0.519, SD=0.053$ ; Neutral- $M=0.502, SD=0.033$ ). A similar trend was observed in the post-target region as well. The total reading time of sentences with the emotional target word (Positive- $M=7.82, SD=0.55$ , Negative- $M=7.81, SD=0.42$ ) was also slower than with the neutral target ( $M=7.79, SD=0.50$ ).

### Conclusion

The findings demonstrate that context significantly influences the target word processing, while emotionality of context and the target word together indicates the spillover effect on post-target words. The results aligned with predictive processing theory, showing that meaningfulness of the context modulates word-processing and meaningless contexts slows reading times. Emotional content increases attentional engagement or conflict leading to delayed processing, beyond the emotional word, supporting the affective priority hypothesis. Interestingly, emotional congruity exhibited longer reading times at target and post-target words compared to incongruent context-content conditions. A similar delay in the processing of congruent conditions was seen for positive context and positive target word, further strengthening the idea

of elaborative processing in high emotion load. Overall, reading speed at target and T+1 in an emotional context is similar to that in a non-emotional context, but it slows down towards the end of the sentence (T+2 and T+3). This suggests the role of personal relevance of emotion that serves initial facilitation of processing before the emotional load delays the reading speed for deeper integration. The total reading times also indicate increased emotional load while reading relevant emotional sentences, than non-emotional. These results support dynamic interplay of emotional context and content, and highlight the need to further explore how context valence, relevance and emotional congruity shape cognitive load, perhaps more precisely using neurophysiological measures.

Keywords: *sentence processing, emotional load, self-relevance, sentence context*

## **The Effect of Platform Features on Attentional Tunneling in Short Form Video Use**

Devikrishna Sabu and Aparna Pandey, IIT Bhubaneswar

### **Abstract**

Short form videos (SFV) are a very popular medium of digital consumption in the present times. Prior research shows that excessive use of SFVs can lead to addiction and altered cognitive abilities (1,3) like decreased attention span, inhibitory control and so on. One key mechanism that has been associated with increased use of SFV is ‘flow’- an active skill-balanced immersive state (2). However, the theoretical models suggest that SFV use might actually be associated with a ‘pseudo-flow’- a passive, design exploited immersive, low boredom state. Limited studies have experimentally tested the impact of platform features (such as personalized algorithms, autoplay, infinite scroll) of SFV on attention capture. This study aims to explore how platform features impact attentional tunneling- a phenomenon in which the users focus on the content by ignoring the physical surroundings (4). Fifty healthy typically developing participants were assigned to one of the two conditions in the between-subjects design: (i) Personalized Video (PV) condition in which the participants viewed their own SFV feed with autoplay and infinite scroll (ii) Generalized Video (GV) condition in which the participants viewed non-personalized, pre-selected random videos in the gallery app with no autoplay or infinite scroll. Simultaneously, an Instruction-Following task was carried out to test for attentional tunneling. Volume of the feed and instructions were calibrated prior to the task to ensure that instructions were audible. Instructions followed score, time perception accuracy and subjective boredom (rated on a 5-point scale) was measured and each was converted into z-scores.

Results indicate that there exists a significant difference in the Instructions-Followed score between PV and GV groups ( $p < .01$ ) showing that platform features did affect attention. The PV group ( $M = -0.36, SD = 0.80$ ) followed less instructions than the GV group ( $M = 0.40, SD = 1.04$ ), showing attentional tunneling. Comparing time perception accuracy between the two groups revealed a significant difference ( $p < .01$ ) such that GV group showed less accuracy in time perception ( $M = -0.29, SD = 0.99$ ) with more boredomness rating ( $M = -0.43, SD = 0.99$ ) than the PV group ( $M = -0.41, SD = 0.62$ ) who showed more accuracy in time perception with significantly lower boredom ( $M = 0.45, SD = 0.84$ ). The findings suggest that platform features and not just content capture attention while watching SFVs. This attentional tunneling could pose safety and productivity risks. Additionally, the findings suggest that flow from SFVs include high immersion (similar to classic flow), but comparatively accurate time perception (distinct from classic flow) indicating that SFV-flow state might be shallower than classic flow creating a

slightly different cognitive state. Future research could explore how platform features could be a primary cause for habit formation with respect to watching short form videos.

Keywords: *short form video, flow, attentional tunneling, platform features*

## **The Digital Reflection of Emotion: A Systematic Review of Machine Learning Approaches for Emotional Representation and Psychopathology Detection on Social Media**

Sarath C J and Aparna Pandey, IIT Bhubaneswar

### **Abstract**

The present systematic review aims to synthesise the existing evidence on digital reflection of emotions, specifically focusing on the machine learning models and natural language processing used to detect emotional patterns, thereby recognising potential vulnerability and psychopathology from social media. Emotions are central to human experiences and their expression has taken a drastic shift with the involvement of digital media platforms, which currently serve as a primary medium of communication and emotional exchange. The PRISMA, 2020 guidelines were followed in this systematic review. The review was conducted on four databases, including Scopus, Web of Science, PubMed, and APA Psycnet. The final list consists of 20 articles, specifically focusing on emotional representation through social media, published in English and selected based on the inclusion and exclusion criteria. The findings show an acceleration in interdisciplinary research on emotional representation and digital media, with the majority of studies published after 2022. The most widely researched social media platform from the reviewed research articles was Twitter, with predominantly textual analysis using linguistic and semantic markers. A strong correlation was found from the reviewed articles on the recognition of the emotional patterns and the early detection of mood disorders and suicidal ideation. The review indicates the function of social medias as an emotional expression outlet and a diagnostic mirror of the users' affective and psychological processes.

Keywords: *emotional representation, emotional distress, social media, machine learning*

## **Counterfactual Thinking and its Logical Structure: A Possible World Semantic Approach**

Ankus Mistri, Jadavpur University

### **Abstract**

There is always an allure to think how reality or existing facts could have been different and as a result of that what would be the possible outcome, for example, “if I had taken my lucky pen today, I would have answered better in the exam”. That is not merely a speculative thinking practice of individuals but many times, even most of the time these are about serious businesses of life. So many fields of human life where argumentation and thinking have significant roles, like Law, Science, Crime Investigations, mathematics, philosophy and everyday decision making, this kind of thinking practices are predominantly present there as crucial parts of our argumentations and reasoning, vindicating cause-and-effect relations between two elements. This kind of conditional statements with an antecedent, counter to the fact and a probable consequence are called counterfactual statements. Counterfactuals come in our thinking in a wide range of contexts, scopes and forms, so the natures of these thoughts are also very diverse, even that makes it very difficult to categorize them under a single definition. The thing that creates the most difficulty of theorizing counterfactuals is to understand its meaning formally

and to model the logical structure behind its vague ordinary language based and context sensitive truth conditional nature. Counterfactuals are not like ordinary conditionals; the main difference is that the antecedents are always false here and according to the fundamental rule of classical logic, all such conditional statements with false antecedents should be vacuously true. But that rule is not applicable for counterfactuals unanimously. There are false counterfactuals with false antecedents, for example, “if we had finished packing Sunday morning, then we would have attended the conference today.” Suppose, it is true that the speaker was unable to finish the packing by Sunday morning but that was not the reason for not attending the conference, rather that happened because the flight was canceled that day. That means, though the antecedent is false still the counterfactual is not true. So, the truth value assignments of the counterfactuals are not determined by the ordinary truth table rules for if-then sentences or to be exact by extensional semantic tools for truth functional sentences. So, to explain the truth value nature of counterfactuals and to describe their meanings in the Davidsonian(1967) sense i.e. meaning is nothing but the truth conditions of a sentence we have to follow some other theories of semantics that can explain their truth-conditional nature.

Here this paper is solely dedicated to the discussion regarding the logical structure of counterfactual conditional thinking considering the above said challenges of defining its meaning in truth conditional sense. The method through which this paper will proceed is a possible world semantic method, especially the semantic method used by Stalnaker(1968), David Lewis(1973) and McKay(1977) where they use an alternative version of possible world model of Saul Kripke for interpreting the truth conditions of these statements. Lewis creates a logical system called Counterfactual Logic with two different conditional symbols in its language for the two kinds of counterfactuals ‘would’ and ‘might’ and he defines the accessibility of possible worlds in terms of ‘relative similarity’ or ‘closeness’. He argues that a counterfactual claim of the form “If it were the case that A then, it would be the case that C is true if either A is necessarily false or a world in which  $A \wedge C$  is true is close to the actual world than a possible world where  $A \wedge \neg C$  is true”(Lewis, 1973) The first section of this paper consists of the discussions regarding various types and forms of counterfactuals available in our ordinary language usage. There it has been shown that they can be categorized in two types: vacuously true and non- vacuously true conditionals and in which sense counterfactuals are different from other conditionals like strict conditionals or material conditionals. All these analysis leads us to identify the non-truth functional nature of counterfactual statements. Like, material conditionals are purely truth functional in nature i.e. the truth value of these statements are solely dependent on the parts but strict conditionals are not. But counterfactuals are not any of those kinds, neither truth functional nor even universally true for all accessible possible worlds. So, neither the simple truth table method nor the original possible world Kripke model can interpret counterfactuals as done with alethic modal conditionals (strict conditionals).

In the second section the nature of counterfactual is described in a new way i.e. as a ‘variably strict condition’ along with the discussion about the semantics for it. The semantics that interpret it, is a sphere base possible world semantics where the spheres(S) are the sets of possible worlds namely S1, S2, S3... situated by surrounding the actual world ‘i’ and they are different in terms of the similarity with the actual world i.e. the closer the sphere, the more similar it would be with the actual world. This model was first created by Stalnaker in 1968 and reformed by Lewis in 1973.

The third section will finally present the discussion of defining the truth conditions or the meaning in formal sense of a counterfactual statement with the help of the alternative possible world semantics, which has already been described in the previous section. Here it will also be

trying to present how the context based and vague nature of this conditional can be handled by this new model.

Keywords: *counterfactual conditional, possible worlds, logical form, truth conditions, causality.*

## **Effect of Background Music and Cognitive Load on Perceptual Sensitivity: A Signal Detection Analysis**

Reshma Raj K and Aparna Pandey, Indian Institute of Technology Bhubaneswar

### **Abstract**

The impact of background music in terms of facilitating or interfering with concurrent cognitive task performance remains inconclusive (Yoo et al., 2022). Early selection theories of attention hypothesize that high perceptual load exhausts capacity preventing distractor processing, whereas low perceptual load allows all stimuli (targets and distractors) to be processed simultaneously (Lavie, 1995, 2005, 2010; Lavie & Tsal, 1994). According to the resource allocation hypothesis (Kahneman, 1973), the attentional resources are of limited capacity, which must be divided between competing demands. Therefore, it is imperative to study how background stimuli, such as music, consume these resources along with cognitive tasks.

The present study aims to investigate if allocating resources to a colour recognition task with varying levels of cognitive load (low, medium, high) will be influenced by different types of non-lyrical background music (positive, negative, neutral, and no-music). Sixty-four participants between the ages 18-30 were recruited via convenience sampling, and were divided into four groups. Each group completed the colour-recognition task, where they had to recall the colour and location of the target square in an array. After a short delay, participants had to identify the colour of the target square by clicking on a colour wheel. To manipulate music and prevent carryover effects, a between-subjects design was implemented so that each participant is exposed to only one kind of music. Perceptual sensitivity was measured using  $d'$  prime ( $d'$ ), which quantifies the distance between the signal and noise.  $d'$  value is the difference between observer's hit rate and false alarm rate, after both proportions have been transformed into  $z$  scores ( $d' = z [\text{Hit Rate}] - z [\text{False Alarm Rate}]$ ). Therefore, greater the value of  $d'$ , greater will be the ability to discriminate between the target and the noise.

A 3x4 mixed ANOVA was conducted to see the interaction effect of music and cognitive load on  $d'$ . Results indicate a significant main effect of complexity  $F(2,60) = 50, p < 0.001^*$ . The values of  $d'$  across varying levels of complexity under different music conditions were not significantly different. A one-way ANOVA comparing four music groups was conducted specifically for each level of cognitive load to find out the simple main effects. There was a significant effect of music on  $d'$  for the low cognitive load ( $F(3,60) = 3.55, p < 0.01$ ). Tukey-Kramer Post-Hoc results showed a significant difference between negative music and no music conditions (Mean difference = -1.75,  $p = 0.03$ ), as well as negative and positive conditions (Mean difference = -1.77,  $p = 0.03$ ). This indicates that the group exposed to negative music performed significantly worse than the no-music group as well as the positive music group. However, no significant main effect of music on  $d'$  was found across the medium and high cognitive load conditions.

From the results, it is evident that when the task difficulty is low, music can compete with the primary task for attentional resources. In the low cognitive load level, the attentional resources

were minimally utilized, causing task irrelevant stimuli to induce distraction and thereby impairing perceptual sensitivity. As the complexity increased in medium and high maximum attentional resources were used by the participants, which hindered the music from effecting perceptual sensitivity. This is consistent with the findings by Kiss & Linnell (2021), which suggest that low- demanding tasks can be influenced by music. The results also suggest that negative music group performed significantly worse than the rest of the groups, which is supported by the findings of Hofbauer et al (2024). Furthermore, the lack of interaction effects between task complexity and music groups is consistent with the findings by Yoo et al (2022) which suggest that complexity and expectancy are the critical factors in determining the cognitive task performance, and music itself is not a facilitating or detrimental factor for cognitive performance.

Keywords: *background music, complexity, perceptual sensitivity, resource allocation*

## Language and Consciousness

Sanjaya Kumar Lenka, Sandeep Kumar and Debashis Khan  
Indian Institute of Technology (BHU)

### Abstract

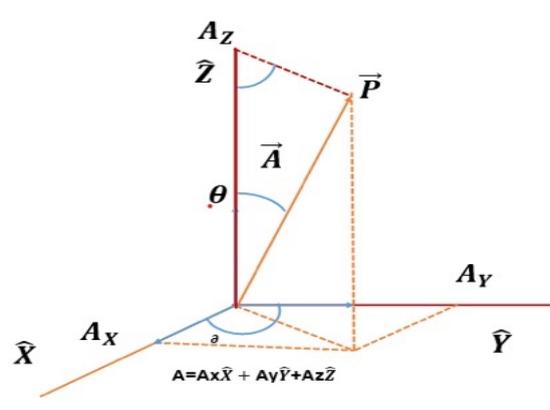
Language is a dynamic, multimodal, and socially embedded system that evolves through interaction, culture, and meaning-making. In this sense, language can be understood as a living and adaptive system shaped by how we use it, with whom, and in which contexts. The use of language is conditioned by our thoughts about reality and our perception of the material world; therefore, language serves as a window into human thought and experience. More importantly, our interpretations of reality and our perceptions of thought are different manifestations of consciousness.

Consciousness may be understood as the experiencer that engages with both the material world and the internal sensations reconstructed by the sensory system. It is natural, universal, and indivisible—although not directly observable or empirically testable, it can be conceived as a central driving force in the evolution of language. A major theoretical problem addressed in this study is the assumption that language is a fixed set of design features that exists solely within biological minds. This assumption is critically examined and challenged.

The study departs from conventional approaches by proposing that language is a natural, adaptive system emerging from consciousness. Consciousness experiences human actions, mindsets, decisions, and other aspects of physical reality, and formulates codes of meaning to express them. Consequently, language, as an extension of consciousness, generates diverse forms of social, scientific, and religious thought. Socio-literary traditions such as Deconstruction (Jacques Derrida), Post-Structuralism (Foucault, Barthes, Kristeva), Hyperreality and Simulation (Jean Baudrillard), Fragmentation and Identity Theory, Cultural Relativism and Pluralism, and Postmodern Aesthetics illustrate how consciousness manifests in different forms of thought and language. All these thoughts are based on perception of Complexity, Diversity Multiplicity of meaning, Local narratives, Cultural and linguistic construction of reality, Power embedded in discourse and Fluidity of identity. Similarly, spiritual traditions—such as Advaitavada, Dvaitavada, Viśiṣṭādvaitavada, and Acintya-bhedābheda—reflect varied expressions of consciousness. Scientific traditions,

from classical to quantum physics, likewise reveal consciousness through different forms of conceptual and mathematical language.

This complex mechanism can be modeled through a hypothesis based on the decomposition of consciousness, in which a conscious space (A) is projected into three interrelated dimensions: physical reality (Y), mental perception (X), and creative–expressive space (Z).



**The Y** represents the physical world, including human actions and decisions, perceived by the conscious space A and projected as  $A_y$ .

**The X** represents the perceptual space of the mind, composed of sensory data and contextual awareness. Sensory input is transformed into thought according to the mind’s contextual “matter.” Different philosophical or literary systems represent different contexts interpreting the same underlying reality; this projection of consciousness is expressed as  $A_x$ . For example

**The Z** represents the expressive or productive dimension of consciousness. Once perception is transformed into equations, ideas, or interpretive frameworks, consciousness seeks expression in language. This expressive force, represented as  $A_z$ , generates the vast diversity of social theories, literary traditions, and religious worldviews.

Overall, the model proposes that consciousness (A) is decomposed into the three interconnected spaces of physical reality (Y), perceptual context (X), and expressive output (Z). These projections— $A_y$ ,  $A_x$ , and  $A_z$ —are linearly connected and together shape the formation of thought and language.

This study will focus specifically on the domains of socio-literary theory and spiritual thought, aiming to build a conceptual bridge between science and spirituality with consciousness as the foundational principle. The study demonstrates how an indivisible unit of consciousness is shaped through different perceptual contexts to produce various forms of thought. In social science, literature, and religious philosophy, this multiplicity becomes clearly visible.

The broader implications of this research include fostering social harmony, enhancing mutual understanding among individuals with divergent perspectives, and contributing to scientific and spiritual discourse toward a unified theory of physical reality and an integrated theory of language and literature.

**Key words:** decomposition of consciousness, reconstructive information, conscious space, thought space and expressive space.

## God, Consciousness, and Reality — Toward a Unified Paradigm

Ajaya Sahoo, GlobalLogic, Bangalore.

### Abstract:

This presentation proposes a paradigm that integrates insights from physics, life sciences, and Vedantic philosophy to illuminate the inseparable triad of God, Consciousness, and Reality. Unlike specialized discussions on cognition, phenomenology, or quantum mechanics, this talk offers a conclusive synthesis—a holistic framework that unifies Life sciences scientific and spiritual perspectives.

Modern physics demonstrates that reality is not reducible to classical matter. Wave-particle duality, entanglement, and nonlocality reveal a substratum beyond space-time, challenging materialist assumptions. confront unresolved challenges:

- The *hard problem* of how subjective experience arises from neural substrates.
- The *binding problem* of how distributed brain processes yield unified perception.
- Questions about consciousness in animals, embryos, and even plants. Neuroscience and AI provide correlations and simulations but fail to explain the origin of awareness itself, pointing to the need for a broader framework.

Vedanta offers such a framework through its triadic model of existence:

1. Physical domain — body, matter, energy
2. Psychological domain — mind, intelligence, ego
3. Spiritual domain — soul (ātman), spark of Brahman

Here, consciousness is not emergent but fundamental, belonging to the spiritual domain and serving as the ground of both subjective and objective realities. This Vedantic paradigm complements scientific inquiry by addressing what physics and biology leave unresolved:

- The role of the observer in shaping reality
- The source of intentionality and selfhood

Key integrative insights include:

- *Quantum Measurement and Consciousness*: Observation collapses the wave function, suggesting consciousness is central to manifesting reality.
- *Life Sciences and Consciousness*: Biofeedback, fMRI, and EEG studies reveal correlations but also highlight consciousness as a pervasive principle, not confined to human neural activity.
- *Philosophical Necessity*: Neither empirical science nor logic alone can resolve the mysteries of experience; Vedanta provides a metaphysical lens to unify them.
- *Spiritual Implications*: Consciousness is eternal, blissful, and inseparable from God, who is not a distant abstraction but the conscious ground of all beings.

Conclusion: Reality is best understood as a synthesis of objective science and subjective introspection, grounded in the Vedantic vision where God, Consciousness, and Reality form one continuum. By integrating physics, life sciences, and spiritual philosophy, this

presentation offers a holistic conclusion to the conference discourse—pointing toward a cosmos that is not merely mechanistic but conscious, purposeful, and divine.

### **Disaster as Ongoing Reality: Lived Experiences from Himachal Pradesh**

Sneha Kashyap, Indian Institute of Technology Bhubaneswar

**Background:** The ecologically sensitive Indian Himalayan ranges are vulnerable to recurring disasters due to a complex interplay of climate change and unplanned urbanization. Monsoon 2023 witnessed the mountainous state of Himachal Pradesh suffer widespread devastation. Post-disaster discourse and practices have largely centered on rebuilding infrastructure and restoring connectivity. The human cost of disaster, manifest in the thoughts and actions of victims/survivors, are much less highlighted. Literature reveals a visible gap in the understanding of lived experience of disasters in the Indian Himalayas.

**Objectives:** This research explores the lived experience of disaster in Himachal Pradesh, potentially enabling mental health and psychosocial support to be tailored adequately. Through foregrounding the narratives of those who have been impacted by disaster yet largely remain sidelined from knowledge production, this research also engages with issues of epistemic visibility.

**Methods:** This study was conducted using a qualitative case study method. Semi-structured interviews were conducted with 5 individuals who had lost their homes and were displaced during the August 2023 flash floods and subsequent landslides in Himachal Pradesh. Purposive sampling was employed, and participants were contacted through a non-governmental organization. Data was analyzed using grounded theory methodology.

**Results:** The findings reveal a profound psychosocial impact of the 2023 monsoon disaster on the affected individuals. Immediate emotional responses ranged from acute distress—marked by confusion, crying, and numbness—to gradual relief upon realizing lives had been spared. However, this relief was overshadowed by deep sadness over the loss of homes and belongings, with survivors describing their former dwellings as sacred spaces infused with memories, independence, and cultural belonging. Participants expressed nostalgia for their previous dwellings which reflected considerable place attachment, highlighting the emotional burden of relocation. Displacement into government accommodations generated significant discontent. The imposed “temporary” housing status heightened feelings of instability, while recurrent eviction notices and conflicts with permanent residents exacerbated distress. Practical challenges compounded psychosocial difficulties. Somatic symptoms such as elevated blood pressure and fatigue, as well as anxieties over children’s futures and loss of breadwinners to disability, further elevated ongoing vulnerability. Despite these hardships, some attributed resilience to governmental and NGO assistance, as well as to community support. Others voiced structural critiques, attributing the disaster to unsafe construction practices and unregulated urbanization.

**Conclusions:** This study foregrounds the lived experiences of individuals affected by the 2023 monsoon disasters in Himachal Pradesh. Findings reveal how immediate emotional distress, material loss and displacement are compounded by relocation stress, strained resources, and future uncertainty. Narratives underscore the depth of place attachment and the challenges inherent in relocation. Institutional support to some extent, and community

strength were mentioned as sources of relief. Foregrounding lived experiences affirms them as a critical source of psychological knowledge, highlighting how wellbeing, resilience, and distress are collectively shaped through everyday interactions with loss, place, and uncertainty.

*Keywords: lived experience, disaster, vulnerability, psychosocial, himalayas, qualitative research*

## **Antecedents of Youths Flourishing and Happiness: The Role of Parental Expectations, Spiritual Involvement & Belief, and Forgiveness**

Shruti Pradhan, IIT Kharagpur

### **Abstract**

**Background:** In the contemporary world, youth face increasing academic pressure, social comparison, career uncertainty, digital overload, and mental health challenges. In this context, flourishing and happiness have emerged as crucial indicators of holistic development and psychological resilience among young people. Flourishing, conceptualized as optimal human functioning, encompasses both hedonic and eudaimonic well-being. Existing literature emphasizes that flourishing and happiness in youth are shaped by a complex interplay of psychological and socio-cultural factors, including purpose in life, optimism, self-esteem, and interpersonal relationships. Promoting flourishing and happiness through emotional education, spiritual exploration, forgiveness, supportive relationships, and balanced parental expectations can create a mentally healthy and purpose-driven generation capable of building a compassionate and sustainable future.

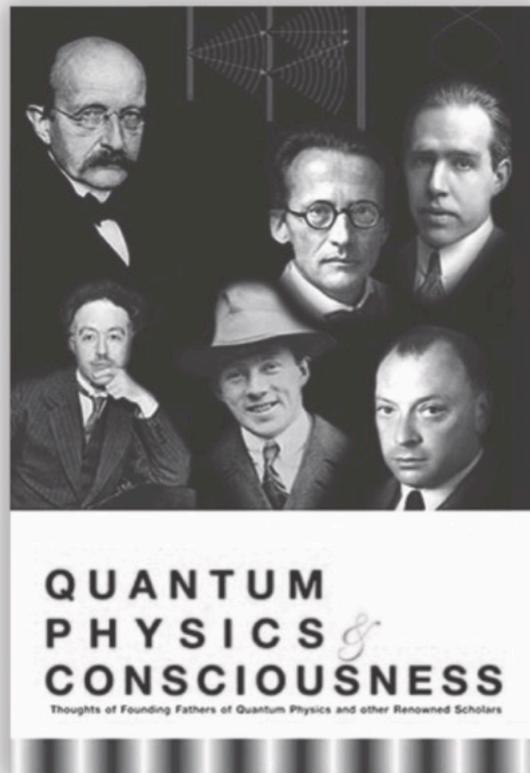
**Aim:** This study investigates the role of parental expectations, spiritual involvement and beliefs, and forgiveness as antecedents of flourishing and happiness among youth.

**Methods:** A descriptive correlational research design was adopted using convenience sampling. A total of 860 young adults aged 18-25 years participated in the study. Data were collected through survey methods from the districts of Purulia, Bankura, Birbhum, and Paschim Medinipur in West Bengal, India. Five standardized tools were used: the Parental Expectation Scale, the Spiritual Involvement and Beliefs Scale, the Trait Forgiveness Scale, the Flourishing Scale, and the Subjective Happiness Scale. Descriptive statistics (percentage, mean, and standard deviation) were used to analyze demographic variables. Inferential statistics, including t-tests and ANOVA, examined group differences. Pearson product-moment correlation and hierarchical regression were applied to assess relationships among variables and the incremental effect of predictors on dependent variables. Analyses were conducted using IBM SPSS 26.

**Results:** The results indicate that personal expectations, academic expectations, career expectations, parental ambitions, spiritual involvement and beliefs, as well as forgiveness, significantly impact flourishing and happiness in young adults. Furthermore, young people's flourishing varies only by gender, while happiness is affected by gender, birth order, and family dynamics.

*Key words: flourishing, happiness, parental expectation, spiritual involvement, forgiveness, youths.*

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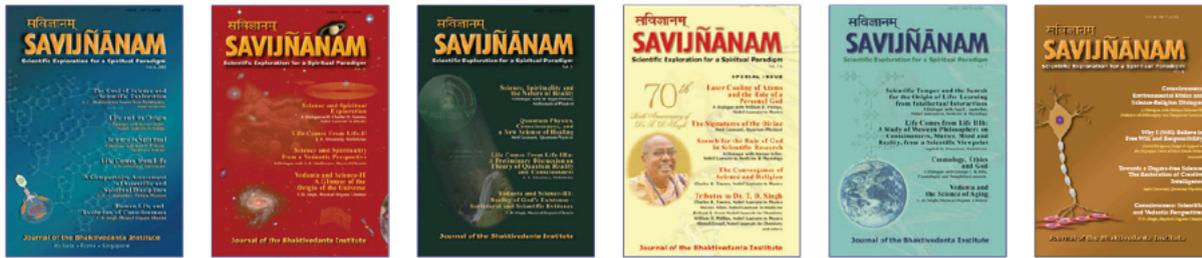
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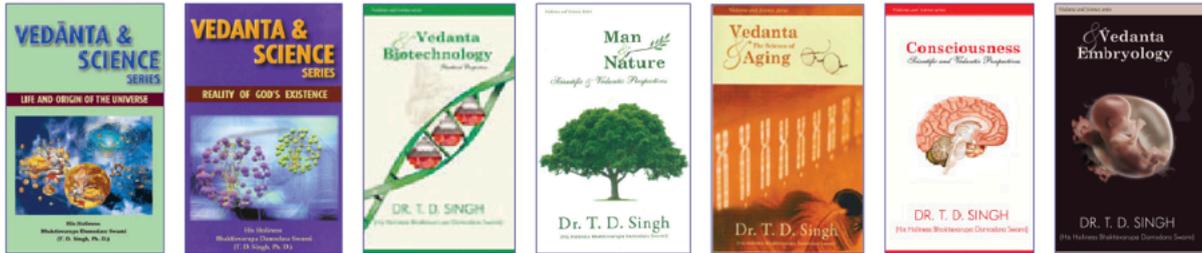
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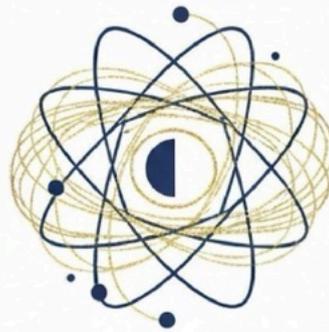


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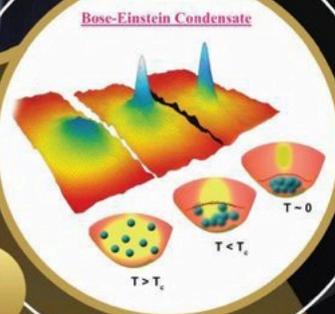


# Nobel Laureate Lecture

## "My Journey of Discovery" Lecture Series

Speaker  
**Prof. Carl E. Weiman**  
*Nobel Laureate in Physics*

31 Jan 2026 (Saturday)  
09:30 am | IST  
Online



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