

Brahman, Shunya, and Cosmological Origins: An Interdisciplinary Exploration of Consciousness in Indian Philosophy and Modern Physics

Sudhakar Dwivedi^{1*}, K. K. Choudhary²

Abstract

Issues regarding consciousness, cosmological origins, and ultimate reality have preoccupied both philosophical and scientific thought for many years. The philosophies of India, especially that of the Vedas, Upanishads, and Advaita Vedanta philosophy, formulated highly advanced metaphysical systems revolving around ideas like Brahman, Shunya, Maya, and consciousness. Modern physics and cosmology, via the evolution of relativity, quantum mechanics, quantum field theory, and cosmology, have done the same regarding the nature and origin of the universe. In this research, interdisciplinary philosophical analysis is done on certain concepts of Indian metaphysics as well as those of modern physics so as to compare the approaches that both have in terms of understanding reality, creation of cosmos, and consciousness. Qualitative concept analysis and comparison have been used to investigate similarities between the metaphysical concepts of Brahman and scientific unification, Shunya and quantum vacuum, Maya and perceptual limits, and consciousness-centred metaphysics and consciousness theories. This study does not intend to scientifically validate any ancient philosophical principles or equate metaphysical concepts to scientific concepts. Rather, it addresses common philosophical preoccupations concerning issues such as unity, emergence, manifestation, and consciousness itself. The thesis suggests a cosmological interpretation grounded on consciousness as a means for philosophical discourse across multiple disciplines and makes contributions to debates about Indian philosophy, consciousness studies, comparative metaphysics, and cosmology.

Keywords: Brahman; Shunya; Consciousness; Indian Philosophy; Advaita Vedanta; Cosmology; Modern Physics; Comparative Metaphysics; Consciousness Studies.

1 Introduction

The questions of the origin of the universe, existence, and the interaction between consciousness and matter have always been the subject matter of both philosophy and science. While the modern scientific approach deals with such questions by means of empirical study and mathematical modelling, the philosophical and spiritual approach has tried to understand them by way of metaphysical reasoning and intuitive understanding. Out of the various traditions that discuss these questions, the Indian tradition is perhaps the most consistent one that has grappled with issues of cosmology and ultimate reality. It is in this context that we shall consider the theories of the Vedas, Upanishads, Bhagavad Gita and Vedanta regarding the origin of the universe.

One of the main features of Indian philosophies is the belief that consciousness is not only a result of some physical processes but is one of the most important features of life. The Upanishadic conception of Brahman as ultimate reality and statements such as *Prajnanam Brahma* ("Consciousness is Brahman") and *Sarvam Khalvidam Brahma* ("All this is Brahman") provide a worldview whereby the richness of the universe arises out of an underlying unity and coherence, which is beyond the distinction between subject and object, mind and matter, individual and universe.

In addition to Brahman, there is another important concept which emerged in Indian philosophy by the name of *Shunya*. While Shunya can be explained in many ways, it is never seen as something that does not

exist at all; rather, it implies some state beyond any distinction whatsoever. Along with other ideas like Akasha and Prana, it was used to describe how manifestation happens out of non-manifestation.

The study of modern physics has similarly changed our perception about matter, energy, space, and time. The principle of relativity proved the unification of matter and energy, while quantum mechanics and quantum field theory showed us a universe where all things and phenomena are connected through processes and fields. Modern cosmology and unified field theory are constantly searching for new ways to explain the origin of the universe.

Both Indian philosophy and modern physics discuss issues related to unity and multiplicity, emergence, and manifestation, as well as the nature of the connection between the phenomenal world and the world of ultimate reality. However, the existence of such similarities does not mean that old Indian metaphysical teachings could predict future scientific discoveries or that scientific discoveries somehow confirm these metaphysical theories.

The interconnection of consciousness and cosmology has seen a revival of interest within modern interdisciplinary academic research. Advances in the field of consciousness have cast doubt upon purely reductionist conceptions of the mind and have led to reconsiderations of whether consciousness is something fundamental, emergent, or derived. Even though modern science denies any connection between consciousness and cosmology, some philosophical perspectives have attempted to make consciousness a more basic concept within a larger explanation of the world.

In light of these ideas, the following analysis will consider certain concepts of Indian philosophy along with modern progress in the fields of physics and cosmology. The purpose here is not to equate these metaphysical teachings with modern scientific theories but to discover possible parallels that can serve interdisciplinary discussions about consciousness, origins of the universe, and ultimate truth.

The study addresses three questions: (1) How do Indian philosophical traditions conceptualise the relationship between consciousness and cosmological manifestation? (2) What conceptual resonances exist between these perspectives and contemporary scientific discussions of matter, energy, and cosmological emergence? (3) Can a consciousness-centred cosmological interpretation provide a meaningful framework for dialogue between metaphysics and science?

Through consideration of these questions, this paper will help to contribute to conversations within the realms of Hindu philosophy, comparative metaphysics, consciousness studies, and philosophy of science. Though ancient philosophy and modern science differ significantly in their methodologies, they might inform one another when addressing longstanding questions regarding reality, consciousness, and cosmogenesis.

2 Literature Review

Scholarship related to consciousness, cosmology, and ultimate reality involves Indian metaphysics, comparative philosophy, consciousness studies, and modern physics. Even though each field comes from its own intellectual tradition, there is a common interest in understanding the basis of being and the creation of the observable universe.

2.1 Consciousness and Ultimate Reality in Indian Philosophy

Consciousness has been viewed as an essential element of life by the philosophical traditions of India. The traditional understanding of the teachings of the Upanishads sees consciousness neither as a feature of the mind nor as an ontological reality but rather as the very substance of which the latter is made. Radhakrishnan (1923, 1992) viewed Brahman as a transcendental principle beyond any subject-object opposition, whereas Sharma (2000) stressed consciousness and its relevance for Indian metaphysics.

Dasgupta (1922-1955) and Hiriyanna (1993) established that different schools of Indian philosophy have frequently debated issues related to consciousness, existence, and the creation of the cosmos. Larson (2001) explained how classical Saṅkhya made a distinction between consciousness (*Purusha*) and matter (*Prakriti*).

According to Advaita Vedanta, Brahman alone is the ultimate truth, and empirical plurality is accounted for through Maya. Deutsch (1969) believed that Advaita placed empirical reality into an ontological context, and Comans (2000) pointed out that there are ways in which Advaita had made sense of empirical plurality in the context of nondual reality. Modern writers like King (1999), Lipner (1994), and Chakrabarti (2016) have emphasised the importance of Vedantic approaches in relation to topics like consciousness, self, aesthetics, and metaphysics.

2.2 Brahman, Shunya, and Cosmological Inquiry

The concepts of Brahman and Shunya are some of the most important in Indian metaphysics. The Upanishadic concept of Brahman describes the infinite, unconditioned and all-pervading reality (Olivelle 1998; Gambhirananda 1995). Related aspects include the oneness of all things and the identity between the Self and Brahman as presented in the Brihadaranyaka Upanishad (Gambhirananda 1997). There are many references in the Upanishads associating consciousness with ultimate reality.

The concept of Shunya gained prominence, especially in Buddhist philosophy and means the lack of independent existence. Indian cosmology, on the other hand, focused on primordial conditions that were not within the scope of existence and non-existence. Panikkar (1977) emphasised these elements in Vedic and post-Vedic philosophy, while the Nasadiya Sukta portrays pre-cosmic reality.

Current scholarship tends to advise caution regarding attempts to relate these ideas to contemporary science. Rather, they can be viewed as philosophical considerations related to the problems of origin/emergence and the limitations of conceptual knowledge.

2.3 Comparative Philosophy and Science–Religion Dialogue

Many studies have been conducted to examine potential dialogues between Eastern philosophy and contemporary science. Capra (1975) proposed that modern physics shows common conceptual elements with certain philosophies in Asia, which has led to many interdisciplinary discussions.

Barbour (1997) presented a comprehensive model for the science–religion dialogue, whereas Davies (1983) addressed the philosophical ramifications of modern physics on metaphysics. Likewise, Peacocke (2001) believed that both science and religion may give different views of existence and meaning. In the field of comparative theology, Clooney (2010) illustrated that comparison itself may enable constructive dialogue by maintaining differences between traditions.

2.4 Consciousness Studies and Contemporary Debates

The recent research on consciousness has reignited the debate on the ontological status of consciousness. The philosopher Chalmers (1996), for instance, posited the hard problem of consciousness, which asserts the inadequacy of physicalist accounts of consciousness. Prior to this, James (1902) stressed the importance of subjectivity and religion in the study of consciousness.

Nagel (1974) and Searle (1992) challenged physicalist accounts of consciousness, while Damasio (1999) and Metzinger (2004) developed influential theories regarding the nature of consciousness within a neuroscientific and cognitive framework, respectively. Other views on consciousness include the panpsychism of Strawson (2006) and the phenomenology of Thompson (2015) and Varela et al. (1991). These works show that the ontological status of consciousness is yet to be conclusively determined.

2.5 Modern Physics and the Search for Underlying Unity

Unity beneath appearances has been an important theme in modern physics. The theories of Einstein (1905; 1936) changed the way we view matter, energy, space, and time, whereas quantum mechanics provided a serious challenge to our classical views about determinism and observation.

Heisenberg (1958) pointed out the significance of the philosophy of quantum theory. Schrodinger (1964; 1967), inspired partly by Vedantic philosophy, raised issues relating to consciousness, individuality, and unity. Bohm (1980); Bohm & Hiley (1993) introduced interpretations that stressed inherent unity in physical reality. Penrose (1989) opposed computational approaches to the study of the mind, whereas his subsequent works (Penrose 2004) focused on deeper mathematical structures of physical laws.

However, modern theories in cosmology and physics pursue unification through theoretical frameworks which provide explanations of the formation and evolution of the cosmos (Weinberg 1993; Greene 2004). It should be noted that the majority of scientific theories are empirically driven and do not indulge in metaphysical statements on consciousness.

Thus, the literature reviewed above presents varied approaches to issues related to consciousness, ultimate reality, creation of the cosmos, and scientific unification. Table 1 represents domains, researchers, and contributions to the field of consciousness and cosmology.

Table 1. Major Scholarly Contributions Relevant to Consciousness and Cosmological Inquiry

Domain	Key Scholars	Principal Contribution
Indian Metaphysics	Radhakrishnan (1923, 1992); Dasgupta (1922–1955); Hiriyanana (1993)	Interpreted consciousness as a fundamental ontological principle and examined the relationship between Brahman, existence, and cosmological manifestation.
Advaita Vedanta	Shankaracharya; Deutsch (1969); Comans (2000)	Developed the doctrine of non-duality and explained the relationship between Brahman, Maya, and empirical reality.
Brahman and Cosmology	Olivelle (1998); Gambhirananda (1995)	Examined Brahman as the ultimate source, ground, and sustaining principle of the universe.
Shunya and Primordial Reality	Panikkar (1977)	Explored concepts of primordial indeterminacy, emptiness, and pre-cosmic potentiality in Indian thought.
Comparative Philosophy and Religion	Capra (1975); Barbour (1997); Peacocke (2001); Clooney (2010)	Investigated possible dialogues between scientific and spiritual worldviews while preserving methodological distinctions.
Consciousness Studies	Chalmers (1996); Nagel (1974); Searle (1992); Strawson (2006)	Addressed the ontological status of consciousness and challenged purely reductionist explanations.
Modern Physics and Cosmology	Einstein (1905, 1936); Heisenberg (1958); Schrödinger (1964); Bohm (1980); Weinberg (1993); Greene (2004)	Explored unification, interconnectedness, and underlying structures of physical reality.

2.6 Research Gap and Contribution

The existing body of research shows considerable attention being paid to Indian metaphysics, philosophy of mind, comparative philosophy, and physics. The problem with such approaches is that they tend to be limited to their own disciplinary contexts. The research of Indian philosophy tends to revolve around textual analysis, while that of physics seldom explores the philosophical aspects. Similarly, comparison of two philosophical systems tends to stress similarities rather than distinguishing resonance from equivalence.

What makes this study unique is its interdisciplinary and philosophical approach towards examining the issues of consciousness, cosmic emergence, and the nature of ultimate reality. Instead of validating some ancient theories using scientific findings, this research will explore the ways in which the chosen concepts in Indian philosophy and modern physics can help address some common concerns regarding origin, emergence, unity, and consciousness.

3 Theoretical and Methodological Framework

The current study will utilise an interdisciplinary, comparative, and philosophical analysis framework to investigate the connection between consciousness, cosmological emergence, and ultimate reality in Indian metaphysics, as well as some selected developments in modern physics. The study lies at the crossroads of Hindu philosophy, comparative metaphysics, consciousness studies, and philosophy of science, with the objective of tracing similarities and dissimilarities in concepts as opposed to proving any correlation between ancient scripture and modern scientific thought.

3.1 Theoretical Orientation

These three viewpoints have influenced the analysis in a complementary way: comparative philosophy, hermeneutics, and interdisciplinary cosmology.

Comparative philosophy plays an important role in understanding the problem. Instead of collapsing distinct philosophies into one theoretical approach, comparative philosophy allows communication to take place while retaining philosophical distinctions. Comparison involves both similarities and dissimilarities, not simply the search for equivalency (Clooney 2010). Using the concept of comparative philosophy, ideas such as Brahman, Shunya, Maya, and Prana will be contrasted with scientific notions of energy, matter, emergence, and cosmology.

The research design also adopts a hermeneutic stance, in view of the fact that philosophical and religious documents always come with an element of context. As such, ideas drawn from the Vedas, Upanishads, Bhagavad Gita, and Vedanta should be analysed in their original philosophical contexts instead of being taken for granted as scientific ideas.

Finally, a third outlook is brought into discussion by way of cosmological studies conducted across disciplines. Modern cosmology tends to bring up philosophical considerations in relation to causality, origins, emergence, and the essence of existence. The current research addresses these philosophical concerns as topics for concept discussions.

3.2 Research Questions

The research is motivated by three research questions:

- **RQ1:** How does the philosophy of India perceive the relationship between consciousness and its cosmological manifestation?
- **RQ2:** Are there any similarities and differences that could be observed in the comparison of selected metaphysical concepts of India with modern physics and cosmology?
- **RQ3:** Does the philosophy of cosmology focused on consciousness create a viable philosophical foundation for interdisciplinary dialogue in metaphysics and science?

All of the questions are exploratory in nature, aimed at understanding how the different traditions treat the same ontological issues.

3.3 Methodological Approach

The methodology employed in this research includes qualitative conceptual analysis and comparative textual interpretation. Sources for philosophical investigation are selected passages from the Rig Veda, major Upanishads, the Bhagavad Gita (Sargeant 2009), and important Vedantic commentaries. Focus will be placed on aspects of cosmological emergence, consciousness, and the relation of ultimate reality to empirical existence.

As far as the science component of the research, the theoretical framework includes relativity theory, quantum mechanics, quantum field theory, particle physics, and current theories of cosmology. The selected theories are interpreted from the perspective of their philosophical implications regarding the nature and emergence of physical reality.

The analysis will be conducted through three stages. Firstly, the main concepts will be investigated within their initial philosophical contexts. Secondly, some of the main developments in modern physics and cosmology will be analysed for philosophical implications. Finally, an attempt will be made to draw comparisons between the two fields of inquiry.

3.4 Scope and Delimitations

The following limitations apply to the scope of the current research. Firstly, the research does not suggest that the Indian philosophy foresaw the findings of modern science. Secondly, it does not propose that the scientific theories of contemporary physics prove the existence of Brahman, Maya, and universal consciousness. If there is any resemblance between ancient Indian texts and modern findings, it should be considered only conceptual.

Lastly, the current research cannot offer an answer to the issue regarding the ontological nature of consciousness. Rather, the research analyses the approaches suggested by Indian philosophy and modern scientific studies to resolving this controversy. It is necessary to clarify that the new consciousness-centred interpretation of cosmology will be considered a philosophical model rather than a scientific one.

3.5 Conceptual Premise of the Study

The study is grounded on the assumption that thinking about cosmic beginnings always raises questions about unity and plurality, potential and realisation, consciousness and matter. While metaphysical thought in India and the scientific method in modern physics use differing approaches to addressing these questions, both aim at providing an explanation for how complex phenomena arise from underlying principles.

In this regard, the study will consider the relationships between Brahman, Shunya, consciousness, energy, matter, and cosmic emergence. This comparative analysis will hopefully provide insights into the issue of the existence of a higher reality beyond traditional disciplinary confines.

4 Cosmological Origins in the Vedas and Upanishads

Issues surrounding cosmogony have always held prominence in Indian philosophy. From the speculations in the hymns of the Vedas to the philosophical musings of the Upanishads, there is a consistent search among Indian philosophy for answers regarding existence, origin, and the connection between manifestation and a deeper reality. One major idea common among these works is the quest for a basic principle that explains the emergence and sustenance of diversity within the universe.

Contrary to most cosmogonies that are centred on a creator, some Vedic and Upanishadic writings took a philosophical perspective to creation, pondering about the state before creation, the nature of being and

nonbeing, and the idea of unity in multiplicity. These speculations formed the basis of later Vedantic ideas regarding Brahman and consciousness.

4.1 The Nasadiya Sukta and the Problem of Origins

One of the earliest reflections on cosmological origins appears in the Nasadiya Sukta (Rig Veda 10.129), often known as the “Hymn of Creation.” Instead of providing a creation story, the hymn attempts to discuss origins from a philosophical perspective with epistemic modesty.

The early verses of the hymn mention an ancient condition that is above conventional classification:

Then was neither non-being nor being;

There was neither the realm of space nor the sky beyond it.

This formulation denies easy distinction between dualities and posits a condition that cannot be accurately described by either existence or nonexistence, matter or form. Further verses speak of a reality in which potential exists before any form of plurality.

The concluding verse extends this uncertainty:

He, the first origin of this creation,

whether he formed it all or did not form it,

whose eye controls this world in the highest heaven,

He surely knows—or perhaps he does not know.

The appreciation of the limitations of knowledge differentiates the Nasadiya Sukta from many other creation myths, where the origin of the world is seen as something that already happened and cannot be questioned anymore. Thus, for scholars, this hymn is viewed as one of the first philosophical speculations about the origin of the universe made by humans (Jamison and Brereton 2014).

From the perspective of the current research, the hymn is important due to the fact that the themes presented there will appear as important themes in Indian philosophy in the future.

4.2 From Cosmic Principle to Brahman

Cosmological speculation found in the Vedas took on a more systematic form in the Upanishads by means of the idea of Brahman as the highest reality behind existence.

The Chandogya Upanishad traces creation to a singular principle identified as Sat (Being):

In the beginning, my dear, this world was Being alone, one without a second.

This sentence brings forth the concept of multiplicity arising out of the notion of unity. The very same text goes on to affirm:

Sarvam Khalvidam Brahma

(“All this is indeed Brahman.”)

This means that creation must be seen not only as an act but as the perpetual presence of all-embracing reality. It is more important to recognise the fundamental oneness of the creator and creation than their difference.

The Brihadaranyaka Upanishad further develops this view through the method of *neti, neti* (“not this, not this”), stressing that Brahman goes beyond all finite categories. It follows that the source of existence cannot be comprehended by concepts based on the manifest universe.

The progression from Vedic cosmology to Upanishadic philosophy thus represents a change from questioning the origin of the universe to questioning what absolute reality underpins the possibility of existence.

4.3 Consciousness as Cosmological Principle

One of the most significant contributions of the Upanishads includes the association between consciousness and reality. In the Aitareya Upanishad, this doctrine is conveyed by the use of the Mahavakya:

Prajnanam Brahma
 ("Consciousness is Brahman.")

In this case, consciousness is not seen as an attribute of matter but as a basic ontological principle. The manifestation of the universe cannot be separated from the idea of consciousness, which thus becomes part of reality.

The *Mandukya Upanishad* advances this perspective through its analysis of waking, dreaming, deep sleep, and *Turiya*, the transcendent state underlying all experience. *Turiya* is described as pure consciousness beyond empirical distinctions. The classical interpretations place even greater stress on the fact that it acts as the base upon which all other states are built (Nikhilananda 1949).

In terms of cosmology, *Turiya* is seen as representing a state of reality before there can be any differentiation between an observer and what is being observed. Such an idea later came to form a cornerstone of Advaita Vedanta.

4.4 Cosmological Manifestation and the Emergence of Multiplicity

While speaking about unity, the Upanishads have addressed the question of multiplicity. It is necessary to elaborate on how a plurality in diversity can be generated out of that one unity without sacrificing the other.

A number of Upanishadic stories attempt to show manifestation using metaphors that illustrate the concept of something arising out of another, such as sparks from fire, water from a source, or many forms made of clay, yet clay still remains the essence of those forms. This is because there is an underlying connection between absolute reality and the material world.

In the *Taittiriya Upanishad*, for instance, creation is described as a process where different aspects of reality come into being from Brahman through differentiation. Thus, matter, life, mind, wisdom, and bliss are interrelated manifestations of the same reality.

4.5 Implications for the Present Study

The metaphysical ideas of the Vedas and Upanishads lay down various ideas and themes which form a critical part of the current study. Firstly, reality arises out of a metaphysical force that transcends normal oppositions between existence/non-existence, subject/object, and unity/multiplicity. Secondly, there is an increasing tendency towards identifying this force as Brahman, who forms the absolute ground of existence. Thirdly, certain Upanishads make an explicit association between Brahman and consciousness.

Though not scientific theories, the philosophical ideas mentioned above have an important role in helping us understand the issues related to consciousness and cosmological emergence. The importance of these ideas lies in their ability to help us reframe contemporary debates about consciousness and cosmological emergence.

The next section will deal with how the ideas mentioned above developed further in later Indian philosophical thought and how concepts like Brahman, Shunya, Maya, and consciousness came to assume crucial importance in philosophical deliberations on the nature of reality.

5 Brahman, Shunya, and Consciousness: Metaphysical Foundations of Reality

These notions of Brahman, Shunya, and consciousness hold an important position within Indian philosophies of metaphysics and cosmogenesis. Even though these terms derive from distinct Indian philosophical schools, they are all trying to answer the same question: What is the origin of the universe? The importance of these notions comes from their ability to provide philosophical explanations for the interaction of unity and multiplicity, permanence and impermanence, as well as the unmanifest and manifest states.

While modern philosophies of materialism start with matter itself and try to understand consciousness through the matter from which it arose, Indian philosophies start with consciousness itself or even ultimate reality itself, and from there examine the emergence of the material world.

5.1 Brahman as Ultimate Reality

The concept of Brahman is the foundation stone of Indian philosophy. Although it has been variously explained in different schools, Brahman has basically been defined as the absolute and ultimate truth of life. The Upanishads say that Brahman is infinite and eternal. The Chandogya Upanishad refers to reality as originating from “one without a second,” while the Brihadaranyaka Upanishad emphasises its ineffability through the method of *neti, neti* (“not this, not this”).

In Advaita Vedanta, Brahman is defined as *sat-chit-ananda*, being, knowledge, and bliss, respectively. These are not qualities but rather aspects of reality itself. According to Shankaracharya, only Brahman has *paramarthika satya*, absolute reality, while the phenomenal world owes its existence to Brahman.

From this standpoint, cosmology and metaphysics cannot be distinguished from each other, as the origin of the universe is explained from the standpoint of the non-dual nature from which everything emanates.

5.2 Consciousness and the Nature of Existence

One unique aspect of Indian philosophical thinking lies in the approach to consciousness as an ontological entity, not a psychological one. The assumption here is that consciousness does not originate from any material processes but is rather a basic element of reality.

This idea is captured in the concept of Mahavakya *Prajnanam Brahma* (meaning “Consciousness is Brahman”). Here, Brahman does not refer to mental processes but to absolute awareness necessary for experiencing anything at all. Thus, according to Vedantic traditions, there is a distinction made between ever-changing psychological states and constant consciousness behind them.

The teaching concerning consciousness is further developed in the *Mandukya Upanishad* in terms of wakefulness, dreaming, deep sleep, and *Turiya*. Although the first three states are considered regular forms of experiencing, *Turiya* is referred to as absolute consciousness, transcending any distinction between the subject and object. In this sense, *Turiya* appears as the ontological basis of all forms of experience and, thus, a basic component of existence.

5.3 Shunya and Primordial Potentiality

Shunya represents another approach to ultimate reality. Though generally rendered in terms of “emptiness” or “void,” it does not signify the complete absence of any existence. On the contrary, it designates a reality existing beyond the common dichotomies of existence and non-existence.

The idea of *Shunya* originated from some early philosophical deliberations, like the *Nasadiya Sukta*, where it was discussed in terms of the pre-manifestation state. It subsequently attained significant

importance within Buddhism in terms of *Shunyata*. More widely, the concept of Shunya can be comprehended in relation to an undifferentiated state from which existence emanates.

Accordingly, the term *Shunya* cannot be used in the sense of total negation. It only means a stage of reality beyond determination and thus indicates linguistic inadequacy to describe ultimate reality.

5.4 Brahman and Shunya: Difference and Convergence

Brahman and Shunya seem completely different at a cursory glance, with Brahman being portrayed positively as being absolute reality and pure consciousness, while Shunya is approached negatively through discarding categories of thought altogether.

However, both ideas seek to describe realities beyond human understanding. This is done by challenging presuppositions on individuality, materiality, and separation. They both lead one towards the concept of something beyond mere observation and reason.

The distinction between Brahman and Shunya can thus be seen as primarily a methodological one. Brahman is approached through descriptions highlighting unity and consciousness, while Shunya highlights the insufficiency of categories.

5.5 Shiva-Shakti and the Dynamics of Manifestation

Additional perspectives on Indian cosmology may be found in the Shiva-Shakti concept. While Brahman and Shunya are concerned with the nature of absolute reality, Shiva-Shakti tries to make sense of the process of manifestation itself.

Shiva represents absolute consciousness, while Shakti stands for dynamic power or energy. Manifestation takes place as a result of the relationship between the two. This was explained by Sri Aurobindo, who saw it as a process of evolution whereby consciousness manifested in matter, life, and mind.

The concept helps explain philosophically how absolute reality is able to create a universe without losing its underlying unity. It allows one to see manifestation and consciousness as complementary aspects of reality.

5.6 Consciousness and Cosmological Emergence

Brahman, Shunya, and consciousness provide a unique perspective on cosmology. As opposed to other forms, which start from matter, these systems start with a reality that lies beyond materiality. Reality is perceived as emanating out of or becoming differentiated from the underlying substratum.

To visualise the sequence of steps, Figure 1 below outlines the hierarchical structure of reality in terms of Brahman, Shunya, consciousness, energy, matter, and the manifest universe.



Figure 1. Consciousness-Based Cosmological Framework

As can be seen in Figure 1, cosmological emergence theory refers to an emergent process that evolves from the ultimate reality through various stages of manifestation until the creation of the visible universe.

This approach cannot be considered a scientific theory of cosmogenesis. Instead, it deals with philosophical issues that include the relationship between consciousness and reality, as well as the evolution of multiplicity from unity. Despite differences among the interpretations, all agree that consciousness plays a more primary role in the process of existence than is usually thought when materialism is considered strictly. Whether through Brahman, Turiya, or Shiva-Shakti, consciousness always appears as part of the creation and structure of the universe.

These metaphysical underpinnings serve as the framework for the following discussion on contemporary physics and cosmology, where similar issues regarding matter, energy, emergence, and ultimate reality are examined.

6 Modern Physics and Cosmological Emergence

Indeed, modern physics has revolutionised people's perceptions regarding matter, energy, space, time, and the origin of the cosmos. Relativity, quantum mechanics, quantum field theory, and particle physics have defied previous assumptions and demonstrated an intricate universe. Although science, as opposed to metaphysics, has contributed to the formulation of these theories, they have raised critical issues about existence and reality.

It is not the goal of this discussion to draw any metaphysical conclusions based on these scientific theories, but rather to analyse how these theories have shaped reality and how our observable universe could arise out of inaccessible constructs.

6.1 Relativity and the Unity of Matter and Energy

The most important development in the field of physics would be Einstein's theory of relativity. In 1905, Albert Einstein proved that matter and energy are manifestations of the same physical entity through the relation:

$$E = mc^2$$

This theory proved that mass can be changed to energy and that matter itself is no longer seen as a form of energy but as an expression of it.

The theory of relativity has also proved that time and space are interrelated and part of a single concept known as spacetime. Distances, times, and simultaneity vary relative to the reference system in which measurements are made. Relativity does not deal with consciousness or metaphysics per se; however, it drastically changed our understanding of physical reality and the underlying unity.

6.2 Quantum Mechanics and the Limits of Classical Reality

There was also a second revolution brought about by quantum mechanics. In small systems, certain events can defy the classical intuition of the world. Quantum objects have to be viewed probabilistically, while their properties like position and momentum do not co-exist simultaneously.

This development undermined the belief that reality is based on distinct objects, which have well-defined characteristics irrespective of observation. On the other hand, quantum mechanics does not prove that reality arises from the mind. This kind of explanation transcends scientific knowledge.

Quantum mechanics poses many philosophical questions about measurements and how the world works. But its greater importance is in proving that reality at very basic levels cannot be explained using classical terms.

6.3 Quantum Fields and the Nature of the Vacuum

According to quantum field theory, the universe is composed of fields which pervade all of spacetime, where particles are seen as excitations of these fields. In this perspective, the quantum vacuum is not an absence of anything; rather, it is a phenomenon with real physical characteristics and energy capacity.

Consequently, the quantum vacuum does not share the same qualities with any of the previous concepts of emptiness. Though the quantum vacuum cannot be identified with such metaphysical principles as Brahman or Shunyata, it demonstrates that emptiness may well harbour structures beneath.

6.4 The Higgs Field and the Emergence of Mass

The existence of the Higgs boson discovered at CERN in 2012 proved that there exists a Higgs field, which forms a vital part of the standard model of physics.

Under current theory, particles obtain their mass from interaction with the Higgs field. The Higgs mechanism is an example of how phenomena we observe are derived from relations with structures that cannot be seen. It is philosophically relevant because it shows us how the intrinsic qualities of things can be dependent on invisible fields.

It is wrong to think that this proves something about consciousness or philosophy. On the contrary, it is an example of the increasing role played by imperceptible phenomena in modern physics.

6.5 Cosmology and the Origins of the Universe

Cosmology in the modern era aims to account for the process of evolution of the universe by observation and theory. The current theory of cosmology postulates that the observable universe started from a highly dense and hot initial condition about 13.8 billion years ago. Some of the evidence for this theory includes galaxy redshifts, matter distribution on a large scale, and the cosmic microwave background.

Hawking and Mlodinow (2010) claimed that modern cosmology was striving to provide self-contained theories of the universe while at the same time addressing many profound issues regarding origins and existence.

Some of the key observational bases of modern cosmology are shown in Figure 2.

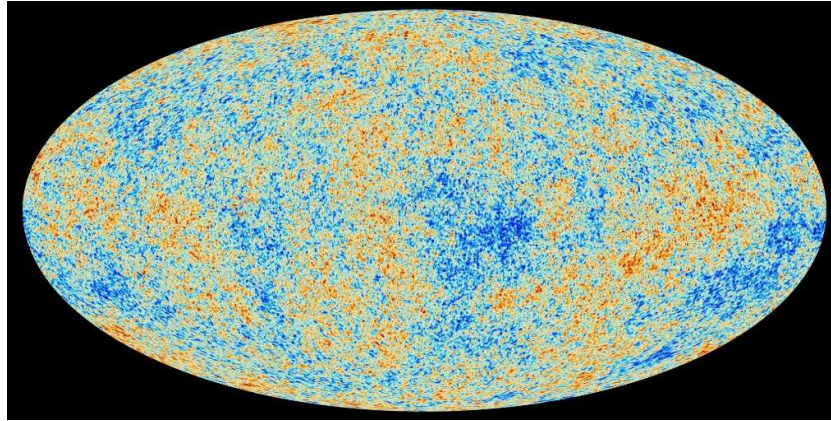


Figure 2. Cosmic Microwave Background Radiation

Even with all its successes, however, the standard cosmological model still poses unanswered questions. Although science is able to explain events just after the initial phases of expansion were observable, there is ongoing research into the matter of singularity, quantum gravity, and pre-Big Bang physics.

As such, even as cosmology gives increasingly elaborate descriptions of the development of the cosmos, some questions about the nature of the universe's origin, whether or not there is a reason behind its existence, and the role of consciousness within the universe cannot be answered scientifically.

6.6 Unified Field Approaches and the Search for Fundamental Reality

One common thread found in the realm of modern physics is that of unification. In the quest for a unified field theory by Einstein and current studies into quantum gravity and string theories, physicists have attempted to formulate systems that explain a variety of phenomena via more fundamental processes. Though a unified system has not been successfully formulated to date, it indicates the belief that a complex appearance can arise from a more profound order. Although this cannot provide any metaphysical conclusion, it is clear that, like philosophy, modern physics is preoccupied with the idea of multiplicity versus unity.

6.7 Implications for Interdisciplinary Dialogue

All of these developments demonstrate that the current state of physics has come far beyond the Newtonian mechanistic paradigm prevalent in nineteenth century science. Concepts of matter relate to energy, particles relate to fields, and cosmic entities relate to interrelationships at various levels of magnitude.

On the other hand, physics does distinguish itself methodologically from metaphysics as it relies upon observations, experiments, and mathematical equations rather than metaphysical contemplation. Scientific ideas cannot then be seen as affirmations of religious or metaphysical beliefs.

However, contemporary physics still generates questions relating to the nature of ultimate reality, emergence, unity, and connections between superficial phenomena and fundamental reality. These issues form the starting point of a discussion that needs to take place between the physical sciences and Indian philosophy regarding cosmogenesis. The following part of this paper thus looks into overlapping points between Indian metaphysics and current physics.

7 Comparative Analysis: Conceptual Resonances Between Indian Metaphysics and Modern Physics

The previous sections have analysed the Indian metaphysical views on consciousness and cosmology, and some developments in modern physics. While there is much difference between these two schools of thought regarding methods and goals of inquiry, they both concern themselves with basic questions related

to reality, cosmogony, and the link between phenomena and structure. It is neither the intent of this section to equate ancient philosophical systems to modern scientific theories nor to find analogies which can bridge the disciplines.

The former operates through introspective techniques, metaphysical analysis, and contemplation, while the latter depends upon observation, experimentation, and mathematics. In other words, the comparison can only be conceptual and not evidential.

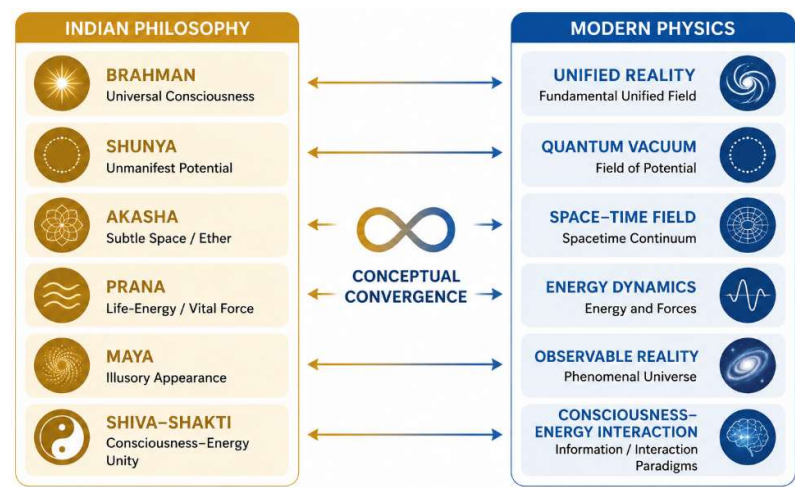


Figure 3. Conceptual Parallels Between Indian Philosophy and Modern Physics

Although Figure 3 gives you an overview, Table 2 illustrates some aspects where there is conceptual agreement.

Table 2. Comparative Overview of Indian Metaphysical Concepts and Modern Scientific Themes

Indian Philosophical Concept	Philosophical Interpretation	Comparable Scientific Theme	Nature of Resonance
Brahman	Ultimate reality underlying all existence	Unified field approaches and scientific unification	Search for underlying unity beneath diversity
Shunya	Primordial potentiality beyond ordinary categories of being and non-being	Quantum vacuum	Recognition that apparent emptiness may contain latent potentiality
Akasha	Subtle space or foundational medium of existence	Space-time continuum	Conceptual concern with the framework within which phenomena arise
Prana	Dynamic life-force or vital energy	Energy fields and physical interactions	Emphasis on dynamic processes underlying observable phenomena
Maya	Apparent reality shaped by perception and manifestation	Cognitive limitations, observer dependence, and perception studies	Distinction between appearance and underlying reality

Shiva-Shakti	Consciousness and dynamic creative power	Matter-energy interactions and dynamic field processes	Relationship between stability, potentiality, and manifestation
Consciousness (Prajnanam Brahma)	Consciousness as fundamental reality	Contemporary consciousness studies	Inquiry into whether consciousness is fundamental or emergent
Cosmological Manifestation	Emergence of multiplicity from unity	Cosmological evolution and structure formation	Explanation of emergence and increasing complexity

7.1 Brahman and the Search for Underlying Unity

An important area of similarity is that of the search for unity amidst diversity. In the context of Upanishadic philosophy, Brahman is seen as the fundamental reality from which everything in existence originates. Similarly, modern physics has always been preoccupied with unification, from classical mechanics through relativity up to the latest unified field theories.

The point of similarity here is the common quest for unity amid diversity. Nevertheless, Brahman can be described as a metaphysical concept relating to consciousness and being itself, while unification in science relates to the physical realm.

7.2 Shunya and the Quantum Vacuum

Secondly, there is a relation between Shunya and the quantum vacuum. While Shunya does not represent absence per se, but an existence beyond all dichotomy of being and non-being, the vacuum in quantum field theory represents an existence of quantum fields along with the potentiality of energy.

While Shunya and quantum vacuum may appear similar in challenging any simple idea of emptiness, the latter can be regarded as a scientific and therefore experimentally demonstrable concept, while the former belongs to the realm of metaphysics. The importance of both these concepts stems from the realisation that emptiness in appearance might mask deeper forms of potentiality.

7.3 Maya and the Limits of Perception

Maya is yet another aspect that can be used for dialoguing. In Advaita Vedanta, the principle of Maya helps explain how the ultimate reality manifests itself in the world of multiplicity.

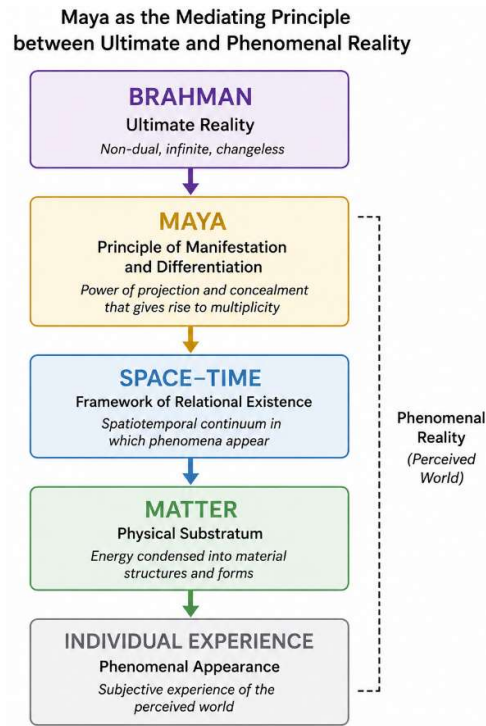


Figure 4. Maya and Phenomenal Reality

Similarly, modern science has recognised the limitations imposed by human perception. The theory of relativity emphasised the relationship between observations and the frame of reference within which they were made; quantum mechanics raised doubts about some fundamental tenets of classical physics, while cognitive science has suggested that perceptions are a construct rather than an exact image of reality.

None of these findings prove the validity of the Maya hypothesis, but they reinforce the concept that perception gives us only a partial and mediated view of reality.

7.4 Consciousness and the Hard Problem

One of the most important comparisons pertains to consciousness, which Indian philosophy often takes as basic; the clearest example is provided by the Upanishadic equation of consciousness with Brahman.

Contemporary philosophy of mind, on its part, has drawn attention to many unsolved problems of subjectivity; the “hard problem” formulated by Chalmers, along with other considerations presented by Nagel, Strawson, and others, challenges any form of reductionism.

While these discussions are no proof of the validity of Vedanta’s metaphysics, they suggest that the nature of consciousness has yet to be understood philosophically.

7.5 Shiva–Shakti and Dynamic Manifestation

The concept of Shiva and Shakti explains manifestation via the dynamic relationship between pure consciousness (Shiva) and creative power (Shakti), offering a way to understand how oneness leads to multiplicity.

Similarly, modern science stresses dynamism, fields, and relationships, whereas matter is understood more energetically and relationally.

While the symbolism of Shiva and Shakti bears no resemblance to science, in essence, both models emphasise process and emergence as key characteristics of reality.

7.6 Cosmological Origins and Emergence

This is precisely what Indian metaphysics and modern cosmology attempt to do in understanding the nature of emergence, the creation of complexity and multiplicity from underlying conditions.

For Indian metaphysics, the concepts of Brahman, Maya, Shakti and consciousness are some of the means by which the phenomenon is understood. In contrast, modern cosmology uses physical phenomena to explain the emergence and development of the cosmos over billions of years.

It is worth noting that whereas Indian metaphysics is concerned with ontological significance, cosmology deals with physical evolution.

7.7 The Concept of Creation through Indian Philosophy and Modern Physics

Ancient Indian texts often describe creation as emerging from an unmanifest state of consciousness or cosmic potential (Shunya). Similarly, modern quantum field theory suggests that the quantum vacuum contains fluctuating energetic fields capable of creating a particle (Bohm, Hiley, 1993).

The Shiva – Shakti principle in Indian metaphysics represents the interaction between pure consciousness (Shiva) and dynamic energy (Shakti), resulting in the manifestation of material reality (Aurobindo, 1990).

The proposed interdisciplinary framework produced by the synthesis of Indian metaphysics and selected principles from modern physics is illustrated in Figure 5.

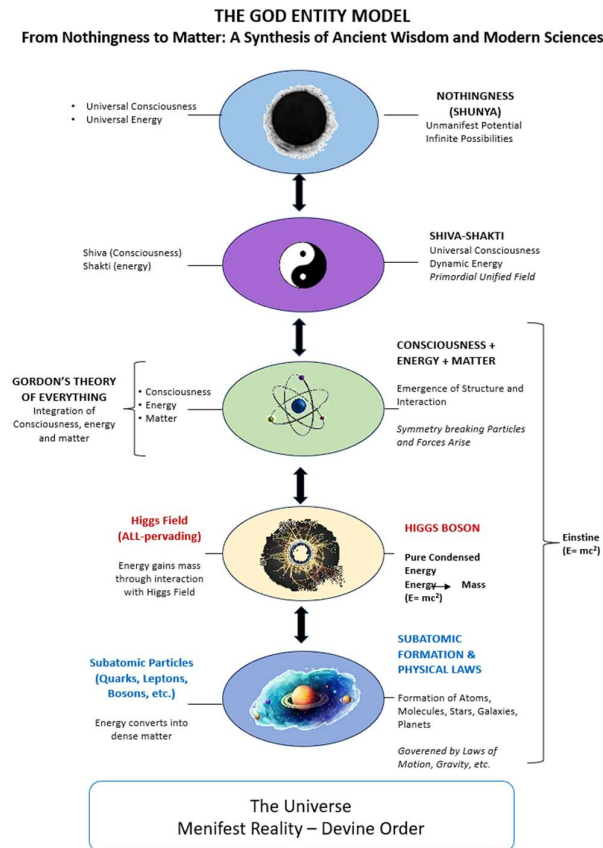


Figure 5: Conceptual interdisciplinary model relating principles of Indian metaphysics and modern theories of energy, matter and cosmological emergence

The model symbolically represents the transition from an unmanifest state (Shunya/ Universal Consciousness) to energetic manifestation, emergence of matter and physical laws. The figure is not intended to represent an experimentally verified physical model but a conceptual bridge between ancient Indian metaphysics and modern science.

7.8 Limits of Comparison

Such similarities do not mean that the ancient writings were a foreshadowing of modern science, nor did the scientific theories prove any metaphysical beliefs. There is a marked difference in the approaches and goals of these two disciplines.

The ancient Indian texts were not works of science, neither was the modern physics meant to prove any metaphysical beliefs. The constructive discussion, then, is possible only when such differences are retained despite common philosophical questions.

7.8 Toward an Interdisciplinary Perspective

While they have diverged considerably, there are some common concerns in Indian metaphysics and contemporary physics, including: the quest for underlying unity within diversity, the connection between appearance and reality, consciousness, and the mystery surrounding the creation of the cosmos. There may be a difference in approach to resolving such issues, but the fact that such concerns exist should not be overlooked.

It is at this point that further examination begins. Given the above-mentioned resonances, one might ask whether a cosmology of consciousness can provide a philosophy to reconsider the relation between consciousness and materiality within cosmology. The intention here is not to formulate a science-based explanation but rather a philosophical model.

8 Toward a Consciousness-Centred Cosmological Interpretation

Several resonances between Indian metaphysics and physics, cosmology, and consciousness have emerged from the above-mentioned analysis. These are not supposed to represent any scientific equivalence or to suggest that Indian metaphysical texts had anticipated some discoveries of modern science in their formulations. Instead, these represent certain common concerns with perennial questions related to the origin of the universe, the unity-multiplicity problem, and the ontological status of consciousness.

Based on these observations, this section introduces a consciousness-centred cosmological interpretation. The interpretation itself is philosophical rather than scientific. It is not meant to substitute the existing cosmology and function as a scientific theory; on the contrary, it presents certain ways of interpreting Indian metaphysics together with the modern consciousness debate.

8.1 The Problem of Origins

Issues relating to the origins of the universe have always been fundamental in the domains of philosophy and cosmology. While science provides explanations for the development of the universe since its emergence, no theory conclusively answers how such conditions arose in the first place or why the world is anything at all.

However, Indian philosophy has addressed the question through a search for an ontological basis for existence. Many Indian philosophies, including those from the Upanishadic and Vedanta schools, consider Brahman as the ultimate reality from which all manifestations arise and in which all things exist. Thus, the question of origin transcends the scientific sphere.

8.2 Consciousness as a Fundamental Principle

Current scientific theories tend to understand consciousness as an emergent property of complex biology. Nevertheless, controversies in connection with issues related to subjectivity, self-consciousness, and the hard problem of consciousness have motivated a re-evaluation of the above approach.

An alternative view is provided by Indian thought that understands consciousness as a fundamental notion, as opposed to being derived. According to Advaita Vedanta, consciousness is equated with ultimate reality in the aphorism *Prajnanam Brahma*. In the current theory, consciousness is taken as a philosophical postulate rather than a scientifically proven fact.

8.3 From Consciousness to Manifestation

Given that consciousness is considered to be basic, the next logical step is to consider how the manifesting universe emerges out of consciousness. These issues are discussed in the context of Indian philosophies using terms such as *Maya*, *Shakti*, and manifestation, which refer to the process of transitioning from unity to multiplicity.

In the given approach, the notion of consciousness is treated as that which acts as a primal substrate that has the ability to manifest. In this regard, the metaphor of *Shiva-Shakti* proves to be helpful, where *Shiva* stands for pure consciousness, and *Shakti* stands for creative energy. It is important to emphasise that this approach is metaphysical rather than scientific.

8.4 A Conceptual Sequence of Cosmological Emergence

Fig. 6 illustrates the proposed consciousness-centric theory of cosmological emergence.

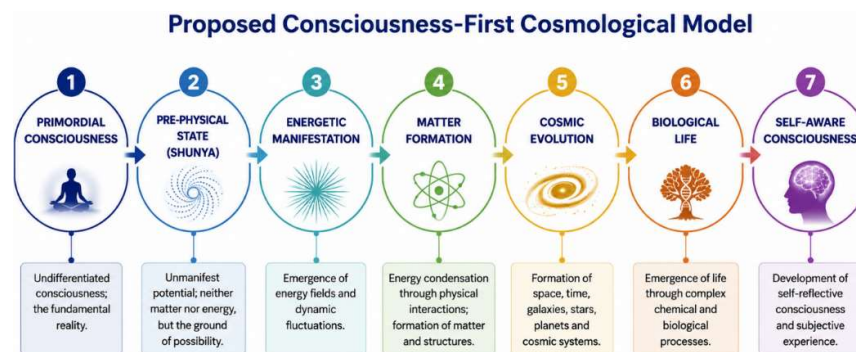


Figure 6. Consciousness-First Cosmological Model

It is essential to understand that the model represents an ontological sequence as opposed to a physical one. At the base of the sequence is primordial consciousness, identified with *Brahman*. Next comes a phase of potentiality, characterised by the presence of such notions as *Shunya*, out of which all other manifestations – energy, matter, life, and mind – arise.

Among other conclusions is the notion of two distinct phases of consciousness: primordial consciousness, which represents the ground of reality itself, and individualised consciousness, which exists in living things.

8.5 Reinterpreting Cosmology Through Consciousness

The model presents a different view of the cosmological story. Although endorsing the scientific version of the story of the evolution of the universe, it implies that such stories can be just one aspect of a larger ontological process.

In the current context, the Big Bang can be viewed as the start of the material universe and not necessarily of life itself. Rather than being a scientific theory about how cosmological events occur,

consciousness serves as a philosophical notion concerning what makes life happen. The scientific account explains how things take place, while the metaphysical one explains why such a reality was necessary.

8.6 Implications for Consciousness Studies

The theory can help address the current discourse about consciousness, too. Despite progress in neuroscience, the connection between neural processes and subjectivity is far from being clear. The theory under discussion does not solve the problem, yet it implies that consciousness might deserve to be viewed as one of the fundamental aspects of research.

As regards this aspect, the theory bears similarities to panpsychism, neutral monism, and other non-reductive theories in some respects, although it is quite different from them.

8.7 Philosophical Significance

The importance of the consciousness-centred approach does not lie in its scientific explanations, but in the fact that it is able to generate philosophical discourse. The approach creates opportunities for thinking about old unresolved issues related to reality and awareness through the integration of Indian metaphysics into current theories on cosmology and consciousness.

The approach also proves the relevance of such concepts as Brahman, Shunya, Maya, and Shiva-Shakti in the modern world as philosophical categories.

8.8 Scope and Limitations

Some caveats have to be noted here, however. Firstly, the framework lacks predictive value as it is interpretive and not empirical. Secondly, there is an abundance of schools within both Indian philosophy and modern physics, and, thus, alternative interpretations are possible. Lastly, conceptual affinity must not be confused with theoretical equality.

All three caveats are necessary for the preservation of methodological integrity. The framework itself has its value precisely because it allows for interdisciplinary dialogue without attempting to resolve any scientific or metaphysical disputes.

On the whole, it becomes clear that the use of a consciousness-centred cosmological interpretation may prove useful as an interpretative framework that will allow us to connect the metaphysical contemplations of the Indians about the nature of ultimate reality with the current debates in cosmology and consciousness studies.

9. Discussion

In the current study, some concepts of Indian metaphysics have been analysed in relation to current debates in physics, cosmology, and consciousness studies. The purpose of such an analysis is to demonstrate how some Indian ideas, such as those concerning Brahman, Shunya, Maya, and Shiva-Shakti, can be helpful in philosophical considerations regarding cosmological origin and consciousness. However, instead of suggesting any scientific theories based on these concepts, their potential importance is being demonstrated.

9.1 Consciousness and Cosmological Inquiry

One major conclusion of this paper revolves around the significance of consciousness when talking about cosmological origins. In the case of cosmology, it explains how our universe evolved due to various natural laws; however, it seldom talks about the ontological nature of consciousness. The Indian philosophy provides another angle where they treat consciousness as primordial instead of derived.

The consciousness-based theory introduced above does not undermine scientific explanations of the cosmos; it simply indicates that consciousness can be considered a valid area of philosophical discussion

in the context of ultimate origins. It is yet to be clarified whether consciousness is basic or emergent, yet its continuity among philosophical thought makes it significant.

9.2 Contributions to Hindu Philosophy and Consciousness Studies

First, the study proves that classical Indian philosophical concepts still have importance in modern times. Philosophical concepts like Brahman, Shunya, Maya, and Shiva-Shakti can be used to construct sophisticated ontologies in order to address such issues as existence, causation, individuation, and consciousness.

Moreover, this study makes some contributions to the philosophy of mind. Questions related to the hard problem of consciousness, the explanatory gap, and the limits of physicalism still puzzle modern philosophers. While no Indian philosophies can solve these problems, they still serve as a source of different philosophical concepts and approaches, which help to enrich the discussion. Namely, the idea that consciousness can be fundamentally ontological is one of such philosophically interesting positions.

9.3 Implications for Science–Philosophy Dialogue

Another important contribution is that made to the science-philosophy interaction. In place of conflict-driven approaches and any attempts at finding direct correspondences between scientific theories and metaphysics, this study highlights the idea of concept-driven interaction. Here, both sciences are considered to deal with similar issues via different methods.

This approach enables us to combine the integrity of disciplines with interaction on certain common problems, including unity/multiplicity, emergence/manifestation, and reality itself.

9.4 Criticisms and Methodological Limitations

There are several limitations that must be considered. Firstly, any comparative analysis of ancient philosophy and modern science entails the danger of anachronism as it tends to project modern meanings upon ancient texts. In this case, the present research paper focused on conceptual resonance and not historical anticipation.

Secondly, Indian philosophy and modern physics each involve multiple, often opposing, interpretations. This framework of interpretation could be seen as one of many possible ways to understand them.

Lastly, the cosmology suggested in this paper is a philosophical approach and cannot produce any empirical predictions. Therefore, it is not scientific, despite being inspired by modern physics.

From a methodological point of view, the present research is more about interpreting ideas expressed in various texts than any sort of an experimental inquiry. Specifically, this research focused on Vedanta and similar schools of Indian thought. In contrast, other philosophical approaches within India such as Nyaya, Vaisheshika, Jain and Buddhist traditions have been beyond its scope. Modern physics have been treated selectively for the same reason.

9.5 Future Research Directions

It would be interesting to pursue connections between Indian theories of consciousness and progress made in neuroscience, cognitive science, and philosophy of mind. Comparative investigations that include Buddhist, Jain, and other Indian traditions would further enhance debates on consciousness and cosmological emergence.

Further research could address the influence of Indian philosophical traditions on physicists and philosophers of the twentieth century, as well as the wider significance of the consciousness-centric paradigm in issues of environmental ethics, human identity, and the connection between mind and cosmos.

9.6 Concluding Discussion

The results indicate that queries about consciousness, reality, and cosmic origins persist across disciplinary lines. While Indian metaphysics and science tackle such issues using different approaches, their common goal is to examine the structure behind existence. The discussion between them may not lead to conclusive answers; nonetheless, it offers an effective platform for an interdisciplinary exploration of some of the longest-standing philosophical questions.

10 Conclusion

This study explored selected intersections of Indian philosophical views and modern scientific research on selected topics using a comparative analysis approach. The focus was to understand selected views of consciousness and cosmology in Indian philosophical traditions using ideas such as Brahman, Shunya, Maya, Akasha, and Shiva–Shakti and compare them with selected aspects of modern physics and cosmology.

The result of the comparative analysis showed significant conceptual similarities in the idea of unification, emergence, interconnectedness, and the relation between the observed and reality. The ideas about Brahman and scientific unification, Shunya and quantum vacuum, and Maya and contemporary issues of perceptions are some examples of how different academic fields deal with similar philosophical questions but come up with different answers.

One major idea that can be derived from the analysis is the possibility of approaching consciousness as one essential element of reality. Contemporary scientific research cannot support this idea empirically at this time; however, the controversies surrounding consciousness studies suggest that the relation between mind and matter needs further understanding. In this regard, Indian philosophical traditions can contribute significantly in terms of conceptual perspective.

This research does not imply that any ancient texts from India have predicted modern discoveries of the sciences, and it does not suggest that metaphysics be equated with science. However, what the study shows is that with proper and well-thought-out comparison analysis, similar philosophical interests may be revealed without violating the boundaries of empirical science and philosophy.

The cosmic paradigm outlined here must, therefore, be seen as a philosophical construct as opposed to a scientifically grounded hypothesis. It is important precisely because it calls for reflection on the link between consciousness, existence, and the creation of the universe.

Overall, this study proves that interaction between traditional Indian philosophy and the ideas of modern sciences is fruitful. The interaction helps enrich discussions around issues such as reality, consciousness, and the origin of the universe.

Declarations

Funding

The authors received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors for the preparation of this study.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript.

Data Availability

No primary datasets were generated or analysed during the current study. All sources used in the preparation of this manuscript are publicly available through the references cited.

Ethical Approval

This study is based exclusively on published literature, philosophical texts, and secondary scholarly sources. It does not involve human participants, animals, personal data, or experimental procedures. Therefore, ethical approval was not required.

Informed Consent

Not applicable.

Author Contributions

Sudhakar Dwivedi contributed to the conceptualization of the study, development of the theoretical framework, and manuscript preparation. K. K. Choudhary contributed to the interpretation of philosophical and scientific literature, critical review, and manuscript revision. Anubha Pandey contributed to literature analysis, manuscript editing, and overall coordination of the study. All authors read and approved the final manuscript.

Acknowledgements

The authors express their gratitude to the scholars and researchers whose contributions to Indian philosophy, consciousness studies, physics, and cosmology have informed and inspired this interdisciplinary exploration. The authors also acknowledge the intellectual legacy of the Vedic and Upanishadic traditions, which continue to provide valuable perspectives on questions concerning consciousness, existence, and reality.

References

- Aurobindo, S. (1990). *The life divine*. Sri Aurobindo Ashram.
- Barbour, I. G. (1997). *Religion and science: Historical and contemporary issues*. HarperCollins.
- Bohm, D. (1980). *Wholeness and the implicate order*. Routledge.
- Bohm, D., & Hiley, B. J. (1993). *The undivided universe: An ontological interpretation of quantum theory*. Routledge.
- Chakrabarti, A. (Ed.). (2016). *The Bloomsbury research handbook of Indian aesthetics and the philosophy of art*. Bloomsbury Academic.
- Chalmers, D. J. (1996). *The conscious mind: In search of a fundamental theory*. Oxford University Press.
- Clooney, F. X. (2010). *Comparative theology: Deep learning across religious borders*. Wiley-Blackwell.
- Comans, M. (2000). *The method of early Advaita Vedānta: A study of Gauṣapāda, Śaṅkara, Sureśvara, and Padmapāda*. Motilal Banarsidass.
- Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. Harcourt Brace.
- Dasgupta, S. N. (1922–1955). *A history of Indian philosophy* (Vols. 1–5). Cambridge University Press.
- Davies, P. (1983). *God and the new physics*. Simon & Schuster.
- Deutsch, E. (1969). *Advaita Vedānta: A philosophical reconstruction*. University of Hawaii Press.
- Einstein, A. (1905). Does the inertia of a body depend upon its energy content? *Annalen der Physik*, 18, 639–641.
- Einstein, A. (1936). Physics and reality. *Journal of the Franklin Institute*, 221(3), 349–382.

- Gambhirananda, S. (Trans.). (1995). *Chāndogya Upaniṣad with the commentary of Śaṅkarācārya*. Advaita Ashrama.
- Gambhirananda, S. (Trans.). (1997). *Bṛhadāraṇyaka Upaniṣad with the commentary of Śaṅkarācārya*. Advaita Ashrama.
- Greene, B. (2004). *The fabric of the cosmos: Space, time, and the texture of reality*. Alfred A. Knopf.
- Hawking, S., & Mlodinow, L. (2010). *The grand design*. Bantam Books.
- Heisenberg, W. (1958). *Physics and philosophy: The revolution in modern science*. Harper & Row.
- Hiriyanna, M. (1993). *Outlines of Indian philosophy*. Motilal Banarsidass.
- James, W. (1902). *The varieties of religious experience*. Longmans, Green and Co.
- Jamison, S. W., & Brereton, J. P. (2014). *The Rigveda: The earliest religious poetry of India*. Oxford University Press.
- King, R. (1999). *Indian philosophy: An introduction to Hindu and Buddhist thought*. Edinburgh University Press.
- Larson, G. J. (2001). *Classical Sāṅkhya: An interpretation of its history and meaning*. Motilal Banarsidass.
- Lipner, J. (1994). *Hindus: Their religious beliefs and practices*. Routledge.
- Metzinger, T. (2004). *Being no one: The self-model theory of subjectivity*. MIT Press.
- Nagel, T. (1974). What is it like to be a bat? *The Philosophical Review*, 83(4), 435–450.
- Nikhilananda, S. (Trans.). (1949). *Mandukya Upanishad with Gaudapada's Karika and Shankara's commentary*. Ramakrishna-Vivekananda Center.
- Olivelle, P. (1998). *The early Upanishads: Annotated text and translation*. Oxford University Press.
- Panikkar, R. (1977). *The Vedic experience: Mantramañjarī*. University of California Press.
- Peacocke, A. (2001). *Paths from science towards God: The end of all our exploring*. Oneworld Publications.
- Penrose, R. (1989). *The emperor's new mind: Concerning computers, minds, and the laws of physics*. Oxford University Press.
- Penrose, R. (2004). *The road to reality: A complete guide to the laws of the universe*. Jonathan Cape.
- Radhakrishnan, S. (1923). *Indian philosophy* (Vol. 1). Oxford University Press.
- Radhakrishnan, S. (1992). *The principal Upaniṣads*. Humanities Press International.
- Sargeant, W. (2009). *The Bhagavad Gita*. State University of New York Press.
- Schrödinger, E. (1964). *My view of the world*. Cambridge University Press.
- Schrödinger, E. (1967). *What is life? and mind and matter*. Cambridge University Press.
- Searle, J. R. (1992). *The rediscovery of the mind*. MIT Press.
- Sharma, C. (2000). *A critical survey of Indian philosophy*. Motilal Banarsidass.
- Strawson, G. (2006). Realistic monism: Why physicalism entails panpsychism. *Journal of Consciousness Studies*, 13(10–11), 3–31.

Brahman, Shunya, and Cosmological Origins: An
Interdisciplinary Exploration of Consciousness in Indian
Philosophy and Modern Physics

Thompson, E. (2015). *Waking, dreaming, being: Self and consciousness in neuroscience, meditation, and philosophy*. Columbia University Press.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. MIT Press.

Weinberg, S. (1993). *Dreams of a final theory*. Pantheon Books.

Capra, F. (1975). *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism*. Shambhala Publications.