



A COMPARATIVE STUDY OF THE ORIGIN OF THE UNIVERSE: A RELIGIOUS, PHILOSOPHICAL AND SCIENTIFIC PERSPECTIVE

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ABSTRACT

Many scientists, philosophers, and religious people have been concerned with the topic of the nature of man and the creation of the cosmos since the beginning of time. Many hypotheses, theories, and stories have been proposed in order to address this timeless issue.

KEYWORDS: Religious people, Timeless issue, Topic, Timeless, Time.



INTRODUCTION

Drawing from the Pāli canonical literature, the post-canonical literature, and other secondary sources, the present paper attempts to compare different theories regarding the creation of the universe posited by various religious traditions and scientific theories. Such a comparative study is very important for gaining a deeper understanding of how different schools of thought and religion address questions such as, where did we come from? Where are we going? Does the universe have a beginning? And who created it? What was there before the universe? Was there a single cause or not? Furthermore, the paper presents themes such as the end of the universe, evolution, the biological Process of human embryonic development, the creation of man, and other world systems. For the sake of clarity and contrast, the umbrella term of prophetic religion has been used to include all religions that believe in Prophets and/or God as their creator, such as Islam, Judaism, and Christianity. And the non-prophetic religions include Jainism, Buddhism, and Hinduism.

PRESENCE OF DARKNESS

Most religious traditions, such as Christianity and Judaism, believe that there was total darkness at the beginning of the universe. According to the Christian Bible, God created the universe in six days.

"At the beginning, the God created the sky and the earth. At that time, the earth was empty, and it was dark and covered with mass of water, and the spiritual sole of the God moving through the water"

This passage offers a very close parallel with the Buddhist views of the presence of darkness and water in the evolution of the world, which are recorded in the Buddhist Pāli canon, the Aggañña sutta of Dīgha Nikāya,

"At that time, O Vāsettha, it was a mass of water and darkness. There appeared neither the sun, the moon nor constellations, nor the stars. The night and day were not visible. Even the season were not known then."

Conversely, Islam went on another tangent regarding the presence of darkness. The Qur'an, Islam's holy book, is mentioned.

"Then He directed Himself to the heaven while it was smoke and said to it and to the earth, 'Come (unto being) willingly or compulsion.'"

To Islam, the earth and heaven above were formed from this same "smoke" This suggests that there was no clear space. The world was obscured by smoke.

Similarly, the presence of smoke at the beginning of the universe found support in the science of modern cosmology. According to it,

"at one point in time, the whole universe was nothing but a cloud of 'smoke' (i.e. an opaque highly dense and hot gaseous composition)."

GREEK PHILOSOPHICAL VIEWS.

Interestingly, the question of the first thing or element that caused the origin of the universe was a major preoccupation for many ancient Greek philosophers. Prior to Thales, most people believed in Greek gods and goddesses. And the general consensus was that the gods had a hand in the creation of the universe. Thales, considered the father of western philosophy, had the view that everything was made of water. According to the Philosophy Book, "The idea that everything in the universe can ultimately be reduced to a single substance is the theory of monism... Thales reasoned that the fundamental material of the universe had to be something out of which everything else could be formed, as well as being essential to life and capable of motion and therefore change. However, another Greek philosopher, Anaximander, opposed Thales on the grounds that water was limited and the universe was unlimited. How could a limited cause have an unlimited effect? To Anaximander, the world is boundless, and therefore the first cause should be boundless. It seems Anaximenes was not fully convinced about the earlier findings of his predecessor. He propounded the view that air was the first element. Another philosopher, Heraclitus, disapproved of him. He said that fire was the first element. He was the first philosopher to introduce the concept of impermanence.

Being a great mathematician, Pythagoras maintained that the first element in the universe was numbers. According to the Philosophy Book,

"Pythagoras has now proved not only that the structure of the universe can be explained in mathematical terms—number is the ruler of forms—but also that acoustics is an exact science, and number governs harmonious proportions." Also, he believed in the concept of rebirth. Unconvinced by the earlier findings of his predecessors, Empedocles maintained that the four elements (fire, water, air, and earth) were the first elements in the universe. There are two other Greek philosophers, namely, Democritus and Leucippus, who thought the universe was made of atoms. They developed the first atomic theory. According to the Philosophy Book,

"the theory that Democritus and Leucippus devised offered the first complete mechanic view of the universe, without any recourse to the notion of a god or gods."

Yet Anaxagoras maintained that the first element in the universe was "nous," meaning the "universal mind." The last three of the twelve Pre-Socratic philosophers, namely Zeno,

Parmenides and Xenophanes thought that the first element in the universe was "being". The Greek philosophers contributed many ideas about the origin of the universe. Turning to the creator of the universe, I will explore the presence or absence of God in the creation process.

Creator of the Universe

Most of the Abrahamic religions, such as Judaism, Christianity, and Islam, believe that God is the creator of the universe. This assumption begs the question: who then created God? Undoubtedly, such questions create more questions than answers.

According to Islam, there is nothing in this world that is not the handiwork of God, Allah. The Qur'an said,

"He (God) created the Heaven and Earth in Truth." He wraps the night over the day and wraps the day over nights and has subjected the sun and the moon, each running (its course) for a specified term."

This passage suggests that God must be very powerful to command all these events to take place.

Most prophetic religions attribute the creation of the Universe to their all-powerful God. Since the world is inconceivable, associating such a phenomenon with God would put his position beyond human imagination. According to the Christian religion, God created the universe in six days, and on the seventh day he rested. The procedure appears in the order, according to Genesis, of the Holy Bible [i]:

On the first day, he created day and night; then on the second day, he created the sky; then on the third day, he created the earth and sea, vegetation; then on the fourth day, he created the moon (small light) for night and the Sun (huge light) for day; then on the fifth day, he created the fish (aquatic animals) and the birds (flying animals); then on the sixth day, he created the quadrupeds, reptile snakes), man, and woman; and finally, on the seventh day (Sunday), he rested. It is called the Sabbath (Holy day).

Similarly, the order of creation appears in Islam, albeit not in a systematic manner like in the Holy Bible. According to the Holy Qur'an,

"It is He who created the night and the day and the sun and the moon; all (heavenly bodies) in an orbit are swimming."

However, Buddhism offers a different view of creation. To the Buddha, the question of the nature and extent of the world is not only epistemologically meaningless but also pragmatically irrelevant. He maintained that his teaching had only one taste of freedom. Furthermore, he clearly mentioned that the question about the origin of the universe did lead to peace, enlightenment, and a final awakening. But on many occasions, the Buddha met with the Brahmin, who had fixed ideas about the creator of the universe. Consequently, he attempted to explain the "relative origin" of the universe. According to the Aggaa sutta, there is no mention of the first beginning of the universe, but it explains the "evolution of the world and society." This happened in four periods: period of contraction; period of expansion; beings from the Ābhassara Brahma realm; and the vegetation period (four periods of the natural environment, namely: savoury earth period, mushroom period, creeper period, and rice period). To the Buddha, the idea of God as a Creator does not appear in the evolution of the world. He emphatically said that the beginning and end of the world are not discernible. According to the Acintheyya sutta, the Buddha advised that one should not try to find out the origin of the universe. Unlike his contemporaries, the Buddha was more concerned with the path to liberation than philosophical speculations.

Interestingly, the Jain philosophy bears some similarities with Buddhism regarding the absence of a creator and the undiscernible beginning of the world. According to Masih. Y., "Jains believe that the world is eternal and did not have any beginning."

In Hinduism, they take this world to be in cyclic order, and it is treated as eternal. They believe, according to Masih.Y., "There is a periodic creation and also a periodic dissolution." [i] Such ideas bear some similarities to Buddhist world cycles such as expansion and dissolution.

Creation of the Universe

Based on the Rg Veda, the Hindu sacred and authoritative text, the environment has divine power (the power of deities). The Hindu story of creation is filled with myths and legends, just like any other creation story. According to Purusa Sūkta, the element of the world is 'Purusa'. The gods have made a sacrifice, offering Purusa as a scapegoat. As a result of that sacrifice, the world has created.

The Rg Veda holds that absolute reality is both immanent and transcendent.

"A thousand heads had Purusa, a thousand eyes, a thousand feet; He holding earth enclosed about, extends beyond, ten fingers length. (RV. X. 90. 1)" [i]

Furthermore, the Purusa was of great splendour, and all human beings were a quarter of him, and the immortals in heaven are made up of three-quarters of him.

Before making the sacrifice, three-quarters of him was raised from the earth. Virja' was born by a quarter of him, and 'Adhi Purusa' was born by 'Virja'. While the gods were cutting his body, the natural environment of the world was created by different parts of his body.

When the gods spread the sacrifice using the Adhi Purusa as the offering, the spring was the clarified butter; the summer was the fuel; and the autumn was the oblation. From that sacrifice in which

everything was offered, the clarified butter was obtained, and they made it into birds in the air, beasts in forests, and beasts in rural areas.

From that sacrifice, in which everything was offered, verses, chants, metres, and formulas were born. And from it, other creatures were born, such as horses, cows, and sheep—animals with a double set of incisors.

Finally, there was a dismemberment of the Adhi Purisa into many parts. From his mouth, the Brahmins arose; from the shoulders, the Khattiyas; from his thighs, the Vessas; and from the feet, the Suddas. Basically, these body parts represent the social classification of people according to the Vedic school of thought. Furthermore, from his mind, the moon arose; from the eyes, the Sun; from the mouth, the Indra (lightning or thunder); from the mouth, the Agni (fire); from the breath, the air; from the navel, the atmosphere; from the head, the sky; from the feet, the earth; and from the ears, the directions arose.

The gist of the Hindu creation story is that all beings and non-beings came from the same source.

Scientific Universe

The field of science offers many theories regarding the origin of the Universe without any reference to God. The most popular ones are cited here.

Expanding Universe.

In Einstein's General Theory of Relativity, the world came into being due to expansion. He maintained that "the universe is expanding. All the stars and galaxies will eventually die." [i] Einstein's theory was supported by using Hubble's Law to measure the rate of expansion of the universe. He maintained that all celestial bodies moved away from each other, finally emptying the space around them. However, this theory leaves us with the question of whether the universe is expanding forever and ever.

The Steady State Theory

This theory suggests, "Although the universe is expanding, it does not change its overall outlook over time." [ii] In other words, the universe has no beginning or end. The Theory bears some similarities with Buddhism and Jainism.

The beginning of the Universe,

The Big Bang The theory is based on the premise that the universe had a specific beginning at a specific point in time. Commonly accepted by most scientists, the Big Bang theory, or "standard model," explains everything that happened from the beginning of the universe until the present time. The theory maintains,

"The present universe came into being from a point called a singularity. At the beginning, this singularity exploded the causing universe to expand Unfortunately, the theory remains silent on the destiny of the universe. It also raises the question of whether the world is still expanding at the present time. Conversely, one scientist from Australia maintained that it was a "Big Chill" (not a big bang) whereby the universe froze and eventually began to crack.

Many Bangs Theory

Although the theory does not mention the genesis of time, it maintains that the universe has always been there and will always be there. The series of bangs is possible due to certain conditions. And "when the right conditions are present, there can be many mini-bangs where another mini-universe can be formed."

Multiverse Theory.

There is yet another scientific approach that expands on the theory of the Big Bang: the presence of an indefinite number of disconnected universes called the multiverse. According to the theory, "instead of one singularity, there were many, which gave rise to different universes." It is clear that scientists have developed their ideas about the origin of the universe for a long time. Some ideas tend to contradict each other. However, some of them bear some similarities with each other. The Cyclic Model of the Universe Based on the most recent modern science and Quantum Physics, the theory suggests, As the universe undergoes expansion and contraction, there will be an evolution similar to the way the Big Bang describes it." This theory describes evolution from the beginning of the universe, when time equaled zero. The theory is a big improvement on the Big Bang theory, and it maintains that the universe lasts about one trillion years, after which a new cycle begins. The idea of cyclical evolution is a recurrent theme in both Hinduism and Buddhism with regard to the universe.

Having discussed the various scientific creation theories of the universe, I will turn to the creation of human beings.

Evolution of Species: Creation of Beings

The creation of beings is a recurrent theme in both science and religion. According to Islam, mankind was created by God. For Muslims, praying five times a day is mandatory in order to praise God for his creation and ask for forgiveness. Prayer is one of the five pillars of Islam. The Qur'an clearly mentions

"O Mankind! Worship your Lord, who created you and those who came before you, that you may become righteous." [i]

Of course, Christians believe that God is the creator of human beings. He created man in his own image. The first man was Adam. Then he created Eve from the rib of a man. Humans are descendants of Adam and Eve. Man is the highest creation of God. Other lower creations, such as animals, trees, and insects, are made for man. The creation of beings is still sanctioned by God. And He is responsible for taking away the lives of beings! Similar accounts are found in Islam.

"Allāh begins creation; then He will repeat it; to him you will be returned." Therefore, the Muslim death is suggestive of returning to the original source of God.

The Buddhist creation of humankind is based on craving. The events follow the principle of dependent origination. At the beginning, beings are mind-made and come from *ābhāsara* Brahma world, after the expansion of the world. After feasting on savoury earth for a long time, their bodies become coarser. They lost their luminosity.

Turning to the scientist's views on the evolution of species, Charles Darwin claimed that "natural selection" is the scientific basis for the evolution and diversity of species. The Darwinists assert the notion of "survival for the fittest," whereby the fittest with advantages can go on to propagate and disappear. His theory of evolution gained popularity among the scientific community. As Weerasinghe puts it,

"The problem of the mechanism of evolution is to find a theory that can explain evolution, that can explain adaptation, and that fits the facts of heredity. The one that passes all three tests, according to the scientific establishment, is "natural selection" by Charles Darwin."

In short, Darwin shows that all species had not been separately created and that natural selection had been the agent of change. The weak species phase out, and the strong one survives.

Biological Process of human embryonic development

The Qur'an elaborates on the process of human embryonic development.

"We created man from an extract of clay. Then we placed him as a sperm drop (a zygote) in a firm lodging (the womb). Then we made the sperm drop into a clinging clot, and we developed the clot into a lump (of flesh), and we formed the lump into bones, and We covered the bones with flesh. Then We developed him into another creation. So blessed is Allah, the best creator."

However, Buddhist accounts offer a very practical and biological process without a God. The Buddha said: There are three conditions that have to be present for conception to take place: First, the mother-to-be must be in season; second, the sperm must be present; and third, the "gandhaba" (a being to be born) must be present. Therefore, human beings are not created by God; instead, there should be three conditions to conceive a human embryo.

Other World Systems. Although the Buddha rarely engaged in speculation about the Universe, he sometimes acknowledged the existence of other world systems. He mentioned in one passage,

"A thousandfold minor world system in which the sun and moon revolve and light up the quarters with their brightness is called a thousandfold minor world system."

The Buddha went on to define the medium-sized world system as comprising a thousand minor world systems. And the major world system comprises a thousand world systems.

The Buddha also mentioned the world cycles where the world dissolves and comes to total destruction, and beings are spontaneously born in the Ābhassara world. And after a certain period of time, the world begins to re-evolve. When this happens, the beings who had died in the bhassara are born spontaneously. They are mind-made, self-luminous, traversing in the air, glorious, and feeding on bliss.

According to the Theravada tradition, the Buddha mentioned the 31 Planes of Existence. First, there is the Sense-sphere realm, which is divided into eleven planes of existence. The lowest realm is hell. Humans, heavenly beings, and animals also belong to this realm. Second, the Form Realm consists of sixteen planes of existence. One can live in these realms for a maximum of 64 years. Third, the Formless Realm consists of four planes of existence. The maximum lifespan of a being is eighty-four thousand aeons. From these accounts, it is clear that the Buddha's cosmology offers a deep understanding of human existence.

End of the World

The question of the end of the world in the near future has caused a lot of fear for those who subscribe to such ideas. The prophetic religion's belief in one creation is heading towards a final end. To them, the world is coming to a final end in the near future. Conversely, Hinduism teaches:

"the cycle of creation and dissolution without a final end... In fact, Jainism and Mimamsakas teach the eternity of the world."

To sum up

In Buddhism, there is no such thing as a final end to the world; however, there is a time when the world with its sun will dissolve and begin again.

Having compared different theories of creation and evolution of beings and the universe, it became clear that the subject fields of religion, science, and philosophy have differing views; however, all of them had a common theme of attempting to find the origin of the universe and the nature of man and other beings.

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