

Hindu Mythology: The Connections between Stories and Science

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ABSTRACT

Most mythologies include a story about a great flood. There is the well-known Noah's Ark, as well as the Hindu mythology story: Pralay. The first avatar of Vishnu, known as the Matsya, who selects a chosen person to save the world from a huge flood. Manu, the first human and the chosen one, constructs a boat and collects two of each species as well as as many people as he can. He also carries important vedic scriptures. The most intriguing aspect is that both humans experienced a mini Ice Age - a global event. Near the end, the Earth starts to warm up quickly and begins to melt at an alarming rate, triggering a flood. The intriguing element is how both of these mythological tales have a very similar story about a huge flood despite there being no communication between them. Not to mention, there are many more stories depicting a great flood in different religions and mythologies. They even have a determined character that wants everyone to survive. This means that without any form of written communication the settlements experienced this event and shared stories with each other. The Chinese civilization has a story that is very similar. So do the Mayans. This inspired me to speculate about how the flood might be related to a worldwide catastrophe, such as the end of a mini ice age. This led me to look into it further, and I theorised that because it was a global occurrence, practically everyone witnessed it, and humanity built boats and survived to tell the tale. Some overstate it, either by changing the size of the boats or the number of boats used. Some even credit God. The followers they amass continue to spread the word. However, when people who narrate the stories die, their followers become perplexed. They begin to tell more stories with a stronger connection to God in order to gain more followers. They must keep the holy person's lessons in mind and ensure that person is acknowledged as a sage or a learned being. This evolved into the modern versions of those stories. It may not be all stories, but many of them may contain a grain of truth. These stories are believed to have some basis or foundation and not comprise pure fantasy. This paper explores and discusses that grain of truth, which have been uncovered on several instances. The paper explores the hypothesis that the stories in Hindu mythology are a way for sages (considered scientists) to convey what they have learnt to their pupils, followers, or learned men. These would then share the word and ensure that their Guru (teacher) was equally well-known and praised, treating the Gurus as if they were god's students themselves.

INTRODUCTION

"We behold what we are, and we are what we behold."

This is a quote from the **Bhagavad Gita**. The Gita is the speech that Krishna, a manifestation of Vishnu (one of the Holy Trinity of Hindu mythology), delivered to Arjuna (a warrior) immediately before the great Mahabharata war started. Krishna is considered as God, and his teachings embody the essence of Vedic wisdom, which is the foundation of Hinduism. As the author, my interpretation of this quote is that we show what we want to display and reveal to other people, and we are what we show to other people. We are characterised by what we convince others about ourselves. This is how I perceive Hindu mythology. In the Hindu religion, we are told and shown stories about the Gods, and that's what most people believe Hindu mythology to be. I observed a few odd and unsettling parallels between modern science and ancient historical stories. But what exactly is Hindu mythology?

The Indian/Hindu civilization was among the first to be developed and has a documented history that is supported by multiple archaeological evidences, implying that it is more than 4000 years old. The Indian civilization has also given origin to four of the world's biggest religions: Hinduism, Jainism, Buddhism, and Sikhism. The Vedic era is divided into four sections:

1. Rig-veda
 - a. It is the oldest Veda and depicts the life of the early Vedic people in India.

- b. Its text is composed of 1028 hymns (Sukta), which are split into ten Mandalas or books, each of which contains multiple hymns and mantras.
2. Worship/Ritual Knowledge - Yajur-veda
 - a. This veda contains the procedures and mantras used during worship and ceremonies.
3. Sama-veda
 - a. It incorporates many hymns and mantras from the Rig-veda and is notated musically, allowing it to be performed.
4. Atharva-veda
 - a. It is yet another collection of mantras related to magic and used to ward off evil spirits or threats.

Chapter 1: Birth of the Universe

The 'Big Bang' theory is the most widely accepted explanation for the origins of our universe. According to this idea, the universe expanded from an extremely dense single point that is still expanding. This explanation bears an uncanny resemblance to legends about the birth of Brahma, the God of Creation. The two most well-known stories are:

1. The Story of Brahma's Birth from a Golden Egg

Brahma was created by the conjunction of Brahman, the supreme entity, and Maya, the female energy. They sought to develop the universe, so they planted a seed in water. This seed matured into an egg, which cracked open to reveal Brahma inside. The universe and everything within it, including the Saptarishi (seven sages), were then created by Brahma.

2. The Story of Brahma's Birth from Vishnu's Stomach and Belly Button

Vishnu was lying in his bed when he felt a slight pain in his stomach that lasted for a fraction of a second. Suddenly, a lotus grew from his stomach, and when it couldn't contain itself any more, it opened up to show Brahma (some argue this is Brahma being self-born because he opened the lotus), who then created the universe and formed the Saptarishi.

The most common response to this is, "Why is this important?" In the first story, there is a supreme entity and female energy. They planted a seed in water, and it matured into an egg that cracked open, this lines up with the Big Bang Theory. The seed is the singular point, and the high heat **energy** and density are Maya and Brahman, respectively. The seed then develops into an egg, which is broken open to reveal Brahma and the universe. This corresponds to the expanding point in the Big Bang Theory. The second narrative lacks the energy aspect, but it discusses the same fundamentals. There is an object that expands and opens up to reveal Brahma and the universe.

These stories were written by the Saptarishi (the seven sages) and were never thought to be those sages with spells and reciting mantras everywhere they go, they were seen to be the scientists of the time.

If one tries to explain a law of physics to a child or someone who doesn't have knowledge of physics at all, you will try to simplify it for them. It might be in the form of a story, or one might use examples that they are familiar with. Using that ideology, we can come up with a theory, a theory that states, the Saptarishi - the scientists of ancient India - were learned men and knew about what we now know currently, way back in the past. Trying to explain these vast and difficult topics, they created stories and those stories were passed down through multiple generations which then led to it being called a story or a myth. The science in these stories is often lost.

Chapter 2: The Death of the Universe

In Hindu mythology, there are four Yugas, which are effectively four ages or sections of the cosmos from birth to death.

They are:

1. Satya Yuga
2. Treta Yuga
3. Dwapar Yuga
4. Kali Yuga

The Satya Yuga, or Age of Truth, is said to last 4000 Divine years or 1680000000 Earthling years (1 divine year is 420000 Earthling years) Humans were spiritually advanced and possessed psychic abilities during this period.

The Treta Yuga is said to endure 3000 Divine years or 1260000000 Earthling years and is when humans were still righteous and Dharmic (Dharma is the basic moral law and governs your life)

The epic Ramayana took place in the Treta Yuga - A saga where an avatar of Vishnu called Ram has a wife Sita and a brother called Laxman. An evil king named Raavan kidnaps Sita while Ram and Laxman are away. Ram goes on a quest to find her and he does find her in Lanka (now Sri Lanka) as a prisoner. Ram fights Raavan and is successful, then rescues Sita and heads back home. This is also the story for Diwali (a festival celebrated in India).

The Dwarka Yuga is believed to last 2000 Divine years or 840000000 Earthling years, and it is at this time that humanity lost all knowledge of their intelligent and blissful selves. Krishna was born during this time period as another Vishnu avatar.

The current period, the Kali Yuga, is estimated to last 1000 Divine years or 420000000 Earthling years. This is the lowest stage for mankind, surrounded by natural calamities, famine, wars, and so on where people lie and cheat frequently. The population of Dharmic people is dwindling. At the end of this period, either Kalki, Vishnu's final avatar, will emerge and annihilate everything evil, or Shiva, the God of Destruction (the destroyer), will appear and destroy everything.

After this, Brahma will be reborn and the cycle of the 4 Yugas starts again.

The Big crunch theory is the theory where the Universe ends because of gravity. It collapses on itself. This theory used to be popular and widely believed to be true but there is a newer, more plausible theory. The second theory states that the Universe will fizzle out as there will be no heat left and it will be the heat death of the Universe (Titled the Big Freeze Theory).

The links to be made here are hazier. Hindu mythology also states that the universe will expire at some point. There is no rebirth theory, and even the methods of death are linked. The key difference is that Shiva destroys the universe all at once, whereas Kalki destroys one at a time. Even still, these are only speculations with little evidence to back them up.

Chapter 3: The Dashavatar (10 avatars) of Vishnu

Vishnu is the Universe's Preserver and Protector. Mythologically, he has been shielding the Earth from catastrophic events that endanger it. When the Goddess of the Earth (Bhumi) came to see Vishnu, she told him about her many concerns. When there was a significant crisis, Vishnu consoled her and chose to appear on Earth as an avatar of Vishnu.

The ten avatars were:

1. Matsya - The Fish
2. Kurma - The Turtle
3. Varaha - The Boar
4. Narsimha - The Half-man and Half-animal (portrayed with a lion head)
5. Vamana - The Dwarf (human)
6. Parshuram - The Axe-Wielding Sage
7. Ram - The **Pure** Human
8. Krishna - The Statesman
9. Buddha or Balram - based on story
 - a. Buddha - The Founder of Buddhism
 - b. Balram - The Brother and partner in crime of Krishna
10. Kalki - The final avatar (said to be riding on a white horse)

The appearance of these avatars has changed slightly. However, this is essentially evolution theory. Charles Darwin's theory of evolution is well known and has been demonstrated to be accurate. People in the Vedic era created a narrative which is also related to evolution theory. This deserves further explanation. The first avatar is a **fish**, as were the first organisms on Earth; they evolved further, and the second avatar is a **turtle**, an amphibian. The following evolution is linked to the third avatar, the **boar**. The boar is a furry animal that is renowned to hunt. Narsimha, the fifth avatar, is a half-man, half-animal hybrid who **walks on two feet**. These are the first Apes to evolve into humans. Vamana, the following avatar, is a brahmin **dwarf**. This represents the first few fully evolved humans on Earth, with the next avatar - Parshurama - being Humans learning how to make weapons and learning more violent methods. The seventh and eighth avatars evolved, although in distinct ways. Ram is the **pure**, Dharmic person, whereas Krishna will bend the rules to gain an advantage. The ninth avatar is a little more perplexing; it might be Gautam Buddha or Balrama. Nonetheless, there is no more need for further proof of evolution as we have already caught up to how far we have progressed.

This is the biggest evidence pointing to a possible link between Hindu mythology and science: Charles Darwin's theory of evolution is widely accepted. This theory has the most evidence backing it up. Sages teach how the world was at that time, explaining how certain animals behave. After multiple generations, some animals may exhibit

different behaviour. These changes are duly noted down by the disciples of the Sages and teach it to their pupils. Each sage has not learned the concept with the same amount of clarity as the previous one, creating stories is an easier path to explain events. If you look at it carefully, the theory of evolution uses natural selection - a process that leaves only the fittest of them all to survive and reproduce - and many adaptations happen due to a change in the environment. These changes could be those same changes that Bhumi was afraid of, a new monster or demon is your change in environment, and Vishnu has to change into a stronger species to survive and kill that demon.

CONCLUSION

To conclude, there is a parallel between Hindu mythology and science. Albeit these parallels are with theories, we can assume two things: 1. The Rishi Muni (sages/scientists) have a huge sense of understanding of the cosmos and that information was lost. We are now rediscovering these claims with theories of our own. 2. The Hindu mythology had an amazing imagination and were able to express themselves via stories. Inspired from these stories, we start coming up with theories that start having uncanny resemblances. Thus, it can be concluded that the Hindu mythology is advanced. They had a heliocentric model before Copernicus proved it and even have lunar calendars. These theories can be proven or disproven at any point at any given time, this was purely for research and there is not enough evidence to conclude the link but there is enough evidence to consider the possibilities.

Index of Gods

1. Ganesh
Ganesh is the son of the Gods, Shiva and Parvati. He is the God of knowledge and wisdom. It is said to pray to Ganesh for wisdom or before an important exam
2. Shiva
Shiva is the destroyer and member of the Holy Trinity. He is not affected by the cycle of the universe.
3. Vishnu
Vishnu is the protector and usually descends on earth as one of his avatars to protect the earth from danger such as monsters and demons. He is also the representative of truth
4. Brahma
Brahma is the creator and he created everything from the universe to every living creature, Brahma has been shown depicting all 4 heads facing different directions (North, east, west and south) This could imply that he is all-seeing. Brahma has a lifespan and it is the same as the universe
5. Laxmi
Laxmi is the wife and consort of Vishnu. She is the goddess of wealth and resides in Vishnu's heart. She emerges in the churning of the ocean - a process to excavate a divine nectar that grants immortality
6. Durga
Durga is the combined energy of gods and goddesses. She is shown to be riding a lion into battle and her sole purpose is to destroy evil
7. Saraswati
Saraswati is the **goddess** of knowledge, art and music. She is the wife of Brahma and was born from, Shiva and Durga.

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