

The Great Creation – Destruction Cycle of the Universe

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Modern people find science to be an exciting aspect of their life. Scientific discoveries has lead mankind to unimaginable propositions in life. One can sit in the comfort of his living room and talk to his son who is several thousand miles away in the same way as chatting in the same room. Virtual reality is competing with reality itself and one wonders if it will take over the later. We are able to see what is happening in Mars and Moon through some satellite based camera. In the name of cloning, scientists are almost near playing God as they claim to manufacture living beings using some raw material. There seems to be no end to the list of things that science can attempt.

Today we are able to send vehicles deep into space and these vehicles are able to travel for several years and locate a new planetary system several trillion miles away from us. Is this a measure of the strength of science and a matter for celebration? Alternatively is it one more data point that science has painstakingly discovered after hard work that reminds us how ignorant we are of the Universe that God has created?

Origin of the Universe

There are a few areas where science is not simply able to catch up with. One such area is the issue of the origin of the universe. Cutting edge research is being carried out on this and newer theories are being proposed. The widely accepted theory for the origin and evolution of the universe is the Big Bang model, which states that the universe began as an incredibly hot, dense point roughly 13.7 billion years ago. According to the scientists, some 10 billion to 20 billion years ago, a massive blast allowed all the universe's known matter and energy—even space and time themselves—to spring from some ancient and unknown type of energy.

The big bang theory leaves several major questions unanswered. One is the original cause of the big bang itself. Several answers have been proposed to address this fundamental question, but none has been proven. Therefore science is at the crossroads when it comes to explaining the origin of the Universe.

If the Universe had an origin, it must have an end as well. When it comes to the end of the Universe, scientific theories are equally clueless. While they are trying to make some guesswork on how the Universe will end, they are not able to predict when it will end. Of the few theories, the Big Bounce theory states that the universe will continuously repeat the cycle of a Big Bang, followed up with a Big Crunch.

Against this back drop it will be interesting to know our position on these matters. Our scriptures have plenty of mention about the origin and end of the Universe. Let us look two ślokas from Gītā to understand our perspectives.

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The Creation and Destruction of the Universe

All our *Purāṇas* have five basic *lakṣaṇas*. One of them is to describe the origin of the universe. Therefore this is a subject matter widely discussed in all our *Purāṇas*. Sri Krishna has in his characteristic style taken a leaf out of these and concisely discussed this in two *ślokas*. He says:

1,000 yuga cycles (*sahasra-yuga-paryantam*) is known (*viduḥ*) as that (*yat*) of the day time of Brahman (*brāhmaṇo ahaḥ*). Similarly, 1,000 yuga cycles (*yuga-sahasrāntam*) is considered as the night time (*rātri*) of Brahman. Those (*te*) who know the day and night (*ahorātra-vidaḥ*) aspects of Brahman indeed the people (*janāḥ*) who are aware of this.

सहस्रयुगपर्यन्तमहर्षद्ब्रह्मणो विदुः ।

रात्रिं युगसहस्रान्तां तेऽहोरात्रविदो जनाः ॥ 8.17

sahasra-yuga-paryantam ahar-yad-brāhmaṇo viduḥ
rātriṃ yuga-sahasrāntaṃ te'horātra-vido janāḥ

Krishna is not mentioning here what is a yuga cycle. If you consult book 3 of Śrīmad Bhāgavata Mahāpurāṇam it contains all these details. According to the calculation available there, one yuga cycle will amount to 43,20,000 human years (or 4.32 million years). Therefore 1,000 yuga cycles will be 4.32 billion years. Since one day and one night make a day, the duration of one day of Brahman is 8.64 billion years. For 100 years of Brahma, this will amount to $8.64 \times 360 \times 100 = 311,040$ billion years (or 311 trillion years)². After this period according to our *Purāṇas* the Universe is dissolved. This is then the life time of the Universe before it will dissolve. Our current calculation as per scientists is that the age of the Universe is a mere 13.83 billion years!

Sri Krishna also has some more detail about the Universe. Although the life time of the universe is 311 trillion years, after every day time of Brahman (which is 4.32 billion years) the Universe goes into hibernation, which is called the night time of Brahman. Krishna says that when the day time dawns for Brahman (*aharāgame*), all living and non-living entities (*sarvāḥ*) transform (*prbhavanty*) from the un-manifested state (*avyaktād*) to manifested state (*vyaktayaḥ*). Similarly when it becomes the night time of Brahman (*rātryāgame*) all these entities dissolve (*praliyante*) into that only (*tatraiva*) into what is called as un-manifested state (*avyakta-saṃjñake*). In some ways this can be called the “creation – destruction cycle” of the Universe.

अव्यक्ताद्व्यक्तयः सर्वाः प्रभवन्त्यहरागमे ।

रात्र्यागमे प्रलीयन्ते तत्रैवाव्यक्तसंज्ञके ॥ 8.18

avyaktād-vyaktayaḥ sarvāḥ prbhavanty-aharāgame
rātryāgame praliyante tatraivāvyakta-saṃjñake

² In our astronomical system, five different types of years are available. One of them is a 360-day cycle, which is used in our *purāṇas* for these time calculations.

These observations and calculations about the life of the universe and what happens to it narrated by our ancestors are all astonishing. They not only provide a clue to the level and loftiness of the thinking of our ancestors but also to some insights into the very idea called Universe and the role of the Divinity or the Lord in this.

The Universe and the Divine Play

Instead of making a genuine effort to understand the intuition that lies behind all these, it is easy to dismiss these as fantasy and blind faith. This is what modern education has taught us to do. Science is nowhere near these issues and currently the attempts to make sense of these issues in the scientific world are based on intelligently using a combination of gadgets, mathematical models, logic and imagination.

There are certain interesting aspects the “creation – destruction cycle” model stated by Krishna in these *ślokas*. The most important dimension is that according to this model, the Universe is not “suddenly” created out of nothing. Rather, it merely transforms from manifestation to un-manifestation and vice versa. This implies that there is merely a law of conservation of energy at work. This side steps the major stumbling block that science is facing now to explain the origin of the universe.

To manufacture a certain metallic or a plastic component used by industrial enterprises, the factory set up to produce is huge. It employs several kilocalories of energy to make these components. If this is the case with respect to a small component, how much energy is required to manufacture the Universe, whose full spread is still not known to the scientific community. When the Universe originated where from this energy came? When it ends where will it go. To avoid this complication arising out of law of conservation of energy, the notion of black hole has been proposed by the scientists.

The second major pitfall continues from the above argument. If we assume there is a black hole, the question is who created this black hole and who supplied infinite energy to the black hole? Science does not seem to have satisfactory answers. On the other hand, our model says it is nothing but the manifestation of the Lord itself. Rational people try to dismiss this saying do not bring unknown things.

Suppose we happen to see a beautiful painting. There are two questions possible; Is there at all a painter behind this wonder creation? Who painted this? Just because we may not know where the painter is, we will not ask the first question. This is because if there is a good painting there ought to be a painter. Therefore we may only ask who he is. Similarly, if a vast and astonishing Universe (as discovered in bits and pieces by science) exists, we have no doubt about the fact that there is indeed a creator. Our search must naturally should be to find the creator, who seems to be all powerful, vast and knowledgeable about everything science knows and beyond. The Indian model concludes that it is none other than the Lord.

Through these *ślokas* Sri Krishna reminds us that the Universe and the vast number of entities that have occupied it are none other than the manifestation of the Divinity itself. This simple understanding will make the whole world that we live in and the entities that

we come across as sacred as the God itself. This can be a life transforming experience for us.