

Ethnobiological Studies from *Manusmruti*: XI. The Concept of Creation (*Srushti*)

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INTRODUCTION

Since the time immemorial it is being the human endeavour, questing for understanding the origin of the universe, the earth in it and the biodiversity. Most likely the attempts were unsuccessful for which the answer to this phenomenon, is ever attributed to the divinity irrespective of religion and belief. In course of our search (Padhy, 2000) for such answers in the Vedic age compendium *Manusmruti* (2000 B.C?), it is being materialised through this communication as an attempt to conceptualise the contemporary Vedic thoughts on creation (*Srushti*).

Conditions of the Universe before Creation

The four introductory *Slokas* of *Manusmruti* reveals dramatically, when Maharshi Manu was sitting alone at the supreme transcendental state of meditation, the other sages approached, worshipped and requested him to declare precisely the laws of human ethics such as:

For then O' Lord, alone knowest the purport, (i.e.) the rites and the knowledge of the soul, (taught) in the whole ordinance of the self-existent (*Svayambhoo*) which is unknowable and unfathomable (Transcription - *Ssloka 3 / Adhdhaaya I*) (Buhler, 1886).

He (Manu), whose power is measureless duly honoured the high-minded great sages and answered: Listen (4 / I):

Aaseedidam tamobhootam apragnyaatam lakshanam,

Apratarkyam abijnayam prasuptamiba sarbatah. (5 / I)

Meaning: This (universe) existed in the shape of darkness (*Tamobhootam*), unperceived (*Apragnyaatam*), destitute of distinctive marks (*Alakshanam*-uninferrable), unattained by reasoning (*Abijnayam*-undefinable by words or authoritative statements), wholly immersed, as it were in deep sleep (5/I) (Buhler, 1886).

In this regard most of the modern cosmolo-

gists believe that the universe began as a dense kernel of matter and radiant energy which started to expand about five billion years ago and later coalesced into galaxies (Gamow, 1954); otherwise known as the Big-Bang theory, evolutionary theory or the theory of expanding universe, proposed by Alexander A. Friedman and Edwin P. Hubble. This theory holds that the universe originated at some finite time in the past and accordingly the beginning of the universe was associated with the space and time. But what happened before that moment (?) is an unanswered phenomenon, which needs to be explained with severe difficulties of thought and language (Capra, 1975). Such difficulty can also be marked with the implication of Sanskrit terms like (5 / I) *Apragnyaatam*, *Alakshanam* and *Abijnayam*; moreover the word *Tamobhootam* (in literary sense - a state of darkness) should be perceived as there was no activity, hence a prevailing stubborn condition.

Further in *Ssloka 7 / Adhdhaaya I*, the creation being considered as the supreme power of the God himself, the following statements are depicted which reinforce the conceptual features as in 5 / I.

- i. He who can be perceived by the internal organ (or the mind alone, beyond the cognizance of the senses, can be perceived by *Yoga* knowledge alone);
 - ii. Who is subtle (i.e. beyond all distinctions, such as small and great, who is imperceivable by the external senses, but perceivable only by subtle understanding, smaller than small);
 - iii. Eternal (*Sanaatanah* -pre existing)
 - iv. Indiscernible (*Abyaktah*: all beings are illusory modifications of Him);
 - v. Inconceivable (*Achintya*) and
 - vi. (He) Shone forth of His own (assumed a visible body, was self luminous, appeared in the form of the evolutes, the great one and so forth became discernible) (7 / I).
- (Statements in parenthesis are commentaries

of other Indian scholars (Buhler, 1886).

The Creation (*Srushti*)

The creation, which we realise around us from atom to universe, is known as *Prakruti* (Nature). According to *Saankhya* philosophy: which existed before any thing was produced, the primary source of all things, the original substance out of which all things have come and into which every thing will finally return, is known as *Prakruti*. Otherwise *Prakruti* is the primal nature or cosmic substance, which is eternal, indestructible, formless and limitless (Bernard 1989). The manifestation of the *Prakruti* as depicted in *Manusmriti* says:

Tatah svayambhooh bhagabaana byakto byanjayannidam,

Mahaabhooota dibrutoujaah praaduraaseeta monudah (6/1)

Meaning: Then the self existent (*Svayambhu*-Himself) indiscernible, (but) making (all) this, the great elements and the rest discernible, appeared with irresistible (creative) power, dispelling the darkness (Buhler, 1886).

The above *Sloka* starts with a word *tatah* (means after that), which refers to the mysterious pre-existence before creation. The sudden appearance of the creation is supported by both, modern science and the vedic theory. In Sanskrit the whole thing is concentrated in two words (1) *Praaduraaseet* - appeared *de novo* and (2) *Byanjayan* - expressed slowly from intangible to tangible.

The Primeval Nucleus (*Brahmaanda*)

The theory of Big Bang was further developed by George Lemaitre, a Belgian theoretical astronomer, who proposed that the universe started from a highly compressed and extremely hot state, which he named as primeval atom (modern physics - primeval nucleus). In the beginning, the entire matter of the universe was squeezed into a single mass, a big fire ball, which exploded and the scattered parts cooled to give birth to the galaxies which continued to expand continuously moving away from each other.

Manusmriti says: That (seed) becomes a golden egg, in brilliancy equal to thousand suns, in that (egg) He Himself was born as *Brahmaa*,

the progenitor of the whole world (9 / 1).

Brahmaa, who is attributed to be the creator of the universe in Hindu mythology, in a scientific basis the creation power of the nature was generated in that golden egg, conforms the primeval nucleus as per the modified Big-Bang theory. Moreover the universe in Sanskrit is known as *Brahmaanda* (*Brahmaa* i.e. the power of creation + *Anda* i.e. egg or the source generation).

The Pulsating Universe

It is evident that the universe is expanding continuously and the galaxies are moving far away from each other. If this expansion will continue as per the Big-Bang theory, it will make the universe empty at one time. Moreover Einstein's equation ($E=mc^2$) in this regard does not provide a unique answer as per the future of the expanding universe concern (Capra, 1982). To overcome this problem a modified theory is suggested, a pulsating universe that alternatively expands and contracts. Because of the forces of gravitation, a time will come when the far moving galaxies will stop after they have reached a certain maximum permissible expansion and then they will start contracting. The contraction will shrink until its matters are compressed to a certain maximum density referred before as the primeval nucleus; that it will then begin to expand again, and so on without end alternatively. This rhythmic occurrence of expansion (creation) and contraction (dissolution) of the universe is explained in a symbolic form as the awakening (day time - *Srushti*) and sleeping (night time - *Pralaya*) of *Brahmaa* (Creation power) in the following verses.

When the divine one (*Brahmaa*) wakes, the world stirs; when He slumbers tranquilly, then the universe sinks to sleep (52 / 1). (Buhler, 1886).

Thus he, the imperishable one, by (alternatively) waking and slumbering, incessantly revivifies and destroys this whole movable and immovable (creation) (57 / 1), (Buhler, 1886).

This linking of alternative sleeping and awakening of the creation power *Brahmaa* with the expansion and contraction of the universe seems to be ridiculous, but as the day/ night period of

the concern is considered as one *Kalpa* (an unit of time discussed later), equivalent to 432×10^7 earthly years, attempts to believe the phenomena more meaningful and scientific. In this context the time concept of the ancient Indians is required to be examined out and out.

Universal Time Concept

The smallest unit of time as per *Manusmruti* (64 / I) is a blink of an eye, called *Nimisha* (0.178 second). Accordingly, the time division for *Pitru* (manes), *Devataa* (Gods) and *Brahmaa* are depicted as follows:

Time Division in *Manushyaloka* (Human habitation)

- 18 *Nimishas* = one *Kaashthaa*
- 30 *Kaashthaas* = one *Kalaa*
- 30 *Kalaas* = one *Muhurta* (47.999 minutes)
- 30 *Muhurta* = one *Ahoraatra* (24 hours - day and night)
- 30 *Ahoraatras* = one lunar *Maasa* (month)
- 12 lunar *Maasa* = one *Vatsara* (earthly year - 360 days)

Time Division in *Pitru* *loka* (Manes habitation)

- One lunar month of human beings = one *Ahoraatra* (24 hours) of manes (*Pitru*). The dark fortnight is their day for active exertion and the bright fortnight is their night for sleep (66 / I).

Time Division in *Devaloka* (Devine habitation)

- One *Vatsara* (earthly year) of human beings = one *Ahoraatra* (24 hours) of Gods (*Devataa*). The half-year during which the sun progress to the north (*Uttaraayana*) is their day and during which it goes to south wards (*Dakhinaayana*) is their night (67 / I).
- 360 earthly years of human beings = one *Deva Vatsara* - year of Gods-Divine year

The cycle of time in the universe passes through four *Yugas*: (1) *Satya* (*Kretaa*) (2) *Tretaa* (3) *Dvaapara* and (4) *Kali* (69,70 / I). These four *Yugas* constitute one *Chaturyuga* or *Mahaayuga*. The age of the *Yugas* including the intermediate period between two *Yugas* (*Sandhyaas* - Twilight period) and the time period of *Brahmaa* is as follows: (71,72,73,74 / I)

Division of *Yuga* and time unit in *Brahmaloka*

Name of Yuga	Period: Earthly years	Period-Divine years
<i>Satya</i>	1728,000	4800
<i>Tretaa</i>	1296,000	3600
<i>Dvaapara</i>	864,000	2400
<i>Kali</i>	432,000	1200
One <i>Chaturyuga</i>	4320,000	12,000

- One cycle of *Chaturyuga* / *Mahayuga* / *Deva yuga* is 12000 divine years or 4320,000 earthly years. The cycle is repeated constantly.
- 1000 *Chaturyugas* = One *Kalpa* (12 hours of *Brahmaa* 4320,000,000 earthly years).
- Two *Kalpas* = One *Ahoraatra* (24 hours of *Brahmaa*: 12 hours day time, period of expansion (*Srushti Kaala* / *udaya kalpa*) and other 12 hours night time period of squeezing (*Vinaasha kaala* / *ksaaya kalpa*).
- 720 *Kalpas* is one year of *Brahmaa* (*Brahmaa vatsara*) and with this calculation the life span of the concern is 100 years = 720,000 *Kalpas* accounts to 31104×10^{10} earthly years.

As per *Manusmruti*, the creation appears and expands for 420×10^7 earthly years and squeezes, rather remains dormant for similar years in conformity with the pulsating universe theory. May be at the end of the life span of *Brahmaa* the entire universe, every galaxy, nebula, star each and every thing perishes (Mohan, 1996). It is beyond imagination as to how the ancient Indian saints have found such great truths without any material support like telescopes, spectroscopes etc. The concept of creation in *Manusmruti*, certainly elevates to what extent the ancient Indian science, was positive. A recent attempt to corroborate the truth - convergence of science and the *Vedas* (Levacy, 2000) traces the concept of black hole in various *Upanishads*. The creation is often followed by dissolution, leaving the paleontological and archaeological foot prints of geological time scale. We further look forward in search of such facts in the epic (Mohapatra et al 2001).

KEY WORDS *Manusmruti*. Conditions Before Creation. Primeval Nucleus (*Brahmaanda*). Pulsating Universe. Time Concept.

ABSTRACT Facts depicted in *Manusmruti* regarding the

creation of the universe as conceived by the ancient Indians, corroborates with the theories of the modern science. The difficulties of the thoughts and language to explain the condition of the universe before creation followed by appearance of irresistible creative power and its exposition are reflected in this work. The Vedic people were more conscious of time division from 178×10^{-3} second up to 31104×10^{10} earthly years.

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