Hindu Cosmogenesis

By Basile P Catoméris

The modern, scientific explanations of the origin and evolution of the Universe and matter are essentially founded on the concept that prevailed in Ancient Greece (four basic elements--earth, water, fire and air), with the additional, modern conception of a relativistic space- time that combines three spatial dimensions with time as a fourth dimension.

Interestingly, the Greek, four-element paradigm existed already in ancient India, but with a fifth element, $\hat{a}k\hat{a}sha$, generally translated as "ether." $\hat{A}k\hat{a}sha$ may be thought of as a kind of all-pervading, immense spatial continuum that potentially embraces all non-matter existing in the universe, inclusive of recently discovered anti-matter and black holes. (The ancient Hindu sage, Kanada, a precursor of atomist theory, considered light as two forms of one and same primordial substance.)

Our world is in constant motion, *perpetuum mobile*, seemingly with no need for rest with regards to the kinetic forces at play within universes, matter and mind. Time-induced changes are noticeable not only in our minds and thinking processes, but in every part of our organism, be it at the atomic, molecular, cellular or tissue level. Of course, time also affects macroscopic changes throughout human society. The Western conception of time is generally limited to paleontological or archaeological discoveries that set the origin of documented human history around 8,000 years, B.C.

The sages of ancient India dedicated much energy to understanding time, both at the individual level (as the limitations of time are an obstacle to reaching higher stages of consciousness) and with regard to the global manifestation they perceived.

By contrast to Western conceptions, ancient India's cosmological conclusions open such vast perspectives that they could seem pure fiction, were it not for India's irrefutable credentials in mathematics and astronomy, among other fields of learning. In the rishis' vision, time is eternal. That means that time is endless, endowed with a past free of any commencement and a future without completion. Cosmic evolution is characterized by the inseparable phenomenon of creation and dissolution, in an endless succession of cycles (*manvantara*).

The recurring creation of Cosmos is a tangible manifestation of the Absolute. Its dissolution coincides with the beginning of a period of non-manifestation, symbolically corresponding to a return to the Supreme source–Brahman, the Absolute. From that Absolute, another manifestation is to emerge. Allegorically, this alternation is described as the days and nights of *Brahmâ*. Such a one-day of *Brahmâ* (*kalpa*) may be determined with arithmetical accuracy. The philosopher O.N. Krishnamurty has set its duration, unconceivable as it may be, to 4320 millions years!

Esoteric calculations divide this time into fourteen periods (*manvantara*) and seventy-one further subdivisions (*mahâ-yuga*). Each consists of four phases called *yuga* (viz. *satya yuga, reta yuga, dvapara yuga* and our present age, *kâli yuga*, expected to last 432,000 years).

Each cycle is endowed with a cosmic genitor (Manu). The name of the present *yuga*'s genitor is Vaivasvata. As a prototype for mankind, the genitor corresponds, approximately, to the Adam of Hebrew tradition. When the unthinkable duration of the "*day of Brahmâ*" finally does come to an end, a cosmic night transition appears, followed by a corresponding eon and so forth in an endless cycle, inconceivable to the human mind.

Are the teachings from India's holy scriptures actually any less baffling than the astrophysical and subatomic discoveries of the last centuries, which have indefatigably pushed forth the limits of the Universe and its contents? Are not such grand notions plausible, considering how modern science has mapped out some 260,000 known galaxies and calculated an age of several billions years to the Universe?

Science is constantly on the move. Undoubtedly, contemporary discoveries have brought light to modern intellectual and philosophical curiosity in exploring both the unconceivable dimensions of universe and the most intimate secrets of matter.

But, the intuited perception of an underlying, unknown field or spiritual reality as a static background to our limited knowledge has (since time immemorial and still today) posed a thought-provoking challenge. Intuitive minds have always meditated on the enigma of our universe. Scientific minds have then attempted to discover the truth of the inseparable twins – mind and matter.

The idea of an existing "unknown" field was notably revived by Einstein's recognition of a void field. This recognition found its relay in Max Planck's formulated quantum theory and (a quarter of a century later) in the famously ineluctable "uncertainty principle" of Werner Heisenberg (relating to the illusion of pure objectivity in science, granted that any observed phenomena is intrinsically subjected to the observer's influence). This theory is, in short, a clear demonstration of the impossibility of proving the existence of the external world through rational methodology.

Since then, a consensus between astrophysicists and physicists searching to disclose the respective mysteries of space and matter seems to indicate that man's limited tri-dimensional cognition is inadequate to ever explain the multidimensional reality of matter and mind. Already before them, the philosophers George Berkeley and John Locke had suggested that matter does not exist per se, thus reducing the existence of all natural phenomena to mental contents-ideas, or an exclusive cosmic mind whose contents would be our universe. Lately, Sir Arthur Eddington conceived the ultimate Reality--the unknown, the very basis of both the universe and our mental contents--as fundamentally spiritual. In this perspective, the world becomes a process of reconstruction operated by the mental (cf. Paul Brunton's so-called "*mental-ism*").

Clearly, a large number of contemporary scientists have foreseen another reality at the ultimate frontiers of experimental science. Shrödinger, a physicist and author of several philosophical books sympathetic to monistic doctrine, invokes the Vedas to explain his conception of the universe. Ilya Prigogine, 1977 Nobel Laureate in chemistry, points to "the possibility of an eternal return of an infinite serial of universes" 1). Richard Phillips Feynman, one of the most influential physicists of the past century, compares the subtle mechanisms of our individuality to an atomic dance akin that of Shiva's cosmic dance: "The atoms get into my brain, dance their dance and then get out; continuously new atoms, but always the same dance."2)

Compatible notions were also elaborated upon by Fritjof Capra, philosopher and scientist in theoretical physics, in the preface to his book, *The Tao of Physics* 3).

Despite the testimony of such giants in the scientific field, the Western scientific agenda in general shows a stubborn disdain and lack of interest in the unknown field of spirituality. When this compelling and intangible quality of life does occasionally find its way onto the western agenda, too often the underlying assumptions are tainted with naïve and futile projections of wishful thinking, possibly as a consequence of the materialistic and hedonistic views of Western culture at large. But the reports from the aforementioned great scientists about the reality that may lie beyond this side of corporeality ought not to be dismissed lightly. Mankind faces threats due to insane nuclear arms races and serious environmental problems that endanger the survival of all life on our planet, and politicians and responsible institutions must place a high priority on meeting these issues with morality and justice, whatever the price. There are still huge resources left and plenty of energy and goodwill at Man's disposal to find immediate solutions to present priorities. However, to undertake the great adventure is not so much a matter of money, as of spiritual maturity.

Pranava

Our surrounding world is made of sounds expressed at different levels of intensity. Perceived differently, sounds may be a sheer nuisance or a pleasure to human ears. Characterizing modern life, urbanized societies produce sounds that hardly match our normal pleasure sources - music, the familiar rhythm of rain, a gentle breeze or the movement of waves on shore, birds' cheerful songs, a good friend's familiar voice or the lover's cajoling whispering.

To acknowledge a yogic millenary legacy entails the acceptance of the fact that there are more sonic phenomena out there than the usual two kinds of sounds we are used to--audible and inaudible. There are, indeed, particular sounds that can only be heard in a state of deep mental concentration; to that category belong subtle sounds perceived in the practice of Mantra Yoga 4). This short survey deliberately ignores the capability of certain animals to perceive subtler sounds, called ultra-sounds, nor does it aim to go into the further intricacies of sound perception.) Briefly described, the term "mantra" usually describes phonemes used by Yoga practitioners initiated in any traditional Yoga path, such as Mantra Yoga.

The primordial sound "OM" (also identified as "AUM") is technically called Pranava, and is a very sacred symbol in Hinduism.



The original mantra occurs in practically all important sentences of Sanskrit. It may also appear as a sign, a characteristic graph consisting of three elements – bindu, nâda and bija. Pranava has a most privileged position in Hindu language, especially in sacred literature and devotional songs.

In Hindu cosmology, Pranava is considered the symbol of the manifested universe and mind, the very first manifestation occurring in the form of a primal vibration, immeasurable and with no magnitude, which may be called the Infinite. Pranava is thus the actual starting point of the Cosmos, the first manifested sign in a causal and evolutionary process from which emanates both the manifested and the mental.

The primordial sound Pranava has three definable aspects. However, a fourth aspect can be realized, neither subjectively or objectively, but in an extraordinary state of mental concentration, called *asamprajñâta samâdhi*.

Breaking the kâmakalâ triangle,



the merging Pranava corresponds to the first manifestation of God (Logos, in Christian scriptures).

Its three aspects are:

Apara – God and associated power of creation, and related effects such as mind and matter. (It corresponds to the graph where the dot is bindu that stands for sattva, a half crescent moon representing nâda as rajas and the evolutionary line standing for tamas as bija.)

Para – a Supreme Being that stands beyond manifestation;

Maha – the causal combination of the two above; immanent and transcendent God.

In the Hindu triune (called Trimurti), the first three aspects of Pranava correspond to three permanent grand principles that operate in manifestation (viz. Brahma, Vishnu and Rudra (alias Shiva) in their respective functions of creating, preserving and transforming by destruction). Pranava also embraces the fifty primary sound units (mâtrikâs) from which emerge mind and matter. Each mâtrikâ comprise 20 potential forms represented in the thousandpetalled shahasrâra chakra.

Mantra

Adopted extensively even outside India, mantras are used in several manners, more particularly in rituals and specifically in the practice of Mantra Yoga.

The term mantra consists of two terms, *manas* and *trana*, to describe the mental and (mind) withdrawal, respectively. Mantras may also have a linguistic meaning, such as the sacred Gayatri mantra of Hinduism. When as-

sociated with a specific connotation, mantras may be supported by an image upon which the practitioner may concentrate his mind while uttering the mantra rhythmically at an appropriate breathing rate. Mantras may also occur with no linguistic connotation (as when they are used as bija (seed) mantras), in which case they usually consist of phonemes.

When practicing mantra japa (which is essentially a mental iteration process), the yogi(ni) endeavors to transcend the physical aspect of sound (vaikari) to reach the subtle stage of supersound (madhyama), up to the level of nada and pashyanti, the causal sound-radiating energy stage. The bija mantra becomes purified by way of repetition, which is considered highly auspicious for spiritual evolution. It then enters into the subliminal impression storage (hridaya), where it remains as karmasaya, a seminal source for future actions (karmas).

In a general comment on Pranava, Shri Aurobindo confirms 5):

"The function of a mantra is to create vibrations in the inner consciousness that will prepare it for the realization of what the mantra symbolizes and is supposed indeed to carry within itself."

This subtle sound aspect is eventually reduced to bindu, in which a new aspect of consciousness arises with no equivalent in the mental or in the outer world as we usually perceive it. It is at this stage that the three-and-a-half-coiled spiritual potential (Kundalini) is roused.

Maya

Our universe has its origin in the Infinite, the primordial unity that (by a seeming self-limitation) operates via a virtual entity, Maya. It is Maya that actually renders possible the impossible, a universe that only exists in the subjective knowledge of an incarnated being (jiva). Maya expresses a unique power insofar as an unreal phenomenon does appear to become a phenomenon, although it is inexistent in the Infinite, in terms of absolute reality. (Cf. Shankara's interpretation of the monistic doctrine : "All is Brahman - an eternal existence.")

Maya has no autonomous existence, per se. To spiritual seekers, Maya plays the role of a veil or "illusion" of the One – Brahman – and yet reveals a limited phenomenal existence of the Whole (Purna) in the manifested multiplicity. It offers a limited manifestation in the unlimited realm of Supreme Consciousness.

In Hindu metaphysics, Kama Kala represents supreme equilibrium. Graphically represented with an equilateral triangle, Kama Kala stems from the non-dual entity Shiva-Shakti, which is All and the Whole (Purna) integral, supreme, infinite and apart from which no thing exists. Kama Kala is the expression of the Supreme's desire to manifest while still being in a seminal state, in perfect equilibrium. So far there is no causality, nor any manifestation of cosmos. Its breaking off is nothing but the desire of the Supreme to manifest, and from that supreme potential power is released a creative willstream that results in the causal field (as yet un-manifested at the cosmic level) of the primordial sound called Pranava.

The components of Shakti are Sat – Chit - Ananda. These symbolize, respectively, the power to exist, supreme consciousness and supreme bliss.

It is in para bindu that lie both Life-force (Prana) and the three primordial attributes of the Supreme Power mentioned above. There, bindu represents sattva (sentience) while nada stands for rajas (energy) and bija accounts for tamas (inertia). In permanent operational symbiosis, these three primary forces are identified as gunas.

The original sound of all sounds, Pranava or Om (ong) alias Aum, manifests in nada.

Prana

As the principle of eternal energy in Supreme Power, Prana is a complex phenomenon. Most concentrated in Bindu, Prana is the supreme creative force of manifestation. It is activated at the causal level of nada, where it holds the power to manifest at three different levels – creation, preservation and transformation.

Every thing is born out of Prana and Prana has also the power to sustain and transform what it creates. It is when unfolding that Prana manifests its most

concentrated energy as the sound Ong. The all-creativity of Prana occurs via three primary attributes (called the gunas): sattva, rajas and tamas.

- a) Rajas as primordial principle of energy
- b) Sattva as primordial principle of consciousness
- c) Tamas as primordial principle of inertia

Dharma

Dharma is the primary spiritual causality principle. Through the gunas, dharma operates on Prakriti (nature) throughout the mineral, vegetal and animal realms.

In man, dharma is present as the cosmic flow that causes karma (mental psycho-processes and action of various kinds) via smiriti (memory). Smriti links together past actions and the stored subliminal duplicates as samskaras. These samskaras are in turn subject to the three primary principles (gunas) when they direct our actions either towards a predominating dharma (which corresponds to the combination of sattva and raja) or to a predominating a-dharma (when they are under the influence of the combination of tamas and rajas).

Following any of the dual paths described in Tantric scriptures, the highest ambition of a tantric practitioner is nothing less than a return to the original source of everything, an ultimate union with and in the Absolute. Such a realization transcends all sensorial and mental phenomena that in daily life are represented as words and/or forms.

By contrast, the nondual (advaita) Vedanta darshana teaches no particular sadhana to achieve. It just refers to the epitomized reality of "tat tvam asi," "That art Thou" or "I am the Absolute."

Edited by Jim Earles

- 1) *Entre le Temps et l'Éternité*, by Ilya Prigogine and Isabelle Stengers. Fayard, 1988, p.16
- 2) *Taking the Quantum Leap*, by Fred Alan Wolf. Harper and Row, New York, 1989, p. 228.

- 3) *The Tao of Physics*, by Fritjof Capra. Shambhala Publications of Berkerley, California, 1975; Éditions Sand, Paris, 1975.
- 4) It would be too great a challenge to detail all of the complex aspects of the sounds pertaining to the world of mantras. Mantras are also used in devotional chants and rituals in Hinduism, as well as in various branches of Buddhism, Sikhism and Zoroas-trianism.
- 5) Letters on Yoga, Vol. II, pp 745-748