

EDITORIAL

A CALL FOR INTEGRAL THINKING

The Himalayas as a system is Asia's Kamandal. It is the source of water to the Indus, Amu Darya, Ganga, Brahmaputra, Yellow River, Yangtze, Sutlej, Nu/Salween and Mekong. South Asia's four major river systems, the Ganga, Indus, Brahmaputra and Sutlej originate in the Himalayas. Water in a sage's kamandal is considered auspicious and represents the amrita (nectar of life). The Himalaya's water is like an elixir for Indian sub-continent. The combined river basin of the Indus, Ganga and the Brahmaputra rivers constitute 43.8% of India's total surface area. The Himalayas provide 63% of India's fresh water.

The Himalayas act as the site upon which utopias and fantasies are projected. Much of it is still a terra incognita and the geo-imaginative articulation by different Asian communities provide a structurally coherent meaning as well as reflect the centrality of the Himalayas in their practice of topopieté. For an Indian observer, the Himalayas appear as a crescent Moon dotted with fourteen highest mountain peaks (Eight thousanders) as stars on a relief map. The Mount Kailash would appear as the sixteenth digit of the Moon, the dot of immortality in Tantric parlance. The Kailash holds a special place as the axis mundi of the universe, the manifestation of the mythical Meru in the Asian imagination of the sacred landscape. The Himalayas has always been viewed as the abode of immortals. There are various Bon myths about the existence of Dmuthang, the rope to the heaven. Hindus believe in the hidden land of immortals in the Himalayas, siddhashrama, while for the Buddhists there are 108 similar hidden abodes (beyuls) across the Himalayas, Pemako being the most sacred site. From Tibetan side, the Himalayas appear as a rainbow. And it is not a strange coincidence that the rainbow holds highest importance in the Tibetan view of immortality. The rainbow for Tibetans is the body of immortals. There is an ancient tradition of Zhang Zhung where trekchod and togel practices lead one to attain rainbow body of deathlessness in which the master practitioner leaves no flesh behind after death and transforms into rainbow bodies. A 4th-5th century Chinese poet, Tao Qioan wrote about an earthly paradise hidden in the Himalayas. For the Chinese observer, the Himalayas appear as mighty dragon. On the relief map, the range that separates Tibet from India appears like the body and wing of a dragon and the range that curves out from Sichuan to Chiang Mai in Thailand appears as the foreleg and the neck. The curve that extends from Afghanistan to northern Iran appear as the hind leg and the tail of a dragon. In the Chinese mythology, the dragon symbolizes immortality, fertility and creativity. Thus, the Himalayas become the source of life and immortality for sacred imagination across Asia. Though only 0.3% of the planet area, the Himalayas contain 10% of the global biodiversity, many seemingly related with the belief in immortality ranging from jambu fruit, tea, caterpillar mushroom (Buddha mushroom). The Himalayas have transformed into an index of immortality.

Therefore, it came as a rude shock to the pious devotees when a part of the Himalayan region in the Uttrakhand was devastated by what many terms, 'Himalayan tsunami' bringing death and destruction to the seekers of moksha. It is a national calamity in which thousands died, many thousands still missing and the major centers of the pilgrimage in the ShreeKshetra of the Himalayas, lies in ruins. A cloud burst followed by the breaking of the Kedar dome glacier caused a flash flood in the Kedarnath. The ancient holy site has been ravaged beyond recognition. The pilgrims who were standing in queue praying for salvation and prosperity, were swept away callously. The Alaknanda and the Bhagirathi swept away villages and the towns, temples and the sarai, ruthlessly. The environmentalists and the climatologists have been ruminating over the ecological reasons for the catastrophe. But, alternative view about the calamity is spreading fast.

The calamity has reinforced the faith of millions. The devotees claim that the Himalayan Tsunami crisis started only when the guardian deity of Uttrakhand, Ma Dhari Devi (Goddess Kali) was shifted by a hydro-

power construction company on 16th June on the pretext of surging water of Alaknanda that might have inundated the holy idol. The votaries claim that the Dhari Devi had warned the company officials on 2nd September, 2009 in clear terms recorded in writing that if her location was shifted, there would be calamity.

No sooner was the Mahakali's idol shifted, the wrath of the Goddess was brought down in the Himalayas. Mahakali of Dhari is also the Ugratara and the Chhinamastika, the Goddess of the lightening. The clouds burst, the dams burst, and the reservoirs burst. The glaciers broke, the roads collapsed. Buildings and mules, men and vegetation were swept away in the pralaya. It was only when the flood water reached the sanctum sanctorum of Kedarnath and touched the Sivalingam, the wrath stopped suddenly. The goddess Mahakali calmed. It was like the mythical story in which Shiva had to lie down and when Kali's feet touched Shiva, she calmed. In fact, neither the Shivalinga nor the idol of Nandi bull guarding the temple precinct did go under the sludge. The Shiva lingam remained crowned by offerings of belpatra leaves. Votaries argue that Kedarnath Shiva tamed Mahakali of Dhari.

The western press condemns such thinking as bizarre. India's own secularized elite question the narrative and views the same as an exercise in myth-making. But, the believers point out how as soon as the idol was lifted; the lightening began to flash around and the calamity befell the region. Are there non-human agencies in the Universe? Does nature listen? Does our biosphere possess agency? Are we entangled with the natural world at large?

It is a strange coincidence that two day conference on immortality concluded on 16th June in New York. A 32-year old multi-millionaire Russian tech entrepreneur, Dmitri Itskov organized the Global Future 2045 International Congress and it was attended by the best scientific brains like Ray Kurzweil, and Marvin Minsky; the roboticists like Hiroshi Ishiguro of Osaka University who came along with his own mechanical twin, Geminoid. The Conference concluded with the optimism that by 2045, humans will achieve digital immortality by uploading their minds to computers. These transhumanists believe that once "mindclones", the digital versions of humans that can live forever, are created from the "mindware," a kind of software for consciousness; it will no longer be necessary to live through a biological body. The mechanical twin, Geminoid attended his creator's lecture and surprised the audience by speaking that the next time he would make a better presentation than his creator. Itskov is so much emboldened with the advance of technology that he is preparing to launch a company this year that will sell immortality to the rich clients listed in the Forbes.

Did the Himalayas, the imaginary abode of the biological immortals like Babaji and Guru Rinpoche convey to the techno-fundamentalists of 2045 Initiative, its displeasure over tinkering with the biological mortality? Was the conference an irritant for the Himalayas? Is it all connected? The Himalayan tragedy is unfolding like the Rashomon effect with contradictory interpretations from various quarters!

The mechanical and secular world view that arose in the West from Francis Bacon onwards has endangered the diverse pool of cognitive thinking within a short span of time. The matter has been dispossessed of any agency and viewed merely as 'nature' bereft of any presence of spirit, deities, consciousness. But, the development in the frontiers of technology and new sciences is questioning the validity of the dominant western epistemology. Consciousness studies have become a focal point for the finest brains world across. The roboticists are exploring and integrating the effective and simpler way to design robots as social agents that facilitate communication with human.

Human-Robot Interaction (HRI) Studies as a specialized area to explore the robotic solutions for real world problems like aging societies, emergency response, education has emerged. The scientists are building socially-intelligent robots, lifelike robots, robot-team learning, autonomous robots. Human-robot symbiosis

has been achieved by many tech-entrepreneurs. Now, the best teams are vying to build gossiping robots, robots which can lie. Apart from the look-alike, the future robots will behave as natural as human beings with all those imperfections which constitute what is being human. Pentagon is talking about *Robo sapiens*. There are dancing robots, fashion show robots and even female robots (Fembot) in Tokyo for which advertisements are made like, "*A Female Android looking For A Valentine Date in Tokyo.*"

Neuroscientists from the ATR Computational Neuroscience Laboratories in Kyoto have unlocked the surreal world of dreams with 60% accuracy. By using the technology, the future robots might be built that could dream. Philip K. Dick's vision in his bestselling 1996 novel '*Do Androids Dream of Electric Sheep?*' which describe about androids and synthetic animals being almost indistinguishable from human beings and real animals appear close on the horizon. If machines can start dreaming, they can become creative and equal co-creator of the Universe just as we have come to claim that position. Though, the science and technology rooted in western epistemology secularized the Reality and made 'consciousness' purely human phenomena; the technology is now imbuing 'consciousness' in inert matter of machines!

Frédérique Apffel-Marglin, Professor Emeritus of Anthropology at Smith College and a friend of mine, have come out with a strong critique of the western scientific tradition and abject materialism of the western world-view in her recent work, '*Subversive Spiritualities: How Rituals Enact the World*' (2012). She rather pities the modern, cosmopolitan world view which lies abandoned by a multitude of '*other-than-human*' communities. She lambasts with following statement, "*We modern cosmopolitans, heirs to the scientific revolution and to the enlightenment, are like abandoned children. We have lost the safety net of a web of extended relations and human communities and find ourselves increasingly on our own, competing with others like us for the social space and the rewards that makes us feel that we really belong, really exist, really matter. ... Before the triumph of modernity, sealed in Western Europe of the seventeenth century by the advent of the scientific revolution –people lived in a constant interaction with host of beings, powers and spirits, who tricked us, protested us, punished us and conversed with us. We were wealthy in our human and other-than-human communities. There was an abundance of beings to accompany us in our earthly journey. .. With Descartes' cogito, the mind also departed from matter, transmuting the body into soulless mechanisms, transforming us into only observer of an inert material reality, alone among ourselves, abandoned by all the other beings of the world.*" (Apffel-Marglin, 2012, pp.3-4)

The paradigm that consciousness exists only in the human beings and matter is inert and hence does not have agency is coming under serious interrogation from multiple directions.

Consciousness is not merely limited to 'western' human beings. In such a situation, the likelihood of communication between human beings and other than human beings (plants, spirits, rocks, ghosts, and god) cannot be discarded anymore. Astrophysicists compete to discover 'dark matter' and 'black holes'! Transference of consciousness, or *phowa* in Tibetan Buddhism, has been proved consistently in laboratory conditions. The existence of non-locality (instantaneous communication) has dazzled scientists and the presence of a primordial consciousness (unity of consciousness) is becoming the logical correlate. Surprisingly, dematerialization of matter is found to be taking place in the quantum world.

The scientific paradigm dominant since Galileo and Newton's work is now shattered. The western notion of modern knowledge depends on binarisation, dichotomy and dominance. The empirical observation that characterizes this scientific tradition depends upon the practice of separating the 'knower' from the 'known' and to create a relation of externality to the natural world. Only objectivity guarantees the possibility of deciphering the immutable laws of an inert natural world. Boundaries were discursively created between human-non-human, nature-culture, internal-external, epistemology-ontology, science-sacred.

Thinking is always influenced by the dominant technology of the age. The accuracy of the pendulum clock influenced Descartes, Newton and Galileo. The clock became the metaphor for “nature”. Descartes separated matter from consciousness and this external natural universe was reduced to a mute and inert world possessing no agency of its own.

The early twentieth century witnessed the advent of the theory of relativity and quantum mechanics. Werner Heisenberg propounded the principle of uncertainty i.e. simultaneous observation of a particle's location and characteristics is not feasible. Physicist Niels Bohr, who won the Nobel Prize for his model of the atom, and his Copenhagen school put a radical challenge to Newtonian physics and Descartes' schemata by proposing that 'things' do not have inherent determinate boundaries and properties and put into question the dominant Cartesian paradigm of distinguishing between subject and object, knower and known. He proposed 'phenomena' as the primary unity of knowledge, i.e., relations without pre-existing objects. For him, reality exists as things in phenomena. His contemporary quantum theorist, Erwin Schrödinger called this 'entanglement' and first used the term in 1935.

Recent researches confirm 'entanglement' is a pervasive phenomenon. In a quantum world, two particles remain connected without any conventional communication, long after their initial interaction is over. Entanglement is not merely the correlation of certain observable physical parameters in the process of measurement but genuine interconnectedness and inseparableness of once interacting quantum entities. This instantaneous influence is often termed as 'non-locality' in popular parlance.

Whether quantum entanglement manifests itself macroscopically in the visible world? If so, can that influence chemical, biochemical and other physical processes? Whether the observations and anomalies that are marginalized in any study are caused by the entanglement phenomena? Can one explain the sensing of what is happening to our loved ones thousands of miles away as entanglement at a macro-level? Whether psychic phenomena like telepathy, clairvoyance, collective premonitions really exist? Why do most of us find that some of our lucid dreams come true? Postmodern science is at an early stage of engaging with the phenomena of entanglement. The idea of the universe as an interconnected whole is emerging as the new world view. The Eastern concept of 'reality' as an entanglement of purusha (universal consciousness) and prakriti (nature) appears to be much closer to understand Reality.

Holberg Prize for the year 2013 has been conferred to the French anthropologist and sociologist, Bruno Latour. Latour conducted an analysis and reinterpretation of modernity for last three decades and has destabilized the western notions. He has reinterpreted the distinction made between modern and pre-modern, nature and society, human and non-human. While conducting fieldwork in Brazil, he was captivated by unique phenomena. In the town of Boa Vista of the province of Raraima, the research team discovered a species of fire-resistant trees that usually grow only in the grassland (savanna). But, the tree of this same species was found along the edge of the Amazonian forest, where the forest meets the savanna. In the grassland, the tree is surrounded by small seedlings but at the edge of the forest, this does not shade any smaller plant. Some trees did grow ten metres into the forest, where they tended to die. What perplexed botanists were whether the forest was advancing or retreating? Whether the large tree on the edge of the forest may be counted as a scout sent by the forest as an advance guard, or perhaps a rear guard, sacrificed by the retreating forest to the merciless encroachment of the savanna? (*Latour, Pandora's Hope, 1999*). Do forest and grasslands think as a system? Is nature conscious? And if nature is conscious, does it possess agency?

The physicist David Bohm formulated an interpretation of quantum mechanics based on an understanding of the entire universe as an undivided whole. Bohm stipulated the presence of an informational field that does not carry energy at a subatomic level and necessitated a kind of intelligence on behalf of the particles such as

the electron. He even thought that the electrons were alive. If this is so, can we have a better understanding of the inter-connected world?

Emerging studies on the biosphere also provide evidence that our entire ecosystem acts as if it is intelligent. The earth is a living earth. It is the Gaia. We cannot understand the ecosystem without affecting a radical epistemological shift. Our collective dread about the doomsday in 2012 that originated with the claim that Nibiru, a supposed planet discovered by the Sumerians, is headed toward Earth was lampooned by the secularized class. On 15th February 2013, a small asteroid entered Earth's atmosphere over Russia that took astronomers by surprise and it exploded just a few miles above Chelyabinsk in Russia, saving a part of the earth from the catastrophe. The cosmos responded to our collective fantasies. There appears to be genuine inseparability of mind and cosmos as if all the entities, human and non-human, are woven into Indra's heavenly net.

Another significant shift is taking place in the type of organization. We are in a network society. The social media is part of our Reality. The twitter and Facebook mobilize people out of virtual space into physical space. A new ontology is emerging-cyberontology. The Colombian philosopher Rosa María Rodríguez Magda conceptualizes how the reference of this being is neither matter, nor the essence. It is the new structure of reality-Virtual Reality that acquires a noticeable presence, whose essence is the code, that is, the logos, the device whereby the intelligible world is sensible world without being material. The growth of new subjects like cyberpsychology, cybersociology amply demonstrates that we have entered into metaphysics of presence that no longer refer to the substantiality, but is revealed as an effective phenomenology of absence. Magda terms how it is the absence of materiality that counts in the digital Reality. Presence no longer is linked with the materiality. Rosa dreams of metaphysics of ciberontología in which science, mysticism and poetry become strange allies. She pits digital reason against Kantian critical reason to develop an emancipatory agenda in the new Integral Reality which has assumed the *"form of the sign that has been encoded, digitized, virtualized, without losing its force material"* .

What is required is to develop a new metaphysics, to push for a revolution in thinking itself. Thinking need not be merely binary and causal. A-causal thinking, synchronous thinking, correlative thinking, telescopic thinking, analogous thinking, chizimizing thinking, absurd thinking of Zen tradition, fuzzy thinking, kha-metic thinking (kha is the sunya, absolute emptiness in Indian tradition) that exposes vacuity of things; have been other modes of thinking. Sociologists are brooding over 'resonant thinking' to describe the recent popular uprisings in Tahrir, Taksim, Sol, Syntagma, Shahbagh, Zuccotti, and Ramlila ground. We do not need only instrumental reason to control and 'mirror' the nature. It is desirable to unleash an epic shift in elevating the communicative reason so that we seek permission from 'other-than-human' presences which might not be 'material and substantiated', for sharing their resources and domains. We will no longer feel abandoned in a populated universe. We need an integral thinking to make intelligible the interconnectedness of human and 'other-than-human' communities. India has been a powerhouse of philosophizing. It is time that our researchers and scholars take the lead to evolve an integral thinking which can provide bio-happiness to individuals, dharma guidance to the communities and social emancipation to the public. In this issue, we are publishing articles ranging from the ecological impact of dam construction in the Himalayas and the politics of the BRICS; critique of western philosophy and the poetry of G. Mend-Ooyo; study of oscillation of LASER beams and fractal geometry. This issue is a fusion of *'science, mysticism and poetry'* that reflects our zeal to promote integral thinking. I take this opportunity to acknowledge the support of the Mewar University, colleagues and the growing number of scholars who are sending us their work for widening the sphere of the journal. May this issue cause rush-hour of integral thinking among the readers!

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