Abstract

Mythmaking presents us with an idiosyncratic fusion of language and metaphysics so as to simply convey meaning as language does, and also communicate an entire metaphysics at a level of meaning beyond language and image. Claiming so, is to attest to the relevance of myths in the operationalization of ecological worldviews. In this paper, I will assume such an operational relationship between myths and ecological worldviews. First and foremost, our worldviews act as ‘first principles’ in establishing our interaction with our environment. At a time when anthropogenic ecocide presents a grave threat to the balance of life on earth, this fundamental notion is of great relevance. Specifically, this paper will study how myths mediated human interaction with nature in the past and continue to do so today. By comparing sets of myths of the Tukano Indians of the Amazon and Hindus of India, I will identify two functions of myth as mediator between man and nature.

Keywords

Tukano Mythology, Hindu Mythology (Pancabhutas and Samudra Manthan), Ecological Worldviews, Interpretation of Myths, Sustainability

1. Introduction

Our collective unconscious ties us all together in an unconscious web of instincts, intuitive epistemologies and the fundamental human condition. It remains after we are gone, almost like a fount of metaphysical memory, for others to resurrect our minds and impressions, even posthumously. Myths represent a dimension of this memory which convey imaginative, rational and metaphysical meaning all at once. Sontag calls myth ‘a first principle’ [1] – upon which metaphysical meaning depends. For him, myths have a penetrating power to reveal the inner life, which is to say, the metaphysical experiences of what would otherwise remain only a linguistic description. Language, as we use it everyday, is different from myth in that it often stops at the referential level of pointing to objects in existence. Myths on the other hand convey qualia of experience, truths of realizations and linguistic allegory all at once – or as Jung would say, simply the inner life. One might ask the question, what do myths really refer to? The simple answer to this question is ‘worldviews’ – sets of ideas, experiences, values expressed to someone else. Worldviews in the inner life don’t exist. They emerge with the need for exposition and description. In this paper, I wish to explore the function of myth wherein it facilitates the interaction between worldviews and our natural environment. In a sense, asserting that mythic worldviews determine our interaction with our natural environment is a somewhat
Myths act as mediator between man and his natural environment. They embody the emotional, rational and metaphysical dimensions of this relationship and communicate adaptive worldviews, ecological wisdom and even universal cosmologies. Moreover, they employ natural symbols to reflect the human itself, as in the case of the churning of the ocean myth. **This paper will illuminate these two functions of myth as it pertains to the human-nature and subject-object dynamic.** For the former, the case of the Tukano people of the Amazon as documented by Gerardo Reichel-Dolmatoff and the Pancabhutas in Hindu mythology will be considered and for the latter, the myth of the churning of the ocean from the *Mahabharata.*

2. **NATURE REFLECTING UPON HERSELF: COMPARISON BETWEEN TUKANO AND INDIAN [HINDU] COSMOLOGIES**

During the period of colonial modernity, the predominant image of the American-Indian tribes was that of a rather ‘primitive’, hostile and intellectually impoverished people, whose contribution to human thought was claimed to be negligible at best. It followed then, that the levels of complexity in their social structures was also non-existent. For the most part, one may attribute this notion to the quintessential narrative of modern colonialism which polarized most of its subjects as primitive and occasionally, mystical. Interestingly, the beginnings of modern anthropology, embodied by the likes of Edwin Tylor (1832 – 1917) and James Frazer (1854 – 1941) operated primarily on the basis of extensive reading, without much actual interaction with cultures outside their respective locales. After decolonization however, anthropology began to shed some of its colonial baggage and began to consider the possibility of a primitive ‘intellect’ outside of a post-Enlightenment framework of determining abstract rationality. American anthropology in particular, saw a flurry of anthropologists travelling to the Amazon and opening up to the native worldview.

Gerardo Reichel-Dolmatoff (1912 – 1994) was one such anthropologist—often considered to be the father of Colombian Anthropology—among others such as the American ethnobiologist, Richard Evans Schultes (1915 – 2001). His work in the Eastern Tukano region of North-West Amazon opened up the West to a new image of the native—“not only a highly pragmatic thinker and an individual with a sound sense of reality, but also as an abstract philosopher, a builder of intricate cosmic models and a planner of sweeping moral designs” [2]. Of particular interest to him were the ‘adaptive’ aspects of the *Tukano* Indian culture with respect to their thriving and often, highly demanding Amazonian environment. To identify the fount of their ‘adaptive’ strategies, he attempted to establish a connexion between the cosmological concepts – cosmologies, mythic structures and rituals – and the realities of adaptation to their environment – ecological principles and socio-economic norms. Of interest to us for the present purpose of this paper are his insights into how Tukano myths (cosmological concepts, more generally) relate to the natural environment and facilitate their interactions therein.

2.1. **Myth as a mediator of Ecological Interconnectedness**

The Tukano are bound to their rain forest habitat, which is surrounded by Colombian or Brazilian settlers and thus, have to rely upon their local resources. “Their traditional settlement patterns consist of widely scattered large and well-built communal houses, occupied by extended families.
They derive most of their food supplies primarily by cultivating manioc gardens, while seasonal hunting, fishing and gathering play a secondary role both as food and in economic relations” [2]. In the social, spiritual, medicinal and even economic spheres, ceremonies and rituals officiated by the shaman, play a pivotal role.

As for Tukano mythic structures, the creator was the Sun-Father, an anthropomorphic god who designed the three planes of existence - flat earth, a celestial vault and a place of bliss situated under the earth. He created plants and animals, both under the constant care of spirit-beings who were to guard and protect against eventual abuses. Further, he demarcated a limited, roughly circular, stretch of land and gave to each species, a set of rules to live and reproduce. We may note here, that the sun-father created a finite material reality for the Tukano. Their creation myth is localized to their community. In fact, in another mythic account, the Tukano are bound to the rain forest by an everlasting promise made to their ancestors, who had found it and gave its denizens appropriate designations [2]. Their role as caretaker and inhabitant of their habitat is thus, doubly emphasized. Further, the Sun-Father’s creation of the natural world is not told as having been completed. It is still in process and the Tukano are an active and formative part of it. The sun’s energy is equated with light and heat which is the creative energy for all life on earth, as well as spiritual illumination for the soul.

This circuit of energy is imagined as having a limited amount of energy which comes into the system and is constantly transformed into different forms. Thus, the myth puts forth the world as a cycle of conserved energy, where the amount of energy which enters is directly related to that which is put out. The system encompasses the entire universe and the Tukano are an active part of it. The energy circuit sits in a balance, which must not be disturbed. As human beings, the Tukano recognize their potential to disturb this balance. The operational consequence of this cosmological balance is manifested in the social and economic organization of the group. Operationally, it becomes a religious duty to ensure that the balance of Sun-Father’s energy is not disturbed. To ensure that the balance is maintained, the Tukano make efforts to return any energy they consume in any form. Curating extensive knowledge about their ecosystem becomes a religious observance [2].

Thus, the Tukano constantly build on an old tradition of learning about their ecosystem in an attempt to learn adaptive strategies. They understand the animal and plant kingdoms around them very well – parasitism, symbiosis, commensalism and other relationships among species are well known to them and often provide a source to learn new adaptive strategies. In fact, Shamanistic wisdom often contains descriptions of exchange with plants and animals which often teach unexpected food sources, cures for illnesses or solutions to everyday problems. At the same time, maladaptive strategies in myths are portrayed as receiving punitive treatment – gluttony, improvidence, aggressiveness and all forms of overindulgence. In this manner, the universal system of energy conflates upon the societal level and further, to the individual’s everyday life.

Dolmatoff notes the manifestation of this social charter playing out in social customs as concerns the birth rate, the harvest rate and socially disruptive behaviour [2] – all elements which contribute to maintaining the natural balance. As for population control, the Tukano rely on two adaptive strategies – herbal contraceptives and abstinence (which forms a requirement for most ritual ceremonies, including hunting for food). In fact, sexual appetite is related to caloric intake. For instance, when it comes to hunting, the Tukano must ritually seek the permission of the Master of Animals – a dwarf-like phallic spirit-being – through rituals requiring abstinence. Often the shaman ritually becomes the mediator between the Master of Animals and his society in
maintaining a balance between the population of game animals and the hunting habits of his tribe. Similar ritual measures are taken to restrict the harvesting and gathering of wild fruits, nuts, honey, and insects for food as well as for manufacturing or technological purposes. Further, socially disruptive behaviour is checked through the mechanism of organized exogamic groups which exchange with each other women, food, raw materials etc., often through ritualised dances and ceremonies. Clearly, there is an overt ecological dimension to these measures which may be seen as adaptive strategies to maintain the mythic balance.

Another mechanism is the Tukano theory of disease and illness, according to which the revenge of game animals, the ill-will of other people and the malevolence of supernatural beings such as the Master of animals are the primary external sources of disease.

The myth and ritual based adaptive strategies have an overt religious meaning to the Tukano and an ecological relevance on a wider scale. The Shamans are often outrightly aware of their role as an economic and ecological mediator. Thus, the socio-economic as well as ethical operational frameworks of the Tukano derive substantially from their mythic cosmology, the central concern of which remains exploring the ecosystem for adaptive strategies. The myths and rituals prescribe a socio-economic model of constraint of consumption patterns and even prescribe the moral order. In light of this, one might see the relevance of Malinowski’s functionalist framework of the social charter [3]. Myths in the case of the Tukano do indeed provide a social charter. However, for Malinowski the functionality of myths was primarily aimed at perpetuating the order of the ruling class. In this case, the Shamans, as mediator between humans and the spirit world would form the exploitative priestly class whose social charter is justified. However, deriving this conclusion would be missing the point.

The adaptive strategies mentioned are based on a religious reverence for the natural world, living in balance with which requires conscious effort. Eliade’s ideas on religion and myth are better suited in this context. To begin with, Eliade identifies hierophany – a manifestation of the sacred – which bequeaths a sacred order and structure to the world, as the core of religious belief. Sacred space is that space where the sacred manifests. Further, Eliade interprets rituals as being gateways of eternal return to the primordial, sacred time wherein the people undergoing the ritual actually participate in the act of sacred manifestation [4]. The Tukano practice their task of maintaining the balance of energy with religious fervour. Spirit-beings exist in all forms of life. This, combined with the fact that their connection to the rain forest is envisioned as a sacred lineage allude to the hierophany which makes their ecosystem a sacred space. Further, the Tukano ritually participate in ceremonies, often centred on the plant spirit that they revere the most – Ayahuasca – to recreate and renew the world to re-establish its order [2]. To ensure the continuation of sacred time – that is time of the original balance which was created at the moment of origin by the Sun Father – they ritually participate in its re-creation and re-newal. It must be noted here, that creation is not complete, but an ongoing process. Thus, the concept of sacred time and space apply even to the daily lives of the Tukano.

Eliade’s ideas interpret the Tukano cosmology in line with Dolmatoff’s observations of what it means to the tribals. However, we may add another dimension. Their myths and rituals ensure the cyclical maintenance of bio-rhythms of the ecosystem around them. In this respect, myth functions as a source of adaptive strategies and ecological wisdom, and places the Tukano in the midst of the ongoing process of creation. To the Tukano, their ecosystem is their only source of socio-economic livelihood as well as their spiritual and ecological teacher. With this worldview, they are able to maintain the delicate balance of an ecotone as complex as the Amazon, and are
also able to keep a check on their patterns of consumption – a feat utterly lacking in the global world, where material consumption is thought to be without any consequence.

In 1977, an inter-governmental conference on Environmental education held in Georgia began with the following declaration, which rings true to this day:

*In the last few decades man has, through his power to transform his environment, wrought accelerated changes in the balance of nature. The result is frequent exposure of living species to dangers which may prove irreversible.*

What is perhaps lacking is a cosmology which marries all dimensions of life – biological, physical, psychical, philosophical, metaphysical and spiritual – and in doing so, places the human being at the centre of the continuous process of cyclic degeneration and regeneration of life. The Natural Sciences provide a cosmology with the cosmos as a distinct, often lifeless *object* of study. It relinquishes any role of the individual consciousness in the cosmos and thus, perceives it as being a separate entity altogether, almost as if man existed outside of nature. Kapila Vatsyayan’s inquiry is very similar to that of Dolmatoff’s, albeit in the context of the *pancabhutas* in Hinduism. She too wonders at the decrepit ecological worldview of the modern world and asks “what are the diverse components of the disturbance, the ecological imbalances and what methodologies and strategies were adopted in the past to sustain these balances?” [5]

Interestingly, for her too, the essential core of myths is “the sustenance of the ecological balance, which to her was the human being’s first and last duty, for only then the moral order of the world [Rta (cosmic moral order)] as also Dharma would be sustained” [5].

To begin with, the human being is envisioned as a *jiva* – one among all living matter whose life depends upon all that surrounds and sustains him. The *jiva* is at once the microcosm and the macrocosm. What he is by himself is what he is as the whole. In fact, as a part of the whole, he is in eternal anguish and fails to see any semblance of belonging. He sees belonging in things bigger than himself – social groups, movements, designations, professions and so on. The ‘biggest’ of all is the whole, the macrocosm itself. Thus, just as the *pancabhutas* – water, earth, air, space and fire - make up the Universe (the macrocosm), they also make up the jiva (the microcosm). In other words, the elements of creation are the *jiva* just as much as they are *prakriti* (creation) itself.

The first element, water is the principle of fertility and life. The Vedas tell many hymns of water, or of Varuna, the god of the waters.

*This earth is King Varuna’s as also this great far-flung sky: the two seas are his belly (appetite); at the same time he is hidden in this little water. Even we who may cross the sky will not escape King Varuna; from heaven his spies are patrolling this earth with a thousand eyes; they scan through the earth. King Varuna sees all that is between heaven and earth and that which is beyond (them) - Atharva Veda (IV. 16).*

The Vedic poet here, is referring to an eternally known natural phenomenon of the primeval waters rising as vapour (as spies) in the sky only to descend again to Earth [5]. In the Hindu worldview, as with many other pre-modern worldviews, water is the primordial element whence life spawns. In the myth of the horizontally floating golden egg, Visnu or Brahma is lying upon an undulating serpent which represents the primordial ocean or *pralaya*. The *banalinga* from the Narmada and the *shalagramas* (ammonite fossils from the mountains) act as symbols of creation from water and solar energy and embody this myth [5]. In a cyclical continuum, the waters and the stones reflect the constant creative and destructive processes of existence.
Myths about the rivers too abound Hindu mythology. For instance, Ganga – often personified as a mermaid descending from heaven – represents the drop of water from the celestial heavens which fills the ocean (sagara). There are multiple myths attributed to Ganga. In one version, Agastya swallows the entire ocean. Although he meant well as he wanted to expose the demons hiding in the sea, his swallowing deprived the earth and all beings of the necessary life-sustaining water. Sage Bhagiratha undertook the task of bringing Ganga back to earth. After performing great austerities and tapas he received a boon from Brahma in response to which, Bhagiratha asked for Ganga to descend back to earth. Brahma agreed but claimed that only Siva can break the fall of the mighty Ganga. So, Bhagiratha performed more tapas until Siva finally appeared and allowed Ganga to flow through the forest of his jatas.

The ecological overtones of the myth are as clear as the physical reality of the course of the Ganga; its origin in the Himalayas, whether mythically Kailash or actually Gomukha or Gangotri, the Vasudhara falls and the rich Deodar forests through which it meanders, the several streams into which it breaks before reaching Haridvara (literally the entrance [dvara] to Siva [Hari]) [5]. The myth extols firstly, the ecological process through which the Ganga sustains life on earth and secondly, the power of austere discipline to uphold the moral and ecological order and not to destroy it. Further, the waters are interconnected with the life that emerges from it – for instance, the symbolisms associated with the lotus (representing fecundity, abundance and well-being) and the serpent (the first species to come out of the waters), which represents undifferentiated creation and interconnection.

This mythological worldview understands the waters as both the source and a part of creation. Through an intricate system of symbolisms, the myths marry the human imagination with the ecological interconnectedness of water with all the species of life that it is surrounded by. Similarly, as this is the case with water, so it is with the other elements (bhutas). Earth (Prithvi), the mother earth, is venerated in symbols pertaining to the millions of species of trees that she sustains, which are in turn allegorically equated with rasas and bhavas in the human psyche; Air (Vayu) as the pure breath of life (prana), pivotal to the jiva’s material and spiritual sustenance; Sky (Akasa) as the giver of rain and thunder, Indra’s abode; and finally, fire (Agni), the principle of light, creative energy and spiritual illumination. In the Vedas, as well as in later texts, each element is endowed with a series of myths, personified as divine beings and accompanied with elaborate rituals.

In fact, the ecological dimensions of Hindu myths may be seen even without much analysis. All the gods in the pantheon are accompanied by animal vahanas – Siva with Nandi the bull, Visnu with Garuda and Brahma with a swan or a goose. Even other Hindu gods have vahanas and in some cases, are in zoomorphic or theriomorphic forms – Hanuman and Ganesa being the most popular examples. Visnu’s dasavataraas too evolve from the zoomorphic to the anthropomorphic. The iconography of Hindu gods too may be interpreted through ecological analysis. For instance, the dance of Siva (Tandava) may be interpreted so – His emblems are Agni and deer; his locks, the forest; Ganga flows from his jatas; the sun and moon adorn his hair; snakes adorn his neck and he plays the cosmic rhythm of creation and destruction on his damru as he dances atop the embodiment of ignorance – apasmara purusa. While he is the embodiment of undifferentiated consciousness, his consort is Shakti – the manifested energy which sustains the material universe, the ‘atmanized’ ripples in the undifferentiated ocean.

Here, a remarkable similarity may be noted between Tukano and Indian Cosmology – both perceive the world around them as hierophant manifestations. For the Tukano, this perception rests in maintaining the balance of energy in their ecosystem. For the Hindus, God exists in
everything, without exception – plants, animals, insects, stones, etc. Both their mythologies extol adaptive strategies which place the human being in the larger web of ecological sustainability. As a *jiva*, the Hindu worldview sees everything embodied in the individual, which is to say, that as the elements exemplify divinity in cosmic creation, they also embody the human form. In both cases, their worldviews are operationalized in rituals and ceremonies – in the maintenance of ecological balance for the Tukano and in the numerous rituals in the Vedas and the numerous harvest festivals, which participate (in an Eliedian *sacred* space) in the principles of creation, such as *Makar Sankranti, Pongal* etc. **Thus, in both cases the dynamic between man and nature is mediated by myths as an ecological system of interconnected existence.**

### 2.2. Myths Reflecting Microcosm and Macrocosm

Another Indian myth wherein ecological motifs act as the symbolic language, is that of the Churning of the Ocean [*samudra manthan*]. The main elements in the myth are Mt. Mandara, the serpent Vasuki who forms the rope for the churning, the gods and demons, the tortoise who forms the base, the *amrit* (elixir of immortality) and the poison swallowed by Siva. Let us begin with the importance of Mt. Mandara in the myth. Mt. Mandara is both ecologically and psychologically important. “Its height and it being equated with the centre of the cosmos, naturally led to other correspondences. First, the cosmic tree, then the straight column - the *yupa* of the *yajna*, and ultimately the building of temples, stupas and even masjids in India [5]. One of Eliade’s foremost ideas which have become axiomatic today, is his hierophantic interpretation of *axis mundi* (Cosmic centre). The axis mundi acts as a separation of the sacred from the profane; that is, the hierophantic space which gives a sacred point of reference to the individual, from the orderless and indeed meaningless profane space, which has no centre or fixed point.

*In the homogeneous and infinite expanse, in which no point of reference is possible and hence no orientation is established, the hierophany reveals an absolute fixed point, a centre [4].*

Thus, the *axis mundi* refers to the sacred and spiritual centre of the individual’s experiential universe, not the geographic one. In a sacred space, the individual not only commemorates but also participates in hierophany. Thus, in this ‘Eliedian’ sense, *Mt. Mandara* may be equated with the axis mundi. In a yogic worldview, the centre of the Universe for the experiential observer is represented by the spine [7]. Thus, the spine too, may be equated with the *axis mundi*. In the simultaneous ecological and individual imagery of the myth, the microcosm and the macrocosm are conflated. In this sense, it is really the spirit that is being churned to scale the heights of the spine in *samudra manthan*. The turtle, the Kurma avatar of Visnu according to some myths, represents the preservative force which upholds existence. The gods and demons pulling on the serpent, in this scenario represent the ‘psychic’ demons and gods – as in psychical states of mind of good and evil dispositions - that the individual must navigate through to reach the *amrit* – the elixir of immortality. Immorality in this context, does not quite mean physical immortality, but a spiritual immortality exemplified in liberation from the cycle of birth and re-births. South Indian *kurmasanas*, wooden seats a metre across, represent this conflation of ecological features in the myth and psycho-anatomical features within the human body graphically when a holy man sits on top to meditate in the course of yoga, attempting to navigate his energy up the spine [6].

In the *samudra manthan*, the dynamic between man and nature is somewhat different from the dynamic painted in the first function (of mediating ecological interconnectedness) discussed in this paper. In the conflation of natural imagery with the interiors of the human psyche, the myth
does achieve this objective too. However, I wish to bring attention to another function exemplified in this myth - this conflation also places the jiva as the cosmos itself. It dispels the common abstract fallacy of ‘human and nature’ and instead, points to a fascinating truth of existence - that the human being is not separate from nature, but is in fact, nature reflecting upon herself through the gift of consciousness. The semantic construction of myth in this regard is poetic, ecological and metaphysical at the same time. Through the accommodation of these three dimensions of language, the myth alludes to the goal of the process of self-realization – just as the myth conflates the cosmos with the jiva, so too should the sadhaka - as realization or liberation is nothing but the dispelling of the illusion of separation between subject and object. Thus, in this mediatory function of myth, man and nature are united as reflections of each other. This feature of myth may be observed even in the case of the Tukano cosmology. For the Tukano too, the universal macrocosm is indispensably connected to the microcosm of the individual’s ecosystem and further, to the individual itself as the duty of maintaining the creative balance of father-sun’s energy becomes an individual responsibility. Both cultures, thousands of miles apart, show an affinity for this idea through their respective mythologies.

3. CAUSE-EFFECT AND SUSTAINABILITY

At the intersection of mythology and ecology, we are now in a better position to judge the worldviews of the mythmaking Tukano and Hindu. The picture we get is that first, both of them illustrate a profound realization of ecological interconnectedness and the active role of the human being in it. This realization was in part derived from a hierophantic worldview of the natural world. In addition, they kept their patterns of consumption in check, almost as a religious duty. A divine reverence for the natural world meant that maintaining ecological balance and constantly evolving adaptive strategies were integral parts of spiritual development, of getting closer to God. Second, both the Tukano and the Hindu saw the universal and the individual as conflated levels of the same reality. In other words, they saw individual spiritual development in dissolving the subject-object binary. Compounding these two features of their worldviews, one may see their intuitive understanding of cause and effect: intuitive because it was built into their very way of life.

Judging from the complete lack of acknowledgement of the human being’s active and formative place in the ecological balance of the planet in modern and post-modern times, the present understanding of cause and effect is seen as a linear principle that is 'unidirectional’. That is to say, that it is a process/phenomenon, wherein one thing literally leads to another and so on and so forth. This unidirectional understanding of phenomena isolates a piece of reality as if it existed in the cognitive landscape of intellectual construction. Let us consider here, that the primary function of intellectual abstraction is indeed to isolate our cognitive illusion of reality from the ‘unapprehensible’ organic flux of nature. Thus, the present understanding of cause-effect remains at the level of abstraction, not translatable into the true nature of organic reality.

Such a conception of cause and effect is inherently inhospitable to the notion of sustainability. It must be noted here that sustainability is first and foremost, an epistemological attempt at trying to apprehend the organic fluxes of nature into an intellectual model of interconnections and co-existence. Every moment builds on the previous one and into the next. Every phenomenon is a 'sustained’ flux in the play of nature. Cause and Effect, as we know it, does not lend itself to describing this 'sustained’ nature of reality, but instead breaks it down into isolated intellectual events, as if they could exist in some vacuum. It lends itself to the same fallacy that reductionism does; believing in a reducible reality separate from the real world.
If human understanding of causality remains bound to the realm of cognitive ‘untruths’, then how can we ever begin to arrive at truth? It appears that the definitive reason why human cognitive mindscapes appear to delude us is that they are separated from the very reality that they attempt to apprehend. One may only understand or apprehend something that he or she IS not. In other words, the assumption that modernity works with is that the human and the natural world stand at a perceivable distance from each other. Now one might ask, what is it or rather, who is it that is separated and from whom? Both the Tukano and the Hindu myths answer this question by conflating the microcosm and the macrocosm. In doing so, they dissolve the subject-object binary as well as the perceived distance between human and nature. They do this, not through intellectual gymnastics, but through hierophany and poetic mythmaking.

What modernity refers to as sustainability is an attempt to account for the interconnected-ness of ecosystems, natural cycles of the planet and in general, of all life in the Universe. From a disposition of purely intellectual planning, it is perhaps impossible for even a supercomputer to analyze all these interconnections - though systems theory is attempting exactly this. However, this intellectual modelling approach is warranted only as long as an axiomatic distinction between human nature and nature herself is maintained. In this case, actions cause an effect externally, to an outside entity. As explained earlier, the myths referred to in this paper overcome this predicament through intuition rather than purely intellectual modelling. Without the veil of separation (that is with the conflation of micro- and macro-), as in the case of those myths, it follows that both the cause and effect are self-contained, almost like mirror reflections. If cause-effect are seen intuitively as self-contained, it is a way of being that is cultivated, not a way of thinking. In essence, the Tukano and the Hindu myths paint the human being as both the subject and the object of his actions. Hierophany is at the heart of this way of being.

4. CONCLUSION

Through the course of this paper, two functions of myth as mediator between man and nature have been illuminated. First, the myths of both Tukano and Indian cultures reveal ecologically adaptive strategies and worldviews of interrelated co-existence. Second, both sets of myth conflate the microcosm and the macrocosm in an ingenious interplay between the imaginative, rational and metaphysical dimensions of human experience and human language. The commonality of these two functions of myth in these two distinct cultures alludes to the similar way in which they perceived the cosmos and consequently, the human condition – the cosmos is energy in eternal creation, a divine gift; the human being is the caretaker of this gift, forever striving to be an active part of it. Additionally, in both cases, this similar cosmological worldview translated into an operational worldview which saw ‘sustainability’ as a logical consequence of the human condition.
Table 1: Summary of the Comparison between Tukano and Hindu myths in the two ecological functions considered in this paper

<table>
<thead>
<tr>
<th>Function of Myth</th>
<th>Tukano</th>
<th>Hindu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Myths and Ecological Interconnectedness</strong></td>
<td><strong>Cosmological Principle</strong></td>
<td>The Cosmos is an interplay between Universal Consciousness and Creative Energy.</td>
</tr>
<tr>
<td></td>
<td>The Cosmos is a delicate balance of Sun-Father’s energy – of creation in progress.</td>
<td></td>
</tr>
<tr>
<td><strong>Place of Humans</strong></td>
<td>The Human Being is central to and a formative part of the process of creation.</td>
<td>The Human being is one among countless jivas – living beings. The microcosm of the jiva is not just central to the creation process, but is conflated with whole macrocosm itself.</td>
</tr>
<tr>
<td><strong>Operationalization of Cosmological Worldview into Ecological Worldview</strong></td>
<td>Socio-Economic Adaptive Strategies condone co-existence and condemn overindulgence and unsustainable consumption. This is based on a religious duty to maintain energetic balance.</td>
<td>Hierophantic view of all of creation. Natural forces are commemorated, communed with and revered as divine beings. Austerity and overcoming material desires is prescribed as the path towards salvation.</td>
</tr>
<tr>
<td><strong>2. Myths Conflating Microcosm and Macrocosm</strong></td>
<td><strong>Conflation</strong></td>
<td>Through imaginative use of mythic language.</td>
</tr>
<tr>
<td></td>
<td>Through levels of societal organization based on father-sun cosmology. The Tukano attempts to work in harmony with the ongoing process of creation.</td>
<td>Knowing the self is equated with knowing the universal.</td>
</tr>
</tbody>
</table>
The purpose of attempting a comparison between these two cosmologies may largely be seen in undoing the colonial assumptions about the uselessness and ‘primitivism’ of tribal and ancient cultures in an ecological context. However, the pursuit has also brought forth highly relevant insights in context with the present post-modern moment in human history.

First, there is remarkable similarity between the modern integrated systems approach of studying human beings and their environment as exposited by the likes of Fritjof Capra [8]. The integrated systems approach, largely influenced by Eastern philosophy - especially Daoist philosophy – proposes an entirely different worldview from the Cartesian worldview of man as separated from everything around him. This worldview has formed the core of the natural sciences since the Age of Reason in Europe. It proposes that to truly study nature, one must view her as an alive system of profound interconnectivity, where nothing exists in isolation. Both Tukano and Indian myths show an affinity for this view, both in their use of the different levels of language and symbolic content. The relevance of this view is first and foremost epistemological and metaphysical, in that conceptually, it completely transforms the dominant worldview through which the human being is taught to view the world around him/her. Further, its most overt relevance is seen in the consequences of its negligence – the ecological crisis which faces us today. What the worldview of Tukano teaches post-modern civilisation is that to adapt to natural environs, even as demanding as the Amazon, a conscious effort to learn about the interconnectedness of the natural system is imperative. The primary culprit in the impending anthropogenic ecological crisis is the unrestrained, unintelligible consumption and exploitation of natural resources. The Tukano’s adaptive strategies correct just that. In the absence of an interconnected cosmology of human and nature, these strategies are lifeless policies, where consumption is a cause with only external effect.

Second, the similarities between the mythic structures of the Tukano and Indian myths are remarkable. If a universal condition of the mythic human mind is to be found, it must be in their facilitation of the dynamic between human and nature. If the functionalist model stepped out of the knowledge-power formula, and approached from a perspective of ecological analysis, it would perhaps also arrive at the same conclusion.

Finally, the last insight has to do with the universal human condition. Inextricably linked with the interconnected universe that we live in is this fundamental issue which acts as a point of departure for the eternal human pursuit of meaning. The myths considered in this paper convey clues to answering this question. The search for meaning is a pursuit of finding one’s place in the cosmos. Denizens of global culture are taught from an early age that human beings exist separate from nature. In that, they arrive at a warped definition of nature without humans in it. In the second function of myth highlighted in this paper - the conflation of the microcosm and the macrocosm - myths tell us that perhaps the journey to find ‘meaning’ is to find ourselves ‘within’ nature; to find oneself as nature herself. This is a fundamental, undeniable reality of existence – that we are indeed nature reflecting on herself. This idea however, while it remains just an idea, has little consequence in humanity’s violent relationship with her. Its realization however, is far more profound as it is seen in its operationalization in the myths of the Tukano and the Hindus.

Acknowledgements

The author would like to thank Prof. Viraj Shah of FLAME University, Pune for guiding him through the ideation and execution of this work.
REFERENCES


