

Evolution of Indian Civilization and Creativity

- seen through the Myth of an Aryan Invasion that never was!

Indian Institute of Technology Kharagpur

The Science & Heritage Initiative



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ISBN: 978-93-80813-71-4

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Evolution of Indian Civilization and Creativity, IIT Kharagpur
Published in May 2019
www.iitkgpsandhi.org

Designed & Printed by

Cygnus Advertising (India) Pvt. Ltd.
Bengal Eco Intelligent Park, Tower-1, 13-F1,
Unit 29, Block EM-3, Sec-V, Saltlake
Kolkata, West Bengal 700091
www.cygnusadvertising.in

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Content

5

EVOLUTION OF THE INDIAN ESSENCE OF
CREATIVITY

The Aryan Invasion that never was!
Evidences: [part 1](#)

7

16

The Aryan Invasion that never was!
Evidences: [part 2](#)

The Aryan Invasion that never was!
Evidences: [part 3](#)

22

103

The Aryan Invasion that never was!
Evidences: [part 4](#)

The Aryan Invasion that never was!
Evidences: [part 5](#)

113

193

The Aryan Invasion that never was!
Evidences: [part 6](#)

Committee

223

EVOLUTION OF THE INDIAN ESSENCE OF CREATIVITY

- Based on the re-interpretation of the Aryan Invasion Myth, which never was!

'...In the Beginning, there is the word. The Word is with God. And the Word is God'.

The Gospel of Saint John

New Testament

There must be some unity of language to serve as a medium of mental exchange. Through church or family, or school or otherwise there must be a unifying moral code, some rules of the game of life acknowledged even by those who violate them, and giving to conduct some order and regularity, some direction and stimulus.

Perhaps there must also be some unity of basic belief, some faith, supernatural or utopian that lifts morality from calculation to devotion, and gives life nobility and significance despite our mortal brevity. And there must be some toleration, some technique however primitive, for the transmission of cultures.

Will Durant

The Story of Civilization

INVOCATION

The present book forwards the linguistic and etymological foundations of the language of the Vedas – which is 'Sanskrit' and traces its contributory linkages with the development of global language systems. The contributions are made evident on the basis of semantics (behavioral systems of language systems) and etymology (philological and articulation systems). If the evidences are true then this particular contribution of India to the world can stand second to her greatest and the first one, which is spirituality and religion. In that process, it also re-discovers the true of creativity, whose origins are in the divine, yet they are material manifest.

Language system is based on the convergence of thoughts and the final idea, around which words and patterns of language are formed. Thought (or idea) and the expressions (or articulated vocal forms) are synonymous and essentially the same. In Indian spiritual wisdom, Sages time and again have realized the whole universe and its manifold expressions as great 'Words' and these they have called the Godheads. Finally the different words have been realized as 'ONE' – the Word realized as the supreme God of all Gods. This they called '*para-*

Vak’ or the supreme divine WORD.

The system of ancient Sanskrit, which had evolved out of this realization, was elaborated as a derivative of this one divine ‘Word’ and its further descendants as expression of vowels and consonants. With the inclusion of the syllable and the depth of articulation, the language of the Vedas evolved as the richest and penetrating language holding the key to the universal wisdom and also the understanding of everything in detail. This was the ‘oral’ tradition maintained by high-end mnemonic (memory-based) systems underlying a complete layer and hierarchy of human consciousness called the ‘*srutis*’.

The vibrations within a realized human mind therefore represented the vibrations of the universe. Different combinations of ‘wind’ (Vayu or Life energy) and ‘water’ (form) configured the different pillars of sound like varying vibrating columns of a reed instrument. Ancient Milesian philosophers and their immediate Ionian descendents had in all probability inherited this great wisdom from a very ancient Indian source and the same was probably true for China on the eastern front. Thus ‘Sanskrit’ began to form the upper crown (in breadth) and the root (in depth) of an ever-enlarging tree of global language system.

Today times have changed and a plethora of world language system is highly compounded with other complexities of creed, culture, ethnicity and material utilities. A current state-of-the-world questions the primordial role, need and current relevance of ‘Sanskrit’ and feels apprehensive about the further requirement of an ‘Indo-European’ tree, whether it actually existed! The issue of a universal language, if any, is also questionable! Is it really required, if there is one? Section one raises this question and provides the most likely answers.

Given these answers, section two forwards a more challenging research premise around the ‘Indo-European’ foundation and brings to light a ‘comparative inquiry’ of this foundation based on art-archaeological-folk-mythological evidences. Recent language researches have converged to ancient Anatolia of around 7000 B.C as a probable cradle of the first ‘Indo-European order’. If that is true, then what exactly was that order? Can we trace evidences of Indian spiritual semantics and etymology in that? Let us find out.....

The Aryan Invasion that never was!

Evidences: part 1

Section one: the first research clues

The scholars of Penguin Dictionary of Religions¹ have noted that probably 7000 years back or even earlier there was a common cultural stock of people in Eastern Europe and Western Asia and from that time they as different groups migrated in different directions. Of them, one major branch traveled east and eventually settled in the Indian sub-continent and composed the richest and earliest oral traditions (*Shrutis*) of the world, which over time was preserved as documents called the Vedas and in another part called the Avesta in Persia (ancient Iran). This has led to the common term ‘the Indo-Iranians’ or broadly or loosely the term – the ‘Indo-Europeans’!

Some other Indo-European group called the Tocharian traveled further east in regions beyond Mongolia. Other Indo-European groups moved to Anatolia and then to Greece, the Italian peninsula. Others moved towards Iberia (Spain and France), Scandinavia and even as far as distant Ireland.

Universal words like ‘mother’, ‘father’ and ‘brother’ were seen as derivatives of ‘*matri*’, ‘*pitri*’ and ‘*bhatri*’ from Sanskrit. Other important numerological words like penta, sexta, septa, octa, nona and decimal were respectively from Sanskrit forms of ‘*pancha*’, ‘*satha*’, ‘*sapta*’, ‘*ashta*’, ‘*navam*’ and ‘*dasam*’. Like these hundreds and thousands were traced and linked. A new world order, though still controversial, opened up. Certainties or uncertainties of a common origin of human race and purpose are now wide open to fresh polemics!

Thus existence of parent groups of languages i.e. Sanskrit, Greek and Latin; parent group of ritualism i.e. veneration of fire and natural symbolisms; and a common tri-partite or fourfold social ideology i.e. society seen in forms of 1) a priestly and sagely class, 2) a warrior class and 3a and 3b) the productive and service classes (propounded by scholars like George Dumézil² and his followers) started to strengthen a hypothesis: a possible common foundation of Indo-Europeans. Is this true?

Other researches – similarities between Sanskrit and Greek

Researches have observed that the earliest surviving form of Sanskrit, that of the Vedas bears about the same relation to the classical tongue as does Homeric to classical Greek. The verb is of great complexity rivaling Greek. Another striking feature of Vedic Sanskrit is the tonic accent and every important word had an accented syllable, which was not necessarily stressed, but on which the voice raised in pitch, as in classical Greek. The tonic accent of Sanskrit, with some minor exceptions, is almost the same as in old Greek language systems³.

Since the discovery of different Indo-European languages ranging from the Indo-Iranian, the east Asian Tocharian, the east European Slavonic and Armenian, the south European archaic Greek and Romance (Italic), the north European Germanic, Baltic and Celtic and the Anatolian Hittite, the scholars of language systems have faced major linguistic and cultural controversies in confirming the direction of linkages and dissemination. Some major questions have emerged:

¹ Page 163 on ‘Indo-Europeans’ (1984) edited by John R. Hinnells, Penguin Books.

²² His first book was in 1935: *Flamen: Brahman* (Paris); his second book on the Tripartite ideology (Bruxelles, 1958); and his third book on ‘Indo-European Myth’ (Gallimard, 1968).

³ Notes taken from Page 388-389, Chapter IX of ‘The Wonder that was India’ (1989) by A. L. Basham, Rupa & Co.

- Which is the mother stock from where the people of Europe and Asia have descended?
- Second, do most of the modern European languages derive their source from a single Indo-European origin?
- Third, given any answers to the two above questions, how can the role of the early language carriers be historically accommodated to explain language migration? Particularly the following:
- Evidences of trade linkages between settlements of Indus valley, Mesopotamia and the ancient Mediterranean (from times unknown - 2500 BC)
- The presence of Hittites and Mittanis (Ancient Near east –Assyria to Anatolia) venerating some form of Vedic lore and natural Vedic deities (1700 –1400 BC)
- The earliest marine carriers called the Phoenicians from the Persian Gulf (even earlier to / from 3000 BC – 500 BC) and them introducing phonetics to Eastern Europe and northern Africa. Who were they?
- The land carriers called Gypsies [probably from India] (even earlier to / from 500 BC – 500 AD) and their impacts on languages.
- The Moors of Arabia (1100 AD onwards to Iberia) who further brought in Persian language and culture into Western Europe during the dark ages.

A common station point – recent researches

Professor Colin Renfrew of Cambridge University in his recent book named ‘Archaeology and Language: The Puzzle of Indo-European Language’ (Penguin, 1987) have stationed the search among the first settled farmers of Anatolia. As a probable period he arrives as early as 7000 B.C and further proposes that the whole family of new languages probably evolved from that point in history.

His research is exhaustive involving his own works in relation to that of other 100 reputed scholars from all over the world. In conclusion, he points out a further dissipation of language from Asia (Anatolia) to Europe at around 6000 B.C.

In our present discussion we forward professor Renfrew’s research pointer at an ancient station point in Anatolia leading to the genesis of Indo-European culture. He also provides a vital research clue of a continuity of the farming community from Anatolia to Indus valley on the one hand and the Eastern European regions around Danube (Ishter) valley on the other hand.

The Anatolian connection – Indo-European evidences

The present discussion suggests some research clues based on available evidences and they are in conformity to Renfrew’s overall recommendations.

These evidences goes a little beyond to propose a probable extension of India’s ancient religious, socio-cultural and economic base up to the Asian shores of the eastern Mediterranean. Several research clues can be highlighted augmenting this probability. Here are a few of them:

Unity of Sura and Ashura: Striking art-archaeological-linguistic evidences of Indo-European myths and associated Godheads had been discovered with the original inhabitants called the Hittites⁴ of Antalya (Anatolia), Mittanis of Syria and Kassites of lower Sumeria. The prominent names of *Indra* (the sky God of Thunder), *Varuna* (The sea and rain God), *Nasatiya* (the twin Gods or horse riders Dioskouris) and *Mithra* (Sun-God) were found amongst them. Of all, the name *Mithra* is probably the most important for understanding the impact and gravity of Indo-European religious and cultural disseminations. The worship of Mithras was a powerful and all-pervading one before the advent of Christianity in Europe⁵. Its worship probably extended much earlier through the breadth and expanse of the Persian Empire. This was as early as 700 B.C or even earlier facilitated by the great times of Emperor Kurus (Cyrus) and Darayuush (Darius). They had disseminated the knowledge of the Vedic ‘Ashur Mitra Varuna’ and the Atharvan priests (later called Magi) right up to the Mediterranean Europe and beyond.

The epi-center of that dissemination was the city of ‘Ashur’ and the legacy was that of Assyrian empire, after the name of that city. In ancient Vedic wisdom the true meaning of Ashur⁶ was a divine agent descending from spirit to matter being opposite but complimentary to a ‘Sura’ (or a Deva) who is an ascending one moving from matter to spirit.

In later times, this body of unified knowledge was disrupted and lost. That perhaps led to the separation of India and Persia spiritually, socially and culturally. Such separations and future schisms had led to further divisions and compounding of subsequent religious developments in the lands further west of Persia. It is mentioned early in the Book of Genesis (11.2), Old Testament that the first group of settlers came from the ‘eastern Hill countries’ and they settled in the land further west known as the land between the two rivers (Mesopotamia). The ancient archaeological evidences⁷ of the Old Testament has traced the name of three Indian rivers ‘Kaberi’, ‘Jamuna’ and ‘Gangai’ in lands stretching from Sumerian plains to that of Anatolia. A much later festival of Arabia that even today celebrates a day of voluntary fast and commemorates its mood through the historic battle of Karbala called the day of the ‘Ashur’⁸.

⁴ Refer Gurney O., *The Hittites* (1962), Harmondsworth, Penguin

⁵ Refer Cumont F., *The Mysteries of Mithra* (1956) (translated by T. J. McCormack), New York, Dover.

⁶ The term is originally applicable to the ‘*Adityas*’ – the descending agents of light and in the Vedas they are mostly mentioned as *Ashur Varuna* (RV: 1.24.14); *Ashur Mitra* and *Varuna* (RV: 1.174.1); *Ashur Twasta* (RV: 1.110.3); *Ashur Indra* (RV: 1.54.3) and so on. The work of Wash Edward Hale on ‘Asura in early Vedic Religion’ (1986), Motilal Banarsidass has pointed at composite research evidences on this crucial and original theme of the Vedas.

⁷ Refer ‘*Archaeology of the Old Testament*’ (1963) by Professor R. K. Harrison, English University Press, Toronto. Here from the cuneiform tablets of Nippur (440 B.C) an ancient irrigation canal has been located and it was called ‘*Nar Kaberoi*’ – meaning waters of *Kaberoi* (page 86); on the other hand, the name of ‘Benjaminites’ of the Book of Genesis has been found amongst the archaeological evidences a strong river-side farming community called ‘*Banu-Yamina*’ (page 23); and in page 864, Chamber’s Dictionary (1998), Allied Publishers private limited publications has traced a stream called ‘Jet’ in ancient Lycia which is linked to a major water channel and a Town called ‘Gangai’: in Old French ‘Gagate’ or in ancient Greek. ‘Gangai’

⁸ Refer the Chapter on Islam in ‘*A handbook of Religions*’ (1984), page 166, Penguin books.

Further westward migration is possible leading to the following schisms and conflicting separations of one religious movement from the other over subsequent periods in history:

- An early separation of the original Persian and Judaic wisdoms that included the approach of the Atharvan fire-priests (later called Magis) and the later movements characterized by an orthodox patriarchal tradition founded in the plain lands of Sumerian Mesopotamia.
- A further separation of the original Patriarchal wisdom of Abiram (Abraham) into two distinct lines of organized religious developments that were represented by the siblings of 'Ishmael-Hagar' and 'Isaac-Sarah' (they are the two consorts of Abraham and their respective sons and the story or history is akin to that of the Mother-son couplings namely '*Diti-Daityas*' and '*Aditi-Adityas*' of Sage *Kasyapa* in the Indian tradition). This had led to the development of two major offshoots from mainstream Judaism called Islam and Christianity.
- A consequential schism between Asiatic Christianity of Persia (Assyria where the 'Ashur' roots were predominant) and Anatolia called the 'Nestorians' called the 'Eastern Churches' and the monotheistic movements in Egypt called the Monophysites. The fight was on a simple evolutionary idea of a mortal being, who is raised to original divinity and that of an absolute divinity, standing for the oneness of Trinity through a 'Son of God' posited against duality of matter and original sin of this material world. Till date, this schism has continued and expanded adding to numbers and differences amongst varied forms of Christianity and Islam.

Evidences of Yoga and Tantra; and Tibetan Buddhism in Anatolia: Several names of the archaeological sites of ancient Hittites and Hurrian establishments were discovered in the Anatolian plain. Of them three most important ones bore names like Boghaz-kaya, Yasil-kaya and Anta-kaya (later Antioch) and of late Kappado-kaya (Cappadocia). The names of these ancient sites and many others in Turkey suggest strong Indo-European religious implications:

- For example, Boghaza (in Sinhalese stands for Bodhi or enlightenment) and consequentially Bodhkaya will suggest an ancient Buddhist terminology. The word *Kaya* means 'body' i.e. *Boghazkaya* means the body of Buddha or Bodhisattva. The word *Kaya* is a suffix to names of different places in ancient Anatolia and in India; it means a spiritual body or body in general. In this connection one may also refer to the yoga treatise of Sage Patanjali. The treatise has important words like '*Kaya-nirmana*' (making of spiritual body)⁹. Tibetan Buddhism¹⁰ had similar words like '*Dhamma-kaya*' (essential body) or '*Sambhoga-kaya*' (blissful body). In all possibility the names of historic sects like 'Bogo'-miles (in Bulgaria) and Al-Biga (or Cathars in France) shares intimate connections with these roots.
- The second word has a component 'Yasil', which means the horse-like (derived from a word like 'easel', which is a horse-shaped drawing stand used by artists). Incidentally the important word Aswatthwa (meaning the tree of sun-horse or simply the Bodhi or the Bo-Tree) is rooted on the term 'aswa' (Equus genus like ass) or the Horse. *Yasilkaya* therefore means the body of the mystic horse (visualized in the

⁹ Refer '*Raja-Yoga*' (1994), chapter three on 'Yoga aphorisms: powers' by Swami Vivekananda, Advaita Ashram, Kolkata.

¹⁰ Refer part two in Chapter three of '*Tibetan Book of the Dead*' (1994), translated by A. F. Thurman, Harper Collins publishers, India.

Vedas as the ray-horses of the new-born Sun or in Greek Mythology, where the horse stands for the carrier of sea-king Poseidon having his trident).

- The first part of the third word is ‘*Anta*’, which means the end or the other side (i.e. ‘anti’) and therefore *Antakaya* means the final body that is attained or the body opposed to the material or mortal body.

So by 1500 B.C it appears that the Anatolian plain was a religious repository of Indo-European spiritual practices and disciplines.

Evidences of an ancient Indo-European Godhead of Death and resurrection: Let us focus on the seasonal harvest festivals and similar chthonian festivals related with ‘death’ and ‘resurrection’ symbolisms. These were practiced amongst the earliest Hittites and Hurrians. In these festivals name of a newborn King ‘Kumar-bi’¹¹ holds an Indo-European root and it recurs among the different tales of religious allegories. The symbolism of the ‘dying’ and ‘sprouting’ corn-spirit was equated with the name ‘Kumar-bi’, which meant either a ‘promising son’ or ‘an ever-youthful son’ and ‘someone who is about to be resurrected’. His tales recur in the ancient Anatolian legends and they exhibit very strong similarities with another religious myth of an Indian origin. We refer to the Indian version where a twice-born divine son called ‘*Kumara*’ or ‘*Scanda*’ is re-juvenated to activate a divine purpose on earth. In India, he is also known as ‘*Murugan*’ (associated with Peacock) or ‘*Su-Brahman*’ (associated as a head of all Sages or the *Brahmanaspati*, who are truly the highest among all realized souls – a term equivalent to a later one called the ‘high-priests’).

Incidentally in India the calendar names of two months mean the opposites of ‘death’ (fall) and ‘resurrection’ (spring). They are called ‘*Boisakh*’ (post-spring in April-May) and ‘*Kartik*’ (post-autumn in October-November). Both are derived from the ancient tale of the twice-born *Kumara-Scanda*. ‘Boisakh or Vaisakh’ is the new year of Indian calendar based on the root word ‘*Visakh*’, which means ‘one who is rooted and has no branches’. ‘*Kartik*’, on the other hand, has an opposite meaning representing the full youth, fecundity and germination of the divine senses. The divine form of ‘*Kartik*’ is born of the Great mother under the supervision of the six ‘*Krittikas*’ (six feminine powers or six consorts of the six of the seven Sages called the *Lalanas* or in an aggregate form called the *Lolita*). Thus a germinating *Kartik* is born with the ‘fall’ of Autumnal turn (as sun moves down) and an uprooted *Visakh* is born with ‘spring and upsurge’ of the vernal turn (as the sun moves down). What does it mean? One containing the other – unity of opposites ! It matches with the principle of Tao exactly.

The story of the ‘divine’ birth is still very popular today. It is found in the ancient tale of ‘*Kumar-Sambhava*’ (son is born), found symbolically in the earliest form available in the Vedas and in the mythological form in later *Puranas*:

- The birth of the ‘First-born’ Kumar ‘*Agni*’ in the Vedas (RV: 3.1.4)
- In *Adi-Kanda* of Epic Ramayana (much early to 600 B.C)
- In *Scandapurana* (600 B.C) and
- In a later composition by medieval Poet Kalidas (300 A.D)

¹¹ Refer Barnet R.D., ‘The Epic of Kumarbi and Theogony of Hesiod’ (1945), Journal of Hellenic Studies, page 100-101, Vol. 45.

In South of India, even today ‘Kumar’ is adored as the ‘Supreme realized *Brahmanaspati*’ and called ‘*Subrahman-Swami*’ (his earliest representations are found in the Vedas in RV:6.75.all and 17 in particular as a divine youthful warrior class – observed by the spiritual lineage of Sage *Bharadwaj*, who is also one of the Seven Sages).

Indo-European origin of Anatolian settlements: With the birth of *Kumar-Kartik*, the disjointed powers of the universe are terminated. The disjointed powers are inherent in ordinary mortal human beings and they are symbolized by *Taraka-sura*. With that the newborn son re-establishes the path of ancient Yoga called the ‘*Taraka-yoga*’. Mankind is again elevated from the sensual material plane to the purified spiritual plane.

‘*Taraka-yoga*’ is in essence an eidetic visual (concentration through production of a cognitive image) phenomena practiced externally to bring in the inner concentration of the mind, which is able to ideate and sustain memory of that which is otherwise lost (*smara*). Hence, *Kumara* is also known as ‘*Smara-deva*’. The ‘*Taraka-yoga*’ is symbolized through a bow and an arrow.

In the upanishads, the symbolism of archery is described as the internalized pre-requisite of the inner yoga. *Kumar-Kartik* is seen in bow and arrows and seated on the solar bird, the Peacock, which is the bird of resurrection.

In the ancient Upanishad we find the beautiful description that is also taken up later by Zen Buddhism (Herrigel, 1971)¹²:

The Bow is the Word (AUM), the self is the arrow and the infinite absolute Brahman is the focus, knowing this, Taraka-yoga¹³ is achieved by developing a sustainable cognition of seeking the arrow to begin with and then be the eidetic image of the arrow itself, which is finally the Brahman the end and the goal. Thus means, process and goals are finally one.....This is the essence of the ‘archery’ (Mundaka Up: 2.2:3-4, Lineage of Sages Bharadwaj and Atharvans).

Given this understanding of ‘*Kumar*’ and ‘*Taraka*’ one may further delve into the rites of ancient Anatolia.

The entire Anatolian community in the remotest of times was known for two of great seasonal harvest festivals:

- 1) The festival of the great flame called the ‘TORCH’ (celebrated at spring) and
- 2) The festival of the fertile mother earth called the ‘PURULLIYA’ (celebrated from later spring or summer and sustained up to autumn).

Festival of Torch: First let us review the ‘Fest of the TORCH’ from where a later flame symbol of the Olympian Games in Greece was derived. Many scholars begin to think and trace the source of this ancient fest to a great Hittite deity whose name was ‘Tark’ or ‘Tarku’ or ‘Turak’ and it is from this name latter geographical terms like ‘Turkmenia’, ‘Turkistan’, ‘Etruskan’ and of late Turkey (Frazer, 1932)¹⁴ had been derived.

¹² Refer his book on ‘Zen in the Art of Archery’, Vintage Books, New York.

¹³ Refer page 356 on ‘Yoga’ in ‘Dictionary of Religions’ (1984), edited by John R. Hinnells, Penguin Books.

¹⁴ Refer entire chapter 6 (burning of Sandan) and particularly pages 117-119 and 131 in ‘Adonis: a study in the history of Oriental religions’ Watts 7 Co, London

In all probability ‘*Tarku*’ (also the genealogical names of Cilcia (*Kolki*) priests in Anatolia) is closest to ‘God with the double trident (thunderbolt)’ and his image in the ancient times was more close to *Indra-Vrihaspati* of the Vedas or *Zeus* of the Greeks or *Jovis Pater* (Jupiter) of the Romans, which meant the chief of Gods. This was precisely the image of ‘Kumar’ as ‘*Su-Brahman-swami*’ in India.

Two questions arise subsequently:

- One, whether this great deity of Anatolia known as ‘Taraku’ (associated with ancient Fest of ‘Torch’ or the waxed or oiled ‘Torque flax’ having fire) is in essence linked historically to the very Indian deity ‘Kumar’, the master of ‘*Taraka Yoga*’?
- Two, is the word ‘Torch’, which stands for a burning twisted flax or flexible wire, Indo-European?

To find the answers we have trace Gypsy lore and traditions. A very important word of the Gypsies is associated to this symbol. The ancient Gypsies while playing ‘cards’ called it *TAROCCA* [in ancient Italian /Etruscan and later it became Tarot], which meant a twisting step of colors, numbers and images on which the reading of cyclic zodiacs, associated planetary observations, observations on past-present-future and finally the whole branch of alchemy, fortune-telling (astrology) and esoteric systems of ‘Kabala’ (horse traditions) were founded. A twist-and-turn pattern characterized cyclic movements of cards in this ancient game of Gypsies.

On the other hand, the eidetic vision of ‘*Tarak-yoga*’ is a vision of Yogi which also involved through twisting (or converging) an intertwining of the movements of mind i.e. the *akasha* (moon) and that from the human soul i.e. the vitals or *prana* (sun) as ‘one wire’ that would carry forward an inner galloping to penetrate the veils of phenomenal time and causation.

So are the two interlinked?

Festival of Purulliyas: Finally we come to the other festival called ‘The Fest of the Purulliyas’. The term is based on an Indo-European word. It meant celebrations in ancient Anatolia based on a famous Hattian derivation of the word ‘Purulli’ meaning ‘of the earth’ (inside the *pura* or *pyra*). It was the New Year Festival once celebrated in the later spring and once after the fertilizing rains. Does this imply the ‘twice-born’ myth? Even today, in eastern India, in Bengal, there is a place in West Bengal which goes by the same name of this ancient festival. One has to look critically to these ancient connections between ancient Anatolia (Turkey) and India.

Archaeological evidences from Troy: Additionally there are ample archaeological evidences in terms of settlement artifacts and ornaments, which have been discovered from different sites abutting ancient Illium (or Troy). On these ruins the nearby modern city of Byzantium (later Constantinople or Istanbul) is founded. The evidences forwarded by the National Geographic scholars are of prime importance. Primary among them are the evidences of style and ornamentation in gold jewelry and associated artifacts that exhibit strong oriental (Indo-Persian and mainly Indian) styles. There is an exclusive visual coverage of these elements in Time magazine (April 22, 1996).

¹⁵ Based on explanation given under TAROT (Taroc), pages 969-979 in the Penguin Dictionary of symbols (1982), edited by J. Chevalier and A. Gheerbrant.

¹⁶ This is based on description in ‘Ancient Gods’ by E. O. James in pages 156-9.

¹⁷ Archaeology of Troy may be referred from National geographic web site.

Arguments and conclusions

In spite of these evidences a study of Indo-European language systems is possibly the largest and the most controversial area of Indology-related subjects. The global dissipation of languages following the Indo-European language tree with Sanskrit at its root raises many questions. Two most crucial ones are:

- Whether Sanskrit deserves a root position in the tree?
- If it so then shall a renewed pursuit of Sanskrit studies help seek a platform of universal language system?

The following section reviews the serious question.

Finally, the beginnings at Anatolia could be verified through the confluence of Indian and other elements. One possible case study is the Alexandrian school. This has been dealt finally in this chapter. If these evidences are true, then the very fact that the Indo-European language system is the second greatest contribution of India to all humanity is also true.



The Aryan Invasion that never was!

Evidences: part 2

Section two: in Search for a Universal Language

Introduction

Communication is the essence of human interaction. In early times characterized by intrinsic and agrarian qualities of the human interaction, the nature of communication was relatively slow but natural.

In recent times of increasing urban-industrialization, the pace of communication is becoming faster, complex and artificial day-by-day. Of late it is the 'Digital Link' – the activation of the universal electronic medium called the WWW or the World Wide Web.

There is however a note of apprehension. Though the mode of communication has changed from a slow to an increasingly fast and efficient form, at the same time, its inherent quality has stepped down from levels of a natural simplicity to varied and complex expressions of popular show business, extravagant mass-media communication strategies and their mode of quick and hurried 'journalistic' interactions. As a result, we have now a looming popular global language that is founded on ideas of economic competition, and consequently breeding social distrust, ethnic fanaticism, international terrorism and inter-community rivalry. The very essence and purpose of humane communication is now cornered. A truly universal humane language is yet to emerge.

So there is a need of a Universal language to reverse the present crisis. The question is if there is one, then what will be so universal about it? To answer that we have to first review the present complex language situation of the world and then arrive at the gaps and conflicts, bridging or addressing which will be truly 'universal'.

Against an universal Language - evidences

Language is human speech – the diction of the most intelligent species on earth. Language may comprise of a variety of words and idioms of a large group of humans ethnically seen as a big community or even as a nation. For example in India, there are many communities having their own languages. In Indian today, collectively we do not have a fully accepted common linguistic foundation, at least in practice. The major mode of intellectual communication is still a foreign medium: English. The aspirations of different community languages have to wait further to secure their commanding place at a national level.

In France, the majority speaks French though there is trace of the Provençal. In Spain, the majority speaks Spanish even though a long-standing minority of Euskara in the Basque-speaking region defies integrity.

In the United States, numerically the largest speaking language is possibly Chinese now though the earliest aborigines were Red Indians and the majority of the early immigrants were English, Dutch and the French.

In undivided Bengal in pre-independent India (pre-1947), the lingua called 'Bengali' represented an entire community. Regionally the style of articulation and its underlying culture of East of Bengal (now Bangladesh) is phonetically different from those in West of Bengal, in India. Such natural differences have emerged over the dawn of many ages.

Though we speak of an ancient Aryan India, north Indian languages stand apart from those in the South. The Vedic civilization is geo-spatially identified with rivers in the north. But the Southern Dravidian languages are more rooted to ancient Sanskrit. This is the belief held by many Indic scholars.

Researches round the world have concluded that at the apex of a vast tree of major Global languages stand Sanskrit. It is from Sanskrit the whole network called the 'Indo-European' group originates. However in modern India and also in the world, the least popular or least spoken language is probably Sanskrit. Sanskrit is almost dormant or extinct and the claim is paradoxical!

The collapse of the USSR has several reasons. One of them is the complexity of many languages in a vast region that was only politically bounded. In Russia there is a huge northbound Finno-Ugric speaking population. They differ at large from those in the South speaking languages closer to Aramaic and Pashtun.

On the other hand the 'gypsies' of the Balkans speak a language akin to those in India and Pakistan, in province of Sind. The same is true for the Gaels¹⁸ and Celts of eastern and southern Europe and the Hittites of Turkey.

The global language situation is therefore complex.

Such complexities lead to incomplete integration of the global human society and raise two fundamental questions:

- Is there a real need of a Universal Language?
- Where lays the difficulty in having one?

For the universal language - evidences

Fundamentally, language is the pattern of expressing human thought or feeling. If there is anything that bridges a human being to another irrespective of distances, region or community, it is the spirit of thought and feeling. It is never the attributes of race, color, code, degree of material advancement and religion that really matters.

A tribal mother in a remote region of Africa caresses her little child. So does a highly educated and fashionable lady in New York City, who is also a mother. In spite of linguistic and educational differences, the feelings of the two mothers are the same. At that higher and inner plane they converge – the Mother. Words like 'Mother', '*Matri*', '*Mater*', and Madonna have therefore remained so fundamental to the universal human feeling and 'idea' shared by all of us. The idea is called motherhood.

On the contrary, a different group of words like 'Fascism', 'racial', 'colonial', 'under-development', 'backwardness', 'native' and 'bourgeois' classify a fragmented world of human biases and feelings that care little for 'all of us'. The idea is far away from universal.

If any language in the world has sustained and preserved the universal cause of human communication and promoted the spirit of interaction, inter-feeling and empathy, then it indeed is a universal language. If there is a language that primarily cares for creating words to help elevate the state of human mind to a higher plane: from the crude material to the moral and the altruistic, then it is indeed a universal language. In that sense, the language of the ancient Vedic seers, the poetry of Tagore, the literature of Tolstoy, the words of the Christ and the Buddha are universal languages. They are so though they have had been spoken in different dictions, in different regions during different times in history of humankind.

¹⁸ Works on the Celts: by T.G.E Powell (1994), Thames and Hudson, London.

If today's digital communication is open to such universal goals of human philanthropy and altruism, indeed it is also a part of that ideal universal language. What are most important are the intentions and the idea behind that makes it universal. Otherwise they are questionable, however technically advanced or materially progressive they are!

The science of universal language – the ancient root

At the heart of Indian spiritual realization stands wisdom. This wisdom is the unity of humanity seen in harmonious relationship with the fundamental unity of the Universe. It is in the heart of that wisdom lays the true origin and depth of a universal language.

All objects in this world have a name or a word associated with the idea that stands for that objective existence. 'Sabda' or the phonetic nature of the Word is the 'sound'. The sound is the peripheral expression of that idea or the essential thought, which is the core. Idea (concentrated or convergent thought) therefore lies at the center of the periphery of sounds of expression, which is *Sabda* itself.

Say a word 'chair' is connected with the idea of a physical object meant for sitting. The idea behind a 'choir' means another sitting of a musical group. The idea behind the word 'care' means another sitting of mind (an eidetic mental frame) from where love and affection and consideration are offered. Phonetically 'Chair', 'Choir' and 'care' are not so similar. But etymologically, to a root idea they converge. Behind the varied phonetic expressions there is the central idea of a sitting – whether it is for a person or for a musical group or meant for medical attention or love. The three words share an idea of a settled state of mind. This is the 'idea' of the root (etymos or etymo-logic) word.

In Sanskrit there is the root word: *kri* from where words like *Kora* (to do), *karak* (who does), *kara* (the thread of work or light), *kara* (hand or palm as agent of work) are derived. This is the essence of *criya* or *Kriya*, which means to work with an idea or concentrated thought from where the word 'create' has emerged. Meditation is often associated with 'Kriya-yoga' as it primarily involves concentrated thought sustained through a universal or unifying idea of man and the universe. The idea is that of 'new creation' (Revelation: 21.4) so that 'the old disjointed order passes away'. The idea is of a created 'Core' and its rejuvenated 'periphery'.

The Completeness – core and periphery – the conjugate

Nature is identified with *Prakriti* or the Mother, who is responsible for procreation or manifestation. She is the periphery or the field of energy. She is the string that sustains the vibration holding all expressions of the word or *Sabda*. The vibration within is the essence (the core). It is concentrated thought or the *Artha* – the essential meaning of the idea that is contained within.

Idea is that core, that central source point. It is the originating center of which the sound is the expression - the *sabda*. Thus the idea of the core and the periphery, *Artha* and *sabda* is a conjugate - completeness. It is an idea of a complete picture where one is observing both the seed and its full manifestation the Tree at the same time.

The science of the conjugate

Sages have said that all-embracing *Prakriti* represents the entire network of sounds i.e. language expressions, which can be inter-related, coordinated and orchestrated as ‘a singular harmony’. This is possible through the convergence of consonants and vowels as syllables of articulation leading to a final tonal sound or pitches that is the underlying reality behind the words.

At the center of a universal language system stands this reality. That reality is the primal ‘thought’ – the thought of all thoughts. It is also the primal reality or the master core. It is changeless but the source of the energy of expressions. It is called the *Purusha*. Often *Purusha* is signified as the undying, the unchanging. Hence it is called the *Anahata sabda* or *Nadanta* (end of sound). The various strands of expression-energy on the other hand are the pool of the strands of concentric *Skakti*. Thus core and periphery, *artha* and *sabda*, *purusha* and *shakti* are one and complete by having each other.

The complete realization

Anahata stands for the grand assimilation of all thought expressions. All thought expressions are nothing but different language systems. Language is the essence of all human relationships.

Thus *anahata* bridges the relationship between a single human being and another human being; it bridges a human being and the collective: the society; it bridges a particular society and all society: humanity itself; and finally it bridges all humanity and the Universe. The branches are automatically traced back to the root. The purpose of communication is so.

This is the science of ‘etymology’. It is the search for the true origins of words.

The Bible had therefore said:

“...*In the Beginning, there is the word. The Word is with God. And the Word is God*”.

Two thousand years later, during a deep contemplative Himalayan experience at Kakrighat near the Almora, Swami Vivekananda, the patriot-reformer-monk of India had quoted his own realization by saying:

“...*In the beginning is the word...the microcosm and the macrocosm are built on the same plan. Just as the individual soul is encased in the living body, so is the universal soul in the living Prakriti (Nature) – the objective universe. Shiva (i.e. Kali or Prakriti) is embracing Shiva or Purusha. This covering of the one (soul) by the other (nature) is analogous to the relation between an idea and the word expressing it: they are one and the same...thought is impossible without words. Therefore, in the beginning was the Word...*”.

The Swami had added:

“...*This dual (double) aspect of the Universal soul is eternal. So what we perceive and feel is this combination of the eternally formed and the eternally formless*”.

What the Swami had realized is in unison with the remote wisdom of the Vedic Sages and forwards again that ancient philosophy of great saints and Yogis of Natha parampara.

Conclusions

Today humanity has come a long way. Language of today is increasingly collective, democratic and inter-linked. The emerging idea is 'holistic'.

A time has come when the poorest nation of the world has a place in the United Nations. A time has come, when an average villager is beginning to realize the common fruits of modern development reserved earlier for the privileged few.

A time has now come, when communication and access to knowledge is distributed worldwide transcending the differences of the developed and the developing. This has been made possible by the digital link. But we have go further from there.....

The digital link has to make a few steps more. In a world of increasing knowledge systems and information-based e-society, the purpose of unification of global language systems on a scientific and spiritual footing is an indispensable goal. For this, fundamental researches have to be patronized and sponsored. Only then, the real linkages to a Universal Lingua Franca will be established.

The need of such a language is a must to sustain a Confederation of Nations. This will happen when humanity accepts spirituality as the future goal of a present materialistic humanity.

Setting such goals cannot be achieved through spiritless or opportunistic words or lectures or theories. They are only achievable as a living thought, a breathing idea, a very way of life. It is the way of life of future humankind. The ancient universal sages of the Vedas had set for us such a goal to which the march of humanity has to inevitably return for the peace of a better tomorrow.



The Aryan Invasion that never was!

Evidences: part 3

Case study: The Alexandrian school – its probable Indo-European origin

A precursory note

Natural sciences are important to scholars of Indology and particularly ‘Indo-European language systems’. These sciences contain root words of natural elements and their combinations and compositions are elemental to ideas of Indian cosmology. The most fundamental of these components are the ‘Pancha-bhutas’, the five elements of nature i.e. earth, water, fire, air and space and they are frequently found in Indian concepts of cosmology and cosmogony.

The five elemental components form a basis of one of India’s many cosmic philosophies called the ‘Samkhya’. ‘*Samkhya*’ is mentioned in one of the ancient of all Upanishads called the *Swetaswatara*. The *Upanishad* contains both the details and the name of the patron saint proposing it. His name is *Kapila*.

In subsequent discussions we shall trace a momentous contribution of this antique philosophy of Kapila to the earliest schools of western sciences - the school of the Milesian Sages of ancient Greece.

Structure of discussion

The discussion has been presented in four parts. Part one provides a cursory introduction to the controversial ‘Indo-European myth’ and a possible emerging standpoint that is not biased. Part two expands on ‘Samkhya’ philosophy for the benefit of all readers and this part of the discussion is based on philological and etymological linkages.

The third part evaluates the ancient schools of Milesians (archaic Greece) in light of probable evidences of its connection with Indian philosophy.

The forth and final part forwards directives to the study of Indo-European linkages based on the aforesaid evidences. Associated research clues are drawn from comparative folk-anthropology. These clues are observations drawn from the living pattern, customs and beliefs of ancient farming communities in Anatolia (ancient Turkey). The clues epitomize a most likely genesis of Greek and later European civilization from the western shores of Mediterranean Asia.

Part one: the biased Myth

The Indo-European myth is not a new one. The myth has been used time and again in the colonial and even later in our own post-colonial times. The usages have tried to organize and consolidate a standpoint promoting a one-way traffic of flows of culture and sciences through the medium of language.

The one-way traffic have had been theorized to be a historical event and also a movement of civilized people called the ‘Aryans’. Myths concerning the Aryans were theorized to posit their origin in Western Europe and propose their subsequent migration to Asia – i.e. Persia and India. Therefore a one-way journey as contemplated by the colonial preachers asserted earliest movements from a place beyond the upper Balkans and the Germanic Black forests or Norwegian mountains were designated as their original homes.

From there they had moved further eastward through the mountainous valleys of the Caucasus, Turkmen and the Zagros of Persia to reach the Indo-Gangetic plains. There they composed the earliest gospels of universal truths, cosmology and humanity seen as manifestations (*atman*) of a single reality, which they called ‘Brahman’. This culture and religion formed in India are believed to have been a pure or an extended import from Europe, where at present there are very little or possibly no traces of an origin!!

On the contrary, in India, since the original Vedic times, when ever they were realized and composed, say 7000

B.C or a later proposition of around 2000 B.C, the continuity of that grand cosmic and humanitarian heritage and its practice are sustained right through to our present times.

Origin and the original – which way?

If we apply simple logic earmarking areas of origins as areas of concentrations as against areas of present dilutions or absences identified as definite peripheries, we logically arrive at a different picture. The regions of continuity and concentrations over time are the possible origins. Evidences from ancient, medieval and modern India provide such indicators. On the other hand, way of life and present evidences in Modern Europe is a negation to that continuity.

The colonial preachers however were not interested in that kind of simple logic!! So the sources of the most probable forefathers of the mighty Anatolian Hittites; of the ancient Median worshippers of the Persian ‘Atar-Baharam’; and of the inspirations of an Indian Vedic Rishihood were all contrived to be sourced by a materialistic Teutonic power of Germanic and Scandinavian Europe ! That was the Myth !

The proponents of this ‘Aryan myth’ were many. They were Max Muller, Nietzsche, and Schopenhauer and lately, the military authority named Adolph Hitler. Their intentions were clear. In the treasure house of the Library of Alexandria the ancient knowledge and theories of original Greek homelands could be traceable in Asiatic Anatolia, African Egypt, Asiatic Media and the Indian Saraswati valley. In that Library the earliest Egyptians stored all of that ancient knowledge - the probable source to the later knowledge of Euclid, Pythagoras, Heraclitus, Hippocrates, Protogoras, Socrates, Plato and Plotinus. This was unacceptable!! The colonial legacy had to block the ‘Aryan Myth’ and reverse its source to be found within the bounds of Western Europe. The Asiatic character and heritage of Eastern Europe was seen as an intermediate deterrent! So there had to be other plans!

Many of us know the event of a destruction of the ancient Alexandrian Library. The ancient linkage were put to fire and Rome was invaded the barbarians from North, who overtook the Italian peninsula from the ancient Etruscans and Sabians.

Later in history, the northern invasions continued to wage the war of anti-semiticism¹⁹- the battle against Mediterranean and east European races. Defying the spirit of humanitarian intent the so called ‘Aryan’ invaders managed to wage two great World wars. Their intentions were to re-establish the colonial one-way myth and sustain, preserve and motivate the ‘supremacy of a particular racial standpoint’. What is truly ‘Aryan’? Peace or Invasion?

Does the colonial ‘Aryan standpoint’ match the message encoded in the Vedas ?

We will soon have the answers.....

The turning of the tide

A reverse picture of an Aryan cultural migration from Asia to Europe was never considered. It was important that honest protests backed up by in-depth researches were to be initiated.

As imperialism began to take a back seat following the great World Wars (1916-45), colonized countries in

¹⁹ A racial discrimination posed on all Semitic races - mainly Jews including all east European races.

the underdeveloped world had started to become independent one by one. New and reinvigorated researches were encouraged. Consequentially the voice and aspirations of the many suppressed for centuries had begun to resurface. In India particularly, it had taken a very important turn. It was the turning of the tide.

Adding to that tide, there were efforts of renewed realization, recognitions and scholarships. Here are the first and most important ones:

The earliest pointers: It began with Dayananda Saraswati, the founder of the '*Arya Samaj*' in India. Then it was Swami Vivekananda, who renewed a voice of confidence in true spirituality and its probable origin in India through his impact on the Parliament of Religions in Chicago in 1893. This was followed by the deep textual insights of Shri Aurobindo²⁰, presenting to the world the first scientific foundations of the Vedas. Then emerged subsequent scholarly researches by R. Swaminatha Aiyar, B. R. Ambedkar, A. L. Basham, Micheal Danino²¹, Sujata Nahar, David Frawley²², Georg Feurerstein²³ and of late, many others.

Archaeological, art-anthropological and semantic-phonetic evidences: Further discoveries have strengthened the foundations of Indian spirituality. Of them six most important are:

- The discovery of the Indus Valley civilization taking Indian history a few thousand years prior to the Buddha and also prior to the archaic beginnings of an European Greece at around 600 B.C. Of late, new discoveries of Indus valley sites namely Mehrgarh²⁴ I and II have pushed Indian civilization back to 7000 B.C.
- The recent satellite imagery reconfirms²⁵ the Indus-Saraswati concentration of ancient settlements and associated evidences have strengthened the possibility of an Indian Vedic civilization pre-dating the Indus Valley. Many scholars have contributed to that. Some of them are V. S. Walankar (1987), S. R. Rao (1991-1999), V. N. Mishra (1993-1999), S. P. Gupta (1996), B. B. Lal (1999), B. P Radhakrishna and S. S. Mehr (1999), R. S. Bisht of A.S.I (1998) and lastly K. S. Valdiya (2002) of Indian Space Research organization. A striking observation is on the joint agglomeration of archaeological sites of the Indus valley, the settlements of the Indus-Saraswati plains and the probabale settlements of Dwaraka and Prabhas of the *Mahabharatas* confirming a continuous and an inseparable system of settlements²⁶ (which have been augmented by further evidences of offshore location of under-water settlements in the Gulf of Kutch (possible Dwaraka).
- Recent evidences of prehistoric horses in Paleolithic upper Sampo-Tibetan zone²⁸ (north-east India) have challenged an earlier theory of 'horse import' from Europe. The discovery of Riwoche species of horses

²⁰ The major works are 'Hymns to the Mystic Fire' and 'Secret of the Vedas'.

²¹ Based on the book: 'The Invasion that never was' (with Sujata Nahar): Auroville Press, Mira Aditi (1996)

²² Based on his book: 'The Myth of the Aryan Invasion of India' (New Delhi; 1994)

²³ Based on a book entitled 'In search of the Cradle of Civilization' with Prof. Subhas Kak and David Frawley, Quest Books (1995). Readers are requested to read the 21 researched arguments against the 'one-way Myth' in this book.

²⁴ Courtesy: page 114, National Geographic: Vol 197, no.6, June 2000 in 'Indus: Clues to an ancient civilization'

²⁵ Courtesy: page 38, imageries of US Satellite 'Land Sat' and French 'Spot' imagery in: 'Desh' (A Bengali Magazine, July 8, 2000), ABP Ltd.

²⁶ Refer Chapter 7 in 'Saraswati: the river that disappeared' (2002) by Prof. K. S. Valdiya, ISRO publications, Orient Longman Private Limited.









²⁷ Courtesy: page 39, India Today: 'The Lost Civilization' – February 11, 2002 (a fortnightly magazine)

²⁸ Courtesy: 'Secrets of the Unicorn' in Metro: The Telegraph, July 24, 2000, in article by Jayanta Basu.

in these regions abutting Indo-China borders has opened up new areas of research. French anthropologist Dr. Michel Piessel and his team had initiated the work on pre-historic Stone Age paintings of horses found in this part of Tibet (reported by Time Magazine, November 27, 1995).



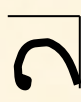
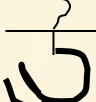
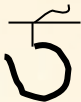
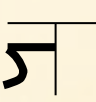


- Observations on textual and iconic similarities of Tamil and Greek script have been earlier noted. Similar alphabets are like Π (pi) and Ψ (psi or Russian Zhi) and ω (double-u syllables found in ancient traditions of Yahweh²⁹ and that of ancient Dionysian Thrace). Alphabets of ancient India have similar phonetic and semantic patterns of European phonetic counterparts (say ‘Ka’ in India and K in Celtic-English) (refer Table 5.1).
- Common origins of European and Egyptian Gypsies are evident in northwestern India (South central Asia). The movements of the Indo-European Gypsies to Anatolia and Egypt further confirm that they were the forefathers of eastern Europeans in Trans-Sylvania comprising of Romania (*Crisana*), Austria (Vienna or *Vindobana*), Anatolia (*Ankora*), Hungary, Bohemia, Bulgaria and probably all areas in Mediterranean Cyclades and mainland Greece.
- A recent work of Professor Colin Renfrew³⁰, researching the puzzle of the Indo-European origins has confirmed a possible hub of the earliest concentrations of Indo-European cultures not in Europe but in western Asia i.e. Anatolia. He has dated the hub at 7000 B.C. and this matches similar farmstead community settlements of Mehrgarh in Indus of a similar period. Renfrew pointed out Eastern Anatolia (present day Turkmenistan or eastern Turkey) as the first cradle. Here the Asiatic forefathers (around 6000 B.C.) formed the folk-anthropological, linguistic and socio-cultural beginnings that led to further dissemination of Indo-European culture in lands further west. The last part of this section has forwarded these evidences.

Table on common patterns in Indo-European alphabets

Indian	European	Eidetic pattern-match	Indian	European
	K	The matching of the angular pattern in the left and the mirror-reverse in the right.		F or f
	B	The bi-valve pattern of B in the left and the jack-pattern to the right.		J or J
	D	The half-circle turn pattern in the left and the circular pattern (full to half) in the right.		O or o
	T or t	The complete match of consonant t in the left and similar single knot-string matching to the right.		r or R

²⁹ This is the earliest name of monotheistic syllabic God (based on vowels like the Vedic AUM) in the Old Testament. In this light, we have to remember the beginnings of the Mosaic (Moses) traditions in Egypt.

³⁰ The book entitled ‘Archaeology and Language – The puzzle of Indo-European Origins’, Penguin, 1987.

Indian	European	Eidetic pattern-match	Indian	European
	M or m	The double knot double turn of m in the left and the corner kink of v in the right.		V or v
	N or n	The half-turn volute of n to the left and the double u match point in the right.		W or uu (Double u)
	U	The half-turn of u to the left. The special turn of J or z in the right.		Z or z
	P or p	The mirror inverse of P to the left and the loop pattern of e to the right.		E or e

It is evident that an eastward expansion of the Indo-European culture i.e. from India to Europe is a higher probability than the western movement.

The critical questions and arguments

On the other hand it is hard to accept an unreasonable story – a well fashioned story of an invasion of Persia and India by ‘war-loving plundering people’ from Europe coming on horsebacks. They enter India at around 2000 B.C. They are suddenly becoming a ‘peace-loving spiritual race’ as they settle in India and then they begin to realize and establish a Vedic culture of ‘*srutis*’ and also write the first spiritual documents of the world that would preach a harmony of human life and cosmic sustainability!! What a transformation of a whole mass of migrants ! So here are the immediate questions:

- Is this acceptable to the rational mind?

Can we scientifically establish a folk-anthropological and cultural correlation between the two – origin and destination? On the other hand, an eastward migration is more probable, which gradually reached the eastern borders of Europe and faced opposition from the Northwest. The violent and inhumane forms of ‘anti-semiticism’ and the World Wars are the natural and consequential evidences of this opposition to a westward movement.

- If the Western invaders had slaughtered the dark-skinned people of India, then where the original traces of the ‘white skinned, blue-eyed and probably golden haired civilized people’ from Europe today? Where are they now amongst the relatively ‘yellow or brown-skinned and black-haired’ people of Central Asia, Persia and India? On the contrary, in the Northeastern and eastern-Mediterranean European countries (stretching from Asiatic Armenia to Romania on the one hand and to Arcadia and Bulgaria on the other hand) we still find predominant evidences of characteristic Asiatic anthropological feature. So which one is true?

It is therefore evident that the colonial propositions are far from truth.

Defying this widely popularized and erroneous colonial proposal, Swami Vivekananda had asserted:

³¹ From ‘The East and the West’ by Swami Vivekananda.

“...In what Vedas, in what sukta, do you find that the Aryans came into India from a foreign country? Where do you get the idea that they slaughtered the wild aborigines?”

The scientific unity of one Indian race – Aryans and Dravidians

A further important understanding is a deeper insight into the etymology of the two words ‘Arya’ and ‘Dravida’ as against their colonial racial proposition of an European Aryan and a backward Indian Dravida!

The term ‘Arya’ and ‘Dravida’ are in fact the opposites of a unified principle constituting the cosmic thermodynamic cycle. The realization and presentation of this cycle has formed the basis of the Vedas and also our discussion in chapter two. We shall re-open that discussion to decipher the two words.

The term ‘Arya’ means the furious movement, the rhythm of a sacrificial temperament of life fostered by an inner divine principle guiding an aspiring Sage-like mind. The inner principle is ‘agni’ – the inner fire and it was later symbolized by the outer fire of Vedic *yagna* (sacrificial altar). The famous sacrifice of the ‘cosmic Horse’ (*asswamedha*) is based on this fire theme and its journey around the empire (or the universe) represented by the first phase of a cyclic movement of the sun in the ascendant. It is called the *uttarayana*. In this half-circle the horse of cosmic fire is put to sacrifice (Subhash Kak, 2002)³².

Thus the term ‘Arya’ therefore stands for an increasing heat of an aspiring mind. It is based on the root: ‘wri’ or ‘ri’ – from where other words like ‘Riksha’ (the Great Bear or the bearing capacity (spiritual conception) of the seven Sages); ‘Rik’ (the hymn to the sacred fire signifying the name ‘Rig’ Veda); ‘Rita’ – the rhythm of truth; ‘Ritu’ – the dynamic nature of seasonal change augmented by the heat of sun; ‘Ribhu’ – the increasing inner heat (divinity) of man and finally ‘Rishi’ – the great man established in a perpetual standpoint of increasing heat or ‘tapasya’ (the heat of austerity) are all founded.

Thus the word ‘Arya’ has always meant intent of ‘sacrifice’ and not barbaric invasion. It means increasing heat, rarefaction – an urge of a spiritual movement from the gross to the subtle and even beyond. This is the first part. Here one may say that the ‘CHI’ is in the ascendant as it dissolves matter and form (refer the discussion on ‘unicorn’ in chapter four).

On the other hand, the term ‘Dravida’ means the descendent. The other component of the thermodynamic couple is signified by the descendent – ‘Dakshinayana’ (meaning the movement of sun to *Dakshina* or the Deccan). As the sun loses heat by going down to the tropic of Capricorn, it is first characterized by increasing rains, then by autumn and winter. It comes from the root word ‘dravi’ (RV: 10.72.2; 9.112.2 and particularly 6.3.4) which means ‘composition’, ‘condensation’ and the art of forming the ‘gross, the ‘sculptured’ and the ‘tangible’ out of the intangible. This is the other part. Here the ‘CHI’ is in the descendent forming matter, name and form out of the great void.

Geo-climatically, the northern half of India and its southern half, even today corresponds to this ancient science. It is portrayed through a visible medium of design and expression of the science of ‘built-environment’ called ‘Architecture’. It is evident in the ‘spirit’ of Indian architecture.

‘North’ and ‘south’ Indian temple forms present this principle of the complementary opposites. In the North Indian form, the journey is characterized by an increasing height (*aswa-darwaza* or the gate of the fire-horse)

³² From his book ‘The Asswamedha: the rite and Logic’ by Motilal Banarsidass, India. The theme forms the beginnings of the great Upanishad the Vrihad Aranyak and formed the end of last chapter contained the Black school of the Yajur Veda. Therefore, the ‘horse’ symbolism stands between the Black and the White traditions.

of the temple form as the user moves from outside to the inner sanctum (*garba-griha*). The increasing height stands for expansion and rarefaction of the ‘Aryan seer mind’. The South Indian form is just the opposite. It starts from great heights (*gopuram* or the tower of the milking cow) and comes down to a small inner sanctum representing condensation, liquefaction – the ‘principle of Dravidian Sage mind’, who is even higher and descending from that height.

The two together represents the journey from matter to spirit and from spirit to matter. They are:

- **Rarefaction by fire** – ‘Arya’ (principle of *aswa-kranta* or *Uttarayana*): It is a movement from earth – to water – (through fire) – to air (life) – to space and beyond.
- **Condensation by the life-giving waters** – ‘Dravida’ (principle of *Go-kranta* or *dakshinayana*): It is a movement from beyond – through space – into the creation of the five principles in the descendent (involution) and through ‘life giving waters’ (soma).

It is shown in the following art-plate. This plate was part of an exhibition called the ‘Madhu Vidya’, the ancient wisdom of completeness.

In the following section we shall trace this search in the two-way journey signified through the ‘pancha-bhutas’ and its basis the philosophy of Samkhya. We shall also see how it had shaped the origin of the earliest of Greek philosophers – the Indo-European origin of the Milesian sages.

Unity of the principle of ‘Arya’ and ‘Dravida’



(Based on original art-work of the exhibition entitled ‘Madhu Vidya’)

Source: Department of Architecture and Regional Planning (1999-2002), IIT Kharagpur

The unity of opposites and its origin in the Vedas

We now begin our search using a method called ‘the comparative inquiry’ where linguistic verifications are complimented with supporting facts and figures from etymology, history, comparative religion and culture, folk-anthropology, archaeology and the basic sciences. The method is based on a pattern matching called the **NPEP** – ‘the nearest possible evolutionary sequence’, for instance: the word seven in *Sanskrit is Saptam* and in Latin it is *Septum*. In Sanskrit it has spiritual, cultural and scientific significances. For example, we have the *Sapta Rishis* (seven sages) of the Vedas; the *Saptaka* (seven notes) of Indian classical music; and the *Sapta Rashmi* (seven colors of a solar ray). In classical Greek and Latin we also get story of the seven heavens, the septuplet chord and seven colors of Iris, the Goddess of rainbow. In science, the idea has continued and complemented furthermore by quantification drawn from external analyses.

Our present concern is the natural and ecological foundations of the Vedas (Vannucci, 1993)³³. They are found in the five elemental components called the *pancha-bhutas* (the five elements) and known by the terms *Kshhiti*, *Apas*, *Agni*, *Vayu* and *Vyomma* (i.e. earth, water, fire, air and space respectively).

Modern scientific understanding of the physical sciences is also based on these elements. Their variations are based on compounding, composition and gradations of temperature i.e. a change of a solid state to a gaseous state. The sequence of *pancha-bhutas* is based on this gradation. If the idea of the Indo-European linkage is true then the earliest idea of the five elements as found in the Vedas and later Upanishads is true and its associated linkages with the earliest of European sciences are also true.

These linkages in all probability can be traced to the archaic Milesians and their original homes in Lydia, Lycia and Caria of ancient western Anatolia (present day Turkey). From these forefathers the later Milesian school and the Alexandrian Library have had derived its first scientific philosophy and then from these sources Euclid got his framework of geometry; Heraclitus his outline of cosmology; Hippocrates his gnostic approach to a diagnostic Medicine, Protogoras his divine anthropometrics; Plato his cosmogony; and Pythagoras his wisdom of cosmic numbers, universal music and associated mathematics.

First, we shall see the connections. Second, we will revisit the earliest Greek school.

Part two: philosophy and etymology of the Pancha-bhutas

The original source

At the root of Indian natural science is *Samkhya* philosophy. It was pioneered by Sage-philosopher Kapila. If there is anything that has actually flowed out of India to influence Western sciences, then it is the philosophy of Kapila. Kapila³⁵, as highlighted before, is mentioned with his philosophy in this ancient Upanishad called the *Swetaswataara*³⁶ (5.2 and 6.13).

³³ One may refer works on ‘Ecological readings in the Veda’ by M. Vannucci (1993), D. K. Printworld (P) Ltd, New Delhi.

In *Samkhya* philosophy, the five elements or *pancha-bhutas* are considered to be the body of Mother Nature, the omnipresent nature of the cosmos, which is also *Prakriti*, the inner constituent nature of human beings or the ‘Anthropic principle’. *Samkhya* philosophy is in essence the philosophy, science and religion of ‘man-nature’ dynamics. It is a completeness that provides the microcosm and the macrocosm the same blueprint, the same scheme and the same planning for evolution with its underlying purpose (The completeness is detailed in the whole of *Swetaswatara* Upanishad and particularly validated by the sutra 5.2).

The name *Swetaswatara* means a ‘cross’ or a ‘coupling’. The parable of a white mule, within the purview of the Black school (*Krishna Yadjur Veda*) is a reproductive cross of a dynamic proactive and up surging male horsepower (like *Yang*) and the passive, naïve, docile and effeminate attitude of an ass (like *Yin*). The Upanishad is therefore a symbol of ‘the unity of opposites’ or of ‘CHI-LIN’, meaning unity of *Yang* and *Yin*, which is completeness – the *Tao*.

Etymology based on the Pancha-bhutas

We now suggest a set of possible evolutionary sequence (NPEP) observed from the five elemental components and other associated terms used in *Samkhya* philosophy. Each clue has been provided to facilitate future research possibilities.

Prakriti: It means nature or Mother Nature. The nearest possible evolutionary sequence (NPEP³⁶) is: Prakrita > Prakita > Praciti-ka > Practical. It means a process that is natural, material (or tangible), condensed and therefore ‘practic-al’.

Kshetra: The field or the Mother Nature as *Prakriti* is the field. It is connected with the soil and symbolized as the bed of harvest or ‘agora’ (*ajara* i.e. not subject to decay (*jara*) but open to re-sprouting or germination; hence the term ‘agri-culture’. The possible NPEP is *Kshetra* > *Kuetra* > *Quatera* > *Quarto*, all meaning a field, a house, a logical square-shaped location (*loka*). Incidentally, in ancient Indian iconography, a square stands for Earth or *Kshitti* (or *Khetti*). That is why we have the *Kshatriyas* (also known as *Kaya-s̥tha*) the protectors of the Field or settlements in ancient days. *Kaya* is the body of harvest or the field. In religion and spirituality, it is the inner field or the inner body or the inner *Kshetra*. The Ancient Hittites of Anatolia (1700 BCE or earlier) bore a definite Indo-European characteristics as they were known as ‘*Khattis*’ and many of their sites had a ‘*Kaya*’ suffix. For example, we have the Hittite settlement names like ‘*Bogazkaya*’ or ‘*Yasilkaya*’ or ‘*Antakaya*’.

Jala: The water is the second element of the five *Bhutas*. The possible NPEP is: *Jala* > *Jelly* > *Gela*/Gelatinous > *Gallos*/Gallos. It also means milk or a liquid nourishing substance. Hence are the different words like galaxy (the Milky Way), *Galli-crex* (water hen), jollyboat (water-boat) and the Galatians (the ancient fishermen of Galilee). There are possible ancient linkages to another word called the ‘*Galli-iambic*’, which is an esoteric hymn dedicated to Anatolian Mother Goddess *Kubele* or *Cybele*. In this connection we should recollect the

³⁴ Swamiji said that there is no other philosophy in the world that is not indebted to Kapila. Pythagoras, the Swami believed had come to India and that was the beginning of Greek philosophy. Later it formed the Alexandrian school and the school of the Gnostics (from ‘A Study of the Sankhya Philosophy’ (Vol 2, page 445)

³⁵ Swamiji reconfirms the mention of Sage Kapila in the *Swetaswatara* in his question and answer session at Harvard University. Sri Aurobindo confirms this in his commentaries on the *Swetaswatara* Upanishad.

³⁶ As these connections are subject to more detailed proofs, we propose a comparative inquiry based on a process of nearest possible evolutionary sequence (NPEP).

other term ‘Thri-iambic’, which is dedicated to the Great God Zagreus – Sabazius, who is later Dionysus – the ‘twice-born’. As a different aspect, one may also say that the pastoral divisions are based on limits of wetlands and intervening fields or ‘lots’ called the *Jallas*, which are marshy lands and hence the Persian word *Zola* or *Zilla*.

Agni: The fire or the principle of Fury is the link *Bhuta*. It is the third element of the five *Bhutas*. The NPEP is as follows: Agni > Igni > Igneous. One may recollect names of Saint Igneous, who had some connections with Gnostic sects like the ones around Nag Hammadi of Egypt; the sect of Therapeutes in Alexandria and the Essenes of Anatolian highlands. Igneous is a volcanic (plutonic) word. In this connection, the Greek netherworld God Pluto is equivalent to Indian *Rudra* (*Swetaswatara* Upanishad: 3.2), who is associated with the Godhead of igneous subterranean fire and fury called ‘Hades’ (*Hadis*). He is called ‘Erebus’ (probably from Sanskrit ‘*Ourabo*’, which means the subterranean fire-horse in the sea; it is also called the ‘Barb’ – the black Arabic horse (Kelpie) and in Sanskrit it is ‘*Baraba*’). The emphasis of a nether worldly corporeal fire in Persian and later Semitic religions (as against the otherworldly fire of the later Indian tradition) is a key to this understanding. The term ‘Orpheus’ (Singer of Hades) and ‘Orphalese’⁷⁴ and associated subterranean elements like ‘Erbium’ (Lanthanide series of chemistry) owes much to this understanding growing in the Anatolian-Mediterranean world.

Vayu: The principle of wind and originally meaning the flow of life-current. It stands for the principle of life or the vital energy. The NPEP is Vayu > Bio(s). It is also the principle that flows, rises and levitates. Other NPEP is Vayu > Buoy > Boete (Bata > Vita/Vital) > the word ‘Boeing’. It has connection with developments in ancient ‘Boetia’ or Thebes (epicenter of Greco-Egyptian elements of Alchemy) has a connection with the later scientific developments in ancient Alexandria.

Vyoma: The principle of space and expanse. The NPEP is Vyoma > Boom (meaning sonic travel in space) > Beam (propagation of waves). Many words of wave-propagation have possibly evolved from this ancient Sanskrit root word.

Purusha: The transcendental principle of Sankhya (as opposed to Prakriti). He is the lord of the field and therefore called ‘*kshetrageya*’ or ‘*kshetra-pati*’. In the Rig Veda he is mentioned as ‘Shiva-Shambu’, who is the Lord of the field (RV: 7.35.10). In the 4th Mandala of the Rig Veda, in sukta 57 there is a whole hymn dedicated to the allegory of the Lord of the field, whom we have vividly discussed this in chapter three, section under the sub-head ‘the parable of the farmer’. The term ‘*kshetra-pati*’ (*Swetaswatara* Upanishad: 6.16) is also used in Indian astronomy and astrology meaning the lordship of larger fields of universal energy (called *Rashi*). The possible NPEP is Purusha > Perosa > Parisa/Pharisee (Parasya) >...perso (na) / personality (the one and the only one, unchanging identity). The term is Patriarchal and male-intensive (God as Father) and became more important in later World religions as the ‘Sacred Feminine aspect’ (God as Mother) took a back seat. It began with ‘Persia’ (ancient *Parasiaya*). ‘*Parasiya*’ is the nearest root of Persia. This is a vital research clue to understand later evolution of patriarchal traditions in Persia and associated religions and society.

⁷⁴ The mythical land mentioned by renowned Lebanese Philosopher Kahlil Gibran in his book ‘The Prophet’ (1988), New York: Alfred A. Knoff.

The Complimentary European terms of *Pancha-bhutas*

Matter or material: The NPEP is matri or Mother Nature. The inner volcanic fire is also known as Mother Fire or Magma mater.

Earth or Hearth: The NPEP is 'Artha' meaning the bed of material wealth. Other words are *ourba*, *urbara* (connected with chthonian words like arbor, harbor and arable) all meaning productive earth - the 'word' or 'ward' meaning a tangible condensed lot or 'hard' laboratory of culture (agriculture or higher culture). It is a static and a steady state of earth as against other four *bhutas*.

Water: The NPEP is adro, hydro as in Sanskrit. It is something humid or watery. The term 'Adriatic' sea in the Cyclades has similar etymological connections; also life-giving waters from feminine words like the 'Udder' (connected to *adara* - related to 'water' and weather).

Fire: The NPEP is 'Puro'. Agni (or the igneous principle) is the symbolic 'Puro-hitam', (ancient Persian *Pyrrhetoï*) – the fire priest or the dweller in the house (the *puro*). The earlier word *Purusha* also means the same. The inner fire in the waters of creation is the 'Lord of deep dark waters' (Adonis (*Odon* or boiled seed) or Tammuz).

In ancient *Swetaswata* Upanishad that predates the birth of Buddha and many other traditions of the world, the Sages uphold the principle of ultimate unity. It is mentioned as a coupling of the immutable divine spark epitomized as the swan - the unchanging immutable in the changing mutable mortal waters of creation, which is referred as '*Eko Hamsah bhuvanasyasya maddhe, sa eba-agni salile sannibista*' (6.15).

(The one and the only one is the supreme divine spark – the sole unity remains within the sea of creation).

In ancient Egypt it became that '*pura*' with the inner fire in the middle (*madhya*). Hence is the core word of all Egyptian mysteries called the 'Pyra-medes' or the Pyramid.

In spirituality (say in Tibetan Buddjism, the *Tantras* of India and in Sufism or Egyptian alchemy) it stands for the principle that burns or 'purges'. It is the agent of Hades or Hell and hence the word 'purgation'. The NPEP is Puro > Pyre.

In this connection, one may refer the word Pyramid – where semantically the triangular pyramid shape stands for an icon for Fire. It is an ancient icon of '*Tri-anga*' or '*Tri-kona*' (Trigona) in the Vedas (R.V: 1.118.2), the *Swetaswata* Upanishad: 1.4 and seen in the pyramids³⁸ of ancient Egypt.

In this connection we have to refer to the word '*Purganya*' (a name of Vedic *Aditya* or Sun standing both for a divine couple of both Heavenly Fire (thunderbolt) and the rains). *Purganya* has a Thunderbolt and the rain and perhaps his name is definitely related to rain and thunder-god Perkunas of Scandinavian mythology.

There are possible NPEP with words like purgation > purge > forging (related with metal-smith work based on fire). The principle of fire-smiths is rooted in esoteric Indian spirituality and mainly in the Rasayan (khemia) Yoga. It is related to alchemy and finally Sufism of Persia; it is also found in the deeper traditions of Kabala.

In Egypt 'al-Khemia' became 'Al-chemistry'. It stands for a science of purification of base or lower metals

³⁸ Pages 40 and 61 in the Penguin 'Dictionary of Religions' (edited by J. Hinnells) (1984)

(like iron) to a higher state called 'gold'. Mythically we get an idea of an 'Iron' age, a state of crude material mind as against a distant Elysium – the 'Golden age' – 'Saturnalia' - the age of truth.

The term is also connected with the ancient 'Pyrrhic' war dance of fury which stands for the symbolic fire Smiths, connected with tales originating in the ancient Cyclades (island of Lemnos, Imbros and Samothrika) in Ancient Greek Orphism leading to Fyre > Fury (traditions of archaic Greek Mythology of Fire having possible NPEP to Persian word 'Pir' – the holy purgatory place of worship).

Air – The NPEP is *Ara*, which means a spike or a spoke. The NPEP is: *ara* > oar > ear (meaning the ear the corn). It stands for the principle of 'Shibboleth', a mantic (mantra) Judgmental tradition based on 'phonetics' of right articulation and it is found in the Old Testament (Judges 12:5-6). It stands for the principle of airflow, which is *Vayu* from where the science of 'cybernetics', 'aerodynamics' and 'hydraulics' are probable derivatives. Archimedes was the link man between the ancient and modern world. It is based on the science of vibrations that we have discussed earlier in this chapter.

Space – The NPEP is *sparsha* (in dialect form or *prakita* it has become *spasha*. It is the principle of touch and expanse. In space, we feel and touch the principle of existence (form and solidity). The NPEP is *sparsha* > *spasha*³⁹ > spatial > space. An alternative root may be from the word '*sphotana*' or '*sphuta*', which means to explode or bloom in space i.e. expands in three dimensions. (Refer footnote 39 for linkages on Kharosthi / Aramaic and Historic Christianity)

Spirit – The near NPEP is *sphuron* i.e. something that self-emanates or has emanated. Thus NPEP is spherical from *sphurita* > *spherita* > *spirita* > *spyra* > *spyro* > *spire* > a-spire. Aspiration is the basis of all mental levitation processes meaning an inner yearning for larger or ever-expanding truth as opposed to an inert or gross Tamasik nature of static or non-expanding truth.

Thus the science of *pancha-bhutas* is essentially the science of thermodynamics and natural physics and chemistry of life (biology). It is from this root understanding of the Asiatic forefathers the Milesian philosopher and sage-like minds began to build their first analytical ideas of natural and cosmological sciences. We shall discuss that expansion now.

Part three: ancient Milesian Sages and their concept of completeness

Dr. Fritjof Capra, the author of the book 'The Tao of Physics'⁴⁰ makes a very important observation on the beginning of Greek science and its forerunners, the Milesian sages. He says:

³⁹ It is so that from Sanskrit Nirvana and Dharma they have later become (in Pali and Kharosthi and near similar Aramaic) Nibbana and Dhamma. In the process of vernacular phonetics and dialectics the 'r' has been lost. So Dharmanikaya has become 'Damanika' or possibly Dominicans. Madyamnikaya had become Majjanikaya or Mesonica or possible 'Masonic' movements of the Free Masons (Templars in the Americas). Bodhisattva has in probability become 'Bethesda' or 'Bethseida' (John 5:1) an allegory of the many 'Passover lambs or sheep pool' – a collective state before the becoming of the Buddha or the Christ. This discussion can be reviewed in light of an earlier discussion on historic Christianity in chapter four.

“The roots of physics, as of all Western science, are to be found in the first period of Greek philosophy in 600 BC, in a culture where science, philosophy and religion were not separated. The sages of the Milesian school in Ionia were not concerned with such distinctions. Their aim was to discover the essential nature, or real constitution; of things what they called ‘*physis*’. The term ‘physics’ is derived from this Greek word and meant, therefore, originally, the endeavor of seeing the essential nature of things” (Chapter one, page 24).

The word ‘*physis*’ is Indo-European and in all probability it comes from the root: ‘*pusha*’ or ‘*posei*’ which means the essential elixir that is inside. It is the inner essence that nurture, foster and guides life and raises it from the material and earthly level to higher spaces in the mental and the spiritual levels. The Milesians were like the Vedic Sages as they had seen the three as one. This was their spirit of completeness where:

- One gets both an idea of science, an expansion of the elemental components from matter to space.
- Further experiences a philosophy that binds the various levels of creation from gross inert to subtle and the sublime and
- Finally a hint of the inner human journey and its pursuit, which is spirituality.

Hence comes a complete term ‘*pusti-varadhanam*’ (RV: 7.59.12). The ancient Rig-Vedic hymn forwards this holistic thought – naturally or ecologically, scientifically, philosophically and ultimately, spiritually:

‘Triambake Yajamahe sugandhi pustibardhanam’

This is hymn to *Rudra*, the dynamic and ever-furious aspect of Shiva.

The later words that are likely associated with ‘*pusti-varadaka*’ meaning an ever increasing nourishing process are: feast, foster, festival, pastry, paste (food or bread), pista (nuts), pasta (Italian food) and lastly ‘fast’ (a principle of sacrifice). They are all connected with ever-increasing life-giving principle.

The month of *Pousha* (winter solstice) in India is dedicated to the festival of the promises of a resurrected sun. The celebration in this month symbolizes the renewed nourishing heat, fire and life from the ‘deep dark and cold waters’ embodied through the symbol of Capricornia (mythical ‘Capra’ or the Makara (mugger or Mizraim of Egypt (hence Egypt’s old name is mythically the crocodile called ‘*Mishara*’)). In the Western system it became *aja* (the immortal) symbolized by a horned Goat (Hence ‘Aegis’ – the mythical goat-skin shield of Zeus and other names of Agyptus (Egypt) and Aegean Sea in the Mediterranean Greece). This is a vital research clue.

Let us come back to the word ‘*pousha*’ again. At the lowest point in the southern hemisphere (with respect to the north) it is cold, meaning a lowering of heat or an absence of heat. As a result life on earth is in a state of disorder. It is from this lowest point the Sun makes a re-turn. Hence the term tropic (a tripping) and with this are associated the later terms in science like ‘en-tropy’, which means an absence of heat or an unavailability of urge (ergo) to activate (to do work).

Then the Sun moves northbound i.e. *Uttarayana* (or spring equinox). Heat builds up as Sun reaches higher and higher latitudinal points till it reach the next ‘tropic’ – the one at ‘Cancer’ (after Carcino or *Karkata*). This leads to building up of heat and energy to bring back / sustain life on earth. This return of the ‘Sun’ is taken in

⁴⁰ One may refer book entitled ‘The Tao of physics’, Flamingo (1983).

the deeper sense to symbolize the resurrection of life that was either lost or kept dormant in the subterranean depths of matter.

We have discussed this great science of ‘Cosmic thermodynamics’ in chapter two and we shall review it again later in chapter six while we explain the spirit of ‘Boisakhi’ (or Visakha) - the Indian New Year. At *Boisakhi* the sun is building up its excruciating intolerable heat for reasons that are ultimately benign. Renewing a full cycle of seasons, the Sun and life on earth eventually attains sustainability and completeness (i.e. immortality).

Rudra is therefore venerated as ‘*puṣṭi-varḍhak*’ – the fosterer of life and immortality in the subterranean region. He is the ‘fosterer’, the ‘pusher’ of an upward thrust. With his pro-active fiery and furious mood he epitomizes resurrected consciousness. *Rudra* symbolizes the journey from the subterranean world (*bhuta-akasha*) to the supreme heavens (*chida-akasha*). *Rudra* is also venerated as the ‘*Triambak*’ – an impersonal image of a giver of the triple wisdom (like Trimegistus Hermes of Greece or Thoth of Egyptian alchemy).

The term ‘Triambuk’ is found amongst the ancient Orphic initiates of Greece. The term is ‘Thriambic’ (the triple ‘iambic’ or the syllable of words or mantras) and it is a penultimate word of later religious developments in Europe signifying the victory of the Christ over his cross and his subsequent resurrection. The spirit of victory is expressed through the ideas of ‘Triumph’ and ‘Trumpet’, which are found in the Book of Revelations, New Testament. This we have discussed in chapter four from a historic standpoint. But prior to Christianity, the Milesian Sages were guided by this ancient wisdom of the earlier Sages.

Ancient Milesians and the later Greeks – a note of departure

The essence of modern science Physics can be traced back to the Indo-European root.

Fritjof Capra has further added to his observations by saying that:

‘.....the monistic and organic view of the Milesians was very close to that of ancient Indian and Chinese philosophy, and the parallels to eastern thought are even stronger in the philosophy of Heraclitus of Ephesus. Heraclitus believed in the world of perpetual change, of eternal ‘becoming’. For him, all static Being was based on deception and his universal principle was fire, a symbol for the continuous flow and change of things. Heraclitus taught that all changes in the world arise from the dynamic and cyclic interplay of opposites and he saw any pair of opposites as unity. This unity, which contains and transcends all opposing forces, he called the Logos” (Chapter one, page 25).

This was the completeness as preached by Heraclitus. The doctrine of the ‘Couple’ or the unity of opposites was the heart line of the Orphic school and it influenced other philosophies from Pythagoras to Plato.

But the split and the departure from completeness began with Aristotle and particularly from the Eleatic school of Parmenides. On this Capra gives the historical observations:

‘....the split of this unity began with the Eleatic school, which assumed a divine principle standing above all gods and men. This principle was first identified with the unity of the universe, but was later seen as an intelligent and ‘personal’ god who stands above the world and directs it. Thus began a trend of thought which

⁴¹ One may review the cosmic cycle in light of modern concepts in Thermodynamics and the associated concepts of two ‘isothermals’ and two ‘adiabatic’ in that cycle developed by Sadi Carnot. It is called the Carnot’s cycle.

led, ultimately, to the separation of spirit and matter and to a dualism which has become characteristic of western philosophy”.

We know, based on our previous discussions in chapter four, the impact of this departure on later philosophy and religious movements in the Mediterranean world. The departure had led to the problems of ‘a dualism of ‘sons of spirit’ versus ‘sons of matter’, a growth of a problem of original sin and a growing dependence of a weaker mind state on a personal savior myth’. These affected all later religious and cultural philosophies of Europe.

‘Unity of Opposites’ - Samkhya philosophy of complete numbers

The philosophy of a fundamental unity of the two – the essence and the expression comes from Samkhya philosophy in its original form. It is derived from a step-by step reconciliation of *Prakriti*, which is the 24th component, which is internally composed of 23 sub-components of the individual world (the microcosm).

The 23 components are the 5 *bhutas* or elemental physical components of world, 5 *tanmatras* or the subtle senses (the senses or perceptions of form, essence, sound, touch and smell), 5 working senses, 5 intellectual senses, and the other three, which are mind, intellect and ego.

The *Purusha* or the self or the life-giving spark is the 25th Component. The *Purusha* and the *Prakriti* thus constitute the lower frame up to the microcosm (the individual weak anthropic principle) and the world of experience that builds around a weaker combination of this principle.

In the higher steps of Samkhya, 11 other high-end component-levels are found where the two – *Purusha* and *Prakriti* are not seen as separate beings of spirit and matter (in opposition to each other) but as complementary to each other (as a couple). In these 11 higher steps, the two are reconciled as a conjugate (*jamala* or Gemini (*mithuna*)). Finally in the highest level⁴², which is the 36th they are seen as one, inseparable and always in eternal union. It is like the eternal unity of the Bride and the Bridegroom as explained by the *Trika* system of Kashmir Shaivism (which has been introduced in chapter one; sourced in chapter two and explained in chapter three).

On this renowned Indic scholar Gobindagopal Mukherjee (1989) has pointed out:

‘The Trika system in explaining the evolution of the world, therefore, goes beyond the other systems of philosophy, because it tries to trace it from the original source step-by-step. It posits 36 tattvas or categories (or levels) instead of 24 or 25 (of the lower Samkhya). The 25 are recognized and kept as they are but above them are posited eleven more to explain how the Purusha and Prakriti themselves come into being’

(Page 54, Spiritual heritage of India: The *Tantras*)

Different mythologies have seen this couple as a primordial hermaphrodite - for example is the unity of male Hermes and female Aphrodite. In Shaivism it is seen through the divine communion of *Shiva* and *Shakti*. In an

⁴² It results out of 25 primary components of the microcosm of the two *Purusha* and *Prakriti* and 11 advanced components where the two are reconciled and seen as a unity. The final number of Complete Samkhya is 36 = 25 (microcosm) + 11 (advanced microcosm or the macrocosm).

⁴³ This is quoted from a book entitled ‘Studies on the Tantras’, The Ramakrishna Mission Institute of Culture, Calcutta (Kolkata), India.

inner sense, which is beyond mythology, it is also seen as the unity of the Great Mother eternally containing the Child (the male consort as her son) in her womb.

This particular viewpoint in Indian philosophy is called '*Nigama*' or the descendent wing of Tantra. This philosophy in essence constitutes the ancient and sacred tale of Mother *Annaparina* (Greek *Annaparina*) and her consort now reviewed as the son – the dependent form of Shiva (or say archaic Greek Sabazius) of Varanasi in India (Diana L. Eck, 1992)⁴⁴. There are other tales of a similar relationship between Mother Goddess Tara (*Nila Saraswati*) and her consort or son '*Kala-agni-rudra amar-kanthak Shiva*'⁴⁵.

The word 'Couple' – a most probable origin

The word 'couple' in all probability has originated from the name of the Sage 'Kapila'. His name stands both for a furious fiery red color (symbolizing death) and also for a life giving milk or ambrosia from the parable of a mythical Cow called the '*Kamadhenu*' (symbolizing the source of immortality).

Kapila is connected with the Upanishad called '*Swetaswatara*' which is both described as a 'White' (*sweta*) Upanishad and belonging to the 'black' (Krishna) school of the *Yadur Veda*. This is comparable to the allegory of the black and white seen in the constant iteration of an ancient Chinese symbol called the 'Tao' (meaning the 'way of the Gods') and forms the basis of the philosophy of Confucius and Lao-Tzu and their commentaries on *I Ching* meaning the Eternal Book of Changes⁴⁶.

The term '*Aswatara*' has been described and discussed before and it literally means the Mule. It is an allegorical cross of the male horse and the female ass symbolizing the unity of opposites a divine couple completing the concept of an ultimate and dynamic reality.

The earliest Milesians

The doctrine of the unity of opposites or the 'couple' (Kapila) was rooted in earliest Greek philosophy. The Milesian sages had seen this as the unity of the macrocosm and the microcosm.

Pythagoras echoed the 'Philosophy of Kapila' by saying 'everything is numbers'.

Protogoras talked about it through his universal 'Anthropic principle' and said 'Man is the measure of all things'. This influence the renaissance minds of like De Vinci and others.

Hippocrates re-depicted the ancient Hermetic Wand 'caduceus' where he showed the unity of the two serpents and a crown beyond or above that unity represented by Horus or the divine Falcon – symbol of Egyptian Pharaoh, who is both a son of Man and a Son of God. And there were others.

Here is a brief of that legacy:

⁴⁴ Readers may refer her book on 'Banaras: City of Lights', Penguin Books.

⁴⁵ The tales are that of an exasperated Shiva following the intake of the toxic poisons of this world (Hell or Halahala) from the sea of creation or troubled waters. Shiva accepts the immortalizing juice from the udders of the Great Mother and gets resurrected. In this there is a hidden image of Bodhisattva, one who takes up the universal creation load and its resurrection as a component of his personal salvation. Similar images have also been seen in the case of Ishtar and her son Tammuz (in archaic images in the colony of the Phoenicians).

⁴⁶ Refer chapter seven on 'Chinese thought' in 'Tao of Physics' by Fritjof Capra, Flamingo (1983).

Table: The philosophy of the Milesians School

School	Philosophers	Natural Universal elements
Milesian School (in mainland Anatolia)	<ol style="list-style-type: none"> 1) Thales (around 600 BC) 2) Anaximander (546 BC) 3) Anaximenes (494 BC) 	<ol style="list-style-type: none"> 1) Thales thought universal element is water 2) Anaximander said the primal substance is neither water nor fire or air, as they have properties like moist, heat and cold respectively. 3) Anaximenes said it is air, as soul is air, fire is rarefied air and air becomes water if condensed and earth having further condensation.
Ionian School (In Samos and Grecian islands)	<ol style="list-style-type: none"> 1) Pythagoras (532 BC) 2) Heraclitus (500 BC) 3) Protogoras (500 BC) 	<ol style="list-style-type: none"> 1) Pythagoras believed that all things are numbers (<i>sankhya</i>) and saw relationship between science of vibration (lower noise and higher music) and mathematics in terms of 'harmonic series' that explain configuration of things (potential status of objects). He also suggested fundamental application of physics in art, architecture and aesthetics⁴⁷. 2) Heraclitus believed that fire is the fundamental substance and his sense of Fire, like Thales and Anaximenes, was not material fire but close to the conception of inner fire or <i>Agni</i> of the Vedas. 3) Protogoras believed 'The Human form' (Anthropometrics) is the universal measure. He depicted a fundamental unity of the two; microcosm and the macrocosm.
Athenian school	<ol style="list-style-type: none"> 1) Socrates 2) Plato (425 BC) 	<ol style="list-style-type: none"> 1) Both were followers of the Pythagorean school and reformed Orphism. Orphism was an based on the doctrine of transmigration of souls, purgation, asceticism and ultimate release of the soul from the bondage of matter. In essence Orphism was close to Indian religious systems. Plato in <i>Timaeus</i> re-emphasized the importance of numbers in solar and seasonal cycles, day and night and diversity of the universe. He emphasized as Fire as the immortal part of the soul in the head and the mortal part in the breast having physiological implications in anthropometrics. Such description of two important locations (one within and the other without) is the essence of earliest Upanishads of India and traditions later developed by the <i>Tantras</i>.

In archaic Greek philosophy we therefore observe both - a pre-dominance of the philosophy of numbers and the pluralism of the natural world. But all pluralism is seen as an essential unity. The concept of pluralism (as depicted by the five components or the *pancha-bhutas*) and an eternal unity that contains that pluralism within was known to earliest Greek philosophy.

⁴⁷ From pg 54, Chapter III, A History of Western Philosophy by Bertrand Russell (Unwin, 1946).

In studying the relationship between the two, the microcosm and the macrocosm, the three faces of complete knowledge i.e. science, religion and philosophy of the ancient Greeks was also sharing the holistic viewpoint of the Indian sages. It was a concept around which all sciences, all philosophies and all religions have grown and developed. That great concept is TIME.

The concept of TIME – the final key to Indo-European linkage

The concept of Time developed with the contributions coming from one of the greatest of Greek philosophers and a true Milesian successor and also an adherent of the philosophy of Orphism. His name was Plato.

In our final search of the Indo-European origin, we will focus on Plato, the greatest religious, philosophical and scientific personality of the Athenian school. In Plato we shall discover the idea of TIME not as a straight line but as a moving image in cycles and rhythmic patterns explaining the sustainability of life on universe and the universe in essence. That construct of TIME had crosscut archaic philosophy of the Greeks. It had constituted the lifeline of ancient Greek festivals on the one hand and had contributed to modern physical science on the other.

For that we have to first look at Plato, his Cosmogony and then look specifically within the rooted secrets of a particular and great ancient Anatolian seasonal festival that possibly provided the clue of patterns of life as TIME, the etymologic behind the word TIME and the idea of TIME to later Greek philosophers.

TIME: the word and its probable Indo-European root

In Plato's *Timaeus* we get a full account of the origin of TIME:

“...The creator-father created images of eternal gods, he rejoiced, and in this joy determined to make copy still more like the original; and this was eternal, he sought to make the universe eternal, so far as might be. Now the nature of the ideal being was everlasting (eternal as a flux and not in essence⁴⁹), but to bestow this attribute in its fullness upon a creature was impossible. Wherever he resolve to have a moving image of eternity, and when set in order the heaven, he made this image eternal but moving (so that as an image it can be eternal in its immanence or movement), according to number; while eternity itself rests in unity (the transcendental opposed to a mirror to the immanent); and this image⁵⁰ we call TIME⁵¹”

Of the eternal aspect there is neither it was or will be and therefore we cannot say that. But of the ‘moving image of eternity’, it is correct to say that it was and it will be and this is called **Time**.

⁴⁸ From pg 161, Plato's Cosmogony, *ibid*.

⁴⁹ And this idea is closest to Prakriti (nature) of Sankhya philosophy.

⁵⁰ This is equivalent to Swami Vivekananda's description of the transcendental state in a song entitled ‘Samadhi’ (sung in Raga Vagwesri) where the universe is seen as a moving image of something beyond (vashe byomme chayasomo chabi-visya charachara...). In the Gospel of Shri Ramakrishna, there are similes of ten pots with water and the ten reflections of that ‘one sun’ in the sky in the ten pots that are broken one by one. Lastly what remains of any image, when all are broken cannot be said !!

⁵¹ One may refer to page 158, Ch XII, ‘A History of Western Philosophy’

Explanations complementing Plato's *Timaeus* – parable of shadow

In the moving image there is the knowledge of numbers and the unity of opposites i.e. of that, which was and will be.....

It is the root idea of an origin or the transcendental source called the *Purusha* and the moving image of that *Purusha* contained in the dynamism of nature or *Prakriti*. *Purusha* is in the eternal source and *Prakriti* is the movement that contains in her in the material expanse the image (the shadow) of that absolute, which is forever.

If the absolute is truth then its moving image or the shadow is also a truth. Both are truths. Here lies the Completeness as the two are complementary as one.

This material expanse of *Prakriti* or nature is the matter or the gross inert nature where we observe the movement of that image and consequentially sense the 'ticking of the clock' or time. Thus Time is a directive of that image on gross matter or gross nature. This is called *Tamasik* nature in Indian philosophy.

On TIME we can suggest a probable Indo-European linkage:

Tamasik: Tammas > Tammuz > Timaeus > Time

The two broad levels of *Tammas*

The word '*Tammas*' means a framework of gross inertia within and beyond which there is an ever-changing and ever moving current of changes presented through multitude of more frozen (like sand dunes) and relatively less frozen (like sea waves) changing material forms. All are frozen and condensed but their intensities of changes (different CHIs as per Chinese thought) are relative to each other.

One observes in that mutable movement an endless pattern of changes called the eternal flux. But the framework is gross or *Tammas*. Thus we get two broad levels.

- Level one: There is one concept of static time exactly denoted by the sum-total gross inertia of a particular object and this is represented by a multiplicity or numbers. Science of numbers that is that arithmetic (A-rhythmic) representation and it is also the language of Statics or basic material sciences. Time ticks as there is inertia. Time is observed due to duality or multiplicity. The science of the static is the science of inter-relationship of the multiplicity in universe and based on the slow relationships between them (traveling below the speed of light).
- Level two: The static sense of Time collapses if multiplicity vanishes and an absolute monism emerges in its place. In the framework of the Absolute, which is one and the only one, there is no Time; at least the natural clock time we are used to at level one is transcended. Where then is the moving image that displays the overall *Tamasik* nature of a changing universe seen against eternity? It is there as a special relationship of duality or multiplicity of this universe seen against an unchanging unity. We can see it in the moving dynamism of the patterns of changes moving from one form to the other - like a continuous dynamism seen from one collapsing wave to the next resurging wave over a unity - the sea. That moving image of that perpetual dynamism is the higher image of TIME at level two. **This is the level that Plato was exactly talking about and that brings us closest to eastern (Japanese, Chinese and Indian) concepts of Time.** This level of *Tammas* is a framework of integrity that holds within the dynamic level of continuous patterns of changes. In Indian philosophy, this is the frame of higher *Tammas* – the very basis of a process of 'deconstruction' of static names and forms and a sustained 'construction' of that continuity seen through the perpetual modes of deconstruction. In the Vedas this force of a sustainable deconstruction (*Dakshina*)

and construction (*vama*) is called *Rudra* and its power is called *Rudrani* or more commonly known as *KALI*. In China in the Book of *I Ching* it is called the CHI-LIN meaning a grand static framework holding within a continuous dynamic reality. In modern physics we have parallels – the concept of a ‘dynamic equilibrium’.

Now we face two major questions:

- How can we relate the Indian word ‘Tamas’ and the western word ‘Time’? On what basis?
- Where can we trace these lost connections?

For this we have to look somewhere else.

In the last phase of our discussion we have no other way but refer to the early beginnings of farming communities of Anatolia as mentioned by Professor Renfrew. In a short review of the essential folk-anthropology and comparative religion of that ancient eastern Mediterranean, we will discover the missing linkages.

Part four:

Original evidences and new directions

It is by and large accepted by scholars that Pythagoreanism was a movement of reform in Orphism. From Pythagoreans, sprang the genius of Plato, Origen and later neo-Platonism of Plotinus. Much of later Christian philosophy is imbedded in Plotinus and also the later schools of Baruch Spinoza and German philosopher Schopenhauer.

The root is Orphism, which was a movement of reform in the worship of Dionysus. And the cult of Dionysus (Sabazius) was that of an original Asiatic mystery cult imbedded in the pre-history of Anatolia and in the Ancient Near East. The principal linkage was the ‘cult of Mithras’ that had spread from Persia to different parts of Europe as early as 600 B.C.

In Anatolia he was ‘Kyros Sabazius’; in Greece he was ‘Bacchus Sabazius’ and in Rome he was ‘Jupiter (Zeus) Sabazius’.

F. Cumont (1956) says:

‘This ancient divinity of Thraco-Phrygian tribes (Turk-Riga) was by an audacious etymology, which goes back to the Hellenistic epoch (300 B.C and earlier), identified with ‘Yah-we-eh Sabaoth’ (Sibboth), the Lord of Host of the Bible (Old testament). The Kyrios Sabaoth (Sabbath) of the Septuagint was regarded as equivalent of the Kyrios Sabazius (Sebazius)⁵²’.

We therefore see that the highest concept of Biblical ‘Sabbath’ is an Indo-European derivative of a state of highest spiritual transcendence called ‘*Sibbatwa*’ (the highest and perfected impersonal state of meditation later personified through the cult of Shiva or Siba). This may be linked through the ancient settlers of ‘Saba’ (Hebrew: Sheba), the Arabian Sabaeans – associated with worship of ‘stars’ and its Lord – ‘Saba’ (Sheba), the host of Heavens. Hence are the words ‘Shavuoth’, an Old Testament festival after Pentecost and the idea of a ‘savior’ – from verb ‘save’ (the sieve or refinement of quality and value).

⁵² By F. Cumont, John Burnet, Stewart Perowne and others.

⁵³ Refer his book ‘Oriental religions in Roman Paganism’ (1956) and ‘Afterlife in Roman paganism’, Dover publications, New York.

In light of 'Kyros Sabazius' of Anatolia; 'Bacchus Sabazius' of Greece and Jupiter (Zeus) Sabazius' in Rome, one will venture to hope for a probable connections with the ancient 'Sabines' of Italy. It is from this source King Solomon and his probable consort, Queen of 'Sheba' had obtained their seal – the famous ancient star of Old Testament – 'the Star of David' (or the Seal of Solomon). It is also called the 'Magen Star' claiming even eastern or Persian Magi-based origins. And the roots of the Magi wisdom are that of the Persian Athaurvan fire-priests and their cult of 'Atar-Ba-haram'.

The cult of Mithras (Mithraism) was therefore an extension of the Indo-Persian 'solar (*Sol Invictus*) cult' imbedded in the original *Vedas* and *Avesta* literature. This was almost synonymous with that of Dionysus (Thracian or Turco-Bacchus or Anatolian *Sabazious-Bromius*), which was a cult of divine intoxication and ecstasy and it had strong roots in the folk-anthropology of settlements in Anatolia and the Ancient Near East.

It is within this esoteric mystery of Anatolian highlands that we might discover the roots that we are looking for. The most important of all these mystery cults was that of 'Tammuz' or 'Tamsu', who is intimately connected with the cult of Kumarbi of ancient Anatolia. This on 'Kumarbi' we have had our discussions earlier. But let us concentrate on 'Tammuz' now.....

The Cult of Tammuz – the cut of a double intender

The cult of Tammuz comes from an agrarian rite of a dying and rising theme related to the symbolisms in seasonal cycles and life on earth itself.

The cult had chthonian (related to arable/underworld) fertility and growth implications, which were observed and practiced by all agrarian communities throughout the ancient Near East. Such communities had spread from Persia, Assyria, Sumeria/Mesopotamia, Abyssinia, Egypt and Anatolia.

We have previously discussed the Indian version of this great Godhead of fertility and growth, which is the cult of 'Kumar' or 'Scanda'. Let us discuss the Anatolian version.

The Anatolian legend of 'Adonis' or 'Kumarbi' has two parts. One is the 'divine' aspect and the other 'the mortal or the subterranean' aspect. One, it is the absolute image in the heavens and the other that image that is born here and is moving here and then seeking a release from the earthly terrestrial.

The dual nature of 'Adonis' had provided the concept of a 'son of Light' and 'a son born of matter or mortal man'. They are also found in a slightly different version in the Old Testament through the duals of 'Sarah and Isaac' and 'Hagar and Ishmael', which we have time and gain discussed earlier.

In the Kumarbi legend, the second or the mortal aspect was called 'Tamsu' or Tammuz. The name probably at a later point became the name of a Jewish calendar month around June-July following the month of 'Sivan' or the Pentecost festivals of seasonal harvest symbolisms.

⁵⁴ Refer chapter on 'Moses and Mithras' (1988) in 'Roman Mythology' by Stewart Perowne, Hamlyn.

⁵⁵ John Pinsent's 'Greek Mythology', page 12, where the parallels between the 'first born' (The son) has been established between Greek version of Dionysus and that of the texts survived in the Hittite capital in Asia Minor (1200BC).

⁵⁶ Refer <http://www.leaderu.com/everystudent/easter/articles/yama/htm> and allied books by E. O. James (The Ancient Gods) and James Frazer (The Golden Bough).

It is said that just over five weeks after Pentecost there is a three-week period of intense mourning and this period begins with a daytime fast called 'Shivah Asar Be-Tammuz' from where it goes up to month of Elul (August-September), the last calendar month.

Judaic New Year is again celebrated at Tishri (September-October), the month of post-Autumn. Traditions of ancient Judaism are just the mirror opposite of that we generally have in India (a New Year celebration beginning with post-spring). In fact, in India, there is a deeper implication of the festival of the Mother Goddess celebrated twice – one by a mortal man called 'Ravana' – during month of *Chaitra-Vaisakhi* or 'Vasanti' in spring equinox; and the other – by a divine intervention – by Lord 'Rama' – during 'Aswin' or 'Haimanti' in Autumnal equinox. Why is it that way?

One shall to find out these deeper implications later

This is just a theoretical pointer.

The cycles of Tammuz

In the Arabic calendar instead of Judaic Shivan (Pentecost) and Tammuz (fasting), we get *Sha'ban* (Shivan in Arabic) and *Ramadan* (or Ramazan in India known for month of fasting). Ramadan is the probable equivalent of Tammuz.

The cult of Adonis (the Lord) is equivalent to the ancient cult of Tammuz whose roots are far more eastern than Anatolia i.e. they are found in Ancient Sumerian mythology in the Ubaid traditions of archaic Mesopotamia.

His name means 'the true son' or 'the earthly son, who is born of deep waters' (Chapter one, page 5, in 'the Myth of Adonis' by James G. Frazer (1932)).

In the religious literature of Babylonia, Tammuz appears as the youthful lover of Mother Goddess Ishtar (the Sumerian equivalent to Venus and Judaic Esther) and stands for the embodiment of the complete reproductive and creative power of nature.

In the story of this divine conjugate i.e. 'Tammuz-Ishtar', a cyclic recurrence was found. Every year Tammuz was believed to die, passing away from the cheerful earth that was previously sprouting up (the ear of the corn) to the gloomy subterranean world, and every year his mistress Ishtar continued the search of him. Thus life on earth succumbed to drought and fasting and loss of fecundity and mortal inertia of earthly doom. Hence the name of month called Tammuz.

After desperate search and torment in the infernal regions Ishtar restores Tammuz to glory as fertilizing rains come in and the company of the two is restored. The two attains the original seat in the upper world, where their true and original divinity is restored.

The parallels of Tammuz in Orphism

This was also the key theme of Orphism, the theme of original divinity (1) and a descent of that original divine

⁵⁷ Refer 'A Handbook of Living Religions' edited by John R. Hinnells, Chapter on 'Judaism', page 36, Penguin Books (1984).

⁵⁸ This is from chapter one, page 5, in 'the Myth of Adonis' by James G. Frazer (1932), Watts & Co. London.

spark to mortality (2) and continuity through the next possible resurrection (ascent) to heaven (3). The cycle (1-2-3-1 and so on.....) is continuous because we are 'originally divine' as the original roots of the race in the supreme heavens keeps the joy of creation forever:

In one of the discovered Orphic fragments of '*patale*' (petelia, an Indo-European word meaning the subterranean) we find these lines:

*'I am a child of earth and of starry heaven;
But y race is of heaven alone. This ye know yourselves,
And lo, I am parched with thirst and I perish. Give me quickly...
The cold water flowing from the lake of memory,
And of themselves they will give thee to drink from the holy well-spring.
And thereafter among the other heroes thou shalt have lordship.....*

(Tablet of 'Petelia', Orphic Text, translated by Professor Gilbert Murray)⁵⁹

Associated are other important words connected with the Indo-European root from where the geo-spatial connotations of ancient places in the Mediterranean and Anatolia were derived. They are:

- '*atalia*' – older name of Italia;
- Ana-*atalia* or older name of Turkey;
- all ancient wells as source of water and life called Tella – like Tel-aviv, Tel-Amarna and many more.
- Other marine or subterranean words are '*atalaia-anta*' i.e. atlantic (in the depths of the subterranean sea) and the legacy of 'Atlantis' are also based on such ancient connections.

In ancient time, the lower Indus valley and lower Ganges valley were known as 'Petelia' to which the Orphic myth is probably connected. The highest points of the origins of river in the mountains were analogous to the Heavens and the lowest points were the estuary and further beyond considered to be a lowest 'tail' point of the river entering the subterranean realms.

Hence In Indian myths we get the allegory of *tala*, *atala*, *patala*, *rasatala* and many other mythological descriptions of the subterranean and similar terms are also found in the Orphic Greek textual description of the fire in that subterranean called 'Ourba' (in Sanskrit) and 'Erebus' (Hades) in Greek.

This is mentioned In Megasthenes 'Indica' (Account of India).

Charles Berlitz (1982) in his book named 'Doomsday 1999' (page 136-137, Granada Books) has traced the word '*atalia*' to many traditions in North Africa, particularly the ancient Phoenicians (their colony in Tunisia, Morocco) and later Moors (Berbers) of the ancient world.

The story is the annual disappearance of the spirit of life (activated by the symbolic reaping of the corn-goddess Demeter) to the nether world (*patalia*) and its further reappearance in the upper heavens (the re-sprouting of the corn or 'shibboleth') of Persephone is a parallel Greek version. The story is either of a specific Persephone or the general case of any virgin young girl called 'the Kore' and her Mother. The coupling of two in the upper world (Zeus) and the lower world (Hades) provides the two-way cycle and the story of death and resurrection

⁵⁹ This is quoted from page 38-39, Chapter one in 'A History of Western Philosophy' (1979) by Sir Bertrand Russell, Unwin Paperbacks.

in the Greek version, which was then matriarchal!!

Thus Kore, who is the daughter of mortal man, is also the daughter of divine nature (The bridegroom of Zeus). She is also the eternal ancient Virgin – the mother of the Universe and the mother of all ‘sons’ of God.

Parable of the Corn – blowing in (reaping or death) and blowing out (sprouting or resurrection)

The blowing out of the universe as the moving image of unity and the return of the universe or the ‘word’ itself (representing the entire universe and all life in it) to its roots are found in the symbols of the sprouting and the reaping of the corn. The Vedic roots of this parable have been discussed in chapter two.

Corn represented the seed, which is the epitome or ‘*Vija*’ of the universe and it is a concept found in India from the earliest days of the Upanishads (Mundaka Upanishad: 1.1.8), where the absolute truth or ‘Brahman’ is compared to a corn. In the Vedas, it is a boiled corn served as a complete food of the supreme. It is called ODANA. This Vedic parable has also been discussed earlier.

The twin agricultural seasons of ‘autumn’ and ‘spring’ represents the twin half-circles (like the Chinese *Yang and the Yin*) of the full cycle of Cosmic Time. Like Ancient India and China it had also formed the common basis to almost all ancient civilizations of the Ancient Mediterranean and African worlds.

In the Vedas they are explained through two important principles:

The principle of an original (out flowing or inflowing) cosmic breadth (called *Matarishwan* in the Vedas) and

The formation of the ‘cosmic word’ or the ‘Logos’ (*Prajapati or Isha*).

The first principle is symbolized in the form of the ‘Mother’ and the second, as the son, who is transcendently the husband or the Father in the heaven and in immanence it stands as the aspiring lover and symbolized as the son in the highest or divine sense only.

The two principles form the basis of the many myths of ancient world.

Here is a short list:

Table: Mother-son (consort) conjugates in ancient civilization

Cult name: Son-Mother	Origin
CHI-LIN (unity of Yin and yang)	Chinese
Kumar-Kumarika	Indian
Adonis-Aphrodite	Greek
Attis-Cybele	Asia Minor
Dionysus-Demeter/Persephone	Eleusinian (earlier Greek)
Horus-Isis	Egyptian
Tammuz (or Dammuzi)-Astarte (Ishtar or Ashtoreth)	Ancient Near East (Phoenician origin)
Christ-Mary	Christian symbolism

⁶⁰ Refer page 12-13, Greek Mythology (1988), John Pinsent, Hamlyn series.

The origin of Easter is believed to have come from Goddess of spring ‘*Oissterre*’ or ‘*Ishtar*’. The descent of *Ishtar* into the netherworld from the heavens and the resurrection of an entombed godhead called ‘*Tammuz*’ (equivalent to *Adonis* or *Dionysus*) simply symbolize the blowing out and the blowing in of the cosmic word or ‘*Logos*’. This is the concept of ‘*Easter*’ carved out of early Asiatic wisdom and accepted by the Mediterranean world.

Tammuz represents the embodied soul imbedded in the bondage of matter but ready for a fresh release activating another half-cycle of a sustainable creation going back to its roots. The cycle goes on like a self-activated ‘fly-wheel’ keeping life and hopes of resurrection eternal and perpetual (the story of *Phoenix*).

Imbedded in the word ‘*Tammuz*’ is the Indian concept of cosmic Time (or *Kalpa*).

The final research clue on Time comes from the works of *Swami Vivekananda* on *Cosmology* and *Samkhya* philosophy.

The Indian origin of Tammuz

Rooted in the concept of *Tammuz* is a double intender. It is the Orphic realization/notion that every soul was partly divine (rooted originally in the infinite) and partly earthly (rooted here in the bondage of matter). This was corroborated by similar observations in natural cycles of spring and autumn. Accordingly the ‘twice-born’ concept was born. From *Dionysus* of Greece to *Adonis* or *Tammuz* in *Anatolia* or *Mesopotamia* the concept is rooted in the *Vedas* as the foundation of a ‘*Dwija*’ - the *Sages* who are born twice – later as an *Olympian* (heavenly) and first as a *Titanic* (earthly).

The blowing in and the blowing out – the five elements & the concept of Time

The blowing in and the blowing out of the life principle (signifying the descent into matter and the ascent or release of spirit from matter) are described on the basis of *Prana* and *Akasha*.

On this the *Swami* says:

“...When the *kalpa* begins, after an immense interval, the ‘*anidavatam*’ (unvibrating stage) commences to vibrate and blow after blow is given by *Prana* to *akasha*. ...The *akasha*, acted upon by repeated blows of *prana*, produces *Vayu* or vibrations. This *Vayu* vibrates, and the vibrations growing more and more rapid result in friction giving rise to heat or *Tejas*. Then the heat ends in liquefaction, *Apah* or *Jalah*. Then that liquid becomes solid (gross inertia or the stage of **TAMMAS**) and it goes back in exactly the same way”.

Instead of the ‘*Mother*’ (*Shakti*) and the ‘*child*’ (*Kumara*), we may ideally impersonate them as ‘*nature*’ and ‘*the individual*’.

It is out of nature, the soul rises as it evolves from an animal state of *Dionysus* (*Zagreus* or one bonded or dormant in its abysmal depths and symbolic of the chthonian netherworld mystery cults) to an upper or divine state (*Sabazius*).

⁶¹ It is to be noted that the concept of ‘*Easter*’ (Spring) comes from this ancient goddess *Eoster/Ishtar*.

The Swami further observes:

“...According to Kapila’s philosophy, all souls can regain their freedom and their natural rights like omnipotence and omniscience. But the question arises: Where is this bondage? Kapila says it is without a beginning...everything in Nature is constantly changing, but the soul never changes; so, as nature is always changing, it is possible for the soul to come out (rise or resurrection) of its bondage... (Nature is without any beginning or end, but not the same as soul, because nature has no individuality (in other words, soul has individuality or unity as it is non-changing)”

The Swami further adds:

*“...this nature consists of three elements, called Sattva, Rajas and **Tamas**. These are not qualities but elements, the materials out of which the whole universe is evolved”.*

“...The combinations which you call nature, these constant changes are going on for the enjoyment of the soul, for its liberation, that it may gain all its experience from the lowest to the highest. When it has gained it, the soul finds it was never in nature, that it was entirely separate...that going to heaven (rise) and being born again (descent back to Hades) were in Nature, and not in the soul. Thus the soul becomes free.”

But this is not all. The Swami finally adds:

“...the souls are many according to Kapila’s philosophy. (But) The Vedanta says that the soul is in its nature Existence-Knowledge (consciousness)-Bliss absolutethe omnipresent, the infinite, cannot be two..... Hence, there can be but one infinite, that is, one Purusha”.

Thus we clearly see Samkhya as a resolution of force (soul) and matter (nature) in the planes of multiplicity and microcosm. Here, there is going and coming, from a dualistic standpoint. In here there is a twin concept of duality of death and resurrection.

Ishtar or Mother Nature has to sacrifice itself for the liberation of the soul or her son **Tammuz**. Ishtar has to descend into Hades to resurrect **Tammuz**. To a divine lover she becomes both the mother and the beloved. This is in the divine sense. Similar standpoints can be framed to review the two Mary(s) and Christ the Jesus: 1) the Virgin Mary and 2) Mary of Magdala.

In the story of Ishtar and Tammuz, Ishtar as the Mother is also the Ishtar the beloved. Is it also true for Mary, the mother and the lover of Jesus? Who knows? Further research shall say.....

Gnosis and Spirituality

⁶² This has been explained vividly in Shri Aurobindo’s work ‘On the Vedas’.

⁶³ From Cosmology, Pg 435-36 (Vol 2, Complete Works)

⁶⁴ On this Sir James G. Frazer in ‘The Myth of Adonis’ (Watts and Co, London, 1932) says that: “...Nowhere, apparently, have these rites been more widely and solemnly celebrated than the lands which border the eastern Mediterranean. Under the names of Osiris, Tammuz, Adonis and Attis, the people of Egypt and western Asia represented the yearly decay and revival of life, especially of vegetable life, which they personified as a god who annually died and rose from the dead” (pg 4). (In page 166ff., Sir Frazer traces the linkages of this symbolic seed corn with festivals among many tribal villages of Eastern India and compares Gouri/Vassanti to Isis or Ishtar with an equivalent Kumara (son).

⁶⁵ From Cosmology, pg 440.

At the level of true spirituality gnosis emerges and in India we call that an Advaitic standpoint, as there is no coming and going. There is no death or resurrection and the unity is expressed as one Word or 'logos'. The 'word', which was with God in duality, is now God itself in absolute rapture and as essential unity. This is the highest sacrament – matrimony or unity of the conjugate. Here the nature of soul reflects the true nature. From a monotheistic standpoint, Ishtar is one with **Tammuz**. Mary is one with Christ. Mary is the Christ. This was the belief of the Cathars. Historical research shall prove that finally.....

The Swami relating macrocosm and microcosm (the two-fold aspects of '**Tammuz**') says:

"...That self when it appears behind the universe (or Brahmanda) is called God. The same self when it appears behind this little universe, the body (or pinda) is the soul".

The higher level is the *Akhanda* Tamas (undifferentiated unity of the material universe) and the lower aspect is *Khanda* Tamas (differentiated state of our mortal standpoint). The higher one, which is imbedded in transcendence, is the 'moving image of infinity'. The other and the lower one is a stage of our phenomenal world. Thus in this higher of two levels, we get the idea of 'Tamas' or 'Tammuz' or Platonic 'Timeus'. Today we call TIME in its complete sense and that power which brings us close to that sense of TIME is KALI.

Conclusions

The concept of 'Time' has therefore provided a crucial link to the evaluation of the Indo-European linkage. We have arrived at the definition of completeness as realized by the earliest Milesian Sages and their probable origins in the philosophy of India and Persia. The discussion has attempted to provide a larger framework of the linkage over 'space' and 'time' through which completeness of the ancient Indian sage mind can be better seen and an integrated with science and culture and a religious philosophy, which is to inspire an ever-improving way of life.

⁶⁶ From Sankhya and Vedanta (pg 454), Complete Works.

⁶⁷ Ibid, pg 457.

⁶⁸ Ibid, pg 457.

⁶⁹ Ibid, pg 460

⁷⁰ Ibid, pg 461

⁷¹ As explained in Isha Upanishad

⁷² Ibid, pg 461



1. Rediscovery and Renegade !

2. So, who are the Aryans?

3. Recent lights -

4. @IIT Kharagpur



**1. Rediscovering a global connection
but formulating a disaster !!!**

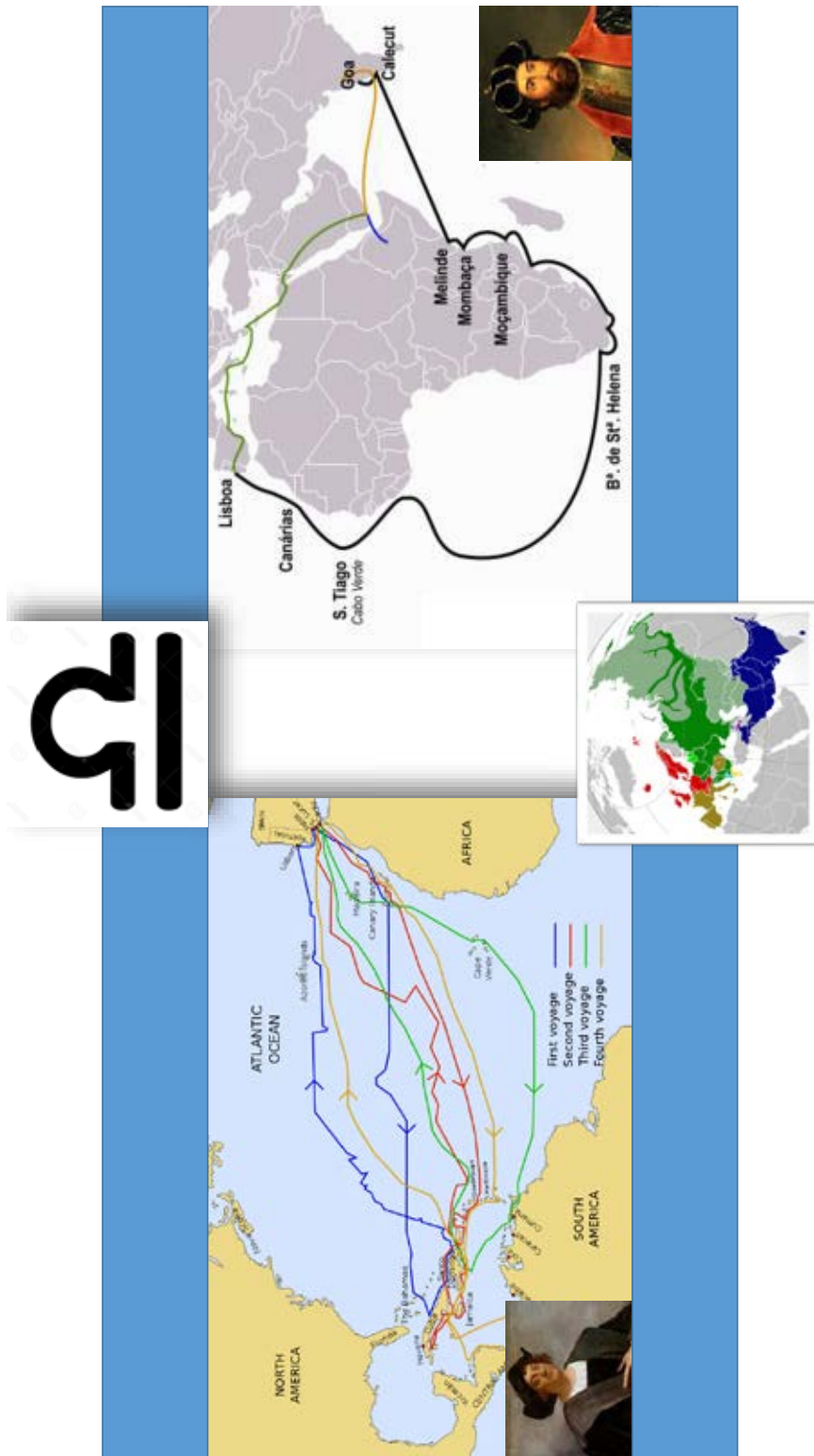
When West was still nascent...

**Towards global system of
expedition and tracing connections**



The Fall of Granada, 1492
The Granada War, Ep. 12

Fall of Constantinople
— 29 May 1453 —



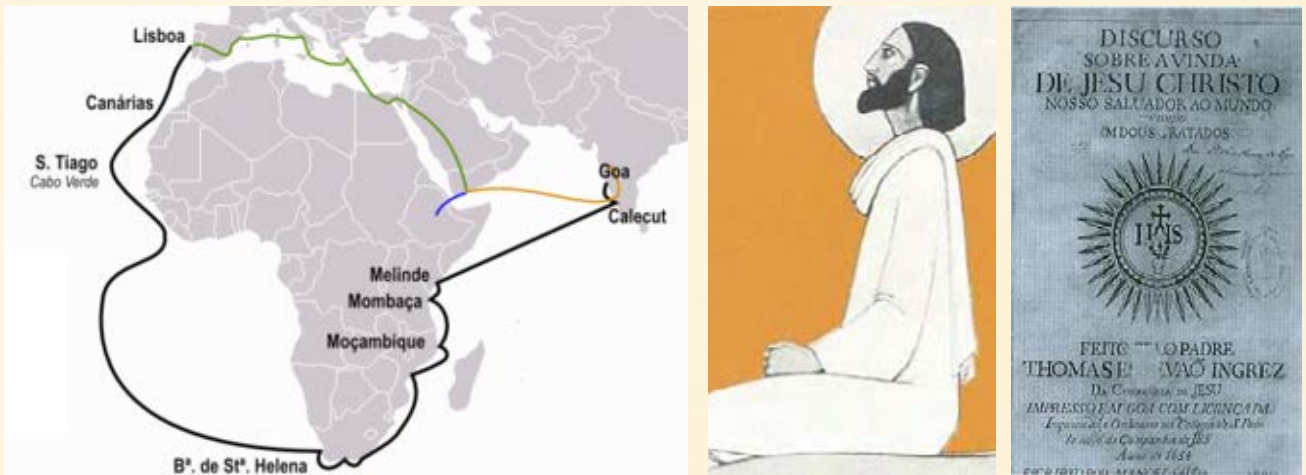


“ *So great, in fact, was the superiority of India in every respect, that it drew to her borders the hungry cohorts of Europe, and thereby indirectly brought about the discovery of America.* ”

INDIA'S GIFT TO THE WORLD
Brooklyn Standard Union,
February 27, 1895



Dovtrina Christam (Krista Purana) by Fr. Thomas Stephens, first published work in Konkani



In 1583, English Jesuit missionary and Konkani scholar Thomas Stephens wrote a letter from Goa to his brother (not published until the 20th century) in which he noted **similarities between Indian languages and Greek and Latin.**

Filippo Sassetti (1540–1588), a traveler and merchant born in Florence came to India in 1540 ...later in 1585



Writing privately to fellow Florentine Bernardo Davanzati in 1585, he noted some word similarities between Sanskrit and Italian (*e.g. deva/dio 'God', sarpa/serpe 'snake', sapta/sette 'seven, ashta/otto 'eight', nava/nove 'nine'*)

ट् = t	प = p
क = k	न = n

A system of Indo-European Language



In 1647, Dutch linguist **Marcus Zuerius** van Boxhorn noted similarity among certain Asian and European languages.



Ottoman Turkish traveler **Evliya Çelebi** visited Vienna in 1665–1666 and noted a few similarities between words in **German and in Persian**.

Gaston Coeurdoux made comparison of Sanskrit, Latin and Greek **conjugations** in the 1760s to suggest **a relationship among them**.

BIRTH OF INDOLOGY

CONCORDANCES & DISCORDANCES

Mikhail Lomonosov compared different language groups, including Slavic, Baltic (“Kurlandic”), Iranian (“Medic”), Finnish, Chinese, “Hottentot” (Khoekhoe), and others, noting that related languages (including Latin, Greek, German and Russian) must have separated in antiquity from common ancestors.

Even Marcus Zuerius van Boxhorn excluded languages such as Hebrew from his hypothesis.

Another was Elamite-Dravidian linkages
...SumerianSemitic group (Cursive)



Developing a System



In 1786 when Sir William Jones first lectured on the striking similarities among three of the oldest languages known in his time: Latin, Greek, and Sanskrit, to which he tentatively added Gothic, Celtic, and Persian.



Thomas Young first used the term Indo-European in 1813, deriving from the geographical extremes of the language family: from Western Europe to North India.



Franz Bopp wrote in 1816 on the conjugational system of the Sanskrit language compared with that of Greek, Latin, Persian and Germanic and between 1833 and 1852 he wrote Comparative Grammar.

Advanced concordances and discordances



The division of the Indo-European languages into **satem** and centum groups was put forward by Peter von Bradke in 1890, although Karl Brugmann had proposed a similar type of division in 1886:

Satem (by semiotics = seasons: শীত):

Centum (by semantics = levels/ matrix):

100 শত / শনৎ সন্ত



From a system of linguistics to racial primacy



Max Müller is often identified as the first writer to mention an “Aryan race” in English. In his Lectures on the Science of Language (1861)



Implying a biologically distinct sub-group, Arthur de Gobineau, argued that the Aryans represented a superior branch of humanity.



Finally, works of Houston Stewart Chamberlain advanced Gobineau’s ideas that later influenced the Nazi racial ideology which saw “Aryan peoples’ as innately superior to other putative racial groups.....

Renegade:
Indeed, Chamberlain has been referred to as
“Hitler’s John the Baptist”



1899 Chamberlain published his most famous work, *Die Grundlagen des Neunzehnten Jahrhunderts*, in German...

The book argued that supremacy of Western civilisation is deeply marked by the influence of **Teutonic peoples**. All European peoples – not just Germans were superior as ancient Proto-Indo-European culture and as a first fallout, Celts, Slavs, Greeks, and Latins made the “Aryan race”.

Adolf Hitler, was appointed Chancellor of Germany

**by President Paul von Hindenburg on 30 January 1933.
Hitler rapidly established a totalitarian regime
on the Superior Aryan theme & a history of its
eastbound invasion....**

Teutonic versus Celto-Hellenic/ Roma



The Last Crusade: World War Years ! Steven Spielberg (1989)



**Triggering the ARYAN MYTH causing
World War II, the deadliest conflict so far in
human history, marked by 50-85 million fatalities**

CHAPTER IV

The Aryans

We possess hardly any definite information about the people or peoples who originated and developed the great civilization described in the last chapter. This is the reason why it is named after the region where it flourished.

A scientific examination of the human skeletons and skulls found at Mohenjo-daro shows that the race actually represented by them belonged to four distinct racial types, viz.

Proto-Australoid, Mediterranean, Alpinoid, and Mongoloid. About 2000 B.C.E., or a few centuries later, a new race of fair complexion, speaking Aryan language, and generally, though not correctly, designated as Aryans or Indo-Aryans, gradually advanced from the North-West, across the Hindu Kush mountains, and entered India through Afghanistan. The Dravidians naturally resisted the newcomers with all their might.... a conflict between two types of civilization.

The most widely accepted view is that the authors of the Sindhu Valley Civilization were Dravidians, i.e., of the Mediterranean type referred to above. This is no more than a hypothesis. It is not possible to determine what we may derive from a study of the Rigveda, and the people speaking them. This view would mean that the Sindhu Valley civilization flourished long before the Aryans came into India.

Sir John Marshall and others independently arrived at the same conclusion by a comparison of this civilization with that depicted in the Rigveda. The presence of Siva-image and *linga*, the absence of horse, and the worship of icons prove in their opinion that the Sindhu Valley civilization was quite distinct from, and earlier than, the Aryan civilization represented in the Rigveda; for the latter lays great stress on horses, both in secular and religious life, regards the *Śiva-linga* with contempt, and knows no images of gods and goddesses. The importance of Mother Goddess in the former is also a notable distinction, for the female deities play no important part in the Rigvedic pantheon. Some scholars, however, do not accept this view. They regard the Vedic civilization as older than the Sindhu Valley civilization, and hold, on the

RELATIVE ANTIQUITY

basis of skeletal remains, that the Aryans formed part of the diverse population of Mohenjo-daro.¹

This brings us to the question of the dates of these two civilizations. The discovery of seals of the Sindhu Valley type in Western Asia, in strata of known date, seems to

Relative carry their date back to 2500 B. C. Even on antiquity of other grounds the later settlements of Mohenjo-daro have been referred approximately to the same date. As already seven layers of buildings

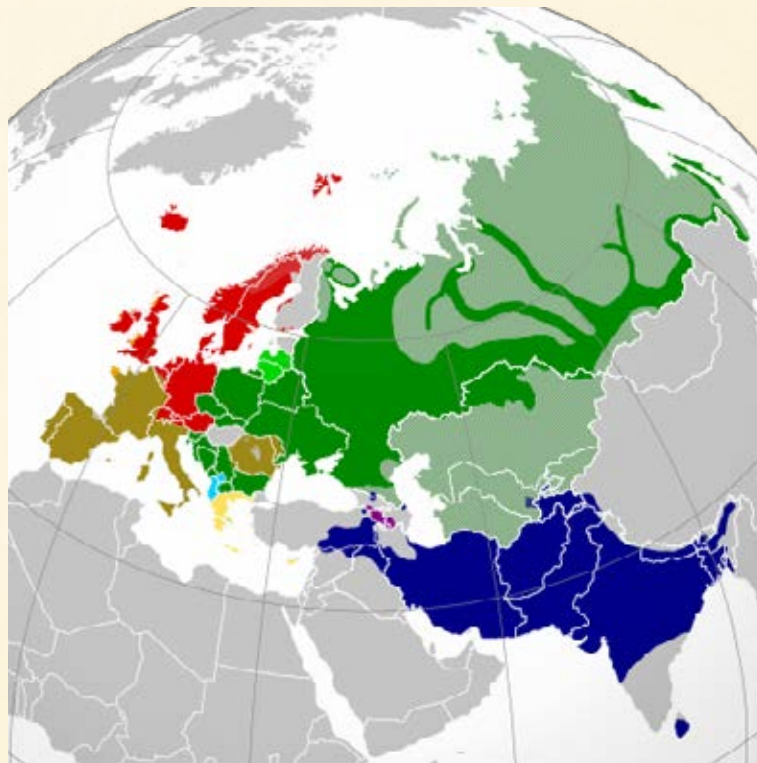
have come to light at Mohenjo-daro, and probably some still exist, this shows that the sub-soil water, we must allow a pretty long time for the growth and development of this civilization. This, according to the generally accepted view, may therefore, be approximately referred to the period 3000-2500 B.C. There is, however, a tendency among modern scholars to date Mohenjo-daro as early as 4000 years.

On the other hand, in the opinion of the majority of competent scholars, the Rigveda must be older than 2000 B. C.² Although this text must have been composed after, possibly long after, the Aryan immigration into India, still the text can hardly be placed much earlier than 2500 to 2000 B. C. From this point of view also the Sindhu Valley civilization flourished before the Aryans migrated to India.

Without fully admitting that no definite or final conclusion is possible at the present state of our knowledge, we may provisionally accept the view that the Sindhu Valley civilization represents the Dravidian culture, and is, therefore, belonged to the racial type commonly referred to as Dravidian. On this basis the history of this period may be hypothetically reconstructed somewhat as follows:

About five thousand years ago, or even somewhat earlier, a new race of Mediterranean type entered India from the West and occupied large parts of India (including Baluchistān). This people, who later came to be called Dravidians from the name of their common language, developed a high degree of civilization and founded many important cities. About 2000 B. C., or a few centuries later, a new race of fair complexion, speaking Aryan

1. Cf. ABORI, XVIII, 385-95
2. The date of Rigveda has been discussed in Chapter V.



2 “So, who are the Aryans?
Aliens to Humanity ?
Or,
Messengers of peace ?

The first protests

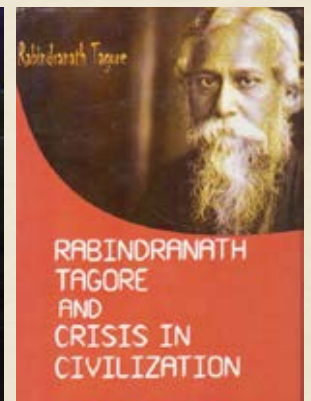
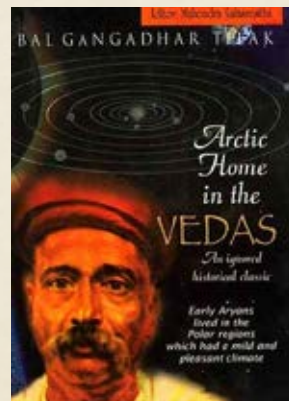
Dayananda Saraswati

Lokmanya Tilak

Swami Vivekananda

Sri Aurobindo

Rabindranath Tagore



B. R. Ambedkar

Will Durant

L. Basham

Michel Danino

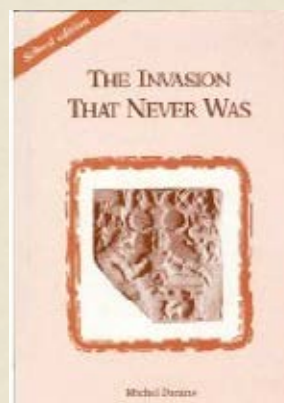
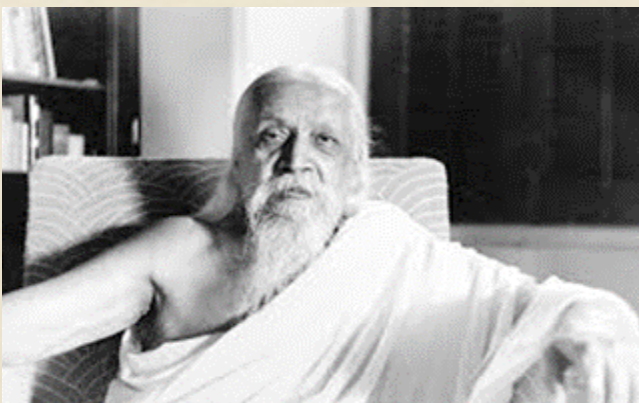
Who were the Shudras?

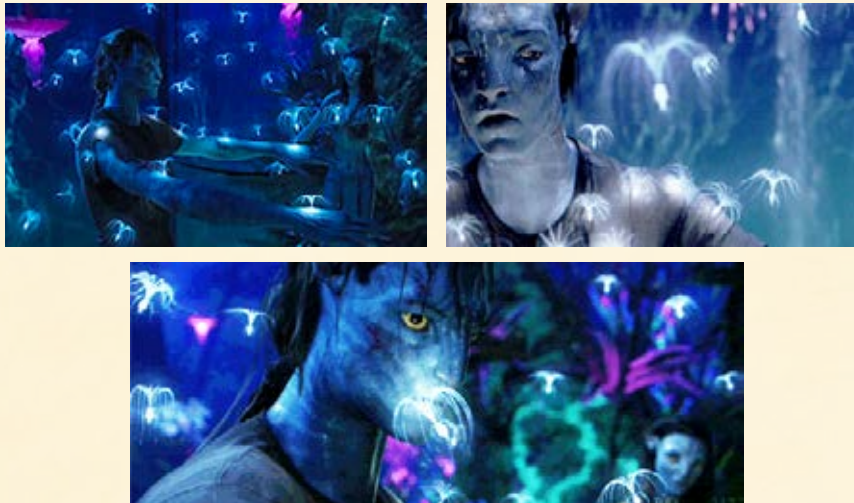
Our Oriental Heritage (Chapter 1)

The Wonder that was India (Cerebral / মূর্খন্য শিরস্কার্য)

The Invasion that never was

David Frawley, George Feuerstein & others..





Aryans "the carriers of light" (RV: 1/117/21)
Shri Aurobindo



LAND OF INDIGO: TYRIAL LINE: PURPLE DYE

Though we know Pandit Savariroyan ...boldly pushes forward the Accado-Sumerian racial identity of the ancient Tamilians....— compared to whose antiquity the Aryans and Semites are babies.

We would suggest, also, that the land of Punt of the Egyptians was not only Malabar, but that the Egyptians as a race bodily migrated from Malabar across the ocean to which Punt they have been always fondly looking back as the home of the blessed.

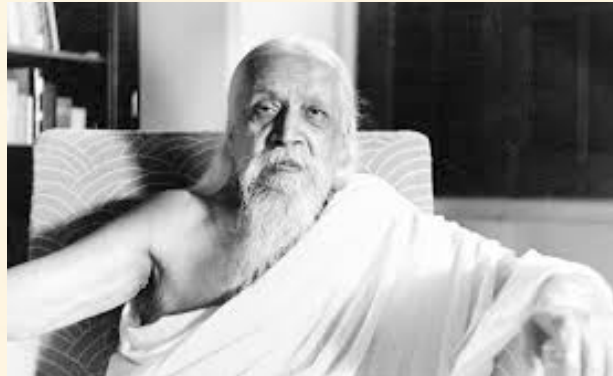
ARYANS AND TAMILIANS

Book I, “1-2

The Phoenicians, who had formerly dwelt on the shores of the Persian Gulf, having migrated to the Mediterranean and settled in the parts which they now inhabit

HERODOTUS: BOOK OF HISTORIES





The theory of an 'Aryan' colonization of a Dravidian India, the theory of Nature-worship and henotheism of the Vedic Rishis..... as if these hazardous speculations were on a par in authority and certainty with the law of gravitation and the theory of evolution.'

(Danino, p 41).

'So great is the force of attractive generalizations and **widely popularized errors** that all the world goes on perpetuating the blunder talking of the Indo-Aryan races, claiming or disclaiming Aryan kinship and building on that basis of falsehood the most far-reaching political, social or pseudo-scientific conclusions.'"

Sri Aurobindo
the Origins of Aryan Speech,
in **The Secret of the Veda**, p. 193

IS INDIA CIVILIZED ?

(Cerebral / মূর্খন্য শিরধার্য syllable/ syntax)

RARE 1899 YOGA RAJA YOGA

SWAMI VIVEKANANDA INDIA

SAINT HINDUISM ILLUSTRATED USA

Sapta sapta 49 varnamala



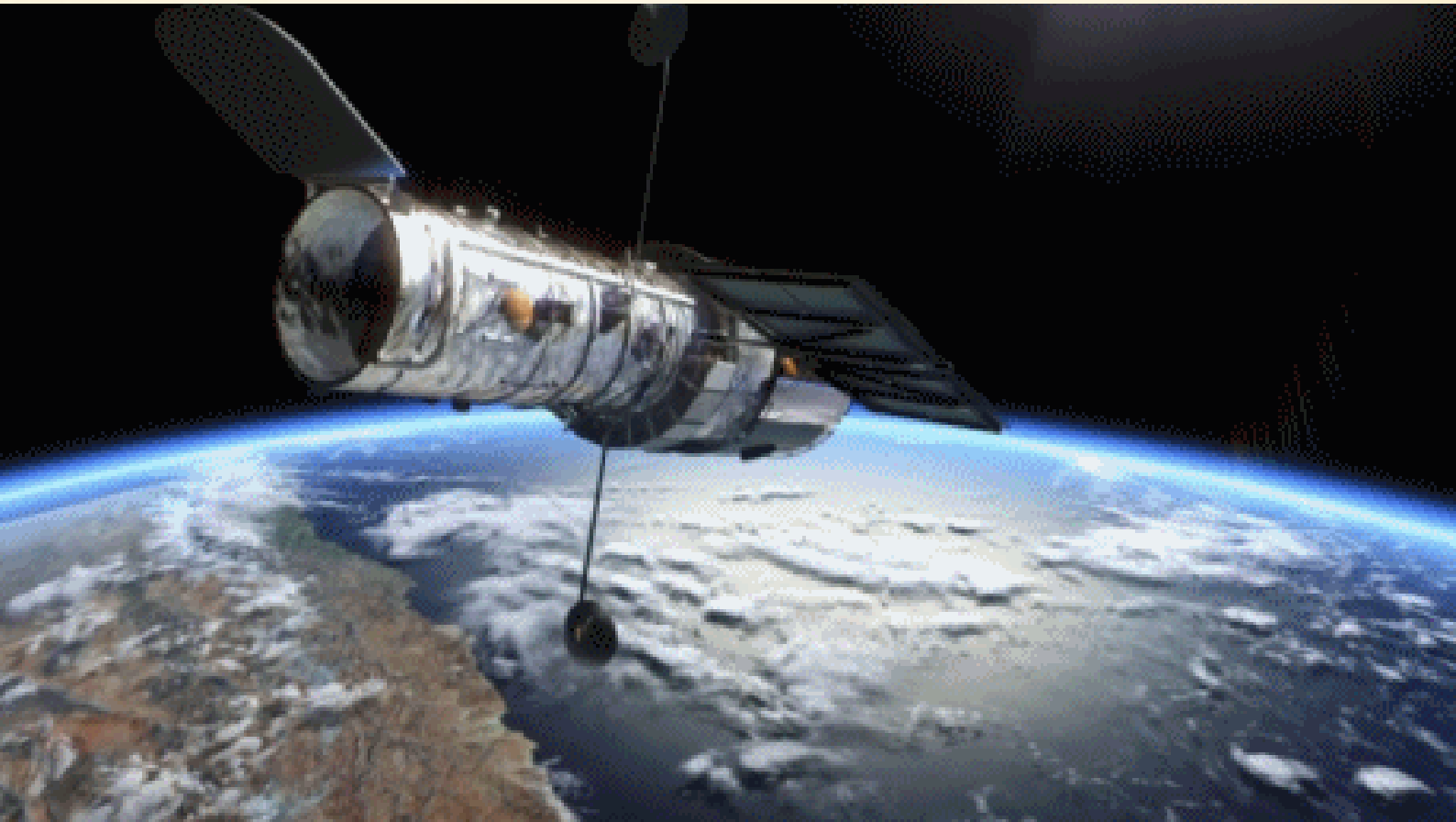


PROGRESS IN CIVILIZATION: THE EAST & THE WEST

- In what Veda, in what Sukta, do you find that the Aryans came into India from a foreign country ?
- Where do you get the idea that they slaughtered the wild aborigines ?
- What do you gain by talking such nonsense ?
- Vain has been your study of the Râmâyana; why manufacture a big fine story out of it ?

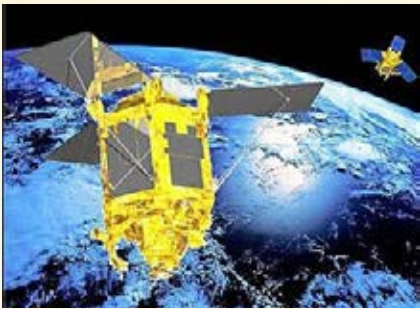
3 Recent lights

- Geo-climatic & anthropological
- Archaeological & Iconographic-al
- Archaeo-astronomical
- Syntax semantics Architectural
- Deep semiotics & realization-al
- Books written



Geo-climatic & anthropologic-al

FRENCH I-SPOT SATELLITES



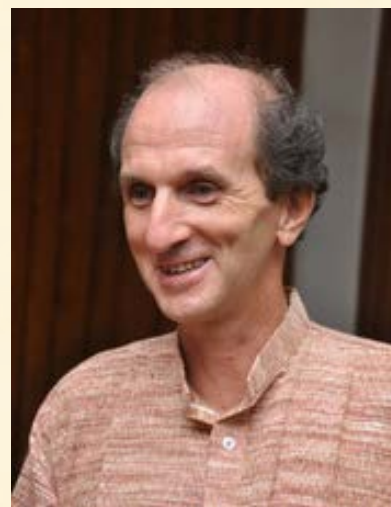
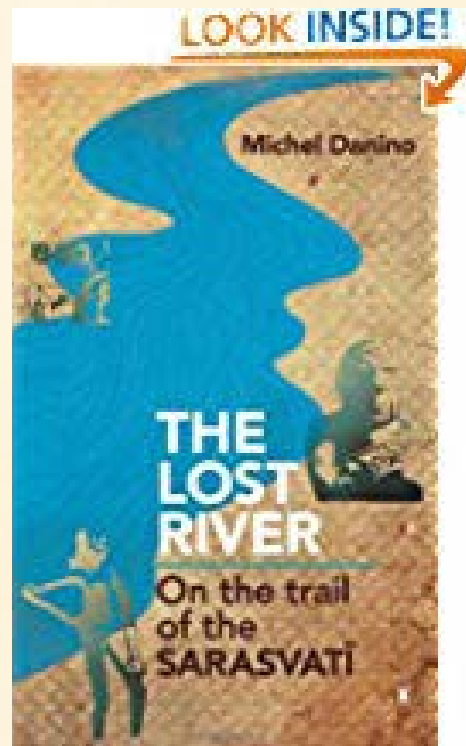
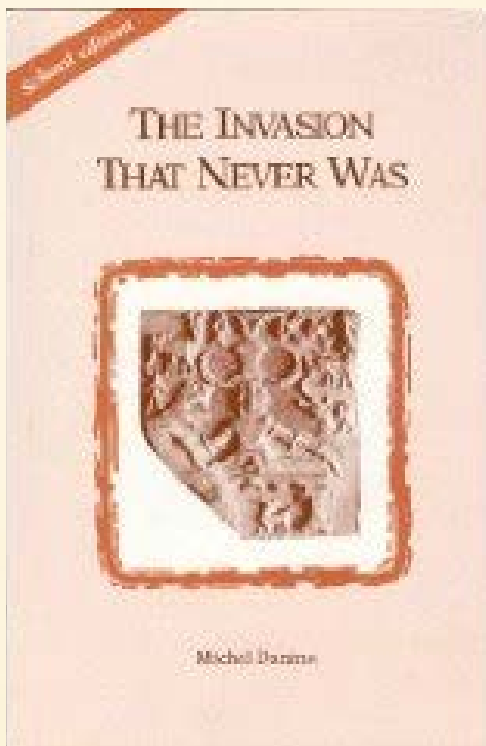
Jhelum, Chenab, Ravi, Sutlej and Beas as Eastern Himalayan Tributaries

NAIMISHARANYA

Indus Valley Civilization as a Western extension

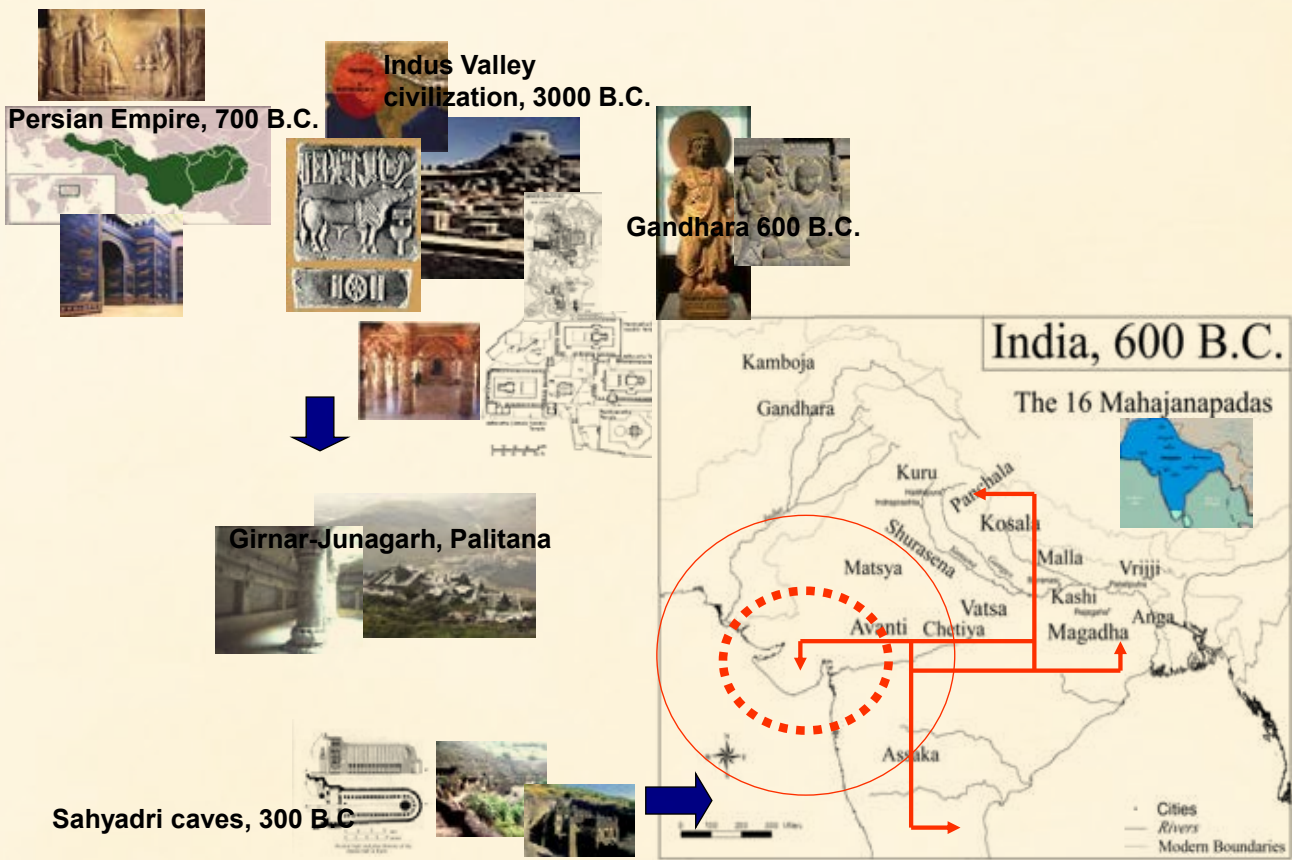
Geo-climatic & anthropological

Tracing the joint Indus-Gangetic plain....



Geo-climatic & anthropologic-al

Tracing the joint Indus-Gangetic plain with Deccan

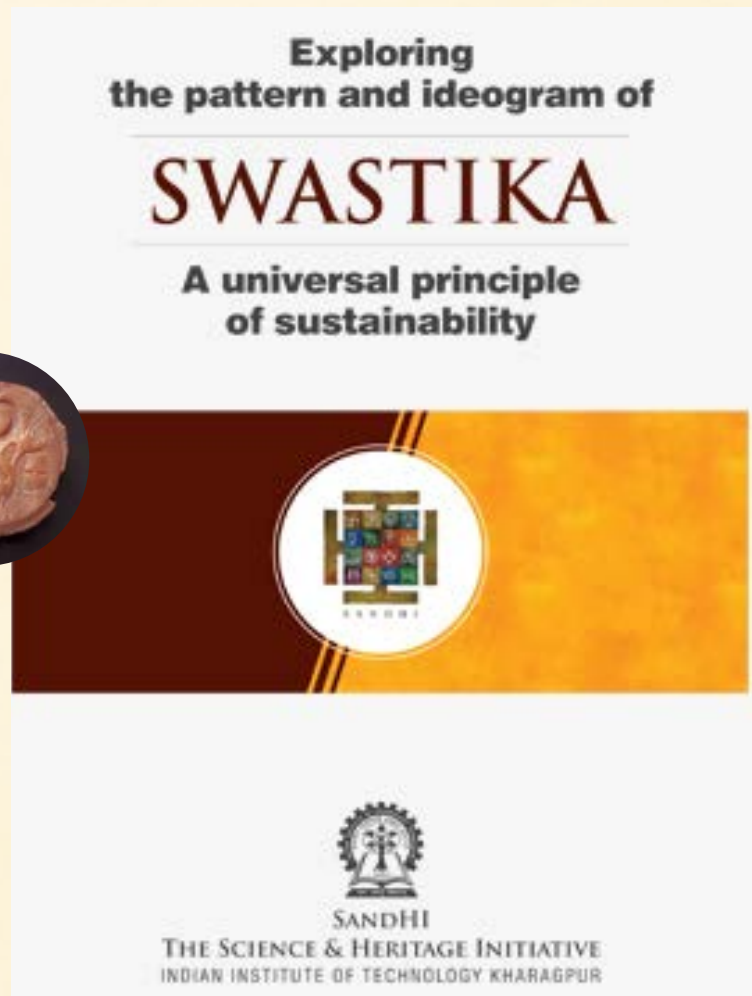


Geo-climatic & anthropologic-al



Archaeologic-Iconographic-al

The icons of array: orthogonal SWASTIKA



Archaeological-&-Iconographic-al

Prehistoric art hints at lost Indian civilization: 10000 BCE

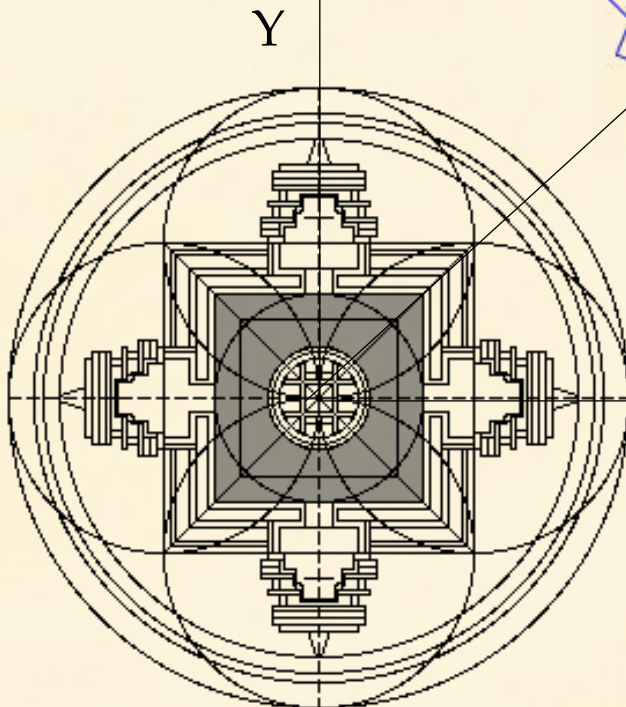
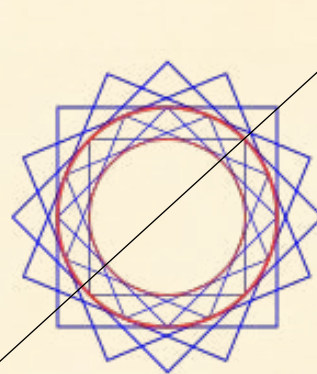
Aditya mandala (Rig Veda: 1.164): 1935 Yale-Cambridge

<https://www.bbc.com/news/world-asia-india-45559300>



Fractals and shape grammar

Mandala



Greater TIME X

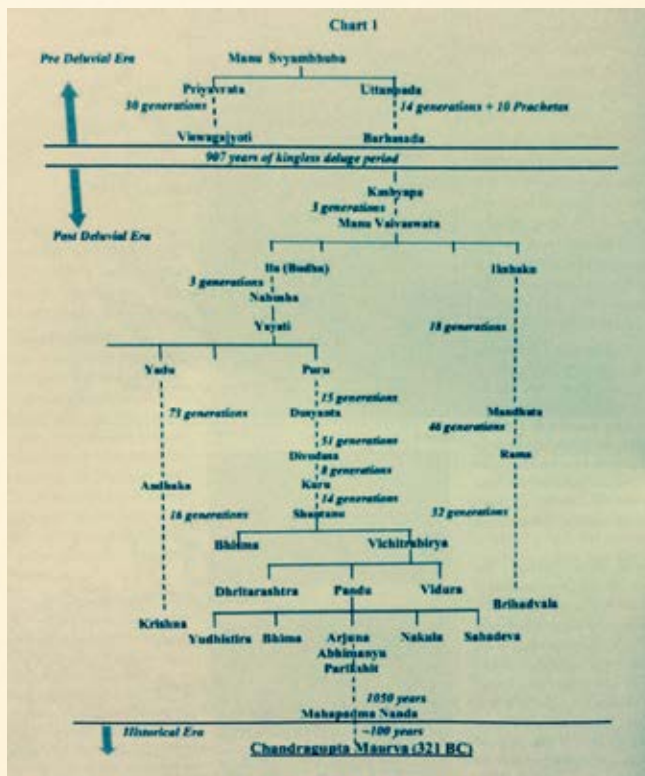
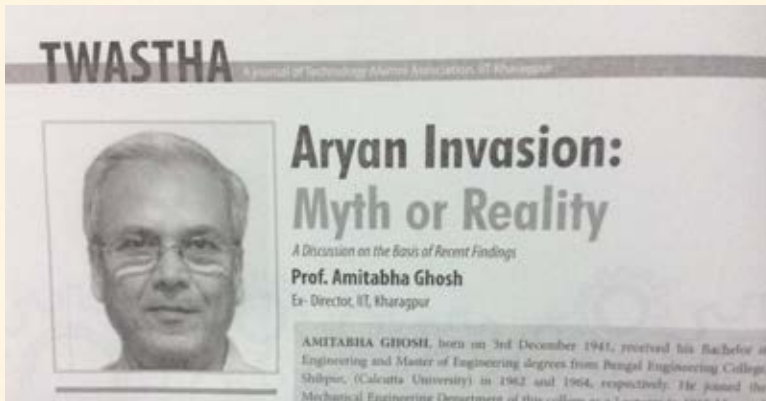
Archaeological-and-Iconographic-al

Grids and shape grammar 3x3 mandala

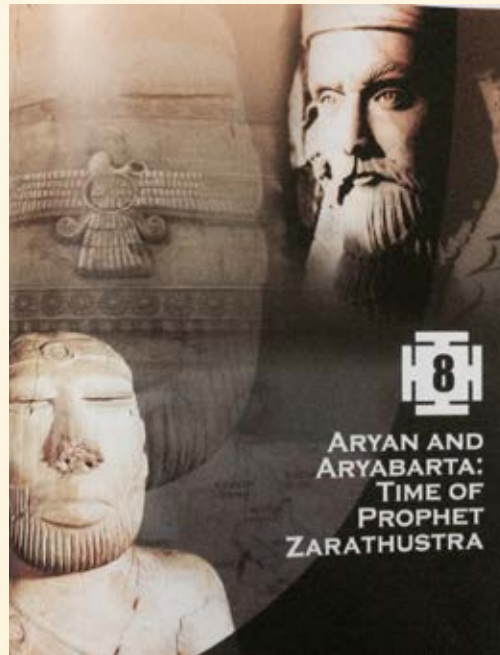


Archaeological-Iconographic-al

Adam's Bridge pre-5000 BCE



Bhisma on the field of reeds 2100 BCE Archaeo Astronomical Algorithm



WALKS AND TALKS BESIDE THE JHELUM



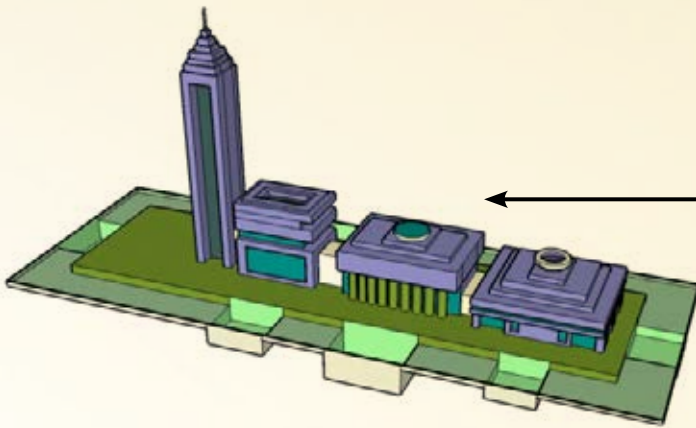
Zoroaster was a reformer of some old religion. Even Ormuzd and Ahriman with him were not supreme; they were only manifestations of the Supreme. **That older religion must have been Vedantic.**

So the Egyptians and Semites cling to the theory of sin while the Aryans, as Indians and Greeks, quickly lose it. In India righteousness and sin become Vidyâ and Avidyâ – both to be transcended. Amongst the Aryans, Persians and Europeans become Semitized by religious ideas; hence the sense of sin.

July 20 1998



Syntax Semantics Architecture-al



Aryan

Agni (Igneous)
Psukkho (Psychic)
Ascent to Spirit

KRISHNA



Dravidian

Dravi (Drop)
Soma (Somatic)

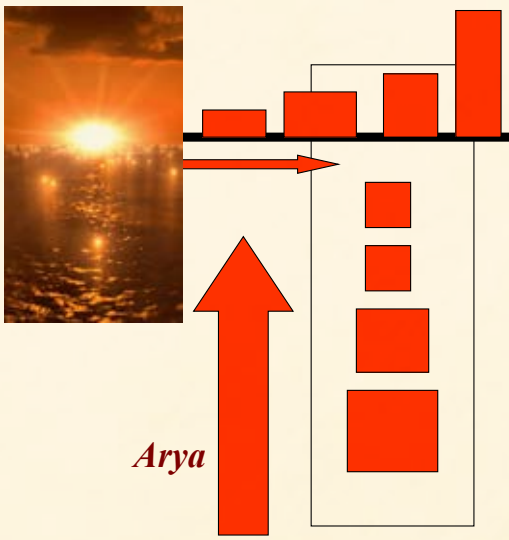
Descent into Matter

SUKLA



Semiotics Architecture-al

Semiotics Architecture-al

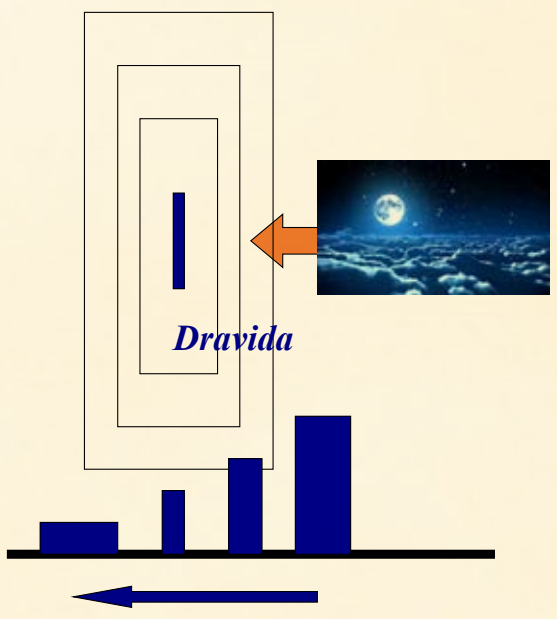


Dravida – the way of condensation, liquefaction.....the blue series of water
RV: 10.72.2; 9.112.2,; 6.3.4

Arya – the way of evaporation, burning.....the red series of fire
RV: 1.117.21; 7.33.7



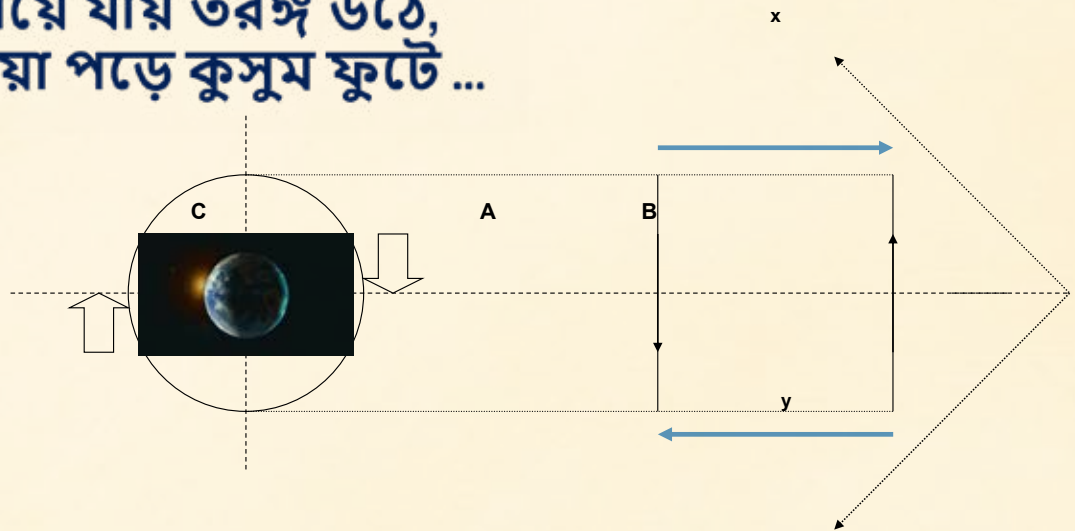
EVOLUTION & INVOLUTION



Deep semiotics & realization-al

Non-linearity: Cyclic approach

তরঙ্গ মিলায়ে যায় তরঙ্গ উঠে,
কুসুম ঝরিয়া পড়ে কুসুম ফুটে ...



The two opposite poles / directions are actually complementary; reciprocal; integral

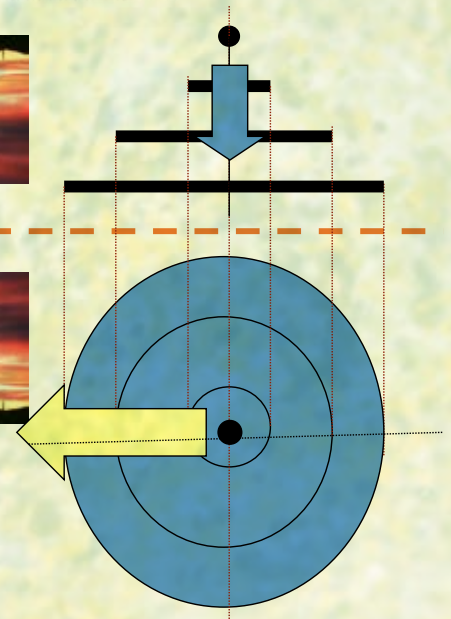
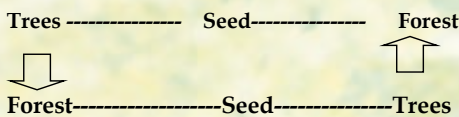
Descending: Top-down: Involutionary Indian Civilization

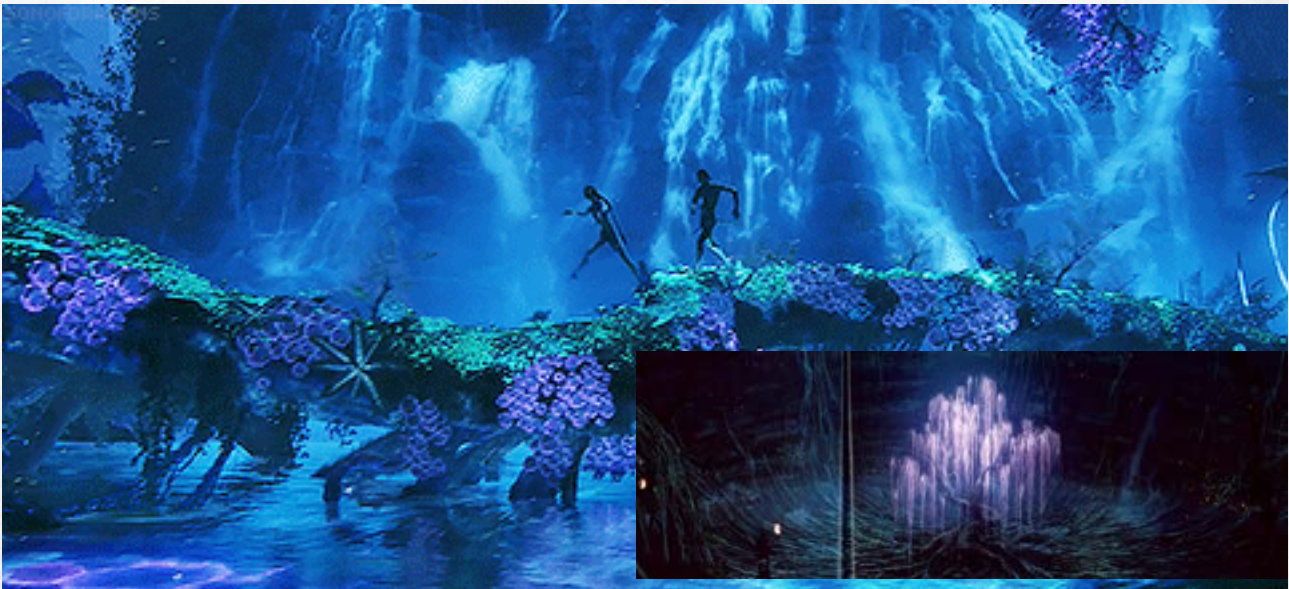
What is this depth and breadth of the Vedic Religious Ideal that is essentially impersonal-personified? ... to unlock this we have to revert to a Rig Vedic symbolism: 1.164.....the *Kattha Upanishad*....

High Root (*mulam*) to low branches (*sakham*)



Inner Core (*antara*) to outer periphery (*bahir*)





THE TREE FORMULATION: **Branches of light**

From Dialectics to Dialogical; And from Dialogical to Integral



ONE-FORCE

VEDIC

VIDYA-AVIDYA MAMA TANU
(Mahad-devanam-Asuram-Ekatwakam): Rig Veda

VIDYA

AVIDYA

GOOD

EVIL **SEMITIC**

Prana (Spirit)

Akasha (Matter)

INDIA



GREECE

Transmigration, Metempsychosis, Reincarnation



পুনর্জন্মবাদ

The above points are fundamental to the concept of reincarnation which has the immortal effulgent soul or Aditya “traveling” continually (RV: 1.164.31) in its involutions and evolution and the flow in orbits;

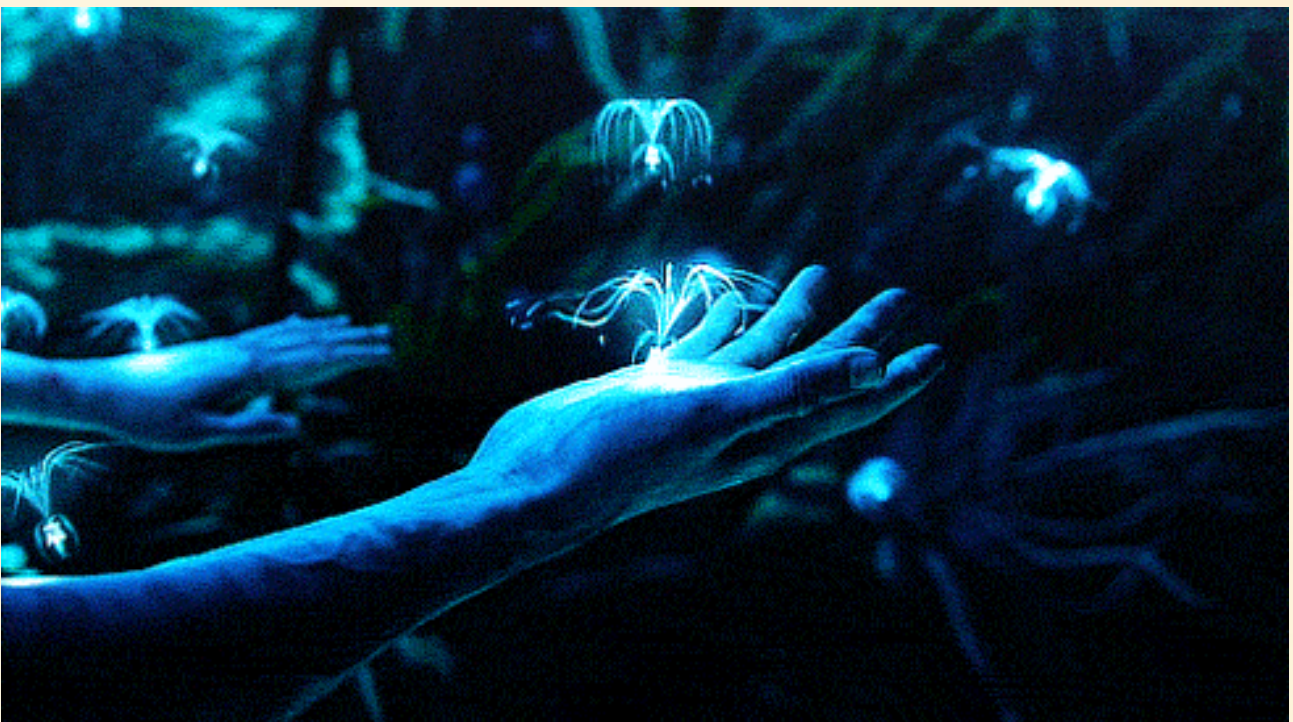
The continuity of impression of death (when body dies) due to its association with mortal body (RV: 1.164.32)

$$Y = f(X)$$

That **the Law of causation** is omnipotent and knows no time or place when it did not exist is a doctrine as old as the Aryan race, sung by its ancient poet-seers, formulated by its philosophers, and made the corner-stone upon which the Hindu man even of today builds his whole scheme of life.

From abstraction to iconic formation

Rupang rupang pratirupang... (RV)



4 IIT Kharagpur offers...

“So, are the Aryans Aliens ?

Depends what your yardsticks are, your definitions are....

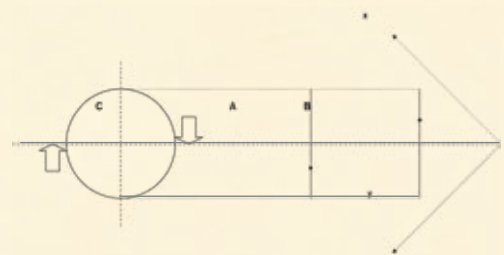
Depends on what you are looking for!

IIT Kharagpur has written for the children of tomorrow..

BOOKS ...based on the Complete Works

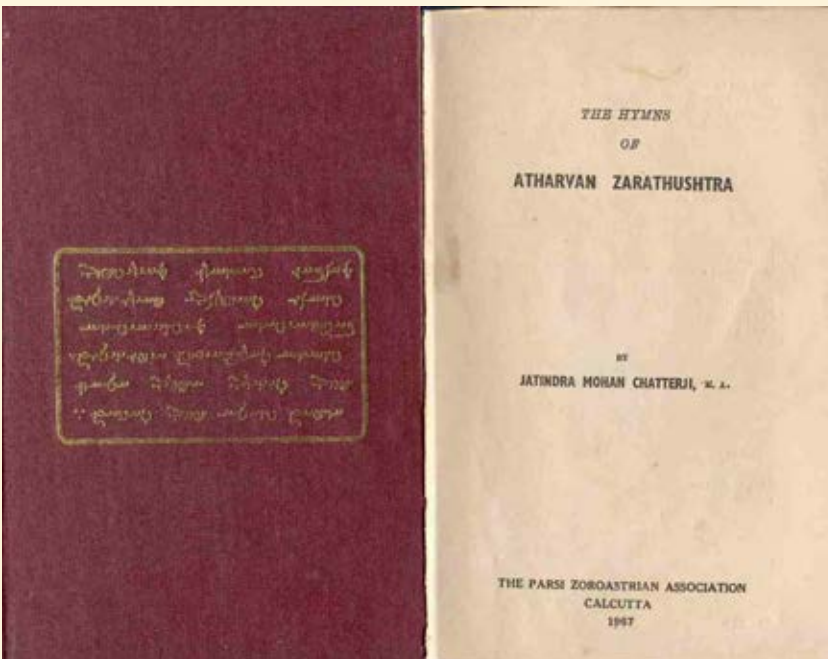
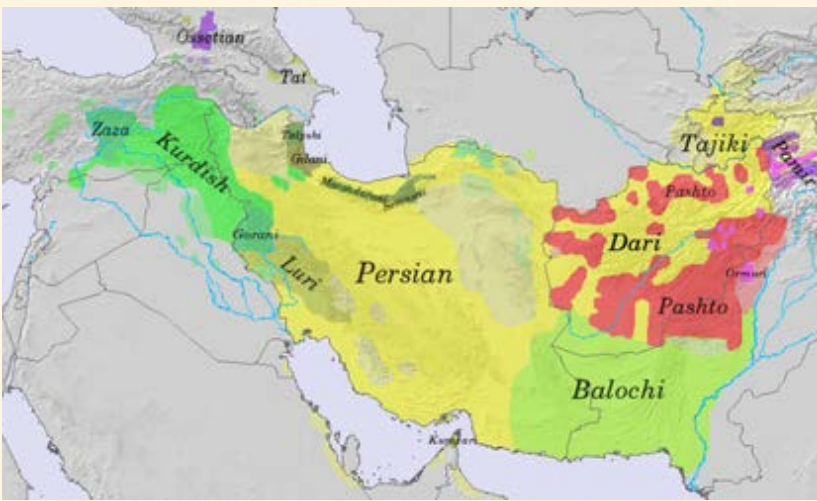
The bi-pole and integrity

- *The Greek sought political liberty.*
- *The Hindu has always sought spiritual liberty.*
- **Both are one-sided.**
- *The Indian cares not enough for national protection or patriotism, he will defend only his **religion**;*
- *while with the Greek and in Europe (where the Greek civilization finds its continuation) the **country comes first**.*
- **We need both...**



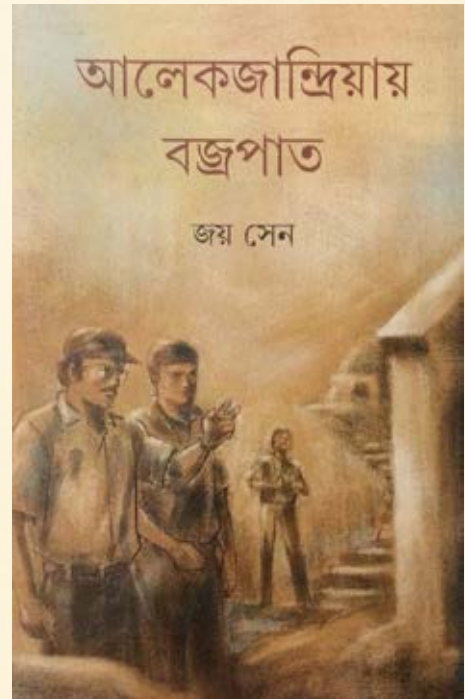
Swami Vivekananda
Hindu and Greek

Once in far remote antiquity, the **Indian philosophy**, coming in contact with **Greek energy**, led to the rise of the Persian, the Roman, and other great nations.



6000 BCE: INTEGRATED ARYAN-ARYABARTA

After the invasion of Alexander the Great, **these two great waterfalls colliding with each other**, deluged nearly half of the globe with spiritual tides, such as Christianity.



island of Crete

Western coast of Turkey

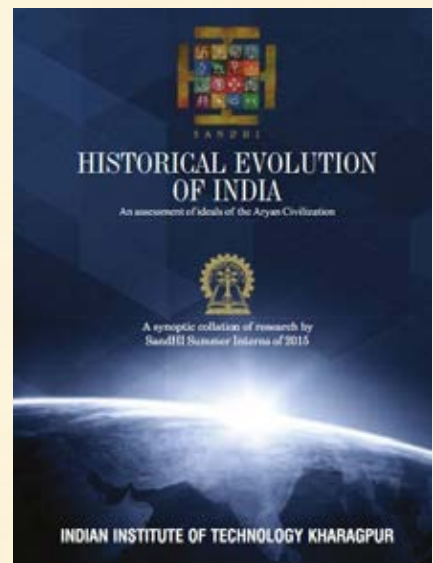
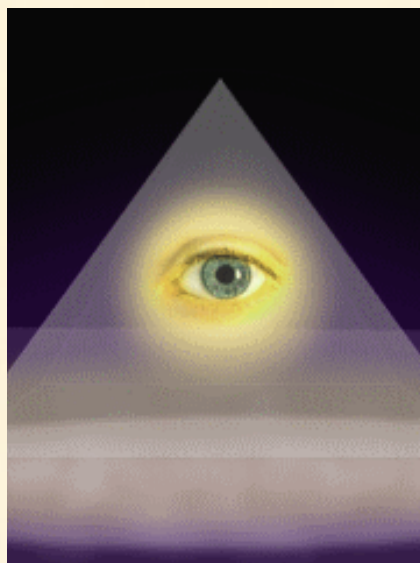
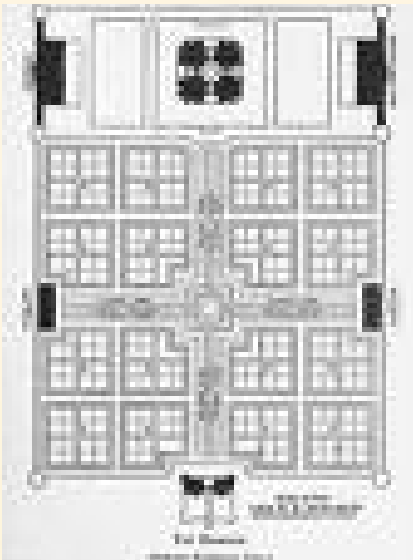
Judea

Egypt

Evidences of rock-cut monasteries in Eastern Mediterranean: 1) in Jabal-al-tarif (Nag Hammadi) see left; 2) in Dead sea caves (Qumran) - see top; 3) in coastal Anatolia / Lycia, Turkey - see right

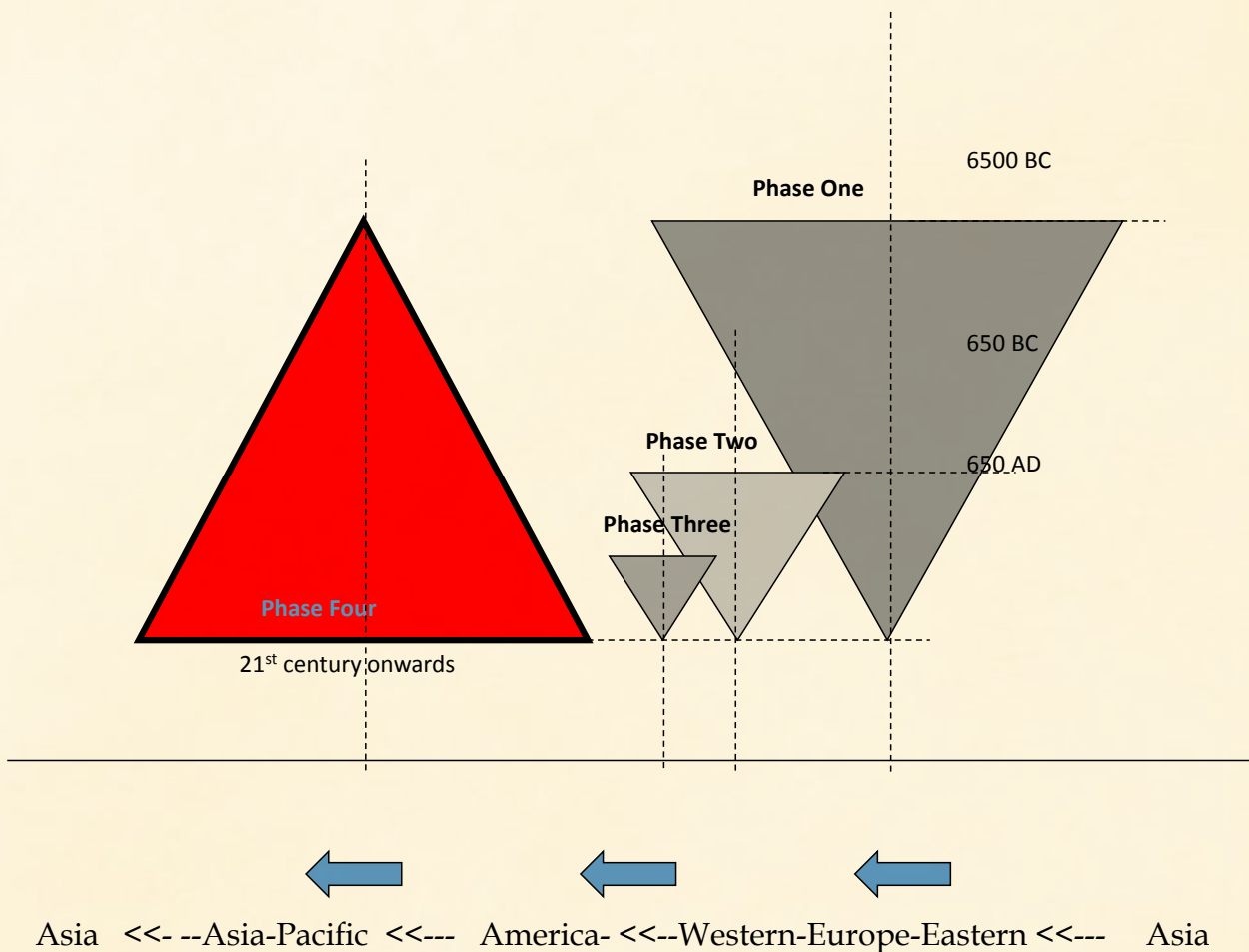
Again, a similar commingling, resulting in the improvement and prosperity of Arabia, laid the **foundation of modern European civilization.....**

America (1893, CITY BEAUTIFUL MOVEMENT)



The star arose in the East; it travelled steadily towards the West....

On the very east, borders of *Sanpo*...





the borders
of the **Sanpo**

The star arose in the East; it travelled steadily towards the West, sometimes dimmed and sometimes effulgent, till it made a circuit of the world; and now it is again rising on the very horizon of the East, the borders of the **Sanpo**, a thousand-fold more effulgent than it ever was before.



RETURN OF THE SEVEN SUPREME ARYAN SAGES:

And perhaps, in our day, such a time for the conjunction of these two gigantic forces has presented itself again.

THIS TIME THE CENTER IS INDIA



The Aryan Invasion that never was!

Evidences: part 4

The true interpretation of Indo-European linkages

List of Sanskrit roots and its NPEP Indo-European derivatives

This annexure complements the preceding discussion in this chapter and provides a short list of probable derivatives (a word) and its original Sanskrit root. The list is not exhaustive. It has been provided just to make evident a ‘tip of the iceberg’ - the very expanse of Indo-European linkages to the formation of European languages i.e. Greek, Latin, Old English and other words. The key to unlock a particular word with its probable Sanskrit root is to see the linkage through:

1. Phonetic analogy (articulations)
2. Semantic analogy (science of social and psychological connections) and
3. Etymology (original root or syllabic formation based on the science of composition having vowels and additive consonants, which is the basis of ancient Sanskrit and Cognate Greek).

As we have said the list is not exhaustive. It is probably a brief to a larger glossary that may be eventually come out of future researchers on semantics, phonetics and etymology. This list is only intended as an augmentative research clue.

It is a list of some basic words taken from daily uses in common areas of numerology, anthropometrics, mythology and religion, eidetic or general words standing for various human behaviors and also some common words from the natural and physical sciences. Before that I have provided an example of the word ‘phonetics’ re-viewed from a comparative framework of historic-eidetic-de-mythological and mythological-cultural-religious dimension. By this it can be traced to a very important word of Indian spiritual and cultural history – the ‘*phoenike*’.

A suggested research methodology

(Based on comparative inquiry of multiple dimensions)

Historical dimension

Historically, for example, the word ‘phonetics’ comes from the Indo-European Phoenicians, who in all probability are the forerunners to the knowledge of alphabets (*alpha, beth, gamma...omega* and so on), which they had introduced to the western world as they came from Western Asia – their original home. From our previous discussions we know that the Phoenicians were the earliest mariners and they had gradually moved from the entire stretch of Persian Gulf to the Mediterranean. This evidence comes from the first line of the first chapter of the book of histories by Herodotus.

Eidetic and de-mythological dimensions

The word ‘Phonetics’ comes from root ‘*phoenike*’, which is an ancient instrument and intimately connected with the highest eidetic imagery of Shiva. In the highest point or the ascendant of deep meditation, Shiva exudes out his complete knowledge (*purna gyana*) through a cosmic ecstasy as he plays a bow-like instrument (like later Greek Lyre or harp) called the ‘*Phoinika*’ (or *Pinaka*). The music of Shiva emanates the chords and words of complete universal wisdom in blissful rhythms, harmony and ultimate melody. Hence he is called the *Pinaka-pani*, which is mentioned in details in the *Sukla* (white school) of the Yajjur Veda (17: all and 51). Beyond the myths of *Puranas* we get a de-mythological root of ‘The Shiva’ in the Vedas.

Spiritual dimension

Spiritually the word Shiva stands for this highest state of yoga. As a result, the embodiment of cosmic bliss and *ananda* known as the supreme *Aditya* of the Vedas and called 'Vishnu' goes to a state of complete ecstasy and infinite beatitude. From the undifferentiated consciousness of Vishnu's cosmic body exudes a river of divine wisdom. This exudation is the descent of 'Ganges'. It is first an exudation - a descent from the head of Shiva and finally as beatitude oozing out of the heart of Vishnu. So there is integrity of the brain and the heart here.....

Mythological and cultural dimensions

Finally Ganges, the river of wisdom falls into the pitcher, the container of the first cosmic archetypal man – the primordial anthropic principle. In the Vedas he is called 'the *Brahmanaspati*' or the more common '*Brahma*'.

Thus through the ascent of man (Shiva) and the descent of beatitude or *Madhu* (Vishnu) we finally arrive at the complete content and containment of the cosmic archetype – the Brahma. We also get the basis of the complete three – the Trinity of the Vedas.

It is believed that the origin of Indian Classical Music is of a higher (*Uccha*) wing (*anga*) and this can be traced to this symbolic story of the Trinity. Finally, the power of content and containment forms the rhythm of the Word (Omkara), which descends in root sound (*nada* or *swaraja* – the 'Do' of a Chord (or *Sa*) and its other six notes in various permutation and combinations based on seasonal moods (*ragas*) at the macrocosmic level and emotional moods at the microcosmic level. This is the cultural heritage of India and its dimensions based on the myth of 'The Shiva' and his '*pinaka*'.

Esoteric dimension

Esoterically there are deeper implications. The highest form of Shiva is essentially a black (Krishna) lingam (stone). This black (symbol of transcendence) becomes white (symbol of immanence or fully resurrected). We get a root word '*lingam*', which is a key word to derivatives like 'lingua' and 'linguistics' (forming a chain or a universal 'sibling' of communication systems).

The symbol of the double trident of Shiva (or the Thunderbolt of *Indra*) is the symbol of this 'Triple wisdom' (*Triambaka*), which covers both the ascendant and the descendent and forms the basis of this completeness. Alphabets like Zhi (in Russian) or 'psi' (in Greek) are based on such symbols.

We now see how an original idea is traceable symbolically, phonetically, semantically through a comparative art-archaeological-anthropological-cultural inquiry based on an integral viewpoint of science and culture. We also see how that idea is linked to later words and their further derivatives. Say the words phone, piano and pan in this case.

Therefore we suggest a NPEP:

Sanskrit: *Pinaka* > *Pianaka* > Greek: *phonicos*: *Phoeineke* > *pinnac-el*

> *Phoneka* > *Phonic* > *phoenix* (the flight of death and resurrection) > *Phonetics* > *Phone*

I have however suggested a list of just a few words on each of which a similar exhaustive research can be done. As said earlier, it is only 'a tip of the iceberg'.

The list is intended as a brief and also as a research clue to expedite further detailed investigation on an area, which shall unlock one of India's greatest contributions to the world – the language systems.

List of words and their Indo-European derivative

We begin with numerological system followed by other areas in culture, religion and the sciences.

Numerological system:

Eka, Oikyyo (one, unity, a single house): *Oikos* (unified house or point of convergence) – words like eco-logy (a unity of logic and system building) and eco-nomics (the unity of external arrangements and relationships) have originated from here

Dui, Dwaita – dual (of two), duet (by two): *dia-meter* (double metric around a center point or Greek God Dionysus - meaning twice-born – nascent / naza / natal

Teen, Tri – Tri-angle, Triple, Trigonometry (Triple combination of *Gunnas / Konas*)

Char, Kshetra (usually four sided) – Quadro, Quarter

Panch, Poncho – Penta-gonos

Schoy, Sas̥tha – Sexta, Six

Sapta – Sapta, septuplet

Asta – Octo, Eight

Novom – Novem, Nine

Das, dasam – Decem, Decimal

Systems of Anthropometrics

Anguli — Angle (fingers and their spread)

Anga – Wing

Anta – Anti (the other side)

Dwara – Door

Danta – Dental

Has̥ta – Hoist (which is handy (can be lifted up)

Kala – cella, a cell (a part of an sector or whole)

Kendra – Centra (central) – going within from outside or from below, linked to *patala*; therefore centri-petal and coming out of the peg or the center of orbit i.e. the root or *pucca*; pega, central-fuga-al

Kala – kilak: Clock

Kala-antara: Calendera (Calendi – a particular Sufi tradition based on philosophy of eternal time; Kalachakrayana Tantra of Tibet; Kali – the Mother Goddess); call of time.

(See *Kalidi* later)

Kalash – Class (a group, a contained element); ecclesia (classification; grouping)

Kara – Chiro (palm)

Krishha – Cursory (center line or axis line or reference line)

Loka – Location (at a particular level of things)

Pada – Foot, footage, podium (base or the feet)

Nasa – Nose

Rupa – Roof (final enclosure or form)

Sakala – School (assembly of all *kala*), scala: scaler (scaling – including all)

Pala – Filla, pillar (any statute)

Patra – Pottery (container)

Sita – Site (point of helm line)

Sthala – Stall (installation on ground), still (static)

Sthithi – Static

Stara – Storey (levels), store, steering (leveling person)

Sutra – Suture (thread)

Twaṣṭha /Takhanna – Techno (sculpturing; art and science of making things)

Mythological, religious and semantic (symbolic) words

Agade – Akkadian (name of ancient empire –based on knowledge of agada-tantra or al-exin (a doctrine of cancellation of opposites; used in toxicology; used in later homeopathy) - the name of al-ikkhan-dariya, where ancient wisdom of Agade (from Proto-Assyria) and Persia was brought in (hence the name Alexandria and also the root of Greek names).

Arista – an Ayur-Vedic principle of bio-chemical sophistication: later Greek words like Aristo-nemy / Aristotel

Arya – urge (meaning an orgy or a burning desire at the corporeal level; also meaning ergo or the urge to work; also meaning the higher urge of a human being aspiring for the spiritual level)

Ali – prefix or suffix meaning continuity – a border line – an aisle, alley (originally meaning a *Kedara* or a part of *Kedara (Kedara-khanda)* – hence the name of Sage *Uddalak*, the Guru of Sage Yuggyabalka – a forerunner of the White school of *Yadjur Veda*.

Arka – ark, arch, archaic (that which is the origin, the primordial); name of Greek Philosopher Archi-medes (middle of truth or origin)

Kalidi- an important clue to ‘Chaldee (Sumer): Culdee (Irish): Caledo (Scot): Celtoi (Gaul): Cultepe (Anatolian)...so on’ – the ancient Indo-European connection is suggested here. The river or mythical bed of hellish fire or waters (*Kali-daha*: linked with *Dahara (Dire) Vidya* of Upanishads – the self engaged in the bondage of material microcosm – connected with tales of Hades (Erebus/ Orphism)

Karsha – coarse, coercion, crucia-al, crush, cross, crèche, cursor (various attributes of crushing, leveling or cursory line of Helm (*Hallam*) on ground (words like *Crishi* (agriculture); *Crisna* (name of *Krishna*) – probably linked to ‘crescendo’: crescent; christening – and finally Christ)

Takshak – Toxic

Gada – Goad

Canchu – Conch

Chakra, Charak – Circe, Circle, Circuit

Divya – Divine; Dove; Debonair (in reversal Persian word: Devil – counter to Ashur)

Jamala – Gimele (Gemini)

Kaba – Cube, cabin, cab, cave, (con)-cave: a receptacle, from ancient *Ka-ba* (terrestrial and semi-extra-terrestrial syllable used in mantic traditions of Tantra, alchemy and Kabala; the third and the last is ‘el’ (in Arabic) or ‘La’ (in Gaulish/French) making the full ‘al-baka’ or its reverse: *Ka-ba-el*; therefore we have *con-vaka* and *con-cava* – the outward and inward shapes). *Al-cava* (Alcove) – it is therefore ingoing (to be stored) and *al-baka* (Al-Book) is revealing (to be read out and disseminated)

Lingum – Lingua, Linguistic

Maddhya – Middle, Mode, Medes

Pluta (apluta) – Plateau, flat, fleet, float (a full level or top of brim – complete with something that is physical or mental) – name of Greek philosopher Plato.

Pura – pyre, Fire (so once we have fire in the middle, it is Pyramids or Pyramid – the symbol of *tri-anga* or triangle is rudimentary to Fire traditions of India and Persia)

Jala – jolly boat (watery), Gelatinous, Gelly, Galli, Galilean (Fisherman or Men of water)

Gartha - Girth (perimeter of a hole)

Odon – Adonis, Eden, Odon (youthful Godhead, a sprout of the new corn, resurrected god – used in Atharvan wisdom as the complete Godhead or *Brahmanaspati* - a perfect relationship of Yin (*anna*) and Yang (*anga* or *angira*).

Ritam – rhythm

Sat, Satya – sooth (sooth-sayer) – Hence the Breadth (*Vrihati*) of the rhythm of truth (Vedic wisdom) – *Satyam ritam brihat*.

Eidetic words (behavioral norms)

amal – not maladic – amal-gam, ameliorate (opposite to *mala* or malady)

angar, angira – anger (burning fuel, fury) – ‘Yang’, the devourer – the other part is *anna* or the food that is to be devoured – ‘Yin’ (see *Odon* above)

artha – art, worth, word (the essence of things, the vital principle)

Banika – banker (a person of trade and commerce)

Barbarata – barbarity (from Indo-European race of Berber)

Crea – create, cryo (action or process oriented) (*Carya-tids*, agents of Kore (Kora) – female demigods of ancient Greece)

Dahara – dire (hell like well or depth)

Daksha – dexterity; doxology (efficiency or skill)

Drava – drop, drive, and derive (descending), drip (associated with condensation)

Java; Joubana - Juvenile

Matri - Mother

Nama – name

Pitri – father, patron, pattern, pattern (lingua or language)

Raga – rage (mood or emotional expression)

Rishi – a rising (personality) principle (sustainable)

Swas – Scious (conscious – the breadth of things, continuity), sustain; re-suscitate (enliven or bring back the breadth of life)

Samata - sameness

Words from cosmology, natural and physical sciences

Adra – Hydra, udder, Hydro (water-based, life-based)

Aja – Age, agile, azoic (original life, not mortally born) – opposite is zoo/ zoic (that which is biologically or mortally born)

Ajara – Agro, agri – fresh born (not dying or decaying and opposite to geria/ geriatrics – *jara*)

Anima – Animation (life movement) – anima-el (animal)

Apa – apis (water of life, honey, connected with bees)

Ara – air, aeration, flow, aura, ear (spike or ear of the corn, through a reed) – array, arrangement

aurba – arboreal, arable (that which is fertile or fertilizing)

Axa – Axis

aurmi – arm (an extension, a wave from an ocean, a branch) aswa – ass (eqqus genus) , easel (horse like drawing stand for artist).

aswatara – Estuary, easter, oistere (Ishtar), astar, star (the spirit or power-link between death and resurrection symbolized by a cross of ass and horse – a mule; In ancient times the power attribute took the form of a mother Goddess of new life and fertility; probably originally from a very ancient Upanishad Tradition of *Swet-aswatra* (White mule) to various names of Ashtoreth and from the last canto of black school (Yajjur Veda); Ishtar belongs equally to all archaic Sumerian, Assyrian and Anatolian traditions; She then finally became the Goddess of spring – rejuvenating winter to the successive warmth of summer; all later astral or star-worship based on the 12-zodiac cycle of death and resurrection sprang from this essential origin).

The word ‘star’ (aster/ asterisk: * comes from aster: Ishtar (Asteroth). Star worshippers of Mandeans, ancient Yemen (Sabeans – associated with Lord, Host of Heavens – Sabbath – worship of Yaehweh; probable connections with ancient Sabians of Italy). She is also Venus the ‘Moon’. The Star and the crescent moon is the ancient symbol of Ishtar – of India; of Anatolia; later in Islam.

atman – atom, atomic, atmos, etymos (the minutest original root, the fundamental basis, the all pervading essence, the root of words) – automata (source of all automated energy in the universe) – Atum (Egyptian Sun God from Vedic Source)

bas – bus, (omni)-bus, base (the principle to dwell or pervade in space – words like *Vaasatu*, *vas̥tu* in India and later words like bust, vesta, vista are words having different space coverage significances)

bak – voca, vocal, beak, beaker, book, bacca-(laureate), bag (from Bacchus- word of God, the word born; The Book, the essence of word formation or knowledge formation; the principle of information sciences; the universal code)

Balka – Volcae, Volcano, Balkan (ancient Celtic / Balkan) – an exuding heated liquid – connected with name of Sage *Yugga-balka* (the saint, who with his flames of ygg exuded out beyond the limits of Black (transcendental) school of Yaggur Veda and revived the White (immanent) school of complete spiritual knowledge.

Briddhi – breeding (increasing in numbers, generally or quality)

Bypta – Baptism (to widen the personality)

Byakta – vector, victor (dimensioned – the principle of established expression)

Cora – choir

Din – dawn (day)

Nocta – nocturnal (night-time)

Some major scientific words

Arka-takshana – archi-tecture (texture) – the primal science of sculpturing

Ayan – Aeon; Ion; large time movements

Gyana – *gna*; gnosis / dia-gnosis (inner or realized knowledge, not intelletual; a very fine intellectual level at least)

Haima – (connected with ‘soma’ – body fluid: vital) – blood: Hematology

Jara – *atri* – Geriatrics (with decay and old age)

Kartkata: *Karkino* – Carcinogenic; Cancer

Majja – Magus; Magi; esoteric inner knowledge – later ‘magical’ (unfortunately)

Medha – medi/ meditate / medica (from Indian root and ancient Medes, Persia)

Nemy – Nomos (a law or arrangement) – eco-nomy (*oikos* and *nemy*); the same for ‘eco-logos’ (*lagan* – the cusp or the hub)

Ośhi – *Ośteo-pathy* (regarding bones)

Pa-dhatri – pe-diatrics (dealing with birth and after care of children)

Vayu, *vayasha* (bird) – buoyancy (science of floating, flowing and aerodynamics)

Varta, *abartana* – vertigo, vortex

Visca - viscious

Scansaya – science (the idea of rational disbelief, agnostic way and questioning)

Takshana – Techno; technology

Yoni / Janan – Gene; Genesis; Genital (with birth and creation); gyno: gynecology; double or internal (*antara*) genitals (cross or hermaphrodite – unity of Hermes (male) and Aphrodite (female): *ardhanariswar*; hence ‘androgyny’ (as *antara* – enter/ intern-al/ inter (*andara*: andro)

There are probably many and many more of these words.

But we have to end somewhere.

This annexure is only intended as a precursory note on evidences to a well-established truth called ‘The Indo-European tree of language systems’.



The Aryan Invasion that never was!

Evidences: part 5

From the three layers in history

‘India of the ages is not dead nor has she spoken her last creative WORD; she lives and has still something to do for herself and the human peoples, And that which must seek now to awake is not an anglicized oriental people, docile pupil of the west and doomed to repeat the cycle of the occident’s success and failure, but still the ancient immemorable SHAKTI recovering her deepest self, lifting her head higher towards the supreme source of light and strength and turning to discover the complete meaning and a vaster form of her Dharma’

Sri Aurobindo

The foundations of Indian Culture

‘The ancient civilization of India differs from those of Egypt, Mesopotamia and Greece, in that its traditions have been preserved without a break down to the present day. Until the advent of the archaeologists, the peasant of Egypt or Iraq had no knowledge of the culture of his forefathers, and it is doubtful whether the Greek counterpart had any but the vaguest ideas about the glory of Periclean Athens. In each case there has been complete breakdown with the past. On the other hand, the earliest Europeans to visit India found a culture fully conscious of its own antiquity – a culture which indeed exaggerated antiquity, and claimed not to have fundamentally changed for many thousands of years. To this day legends known to the humblest of Indian recall the names of shadowy chieftains (Sage-kings, say) who lived nearly a thousand years before Christ, and the orthodox Brahmin in his daily worship repeats hymns composed even earlier.’

Professor A. L. Basham

The Wonder that was India

The ideological basis of this section is to first review the four identified phase-wise evolution of India's history and her art-architecture. The review has taken place based on idea - a conjunction of the two most distinct and opposite priorities of human civilization. They are evident in the following quotation:

'Three mountains stand as typical of progress – the Himalayas of the Indo-Aryan, Sinai of Hebrew (ibri), and the Olympus of Greek civilization. When the Aryans reached India, they found the climate so hot that they could not work incessantly, so they began to think: thus they became introspective and developed religion. They discovered that there was no limit to the power of mind; they therefore sought to master that; and through it they learnt that there was something infinite coiled in the frame we called man, which was seeking to become kinetic. To evolve this became their chief aim.

Another branch of Aryans went into smaller and more picturesque country of Greece, where the climate and natural conditions were more favorable; so their activity turned outwards, and they developed external arts and outward liberty.

- *The Greeks sought political liberty. The Hindu has always sought spiritual liberty. Both are one-sided.*
- *The Indian cares not enough for national protection or patriotism, he only defends the religion; while the Greek and in Europe (where the Greek civilization finds its continuation) the country comes first.*

To care only for spiritual liberty and not for social liberty is a defect, but the opposite is still a greater defect. Liberty of both body and soul is to be striven for'.

Swami Vivekananda

'Hindu and Greek'

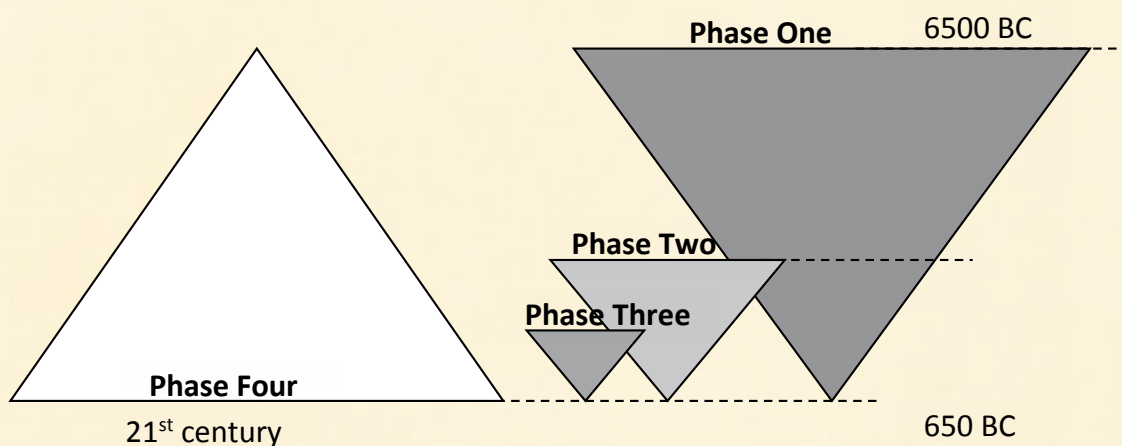


Fig. : Time-line of the Historical Confluences – the four phases

Phase one

Let us look back at Phase one – tracing the earliest Indian and Greek interactions that led to the rise of Persian and Romanic civilization. This was the first renaissance – a rebirth of human inquiry – a search for truth.

‘Once in far remote antiquity, the Indian philosophy, coming in contact with Greek energy, led to the rise of the Persian, the Roman, and other great nations’

Swami Vivekananda
Problem of India and its solution

Arguments in favor of Phase one

ATHARVANS – ORIGIN OF INDO-IRANIANS (AIRYAN-VAJA)

First, one has to revert back to the genesis of Persian civilization – the times of Prophet Zarathushtra and the origins of the ‘Pahlavi’ race as a whole. At the end of that period we have historic evidences of Emperors *Kuru* (Cyrus) and *Darayuush* (Darius) – from 700 B.C⁷³ and later. By that time, the Persian Empire, as recorded by the Greeks was world’s first gigantic empire and it had spread from the western borders of Indus valley to the upper Mediterranean Danube (River *Ishter*). Many religious, social and cultural waves had moved across from the east to the west taking advantage of the length and breadth of world’s first empire. Here are a few:

The most important evidence is the earliest religion of Persia (Parasiya) called the Religion of the *Atharvans* or Divine Fire Priests (or Magi). Much of this religion is still recorded as an extension of the *Atharva Veda*⁷⁴, the fourth cardinal Veda of the Indian spiritual tradition. As evidences, in the most sacred book of the Pahlavis, called the ‘*Yasht*’ (sacred fire ritual or the Vedic Yagna) we get this reference:

‘Usta-no zato Atharva, yo Spitamo Zarathushtra’ (xiii. 94).

(Fortunate are we that the great teacher the Atharvan was born, Spitama Zarathushtra).

In the Vedas, the *Atharvans* (*Atar-bahram*) and the *Bhrigus* (*Kavya Ushana*) are the patron fire priests and their legacy along with the cult of ‘*Vivashwan*’ (*Vivasgwa*) (Aditya or resurrection – refer Gita 4:1) and *Yama* (*Jamshid*) (death and sacrifice) is the very basis of the sacred literature of Persian ‘*Avesta*’. That is the original Indo-Iranian root (page 195, The Penguin Dictionary of Religions, 1984).

ZARATUSTHRA – THE IRANIAN COUNTERPART OF ATHARVANS

We certainly know that Av. ‘aathravan’ is equivalent to Skt. ‘atharvan’. Thus the term had a common Indo-Iranian origin, and must have existed even in pre-Gathic times. There is, thus, no reason to deny that ‘aathravan-s’ existed in Zarathushtra’s time. And further, not much weight should be given to its absence from the texts.

⁷³ Refer sections on Indo-Iranian roots in Persian Mythology by John R. Hinnells (Hamlyn).

⁷⁴ Evidences of the Atharvan foundations are traced through works namely ‘The religion of Zarathushtra’ by Irach Jehengir Sorabji’, Theosophical Publishing House, Chennai (1920), where in Chapter II in the ancient Pahlavi text of Yasht 13. 94, the Prophet is hailed as the supreme First-Born Atharvan and it matches with the opening verse of the Mundaka Upanishad. Another great work is entitled ‘The Hymns of Atharvan Zarathushtra’ by Jatindra Mohan Chatterji and published by the Parsi Zoroastrian Association, Calcutta in 1967.

Source:

- S. K. Hodiwala, (1924): Indo-Iranian Religion, Journal of the K. R. Cama Oriental Institute, Vol. 10
- K. F. Geldner, (1925): ZAOTA, in Indo-Iranian Studies in Honour of Dastur Darab Peshotan Sanjana, London
- J. S. Taraporewala, (1991): The Divine songs of Zarathustra, Bombay

Āthravans or *atharvans*, descendents of Atharvan, a legendary Indo-Iranian Rishi who introduced the fire ritual and is the supposed author of Atharva Veda, are the fire-priests who performed the soma/haoma ritual in the Rig Vedic lore, and *atharva-angiras* formed the sacerdotal class or race of men. This shows their pre-Zarathushtrian presence. However, the term has since declined in Hinduism. In Zoroastrianism, however, it has held the highest position. The term occurs almost 40 times in the later Avesta. It was the first of the four professions (Y. 19.18). The Hom Yasht (Y 9-11) says that Keresâni (a legendary ruler), who stopped *atharvans* from operating in his land, was dethroned by Haoma (here personified for the purpose) (Y 9.24). Paradoxically, Krshânu (Indic pronunciation of Keresani) of the Vedas is a guardian of *soma* in heaven. The two versions are a sign of Indo-Iranian schism in which the Iranian *haoma* priests seemed to have deposed the ruler of the original cult and to have established their supremacy.

During the later part of the Gathic period, we see the ratu hold a new title—*Aethrapaiti*. It means the master of an aethra, and therefore teacher. The term still remains in the Avesta, as an *Aethrapaiti* is the teacher who teaches the Gathas and its philosophy only. The disciple is called *Aethrya*.

The Avesta shows that Zarathushtra's father raised horses. (Yt 23.4; 24.2). The eulogy stating that Zarathushtra is the "foremost" âthra van, warrior, and prospering settler only shows his complete reformation of the three professions. The famous stanza of 'Ushtâ nô zâthô âthrava yô Spitâmô Zarathushtrô--Hail to us, for an âthra van, Spitama Zarathushtra, has been born,' (Yt 13.94) only indicates that the composer of the eulogy was an *Atharvan* who obviously preferred to hail Zarathushtra as the foremost 'reformer' of his particular profession.

Source:

- Bulsara, Sohrab J., *Aerpataştan and Nirangaştan*, Bombay, 1915.
- Ali A. Jafarey., *THE ZOROASTRIAN PRIEST IN THE AVESTA*, 1992. The texts within quotes is an extract from "Glimpses of the Atharvaveda in the Avesta," a paper read by the author at "The Atharvaveda Conference, held by the International Foundation for Vedic Studies, U.S.A., Dag Hamarskold Auditorium, United Nations, New York; July 14-16, 1993.

***Atharvans* – etymological extensions in Azerbaijan**

Azerbaijan is the name used by the Republic of Azerbaijan and the Iranian region of Azerbaijan. This name is originated from pre-Islamic history of Persia, derived from Atropates, an Iranian Median satrap (governor).

(Source: Historical Dictionary of Azerbaijan by Tadeusz Swietochowski and Brian C. Collins, ISBN 0-8108-3550-9 (retrieved 7 June 2006)

Historically the Turkic-speaking people of Iranian Azerbaijan and the Caucasus often called themselves or were referred to by some neighbouring peoples (e.g. Persians) as Turks, and religious identification prevailed over ethnic identification. When Transcaucasia became part of the Russian empire, Russian authorities, who

traditionally called all Turkic people Tatars, called Azeris Aderbeijani/Azerbaijani or Caucasian Tatars to distinguish them from other Turkic people, also called Tatars by Russians.[8] Russian Brockhaus and Efron Encyclopedic Dictionary also refer to Azerbaijanis as Aderbeijans in some articles.

Etymological clue: Aderbeijani = Ateropatene = Atherobaidani

According to various works on Turko-Tatars it is suggested that Aderbajani Tatars (Iranians by type) are mainly **Aderbajians**. The modern ethnonym Azerbaijani/Azeri in its present form was accepted in 1930s.

Sources:

- Brockhaus and Efron Encyclopedic Dictionary. “Turks”. St. Petersburg, Russia, 1890-1907
- Russian Brockhaus and Efron Encyclopedic Dictionary, published in 1890, states the following in the article called “Azerbeijan”: Azerbeijan, or Aderbeijan — fire land

‘*Atrupatkan*’ in Pahlavi and ‘Aderbadekan’ in Armenian are the north-westernmost province and the richest trade and industrial region of Persia. It borders Persian Kurdistan and Iraq of Adjam (Media) to the south, Turkish Kurdistan and Armenia to the west, Russian Armenia (Southern Trans-Caucasian), from which it is separated by the Aras River, to the north, Russian province of Tashil to the east and Persian province of Gilan near the Caspian Sea.

It is to be noted that this important historical land centered ‘Baku’ and lands north of Zagros, the mountains of Persia. These places bear the ancient historicity and the origin of the chthonian cult of Dionysus or Adonis that swept the ancient world from India to Transylvania. The name of that cult is ‘Bacchus-Zagreos’.

The chthonian (earth-vegetation) cult of Atharvans:

Odin-Adonis-Eden

The key word is *Odonā*, which means pure boiled seed or corn. In the Vedas and particularly the Veda of the *Atharvans* (Eleventh Section), the complete knowledge of the Absolute or Brahman is compared to a seed corn, which is boiled and therefore free of any earthly bondage. This is called *Odana*. Since the Vedic times, many names can be found in later Indian traditions. They include the name of the father of Buddha, *Suddhodana* (which means Pure Corn) and also his son ‘*Siddhartha*’ (which means the essence of the boiled corn – ‘*Siddha*’). In the Vedas the origins are: (Atharva Veda:).

Phase Two

Then we move on to Phase two, the later Indo-Hellenic interactive phase that gave birth to the rise of Eastern Mediterranean Culture. This was the second renaissance.

‘After the invasion of Alexander the great, these two great waterfalls (Indian and Greek principles) colliding with each other; deluged nearly half of the globe with spiritual tides, such as Christianity’

Swami Vivekananda

Problem of India and its solution

Arguments in favor of Phase two

‘.... For Priyadarsi, the beloved of Gods, desires safety, self-control, justice, and happiness for all beings. The beloved of Gods considers that the greatest of all victories is the victory of righteousness, and that victory the Beloved of Gods has already won, here and on all his borders, even 600 leagues away in the realm of the Greek king Antiyoka, and beyond Antiyoka among the four kings Turamaya, Antikini, Maga and Alikasudara, and in the south among the Cholas and Pandyas and as far as Ceylon’.

Les Inscription d’Asoka, Paris

On ‘Buddhist Missions to the Eastern Mediterranean’

The Old Testament

The symbolism of the lamb also has its ancient roots in the Old Testament. This is a dream at Bethel (a well venerated by Prophet Ibrahim or Abraham, the early Patriarch) found in the Old Testament. This has been discussed in the previous chapter and the symbolical story talks about the image of the seven Lambs and the symbolical bloody sacrifice that connects ‘Abraham’ and one who follows him (his son or Ishmael).

Vedic foundations and the Alexandrian Therapeutes

The Vedic parallel is found in the birth of seven *marutis* (seen as differentiated life-powers or *Vayu*) and their further 7X7 divisions (or 49 *Marutis*). References may be drawn from comes the Vedic (Rig Veda: 5.52.17; 8.28.5) and later Upanishadic foundations (like *Mundaka*: 2.1.8).

The ancient tradition of a sect called ‘**Theraputtas**’ connected with the beginnings of Christianity and ancient Alexandrian or Egyptian monasticism is intimately connected with this principle of $7 \times 7 = 49$ and the 50th principle as the terminal, when the full-grown white and effulgent Solar spiritual achievements are celebrated following 50 lunar days (after seven weeks) after the Easter (spring Equinox) on a Sunday. Hence is the term ‘Whitsunday’ (also known as the ‘Pentecoste’ (meaning the 50th day or resurrection marking the full ascent achieved by the true descent of the divine support or ‘Holy spirit’]. It is thus the meeting ground of the ascent of the divine spark and the transfiguration of the body (soma) to accommodate the ‘Holy spirit’ in union with the ‘Chaitya purusha’ or the ‘Lamb (Lamp) in the body’.

‘The City does not need the sun or the moon to shine on it, for the glory of God gives it light, and the LAMB is its LAMP’ (Revelations: 21.23)

The day of ‘White-sun’ or resurrection is symbolically mentioned in the Book of Revelations (the parable of the Seven Churches/the Seven bowls and Trumpets - the Seven lambs and the Eighth King], the New Testament. The Choir and the Songs that this ancient sect had practiced bears close resemblance with such inner foundations of songs and mantic vibrations.

Observations on the are found in works on **‘Therapeutes’** in Encyclopedia of Religion and Ethics, edited by James Hastings, Volume 12, Edinburgh (CSS), pg 315-319 (based on the works of Philo of Alexandria around 1. AD):

“.....They are Jewish recluses who reside in simple huts, at a short and suitable distance from one another. Each hut has a sacred chamber reserved for their sacred books by means of which religion and sound knowledge grow together into a perfect whole. After praying at dawn, they devote the day to meditation upon the Scriptures; these include writing or commentaries drawn up by the ancient founder of their sect...Prayers at sunset close the day. Such is the life in each hut. On the seventh day the various members meet for common worship; they arrange themselves according to age, sitting on the ground with the right hand between the chest and the chin, but the left tucked down along the flank.

*...The **seventh day** is their day for relaxation. On the other days no one eats before sunset, and some go fasting almost entirely for three or even six days, in their contemplative raptures. But all use oil and on the seventh day all propitiate the mistresses hunger and thirst, which nature has set over mortal creatures; the diet is simply water and cheap bread, flavored with salt, and occasionally supplemented by hyssop.*

*...**Once every seven weeks** they assemble for their supreme festival, which the number 50 has had assigned to it, robed in white and with looks of serious joy.*

...The final act of the festival is the famous ‘all-night celebration’ of a sacred singing dance by men and women in two choruses each headed by a chosen leader. Each of the choirs, the male and the female, begins by singing and dancing apart, partly in unison, partly in antiphonal measures of various metres, as if it were a Bacchic festival in which they had drunk deep of the divine love. Then, both unite to imitate the choral songs of Moses and Miriam at the Red Sea...It is a thrilling performance, this choric dance and exulting symphony: but the end and aim of it all is holiness...

Such says Philo, the Alexandrian philosopher, is the method of life practiced by these true citizens of heaven and of the universe (From **‘Therapeutae’** in Hasting’s Encyclopedia).

Nazarenes in Palestine likewise observed these Jubilee times. The imperfect Biblical **Book of Acts**, Chapter 2, records a day of **Pentecost, or a ‘50th’ day**, when special miracles occurred. This reflects true traditions in vogue among true Nazoreans. This day is also called ‘The Birthday of the CHURCH’ marking the descent of Holy Spirit on the chosen (Act of the Apostles). The Pentecostal traditions are widely observed even today - the largest churches being the Assemblies of God, the United Pentecostal Church and the Pentecostal Church of God in the Americas (The Wordsworth Encyclopedia of World Religions].

Ashoka had changed from a tyrant power-mongering king to a great man – to an Emperor with a mission – that of universal love and peace. This happened within years of his growing adherence to the lineage of Indian spirituality, preached earlier by the Vedic sages and then fulfilled by Lord Buddha.

Ashoka had started sending ‘Missionaries of peace’ preaching the brotherhood of nations to the world. A part of these missionaries left for South-east Asia. The other part left for the West. The discussion concentrates on the second part. It is extremely important for any student of Indian Architecture to be aware of this great event – of which much seems to have been lost.

The contributions of these missions to the historic beginnings of the Western world – in terms of art, culture, architecture, sciences and religion are paramount. In this chapter we give both the historical and the undeniable architectural evidences of this mission.

The Indian History of sending Missionaries to the West

In Ashoka’s own words:

‘... For Priyadarsi, the beloved of Gods, desires safety, self-control, justice, and happiness for all beings. The beloved of Gods considers that the greatest of all victories is the victory of righteousness, and that victory the Beloved of Gods has already won, here and on all his borders, even 600 leagues away in the realm of the Greek king Antiyoka, and beyond Antiyoka among the four kings Turamaya, Antikini, Maga and Alikasudara, and in the south among the Cholas and Pandyas and as far as Ceylon’ (Bloch, 1950)⁷⁵.

These are inscriptions from an Ashokan Rock-cut Edict bearing the engraved letters on stone. Here Ashoka claims to have won greater victories, to which the mundane victory of a tyrant king is of the lesser kind.

Ashoka mentions sending these missionaries to five Hellenic kings, whose name nearly match with the historic figures of Antiochus II Theos of Syria, Ptolemy (Tul(r)amaya) II of Egypt and Alexandria, Antigonus Gonatas of Macedonia, Magas of Cyrene (Libya) and Alexander II of Epirus (Basham, 1967).

Sir Bertrand Russell⁷⁶ (1946) in his book named ‘A History of Western Philosophy’ admits that Buddhism at that time (250 B.C) was a vigorous proselytizing religion. Russell refers to these missionaries by quoting from Bevan - *House of Seleucus, Vol I* but regrets that no western account of these missionaries have survived.

The historic connections between the extreme western borders of India and the Mediterranean world are not a matter of speculation. A number of evidences can be cited that precede the missionaries of Ashoka by a few hundred years or more:

1. Archaeologists have substantiated trade connections between the Ancient Indus valley and Mediterranean Crete via Kish, Mesopotamia and the Persian Gulf (Edwards, 2000⁷⁷; Possehl, 2002⁷⁸).
2. The Achaemenid Empire of Cyrus and Darius was probably world’s largest urban empire stretching from the shores of Anatolia (modern Turkey) to Bacteria and historic Gandhara (modern Kandahara) way back in 700 BC. Two things are important in this connection:
 - India and Persia then had shared in common philological and spiritual root called the Indo-Iranian lineage (Hinnels, 1973⁷⁹; Renfrew, 1987⁸⁰).
 - Gandhara (modern Kandahara) and Kamboja were already powerful confederations (sixteen *Mahajanapadas* of India around 600 B.C) of India by that time (Majumdar, 1952⁸¹). It was from Kamboja the architecture of North-western Indian front, via the ‘Pallavas’ of Deccan India (similar

⁷⁵ This is from J. Bloch.(1950), Les Inscription d’Asoka, Paris.

⁷⁶ This is from B. Russell (1946), A History of Western Philosophy, Unwin Paperbacks, London.

to ‘Pehlevis’ of Persia) had reached the shores of Myanmar (Burma), Siam (Thailand) and finally another Kamboja or Cambodia. Hinduism-Buddhism was then an original synergetic one and that integrity had reached South East Asia to build the wonders of ‘Ankor-dham’, ‘Ankor-Beth’ (the Temple of Omkara), and ‘Boro-Budur’ (the thousand Buddhas). They are the eastern connections vide the legacy of kings having a suffix ‘Varman’ (akin to Persian Bahram or the Vedic Brahman). But our recent concern is the western connection. This has been discussed in the previous chapter.

In addition, a few later cross-evidences may be cited. Three hundred years later, Christian missionary activities are seen in south of India. This is corroborated by an adventurous Alexandrian Monk of later 6th century AD, who mentions St. Thomas (Didymus), a direct disciple of Christ and one of the Apostles, coming to India and spending his last days of missionary activities till he is entombed at a place called Mailapuram near Chennai (Madras) (Basham, 1967).

Additionally, the Romans persecuted the Jews around 100 AD or so and then the Jews sought their first resort in the Malabar Coast, South India. Thus long-lasting ethnic and reliable connections between the Ancient near East (The Fertile Crescent) and India are evident.

Corroborating such evidences, following the historic march of Emperor Alexander to India the subsequent descriptions of India by Megathenes and Arrian highlight even earlier Indo-Greek connections (prior to Alexander) (McCrimdell, 2000)⁸².

Within such cross-cultural set-up of India and the Mediterranean the Missionaries of Ashoka sent to Anatolia, Lebanon, Libya and Egypt definitely secure a historic root.

Indian Architectural History – evidences of contributions

Professor A. L. Basham⁸³ of Australian National University, Canberra (1967) goes a little beyond. He points out similarities between the teachings of Greek philosophers from Pythagoras, Plato, Stoics and Plotinus and those of the Indian Upanishads and particularly the preaching of Buddha. He says:

‘... We can only say that there was always some contact between the Hellenic world and India, mediated first by the Achaemenid Empire, then that of the Seleucids, and finally, under the Romans, by the traders of the Indian Ocean. Christianity began to spread at the time when this contact was the closest. We know that Indian ascetics occasionally visited the West, and that there was a colony of Indian Merchants at Alexandria. The possibility of Indian influence on Neo-Platonism and early Christianity cannot be ruled out.’

Prior to Basham, many other scholars had agreed upon such evidences. The preliminary evidences provided by Sir Percy Brown, James Fergusson, and E. B. Havell are to name a few. Fortunately, all of them are art-architectural historians and critics. Thus factual evidences drawn by them are essentially tangible as they are physical and ‘architectural’.

⁷⁷ M. Edwards in Indus Civilization – clues to an ancient puzzle (2000), in National Geographic, June 2000, Vol. 197. No.6.

⁷⁸ G. Possehl in his book entitled ‘The Indus Civilization – a contemporary perspective’, Vistaar, New Delhi.

⁷⁹ J. R. Hinnells in Persian Mythology (1973), Hamlyn.

⁸⁰ Renfrew, C., (1987), Archaeology and Language – The puzzle of Indo-European Origins, Penguin Books, London

⁸¹ From R. C. Majumdar in his book Ancient India (1952), Motilal Banarsidass, Banaras.

⁸² This is from J. W. McCrimdell in the book entitled ‘Ancient India - as described by Megasthenes and Arrian’ (2000), Munshiram M. Publishers Pvt. Ltd., New Delhi.

⁸³ This is from ‘The Wonder that was India’ by A. L. Basham (1967), Rupa & Co. New Delhi.

Evaluating the splendid rock-cut monastic architecture of Buddhism, mainly during the Mauryan period and particularly during the times of Ashoka (230 BC), Brown comments:

'This development of the art of working in stone, therefore, which Ashoka introduced into this country represents an Indian offshoot of that forceful Graeco-Persian culture, which flourished with such vigor in Western Asia some centuries before the Christian era.'

Brown further adds:

'The building activities in the neighborhood of Sanchi immediately previous to the Christian era were not entirely confined to the Stupa and its accessories.... elsewhere in Besnagar, were found the divinity of Vasudeva (of Orissa) and in the form of Garuda pillar raised in the honour of the God Vasudeva by Heliodorus, son of dion, who was a resident of Taxila (near Kashmir Gandhara) and had come to the court of the local prince as an envoy from the Indo-Bactrian king Antialkidas (Antioch)... whose name gives 140 BC, the approximate date of its erection'.

Brown finally adds:

*'...Rock-sculpture and rock architecture have been practiced in many countries in the past, particularly in Egypt and Assyria, by the Greeks in Lycia, and the Romans in Petra, while in Persia under the Achaemenids, and later by the Sasanids as seen at Naksh-I-Rustam.... but in none of these instances did the art of the rock-cutter show so wide a range or such audacity and imaginative power as in India, where some of the most **original** examples of architecture produced in this manner may be seen.... but the most striking fact in connection with the plan and the general design of the Buddhist Chaitya hall is its undeniable resemblance to the Graeco-Roman basilica, a type of structure, which was being evolved in Europe about the same time'.*

Fergusson⁸⁴ (1910), makes a more specific observation while studying the rock-cut caves at Karli, between Mumbai and Pune and cites it as the finest example of series of caves built around the earliest Christian era. He commented:

'...It resembles an early Christian Church in its arrangements; consisting of a nave and side-aisles terminating in an apse or semi-dome, round which the aisle is carried'.

Reorganizing the timeline of Architecture

The predominant nature of Buddhism that was preached during the time of Ashoka was called 'Thera-vedas' meaning the 'preaching of the Elders (*Sthavira* in Vedic Sanskrit or *Thera* in Sinhalese / Pali).

The story of the Ashoka and his missionaries fit into the legacy of the legendary sects, the Therapeutes and the Essenes existing or possibly preceding the beginnings of Christianity (Sen, 2003)⁸⁵.

It was under the influence of the two sects, Egypt and Judea (parts of Anatolia, Jordan and present day Israel) were spotted with rock-cut monastic establishments, rock-cut basilicas and underground rock-cut catacombs. From these monastic and austere establishments the early Christians were preaching silently as they were facing persecution by the Romans. But such silent conditions changed later when Roman diplomacy took over the mandate and formed the new Gospel and started using it as a state policy. Then the ancient linkages were probably broken. It will be a matter of great delight for any future researcher of Indian architectural history to

⁸⁴ This is from James Fergusson (1910), History of Indian and Eastern Architecture, Indian Museum Archives, Calcutta.

look into the full details of these evidences.

The evidences are important for any true human being, who would appreciate the great ideals that Ashoka stood for a few thousand years ago. They are cherished only recently by the humanitarian charter of the United Nations. The book entitled 'The Argumentative Indian' by Nobel Laureate and economist Amartya Sen has forwarded this argument in favor of an Indian cultural originality.

It was Ashoka who had sent these earliest missionaries to the West. The high ideals of a 'better way of life' that these missionaries preached were not properly understood by many in the Mediterranean world. But the Buddhist rock-cut marvels definitely shaped and nurtured the earliest Greco-Roman Basilicas and a distant 'echo-like message of the new Gospel' that was preached from these Temples of God.

Phase three

Finally, we have to trace Arabic-Moorish phase. In this chapter the medieval Indo-Hellenic phase revival in Western Mediterranean, subsequently giving birth to the Euro-American civilization has been identified and explained. This is third and the more known renaissance.

'Again, a similar commingling (of Indian and Greek principles), resulting in the improvement and prosperity of Arabia, laid the foundation of Arabia, laid the foundation of modern European civilization'

Swami Vivekananda
Problem of India and its solution

Arguments in favor of Phase three

'...To us, it seems that West-European civilization is civilization, but this is a narrow view. Most of the cultural content of our civilization comes from the Eastern Mediterranean, from Greeks and Jews.....I think that, if we are to feel at home in the world after the present war, we shall have to admit Asia to equality in our thoughts, not only politically, but culturally.'

Sir Bertrand Russell
A History of Western Philosophy

Barbaric Invasion of the Western Roman Empire and beginning of Dark Ages

By 5th century AD, the Germanic Goths plundered Western and Southern Europe. On the east, the Huns came in with equal impact. Soon the Vandals established themselves in the Mediterranean world including the devastation in several old Roman trade outposts in Africa. The outrages matched the Visigoths in South of France; and the Franks in the North and North-west.

⁸⁵ This is by the author – based on two researched papers on 'Historic Christianity – original pointers and evidences (part I) and 'The confluence of Indian and Egyptian elements at Alexandria' (part II), in the Bulletin of the Institute of Culture, Ramkrishna Mission, Kolkata in May (Vol. LIV/5) and September (Vol. LIV/9) (2003).

Phase of de-urbanization of the settlements of the Western Roman Empire

Over time, the principal urban centers of Europe were vandalized; life and activity shrank to insecurity and doom; population was dispersed in the less insecure and more inaccessible hilly countryside. Old Cities decayed and they were replaced by these new forms of hill-top moat-ed settlements and fort-towns. De-urbanization was an overarching phenomenon.

Devastation of Italy and Maturity of Dark Ages

In AD 568, three years after Emperor Justinian's death, the Lombards invaded and plundered the seat of culture and religion in Europe – Italy. The Eastern Byzantines slowly lost control over the West as from the South, they had to face the invading Saracens too.

Later Dark Ages (7th Century AD onwards)

With the collapse of the Italian civilization, the Dark Ages fully descended in Europe. The Western empire broke up into numerous barbaric kingdoms and Christianity fell into their hands. The original ideas and scriptures were severely subjected to misinterpretation, forces of bigotry and forced mass-proselytization.

During the successive centuries, the Church performed very imperfectly as superstition prevailed, secular learning was discouraged and fanaticism grew through horrifying times of 'Inquisition' in the subsequent centuries of the Dark Ages. The most noted among them are the extermination of the 'Knight Templars', the 'Inquisition' around 'Albi' in France on a large following called the 'Catharis'.

This became the foundation of the Western Foundation on which the events of successive wars were built stretching up to the French and German Revolution by Robespierre and Garibaldi, respectively.

Referring to the true nature and impact of these times on defining a 'Western civilization' Sir Bertrand Russell presents his comments:

'...To us, it seems that West-European civilization is civilization, but this is a narrow view. Most of the cultural content of our civilization comes from the Eastern Mediterranean, from Greeks and Jews....I think that, if we are to feel at home in the world after the present war, we shall have to admit Asia to equality in our thoughts, not only politically, but culturally.'

(Chapter VII: Papacy in the Dark Ages, page 395, A History of Western Philosophy)

Continuity of Trade in the Eastern and Southern Mediterranean – beyond Dark Ages

Despite the Dark Ages in the West, the connections in the lower Mediterranean had always continued. Mercantile commerce was highly developed since the ancient times of Phoenicians.

The Cambridge Medieval History, Book IV forwards the real strengths of these hidden linkages; always well beyond the scope of the Dark ages. These points out to just not the political-economic linkages but the real forces that facilitated the Mohammedan conquest of the West:

'...not only did the possessions of enormous wealth create a demand for costly articles, such as silk from China, and fur from Northern Europe, but trade was promoted under special conditions, such as the vast extent of the Muslim Empire, the spread of Arabic as a world language, and the exalted status assigned to the

merchant in the Muslim system of ethics; it was remembered that the Prophet (Mohammed) himself had been a merchant and had commended trading during the pilgrimage to Mecca.'

(page 416)

One has to remember this ancient mercantile linkage. One has to further underscore the military cohesion behind it. Even deeper one has to look at the religious zeal of a new wave. The trade linkages were ancient from Phase One. The linkages were mainly through sea and partly through land, which the Arabs inherited from the ancient Persian Empire (Phase I) and later Greco-Roman Empire (Phase II). These the Arabs utilized as a successive network through which the great intermingling of the East and the West was in the offing.

Rise of Moors and the Message of the Prophet of Arabia

The linkages networked the meeting of elements hidden in Spain and North Africa (the ancient Celto-Hellenic order) with Persian civilization and Indian principles.

This was right through and more from a time in AD 622 (the Arabian Hegira), ten years from which the Prophet of Arabia had passed away. Immediately after his death, the Arab conquest had begun and it proceeded at a fast speed.

Several reasons facilitated this great Mohammedan conquest:

- The exhaustion of Persian and eastern empire after great wars
- The separation of Nestorians of Syria and East Asia, who suffered persecutions under the Western Roman Christian world. They received tolerations from the Arabian conquest by default and in return for the payment of tribute. They believed in a 'Christ in Jesus' – only as the Son of Man. This the Mohammedans accepted.
- In the North African coast, the Arabs allied with the Berbers and older Phoenician stock and merged to form the broad group of people called the 'Moors'. Finally, they invaded Spain and being helped by the pre-existing Jewish and Eastern European population there. These pre-existing people, by default, were the enemies of the West and North European stock – the Barbaric invaders in whose hands lay the decrees of Christianity. In Iberia, such barbarians were mainly Visigoths.
- The simple monotheism of the new religion of the Prophet served the minds of the gentiles and the oppressed. Islam inherited the Judaic roots of Ishmael, son of First Patriarch Ibrahim (Abraham) and reformed the old Jewish customs that had been constricted over the ages and forwarded simple principles of an open-ended liberal social acceptance 'once you are a Muslim'. Much of this idea, in common the 'Celto-Hellenic' principles nurtured the humane principles of 'French Revolution'. Today we know that they are great ideas of 'Fraternity and Democracy'.

The Rise of Arabs and Resurrection of ancient Persian civilization

The role of the Arabians, who was under the Caliph (a successor of the Prophet), had facilitated the marine Power. This led to the rise of Umayyads (750 AD). In Spain, in particular, the Cordovan capital lasted from 735 to 1031 AD, when it became the most cultivated part of Europe. On this we get a brief but essential narrative:

'.....At this time the Moslem Empire extended from Spain to the Middle East. It included several cities such as Alexandria, which had formerly been great centers of learning in Greek times, and other cities, such as Baghdad, which were go-ahead centers of new Knowledge. Thus the Moslems were able to make far great advances in science and in particular arts than were the Christian countries of that time.'

For more than two centuries Spain was in the very forefront of progress. At the great Moslem universities, mathematics, astronomy, medicine and the science of navigation flourished. New navigational and time-keeping instruments, such as the astrolabe, were used in Spain long before they found their way to the rest of Europe. Spanish Architecture took on a new and somewhat oriental look; and Spain felt the full benefit of better irrigation schemes, better trade, better craftsmanship, better standards of hygiene.'

(Man's Past and Progress (1961); page 76; Colourama, Odhams Press Ltd. London)

The whole repository of knowledge and material advances that Moslem Spain had excelled was later downloaded by Christian Europe. By the end of Dark Ages and actually through the intermixing and inter-mingling with this Asiatic treasure-house the seeds of Renaissance and a later navigational Industrial revolution were sprouting. It was finally from here, in AD 1492, Spain, then Christian, funded Christopher Columbus for his 'the search for India' via the Western Route, which Vasco Da Gama (from Basque Spain) had already reached earlier (AD 1497 via the ancient sea-route rounding Africa).

On the other hand, were the resurrection of the ancient Persians and the successive role of Abbassids, They best represented the extended domains of an Indo-Persian Culture. They played a pivotal role in the removal of the primacy of civilization in the Eastern world from Syria (Damascus) to Baghdad (Mesopotamia or modern-day Iraq). Finally the contacts with the 'Paradise' – the Land east of Persia were then fully established.

Role of Baghdad: Rise of Arts and Sciences – re-contact with India

The seat at Baghdad facilitated the greatest of all linkages – the renewed contact with India. The climax reached a point when Harun-al-Rashid (AD 809) furnished a court which became an epicenter of oriental luxury, poetry, art-architecture and learning. His Empire had stretched from the Mediterranean Straits of Gibraltar to the banks of Indus. That brought the Celto-Hellenic Element again at the heart of Asia – 'India'. This is evident in the following quotation where a significant connection has been highlighted – an event that has influenced the best of Western scientific world – the knowledge of numbers, computational mathematics, logic and information sciences – the basis of modern Western Science and later technology:

'...Meanwhile, in Persia, Muslims came in contact with India. It was from Sanskrit writings that they acquired, during the 8th century, their first knowledge of astronomy. About 830 AD, Muhammad ibn Musa al-Khwarazmi, a translator of mathematical and astronomical books from the Sanskrit, published a book which was translated into Latin in the 12th Century, under the title 'Algoritmi de numero Indrum'. It was from this book that the West first learnt of what we call 'Arabic numerals, which ought to be called 'Indian'. The same author wrote a book on Al-gebra which was used in the West as a text book until 16th century.'

(Page 416, Chapter X, Mohammeden Culture and Philosophy, A History of Western Philosophy).

Thus the great intermingling had begun leading to the third phase. It is this great intermingling facilitated by the improvement and prosperity of Arabia, laid the foundation of Arabia, laid the foundation of Modern European civilization.

Phase four

Ultimately, one needs to explain the return of civilization to Asia. We are now heading for the completion of a full circuit - the modern phase, which is Phase Four. Here we are in the midst of the huge 'melting-pot'. It is the giant inter-mixing of Indo-Hellenic elements and the visible vehicle of this greatest of confluences is the ever advancing set-up of globalization and communication-information sciences. In effect, much larger than the 'Renaissance' that had triggered the foundations of Modern European civilization (early Phase Three) and a much deeper than the effect of a 'machine-industrial order' that has had shaped the Americas (later Phase three) is on the run. The forerunner of this greatest of changes is larger than the cultural forces of a European Renaissance and deeper than the material objectives of the American industrial order. Different civilizational principles are converging and the waves that had once moved from Europe through the Atlantic into the Americas are already on its way for the next destination. By crossing the Pacific and reaching the shores of Ancient Mongolia the wave of humanity is finally reaching where it was born again and again thus to renew and reinvigorate at that very origin. The 'new and expected Renaissance' will manifest its 'latest word' by re-tracing its purpose of evolution right at the very heartland of Asia. They are evident in these final words:

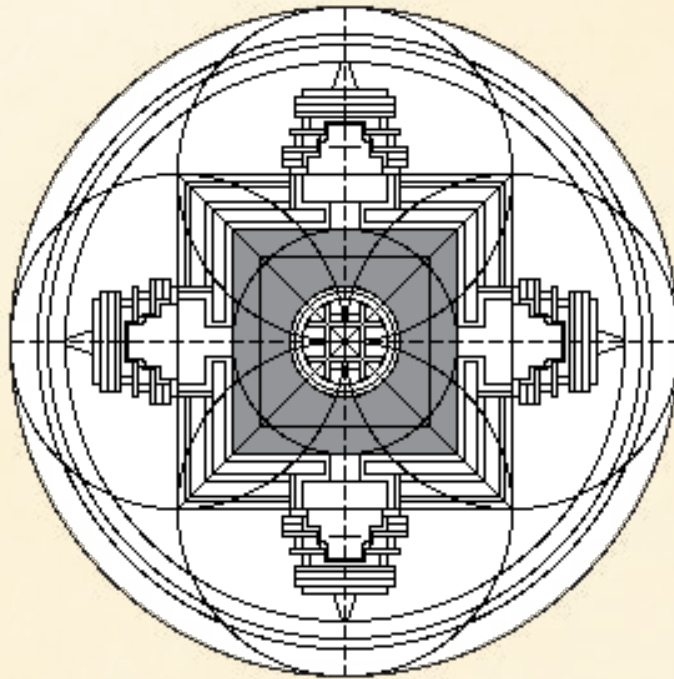
'And perhaps, in our own day, such a time for the conjunction of these two gigantic forces (Indian and Greek principles) have presented itself again. This time their center is India'.

Swami Vivekananda
Problem of India and its solution

This is the fourth and the imminent renaissance.



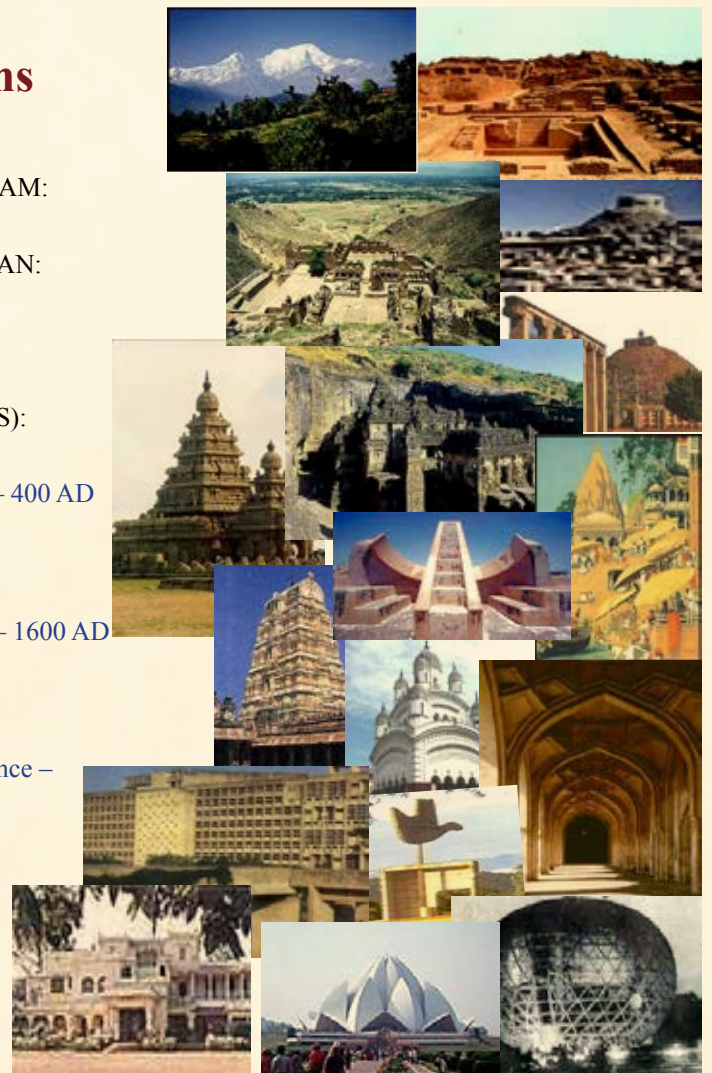
The Architecture of Civilization
Principles of Indian Architecture
&
its applications to Human Unity
Ramakrishna Mission
INSTITUTE OF CULTURE, KOLKATA



Joy Sen, PhD
Associate Professor
Department of Architecture & Regional Planning
IIT KHARAGPUR
March 09, 2018

Over a timeline of expressions

- PREHISTORIC: pre-10000 BC
- NARMADA-KUTCH (DWARAKA), CORAMANDALAM: pre-4000 BC
- HIMALAYAN-TATAR-MONGOLOID AND DRAVIDIAN: pre-10000 BC onwards
- INDUS VALLEY: pre-9000 BC -1500 BC
- GANDHARA-KAMBOJA-PERSIA (PEHLEVIS), GANGAHRIDA, KRISHNA-AMARAVATI (PAHLAVIS): 500 BC – 200AD
- SATAVAHANAS, MAURYAS, SAHYADRIS: 200 BC – 400 AD
- MALWA-GUPTA-VIJAYNAGAR: 200 AD – 900 AD
- CHOLA-VARMANAS-KHMER: 200 AD – 900 AD
- INDO-ISLAMIC (EARLY AND MUGHAL): 1100 AD – 1600 AD
- COLONIAL-IMPERIAL: 1700 AD onwards
- THE FIRST REVIVALS : 1850 AD – 1930 AD
- MODERN INTERNATIONAL STYLE: post-independence – till date
- POST-MODERNISM AND PARADIGM SHIFT – WHAT AND WHY?



**Spirit-folk-place-work:
a deeper cultural continuity**

ONE: ANALYSES THROUGH FOUR PHASES:

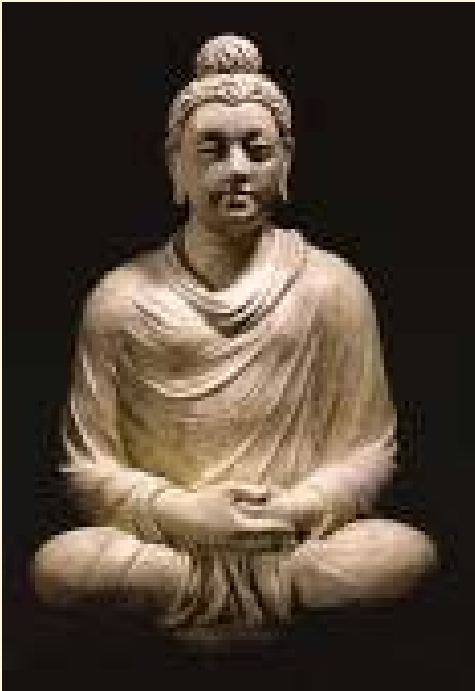
Hindu & Greek

The Historic evolution of India:

Modern India: the Problems & its solutions

&

The East and the West



The two poles of liberty: Part I

- Three mountains stand as typical of progress — the Himalayas of Indo-Aryan, Sinai of Hebrew, and Olympus of Greek civilisation.
- **When the Aryans reached India**, they found the climate so hot that they would not work incessantly, so they began to think; thus they became introspective and developed religion. They discovered that there was no limit to the power of mind; they therefore sought to master that; and through it they learnt that there was something infinite coiled up in the frame we call man, which was seeking to become kinetic. To evolve this became their chief aim.

Swami Vivekananda
Hindu and Greek



The two poles of liberty: Part II

Another branch of the Aryans went into the smaller and more **picturesque country of Greece**, where the climate and natural conditions were more favourable; so their activity turned outwards, and they developed the external arts and outward liberty.

Swami Vivekananda
Hindu and Greek

The bi-pole and integrity

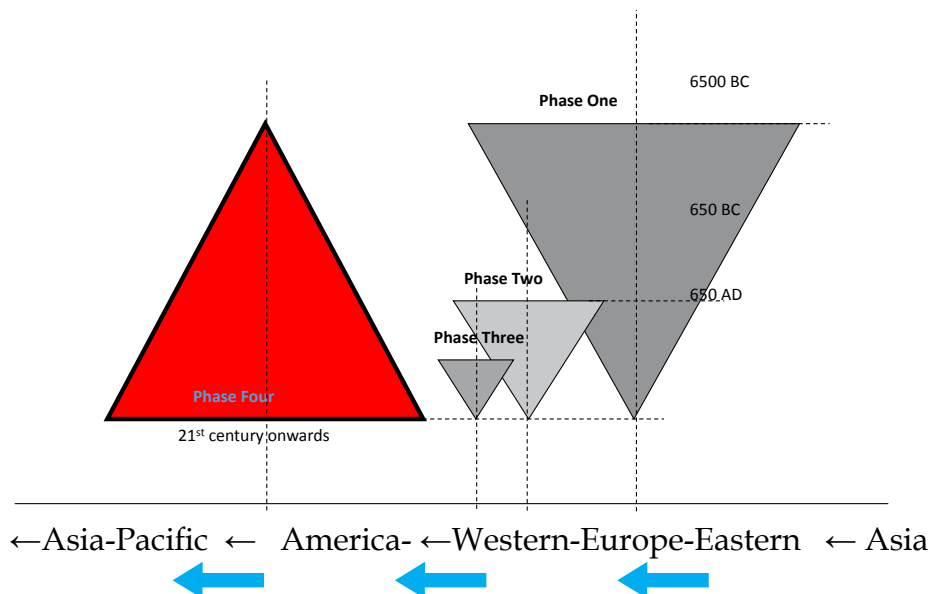
- The Greek sought political liberty. The Hindu has always sought spiritual liberty. **Both are one-sided.**
- The Indian cares not enough for national protection or patriotism, he will defend only his religion; while with the Greek and in Europe (where the Greek civilisation finds its continuation) the country comes first.

Swami Vivekananda
Hindu and Greek

Global civilization: patterns of unity

- To care only for spiritual liberty and not for social liberty is a defect, but the opposite is still a greater defect. Liberty of both body and soul is to be striven for’.

Swami Vivekananda
Hindu and Greek

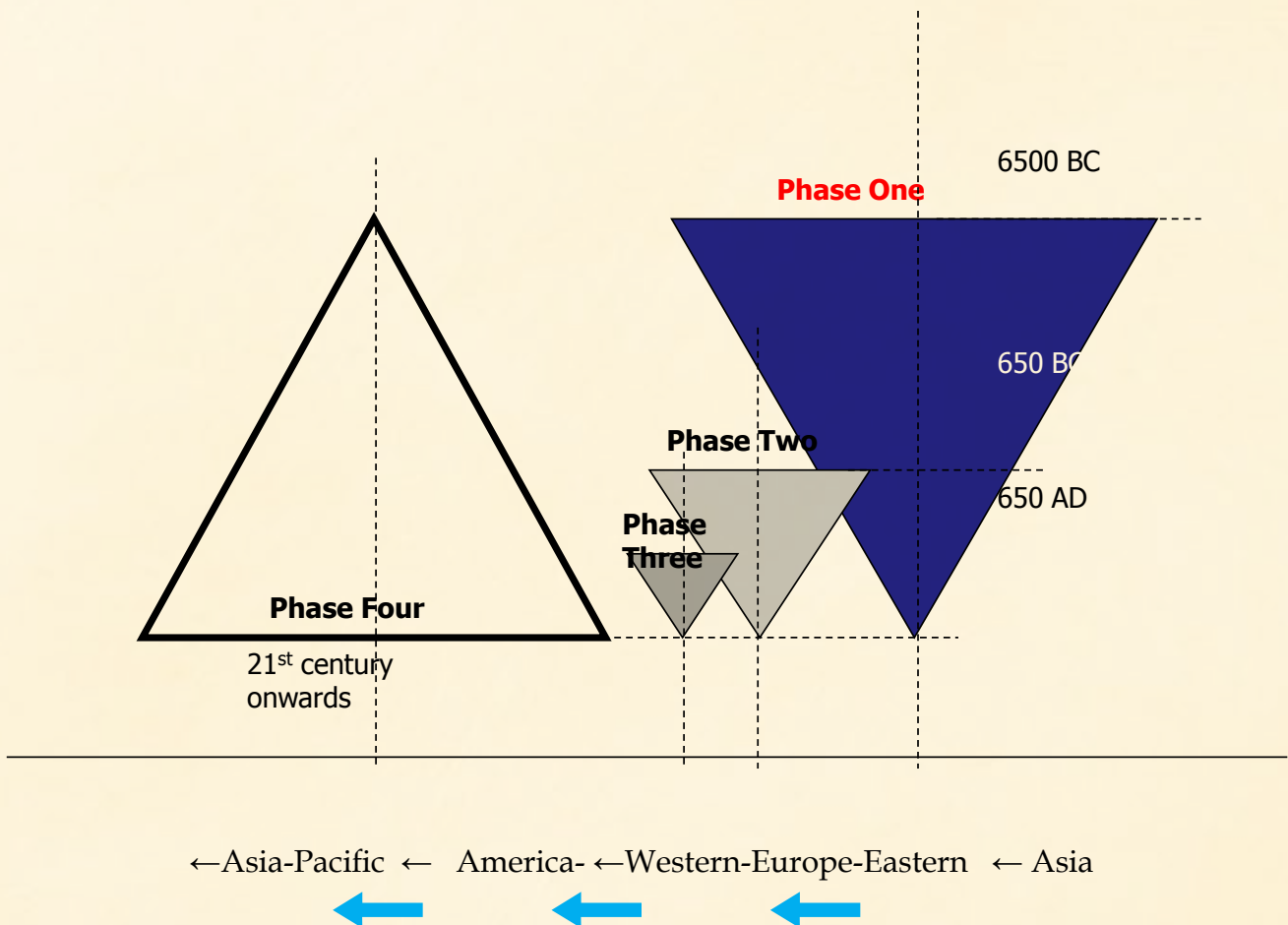


Global civilization: First renaissance

- Once in far remote antiquity, the Indian philosophy, coming in contact with Greek energy, led to the rise of the Persian, the Roman, and other great nations’.

Swami Vivekananda

‘The Problems of Modern India and its solution’

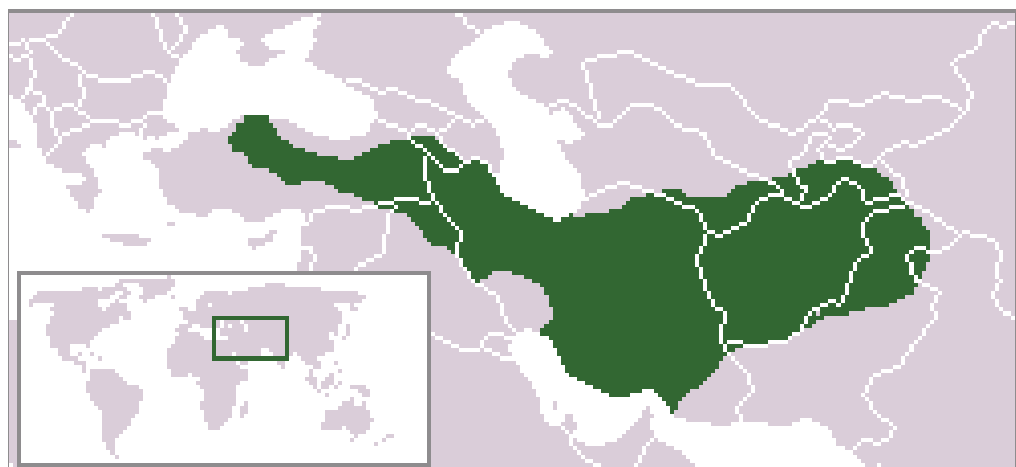


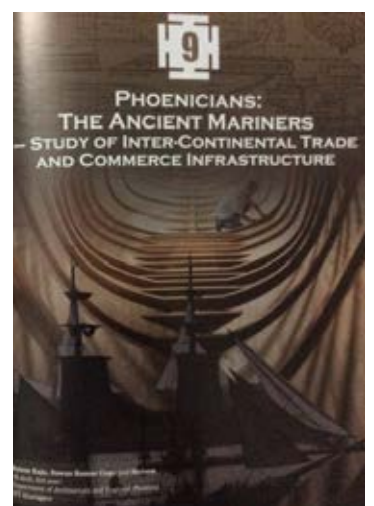
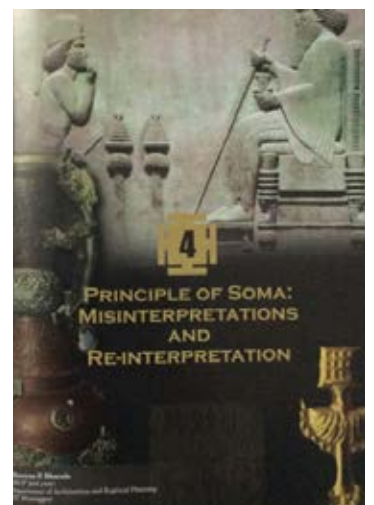
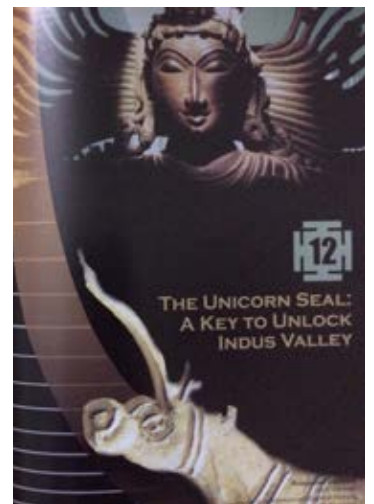
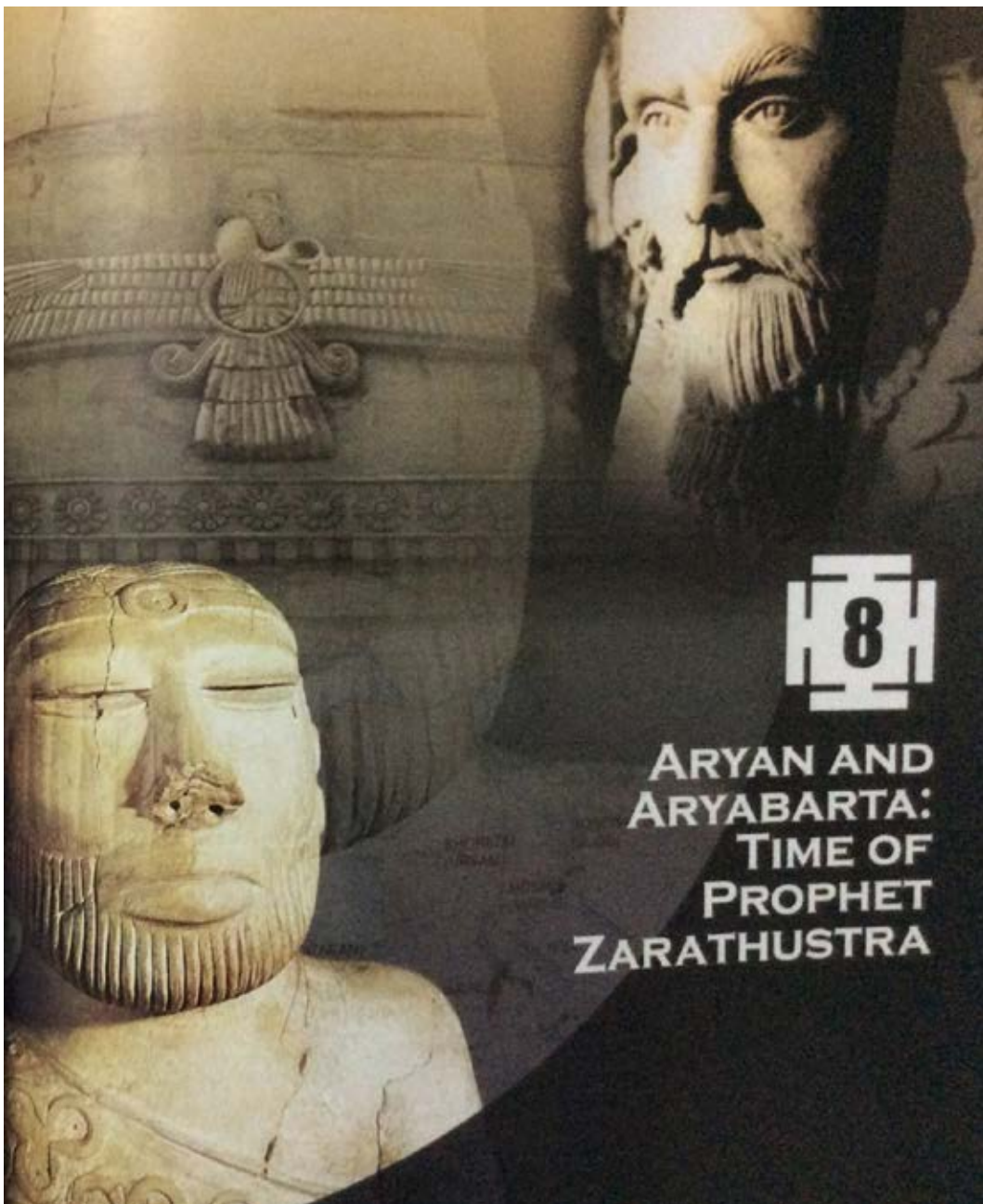


The first renaissance

The ancient Acheamenid Persian Empire in 700 BC had stretched from Danube valley in eastern Europe to Indus Valley in central Asia..... creating the trade-mercantile and cultural linkage of the **Silk Route**.....the connecting religion was Zoroastrianism and Mithraism – extension of the Atharvaveda and the Persian Atharvan priests (Magi)....the ancient **Atharbaidan** is today’s **Azerbaijan**

Land of Punt
 Phoenicians linkages (Indus-Sumerians-Crete)
 Indo-European: Hittites & Gypsies
 Indo-Persian culture: Mithraism



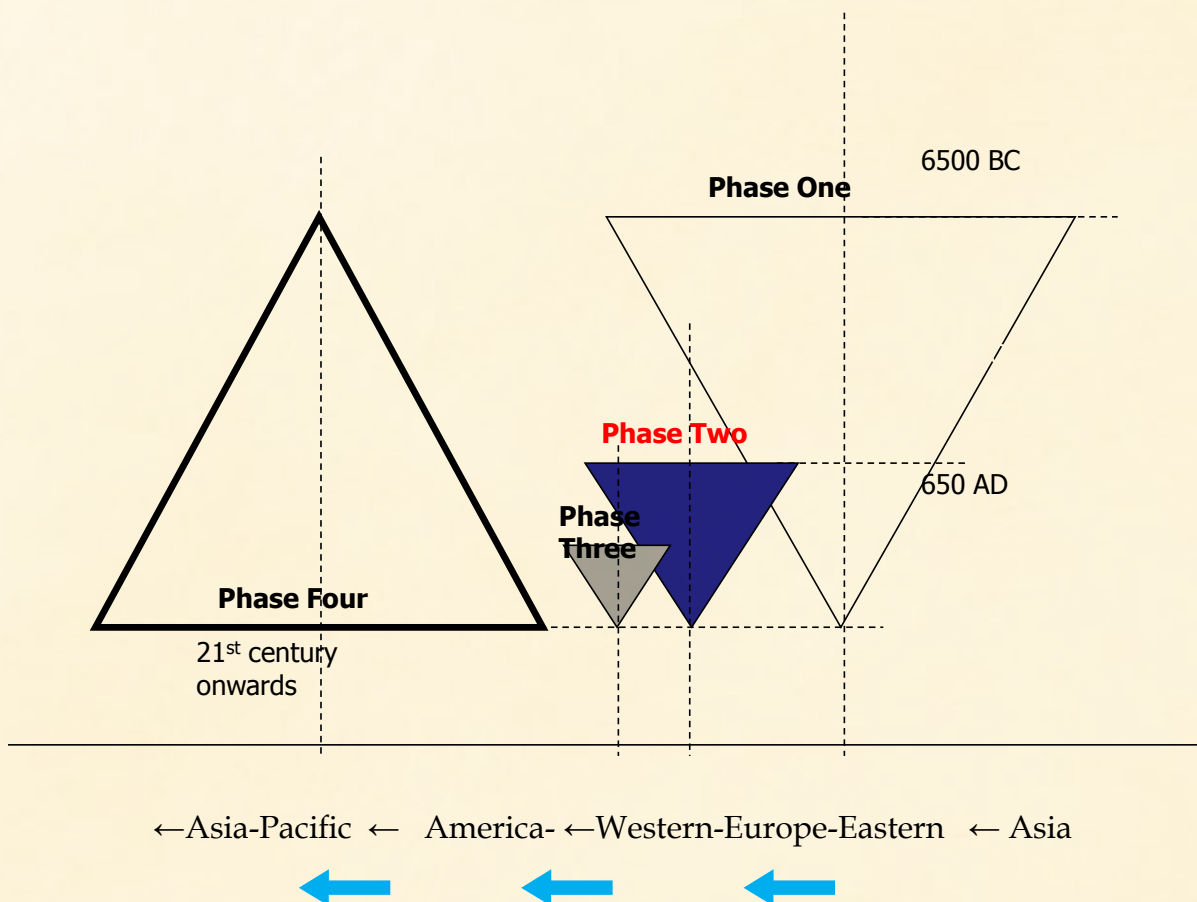


Second renaissance

‘After the invasion of Alexander the great, these two great waterfalls (Indian and Greek principles) colliding with each other, deluged nearly half of the globe with spiritual tides, such as Christianity’.

Swami Vivekananda

‘The Problems of Modern India and its solution’

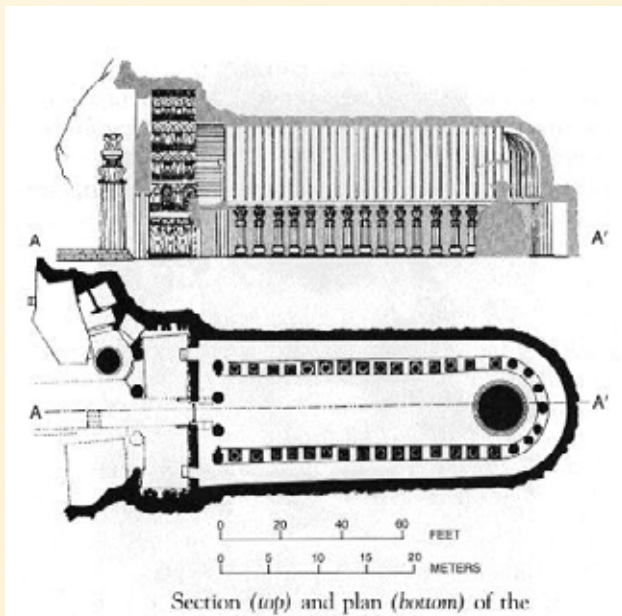
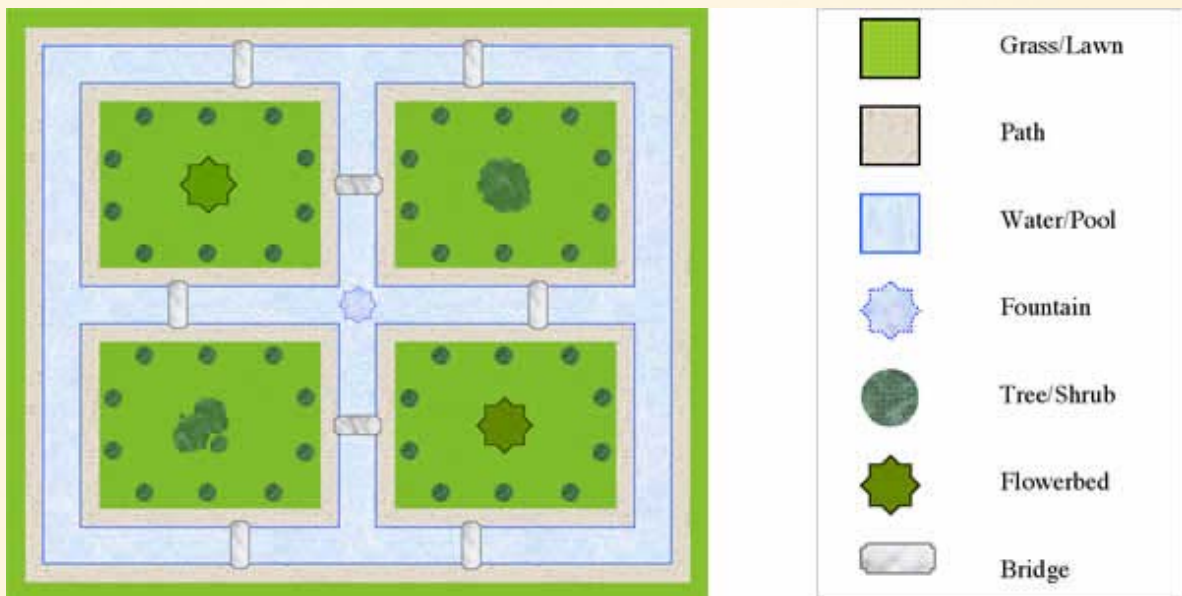


‘.... For Priyadarsi, the beloved of Gods, desires safety, self-control, justice, and happiness for all beings. The beloved of Gods considers that the greatest of all victories is the victory of righteousness, and that victory the Beloved of Gods has already won, here and on all his borders, even 600 leagues away in the realm of the Greek king Antiyoka, and beyond Antiyoka among the four kings Turamaya, Antikini, Maga and Alikasudara, and in the south among the Cholas and Pandyas and as far as Ceylon’.

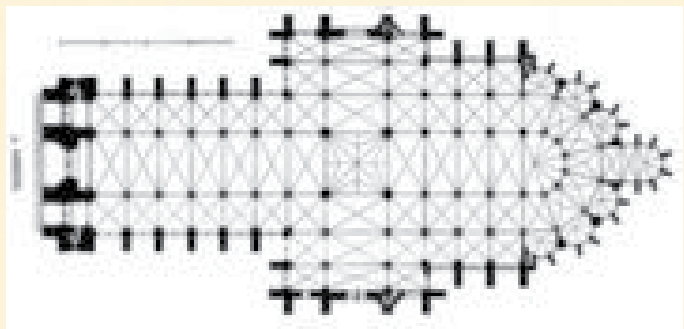
Les Inscription d’Asoka, Paris
On ‘Buddhist Missions to the Eastern Mediterranean’

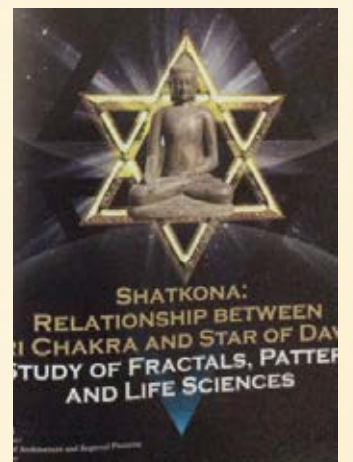
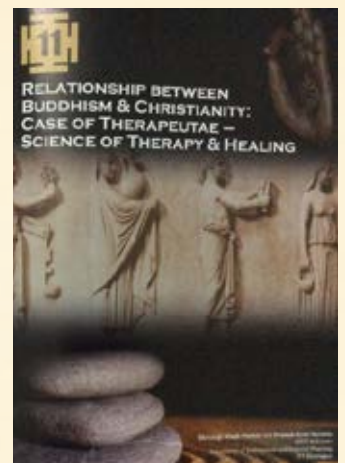
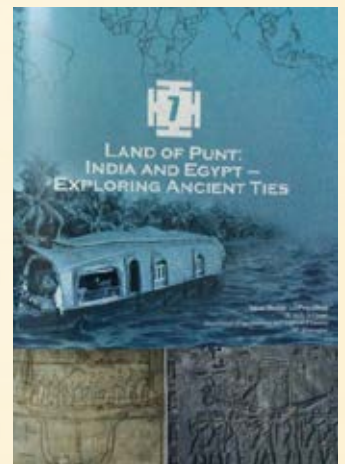
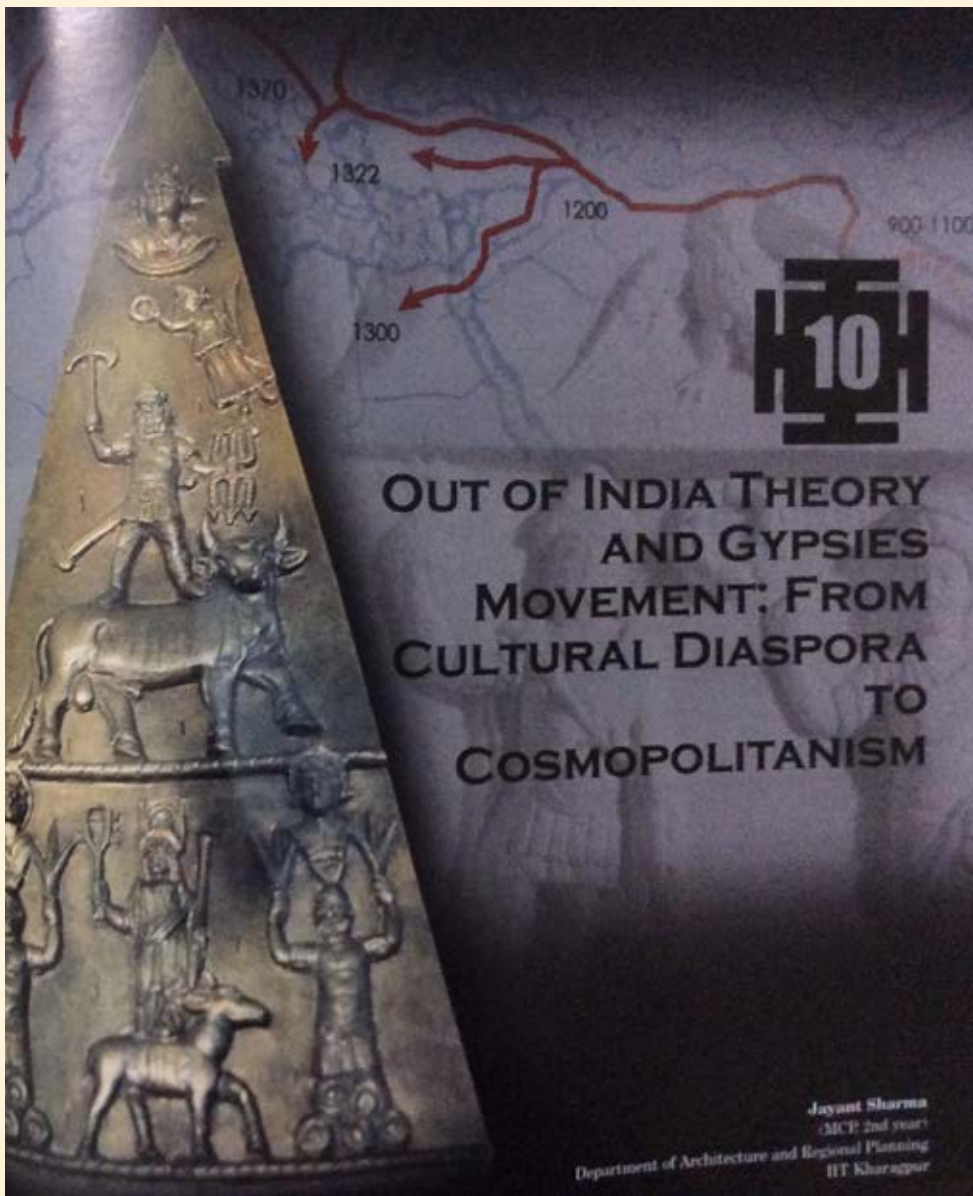


Striking similarities



Plan of Amiens Cathedral

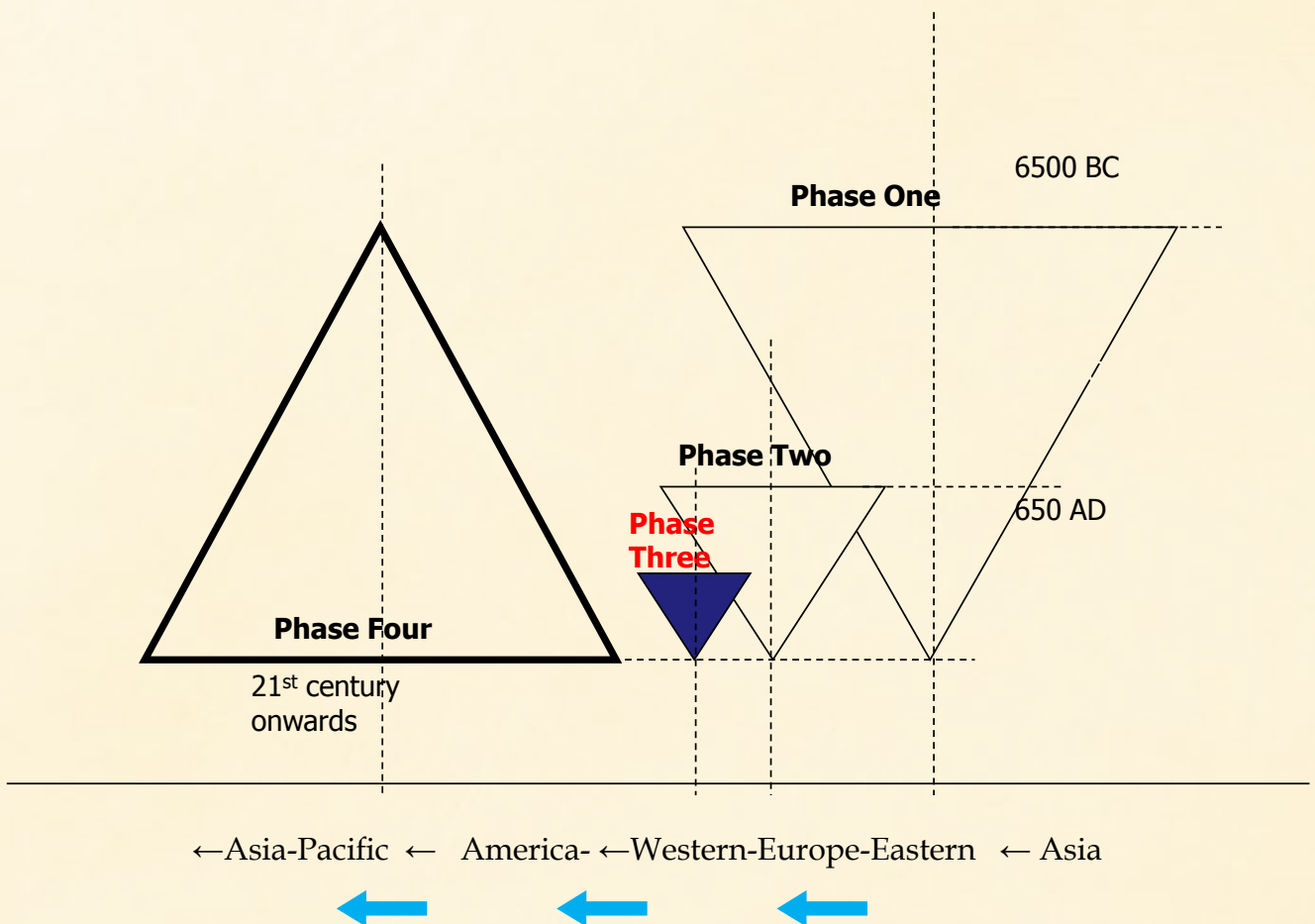




Third renaissance

Again, a similar commingling (of Indian and Greek principles), resulting in the improvement and prosperity of Arabia, laid the foundation of Arabia, laid the foundation of modern European civilization’.

Swami Vivekananda
‘The Problems of Modern India and its solution’



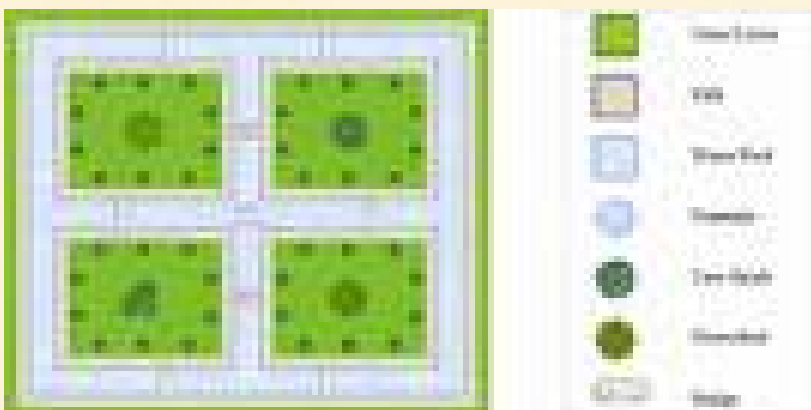
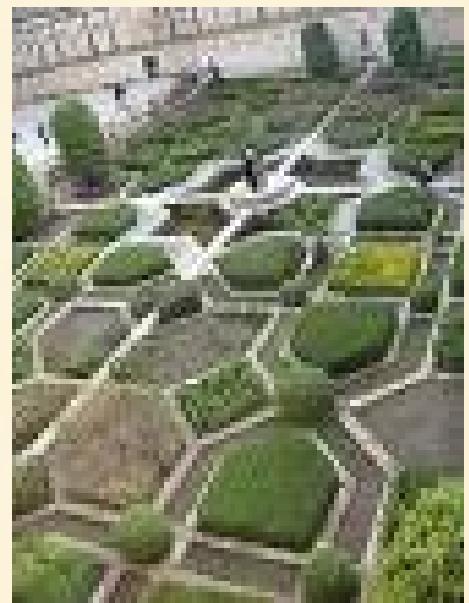
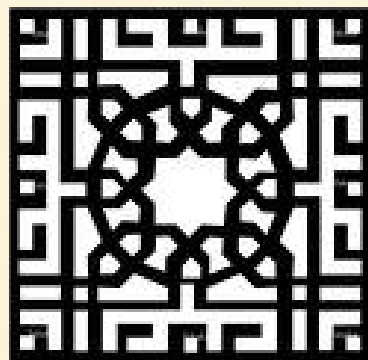
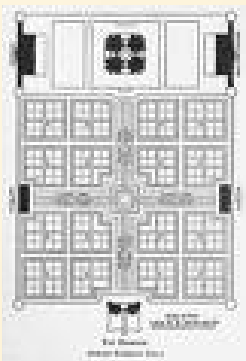
‘...To us, it seems that West-European civilization is civilization, but this is a narrow view. Most of the cultural content of our civilization comes from the Eastern Mediterranean, from Greeks and Jews.....I think that, if we are to feel at home in the world after the present war, we shall have to admit Asia to equality in our thoughts, not only politically, but culturally.’

Sir Bertrand Russell

A History of Western Philosophy

‘.....At this time the Moslem Empire extended from Spain to the Middle East. It included several cities such as Alexandria, which had formerly been great centers of learning in Greek times, and other cities, such as Baghdad, which were go-ahead centers of new Knowledge. Thus the Moslems were able to make far great advances in science and in particular arts than were the Christian countries of that time.’

(Man’s Past and Progress (1961); page 76; Colourama, Odhams Press Ltd. London)




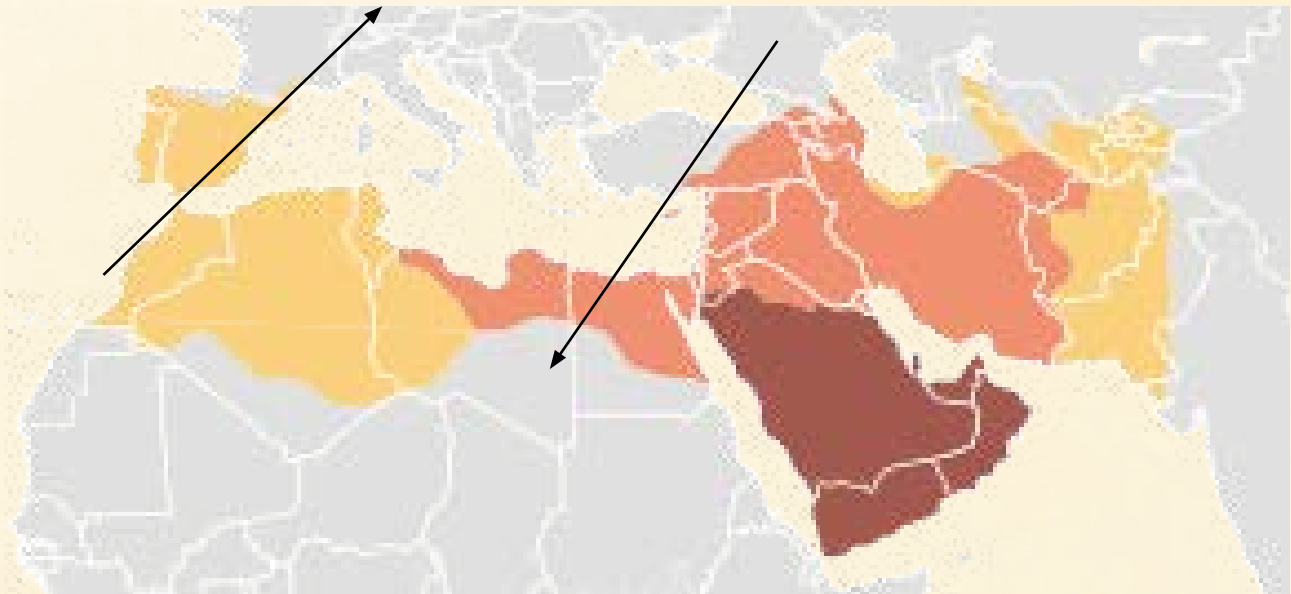
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Histories.....

Fish scales: Armada

Christopher Columbus

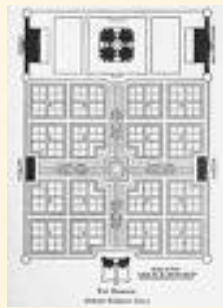
- Re-discovered America
- Thought he reached Asia/India
- Landed in the West Indies/Bahamas

The Granada War (Spanish: Guerra de Granada) was a series of military campaigns between 1482 and 1492, during the reign of the Catholic Monarchs (los Reyes Católicos) Isabella I of Castile and Ferdinand II of Aragon, against the Nasrid dynasty's Emirate of Granada. It ended with the defeat of Granada and its annexation by Castile, ending Islamic rule, Al-Andalus, on the Iberian peninsula and completing the so-called Reconquista.



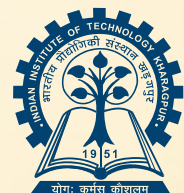
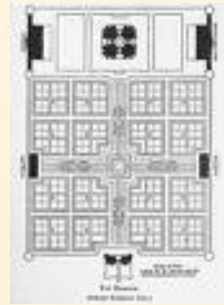
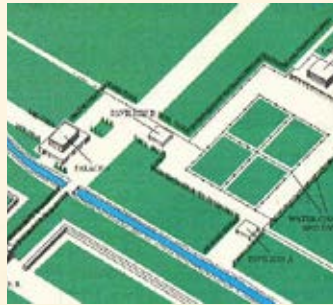
6 Histories..... Chahar - bagh



6

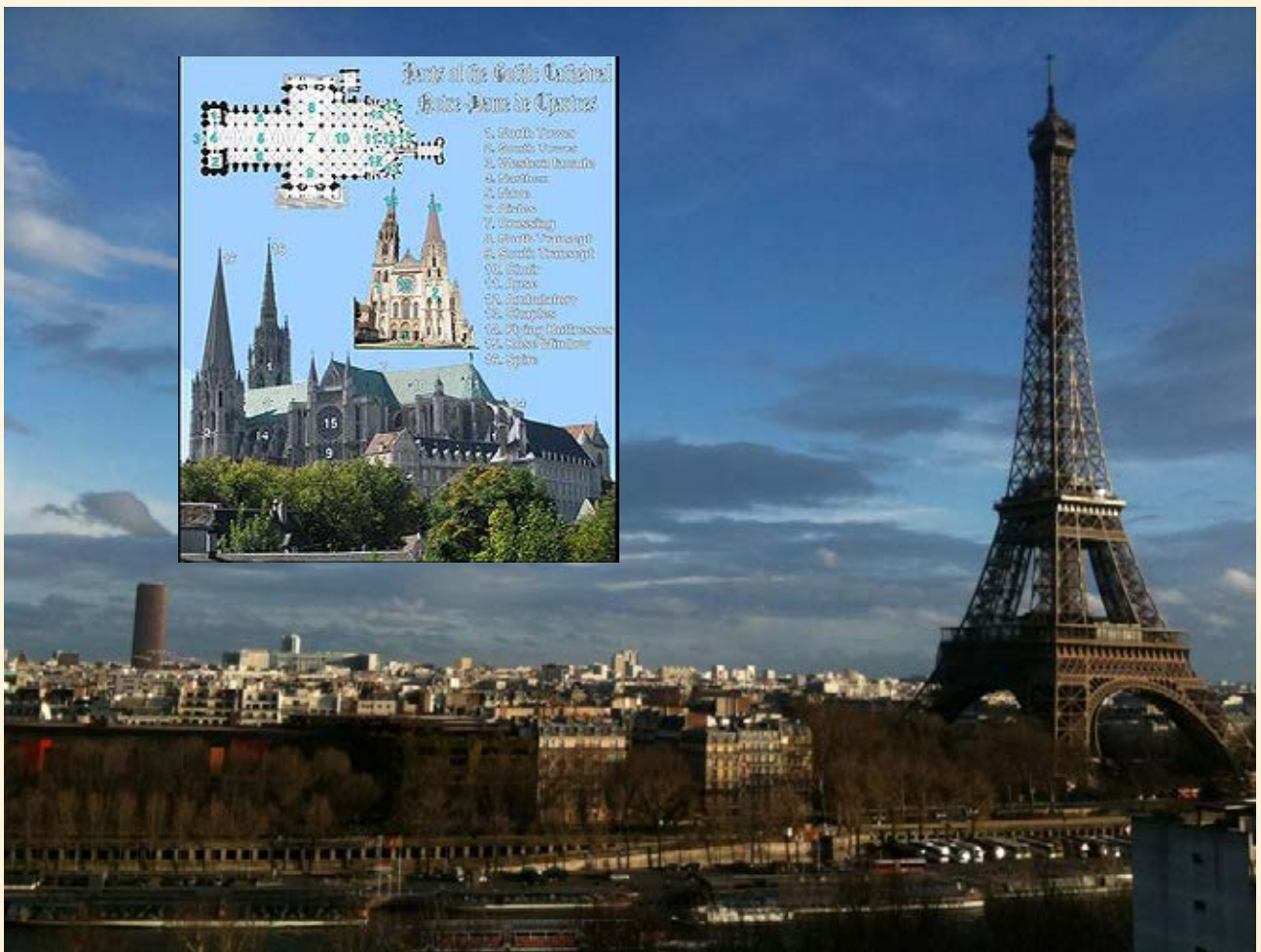
CONNECTING HISTORIES

Pasargadae (700 BCE)Theatre of Pompey (300 AD).....Renaissance architectural footprints (1500 AD)



7

CONNECTING HISTORIES



- 1. North Tower
- 2. South Tower
- 3. Western Chapter
- 4. Choir
- 5. Choir
- 6. Choir
- 7. Crossing
- 8. North Transept
- 9. South Transept
- 10. Choir
- 11. Choir
- 12. Choir
- 13. Choir
- 14. Choir
- 15. Choir
- 16. Choir
- 17. Choir
- 18. Choir
- 19. Choir
- 20. Choir



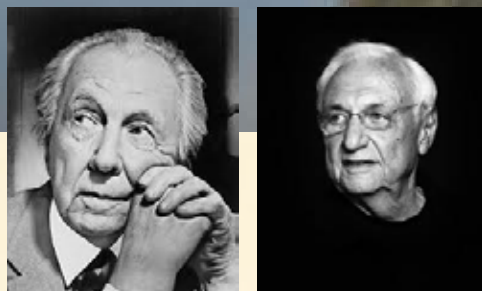
2

CONNECTING HISTORIES



Guggenheim museum | Bilbao Effect

- Iconic Architecture as Catalyst
- Tourism
- City, Globalization
- **Livability 2005**
- Entrepreneurial Development



GLOBAL LESSONS

1. Cooperative network building through indigenous
2. Role of community mosaics: Basques (The Vascos)

Success story: culture-led urban regeneration

Source: <http://www.ckarlson.com/>

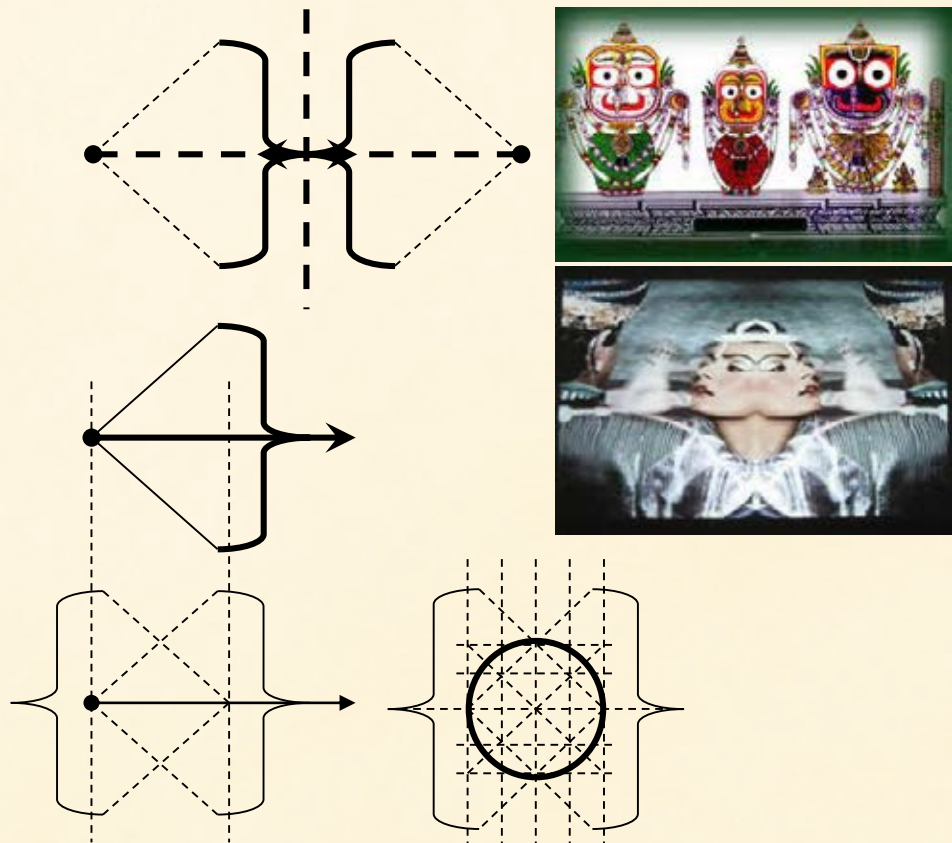


TWO: FUNDAMENTALS OF UNITY & VARIETY

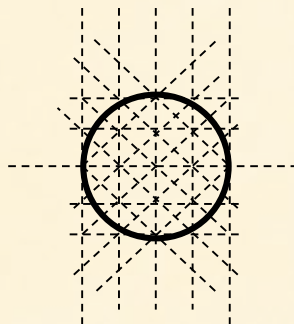
The Mirror The Stratification

MIRRORING – *Shiss-mahalam*

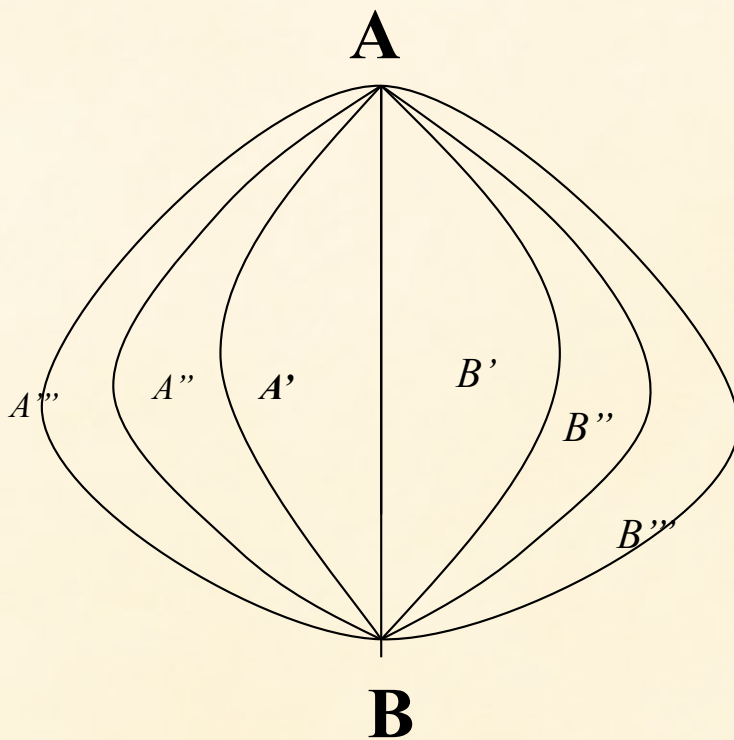




MIRRORING – Shish-mahalam



The Unity in Diversity



“Take these cells. Though each (is) separate, they are all nevertheless inseparably joined at AB. There they are one. Each is an individual, yet all are one at the axis. None (local) can escape from the axis (global). There we are one with him, all in (That) all, and all in God”

SWAMI VIVEKANANDA

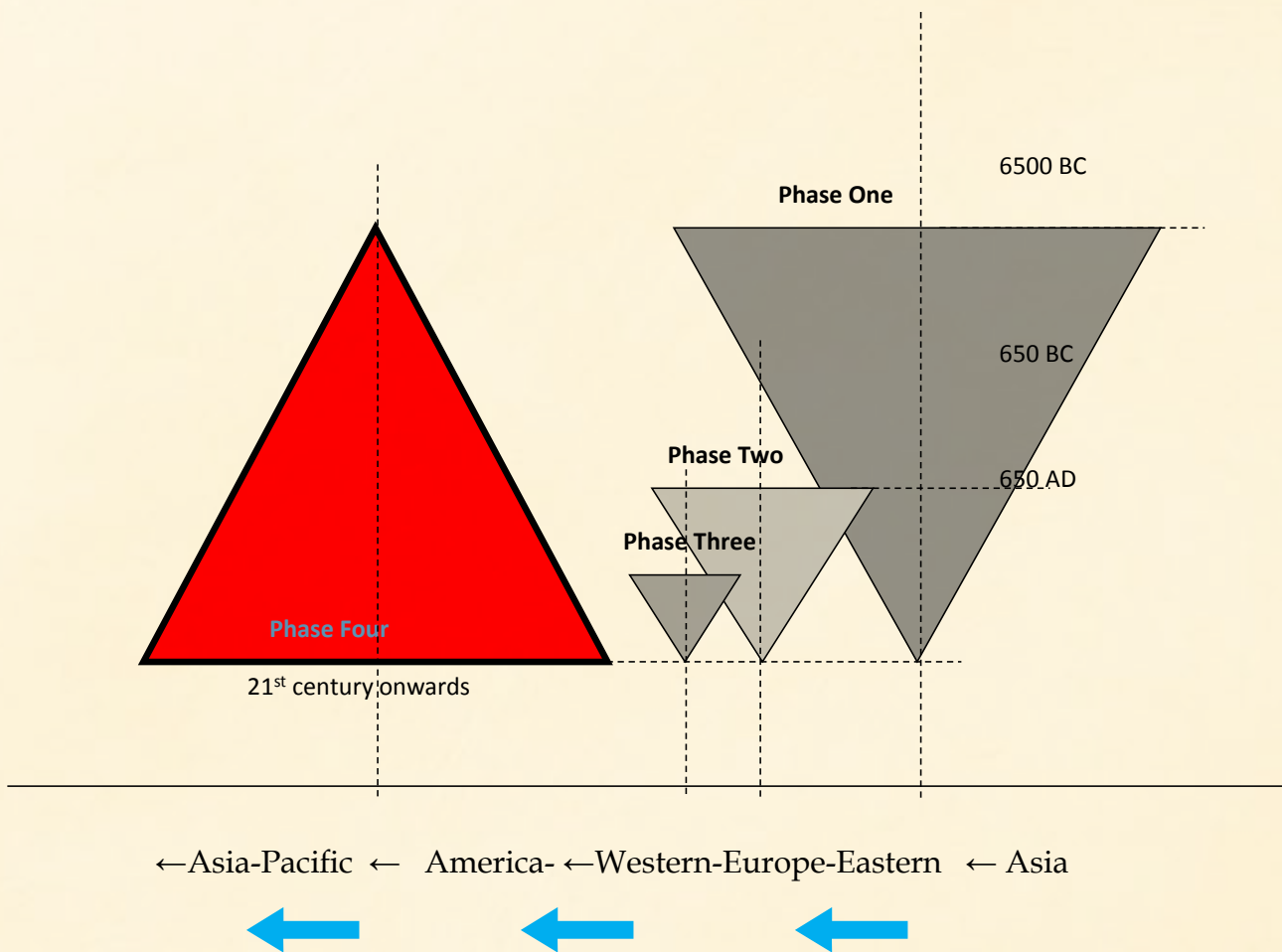
Expected renaissance

‘And perhaps, in our own day, such a time for the conjunction of these two gigantic forces (Indian and Greek principles) have presented itself again.

This time their center is India’.

Swami Vivekananda

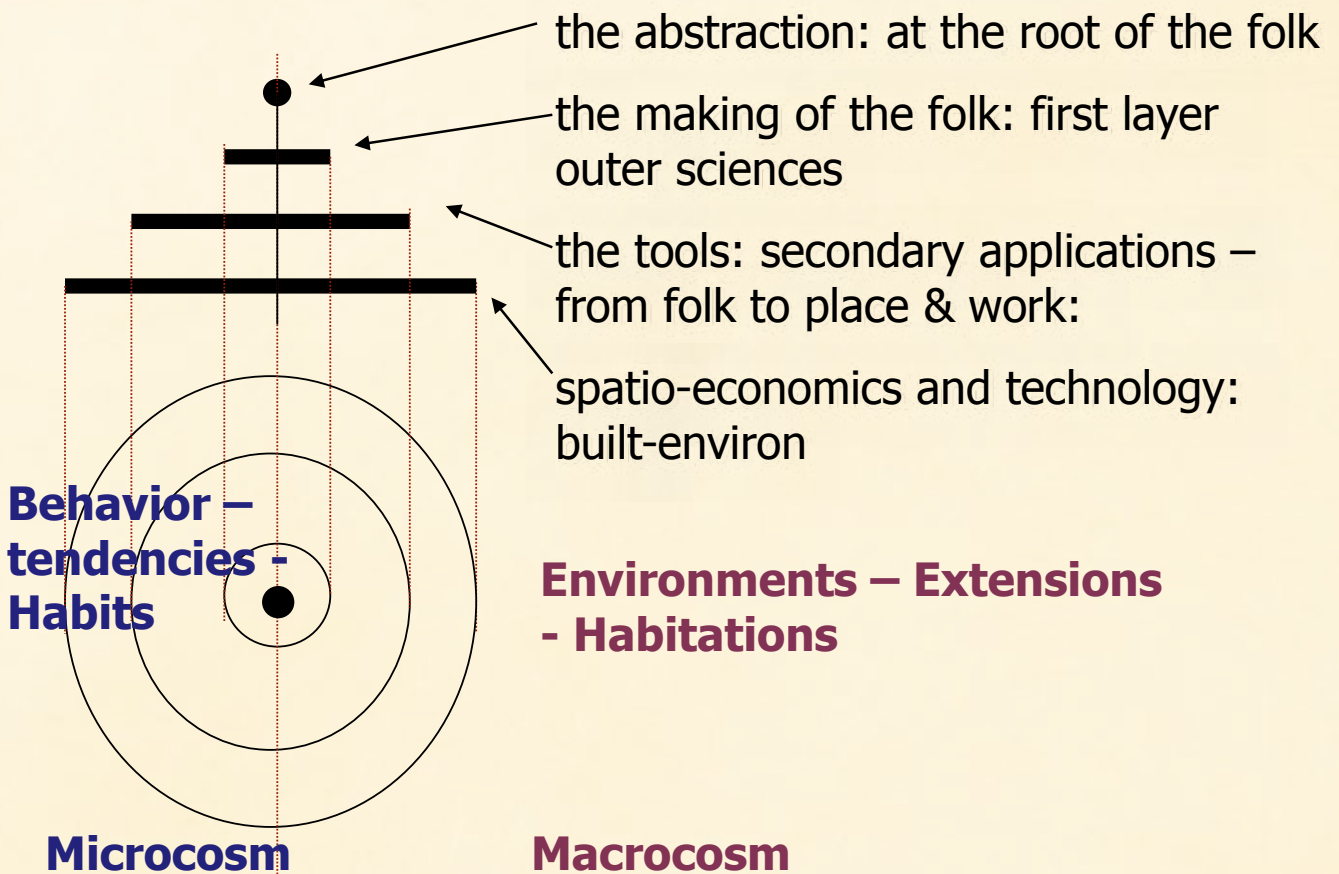
‘The Problems of Modern India and its solution’



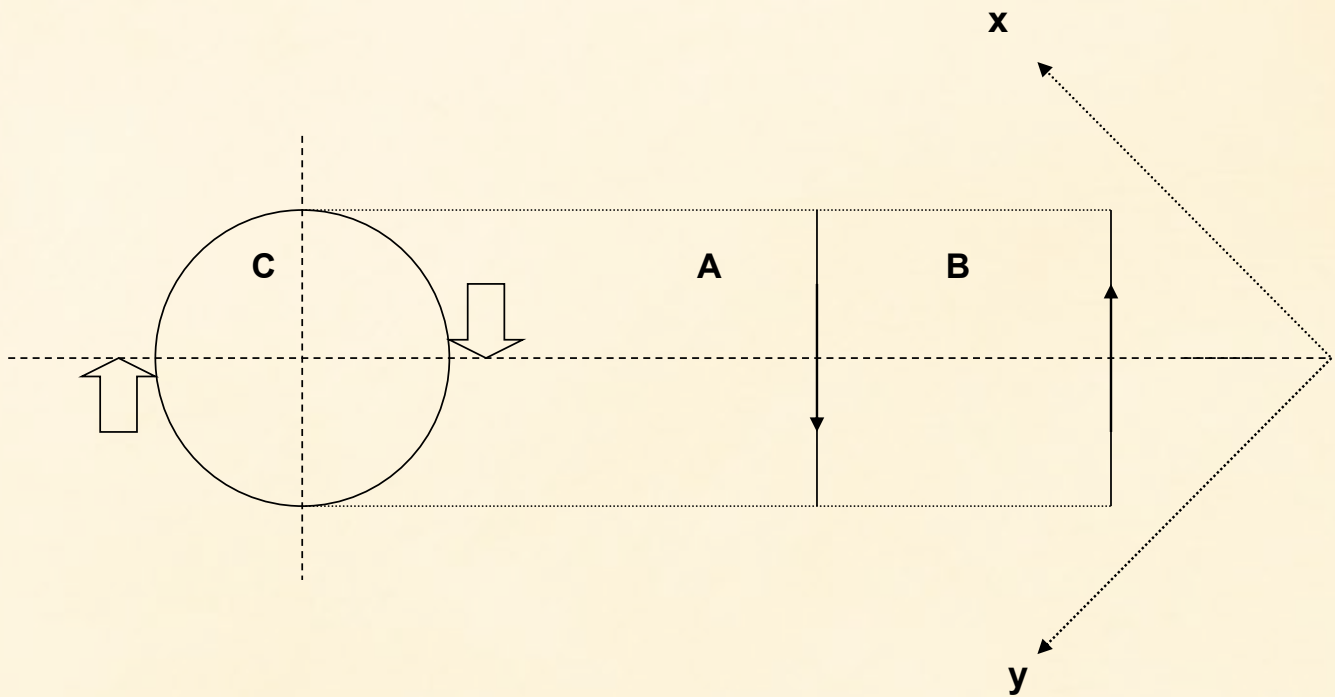
3 concentric parts and a whole

- The abstraction: the root of the folk: inner sciences:
 - **The first realization**
 - *A guiding philosophy: Set of Algorithms and Cardinals*
- The making of the folk: primary applications: cultural and social patterns: outer sciences:
 - **A way of life and expressions and recurrence of an underlying principle**
 - **The Normative framework and its inner hierarchy: the social schema**
- The tools: secondary applications - from folk to place & work: spatio-economics and technology
 - **The built form**
 - **The shape grammar**
 - **The support systems – technology and tools**

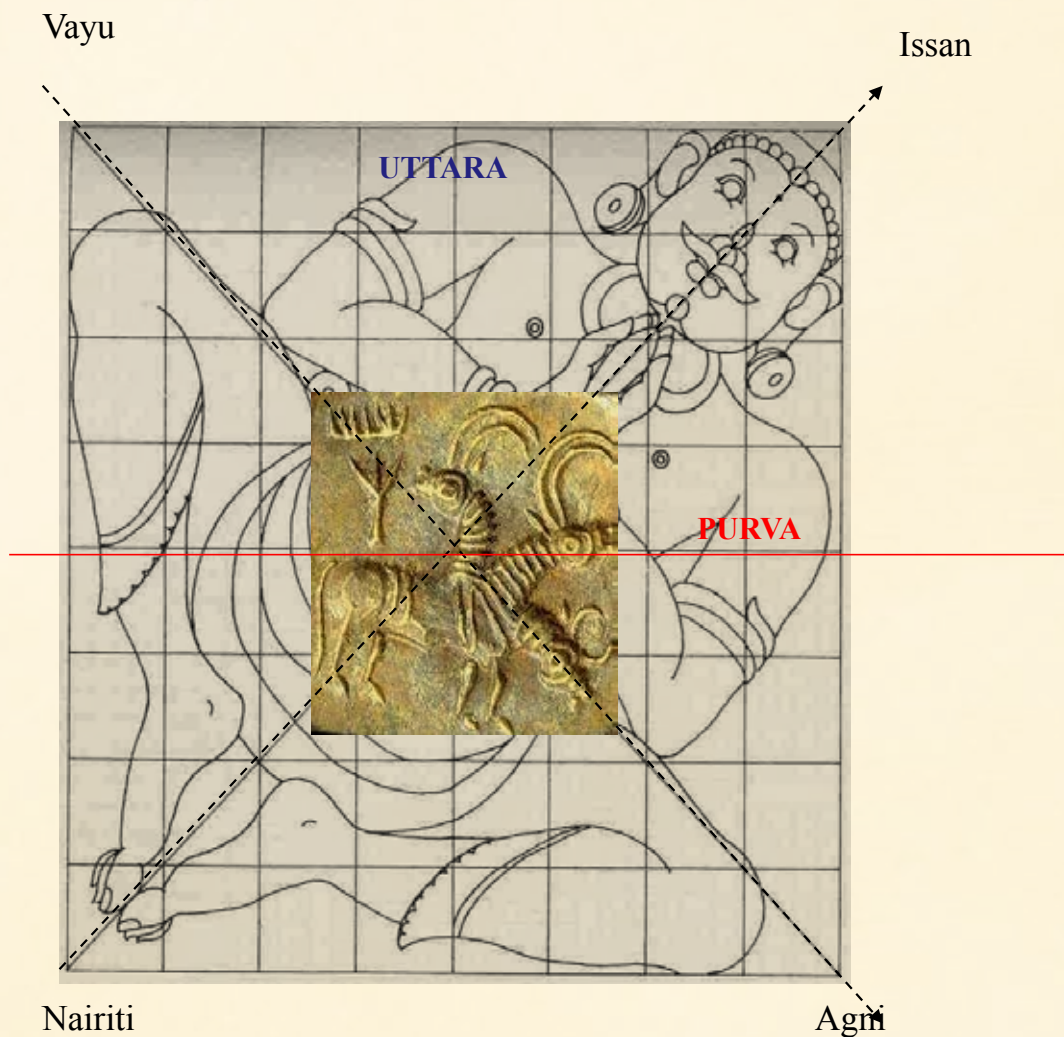
Unity as concentric hierarchy: the Indian architectural ethos



Non-linearity: Cyclicality



The two opposite poles / directions are actually complementary; reciprocal; integral



Part one

**The abstraction: at the root of the folk:
(the inner sciences)**

Why / what to apply?

The abstraction: root of the folk: the inner sciences

‘...In each of the major historical developments of architecture there is one basic principle underlying its conception, and one which is supremely distinctive. With the Greeks this was refined perfection; Roman buildings are remarkable for their scientific construction; French Gothic reveals a condition of passionate energy, while Italian renaissance reflects the scholarship of its time.

In the same way the outstanding quality of the architecture of India is **its spiritual content**. It is evident that the fundamental purpose of the building art was to represent in concrete form the prevailing religious consciousness of the people.

It is **‘mind materialized in terms of rock, brick or stone.’**

Sir Percy Brown

The first realizations of unity

Origin of Indian Architectural vocabulary

Vastospati Devata :

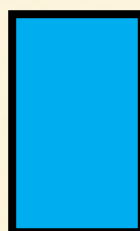
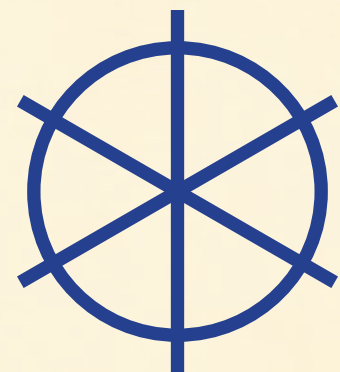
Seer-poet Vasistha (Rig Veda: 7.54 and 55 in seventh *mandala* and end of eighth *mandala*: 8.60 - *Vasuvid*)

Vastospate.....Pahi ksheme uta yoge barang no yuyang pata swastibhi sada na....

Axxani jathedang Herma-ng tatha. Sahasra sringa Brisava.....

A science of **simultaneity** of *Kshema* (construction and sustenance) and *Yoga* (deconstruction and change)

– a simultaneity and a correspondence between **the abstract (wave)** and **the concrete (particulate)**.

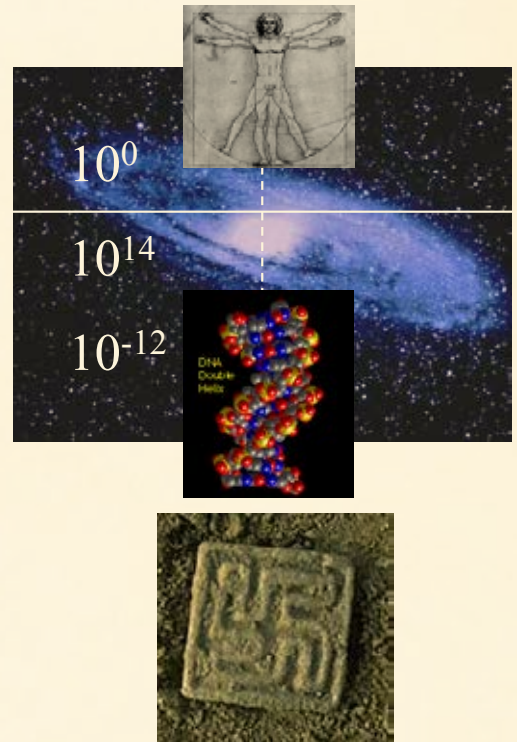


A guiding philosophy: set of algorithms and cardinals- language systems

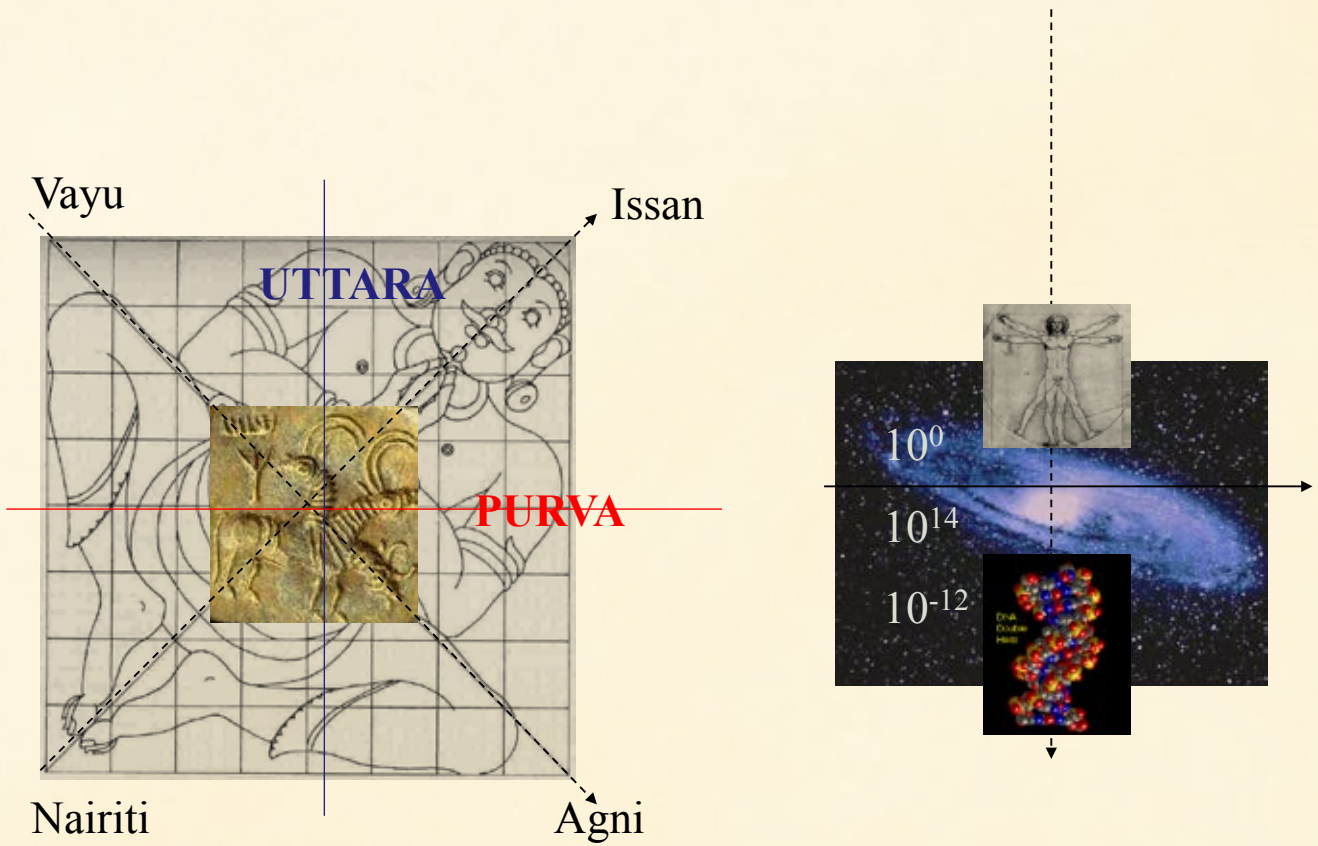
- Root 'Vasu' – Vastu, Vasati, Vasumati, Vasuvidya, Vasistha, Vasava, ni-basa (India)
- Words like – vast, bust, vesta, vestibule, base, bastion, bastille, boss, vase, om-ni-bus (spatial connotations of the West)

The architectural vocabulary of India and its contribution to the global vocabulary:

The need of technical Sanskrit studies

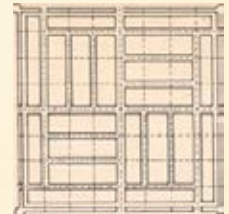
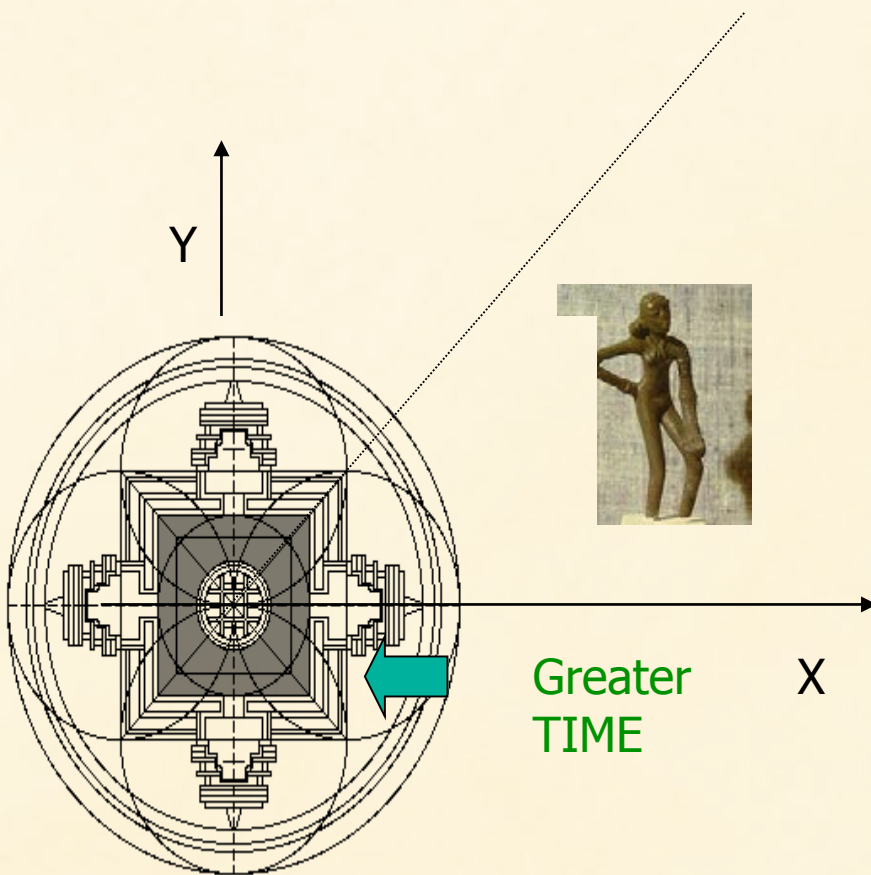


Cardinals of the spatio-temporal



Double intender – space & time

Framework of Holism and folk accumulation (non-reductionism)



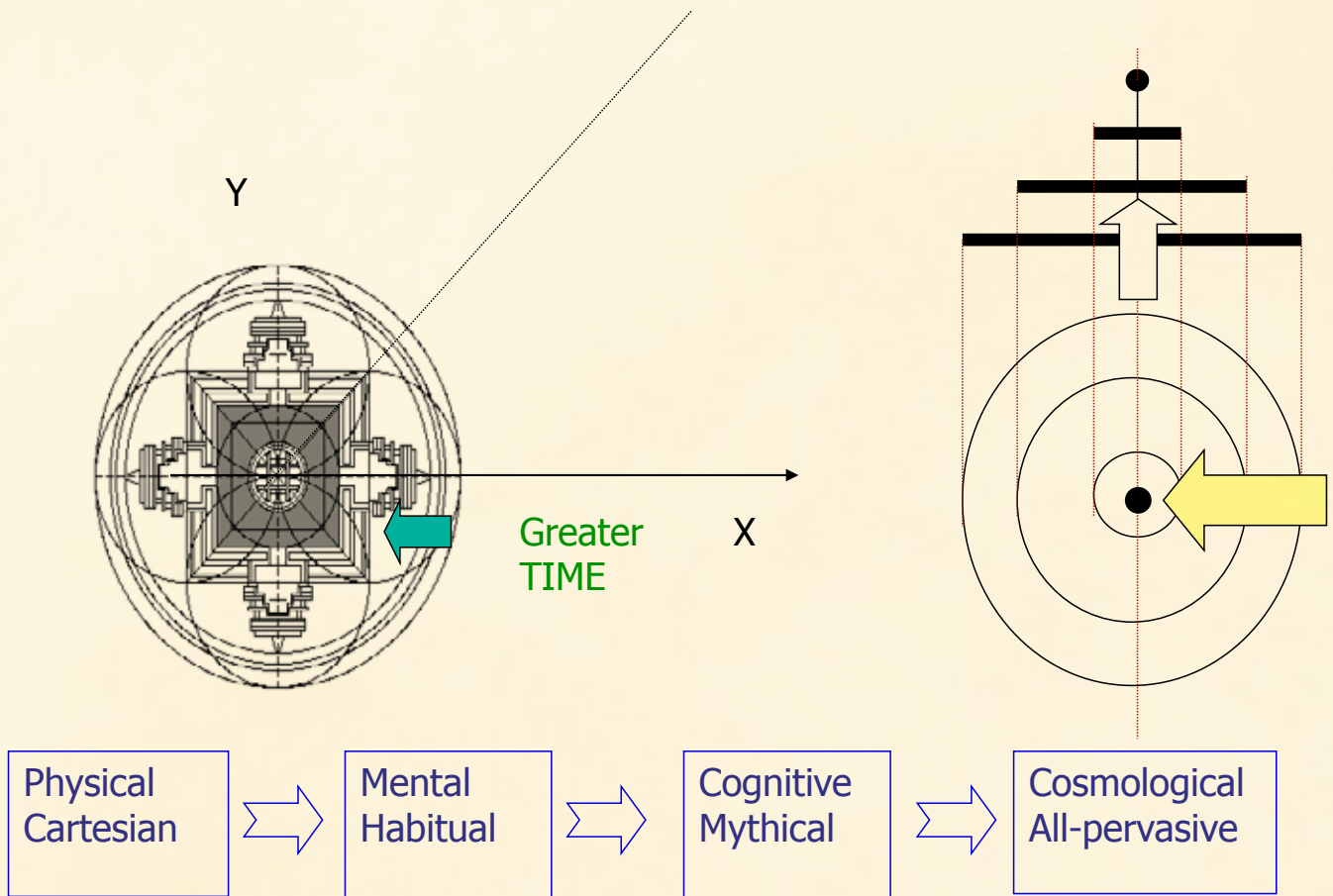
Strictly speaking, the word Mandala means ‘Circle’. It is generally represented as a complex pattern of drawing. Throughout ancient Asiatic civilizations like India, China and the ancient Near east (mainly Persia), Mandala has been depicted as an ideal concept of Order, both at the Universal (also known as macrocosm) and the individual (also known as the microcosm) planes and also in terms of the inter-relationship between the two.

The ancient artist had a deep feeling of being himself an integrated part of the cosmos and of participating in all its categories and elements, a feeling acquired by innumerable generations in **uncounted centuries of meditative experience.**

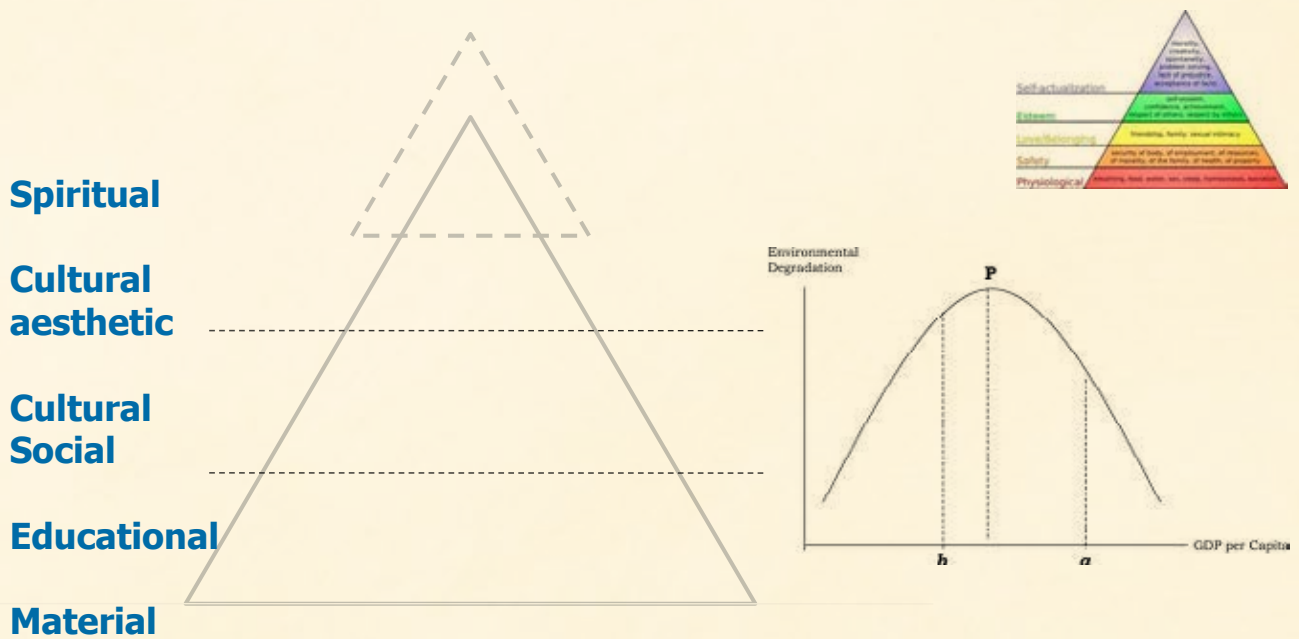
The Penguin Dictionary of Symbols, Paris, 1969

Alice Boner
Vastu-sutra Upanishad

Framework of Holism and folk accumulation (non-reductionism)



Conflict resolution – how ?



Maslow, Abraham (1998). *Towards a Psychology of Being*. Wiley; 3 edition.

Wilber, Ken: *Spectrum psychology*

Inverted U-Curve: Simon Kuznets (1958)

* Ramananda, S (2006), ‘Santa Prasanga’, Dey’s publication

Genesis of Indian architecture



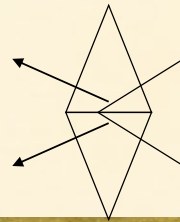
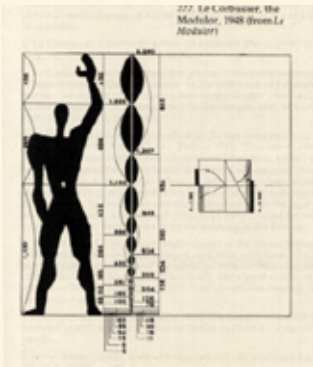
There was **an inquisitiveness** in the race to start with, which very soon developed into bold analyses, and though, in the first attempt the work turned out might be like the attempts with shaky hands of the future **Master-sculptor**, it very soon gave away to –

- 1) strict science;
- 2) bold attempts
and
- 3) startling results

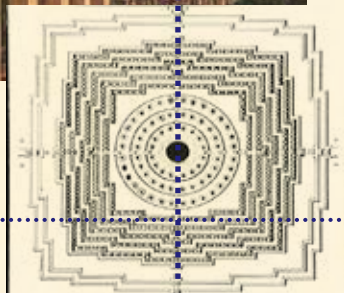
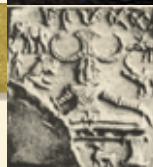
Swami Vivekananda
Historical Evolution of India



Unity in cosmic scales: making of folk-expressions



The Indus Script

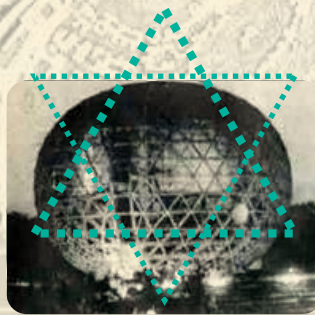
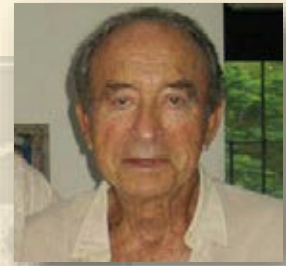
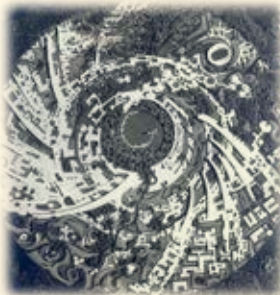


*Trishchinna....yantra
.....TriChakra..Ratha....
Tribrita..Srinante
Vama-base....
Aswini-devta*

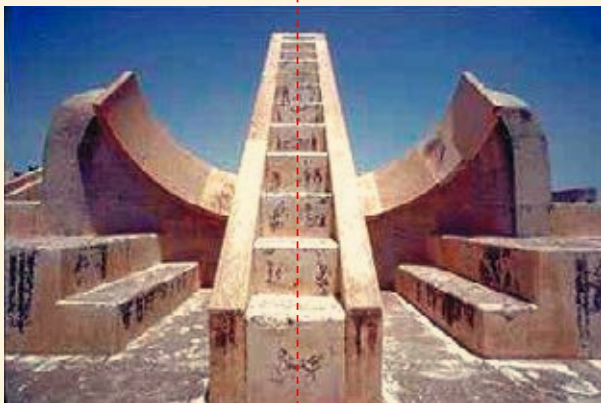
Seer **Hiranya-Stupa**
Angiraśa
Rig Veda: 1.34

1

CONNECTING HISTORIES



Unity in space-time: making of folk-formative



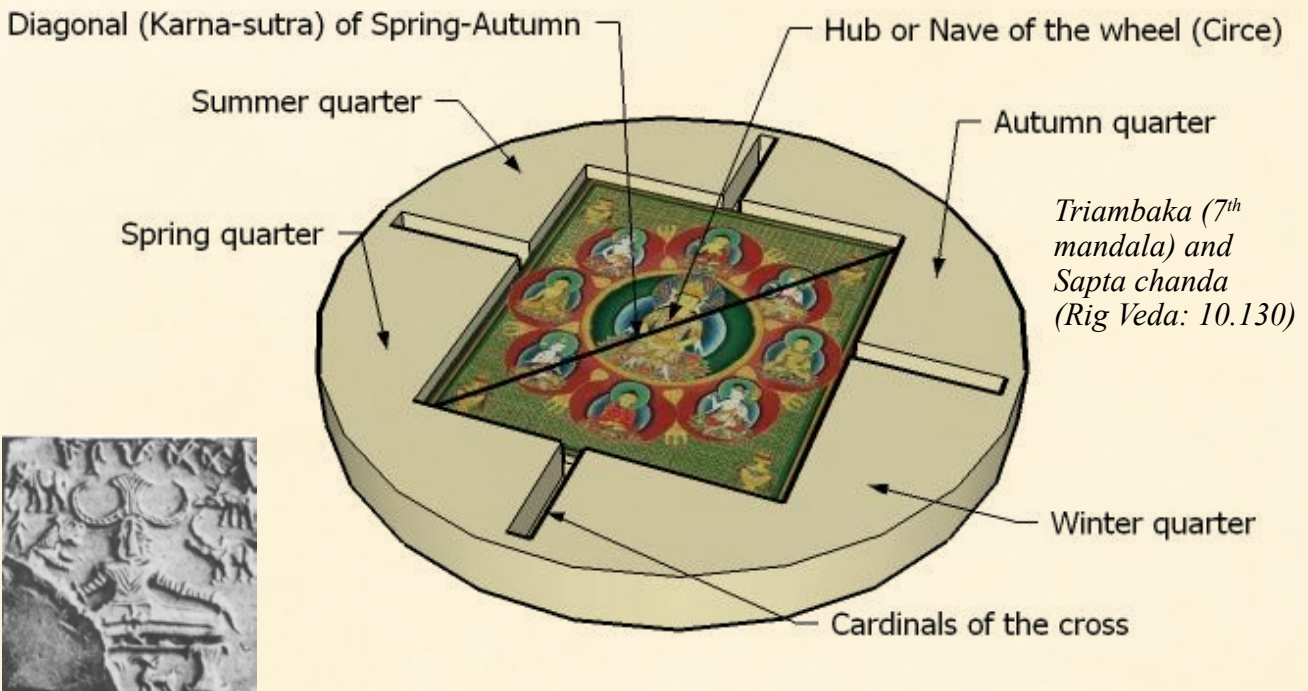
‘It evolved the science of geometry from the arrangements of bricks to build various altars, and startled the world with astronomical knowledge that arose from the attempts accurately to time their oblations.’

Swami Vivekananda
Historical Evolution of India

*Savita Yantra-i
prithivimbmnad-skhamvhan
sabita dyamdunhhat.....*

Rig Veda:10.149.1

Unity in the participatory geometry: making of the altar

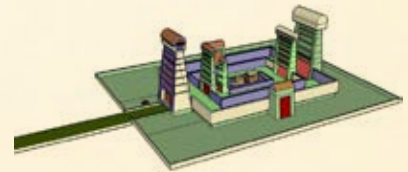
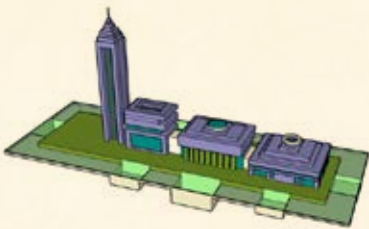


'The Vedic sacrificial altar was the origin of geometry.'

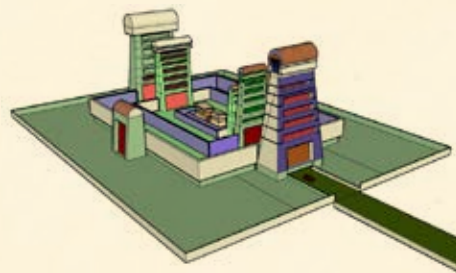
*Swami Vivekananda
Thoughts on Vedas and Upanishads*

Evolution of Centrality (*Devatati*) and the Four Quarters (*Sarvatati*) in Altar

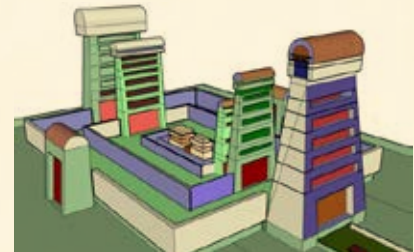
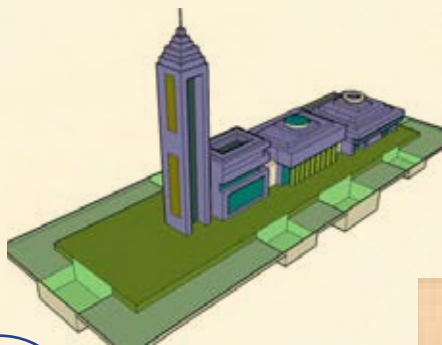
Unity in shape grammar: reciprocity of regional variations



Aryan
Agni (Igneous)
Psukkho (Psychic)
Spirit



Dravidian
Dravi (Drop)
Soma (Somatic)
Matter

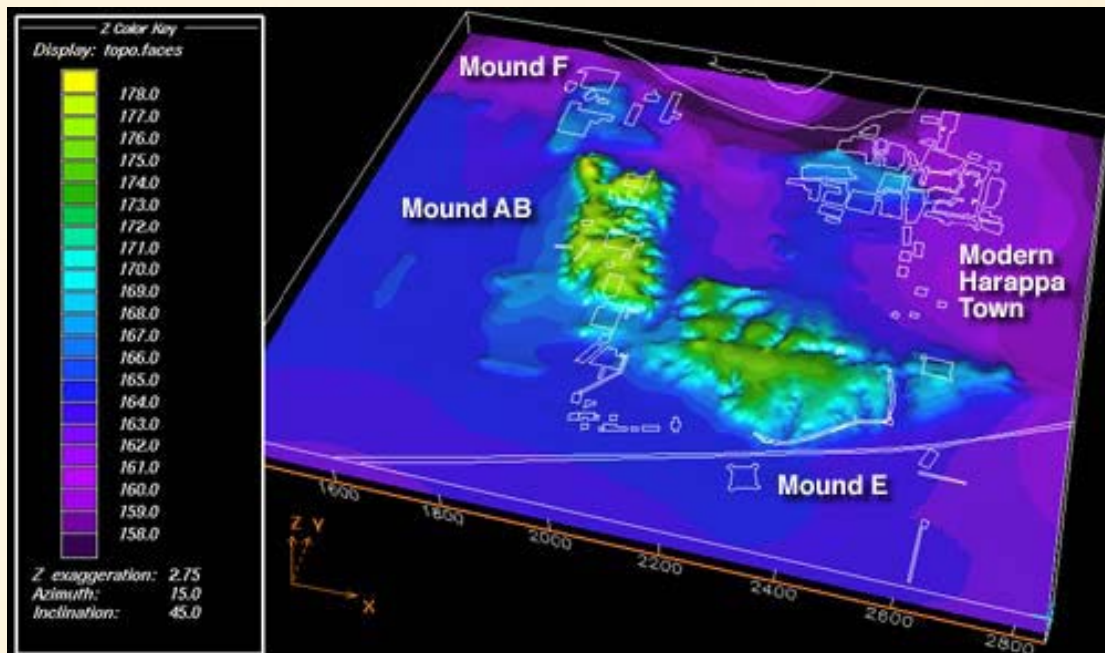


Northern



Southern

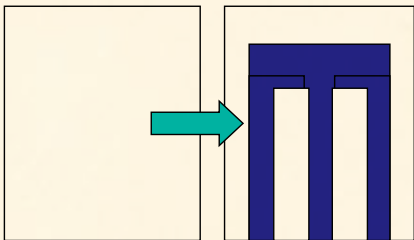




Part three

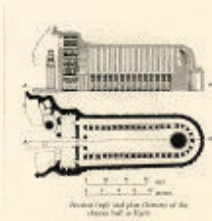
**The making of the work-place:
tools - second applications: spatio-
economic and technological
patterns: (the outermost sciences)
how to apply?**

Reciprocal unity in language of place-expressions : deconstruct and construct

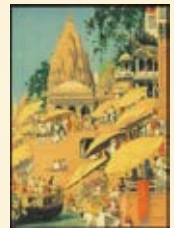
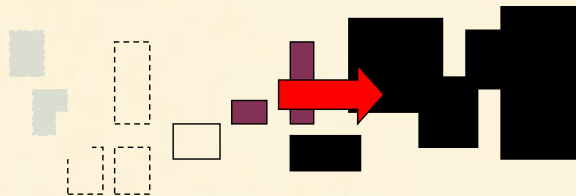


individual meditation to socio-cultural festivity

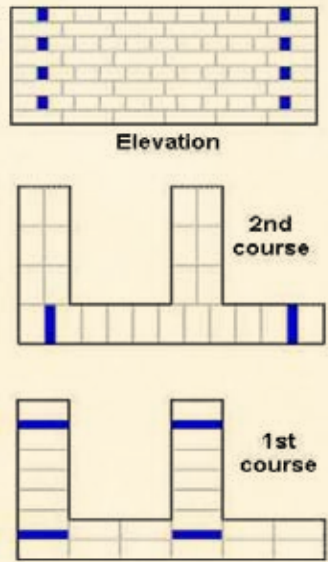
Krishna and Sukla Yajju



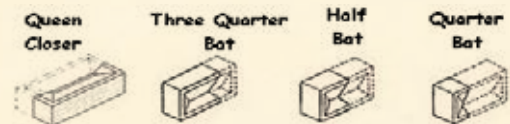
sacred isolated to sacred agglomerated



Unity in tangibles in place-expressions: the brick bond



Istaka : Yadjur Veda



Unity in functions of place- economy: so old and so modern!



Kalibagnan, 200 miles from Bikaner...site of terracota bangles; nine reconstruction phases



Lothal, in Gujarat...with dockyard with warehouses.... evidence of museum.....lower town having coppersmith, sheds and beading factories....excellent drainage systems



Dholavira, in Kutch.....great township.....near Mythical Dwaraka.....

Unity in diversity: regional scape infolk-place-economy

- Kasi
- Kosala
- Anga
- Magadha
- Vajji (or Vriji)
- Malla
- Chedi
- Vatsa (or Vamsa)
- Kuru
- Panchala
- Machcha (or Matsya)
- Surasena
- Assaka
- Avanti
- Gandhara
- Kamboja



Unity in diversified built-form



Indus Valley civilization, 3000 B.C.

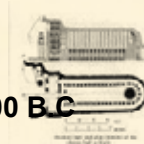
Persian Empire, 700 B.C.



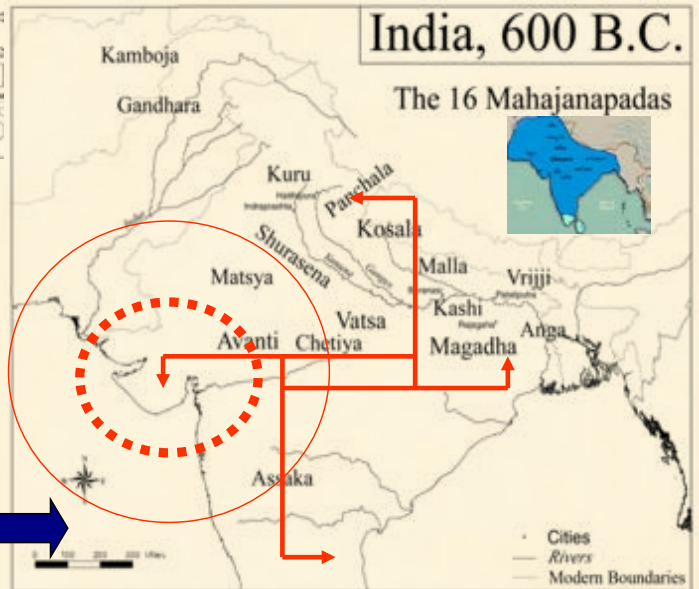
Gandhara 600 B.C.



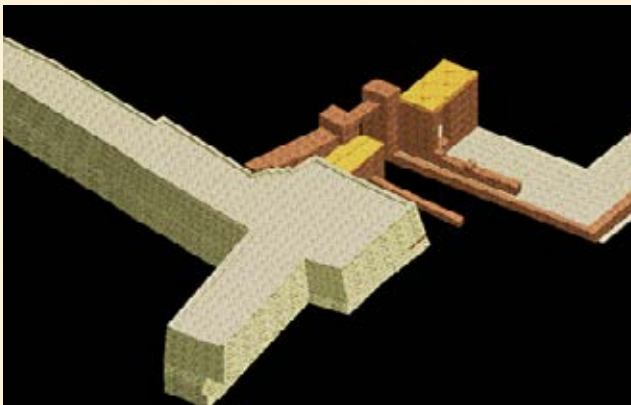
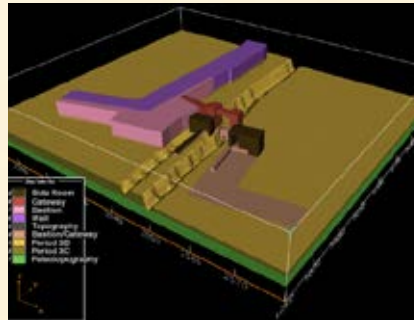
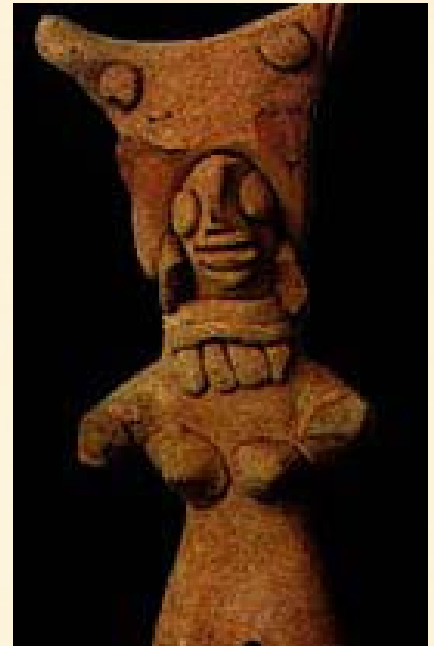
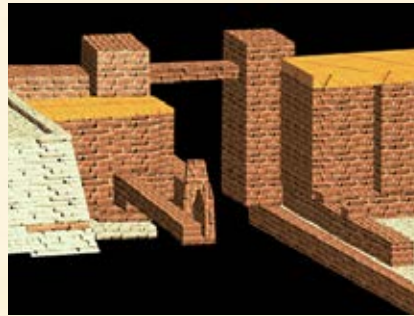
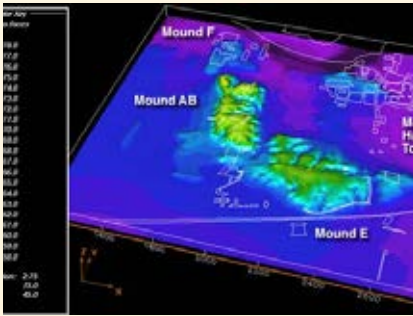
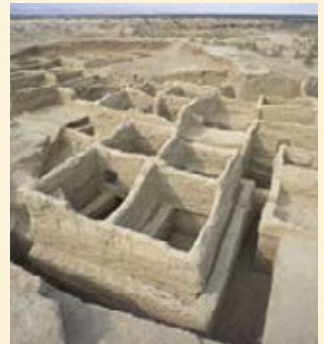
Girnar-Junagarh, Palitana



Sahyadri caves, 300 B.C



Unity in built-technology



Indus Valley Monastery, 3000 BC



**An ancient monastery, Takht-i-bahi
Eastern Gandhara 200 BC**

FIVE: CONCLUSIONS – why ?

**A revival
A recognition
A recovery**

Present time



A SPIRALLING CRISIS due to LACK OF ETHICS & VALUES



Fritjof Capra

Facing:

- *An Inconvenient Truth*
- *A Turning Point*

Forgetting:

- *Small is beautiful*
- *Ethics in Economics*



E. F. Schumacher

A need for:

- Environmental Ethics*
- Scientific Ethics*
- Ecological Ethics*
- Ethics in Economics*



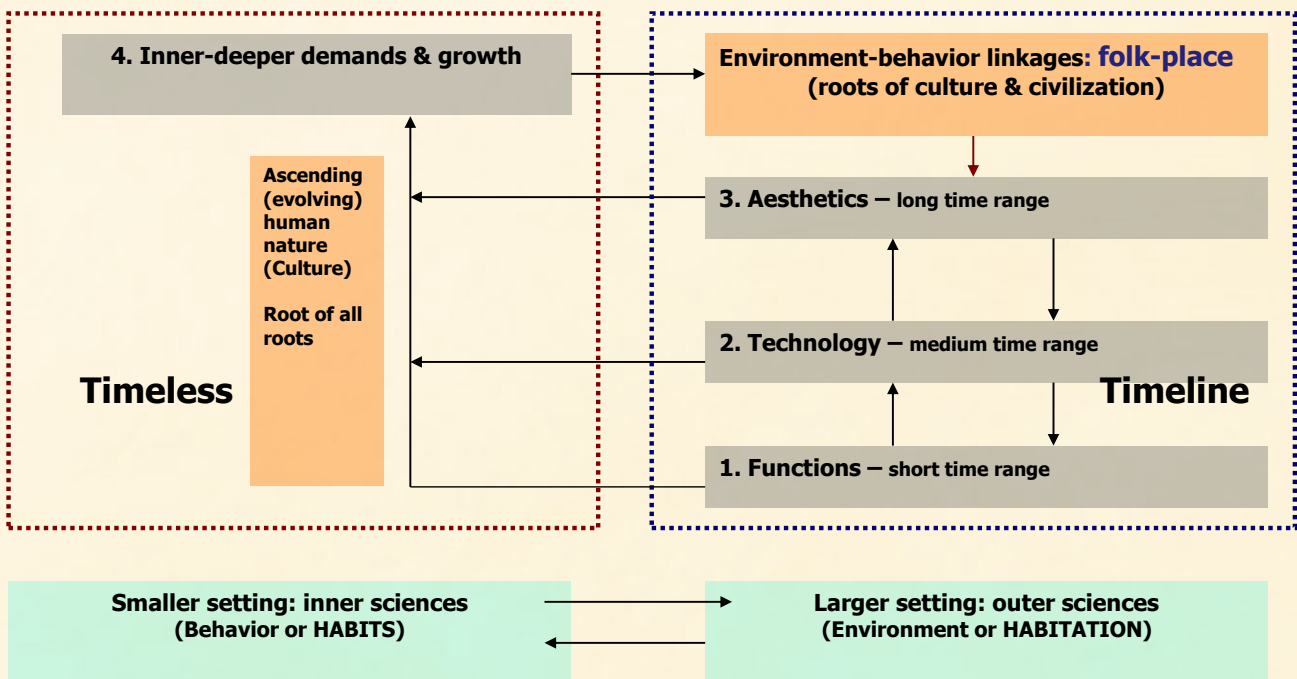
Amartya Sen



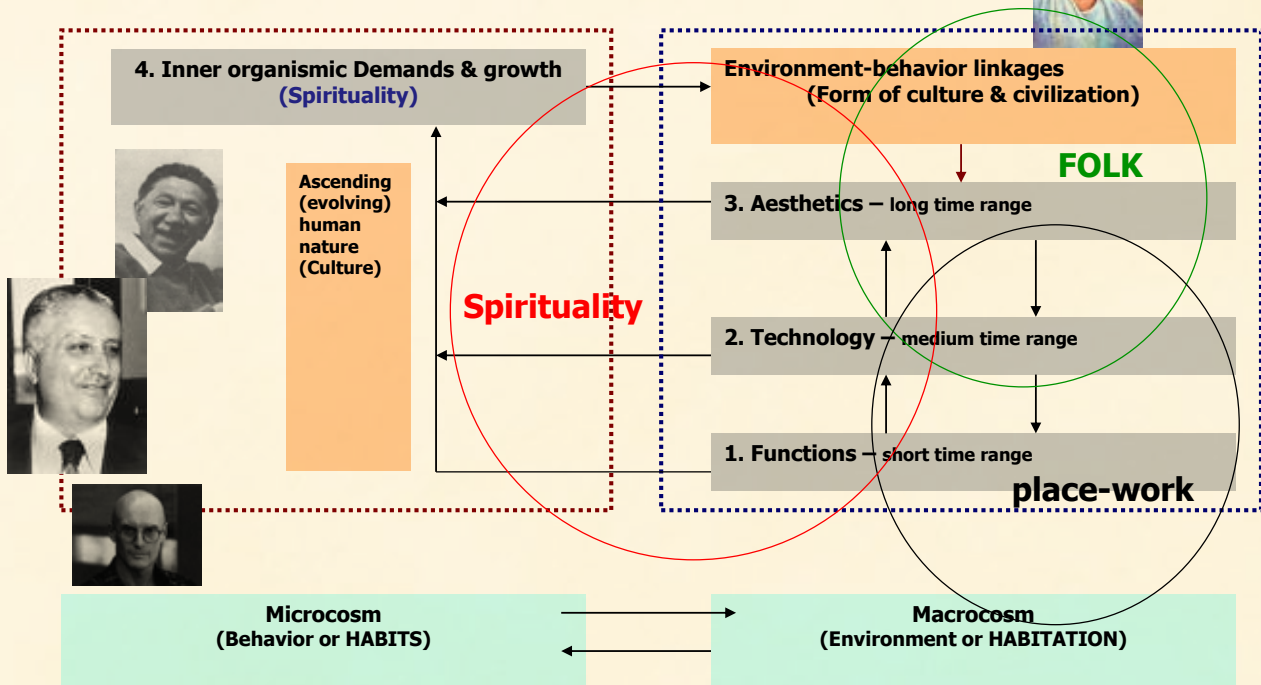
Framework: a deeper approach

Spiritual Liberty

Socio-political liberty



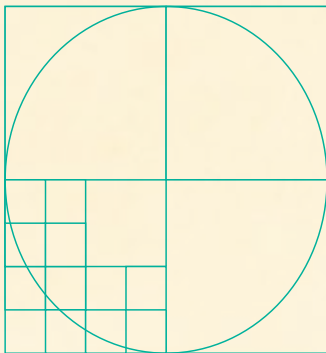
Unity in science of a deep ecology of built-environmentalism



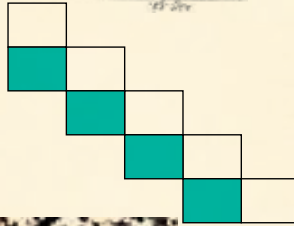
Unity in descent of higher nature in lower nature: from spirit to first-folk



Unity in diversity: **small is beautiful**: translating folk to place-work :



Symbiosis of nature-humanity dynamics: Green order and Ecological ethics matter re-sprouts the green



WHAT HAD HAPPENED?



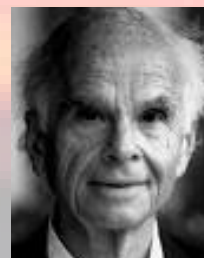
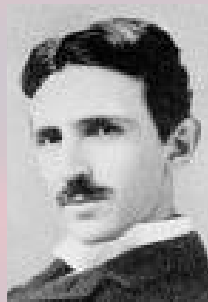
WHAT IS HAPPENING:

**2nd visit to USA:
linkages in Berkley, Los Angles,
Pasadena, California**

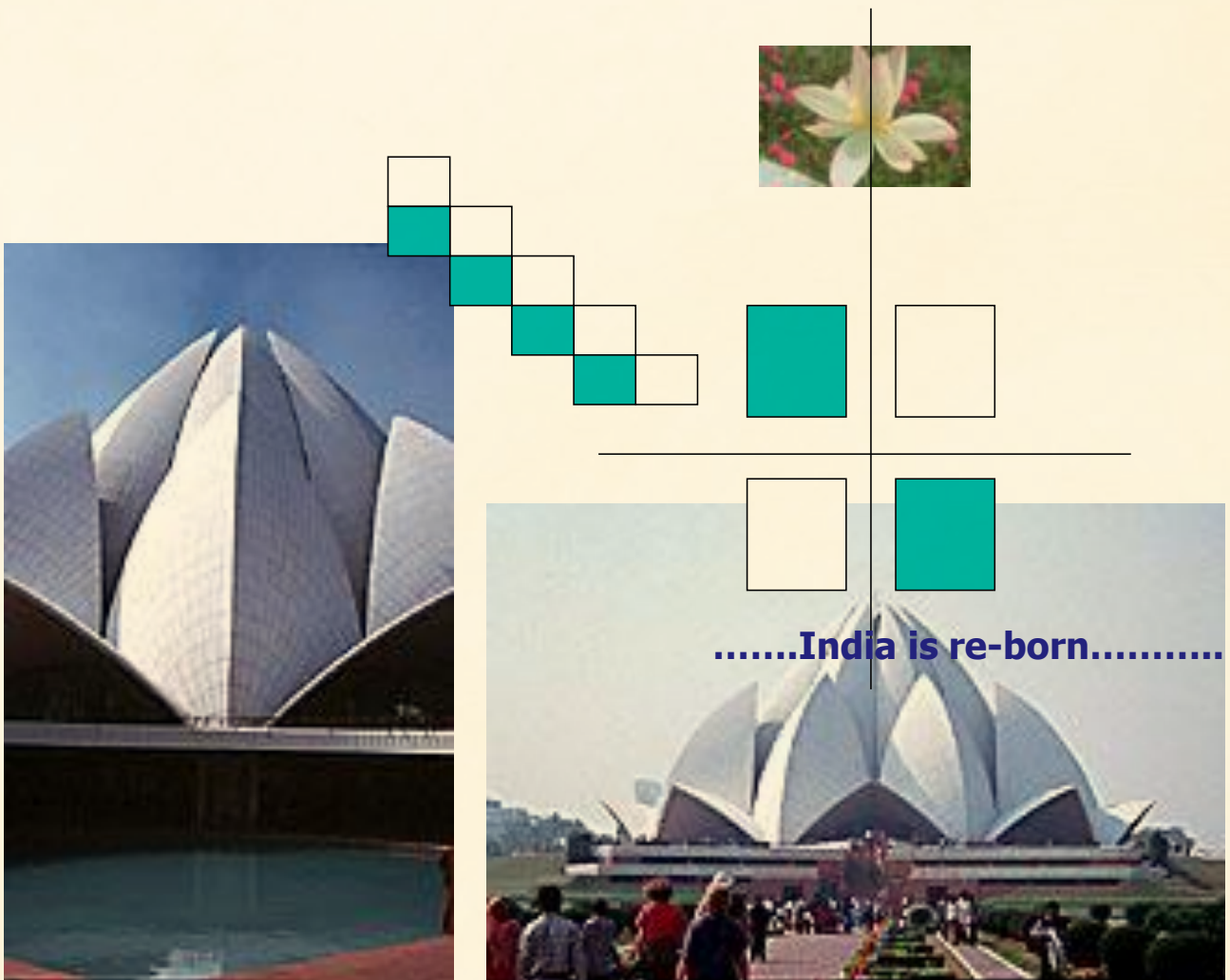
**Co-evolutionary sciences:
macrocosm & microcosm**



Scientist-philosopher Whitehaed, Russell, Tesla....up to
Nobel Laureates chemists Illya Prigogine & Manfred
Eigen Biologists Conrad Waddington & Paul Weiss
Anthropologists Gregory Bateson System Co-
evolutionists Erich Jantsch and Ervin Laszlo
Evolutionary scientists James Lovelock and Lynn
Margulies Traspersonal & Spectrum psychologists
Maslow & Wilber



Spirit and matter : where they meet



Some initiatives ...



Workshops



Books



Initiatives by
IIT Kharagpur

2 International
collaborations



SandHI, a Science and Heritage Initiative
of IIT Kharagpur
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<i>Bhasa</i> Language Systems	<i>Dhwana</i> Meditation Systems	<i>Varanasi</i> The eternal flow
<i>Sansuk</i> Musicology	<i>Moksha</i> End-of-Life	<i>Itihās</i> Geo-archeology
<i>Ankan</i> Iconography	<i>Karuna</i> Compassion	<i>Shilpa</i> Creative Economy

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The Aryan Invasion that never was!

Evidences: part 6
Indian Iconography

INTRODUCTION

An exploration of symbols of Indian Iconography based on the triad of syntax, semantics and the semiotics is still a relatively less unexplored area. Fresh explorations are due to capture and establish a full gamut of comprehending elementary design, functional meanings and directives, and deeper meanings. Beginning with the recovery of elementary vocabulary of design, which is syntax, to the capture of its inherent directives and existential feature, which is semantics, is the first part. Then, there is the deeper recovery of semiotics that is embedded in the sources or origin or purpose of Indian Iconography. The ancient Vedanta or the *Vrihadaranyaka Upanishad* echoes the more remote Vedic wisdom by saying:

Rupam rupam pratirupo babhuva, tad asya rupam praticaksanaya:” (Pururupa iyate, RV. VI, 47, 18)

It means – “*In every form the universal spirit assumed the likeness of each form. The great spirit in the process of manifesting name and form by transforming the universal self in accordance with name and form*”

Behind every designed form and function, there is a deeper pattern or a prototype (*prati-rupa*), and behind that even, is a larger essence that interfaces the universal or the sovereign.

The spirit of that sublime and the universal is the spine of Indian Iconography and its bedrock, which the aforesaid Upanishad underscores. Therefore, iconography, as a part of Indian architectural expression; and its recovery in every period of time in history, is both a matter of evolutionary exploration and also a search for that universal, an *a priori* to begin with. Thus, a re-positioning of the dynamics of Indian Iconography, by tracing the inner thread involved in all stages of evolution over different time periods, is the need of the hour.

The paper attempts to explore the deep science lying behind the surface of the Cartesian framework of visual interpretation. The deep science is a philosophical recovery of different symbols prevalent in the core of a long sustained ancient Indian civilization and still persisting in a variety of socio-cultural practices. The paper probes three distinct dimensions of Indian Iconography, i.e.,

1. *Mandala*, which is a foundational footprint of Indian architecture and it constitutes different design formations of the built and semi-built environment. The outline of the plan of an Indian temple is a good example.
2. *Chaitya*, a predominant form and shape of the pre-Buddhist and Buddhist altar representing a higher level of sacrifice and collective order of submission. Examples are rock-cut cave temples in the Western Ghats.
3. The Unicorn, a powerful and recurring zoomorphic symbol of Indus Valley civilization representing some higher meaning of power, purity and chastity. The city of Mohenjo-Daro alone has revealed 100s of such unicorn seals.

Corroborating the three symbols as case studies, the present paper attempts to both analyse and validate the approach based on the triad of syntax, semantics and semiotics.

A SUGGESTED METHODOLOGY

To identify the meaning and the deeper understanding of the symbols of Indian art and architecture, the paper explores by sequencing the triad of Syntax, Semantics, and Semiotics.

In the case of syntax, constituent elements are like points, lines, planes, volumes or shapes and many others. These are scalar attributes without any directives (see Table 1).

Individually, the pool of syntax may not have much value. Say, in the case of language, vowels and consonants, are simple phonetic elements, at face value. Say, 2 consonants a and b repeated twice (*byanjan varna*) in the form of a, b, a, b, represent just a row of syntax objects without much significant directive or implication. But by juxtaposition, one may start getting directions, what is called words in language systems. Say, juxtaposing a-b-b-a, i.e., Abba, or b-a-b-a i.e., Baba, one begins to forward meaningful directives. What is that? The directive is in the way of someone who is using or uttering these two words, Abba or Baba, actually looking up to someone higher, and to someone very reliable, in a family of existence with siblings. This is the ‘idea of the father’.

Further words like p-a-p-a, or papa or p-o-p-e or pope takes the idea of father further or higher. Phonetically, in the Indo-European Language system p = f, falling in the same group. But still not much meaning is evident. In Christianity, these words, i.e., papa or pope just not stands for ‘Father’, but also stands for papacy, and its highest figurehead, the Pope. Here, the semantics of language shoot out to reach semiotics.

The aforesaid analogy proves that it is just not about a biological father, but someone who is spiritually, also a father, i.e., a father having a deeper meaning. In the backdrop of the Vedic genealogy of Rishis, (realized souls or sages), there is a similar tradition of our ancient forefathers, the *Pitri-loka* or the location of the ancient Fore-Fathers at source. In the core of the Vedic Epistemology, there are the Seven supreme sages, the septuplet of *Brahma-Rishis*, from where the whole Indic tradition of *Gotras* are generated. A tradition of Indian existence of family lineage are from these *Gotras*. If *Gotras* are picked up as a word, then the root word, *Go*, is both ‘cow’ in the mundane or material sense and ‘light’, at the higher mental or universal level. Hence, we have words like ‘*abang-manaso-Gocharam*’, which indicate spheres behind words, expression, lights and locations, which cannot be manifested or put to art (Sri Aurobindo, *On the Vedas*, 1936).

Visually, syntax can be many (refer table 1), say a set of 2 lines (refer Fig 1). The two lines are not related. But when they are juxtaposed or projected simultaneously and in opposition (two lines placed with an arrow attributing the directions), a relationship can be established reflecting a circle or non-linearity, which is from the two complementary lines, but also beyond 2 lines. Thus, one sees a powerful progression from semantics to semiotics, evident from the progression from linearity to non-linearity.





	Shape grammar	Form	Semiotics (Deeper meaning)	Cyclic	
Pool of syntax	Line	—		Spiral	
	Points	•		Evolutional	
	Circle	○		Involutional	
Semantics	Directives	→ ←			
	Vectors				
	Propensities	↷			

Table 1. Pool of visual syntax

The upward progression of human mind, i.e., the evolutionary ladder, and the increasing tempo of understanding of the reality outside us have been aggregated in Abraham Maslow's celebrated 'Hierarchy of Needs' (1943).

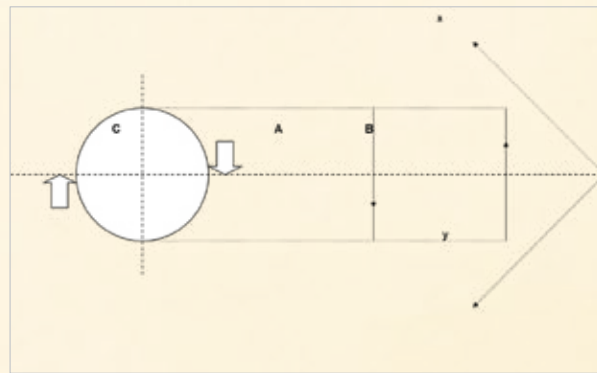


Figure 1. Non-linearity: Cyclic approach representing that two opposite poles / directions are actually complementary

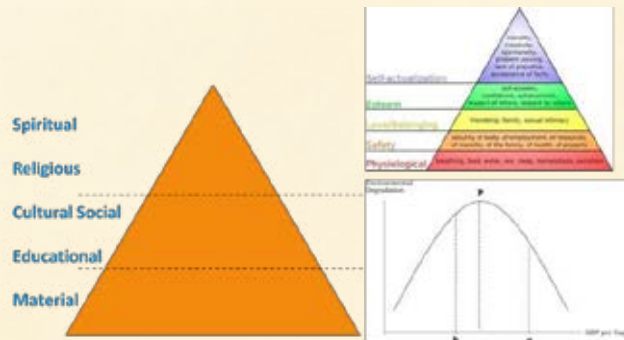


Figure 2. Maslow's hierarchy of need and its deep convergence

The Hierarchy is actually a departure or an evolution from the Cartesian world of syntax to a non-linear world representing larger spatio-temporal contexts in Cosmology with humanity in it. Indian architecture and iconography are direct derivatives of this hierarchy. Thus a larger methodological approach can be proposed which may decode Indian iconography in a unique and holistic way based on the sequential analyses of the triad.

1. INDUCTION OF CASE STUDIES

To understand the strata and levels of Indian iconography, three-prong case studies have been inducted in this premise. Within the scope of the paper, it explores the syntax, semantics and semiotics of:

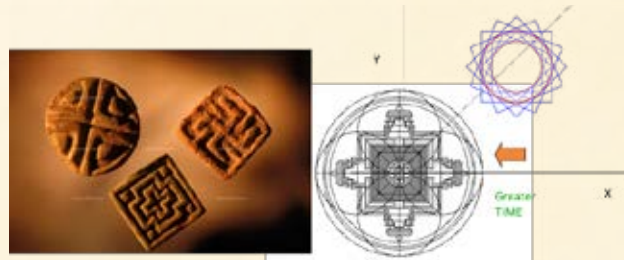
- a. *Mandala* (shape grammar of temples in the later age)
- b. *Chaitya* (Anthropometric form used in earlier temple forms)
- c. *Eka-Sringa* or the Unicorn (Zoomorphic form used in early Vedic ages)

Mandala: Fractals and Shape grammar

In the world of Vedic seers, the *manifest* world is only a part of their existence; as there is also the world of the *non-manifest*. The non-manifest immutable infinite is manifested as the finite and ever-changing. It is like the multitude of waves emerging and collapsing in the backdrop of a calm sea. The forms and events of the perceived world are significant only to the extent that they help us understand the non-manifest layers that lie beneath.

Sacred visual prototypes or footprint diagrams, called *yantras*, explain the nature of the cosmos. Of these, the *Vastu-Purusha Mandala* forms an important basis of Indian architecture based on geocentric and heliocentric features. It has the potential for infinite applications and adaptations in the making of houses, palaces, temples and even cities.

A set of early attempts representing the *mandala* as a four-quadrant, a *swastika* or a concentric orthogonal pattern are evident in an Indus valley seal (refer Fig 3). They are precursors to the *Mandala* used as a footprint of an open altar (*Yupa*) or a closed altar or a Temple (*Mandir*).



**Figure 3. Fractals and shape grammar
Mandala: Archaeological-and-Iconographic-al**

In common use, '*mandala*' has become a generic term for any diagram, chart or geometric pattern that represents the cosmos metaphysically, cyclically and symbolically; and also in the form of a small microcosm as an epitome of the macrocosm or the universe. The basic form of most *mandalas* is a square with four gates containing a circle with a center point. Each gate is in the general shape of a T. *Mandalas* often have radial balance. In Fig 4, strong visual shapes are evident in an ancient Indus valley seal, which is a Vedic solar diagram '*Savita-Yantra*' (Rig Veda, 10th *mandala*).



Figure 4. Grids and shape grammar 3x3 mandala: Archaeological-and-Iconographic-al



Figure 5. Earliest form of *Swastika* found in Jaora, Madhya Pradesh of around 10000 BCE

A very early form of *Mandala* has been found to exist in the seals of Indus valley civilization. Prehistoric art hints at lost Indian civilization of 10000 BCE called the *Aditya mandala* (*Rig Veda: 1.164; 1935 Yale-Cambridge expedition of the Narmada Valley*).


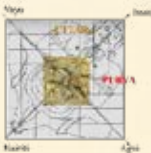

Cyclic form	Footprint	Deeper Meaning
		<ol style="list-style-type: none"> 1. Represents the cosmos metaphysically 2. <i>Vaṣṭu- Purusha Mandala</i> forms sacred geometry based on heliocentric-geocentric relationship
		

Table 2. A triad based exploration of a basic cyclic form (syntax); an evolving footprint (semantics); and a deeper implication (semiotics) [upper portion]; Ratnagiri [lower portion].

Thus an important derivation can be drawn based on the triad (refer Table 2 upper part). The deeper implication of syntax along with the shape grammar or semantics of a given form of *Mandala* can also find its earliest traces in the petroglyphs (possible 12 node sundial) from *Ratnagiri*, Western Ghats, India around 10000 BCE (refer Table 2 bottom part). Here, ancient settlements in the vicinity of Western Ghats had carved out implication of a sun-dial and a diagram portraying the 12 seasons.

Chaitya: Concept of *Chaitya* and *Chaitya-Purusha*

In the context of understanding a deeper meaning of Indian iconography, a second discussion can be initiated on the emergence and evolution of *Chaitya* in physical, philosophical and spiritual terms.

The analysis is portrayed to capture the deeper ecological aspect of etymology and vocabulary (coinage of the term ‘*Chaitya*’), and a brief discussion on the physical, iconographical and architectural features are forwarded:



Figure 6. Relation of Purusha and Prakriti that establish the presence of Chaitya

Concept of *Chaitya-Purusha* (see Fig 6) is a concept from the *Upanishads* and *Bhagabata Purana (Kapilopadesha)*, which is later corroborated by the works of Shri Aurobindo in his *Spark Soul and Psychic Being* (1936). According to Sri Aurobindo, *Chaitya purusha* means:

“The psychic being is formed by the soul in its evolution. It supports the mind, vital, body, grows by their experiences, and carries the nature from life to life. It is the psychic or Chaitya purusha. At first it is veiled by mind, vital and body, but as it grows, it becomes capable of coming forward and dominating the mind, life and body; in the ordinary man it depends on them for expression and is not able to take them up and freely use them...”

Anthropometric and Zoomorphic forms of Chaitya

Anthropometry deals with the measurements and proportions of the human body, and anthropometrics is the comparative study of these measurements. Inclusion of anthropometric measurement in architecture is a traditional practice particularly with the emergence of Buddhist rock cut architecture.

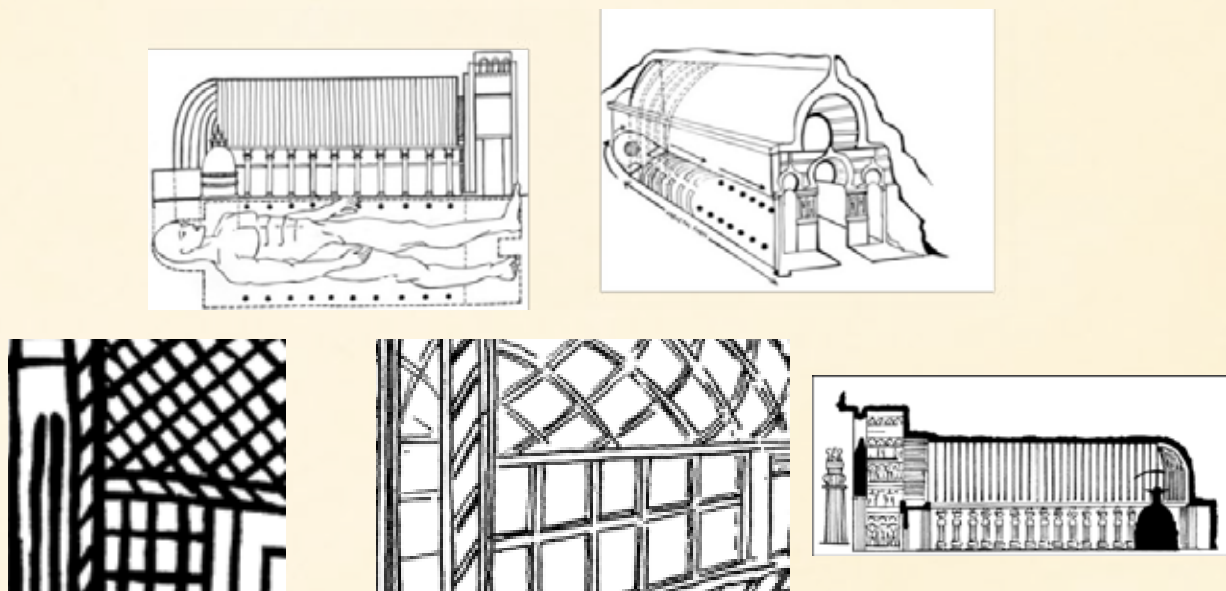


Figure 7. Plan and elevation of *Chaitya* follows the anthropometry of human and zoomorphic forms.

It is evident in Fig 7 that ground plan of *Chaitya* followed the plan of a human-body where the heart and stupa lies in the same axis. The stupa and the ‘*Gabakkha*’ or *Chaitya* window creates a diagonal axis from where the sunlight pours in. Here the light does not only exemplify the physical entity rather the inner consciousness i.e. *Chaitya*.

As evident from the Figure no 9, the ideological concept of the embodiment of a god into zoomorphic shrine is actually the first step of derivation of these structures in built form.

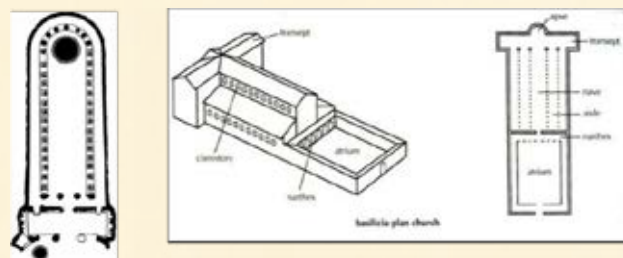


Figure 8. Similarity between the arrangement of the pillars, nave, aisles, apsidal form and the position of the stupa at the Buddhist *Chaitya* and Christian Basilica church


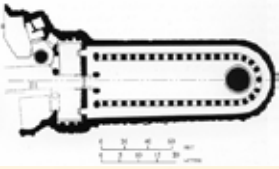

Half cycle form	Direction	Deeper Meaning
		<ol style="list-style-type: none"> 1. Represents the penetration of sun-light and consciousness 2. <i>Chaitya Purusha</i> forms the basis of relationship between the Infinite divine and the consciousness at the individual level
		

Table 3: A triad based on the connection between the triad [Upper portion]; and Matrimandir [Lower portion].

In the case of *Chaitya*, the roof has taken the shape of an elephant’s back. Elephants, particularly White the Elephant implied a symbolic icon in Buddhism representing ‘pure mind’ denoting the dream of Mayadevi, as Buddha is born in a royal family and architecturally, the idea infringes further at the iconographic level.

The plan of the Buddhist rock cut *Chaitya* manifests a unique semblance to the plan of the Christian church and cathedrals. The rounded apse, nave, pillared aisles except the addition of the transepts, echoes a thread of interconnected between the two. The rounded apse in a church and in Buddhist *Chaitya* halls are basically used as the circumambulatory pathway for the devotees and worshippers. The shape of the temple, in Indian traditional architecture, is known as *Gajaprasā*, which means the resemblance to the back of an elephant. The plan of Durga temple of Aihole has unusual apsidal form, which is thought to imitate the earlier Buddhist *Chaitya* Halls.

Thus, a three stage understanding of the half rotation around the center (the Apse); the rotation around the Stupa or the core of the apse as the upper half of universe; and the connection between the Buddha-world and the world here are the stages of syntax, semantics and semiotics (see Table 3). The Matrimandir at Auroville, of late, is a modern representation of the same, where both the halves or Apse have been lifted to ‘Life divine’ or ‘Divinity at earth’. Hence, a golden Cosmic Egg or ‘*Hiranya-garbha*’.

Symbol of the Unicorn

The Unicorn is a mythical creature presented in the ancient texts since antiquity. It is described as a beast with a single large, pointed, spiraling horn projecting from its forehead.

The earliest form of unicorn was depicted in ancient seals of the Indus Valley Civilization (refer Fig 9, left). Later Unicorn was also mentioned by the ancient Greeks in accounts of natural history by various writers, including Ctesias, Strabo, Pliny the Younger, and Aelian.



Figure 9. Unicorn seals from Harappa and Mohenjo-Daro and example of the journey of the mythical character to Italy in middle ages

In the seminal article entitled ‘The East and the West’ (1909) Swami Vivekananda provided an important clue to unlock the meaning of the unicorn. He said:

“... Here is the selfsame Old Shiva seated as before,mother Kali worshipped with the selfsame paraphernalia for the pastoral Shepherd of Love, Shri Krishna, playing on his flute. Once this Old Shiva, riding on his bull, travelled from India, on the one side to Sumatra, Borneo, Celebes, Australia, as far as the shores of America, and on the other side of Tibet, China, Japan, and as far as Siberia. The Mother is still exacting her worship even in China, and Japan; it is mentioned that the Christian metamorphosed in Virgin Mary, and worship as the mother of Jesus the Christ.”

The question is what is this image of Kali that Swami Vivekananda talks about that the Christian metamorphosed into Virgin Mary? What is the very image of the Mother Matrix that is still worshipped in China and Japan? And what is this bloody sacrificial embodiment with which the ‘Word’ is made flesh for universal resurrection of ‘all’? Who is she being both Kali and Mary?

To our great amazement, to our great joy and to our great fulfillment, we shall see that the recent and collective scholarship of Penguin Dictionary of Religions (1997) provides the answer. Thus Quoting from the dictionary, we find that:

“...In Christian Iconography, it stands for the virgin who only conceives by the Holy Spirit. In the middle Ages, it became the symbol of the word of God made flesh with the womb of Virgin Mary...

... It was a symbol of power, basically expressed by its horn, as well as of magnificence and purity... its dance is one of rejoicing, highly popular in the Far East at the Mid Autumnal Festival... as a variant of Dragons in its role of the Lord of the Rains. With its single horn set in the middle of its forehead, it symbolizes a spiritual arrow. A sun-ray (original), the SWORD of God, divine relation or the Godhead penetrating its creation. This fabulous beast originating in the East and associated with the ‘Third Eye’ (Triyambaka), with attainment of Nirvana and with a return to the centre and to the Monad, was ideally fated for the Western Hermetic the path

to *Philosopher's Gold- The inner transmutation (resurrection) effected when the primordial hermaphrodite is recreated. In China, it is called CHI LIN, meaning the unity of opposites: 'Yin and Yang'.*"

So, the *Chi-Lin* of the Asia Pacific may be the *Ka-Li* of India, with a sword in her forehead. The concept of *Eka-Sringa* is both a mythical and a deep ecological concept that runs through all literature, from Rig Veda (*Mandala 1*) to the Ramayana and Buddhist literature. It is the semiotics of 'The one horn pin-pointedness' or, *Rishya-Sringa*, who is the Key Sage with a sword like deer's antler on his forehead. He is the key Sage, as he brings forth the birth of the four sons of Solar King Dasarath, as the epic says. This is evident in Table 4.

The question is, who is this fabulous creature that Swami Vivekananda and the current Scholars are pointing out? In page no 122 of National Geographic scholars of June 2000, there is a revealing answer:

"... Among the (many) animals carved on seals one of the most often depicted is imaginary: A UNICORN – pieces with one horned (horse-like or fabulous) animals have been found throughout the Indus realm, leading Richard Meadow of Harvard University and M. Kenoyer of the University of Wisconsin to believe the UNICORN was the symbol of a powerful community (of Ancient Indus Valley Civilization 3600-1700 BCE)."

One horn	Direction	Deeper Meaning
		<p>1. Represents all full penetration of the Cosmic Matrix</p> <p>2. Unicorn forms the basis of relationship between Virginity and creation of the Word of God or Universe itself (<i>Brahmanda</i>)</p>

Table 4: The 3 stage exploration of the Unicorn symbol

2. CONCLUSION

To sum up the ideas, deeper meaning, behind the iconography of *Mandala*, *Chaitya*, and the Unicorn a set of conclusions have been drawn in Tables 2, 3, and 4.

Though the three case studies look apparently different, yet there is a common thread that underlies all three of them. In the *Mandala*, there is the wheel of the 12 suns, representing the six seasons of India (at an annual level) and iterations of day and night (at the individual diurnal level). The full wheel or *Chakra* (Circa) is also the foundation of the Wheel of *Dhamma* or Religion in Buddhism. And, shapes like apse and others are further architectural derivatives. To maintain that connection between the two halves or the two apse, the Circe (Kirk or Church), there is a need of a full penetration in terms of semiotics, and this is only possible by virtue of both the role of inner fecundity and outward chastity. The Unicorn represents that.

Additionally, the wheel of the Cosmos is also the wheel of seasons. Both are equated with the concept of an inner time, a psychological time of the earth (*Prithvi*) matched with the movement of time in the heavens (*Dyava*). The matching happens in the inner world of the Sages (*Antarikswa*). Thus *Antarikswa* is just not a physical link at the atmospheric level between earth and upper clouds, but it is also an inner link in our psychic worlds. This is semiotics. The matching can be interpreted as follows:

- 1) A semiotics driven by the symbolism of the equinoxes (balance of day and night) and the solstices (day exceeding night and vice versa).
- 2) A portrayal of balances (Scales at point of Libra) carrying a deeper meaning of cosmological thermodynamics.
- 3) Day and night are the internal representations of *Agni* and *Soma* – or of Sun and Moon, externally found in the universe itself.
- 4) Finally, at the cyclic level, where at spring equinox, there is a balance of day and night in the solar ascendant and from there the Sun makes a Passover (The Ram at the point of Aries) to a phase of an increasing heat till it reaches the next climax – the summer solstice (*Uttarayana*).

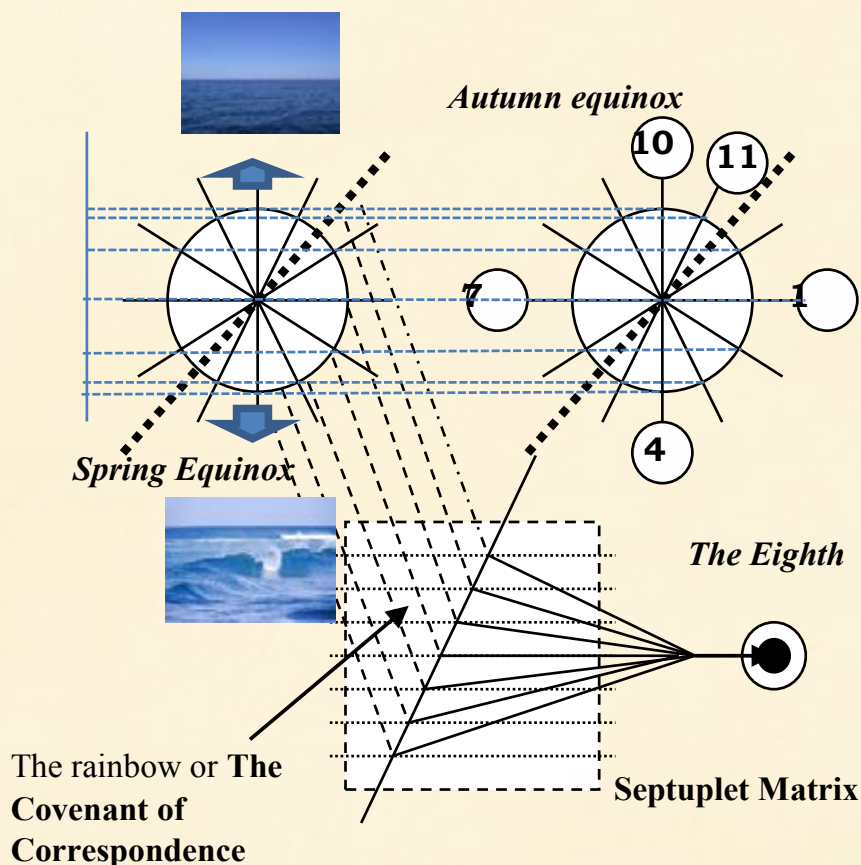


Figure 10. Cyclical changes as coded in Vedas

The balance is also evident in the internal world of a growing Sage-mind (*antariksha* or the Microcosm) and the scheme of events in the external world (the *Dyava-prithvi* or the Macrocosm). The two, i.e., the outer and the inner worlds, are therefore built on the same plan.

The deeper ideas of semiotics, as evident in the Vedic Cosmology, and as extracted from the three case studies, by virtue of the triad is portrayed in Fig 10.

In other words, for the case of *Mandala*, a syntax of concentric circles and squares around the center are evident. The concentricity around a still center is the key semantic feature. The center and periphery collectively imply a hidden configuration. Hence, temple forms, sacred *Yantras*, sacrificial pyres and others are foot printed on different *mandalas*. Each of them are following a specific meaning and represents a genre of deeper experience called semiotics.

In the form of *Chaitya*, the half circular apse and half-circular bay-windows are the key representative forms. The half circle rotation represents either the upper dial or lower dial of the complementary heliocentric and geocentric location and movements called the *Uttarayana* and the *Dakshinayana*. In the principles of *Yoga* and *Tantra*, they have complementary meanings. They are a) the return of soul (rapture or going back to seed) and b) the departure of soul from the supreme divinity (ramification or re-sprouting), respectively.

And in the form of a Unicorn, there is a zoomorphic configuration that is also anthropomorphic and finally, extra-anthropomorphic. The animal consciousness evolves to the human, and then becomes divine by revealing a further line in the form of hornlike penetration from the forehead based on a figure of an animal. It perhaps implies the extension of the spinal cord to higher planes of existence.

Thus, in each of these cases, the syntaxes (geometry) have come together and created a semantics (directives) that further implies something beyond the semantics, which is semiotics (inner essence).

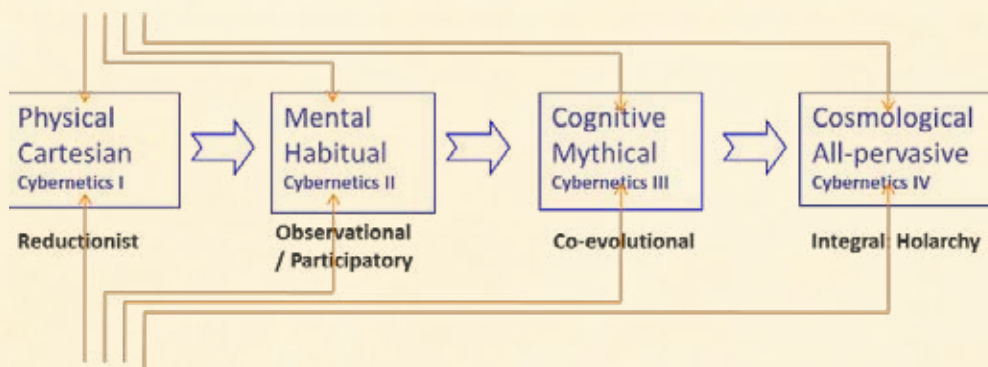


Figure 11. A four stage journey from Physical to cosmological strata.

The understanding reaches a higher level after that with the cognitive mind, which is the first step to Semiotics. And finally, the evolution of cognitive mind opens up or expands up to a cosmic or all-pervasive universal level of understanding (refer Fig 11).

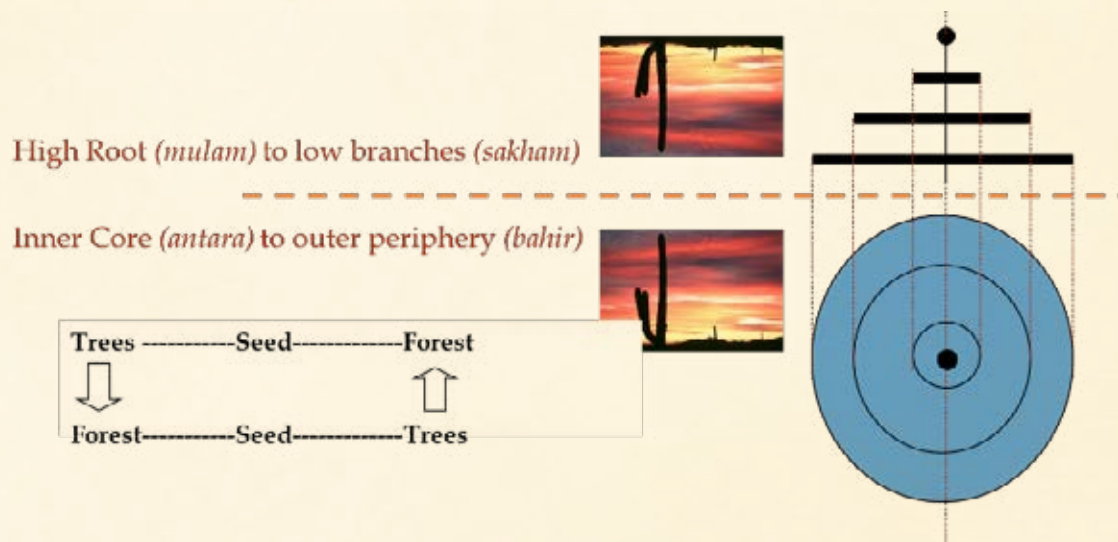


Figure 12. Descending or Top-down approach resembling the idea of involutory Indian Civilization

To better understand the mystery of Indian Iconography, syntaxes (horizontal flow) need to be enhanced exceeding just the Cartesian way of understanding. It is evident in Figure 11, where the first evolution is from the physical being to the thinking mind, which is the mental rational being.

The horizontal flow of understanding as evident in Fig 11 is also explicit in the vertical hierarchy, analogous to Abraham Maslow's hierarchy of needs as evident in Fig 2 (Science and Heritage Initiative, 2014).

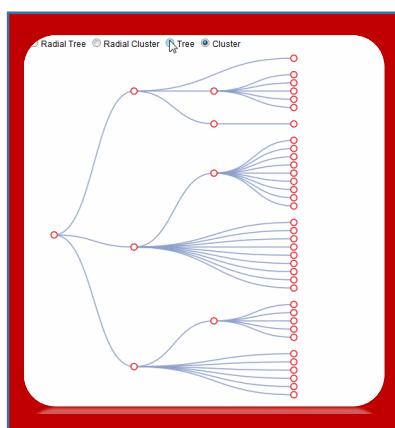
The concept of a tree (*Urdhamulam-Adhaswakhm*), which represents the hierarchy holds the deep semiotic foundation of Indian iconography and the concept forwards the understanding all the three case studies.

The paper has accordingly initiated a three-step inquiry, evident in the horizontal format of cybernetic progression (Fig 11) or the vertical hierarchy of the Tree format (Fig 12). Through the three steps, as corroborated by the sequence of the triad, i.e., syntax, semantics and semiotics, a comprehensive and full-depth inquiry of the system of Indian architecture and creativity can be best targeted.

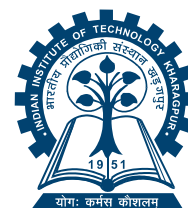


An exploration of Symbols in Indian Architecture based on the triad of Syntax, Semantics, and Semiotics

Case study of chosen built elements, artefacts, seals and petroglyphs



इन्दिरा गान्धी राष्ट्रीय कला केन्द्र
INDIRA GANDHI NATIONAL CENTRE FOR THE ARTS



Joy Sen

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Tanima Bhattacharya

Research Scholar, RCG School of Infrastructure Design and Management

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR



Introduction

1

*“Rupam rupam pratirupo babhuva,
tad asya rupam praticaksanaya:”*

(Pururupa iyate, RV. VI, 47, 18)

*It means – “In every form the universal spirit assumed the likeness of each form.
The great spirit in the process of manifesting name and form by transforming the
universal self in accordance with name and form”*

The triad of syntax, semantics and the
semiotics of Indian Iconography



Outline of the presentation

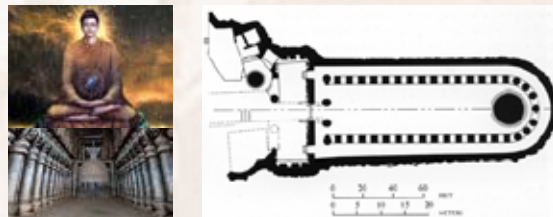
2

1. Streamlining the study of Indian architecture based on a scientific chronology.
2. Three discrete case studies, viz,

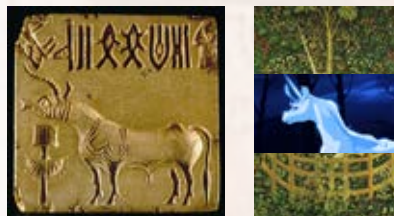
a) The **Mandala**



b) The concept of **Chaitya**



c) The symbol of **Unicorn**



3. Three step driven analyses of the cases based on the triad of syntax, semantics and semiotics to initiate a new vocabulary of Indian architectural syntax and semantics



A three-step ladder

3

The triad of syntax, semantics and the semiotics, offers a **three step ladder exploring Indian Iconography**

2 consonants : **a, b, a, b** (syntax)



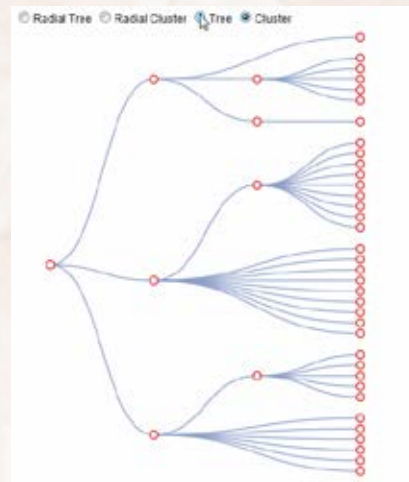
Juxtaposition to direction : **b-a-b-a** (baba) or **a-b-b-a** (abba) (semantics)



'The idea of the father'.



p-a-p-a, or **papa** or **p-o-p-e** or pope takes the idea of the **father of all fathers** (Semiotics)



	Shape grammar	Form
Pool of syntax	Line	—
	Points	.
	Circle	○
Semantics	Directives	↔
	Vectors	
	Propensities	↗
Semiotics (Deeper meaning)	Cyclic	⊙
	Spiral	⌀
	Evolutional	🌱
	Involutional	🏠



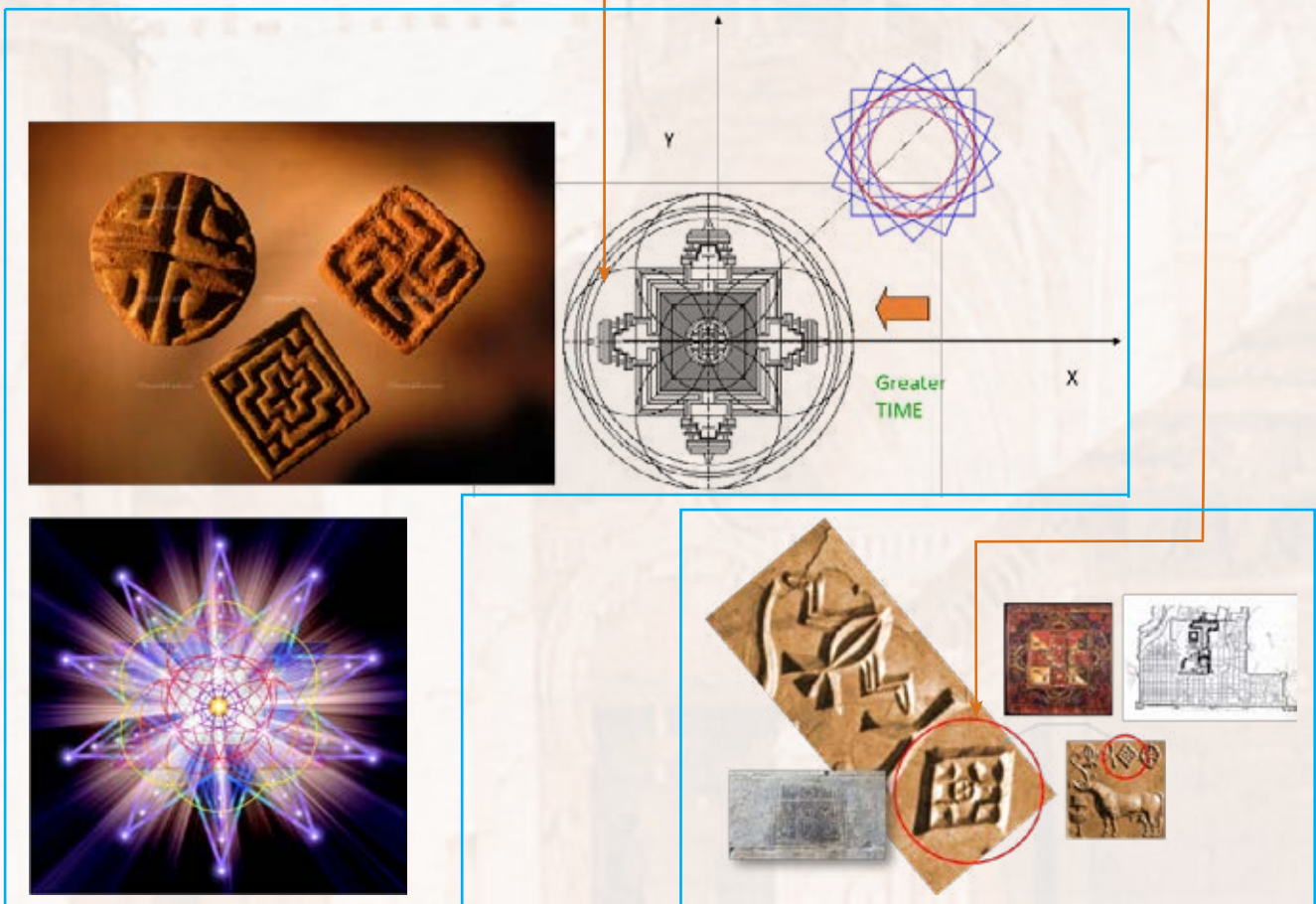
Mandala: concept & iconography

4

- A set of early attempts representing the **Mandala** as a four-quadrant, a swastika or a concentric orthogonal pattern are evident in an Indus valley seal.
- They are precursors to the **Mandala** used as a footprint of an open altar (Yupa) or a closed altar or a Temple (Mandir).
- **Mandala** represents form of a small microcosm as an epitome of the macrocosm or the universe.

Embedded syntax of 2D and 3D footprints


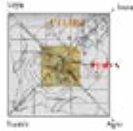
Mandala with 4 quadrant





Mandala: concept & iconography

5

Cyclic form	Footprint	Deeper Meaning
		1. Represents the cosmos metaphysically 2. Vastu-Purusha Mandala forms sacred geometry based on heliocentric-geocentric relationship

A very early form of *Mandala* has been found to exist in the seals of Indus valley civilization. Prehistoric art hints at lost Indian civilization of 10000 BCE called the *Aditya mandala* (*Rig Veda: 1.164; 1935 Yale-Cambridge expedition of the Narmada Valley*)

An astronomical Symbol

Earliest form found in Jaora, MP, India



A triad based exploration of a basic cyclic form (syntax); an evolving footprint (semantics); and a deeper implication (semiotics) [upper portion]; Ratnagiri [lower portion].



Chaitya: Concept

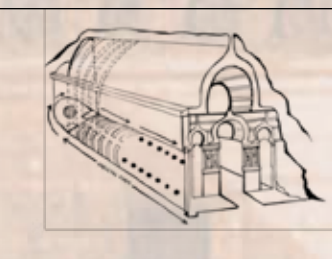
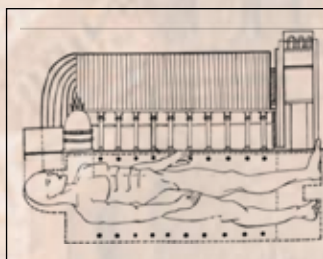
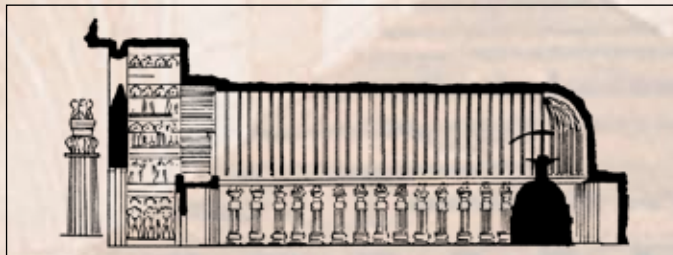
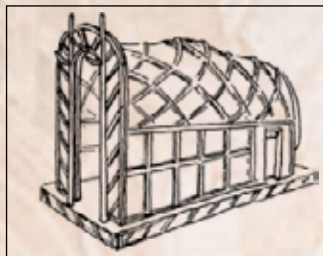
6

- The word **Chaitya** is often taken to have its origin in a funerary mound, from its root word chita i.e. ashes; so chaitya comes to mean the ashes worthy of worship. Architecturally they show similarities to Roman design concepts of column and arch.
- The prayer hall or Buddhist temple & usually referred to as the **chaitya** hall

The inner Self, no larger than the size of a man's thumb...
(Katha Upanishad 2.3.17, Svetasvatara Upanishad 3.13)

In the space lying inside the heart, the Purusha assumes the form of manas which is immortal and golden in look. The flesh hanging like a teat from above the cavity of the throat is the abode of Indra.

(Taittiriya Upanishad I.6)





Relation of Purusha and Prakriti that establish the presence of Chaitya

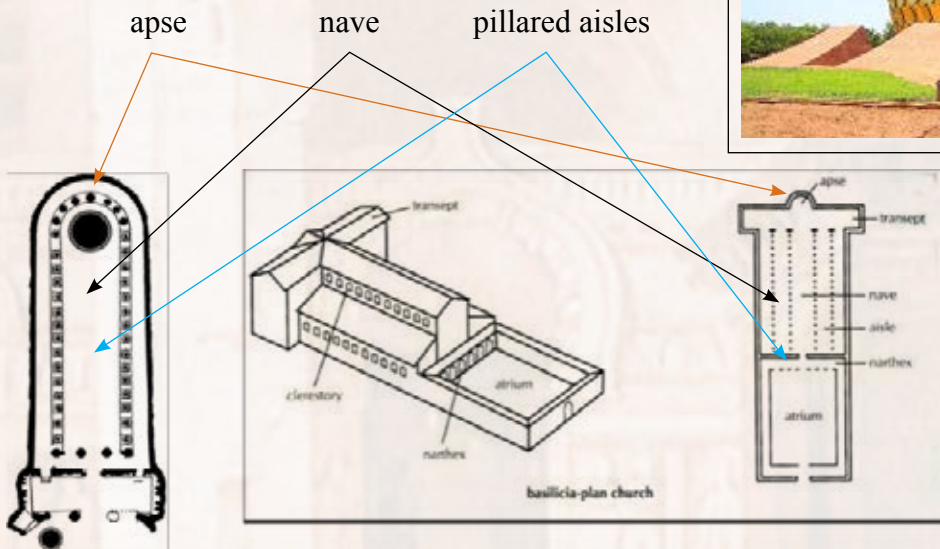


Chaitya: Iconography

7

- **Chaitya** shape of an architecture could be conceptual to suggest cosmic elements; for instance, the world itself as in the stupa, and the stretch of the horizon where the sun rises between two mountains as in the pylon of Egypt.
- It even imitates the shape of an animal by which a deity is represented. Such a zoomorphic architecture may be exemplified in the so-called shrine of Anubis in Egypt.

Cyclic form	Footprint	Deeper Meaning
		1. Represents the penetration of sun-light and consciousness 2. Chaitya Purusha forms the basis of relationship between the Infinite divine and the consciousness at the individual level



Comparison with Roman Basilica plan Church

A triad based on the connection between the triad [Upper portion]; and Matrimandir [Lower portion].



Chaitya: Concept

8

The **Unicorn** is a mythical creature presented in the ancient texts since antiquity. It is described as a beast with a single large, pointed, spiraling horn projecting from its forehead.



The **earliest forms of unicorn** were depicted in ancient seals of the Indus Valley Civilization. **Later Unicorn symbols** were also mentioned by the ancient Greeks in accounts of natural history by various writers, including Ctesias, Strabo, Pliny the Younger, and Aelian.



Unicorn seals from Harappa and Mohenjo-Daro and example of the journey of the mythical character to Italy in middle ages




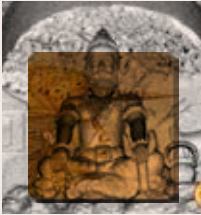


Chaitya: Iconography

9

“... Among the (many) animals carved on seals one of the most often depicted is imaginary: A UNICORN – pieces with one horned (horse-like or fabulous) animals have been found throughout the Indus realm, leading Richard Meadow of Harvard University and M. Kenoyer of the University of Wisconsin to believe the UNICORN was the symbol of a powerful community (of Ancient Indus Valley Civilization 3600-1700 BCE).”

National Geographic scholars of June 2000, pp.122

Cyclic form	Footprint	Deeper Meaning
		<ol style="list-style-type: none"> 1. Represents all full penetration of the Cosmic Matrix 2. Unicorn forms the basis of relationship between Virginity and creation of the Word of God or Universe itself (Brahmanda)

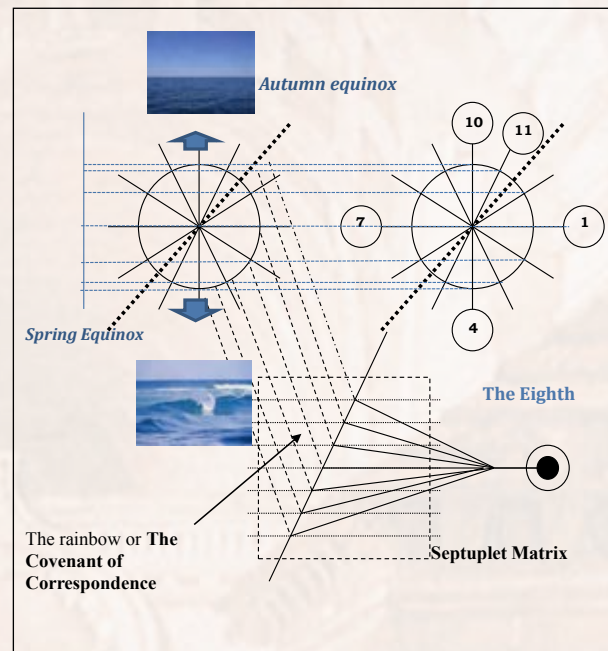


Chaitya: Concept

10



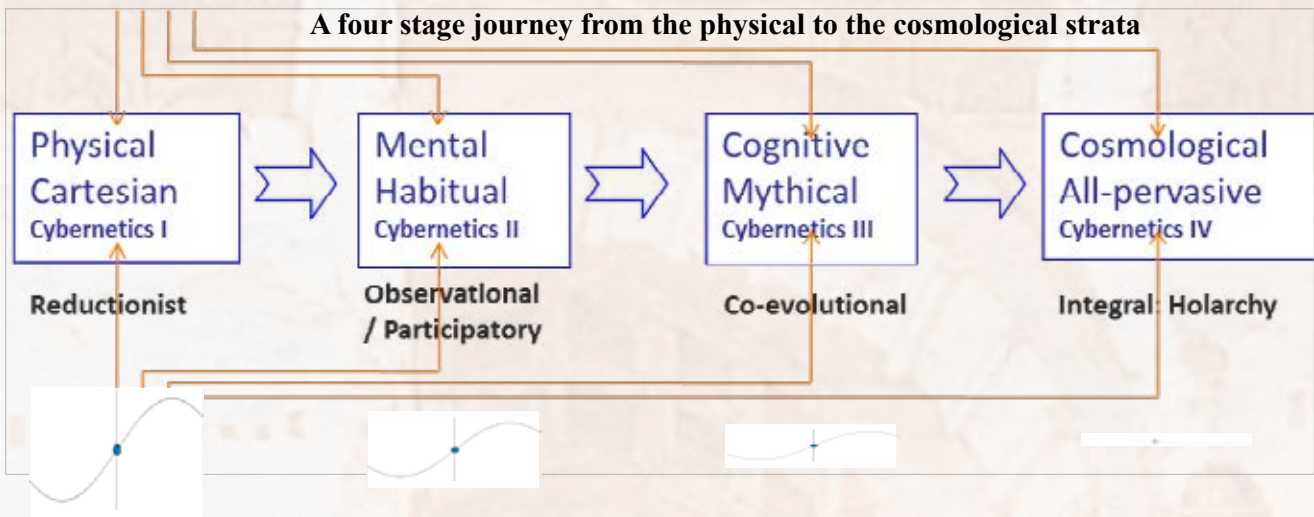
- There is a common thread that underlies all three of the icons-
- In the **Mandala**, there is the wheel of the 12 suns, representing the six seasons of India (at an annual level) and iterations of day and night (at the individual diurnal level).
- The full wheel or Chakra (Circa) is the foundation of the Wheel of Dhamma in Buddhism. Shapes like apse are further architectural derivatives. To maintain a connection between the two halves or the two apse, the Circe (Kirk or Church). **Chaitya** is the conscious key to turn the wheel.
- Finally, there is a need of a full penetration in terms of semiotics, and this is only possible by virtue of both the role of inner fecundity and outward chastity. The **Unicorn** represents that.





Conclusion – cooperative and networked

11



- In each of these cases, the **syntaxes** (geometry) have come together and created a semantics (directives) that further implies something beyond the **semantics**, which is **semiotics** (inner essence).
- The understanding reaches a higher level as the physical transforms to the cognitive mind, which is the first step to Semiotics. Finally, the evolution of cognitive mind opens up or expands up to the Cosmic, the all-pervasive universal level of understanding and beyond to **That Transcendent after the Event horizon**.



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12

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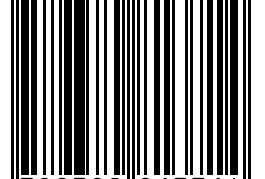
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ISBN 978-93-80813-71-4



9 789380 813714

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