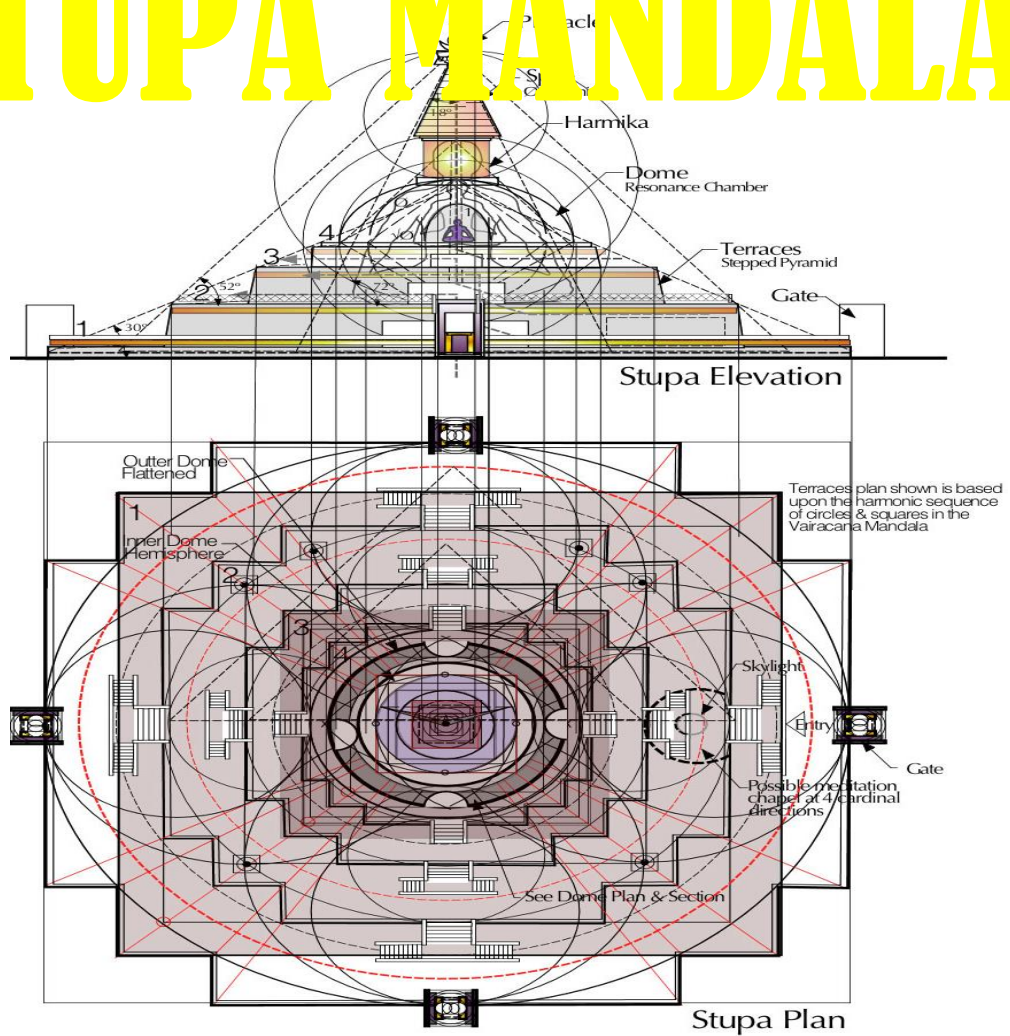


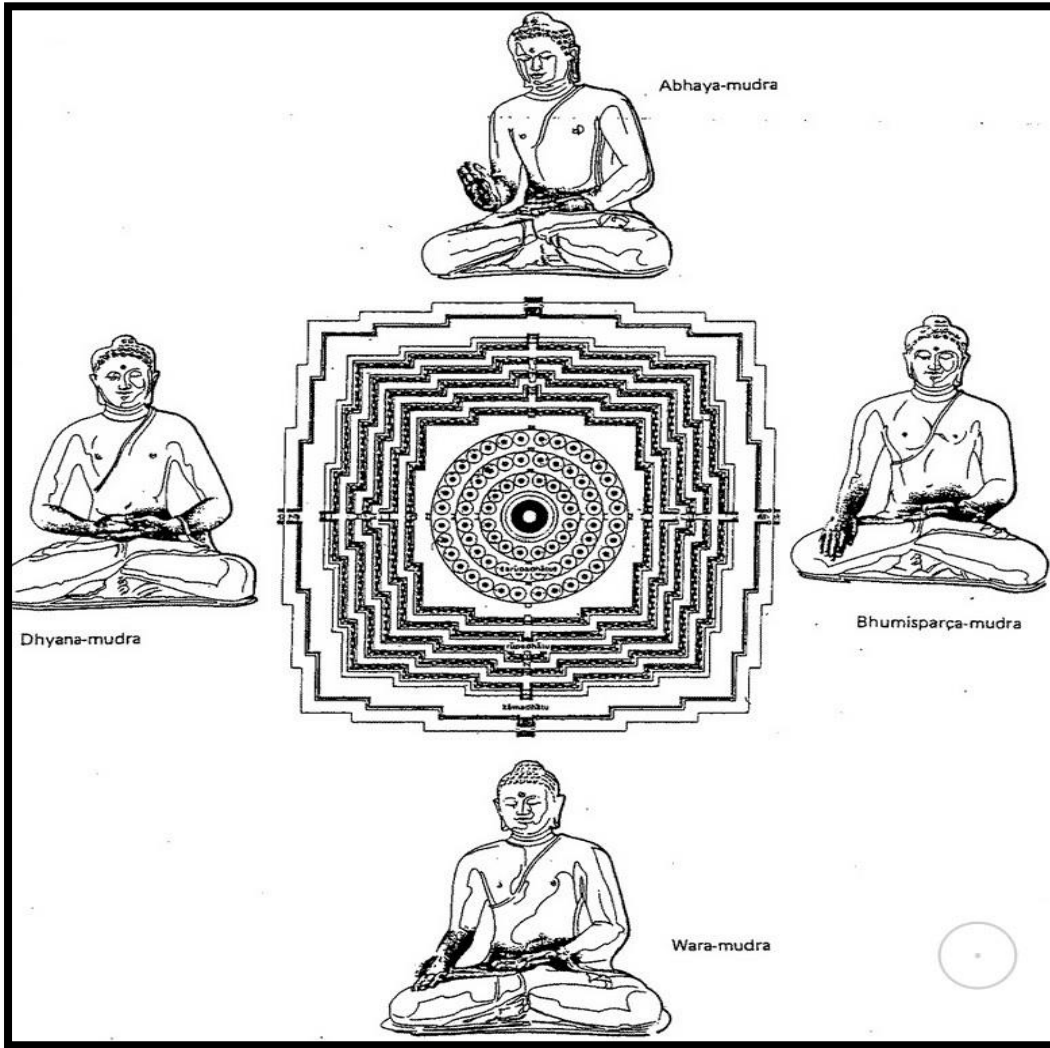
Dr UDAY DOKRAS

MANDALA BOOK VI

STUPA MANDALA

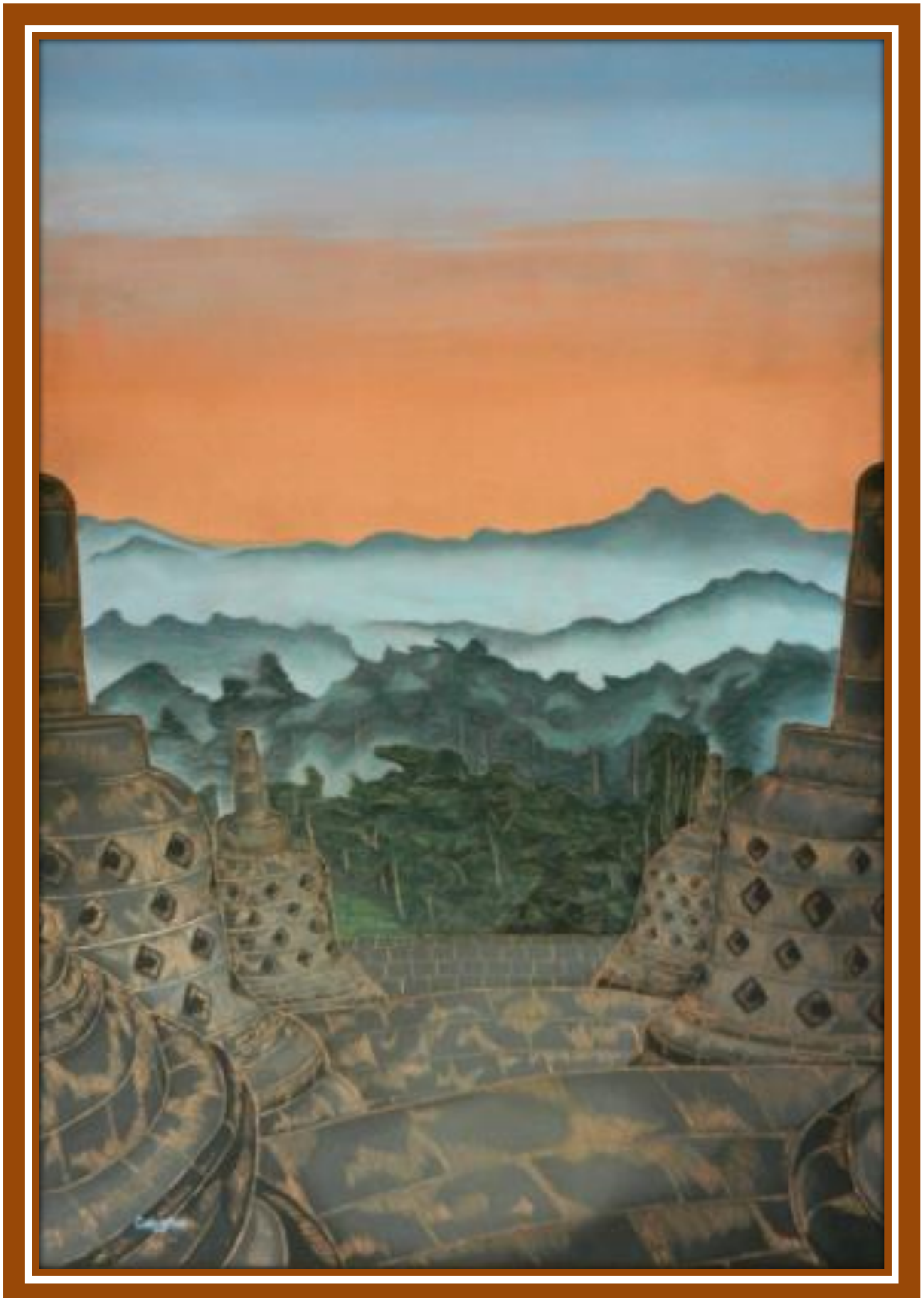


The Stupa of the Great Awakening



MANDALA BOOK VI

STUPA MANDALA



BENEFITS OF BUILDING A STUPA

A few short quotations from the Mahakarmavigganga in English are available from various sources. In one, the Buddha tells the young Brahmin Shuka that there are a total of eighteen benefits to be derived from the building a Stupa. "What are these eighteen?"

*One will be born as the child of a great king
One will have a noble body
One will become beautiful and very attractive
One will have sharp sense faculties One will be powerful and famous
One will have a great entourage of servants
One will become a leader of men
One will be a support to all
One will be renowned in the ten directions
One will be able to express oneself in words and verses extensively
One will receive offerings from men and gods
One will possess many riches
One will obtain the kingdom of a universal monarch
One will have long life
One's body will be like a collection of vajras
One's body will be endowed with the major marks and the minor signs (of a Buddha) One will take
rebirth in the three higher realms
One will swiftly attain complete nirvana*

This book is my Stupa.

To build this, I thank my friend Kerry Penny, contemporary British Landscape Artist whose work inspires me and she generously donates her paintings to ornate my books. The covers - both front and back and some pictures inside are her extraordinary work. I also thank my co-authors Srishti Dokras, Architect.



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CHAPTER 1

Prelude

Gautama Buddha's parents were from two different mahājanapadās (kingdoms) of the Solar dynasty — his father (Śuddhodana) belonged to the Shakya kingdom, while his mother (Maya) was from the Koliya kingdom. According to Buddhist texts, after Buddha's Mahaparinirvana, his cremated remains were divided and distributed among the princes of eight of the sixteen mahājanapadās. Each of the princes constructed a stupa at or near his capital city, within which the respective portion of the ashes was enshrined. These eight stupas were located at:

1. Allakappa, a settlement of the Bulī people. The precise location of this place is not currently known.
2. Kapilavastu, capital city of the Shakya kingdom (the location of this stupa is the subject of some controversy; there is evidence it was actually constructed at Piprahwa)
3. Kusinārā, capital city of the Malla kingdom
4. Pāvā, a major city of the Malla kingdom
5. Rājagaha a major city of the Magadha kingdom
6. Rāmagrāma, a major city of the Koliya kingdom (this settlement is sometimes referred to as *Koliyanagara*)
7. Vesāli, capital city of the Vajji kingdom.
8. Veṭhadīpa, a settlement of Veṭhadīpaka Brahmins. The precise location of this place is not currently known

Some 300 years later, Emperor Ashoka opened seven of these stupas and removed the Buddha relics (his goal was to redistribute the relics into 84,000 stupas which he planned to construct throughout the Maurya Empire). According to legend, the serpent king was guarding the Ramagrama stupa, and prevented Ashoka from unearthing the relic.

To this day, Ramagrama stupa remains the only intact and original stupa containing relics of Buddha. The stupa has been an object of great reverence and pilgrimage site since its original construction. The 7-metre-high (23 ft) stupa is now buried under a mound of earth and is awaiting further research.

The stupa Essay by Dr. Karen Shelby

Can a mound of dirt represent the Buddha, the path to Enlightenment, a mountain and the universe all at the same time? It can if it is a stupa. The stupa (“stupa” is Sanskrit for heap) is an important form of Buddhist architecture, though it predates Buddhism. It is generally considered to be a sepulchral monument—a place of burial or a receptacle for religious objects. At its simplest, a stupa is a dirt burial mound faced with stone. In Buddhism, the earliest stupas contained portions of the Buddha’s ashes, and as a result, the stupa began to be associated with the body of the Buddha. Adding the Buddha’s ashes to the mound of dirt activated it with the energy of the Buddha himself.

Early stupas

Before Buddhism, great teachers were buried in mounds. Some were cremated, but sometimes they were buried in a seated, meditative position. The mound of earth covered them up. Thus, the domed

shape of the stupa came to represent a person seated in meditation much as the Buddha was when he



achieved

Stupa 3 at Sanchi, 1st century (India)

Enlightenment and knowledge of the Four Noble Truths. The base of the stupa represents his crossed legs as he sat in a meditative pose (called padmasana or the lotus position). The middle portion is the Buddha's body and the top of the mound, where a pole rises from the apex surrounded by a small fence, represents his head. Before images of the human Buddha were created, reliefs often depicted practitioners demonstrating devotion to a stupa.

The ashes of the Buddha were buried in stupas built at locations associated with important events in the Buddha's life including Lumbini (where he was born), Bodh Gaya (where he achieved Enlightenment), Deer Park at Sarnath (where he preached his first sermon sharing the Four Noble Truths (also called the dharma or the law), and Kushingara (where he died). The choice of these sites and others were based on both real and legendary events.

"Calm and glad"

According to legend, King Ashoka, who was the first king to embrace Buddhism (he ruled over most of the Indian subcontinent from c. 269 - 232 B.C.E.), created 84,000 stupas and divided the Buddha's ashes among them all. While this is an exaggeration (and the stupas were built by Ashoka some 250 years after the Buddha's death), it is clear that Ashoka was responsible for building many stupas all over northern India and the other territories under the Mauryan Dynasty in areas now known as Nepal, Pakistan, Bangladesh, and Afghanistan.

One of Ashoka's goals was to provide new converts with the tools to help with their new faith. In this, Ashoka was following the directions of the Buddha who, prior to his death (parinirvana), directed that stupas should be erected in places other than those associated with key moments of his life so that "the hearts of many shall be made calm and glad." Ashoka also built stupas in regions where the people might have difficulty reaching the stupas that contained the Buddha's ashes.



One of the most famous stupas, The Great Stupa (Mahastupa) was built at the birthplace of Ashoka's wife, Devi, daughter of a local merchant in the village of Sanchi located on an important trade route in the state of Madya Pradesh, India (photo: [Nagarjun Kandukuru](#), CC: BY 2.0)

Karmic benefits

The practice of building stupas spread with the Buddhist doctrine to Nepal and Tibet, Bhutan, Thailand, Burma, China and even the United States where large Buddhist communities are centered. While stupas have changed in form over the years, their function remains essentially unchanged. Stupas remind the Buddhist practitioner of the Buddha and his teachings almost 2,500 years after his death.

For Buddhists, building stupas also has karmic benefits. Karma, a key component in both Hinduism and Buddhism, is the energy generated by a person's actions and the ethical consequences of those actions. Karma affects a person's next existence or re-birth. For example, in the *Avadana Sutra* ten merits of building a stupa are outlined. One states that if a practitioner builds a stupa he or she will not be reborn in a remote location and will not suffer from extreme poverty. As a result, a vast number of stupas dot the countryside in Tibet (where they are called *chorten*) and in Burma (*chedi*).

The journey to enlightenment

Buddhists visit stupas to perform rituals that help them to achieve one of the most important goals of Buddhism: to understand the Buddha's teachings, known as the Four Noble Truths (also known as the dharma and the law) so when they die they cease to be caught up in *samsara*, the endless cycle of birth and death.

The Four Noble Truths:

1. life is suffering (suffering=rebirth)
2. the cause of suffering is desire

3. the cause of desire must be overcome

4. when desire is overcome, there is no more suffering (suffering=rebirth)

Once individuals come to fully understand The Four Noble Truths, they are able to achieve Enlightenment, or the complete knowledge of the dharma. In fact, Buddha means “the Enlightened One” and it is the knowledge that the Buddha gained on his way to achieving Enlightenment that Buddhist practitioners seek on their own journey toward Enlightenment.

The circle or wheel

One of the early sutras (a collection of sayings attributed to the Buddha forming a religious text) records that the Buddha gave specific directions regarding the appropriate method of honoring his remains (the *Maha-parinibbāna sutra*): his ashes were to be buried in a stupa at the crossing of the mythical four great roads (the four directions of space), the unmoving hub of the wheel, the place of Enlightenment.

If one thinks of the stupa as a circle or wheel, the unmoving center symbolizes Enlightenment. Likewise, the practitioner achieves stillness and peace when the Buddhist dharma is fully understood. Many stupas are placed on a square base, and the four sides represent the four directions, north, south, east and west. Each side often has a gate in the center, which allows the practitioner to enter from any side. The gates are called *torana*. Each gate also represents the four great life events of the Buddha: East (Buddha’s birth), South (Enlightenment), West (First Sermon where he preached his teachings or dharma), and North (Nirvana). The gates are turned at right angles to the axis mundi to indicate movement in the manner of the arms of a svastika, a directional symbol that, in Sanskrit, means “to be good” (“su” means good or auspicious and “asti” means to be). The *torana* are directional gates guiding the practitioner in the correct direction on the correct path to Enlightenment, the understanding of the Four Noble Truths.

A microcosm of the universe

At the top of stupa is a *yasti*, or spire, which symbolizes the *axis mundi* (a line through the earth’s center around which the universe is thought to revolve). The *yasti* is surrounded by a *harmika*, a gate or fence, and is topped by *chattras* (umbrella-like objects symbolizing royalty and protection).

The stupa makes visible something that is so large as to be unimaginable. The axis symbolizes the center of the cosmos partitioning the world into six directions: north, south, east, west, the nadir and the zenith. This central axis, the axis mundi, is echoed in the same axis that bisects the human body. In this manner, the human body also functions as a microcosm of the universe. The spinal column is the axis that bisects Mt. Meru (the sacred mountain at the center of the Buddhist world) and around which the world pivots. The aim of the practitioner is to climb the mountain of one’s own mind, ascending stage by stage through the planes of increasing levels of Enlightenment.

Circumambulation

The practitioner does not enter the stupa, it is a solid object. Instead, the practitioner circumambulates (walks around) it as a meditational practice focusing on the Buddha’s teachings. This movement suggests the endless cycle of rebirth (samsara) and the spokes of the Eightfold Path (eight guidelines that assist the practitioner) that leads to knowledge of the Four Noble Truths and into the center of the unmoving hub of the wheel, Enlightenment. This walking meditation at a stupa enables the practitioner to visualize Enlightenment as the movement from the perimeter of the stupa to the unmoving hub at the center marked by the *yasti*.

Khan Academy video wrapper

This video/animation shows the perspective of someone circumambulating the Mahastupa in Sanchi, the soundtrack plays monks chanting Buddhist prayers, an aid in meditation. Circumambulation is also a part of other faiths. For example, Muslims circle the Kaaba in Mecca and cathedrals in the West such as Notre Dame in Paris include a semicircular ambulatory (a hall that wraps around the back of the choir, around the altar).

The practitioner can walk to circumambulate the stupa or move around it through a series of prostrations (a movement that brings the practitioner's body down low to the ground in a position of submission). An energetic and circular movement around the stupa raises the body's temperature. Practitioners do this to mimic the heat of the fire that cremated the Buddha's body, a process that burned away the bonds of self-hood and attachment to the mundane or ordinary world. Attachments to the earthly realm are considered obstacles in the path toward Enlightenment. Circumambulation is not veneration for the relics themselves—a distinction sometime lost on novice practitioners. The Buddha did not want to be revered as a god, but wanted his ashes in the stupas to serve as a reminder of the Four Noble Truths.

Votive Offerings



Votive Stupa, Bodhgaya, 8th century, stone, 78 x 44 x 35 cm (Ashmolean Museum, Oxford)

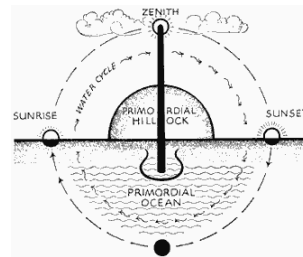
Small stupas can function as votive offerings (objects that serve as the focal point for acts of devotion). In order to gain merit, to improve one's karma, individuals could sponsor the casting of a votive stupa. Indian and Tibetan stupas typically have inscriptions that state that the stupa was made "so that all beings may attain Enlightenment." Votive stupas can be consecrated and used in home altars or utilized in monastic shrines. Since they are small, they can be easily transported; votive stupas, along with small statues of the Buddha and other Buddhist deities, were carried across Nepal, over the Himalayas and into Tibet, helping to spread Buddhist doctrine. Votive stupas are often

carved from stone or cast in bronze. The bronze stupas can also serve as a reliquary and ashes of important teachers can be encased inside.

This stupa clearly shows the link between the form of the stupa and the body of the Buddha. The Buddha is represented at his moment of Enlightenment, when he received the knowledge of the Four Noble Truths (the dharma or law). He is making the earth touching gesture (*bhumisparsamudra*) and is seated in *padmasan*, the lotus position. He is seated in a gateway signifying a sacred space that recalls the gates on each side of monumental stupas.

stupas

Stupas became a cosmic symbol in response to a major human condition: **death**. With the enlightenment of the Buddha stupas became a particularly Buddhist symbol. They incorporate the ancient, pre-Buddhist burial mounds and elements of the Brahmanic religion – several of whose followers converted to Buddhism. The central axis comes conceptually from the ideal of the centre, the axis mundi, and physically from the sacrificial stake. The stupa shape can be found in many of nature's forms. The Buddhist tree of enlightenment is called, in Latin, *figus religiosa*, or sacred fig; It is generally called the Bodhi, or Bo tree. Bodhi is a Pali word for enlightenment.

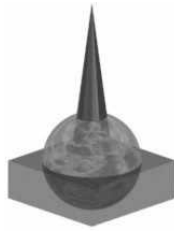


PURPOSE



Generally used as a repository for either a body or cremated remains. The use of non-corporeal relics is now also common. A specifically Buddhist monument used for contemplation and as the focus of religious ritual. A symbol to inspire aspiration and efforts in the religious life – the pursuit of enlightenment.

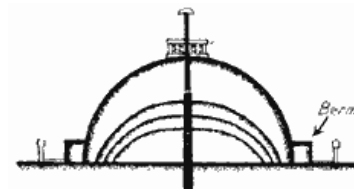
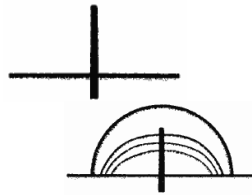
ELEMENTS



Stupas are physically composed of the four elements – earth, air, fire and water. Symbolically of the Three Refuges and a three-fold summary of the Eight Fold Path all topped by direct experience of Nibanna.

ELEMENT	REFUGE	TEACHING
AIR	NIBBANA	INSIGHT
FIRE	BUDDHA	PANNA
WATER	DHAMMA	SAMADHI
EARTH	SANGHA	SILA

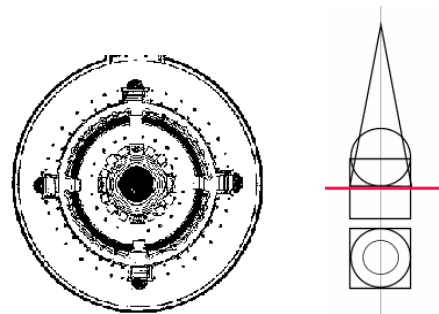
EVOLUTION



Of the early stupas some were centred around sacrificial stakes but all evolved as burial mounds. As Buddhism spread there was an increase in both general support and the funds available. This, together with advances in construction techniques saw the stupa increase in size – both volumetrically and vertically. The evolving complexity and refinement of aesthetic detail is also apparent; as an extension of existing crafts. As Buddhism developed the stupa became more of a general religious symbol, an object of worship. Less emphasis was placed on the stupa as purely a site of interment.

MANDALA

A symmetrical expression of the microcosm and macrocosm. A centred construction designed to draw the viewer to their own still centre through



silent
contemplation.
The basic form
is a circle
(heaven) inside
a square
(earth). The
conceptual
components of
a stupa (cube,
sphere, cone)
interlock and
the shared axis
leads the
viewer's line of
sight upwards
to the apex – a
symbol of the
goal of
Buddhism,
nibbana. The
pure mandala
form of a
stupa is best
appreciated
from above.

Stupas became a cosmic symbol in response to a major human condition: **death**. With the enlightenment of the Buddha stupas became a particularly Buddhist symbol. They incorporate the ancient, pre-Buddhist burial mounds and elements of the Brahmanic religion – several of whose followers converted to Buddhism. The central axis comes conceptually from the ideal of the centre, the axis mundi, and physically from the sacrificial stake. The stupa shape can be found in many of nature's forms. The Buddhist tree of enlightenment is called, in Latin, *ficus religiosa*, or sacred fig; It

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Buddhist Cosmology

By Ken Holmes

The Buddha said this world is like a dream or a conjuration. Therefore, to be comprehensible, his teachings must necessarily express themselves in a way which makes sense in each person's dream. Thus much of popular early Buddhism was taught using the Indo-European world view widespread at the time, in which, living atop the highest peak and ruling other deities was a sky god, known as Dyaus by the Indians, as Zeus by the Greeks and later as Jupiter (Dies Pater) by the Romans. Such concepts had probably spread from the Asiatic steppe, westwards to Greece and eastwards to India, with the invading Aryans, some time in the second millennium BCE. The sacred mountain was Olympus for some, Sumeru for others. Upon it, wielding a thunderbolt, the Lord of Heaven controlled the weather and repulsed attacks from demi-gods.

This early belief became extended to consider our world no longer as unique but as just one of a group of a billion similar world systems, each based around its own central, four-sided mountain, each face of which was made of a differently-coloured precious substance. Indians thought of their land, Jambudvipa, as being a trapezoidal continent to the south of the sacred mountain, opposite its lapis lazuli slope. To either side of it lay small sub-continent of similar shape. Other continents, flanked by sub-continent, lay opposite the other faces of Mt Sumeru: a semi-circular one to the east, opposite the crystal slope, a round one to the west, opposite the ruby slope and a square one to the north, opposite the emerald slope. In invisible worlds high above the summit of Mt. Meru, one above another, were the realms of the various classes of gods whereas in recesses far beneath the earth were the hells and lower abodes.

How relatively true were these primitive ideas was of secondary importance for Buddhists. What mattered was the fact that they were deeply ingrained in the psychology of millions of beings. If teachings based upon such a world view could enable someone to acquire the tools of meditation and clear analytical inspection, what matter? The true nature of reality would eventually become apparent through vivid first-hand knowledge, above and beyond all inherited conventional beliefs. Thus no ethical problem was seen in mobilising the myths and illusions of the day, as long as they set people on the path to wisdom.

On its deeper levels, Buddhism throws a bright light on the subjectivity of all experience. It reveals, with great pragmatism, the impossibility of establishing any ultimate objective reality and explains, as a consequence, that there are as many subjective worlds as there are sentient beings. Each moves through life in a completely unique universe fashioned by his, her or its preconceptions, due to karma. It is as though we live in parallel dreams. Furthermore, as one's awareness and mental clarity develops, many subconscious mental barriers fall away. In the newfound purity, the world around manifests to the senses very differently: there is 'a new heaven and a new earth'.

Surrounding Mount Sumeru are seven ranges of golden mountains, each separated by lakes of pure water of eight special attributes. These are reputed to be rich in precious gems, belonging to the serpentine naga spirits who inhabit them. Mount Sumeru has four large steps at its base and is unusual insofar as it tapers outwards to a flat, square summit rather than inwards to a peak. On the summit is the palace of Indra (who replaced Dyaus), Lord of the Heavens, surrounded by gardens and wonders. In space above, the sun and moon are themselves celestial palaces, as are the stars. Then, in layer after layer, one above another and interspersed with rainbow-hued celestial clouds, are first the seventeen realms of the form gods and above them the four realms of the formless gods.

The doctrine of karma explains the world around us to be the product of past actions, both personal and collective. The Kalachakra teachings describe cycles and tides of time, as humanity's karma carries it from age to age. Some ages - the results of much common goodness - are prosperous and peaceful with bountiful, healthy crops and longevity. Other darker ages - brought about by much evil - are riddled with disease, dishonesty, danger and a poisoned environment in which the lifespan is short. Unusual karmas produce unusual results and some worlds are said to be totally different from anything we could ever imagine. Furthermore, the tantras makes it clear that world views change as

the centuries roll by. Within an endless series of parallel universes, we migrate from one to another much like actors appearing first on one television channel, then another, in quite different realities.

Buddhist Mandalas - the Geometry of Illumination

"Awaken to true reality, the vajra citadel of your mind"

Khenpo Tsultim Gyamtso

Whereas the doctrine of karma deals with the cosmology of the exoteric world, the various tantric mandalas portray the inner, esoteric world which manifests to the mind of the experienced meditator. However, the notion of mandala itself is a very simple and universal one, being any focus on a central entity and the factors which usually accompany it. It could be used to describe something as banal, for instance, as the arrival of mains water in a remote desert village. That one central fact will bring with it the sale of bathroom items, a change in habits as people wash more frequently, cook more hygienically, make irrigable fields and so on and so forth. Mandala is a recognition that nothing exists all by itself but comes hand-in-hand with other things, and has inexorable implications and repercussions.

The sacred aspect of the mandala principle concerns the various facets of cosmic purity, which manifest as specific buddhas in their respective pure lands. Each of these buddhas is the symbolic embodiment of a particular quality of the primordial purity. Buddha Amitabha, for instance, displays its power to help the dying. Each main buddha is accompanied by an entourage relative to that buddha's activity. On this level, mandalas are maps of the awakened psyche; the geometry of enlightenment.

Mind's hidden treasures manifest themselves as mandalas in visions to great Buddhist saints and in the mandala they symbolise themselves through material qualities. Buddhas are 'seen', by the eye of mind, wearing raiments of celestial cloth and ornaments made by the gods. Their palaces of light seem to be made of sublime jewels, such as rubies, turquoises and pearls, and other precious substances. The paradisiacal gardens have pools of water having eight special qualities, being of right temperature, pure, sweet, soft, cleansing, bringing harmony, banishing hunger and thirst and satiating all the senses.

These buddha realms should not be confused with the realms of worldly gods, which are also full of splendours. They have radically different natures. One scripture even says that they do not even have one atom in common. Deva realms are the transient, illusory fruit of good karma. The enlightened mandala are the spontaneous manifestation of eternity: natural, archetypal symbols, generated by mind itself, of true reality. In particular, they represent the five primordial wisdoms. The number five is, in fact, very important in mandalas, as the majority represent a centre point and four sides. Thus most mandalas are geometrically square, contained within an outer circle. This is a two-dimensional way of representing a three-dimensional experience, in which buddhas are seen in a four-sided palace within an outer sphere. Other mandalas, especially wrathful ones, are triangular.

Every detail of the mandala is full of meaning. The outer sphere of interlaced vajras, which completely protects and hides its content from all but the initiate, represents the changeless and invincible realm of pure truth. Within this sphere, all is arranged according to the four cardinal directions. The central celestial palace has four portals, the main one to the east. In tantra, 'east' is whichever direction the yogin faces and is independent of the sun movements. In the heart of the palace, the most sacred spot, resides the particular buddha, like a king. Around him, in successive circles, are his entourage, compared to chief ministers, lesser ministers, servants, messengers and so forth, the less sacred being the furthest removed from the centre.

The entourage and the palace itself can be very detailed and composed of hosts of buddhas, bodhisattvas, attendant gods and goddesses. The mandala can also be very simple: just a few symbolic letters or a single central buddha flanked by two bodhisattvas, and no palace. In the more complex versions, the minutiae have profound meaning. The palace wall, for instance, can have five layers, representing the five wisdoms which are the true 'abode' of the enlightened mind. The palace floor is differently coloured in each of the cardinal directions, representing the infinite love, compassion, sympathetic joy and impartiality which form enlightenment's basis. Each detail tells its story.

A mandala is drawn on consecrated ground to create the sacred space used by a guru to bestow empowerment upon a disciple. This can also be set out on a table in the temple and hidden behind curtains or screens until the appropriate moment of the empowerment ceremony, when it is revealed

to the initiate. Some temples have intricately-carved, three-dimensional mandala portraying a particular buddha and entourage. In others, buddhas and protectors are more simply represented by symbolic objects. Sometimes mandalas are painstakingly made of coloured sand, which is poured into a river once the ceremony completed.

After initiation, more permanent mandalas painted on a thangka or as a mural help the disciple to become familiar with what must be visualised in the creative stage of tantric practice. These paintings also serve as teaching aids for elaborating the detailed meaning of that particular buddha. After months or years of practice, the mandala will shift from being an external symbol to being an internal presence, becoming a familiar place in the meditator's imagination. Given enough time and devotion, this imagined mandala will magnetise the real, primordial mandala, locked within his or her subconscious, into replacing the limited mental creation and manifesting in all its breath-taking glory.

Stupas: Monumental Mandalas

Be they squat domes of earth or gilded pagoda towers, stupas are one of the most striking features of Buddhist lands. Originally funeral mounds housing relics of the Buddha and his disciples, they have evolved into an elaborate architectural expression of the mandala. Unlike churches, mosques and temples, their prime function is not to house the disciple within a sacred space but to place a model of sacred order within the chaos of the worldly landscape.

Stupas are axes of power. Whatever their form, they are always symmetrical, aligned with points of the compass and radiating their geometric shapes around an all-important central axis, known as the 'life tree'. Although each shape and part of the stupa is charged with intentional significance - and can further lend itself to all sorts of symbolic interpretation - its prime importance for Buddhists lies in the relics it houses. Just before his passing, the Buddha gave instructions on the making of stupas and indicated that their construction and veneration would be mainly the task of the lay community. Monks, by contrast, should concentrate on their meditation and study but could, as time went by, keep the remains of their most saintly leaders enshrined in stupas in the monasteries, as a source of inspiration.

Following the funeral rites held for the Buddha and the pleas from each neighbouring kingdom to have some relics to enshrine, his remains were divided and preserved in eight stupas: at Rajgir, Vaisali, Kapilavastu, Allakappa, Ramagrama, Vethadipa, Pava and Kusinagara. Other non-corporeal relics from the Buddha's life, such as his hair, alms bowl, walking-staff, bathing-robe and so forth, also became objects of veneration.

Bodh Gaya

Furthermore, stupas were built without his relics on the most sacred sites of his life, such as Bodh Gaya, where he attained enlightenment.

Sanchi

There remain but traces of the oldest stupas, dating back to the fifth century BCE. Still intact is the great stupa at Sanchi, built in brick by King Asoka in the third century BCE. Railings and gateways were added a century later. Typical of the earlier structures, it is a hemispherical dome, reminiscent of a funeral mound, truncated at the top and placed over a lofty terrace. Above the dome is a pavilion (harmika) above which is the parasol, symbolising the majesty of the Buddha's doctrine. In stupas at Sanchi, which is the site of the most extensive Buddhist remains in India, are relics of the Buddha's two main disciples, Sariputra and Mahamaudhgalyana.

As the centuries passed, the relation between the stupa and the points of the compass became more emphasised, leading to the creation of a square, terraced foundation for the dome. In the centuries around the beginning of our era, terraced stupas were systematically replacing round ones in Gandhara. Probably under the Gandharan influence, a new style of stupa emerged in Northern India and Nepal. The dome rose further from the ground and became less of a mound and more the section of a cylinder. The victory umbrellas increased in number, becoming three, five, seven, nine or thirteen and often represented by discs (cakra). Major terraced stupas were

Bodhnath

constructed in such style at Nalanda and other places from the end of the Pala period and throughout the Gupta period. As it spread east to Nepal, China and Japan, the stupa took on more and more the form of a tower becoming, in its most extreme, the multi-tiered pagodas of the far East. However, in the south of India the original round mound continued to be built in such places as Amaravati. One

of the two main stupas of Nepal - that at Bodhnath - retained this older style too.

Above the three main steps of the terrace, representing the three refuges of Buddha, dharma and sangha, appeared four steps representing infinite love, compassion, joy and impartiality. The terrace continued to evolve, reaching its ultimate artistic expression in the Nepali and Tibetan style where, after receding inwards it again expands outwards, like Mt Sumeru. Indeed, the stupa does represent this axis mundi and the dome and pavillion which surmounts it is analogous to the palace of the 'Lord of All'.

Symbolically, the stupa represents many things. Primarily it is a form representing formless dharmadhatu: the expanse of truth, the realm of voidness. One of many ways of explaining some of its symbolism is the following. The cubic base, with its terraces and steps, represents the earth element, the wisdom of sameness and the jewel family of beings. The mound or 'treasure vase' represents the water element, the mirror-like wisdom and the vajra family of beings and is particularly associated with the seven factors of enlightenment: mindfulness, awareness, diligence, joy, tranquillity, absorption and equanimity. The pavilion and spire together represent the fire element, discerning wisdom and the lotus family. It represents the eightfold path of right view, contemplation, speech, action, livelihood, effort, mindfulness and samadhi. All-seeing eyes are painted on the pavilion in the Nepali tradition.

The thirteen parasol rings of the spire represent attainment of first the ten bodhisattva levels and then the three bodies of the buddha. The parasol itself represents the wind element, the all-accomplishing wisdom and the karma family. The moon, sun and jewel represent the space element, dharmadhatu wisdom and the buddha family of beings.

CHAPTER 2

The Cosmology of the Buddhist Stupa



by Tulku Sang-ngag Rinpoche//A teaching given May 14, 2003, when initiating the building of the Amitabha Stupa in Sedona



Initially, before offering the teaching on the Dharma, that is today's topic, which is a discussion on the meaning of the stupa. Rinpoche would like to first offer homage to the Three Jewels, that is, the Supreme Guide, the Unsurpassed Guide, the Buddha, the Holy Dharma, which are the teachings that the Buddha taught and then also the followers of the teaching, the Sangha. And so, Rinpoche would like to offer his homage to those three. And then, also specially,

the Unsurpassed Guide, who is his own personal teacher, who is the embodiment of all of those three in one single form.



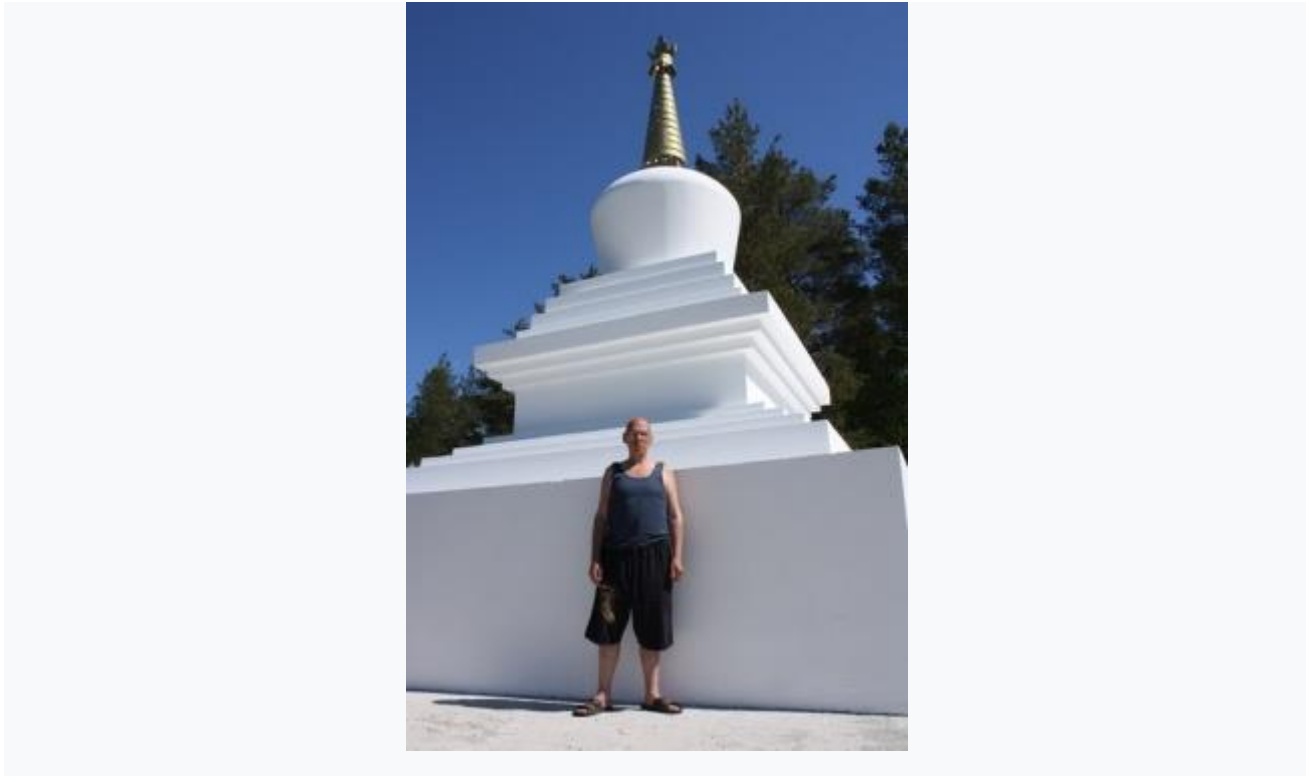
Rinpoche is offering this teaching on the meaning of a stupa in accord with Jetsunma's wishes. Before he gives that teaching, he would like to extend his very warm Tashi Delek and greetings to everybody who is here attending this talk. So, Tashi Delek.

That which is known as a stupa, in Tibetan it is a chorten. A chorten actually means a receptacle of offerings. A stupa actually represents an outward expression of the Buddha's enlightened body, speech and mind. First of all, we have the Buddha's mind. The Buddha's mind is such that it is non-composite phenomena. It has neither shape nor color, but it is all knowing. It is cognizant, which is lucid and yet you cannot identify it as being anything whatsoever.



But despite the fact that the Buddha's mind is not a composite phenomena, or any thing whatsoever, it is unelaborated, cognizant and yet, in order to address the predicament that all sentient beings find themselves in, the variety of sentient beings, in order to tame those beings, bring them on the path to enlightenment, the Buddha has manifested in two specific forms in an effortless manner, in a non-artificial, sort of natural, he manifests in these two types of bodies.

That state of the pure potentiality of enlightenment, that is the state of being a Buddha, is something, which is beyond any kind of representation. It is beyond having colors or a shape or a size or any kind of form, and that authentic state of enlightenment, which is yet to manifest, is the genuine stupa, it is the genuine stupa of basic space, or you could say cho kyi ying, which means the sphere of Dharma, the sphere of pure potential. So, that is what is known as the authentic stupa before the onset of manifestation. So it is the potentiality. So that is the actual state of enlightenment that we are talking about there, before it is actually manifest.



But this state of basic space that is the Dharmadhatu is such that there is the dynamic display of that, which arises as appearances, which are unhindered. So, that space manifests this dynamic display of appearances, which are spontaneously present and complete and perfect. And so, in this manner, because that basic space is an unhindered display of dynamic energy, then we have in the four directions, a variety of stupas manifest in order to benefit beings. The state of the Buddha's mind is such that it has the 32 qualities of enlightenment. They are things like the ten powers and the ten states of fearlessness and so on. There are all of these attributes of the enlightened mind of the Buddha. Those are called the qualities of the enlightened mind. Those 32 qualities of the enlightened mind of the Buddha, when they outwardly manifest, they manifest as the 32 characteristics of a physical stupa. So, they are actually a physical representation of those internal qualities of the Buddha's mind.

Stupas can be roughly divided into two categories. There is the category of the Theravada stupas, or the Hinayana stupa and there is the stupas in accord with the Mahayana tradition. But then there are further subdivisions of those stupas, different shapes and designs.

In the Hinayana tradition, there would be stupas that are roughly in the shape of the Buddha's body, some in the shape of his robes, some in the shape of his alms bowl, his begging bowl and some in

the shape of his throne, so there are different renditions. And then there is the staff; some stupas are in the shape of a staff.

And then in the Mahayana tradition, there are what are known as the eight principle stupas. At the time after the Buddha was cremated, his relics were divided into eight piles and given to eight different great kings and then they made stupas for those different relics. And according to the great teacher, Nagarjuna, there are eight principle stupas that perform eight different functions.



These eight principle stupas, the Mahayana tradition, commemorate the great deeds of the Buddha's life, from the time when he was born till his passing into nirvana. So, for example, there is a stupa that commemorates his birth, that moment just after his birth when he took seven steps in the four directions and each time he took a step, a lotus flower automatically blossomed under his foot, where he placed his foot at that step. And so, there is a stupa that commemorates that, the birth of the Buddha.

And then there is a stupa that commemorates the fact that the Buddha studied a whole variety of topics in his youth and mastered them all. There is another stupa called the auspicious many-gated stupa, the Tashi Gomang stupa. That celebrates the fact that the Buddha descended back down from Tushita Pure Land, where he was teaching his mother.

And then in the Vajrayana tradition, the tantric vehicle, there are specific stupas that accomplish particular purpose. For example, there are the four main types of stupas for pacification. Some are to magnetize. Some are to increase, increase prosperity and merit and some are to magnetize. Others are for more wrathful activities.

So, there are different shapes that the stupa can adopt, but the fundamental meaning is the same in that they represent the enlightened body, speech and mind of the Buddha.

Out of the various representations that a Buddha may adopt, different representations of his enlightened body, speech and mind, the stupa, though, primarily represents the enlightened mind of the Buddha.

You might wonder, well, is this tradition of erecting stupas something that stems from the historical Buddha Shakyamuni. If you really to investigate it, you would find, actually, there are stupas that appeared prior to Buddha Shakyamuni. During the time of the third Buddha, Dipankara, there were numerous stupas erected, so it is something that is prior to Shakyamuni Buddha. There is a long history of stupa making in this world.

For example, there is a very famous stupa in the Katmandu Valley at Svayambhu. Svayambhu means the “Spontaneously Self-Arisen” stupa. During the time of the second Buddha, Marme-dze, that stupa was said to have dwelled in the sky, on the top of the mountain, so it was floating in space. And then during the time of the third Buddha, Dipankara, the stupa went below the ground. And then during the fourth Buddha, Shakyamuni Buddha, the most recent Buddha, this stupa sort of emerged so that half of it was out of the ground and half of it was still in the ground.

This is a truly miraculous stupa, this stupa in Svayambhu. In the sixth Nepalese month, which would be the fourth western month, there is a great celebration on the full moon. After that, you can actually see a reflection of the stupa in the sky. It is really famed as being an amazing stupa. Whether you are Buddhist or non-Buddhist, everyone can witness this stupa, the appearance of it in the sky.

So, there was the creation of stupas even during the lifetime of Shakyamuni Buddha. In fact, the very text for consecrating that was used today was something that was spoken directly from the Buddha.

It was from his mouth, the very manual used to consecrate the land that Rinpoche resorted to today. It is known as the “Sutra of the Twofold Purity” and out of the various teachings that that Buddha gave, some of them came directly out of his topknot. Others were emanated. Some were spoken orally. This is one of those teachings that was spoken orally, so it is considered to be a very sacred practice for consecrating land.

This teaching on how to consecrate land, which came directly from the oral instructions of Shakyamuni Buddha, were taught to, on the one hand, to the gods, so it is called the “Twofold Purity Practice”. One was taught to the gods and it was received by the child of the gods known as Vimala Ratna. And then the other recipient of the teaching was a human known as Sakya Chandra.

And so, the background of this Brahmin, Sakya Chandra, was that he was initially a great practitioner of the Tirtika tradition. And he held a bit of animosity to the Buddhists. And so, one day this Brahmin received a prediction from a deity saying that in seven days his life would come to an end. So, this really perturbed him and he set about looking for some kind of means to protect himself from that fate, some kind of method or practice. But he couldn’t find anyone, any kind of practice.

He really started to run out of options. His search kind of led him to considering going to the Buddha. But he was reflecting on that. He was sort of wondering if he should do that or not, because prior to that time, he had been so antagonistic to the Buddha. He had been an enemy of the Buddhist teachings. He was sort of at a crossroads there, wondering what to do. But then he sort of reflected on it and he thought, well, Buddhists are compassionate and maybe they will take pity on me and I can get some advice on how to get out of this predicament.



And so, he decided then he would go to see the Buddha and so he went off to the Jetavana Grove where the Buddha was teaching a group of people. And so, when he got close, he saw that there were lots of people attending the teaching. He kind of felt very self-conscious. He was thinking, Gosh, I was an archenemy of the Buddha’s teachings before. Now I am walking right into the center

of this enormous audience of people while the teaching is going on. I can't do that. So, he kind of lost his courage and scurried off somewhere. He went behind a wall and started crying about his fate. So, he is behind this wall and then the Buddha finished teaching. And then, after the teaching, he said, "Over there is a wall and behind that wall there is a person who is very upset. Bring him to me".

And then the Buddha asked this fellow, "You have something to tell me. What is it? The clock is ticking". And so, this guy says, "Well, after seven days I was predicted to pass away. Is there something I could do? Is this actually true that I am going to pass away in seven days?"

The Buddha said, "Yes, in fact, it is true. But it gets worse. After you pass away, you are going to take on numerous bad rebirths and finally, you are going to plummet into the lowest realm, into the hell realm, after all those bad rebirths."

And so then, to start with, he was already freaked out about dying, so in addition, he had to worry about all these negative rebirths, so he was completely overwhelmed and he passed out.

So, then, finally this guy revived and the Buddha said, "It gets worse now. Actually, there is something that you can do about this situation. There is actually a method that you can employ to counteract this whole thing. You don't have to actually experience this. You just need to employ this method".

This Brahmin was so elated to hear this news, that there was something that he could actually do to counteract his circumstance. And so, the Buddha then said to him, "Well, what you have to do is, near here there is a stupa, probably from the previous Buddha that hasn't been mentioned, but there is a stupa that is dilapidated, that is run down. And what you should do is restore that stupa." And so the Buddha then gave him instructions on how to do that: how to draw the mandalas, what scriptures to write, how to put in the life wood, which is the axial wood that goes into the center of the stupa, how to insert that and what to write on it, what to carve on it. And then the Buddha then declared that not only would his life span be restored, but he would close the door to the lower realms and eventually reach the higher realms of Akanishta Pure Land. Akanishta means the "highest Pure Land" and one can achieve incredible qualities of enlightenment.



And so, that Brahmin went straight away and started to repair that stupa. He didn't even go home. He went straight there and started the work. And so, along with that teaching, the Buddha has another – there is a sutra known as the Accomplishment of All – actually, the Complete Elucidation on How to Accomplish Everything and then also there is the Wheel that Fulfills All of One's Wishes or Desires. There is a long ceremony, and a mantra associated with that, a practice that one can perform in order to do that, that goes along with that practice. And then the Buddha declared that the erecting of a stupa had numerous qualities. It would fill one's accumulation of one's wisdom and of merit. It was efficacious means whereby one could accumulate a massive store of merit and wisdom.

And so, the Buddha said for that individual who erects a stupa, that individual is blessed by all the Buddhas and the bodhisattvas. That person receives the blessings of the enlightened ones.

If that stupa holds – if that stupa is like a reliquary for ringsel. Ringsel are indestructible sacred relic pills that appear from the ashes of enlightened beings. And so, if those stupas house those relic pills and one creates such a stupa, then all the bodhisattvas bless that person. One will have the good fortune of seeing the face of the enlightened ones. One will be an object of homage, of all the gods like Brahma and Vishnu and Indra will pay respect and praise one. All these enlightened beings and also beings – that is the Buddhas and the bodhisattvas and also the mundane gods will commit themselves to protecting you because you have really enhanced the benefit of those who are on white path to enlightenment.

There is the sutra of the “Twofold Purity”. That was the consecration that Rinpoche performed this morning. If it is done in the correct manner, one will receive an immense blessing.

And so, this tradition, as it was passed down in India, finally reached Tibet. It was brought to Tibet by the very first master to arrive there, Shantirakshita. He was a very great abbot who first taught the teachings on the Dharma in Tibet. And so, at that time, all of the rituals, all the ceremonies related to establishing a stupa were translated and established by Shantirakshita. This is prior to the arrival of Guru Rinpoche in Tibet.

So, that is all related to the history of the stupa. That is all Rinpoche will talk about right there. He just wanted to offer a little bit of background so that we could trace really where the ceremonies, the consecration of the stupa can actually be traced back to the Buddha. That is the Twofold Purity sutra. So, Rinpoche is going to talk about the stupa now.

So, there are incredible benefits that one can derive from both erecting a stupa and these teachings were taught by Shakyamuni Buddha to the King Tsaldyor. And then there is also a discussion by the Buddha on the benefits of circumambulating a stupa, going around a stupa, in order to accumulate merit.

And so, it is said that when erecting a stupa, if you simply offer a handful of sand and place it in the mortar, that handful of sand is equivalent to offering many thousands of ounces of gold up to the enlightened ones. It is equivalent in merit.

So, whether one labors at making a stupa, is involved in work or whether it is related to play, like even if you are just sitting there and you are drawing a rendition of the stupa, you are drawing a picture of it, whatever the case may be, one makes a connection with that. There is contact made and by virtue of having contact, one is connecting with enlightenment, so one receives a blessing. One accumulates merit. There is a story that illustrates this.

In one of Buddha's previous lifetimes there were these seven bugs that lived on a leaf of a tree that was beside a lake. And in the middle of that lake there was a stupa. One day, that leaf just broke off the tree, floated down on the top of the water and then was blown around the stupa a few times and then finally the bugs drowned, but because they went around the stupa a few times, they received a blessing. Traditionally it is said that the seed of liberation was planted in their mind stream. And because there was that seed present, it had to ripen and eventually after a few lifetimes, all those bugs awakened to enlightenment by virtue of the fact that they accumulated that merit.

And so, by seeing a stupa or hearing about a stupa, remembering it, visualizing it, whatever the case may be, any kind of connection will imbue you with a blessing, will connect you to enlightenment. So, whether it is a bug or a human or animal without a body, you know, just floating through space, any being that comes in contact with a stupa will be blessed and gain merit.

And also a stupa could be considered to be like an outward symbol that the Buddha's teachings are still enduring. Even these days you can witness that, the stupa is really like a representation of the Buddha. In Bodh Gaya, in Behart, in north central India, even now, the Buddha's stupa, the original one is still there. And it is an object of homage for countless people. Every year, hundreds of thousands, possibly millions of people, pilgrims, come there to pay respect and to offer prostrations.



And so, it is really like a representation of the presence of the Buddha. And so it is like the symbol, which represents the Buddha, and it is treated as such. There are numerous monks and nuns who go there to receive ordination, blessings and so on. There are people from Thailand and Hong Kong and Japan, people from all over the world come there to see that stupa and receive the blessings.

In the past, there have been so many stories of relics appearing from these stupas. As it was mentioned earlier on, there is that phenomenon known as the ringsel, the small relic pills, which would spontaneously be emitted from the stupa. Sometimes it even rained from the sky in the

vicinity of the stupa, like the stupa in Boudnath and Svayambhu. So, there are numerous stories. But it seems that these days its not happening as frequently as it used to in the past and it might be because of the change in the times. It seems that maybe there is a corruption or something has degenerated, because it is not as frequent as it used to be.

Rinpoche is saying that he really enjoys working with stupas, you know, creating them, helping in their construction. So far, in the States, he has helped with 13 stupas and all together more than 20 stupas. And the reason why is because they are really such a great phenomena. If you are building a temple or something like that, then it is kind of a mixed bag. There is administration. You've got to manage things. It is a great thing to do, but it can be complicated, because you are involved with people and all sorts of things can happen, whereas with a stupa, right from the word go, everything is very virtuous. It is kind of simple. It is expressly made for virtue, so that people can pay homage, so that they can accumulate merit and receive a blessing.

So, it is a very simple and very straightforward matter. And so, right from the onset, it is all about virtue. In the interim it is about virtue and finally, it's all about virtue, whereas other things, you have to manage the money, the people. There is the upkeep, whatever. So, with a temple, you never know where it is going, but with a stupa, it is straightforward and clear cut.

It was advised by Guru Rinpoche and Shantirakshita in their final testaments to the people of Tibet that really, the ultimate remedy for the problems of cyclic existence, everything could really be remedied through the medium of a stupa, because there are so many different types of stupas that address different problems. Like for example, when things really degenerate and we are finding ourselves now at the time known as the five types of degeneracy. At that time, at the time of conflict, there is a type of stupa that works as a counteragent to conflict. There are stupas, which work against diseases, that remedy diseases and plagues and famines, poverty.



So, there is a wide variety of stupas that address all the different problems that we have in this world. There are stupas that create harmony. For example, if a country is suffering from intense poverty, then you would erect a Dzambala palace stupa, which is similar to the palace of Dzambala and because of the law of interdependence; we have created the auspicious interdependent coincidence for poverty to be alleviated, to create wealth. So, this is how these stupas actually function is through the law of interdependence.

Then there is the stupa that represents the enlightened body, speech and mind, so for beings who wish to achieve complete awakening, then, you know, if you are aiming towards realization of absolute truth and would like to achieve liberation, then you would create one of those types of stupas and pay homage to that. So, there are all kinds of stupas that work with different situations.

It is in light of the fact that there are so many virtues, so many great qualities connected with the stupas that when Rinpoche heard that the sangha here had made so many stupas before and wished to make some more, that he was completely overjoyed. He really rejoices in this kind of activity. It is his favorite thing to do. It is the thing he feels the most enthusiasm towards. Out of all the different things that you can do, he loves doing – creating stupas and helping with their construction.

Actually, last year, Rinpoche sort of thought that he would change the way he does things and just sort of stay at home and concentrate on his work in Montana and not really go around too much. But when he heard that there was a stupa to be made, he couldn't help himself. And so, he feels that whenever it is related to a stupa, he is always available. He wants to commit himself to helping develop this stupa. He feels very strongly about it. He is full of enthusiasm. He has made this commitment now.

All of those who are engaged with the work of erecting the stupa, please remain in your commitment to that. Don't deviate from your commitment, but also, all of your work should be imbued with love and compassion for all beings. It should be motivated by that precious bodhicitta. That is really of primary importance. Then the merit and wisdom will be beyond measure.

So, whether you are working, creating that stupa or whether you have made an offering, some kind of contribution or whether you just simply rejoice in such good activity and the presence of a stupa like that, if you are motivated by compassion and love and compassion completely infuses your whole being and you also make aspiration prayers that all beings benefit by the presence of having a stupa there, then the merit and the blessing can't be measured. So that is very important. Our lives are very short. We could pass away any time, but the stupa is something that really endures. So, it is incredibly meaningful to relate to stupa. It something that remains present in this world. It could be hundreds of years, thousands of years; it could be a very long time. And all during that time, beings are receiving blessings, merit is accumulated. One's aspiration prayers are constantly being fulfilled. So it is this enduring, ongoing phenomena. So, it is incredibly – the effect of it is immense and the implications are incredible.



Questions & Answers:

So, if you want to multiply your virtue endlessly, connect with a stupa. Rinpoche says he is

completely rejoicing and he thanks everybody who is involved with that. So, if anyone has any questions, they are free to ask at this point.

STUDENT: I was wondering, when Rinpoche was on the land where the stupa was to be built, what kind of qualities did he notice about the land itself?

RINPOCHE: says that yesterday, he went to look at the geographical configuration of the land; the geomancy and he said it was spectacular. He couldn't believe it. Everything was really quite auspicious. It was really like out of a textbook. All the interdependent auspicious signs were there in their entirety. It was actually kind of amazing. There wasn't anything really missing at all. It was spectacular. So, Rinpoche feels that there must be a lot of prayers from previous lifetimes that are ripening, because everything was fully present there.

He says he studied geomancy and he was so surprised to see all the different signs on the land. I'll relate a couple of them. He said one of the things, in the north; there should be a mountain that looks like a turtle. And that is exactly what is there. There is this mountain that is rearing up behind. In the west, there should be a long rock and there should be like a bird shape. And if you look on the rock, there is a bird's head. It looks like an eagle's head at the end. And it is big and red in the west. And then in the south, there should be two tiger's fangs in the mountains and if you look, it looks exactly like the fangs of a tiger. So it was outrageous.

STUDENT: What is the intention of the stupa that is going to be built here.

RINPOCHE: I'm not sure about what was planned, what is intended, what shape of stupa.

STUDENT: Amitabha.

RINPOCHE: So, this type of bodhi – it is called the bodhi stupa. “Bodhi” is complete awakening, the stupa of enlightenment. So, its express purpose would be to enlighten beings through their connection with that stupa. It is also the same as – it is called the Mara taming stupa. So, to tame negative beings who would cause obstacles. So, basically by connecting with that kind of stupa, you are facilitating your development towards complete awakening and also you are repelling all those obstacles that might happen to beings through negative forces, so they are being repelled.

Generally speaking, all stupas internally are the same and they require the same consecration and they'll have the same contents. But externally, the shape might be different. That is the only difference would be the shape.

STUDENT: How will the stupa affect the energy of the land where it is being built?

RINPOCHE: It will benefit the energy a lot. It will benefit. Do you want to know how it is done?

STUDENT: Is it a stabilizing effect or energizing. What way will it affect?

RINPOCHE: Well, it is like a wish fulfilling tree, you know, if you address your wishes, they will come true. And so, it functions in different ways. It can be a blessing for those who come into contact with it. It can harmonize. It can smooth out rough energy. It can be a cause for accumulating merit and it can also – those who see it or hear it or think about it, it can sow the seed of liberation in their mind stream and that seed will ripen later on. It will blossom and then they will gain the effect of that. So, it functions in a wide variety of ways.

STUDENT: Does it have a direct effect on the actual (inaudible) land itself?

RINPOCHE: Yes, everything will become very sweet. Everything will become like a beautiful garden there. It will become all pretty.

STUDENT: Having been involved with a number of students, how does one understand, knowing that it brings the great deal of virtue that it does, I have seen numerous occasions where people have been (inaudible) invested in stupas had some very difficult karma ripened, very rough circumstances almost immediately. How does one understand that, what happens there and what is the best way to approach to help that be beneficial in some way.



RINPOCHE: It's not just with stupas only, even though that is kind of characteristic. But it happens with Dharma in general. The degree of involvement in the Dharma will automatically kind of invoke a response from your negative karma. One of the things is that for example, a bodhisattva finds themselves in their last life before enlightenment. So, what they have to do is cram in all that purification of so many lifetimes that they would have reincarnated, but they are not going to. So, let's say you have some karma that will propel you into the lower realms still to ripen. But this is your last life. You've got to process all of that karma in one lifetime as opposed to have it spread over many lifetimes and ripening over many lifetimes. And so, Rinpoche says, he has witnessed this himself with highly evolved lamas who are really matured in their practice. Even they encounter intense hardships and he said he couldn't even believe the kind of hardships. They are inconceivable. You are wondering, wow, this lama is so established in their practice. They have so much insight and realization. And yet, even they have to deal with ripening of intense karma, because they are about to accomplish something really immense.

And so, even though they might have gone through all these difficulties, at the end of their life, they display numerous signs that they achieved liberation, like remaining in the state of *tukdom*, you know, at the time of death for many days in a meditative posture. Their bodies are still warm, but they are officially dead. There is no heartbeat. So, all kinds of signs. But one has to process all kinds of things practicing dharma. And these are called "phunste". It's called a critical eruption. Translators of Dharma get it the most.

Take three pills and go to sleep.

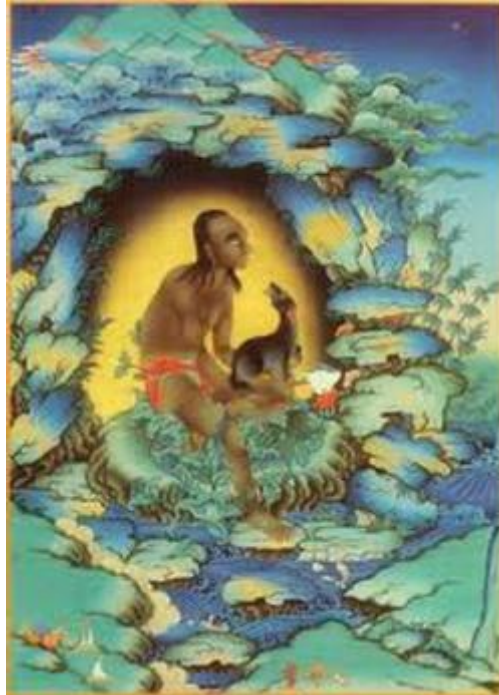
STUDENT: Does the energy of the people, stupa makers, does it come from the (inaudible) of the earth or the stars, or the bodhisattvas, does it come from their own (inaudible).

RINPOCHE: The power, or the energy, comes from one's karma.

STUDENT: That was a short answer.

RINPOCHE: Basically, what they are saying is, when we say that it stems from karma is that if one performs virtuous actions and accumulates merit and is motivated in a positive manner, then the outcome invariably is going to be positive. And so, we are going to enjoy happiness and joy because of that kind of karma that one accumulated. On the other hand, if one is motivated in a negative way and performs bad actions, then because one has sowed the seed, you are going to ripen the fruit that

stems from the seed. So, everything is basically the action of cause and effect. So, by establishing virtuous causes, then you will have a virtuous effect. There is the principle cause and then there is also the circumstantial factor. In this case, because of previous positive actions that were accumulated, those are starting to ripen and then this circumstance presents itself for the creating of the stupa, the land and the people coming together and then that yields an effect that again, initiates so many more causes of virtue. And so, it's this chain reaction, which is very positive and it's enduring.



STUDENT: (asking about rebuilding and repair of some stupas that had been damaged by an earthquake in Indonesia).

RINPOCHE: is not sure what has happened with that stupa. But I think actually, the UN – the World Heritage Fund did something with that through the UN. This is me talking here. I'm not translating. Rinpoche is not sure, but I think it was the World Heritage Fund that did something.

STUDENT: Who built the first stupa and where did the technology come from?

RINPOCHE: It's hard to pinpoint the very first stupa because we are going way back into antiquity. We are going past the fourth Buddha who was Shakyamuni, past Dipankar and then there is even some more Buddhas and then there are tens of thousands of years in between those Buddhas. So, it

is hard to trace right back to the first Buddha. There is also the self-manifest stupa of Svayambhu, which appeared at the time when there was a flood in that valley and was before any humans inhabited that valley. So, we are going way, way back. So, it's really hard to determine the very first stupa.

STUDENT: So, there are no legend or stories.

RINPOCHE: Not for one proto beginning, great, great, great granddaddy stupa.

There is, though, an indestructible stupa just above the vajra seat in Bodhgaya, where the Buddha attained enlightenment. And it is hovering in space above that stupa. And it will be there for the thousand Buddhas that are to appear in this world. It will endure all that time. In fact, in the Vajrayana tradition, in the tantric tradition, there are these three representations of enlightened body, speech and mind that are indestructible. As long as – their presence represents that possibility for the teachings to remain in this world, or at least to keep reappearing. As long as they are there, there is always the possibility of the teachings coming back, even if they disappeared for a while.

So, there are three things. There is a crystal stupa. There is a Buddha statue. And there is also a text representing enlightened speech and it is called the sole son of the Buddha's tantra. And it is a Dzogchen tantra. It is a teaching from the pinnacle of all the teachings of the Buddhist tradition. Even if this world is completely destroyed, until there is nothing left, those three things will remain. In fact, they will go to another world system and things will start up again.



STUDENT: So, they are interdimensional, basically. They are physically immaterial.

RINPOCHE: They are indestructible and they can go anywhere. But they are remaining here as long as this world lasts. And then there is also another stupa that is below the stupa in Bodhgaya. This is not from the Vajrayana tradition. This is just the common vehicle of Buddhist tradition that is also considered to be indestructible and that remains there. All the Buddhas basically go back and achieve enlightenment at that same place in Bodhgaya in India, all thousand Buddhas achieve awakening at that same place.

STUDENT: When Gyaltrul Rinpoche visited Sedona, (saying about self emerging stupas coming out of the rocks).

RINPOCHE: also saw that. He saw what looked like a naturally formed tsa tsa, which is a small kind of stupa. And the nature of phenomena is such that if one looks at those formations with faith and a sacred outlook and a pure perception, then one influences that phenomena. And then on the site that phenomena, that phenomena will respond, as it were, to one's own perception, so it is a symbiotic relationship between oneself and the phenomena. So, nature will adjust according to the perceptions of the beings that appreciate nature. So, that is what is known as a rangjung (naturally arising). It can be a naturally occurring object of homage or become a sacred object because of beings interaction with it. So, it works both ways. The phenomena can bless one, but one can also influence that phenomena and invoke a blessing. In Tibet, there are many such, because of the faith of the locals; you can have images coming out of rocks naturally. And that represents that interdependent relationship between sentient beings and phenomena. It's a fluid situation.

If you have faith in something, then the Buddhas will automatically will bless – their blessings will infuse that object by virtue of the fact that you have devotion. It's not like the Buddhas signed a contract saying we will only bless India and Tibet. They bless any part of the world and Rinpoche feels that in the future, they might bless this area if we have faith and devotion, we can invoke their blessing.

STUDENT: (inaudible)

RINPOCHE: The Buddha went to the God Realms at one point, went on tour, so he went to the God Realms and taught there and then that being became a disciple of the Buddha. It later on

showed up down here on this human world. And he took those teachings back to the God Realm and erected stupas in the God Realm. When the Buddha taught, it wasn't just humans that would attend. There would be gods and demi-gods, non-humans would come and attend the teachings. But in this particular instance, that son of the gods received teachings in the God Realm and then later on come down to the human realm.

STUDENT: (inaudible)

RINPOCHE: That's right. All kinds of beings can benefit.

STUDENT: I was wondering if Rinpoche lived at the (inaudible).

RINPOCHE: Yes, Rinpoche stayed there before. In Montana. Rinpoche is nearby there now, in Arley. Rinpoche is presently engaged in this project of creating mandala, a garden, a Buddha garden with 1,000 Buddhas, representing the Buddhas that are going to appear in this fortunate aeon, the 1,000 Buddhas. In Arley.

I think we have to draw this to an end here. So, hang on to your questions for next time. Don't let them keep you up at night.

OK. We'll have one question. How many hands did we have up here? We've got four. We'll fuse all those five questions into one super question. OK. Over here.

STUDENT: (something about stupas appearing in the West).

RINPOCHE: We're speculating here. That hasn't been the theme the whole night. Don't worry. Just now. There is a stupa in Santa Fe that is kind of small. It's a square stupa. That might have been – Dodrub Chen, this great lama, erected that stupa. It's been like almost 30 years now.

Rinpoche erected another stupa in Santa Fe and when he was erecting that, the people their said that was probably the oldest stupa in America, that one there. So, he is thinking that might be true.

That last question was a good one. It was an auspicious last question. So, if we could all dedicate any kind of merit, any positivity that has stemmed from this for the benefit of all sentient beings.

CHAPTER 3

Indian design Influences on the Mandala of the Borobudur Stupa



Timeline

4,000 BC	Javanese descended from seafarers of China.
6th century BC	Birth of Gautama Buddha.
400 AD	Java becomes sea link between India and China Javanese began carving stone statues and inscriptions.
768-814	Charlemagne rules from northeastern Spain north to the Baltic Sea and east into the Italian peninsula. He is crowned emperor in 800 AD.
800s	Mayans build large cities with tens of thousands of inhabitants under reign of King Samaratunga.
7th and centuries	8th Monks and holy men make pilgrimages to Java from Asian continent.
8th – centuries	13th Sailendra dynasty rules Sumatra and Java.
750 to 850	Golden Age of the Sailendra dynasty.
760	Probable beginning of Borobudur construction.
830	Probable completion of Borobudur construction.
700-900	People of Central Java enjoy a high level of cultural development, erecting many grand palaces and religious monuments.

- c.930** Javanese culture and political life move east, away from the lands around Borobudur.
- 13th – 14th centuries** Islam religion comes to Java.
- 1500-1800s** Borobudur is abandoned; volcanic ash fills the galleries; vegetation, including trees, takes root on the buried monument.
- 1709** According to the 18th century chronicle *Babad Tanah Jawi*, the rebel Ki Mas Dana makes a stand at Borobudur in a revolt against the Sultan of Mataram. The monument is besieged and the rebel defeated, brought before the king and sentenced to death.
- 1758** In the *Babad Mataram* (History of the Kingdom of Mataram), a story is told of the crown prince of the Sultanate of Yogyakarta, who disobeyed his father and journeyed to climb "the mountain of a thousand statues." The Sultan sent his men to bring him back, but he became ill and died as soon as he returned to the palace.
- 1811-1816** Java comes under British rule.
- 1814** Sir Thomas Stamford Bingley Raffles, the English Lieutenant Governor of Java, is informed of the existence of a huge monument called Chandi Borobudur. Raffles orders Dutch engineer officer H.C. Cornelius and two hundred villagers to fell trees, burn undergrowth and dig away the earth that covers the monument.
- 1815** **May 18th:** Raffles visits Borobudur.
- 1844** A bamboo teahouse is built on top of the central stupa of the monument.
- 1885** Panels that surround the hidden base of Borobudur are discovered by J.W. Ijzerman, Chairman of the Archeological Society in Yogyakarta, under the processional pathway that has been built around the monument. This discovery brings about renewed efforts to safeguard Borobudur from vandalism and natural threats.
- 1890-1891** The hidden panels are excavated and photographed, then the pathway is replaced.
- 1896** Dutch Colonial officials give the King of Siam eight wagon loads of statues and bas-reliefs from Borobudur, including five of the best Buddhas and two complete stone lions.
- 1911** A Dutch archeologist from Leiden University paints many of the reliefs with ochre to improve his photography. The yellow ochre remains, encouraging the growth of algae,

fungus, lichen and moss on the stones themselves.

1907-1911

The first major restoration project at Borobudur is begun by Theodor van Erp, a Dutch army engineer officer. He spends the first seven months excavating the grounds around the monument, finding missing Buddha heads and panel stones. Van Erp then dismantles and rebuilds the upper three circular terraces and crumbling stupas. His team cleans many of the sculptures of moss and lichen. However, he is unable to solve the drainage problem which is undercutting the monument. Within fifteen years, the gallery walls are sagging and the reliefs show signs of new cracks and deterioration.

1948

The Republic of Indonesia comes into existence.

1955

The Indonesian government asks UNESCO for advice on treating the weathered stones of Borobudur.

1968

The Indonesian government and the United Nations, working through UNESCO, launch a "Save Borobudur" campaign. A bold plan is proposed to dismantle and rebuild the lower terraces of Borobudur, clean and treat the story panels, and install a new drainage system to stop further erosion.

1971

The plan is approved by the Indonesian government and restoration committee.

1975

Restoration work begins.

1983

Feb. 23: Completion of the project is marked by an inaugural ceremony.

1991

Borobudur is included in UNESCO's World Heritage list.

Borobudur represents not only the creativity of Javanese geniuses but also one of the world's greatest constructional and artistic masterpieces. It represents the spirit of the Monastic movement in India as materialised in this structure, with influences from the eastern school of India and the architecture of Bengal. To understand the design elements, we need to focus our opticals on 14 of the following.

1. Buddhist temples and buildings of India
2. Stupas - Buddhist Memorial Monument
3. The Indian prototype- Sanchi Stupa
4. History of Stupas
5. Sanchi: Home of the World's Oldest Stupa
6. Buddhist temples
7. Features

8. Temple Gates
9. Borobudur: the Ultimate Buddhist Temple
10. Indian connect in the history of Borobudur
11. Why it was built
12. Shailendra dynasty
13. The Sailendras and indian buddhism
14. Architectural development in *stūpa* structure

1. Buddhist temples and buildings of India

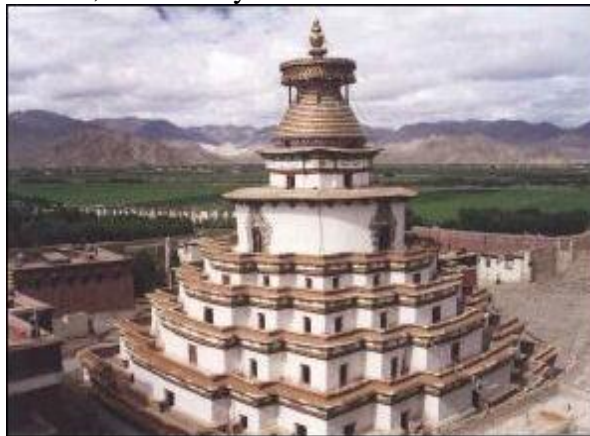
There are essentially three kinds of Buddhist structures:

- 1) stupas, bell-shaped structures that contain a holy relic or scripture;
- 2) temples, place of worship somewhat similar to a church; and
- 3) monasteries, which contain living quarters and meditation cells for monks.

Stupas are solid structures that typically cannot be entered and were constructed to contain sacred Buddhist relics that are hidden from view (and vandals) in containers buried at their core or in the walls. Temples have an open interior that may be entered and in which are displayed one or more cult images as a focus for worship. Although this simple distinction between Stupa and temple is useful, the distinction is not always clear. There are stupas that have the external form of a stupa but are like a temple with an inner corridor and multiple shrines.

Local temples are essentially self sufficient and rely on their own lands and support from the local lay community to keep going. Property belongs to the community. There is not a hierarchy of priest, bishops and archbishops like there is Christianity.

The word pagoda is sometimes used to collectively describe stupas and temples but generally refers to Japanese- and Chinese style towers inspired by South Asian stupa. The word pagoda is derived from *dagada*, the word used for relic chamber in Sri Lanka. Classic Japanese- and Chinese-style pagodas usually have multiple stories, each with a graceful, tiled Chinese-style roof, and a top roof capped by a spire. The base represents the earth, the spire symbolizes heaven, and the connecting piece symbolizing the cosmic axis, to the Way.



History of Buddhist Temples



Mahabodhi Temple Complex in Bodhgaya, where Buddha experienced his enlightenment

The word for temple in many languages is the same as cave. Many early Buddhist temples were "artificial caves" that attempted to recreate the atmosphere of Buddhist caves in northern India. Describing what they were probably like, the historian Paul Strachen wrote: In his book *Pagan: Art and Architecture of Old Burma* , "the now spartan brick *gu* [temple]" was "cluttered with regal objects and requisites, a clamor of activity as food offerings were shuttled from the kitchens down passageways crowded with chanting devotees, brightly colored wall paintings, gilded furnishings and flapping banners and hangings...the usual plain, seated Buddha image, found in the deserted temples of Pagan today, would have been bathed, perfumed and dresses with the finest and most costly garments."

The architecture of Buddhist temples is influenced by the architecture of country in which they are found and various traditions of Buddhist architecture. Japanese pagodas, for example, have unique Japanese features that are modeled after Chinese-style pagodas, which in turn were modeled after Indian stupas.

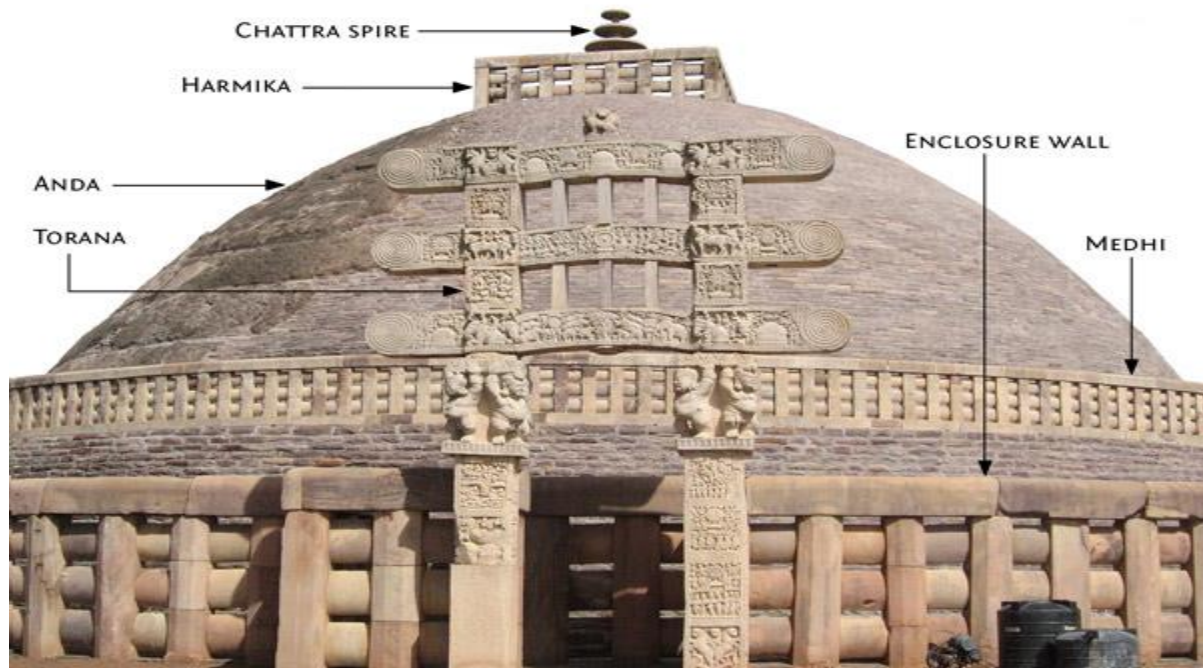
Because ancient wood temples were often destroyed by fire, temples today are usually made of brick and stone with brass and iron ornaments. Chinese pagodas were often built to commemorate important leaders or event or house important artifacts or documents.

Many Buddhist temples are located in the forests and mountains. There are two reason for their remote locations: first, mountains and forest have always been associated with spiritual purity, and second, Buddhist monks were often persecuted and remote location gave them some safety. In China, Japan and Thailand temples are often in the middle of town.

2. STUPAS -Buddhist Memorial Monument

The first and most fundamental of Buddhist architectural monuments, the **Buddhist stupa** serves as a marker for a sacred space, a **symbolic representation of the Buddha's burial mound**.

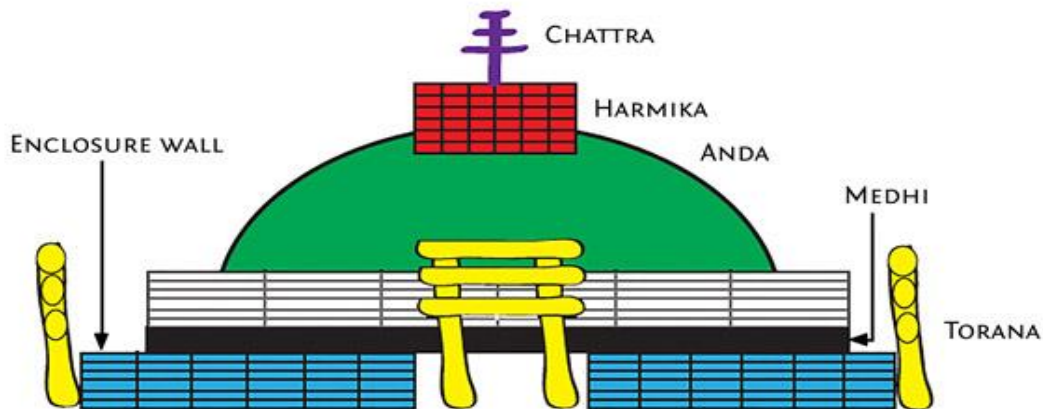
To understand the stupas and pagodas that one will see throughout Asia—including those in Angkor, Cambodia, Thailand, Myanmar (Burma), Indonesia, China, Japan—it is helpful to first appreciate the design of the earliest stupas, which can be found in India and Sri Lanka. These stupas exerted great influence on later designs.



Great Stupa, Sanchi, India, forerunner for Bodobodur

3. The Indian Prototype: Sanchi Stupa

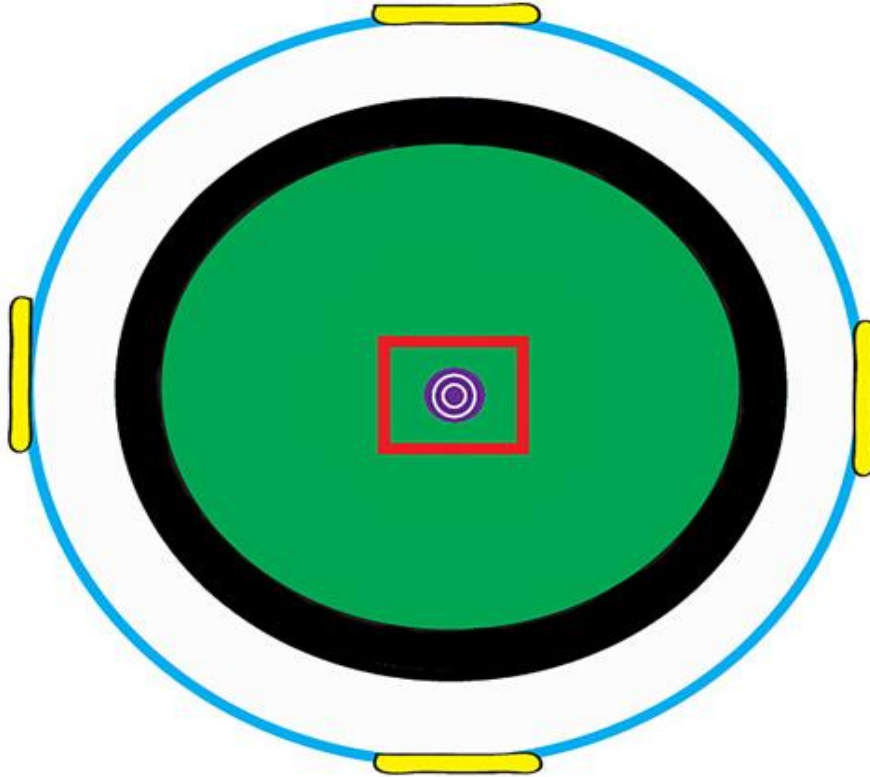
The Great Stupa at Sanchi, in central India, is one of the earliest stupas; it served as an architectural prototype for all others that followed. The world-famous stupa — first constructed by the 3rd century BCE Mauryan ruler Ashoka in brick (the same material as those of Sri Lanka) — was later expanded to twice its original size in stone.



Elevation and plan. Great Stupa, Sanchi, India.

In the most basic sense, as an architectural representation of a sacred burial site, a stupa—no matter where it is located in the world or when it was built—has three fundamental features.

- **A hemispherical mound (anda).** The anda's domed shape (green highlights) recalls a mound of dirt that was used to cover the Buddha's remains. As you might expect, it has a solid core and cannot be entered. Consistent with their symbolic associations, the earliest stupas contained actual relics of the Buddha; the relic chamber, buried deep inside the anda, is called



the

tabena. Over time, this hemispherical mound has taken on an even grander symbolic association: the mountain home of the gods at the center of the universe.

- **A square railing (harmika).** The harmika (red highlights) is inspired by a square railing or fence that surrounded the mound of dirt, marking it as a sacred burial site.
- **A central pillar supporting a triple-umbrella form (chattra).** The chattra, in turn, was derived from umbrellas that were placed over the mound to protect it from the elements (purple highlights). Just as the anda's symbolic value expanded over time, the central pillar that holds the umbrellas has come to represent the pivot of the universe, the axis mundi along which the divine descends from heaven and becomes accessible to humanity. And the three circular umbrella-like disks represent the three Jewels, or Triantha, of Buddhism, which are the keys to a true understanding of the faith: (a) Buddha; (b) dharma (Buddhist teachings or religious law); and (c) sangha (monastic community).

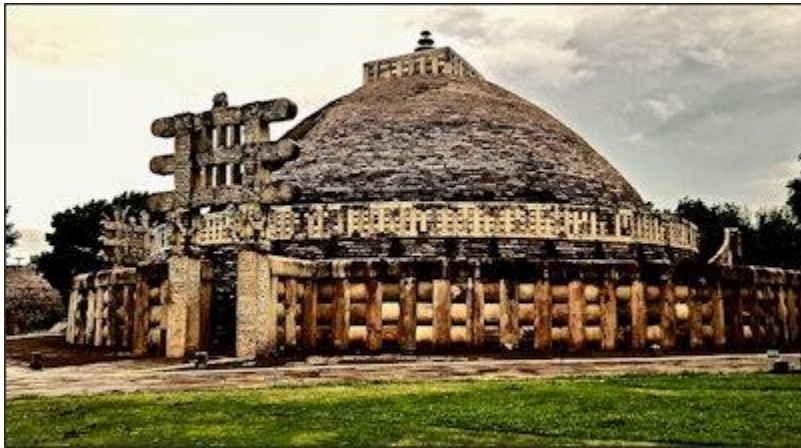
Around these three core building blocks were added secondary features.

- **Enclosure wall with decorated gateways (toranas) at the cardinal directions.** The wall — with its trademark three horizontal stone bars (in the top image) — surrounds the entire structure. The wall is marked in light blue highlights and the toranas in yellow.
- **A circular terrace (medhi).** The terrace—surrounded by a similar three-bar railing—supports the anda and raises it off the ground (black highlights); it likely served as a platform for ritual circumambulation.

4. History of Stupas

After Buddha's death his relics were divided and a number of stupas were built to house them. Although no ancient stupas remain the relics they housed are believed to have been saved and placed in other stupas. Many of the oldest stupas date back to the period of Buddhist expansions during the rule of King Ashoka (268-239 B.C.) The objects inside stupas are often unknown. A gold reliquary excavated from a 2nd century B.C. stupa in Bimaran Afghanistan was decorated with images of Buddha and Hindu gods. The reliquary is believed to have contained the ashes of a revered saint or some object he touched.

Stupa developed in India in the 3rd century B.C. and were general objects of worship for Buddhists before the formation of Buddha imagery, sculpture and painting. Sanchi stupa, built near present-day Bhopal, India, is the oldest. It is shaped like a half sphere and built to allow worship around it. The functions of Buddhist stupas were also diffused, and shapes show a variety of styles in each cultural area.



Great Stupa in Sanchi

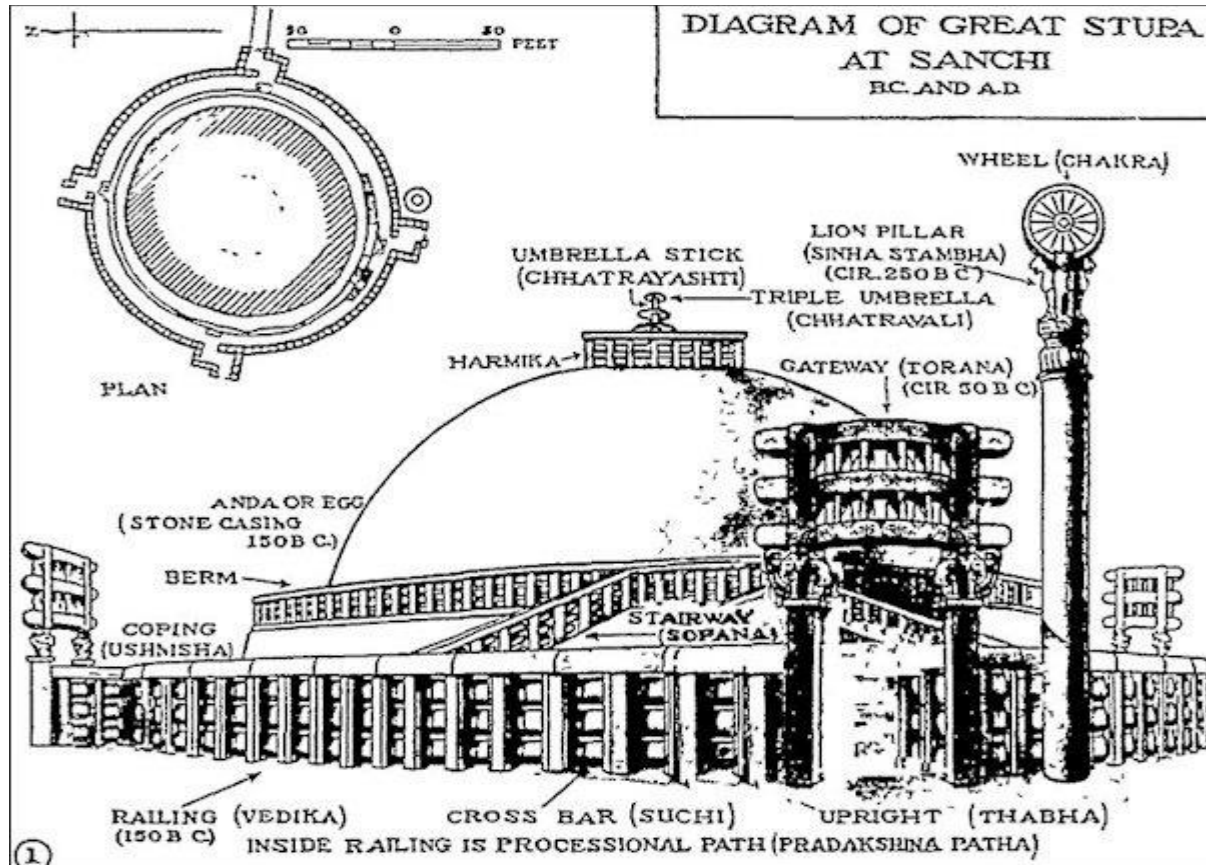
Stupa is a Sanskrit word that literally means “to heap” or “to pile up.” Some scholars believe that stupas predated Buddhism and originally were mounds of dirt or rocks built to honor dead kings. Later, these scholars say, the Buddha imbued them with spiritual meaning. Sylvia Somerville wrote in her book on stupas: “This explanation runs counter to Buddhist tradition, which maintains that because the stupa conveys enlightened qualities, it could only have been revealed by the mind of enlightenment. ...In fact, some stupas, such as the Swayambhunath Stupa in Nepal, are believed to be self-arising expressions of enlightenment.”

Stupas are the oldest Buddhist religious monuments. The first Buddhist ones were simple mounds of mud or clay built to enclose relics of Buddha. In the third century B.C., after his conversion to Buddhism, Emperor Asoka ordered the original stupas opened and the remains were distributed among the several thousand stupas he had built. Stupas at the eight places associated with the life of the Buddha were important before Ashoka and continued to after his death. Over time, stupas changed from being funerary monuments to being objects of veneration. As this occurred they also changed in appearance changed also.

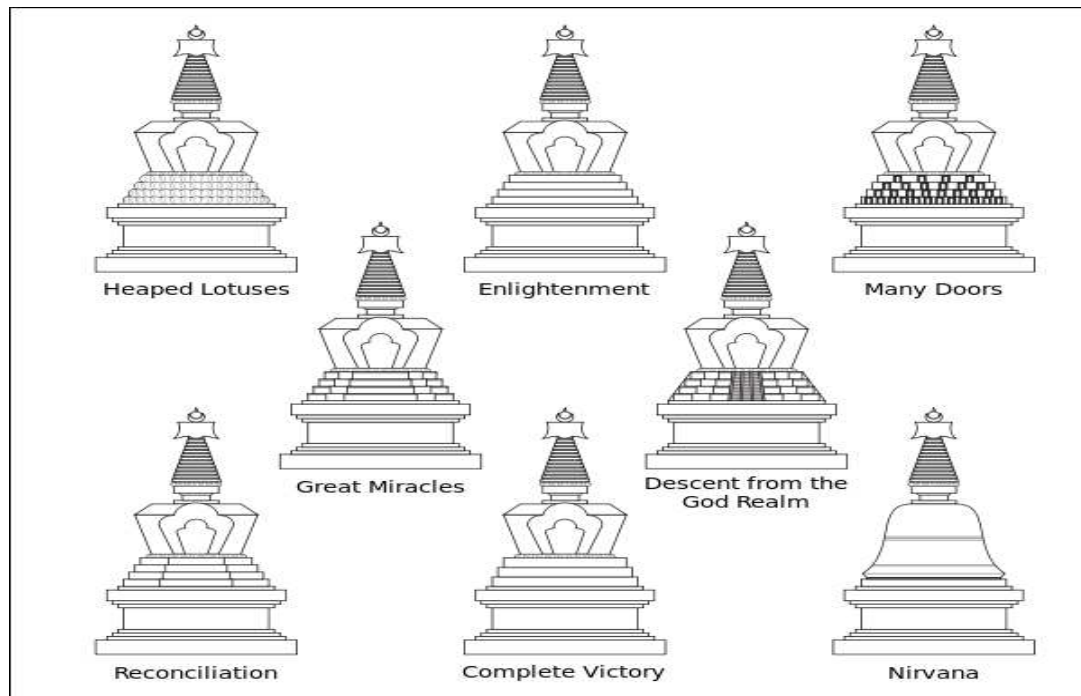
Over the centuries many old stupas became pilgrimage sites. Famous ones became the center of complex ceremonial areas. They were often surrounded by a railing with gateways, through which pilgrims entered the ceremonial ground. Stone lions guarded the entrances. Outside vendors sold food and offerings to pilgrims.

5.Sanchi: Home of the World's Oldest Stupa

Sanchi (30 miles from Bhopal) is a pilgrimage site that attracts worshipers from all over the world who come to see Buddhist art and architecture that dates back to the third century B.C. Designated a UNESCO World Heritage Site in 1989 and regarded as one of the most remarkable archaeological complexes in India, it contains monasteries and the world's oldest stupa.



"Sanchi is the oldest extant Buddhist sanctuary. Although Buddha never visited the site during any of his former lives or during his earthly existence, the religious nature of this shrine is obvious. The chamber of relics of Stupa 1 contained the remains of Shariputra, a disciple of Shakyamuni who died six months before his master; he is especially venerated by the occupants of the 'small vehicle' or Hinayana. Having remained a principal centre of Buddhism in medieval India following the spread of Hinduism, Sanchi bears unique witness as a major Buddhist sanctuary to the period from the 3rd century BC to the 1st century AD."



Eight Great Stupas

6. Buddhist Temples

A temple is a place of worship as opposed to a shrine, which is a sacred place for praying. It generally contains an image of Buddha and has a place where Buddhists practice devotional activities. Temples attract large crowds during festivals or if they are famous but otherwise a fairly quiet. They are often sought as places for quiet meditation, with most acts of worship and devotion being done in front of an altar at home.

Buddhist temples are generally a cluster of buildings---whose number and size depends on the size of the temple---situated in an enclosed area. Large temples have several halls, where people can pray, and living quarters for monks. Smaller ones have a single hall, a house for a resident monk and a bell. Some have cemeteries.

Temples can be several stories high and often have steeply sloped roofs are often supported by elaborately-decorated and colorfully-painted eaves and brackets. The main shrines often contain a Buddha statue, boxes of sacred scriptures, alters with lit candles, burning incense and other offerings as well as images of Buddhas, Bodhisattvas and devas. The central images depends on the sect.

Buddhist temples come in many shapes and sizes. Pagodas found in China and Japan are perhaps the best known. Stupas, stone structure built over Buddhist scriptures or relics of the Buddha or famous holy men, are found throughout the Buddhist world. . Buddhist temples are designed to symbolise the five elements: 1) Fire,

2) Air,

3) Earth, symbolised by the square base,

4) Water, and

5)Wisdom, symbolised by the pinnacle at the top of the temple.

All Buddhist temples contain an image or a statue of Buddha. People sometimes donate money to temples and have their names hung on special wooden plaques attached to lanterns of the temple. Generally, the larger the donation, the larger the plaque. Buddha never viewed himself as an object

of worship. He probably would not have been very pleased to see his birthday as the object of veneration and merit so crassly exchanged for money.

Many temples are tourist attractions and outing destinations for local people. Souvenir amulets and other offerings are sold in little shops or booths; the names of large contributors are placed in special boxes; and priests are available to perform special rites.



Angkor Wat, a Hindu-Buddhist temple

7.Features of Buddhist Temples

Buddhist temples usually contain numerous Buddha statues. The central Buddha images are often surrounded by burning incense sticks and offerings of fruit and flowers. Some contain the ashes or bone reliquaries of popular holy man. Many Buddhist temples face south and sometimes to the east, but never to the north and west which are regarded as unlucky directions according to Chinese feng shui. Many temples are entered through the left door and exited through the right.

The main hall is usually found at the center of the temple grounds. Inside are images of the Buddha, other Buddhist images, altars and space for monks and worshipers. The main hall is sometimes connected to a lecture hall, where monks gather to study and chant sutras.. Other buildings include a the sutra depositor, a library or place where Buddhist scripture are kept; living, sleeping, and eating areas for monks, and offices. Large temples often have special halls, where treasures are kept and displayed.

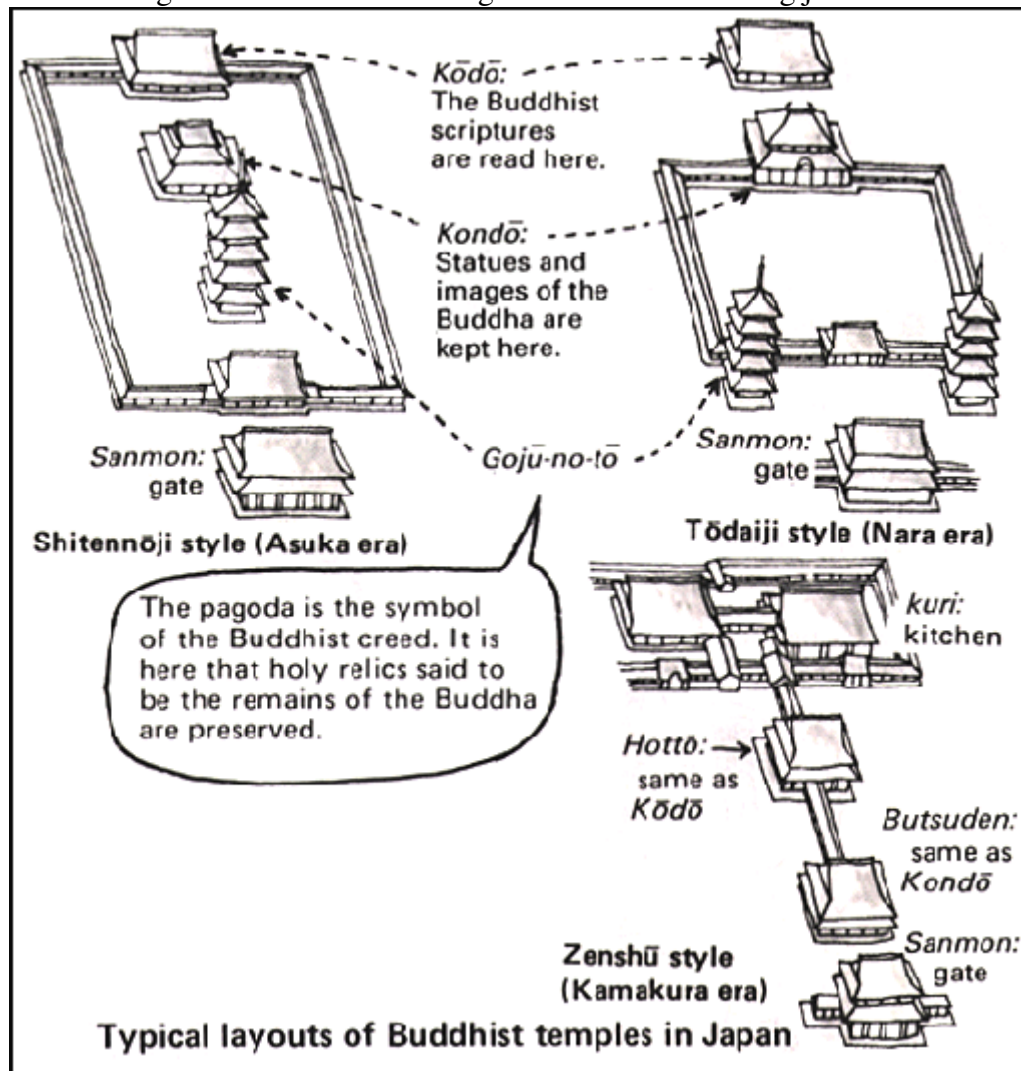
Some temples have shrines for making prayers to the dead filled with funerary plaques with photographs of dead relatives. The photographs are often of deceased people whose funeral ceremony was performed at the temple. Some temple feature sets of wooden plaques with the names of large contributors and other sets with afterlife names of deceased people. In the old days the afterlife names were only given only to Buddhist priests but now they are given to lay people who paid the right price and now in some places have become a kind of ranking system in the after life based in how much one has contributed..

Many Buddhist temples contain large bells, which are rung during the New Year and to mark other occasions, and cemeteries. The pathway to the temples is often lined with stone or paper lanterns donated by worshipers, or strung with prayer flags. Many temples are filled with small shops selling religious items.

8. Buddhist Temple Gates

Buddhist temples usually have outer gates and inner gates protected by statues or paintings of beasts, fierce gods, or warriors that ward off evil spirits. The gateways are composed of wood, stone, bronze or even concrete. The beasts include Chinese lions and Korean dogs. Fierce guardian gods and warriors on the outer gate sometime have lighting bolts coming out of their nostrils and a serrated swords in their hands. Their duty is to keep demons and evil spirits out of the temple area.

The inner gate at the antechamber to the temple complex is often guarded by four guardian kings, representing the four cardinal directions. The king in the north holds a pagoda representing earth, heaven and cosmic axis. The king in the east holds a sword with the power to evoke a black wind that produces tens of thousands of spears and golden serpents. The king in the west possesses lute. And the king in the south holds a dragon and a wish-fulfilling jewel.



9. Borobudur: the Ultimate Buddhist Temple

Borobudur, was built during over a half century by the Sailendra Dynasty after Mahayana Buddhism was introduced from the Srivijaya Kingdom of South Sumatra in the early half of the 8th

century AD. Many Buddhism images and reliefs in Borobudur were made referencing Gandavyuha and Vajrayana/Esoteric Buddhism from Sri Lanka and East India.

The stepped pyramid shape without an inner space as found at Borobudur is found in neither India nor Sri Lanka. And there are no stupas with that similar shape in Southeast Asia prior to Borobudur. Similar shaped monuments are found only in South Sumatra etc. This type of monument, originating from the mountain religions of Megalithic culture that predated the introduction of Buddhism continued through the Historical Age. Borobudur can be seen as a massive monument of this origin, decorated in Buddhism style.



Borobudur in Java

Borobudur is a step pyramid, built around a natural hill, comprised of a broad platforms topped by five walled rectangular terraces, and they in turn are topped by three round terraces. Each terraces is outlined with ornaments and statues and the walls are decorated with bas reliefs. More than two million blocks of volcanic stone were carved during its construction. Pilgrims have traditionally walked around the monument in a clockwise manner moving up each of the five levels, and in process covering five kilometers.

Unlike most temples, Borobudur did not have actual spaces for worship. Instead it has an extensive system of corridors and stairways, which are thought to have been a place for Buddhist ceremonies. Borobudur also has six square courtyards, three circular ones, and a main courtyard within a stupa at the temple's peak. The entire structure is formed in the shape of a giant twirling staircase, a style of architecture from prehistoric Indonesia.

Borobudur is a three-dimensional model of the Mahayana Buddhist universe. The climb to the top of the temple is intended to illustrate the path an individual must take to reach enlightenment. At the main entrance on the east side, visitors can not even see the top. Scholars believed this was intentional. At the top was the ideal of Buddhist perfection, the World of Formlessness. The architecture and stonework of this temple has no equal. And it was built without using any kind of cement or mortar!

Borobudur resembles a giant stupa, but seen from above it forms a mandala. The great stupa at the top of the temple sits 40 meters above the ground. This main dome is surrounded by 72 Buddha statues seated inside perforated stupa. Five closed square galleries, three open circular inner terraces, and a concentric scheme express the universe geometrically. At the center of the top of the temple is a beautifully shaped stupa which is surrounded by three circles of smaller stupas that have the same shape. There are 72 of these, each with a Buddha statue inside. Touching them is supposed to bring good luck. Unfortunately many had their heads lopped off by 19th century explorers looking for souvenirs. The 72 small latticed stupas look like perforated stone bells. The temple is decorated with stone carvings in bas-relief representing images from the life of Buddha—the largest and most complete ensemble of Buddhist reliefs in the world.,

Borobudur is both a shrine to the Lord Buddha and a place for Buddhist pilgrimage. The ten levels of the temple symbolize the three divisions of the religion's cosmic system. As visitors begin their journey at the base of the temple, they make their way to the top of the monument through the three levels of Buddhist cosmology, Kamadhatu (the world of desire), Rupadhatu (the world of forms) and Arupadhatu (the world of formlessness). As visitors walk to the top the monument guides the pilgrims past 1,460 narrative relief panels on the wall and the balustrades.



Borobudur, northwest view

10. Indian connect in History of Borobudur

Borobudur was built by the Sailendra Dynasty kings in the 8th and 9th centuries, around that time that Charlemagne ruled Europe. When it was completed an epic poet from Ceylon wrote: "Thus are the Buddha incomprehensible, and incomprehensible is the nature of the Buddhas, and incomprehensible is the reward of those who have faith in the incomprehensible."

According to UNESCO: Founded by a king of the Saliendra dynasty, Borobudur was built to honour the glory of both the Buddha and its founder, a true king Bodhisattva. This colossal temple was built between AD 750 and 842: 300 years before Cambodia's Angkor Wat, 400 years before work had begun on the great European cathedrals. Little is known about its early history except that a huge army of workers worked in the tropical heat to shift and carve the 60,000 square meters of stone.

11. Why it was built remains a mystery. There are no written records on the subject. No ancient cities have been found nearby. There is no clear sanctuary as a place of worship and no room to store icons. Many historians and archeologists believe that Borobudur is not a temple but rather a kind of advertisement for Buddhism. According to an expert on the subject, John Mikic, Borobudur was built to “to engage the mind” and to “give a visual aid for teaching a gentle philosophy of life.”

Borobudur was an active religious center until the 10th century when it was abandoned for reasons that are not clear. At the beginning of the 11th century AD, because of the political situation in Central Java, divine monuments in that area, including the Borobudur Temple became completely neglected and given over to decay. According to UNESCO: the Stylistically the art of Borobudur is a tributary of Indian influences (Gupta and post-Gupta styles).

12. The Shailendra dynasty (IAST: *Śailēndra* derived from Sanskrit combined words *Śaila* and *Indra*, meaning "King of the Mountain", was the name of a notable Indianised dynasty that emerged in 8th-century Java, whose reign signified a cultural renaissance in the region. The Shailendras were active promoters of Mahayana Buddhism with the glimpses of Hinduism, and covered the Kedu Plain of Central Java with Buddhist monuments, one of which is the colossal stupa of Borobudur. The Shailendras are considered to have been a thalassocracy and ruled vast swathes of maritime Southeast Asia, however they also relied on agricultural pursuits, by way of intensive rice cultivation on the Kedu Plain of Central Java. The dynasty appeared to be the ruling family of both the Medang Kingdom of Central Java, for some period, and the Srivijaya Kingdom in Sumatra.

The inscriptions created by Shailendras use three languages; Old Malay, Old Javanese, and Sanskrit - written either in the Kawi alphabet, or pre-Nāgarī script. The use of Old Malay has sparked speculation of a Sumatran origin, or Srivijayan connection of this family. On the other hand, the use of Old Javanese suggests their firm political establishment on Java. The use of Sanskrit usually indicates the official nature, and/or religious significance, of the event described in any given inscription. After 824, there are no more references to the Shailendra house in the Javanese epigraphic record. Around 860 the name re-appears in the Nalanda inscription in India. According to the text, the king Devapaladeva of Bengala (Pala Empire) had granted 'Balaputra, the king of Suvarna-dvipa' (Sumatra) the revenues of 5 villages to a Buddhist monastery near Bodh Gaya. Balaputra was styled a descendant from the Shailendra dynasty and grandson of the king of Java. From Sumatra, the Shailendras also maintained overseas relations with the Chola kingdom in Southern India, as shown by several south Indian inscriptions. An 11th-century inscription mentioned the grant of revenues to a local Buddhist sanctuary, built in 1005 by the king of the Srivijaya. In spite the relations were initially fairly cordial, hostilities had broken out in 1025.

Rajendra Chola I the Emperor of the Chola dynasty conquered some territories of the Shailendra Dynasty in the 11th century. The devastation caused by Chola invasion of Srivijaya in 1025, marked the end of Shailendra family as the ruling dynasty in Sumatra. The last king of Shailendra dynasty — the Maharaja Sangrama Vijayatunggavarman — was imprisoned and taken as hostage. Nevertheless, amity was re-established between the two states, before the end of the 11th century. In 1090 a new charter was granted to the old Buddhist sanctuary, it is the last known inscription with a reference to the Shailendras. With the absence of legitimate successor, Shailendra dynasty seems ceased to rule. Other family within Srivijaya mandala took over the throne

13. The Sailendras and Indian Buddhism The rise of the Pāla dynasty in the 8th century AD brought paradigm shifts in Buddhist text, ritual, and sacred architecture that sent cultural waves across the expanding maritime and land trade routes of Asia. The architectural concepts travelled in the connected Buddhist world between the Ganges valley and Java. A movement of architectural ideas can be seen from studying the corpus of the temples in the Pāla (750–1214 AD) and Śailendra (775–1090 AD) domains of India and Indonesia. This led to a paradigm shift in the design of a *stūpa* architecture at Kesariya (Bihar) that emphasizes the arrangement of deities in the circular maṇḍalic fashion with a certain numerological configuration of life-size Buddha figures placed in the external niches of the monument. This new architectural concept possibly played a key role in the development of a more elaborate structure of Borobudur in Java. The architectural linkages emerge stronger with the central fivefold structure of the temples of the Pālas and Śailendras. In order to make the essential comparison, a quick method of drawing architectural plans is developed that is based on the basic measurements and not archaeological plans.



14. Architectural development in *stūpa* structure: The main archaeological sites of the middle and lower Ganges plain were recorded in the 19th century by Alexander Cunningham, following the travel accounts of the Chinese scholar-pilgrims Faxian (c. 337–422) and Xuanzang (c. 602–64). Northeast India contained not only early Buddhist *stūpas* and monastic complexes, but also a range of *stūpa* structures that advanced from the traditional hemispherical *stūpa* of Sanchi, through the cruciform, terraced *stūpa* structure of Nandangarh to the elaborate *stūpa-maṇḍala* of Kesariya. Most of the Pāla structures that may have served as a model for Central Javanese temples are in dilapidated state today, making it difficult to track the architectural borrowings.

But since 1998, the ASI excavations of some parts of Kesariya Stupa in Bihar, India have uncovered striking design similarities with the massive Central Javanese *stūpa* of Borobudur, whose stepped pyramid structure and maṇḍalic arrangement of deities in circular

This article demonstrates how the spread of Buddhism through maritime routes was closely linked with commercial activities, and how these networks were different from overland routes. It also provides a survey on early India–China networks and introduces the activities of Buddhist monks and the importance of Śrīvijayan rulers and their contribution to the maritime spread of Buddhism. In the second part, the article discusses the role of Sri Lanka and the Bay of Bengal networks in the maritime transmission of Buddhism. It shows that Buddhism spread in various forms from one cultural zone of Asia to another. It also demonstrates that the transmission of Buddhist doctrines, images and texts was a complex process that involved itinerant monks, traders and travellers.¹

The Buddhas of Borobudur, for example, resemble in some ways the stone Buddhas of the Pāla Buddhist monastery of Ratnagiri in Odisha. There are unresolved debates about the origin of the Śailendra dynasty⁶⁹ and their sudden rise to power in Central Java in c. 750–1090 that coincided with a massive surge in temple construction that included Borobudur (c. 760–830) and Candi Kalasan.

The construction dates of Buddhist monuments of the Śailendras and the Pālas are close and they have many design features in common. We have already seen how the design ideas for Buddhist art and architecture were circulating from the 5th century. It was the network of monks, artists, and craftsmen that made possible the construction of the huge monuments and ritual centres.

The first record of the association of the Śailendras and Pāla India is dated to the Kelurak inscription of c. 778 and the last inscription found in India referring to Śailendras is the smaller Leiden copperplate inscription of c. 1090. By then, the ties between the two states had been sustained for more than three centuries.²

From an architectural point of view, a monument like Borobudur can only have been the culmination of a long period of artistic gestation. Wolff Schoemaker (1924: 22) suggests three to four centuries of an autochthonous gestation period and argues about the lack of an autonomous development of sculpture in Java. Given the Śailendra-Pāla contacts and the construction of the earlier Śaiva temples on the Dieng plateau, it is not beyond the bounds of possibility in this connected Buddhist world that a breakthrough development in the Pāla domain, which transformed a *stūpa* into a *maṇḍala* of life-size Buddhas, was enhanced with narrative reliefs at Somapura and Vikramaśīla and reached its ultimate form of expression on Javanese soil. Jordaan has argued that the Śailendras built their monuments in direct cooperation with Indian architects and craftsmen. This seems possible at the high conceptual level of architectural design, but at the level of relief carving and highly innovative *stūpikā* design there is no trace of non-Javanese influences.³



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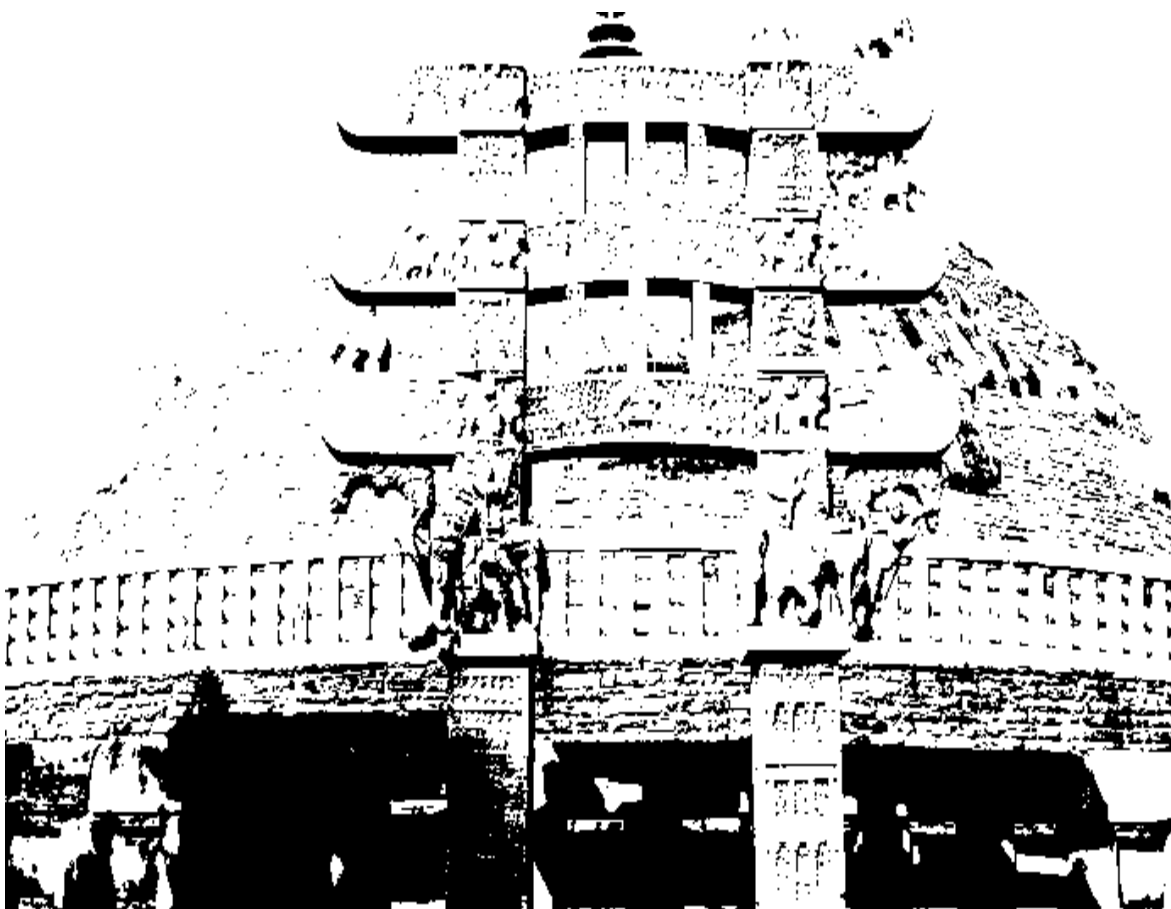
CHAPTER 4

SACRED SPACE AND SYMBOLIC FORM OF A STUPA WITH REFERENCE TO THE VEDIKA OR RAILING

Devotees approach the Stupa or temple from the east and walk around its entirety—an activity known as circumambulation. They begin walking along the large plinth of the temple's base, moving in a clockwise direction starting from the left of the stairs. Sculpted friezes along the plinth depict images of daily life, love, and war and many recall historical events of the past period.

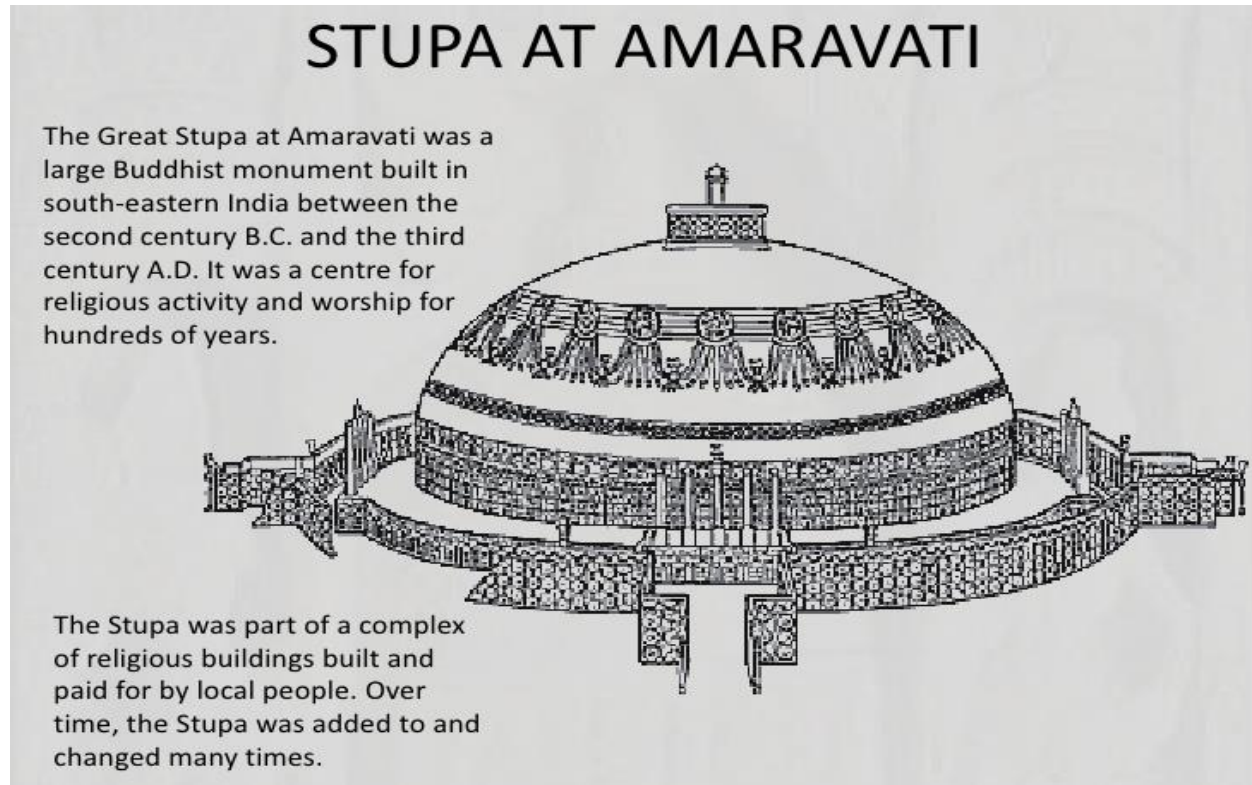
Railing or railings may refer to:

- Guard rail, a structure blocking an area from access
- Handrail, a structure designed to provide support on or near a staircase
- Grab bar, a structure to provide support elsewhere, for instance in a bathroom or kitchen
- Insufflation (medicine), the act of inhaling a substance, generally a drug
- "Railing," a song by Roni Size / Reprazent on the album *New Forms*



In its most fundamental essence, the stupa is a funerary mound erected over the remains of the Buddha . Its antecedents can be traced to primitive burial cists, which evolved in the Buddhist and Jain traditions into places of veneration . In its earliest meanings, the Stupa represented the Buddha and his Parinirvana (“complete extinction”) and, as we shall explore, deeper symbolism synonymous with concurrent traditions.

This paper aims to analyze the ‘physical and metaphysical’ aspects of the stupa . It intends to achieve this by studying some of its most celebrated versions –namely Sanchi, Bharhut and Amravati.

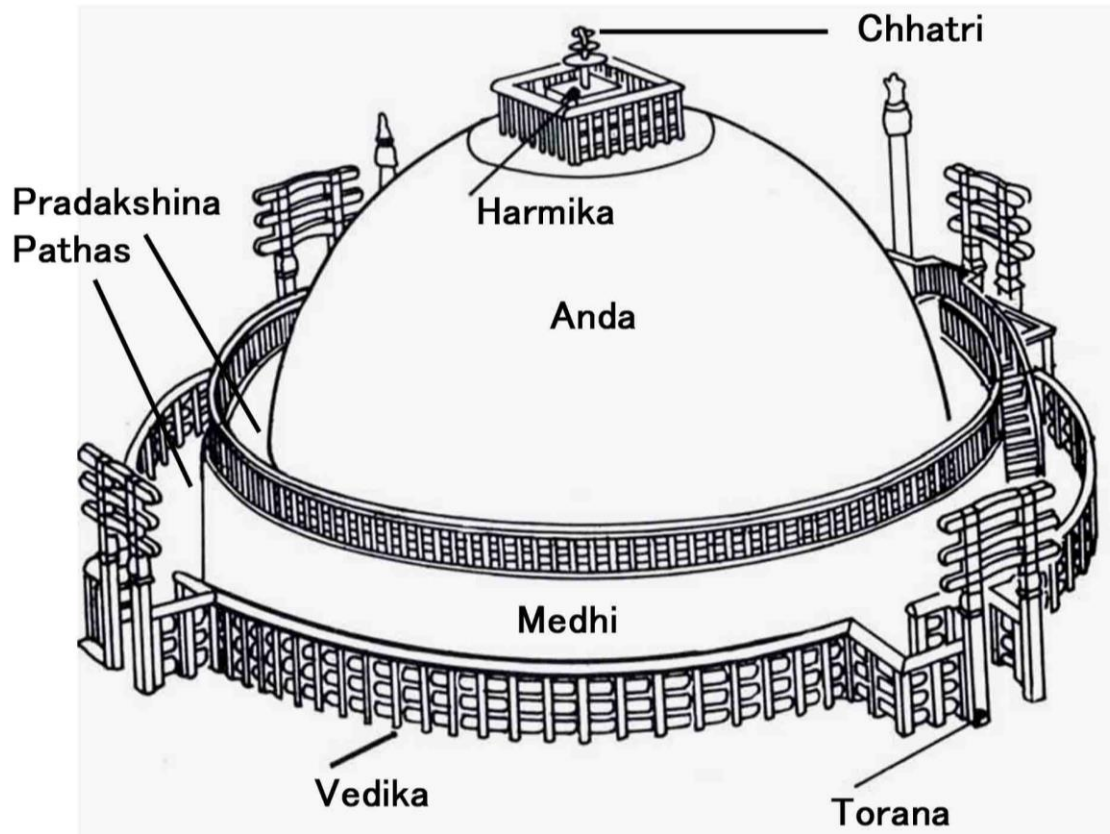


Before addressing the question, I would like to digress into briefly discussing the historical background of the Buddhist religion. The focus will primarily be on two significant epochs/ forces that pre-date these stupas, which I believe, were instrumental in shaping them. The first is the parinirvana of Buddha and the second, the imperial impetus of the great mauryan emperor Asoka. Therafter the paper will focus on decoding the architectural template of the stupa and its significance, followed by the importance and meaning of the decorative motifs.

In the 8th century BC, the gangetic plain witnessed great religious and metaphysical ferment. Philosophical speculation gained currency and salvation from mortality became the greatest goal of life. The profoundest expression of this age is found in the Upanishads, which presented a world view in stark contrast to that of the Vedas . Out of this flux emerged other heterodox cults, opposed to vedic supremacy and dogma, chief amongst which were Buddhism and Jainism.

Buddhism was founded by a prince of the Sakya clan , who renounced the world in spiritual quest. After six years of futile austerities, he reflected in calm contemplation, whereupon he attained enlightenment and became the “awakened one”. His life thereafter was that of a mendicant teacher and he preached his doctrine across the length and breadth of madhyadesha . Simplicity, inclusiveness and the compelling personality of the Buddha presented an adoptable alternative to the increasingly complex world of the Vedas.

Plan of a Stupa with two pradakshinapathas

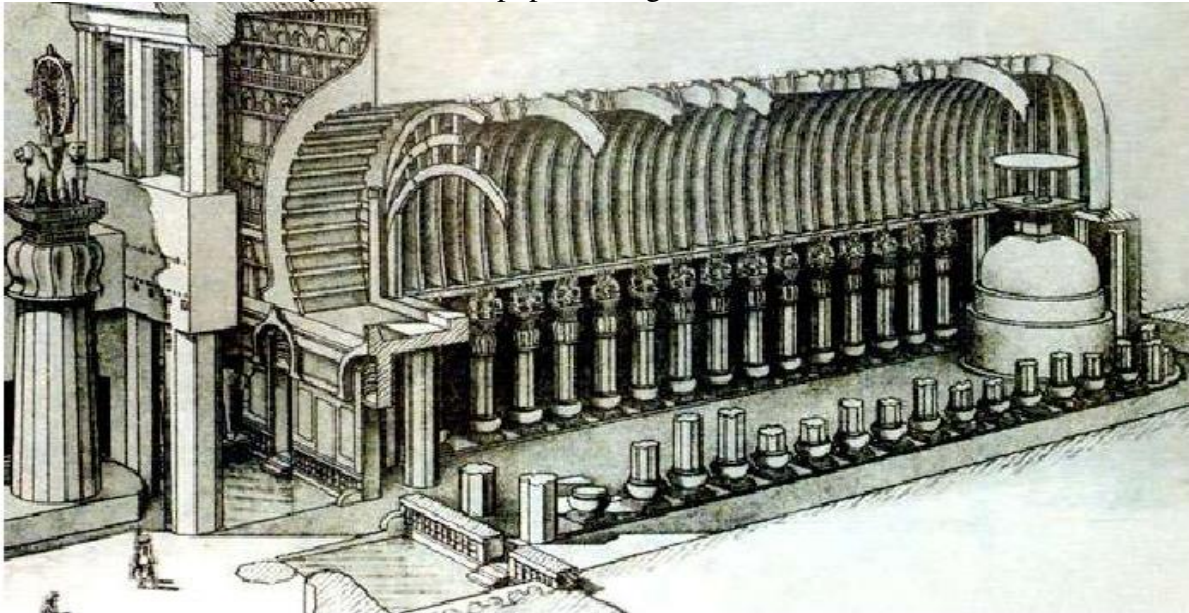


While Buddhism blossomed under the inspiring stewardship of the Buddha, his impending death, in my view, presented a classic case of crisis of leadership . In his lifetime, the Buddha embodied his doctrines, his persuasive presence was central to the propagation of the religion. His absence and the lack of a chosen successor would leave a gaping void, a concern possibly voiced in his pre-mortem interactions with his disciple, Ananda and the sangha. At this juncture the Buddha appointed Dharma his successor. However in doing so, the Buddha cleaved apart what had been a powerful conjoined entity – his rupakaya (physical form) and his dharmakaya (doctrinal corpus)- the driving force behind his missionary impetus. Even his attempt to imbue it with the force of his personality, “Anyone who sees the dharma sees the Buddha” could not match up to the potency of the whole he represented. It lacked the facileness of what his presence commanded for dharma was esoteric , seen through the eyes of wisdom, prajnacaksu . Whereas his mortal presence, seen through mamsacaksu - ordinary eyes of flesh had an essential criticality of its own . In this context the enshrinement of the relics makes imminent sense – it is an act of perpetuation, of retaining the rupakaya of Buddha which could “evoke or make real the absent Buddha in nirvana”

A powerful force that leapfrogged the religion onto the global worldstage came in the form of the patronage of the mauryan emperor Asoka (272-234 BC) . The emperor’s dramatic conversion to Buddhism and his personal zeal saw the reallocation of the relics across the expanse of his empire. The emperor was instrumental in creating a dharmalogical ecosystem where the stupas and edicts on pillars and rock faces worked in unison to evoke both kayas of the Buddha. The edicts were an

imperial concretization of the idea of merit, virtue, righteousness . His messages in their simplicity and mass appeal, were imbued with the power of his personal endorsement . This combination of unprecedented scale and imperial espousal set the stage for the incorporation of the dharmakaya in the meaning of the stupa .

The redistribution of the relics, not only provided unprecedented visibility, it furthered contact with local cultures and indigenous cults, encouraging cross-fertilization, absorption and assimilation of diverse ideas and themes, all of which impacted the construct of the Stupas. Ashoka's focus also tweaked the economic model of the sangha and gave another dimension to its symbiotic relationship with the lay community. It defined a shift from dependency for subsistence to a large scale contribution towards construction of physical establishments. This set the stage for a stupa's ascendance from a funerary emblem to a popular religious monument.



Section in perspective of rock-cut chaitya hall at karli

In its essential construct the stupa consists of a focal earthen mound, bearing relics and an axial pillar in its recess. The enclosed upper extremity of this central shaft ends in capping finials which extend upwards and outwards beyond the confines of the dome. The horizontal boundary of the structure is marked by a railing (vedika) constructed such that it creates a circumambulatory path (pradakshina path) around the dome.

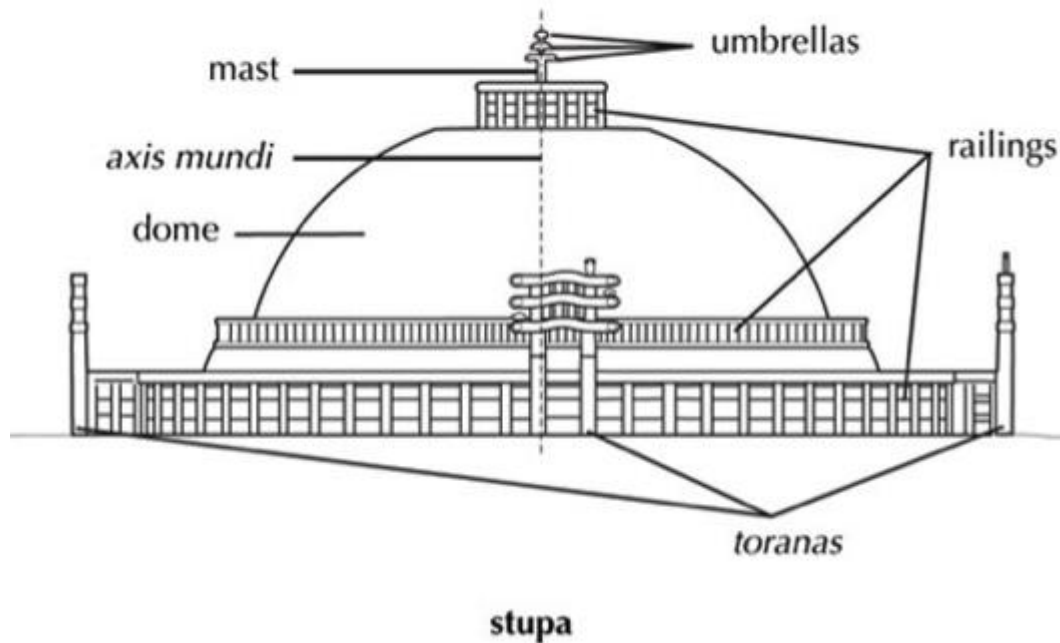
In analyzing the architectural elements and their symbolism, I will take an outside-in approach, starting at its outermost bound of the stupa



Fig 2: Vedika and Torana Sanchi Stupa 1 ©Kanchan Tuli 2010

The railing (Vedika), the threshold of the stupa encloses the precincts. In its construction, it is based on wooden prototypes, forming a “net” of pillars and beams . It opens out in four diametrically placed gateways (Toranas), which, in some instances, are monumental and elaborately ornate. Symbolically the vedika executes a delineation of sacred space, it is “the frontier that distinguishes and opposes the two worlds “, the sacred and the profane, “and at the same time the paradoxical place where those worlds communicate, where passage from the profane to the sacred world becomes possible” . In this consecration of sacred, ordered space, there is an emulation of primal creation .The carving out of a space where rta (order) and vrata (prescribed function) prevailed and the unveiling of the central axis- the fulcrum of orientation. The four gateways positioned in relation to the four quarters of the universe are concordant with this cosmicized plan .

Containment finds significance in the vedic corpus, and, antedates it, as is evident from depictions in Indus valley seals .This decryption at the emblematic level begs an obvious question. What would compel a heterodox religion to attach itself with conventional symbolism? The dichotomy is explicable if one views the stupa as a product of its times. A time when structural aspects were based not on functional, utilitarian foundations but on deeply spiritual conceptions. The act of creation, as Coomarswamy has famously said, was an act of replication.”We must do what the gods did in the beginning. Thus the gods did; thus men do” . The stupa, in its meaning, is replete with this primordial injunction and its appropriation reflects fundamental, primal, human motivations. At another level, this inclusion may have been necessitated by the dynamics of the existing religious milieu. A rudimentary situation analysis of the moment in time when this fledgling religion operated, and, when the first stupa was instituted, reveals the case of a relatively new entrant jostling for space against a dominant ideology. Of an incumbent mythology replete with cosmological interpretations and paradigmatic creator gods. In this setting, legitimacy would require equally potent antecedents. What better way to consecrate the remains of the one, who, like the Vedic god, Indra was born from his mother’s side than to have the sacred place of his interment evoke the archetypal feat of Indra?



The vedika enclosure marks off a path (Pradakshina Path) for the ritual of circumambulation. An important rite, it involved a physical engagement with the stupa and was performed by entering the precinct through the east gate and walking clockwise. The directional emphasis related the devotee to the passage of the sun, “the transcendent centre of the universe” , “cosmic intelligence” whose light is “intellectual wisdom”. In vedic mythology Indra is credited with releasing the sun , setting its “wheel in motion” and “making a pathway through the darkness” . The Buddha, whose birth is likened to the rising of the sun , compares his abhijana (“superknowledge”) to a rediscovery of ancient wisdom , “ clearing of an ancient jungle path from the brush that has overgrown and concealed it for generations” – a veritable pathway, a casting of light on what has been hidden in the darkness. And thence he proceeds to “turn the wheel of law”. With these inherent parallels, the ritual act performs the important function of linking the worshipper with the wheel turning Buddha, and the Sun , on a path that is homologous with the archetypal path .A further instrument to re-emphasize this symbolism is seen in the alignment of the gateways, which form a cosmological diagram in the form of a swastika- a metonymical symbol evoking the wheel and the movement of the light giving sun.

This act, replete with cosmological significance puts the worshipper in harmony with the cosmos while it also reminds him of the Buddha and his odyssey across several lifetimes to attain final liberation-transcendental nirvana.

At the centre of the stupa complex is the solid hemispherical dome described variously in Buddhist texts as garbha, container or alternatively as anda . It bears within itself the seed (bija)-relic. Symbolically this links the dome to the cosmic womb eg: the vedic hiranyagarbha (golden womb) which emerges from the primordial waters of chaos . This analogy is explicit in reliefs at Sanchi and on some early coins where the stupa is shown floating on water .So deep are the cosmological interlinkages that the mythic womb, the embodiment of life and prosperity, was said to encompass

the riches of the universe. In a ritual enactment of the myth, the relic caskets are often made of precious metals/stone and routinely suffused with precious elements. In the brahmanical context, the womb represents the creative unity. In the Buddhist context, it is the enfolder of the seed and signifies the involitional tendency of the spiritual path- the return to the centre, to unity. “The stupa symbolically designates this centre to which the seeker directs his life’s pilgrimage”. and it bears within itself the “pivotal presence” of the wheel turning Buddha . This is significant in the light of inscriptions , which state that the corporeal remains of the Buddha are “endowed with life” (“prana sammada”) for it implies that the dome not only allows the devotee to experience proximity to the Buddha, but also makes him aware of his involitional unity.

The cosmological theme continues with the axial pillar which represents the world axis . This pole is symbolic of the link between the human and the divine worlds. It indicates a pathway of spiritual ascent, an upward movement away from the confines of the physical world , to the limitless realm. In this sense, the pole is a beacon, a representation of the devotee’s goal, for in its verticality, one can measure one’s own progress towards the supreme attainment, a goal triumphantly achieved by the Buddha in nirvana.



The summit of the dome is capped by a smaller railing (harmika) which encloses the projecting end of central axis. The theme of containment is replicated, creating a second sacred precinct. The harmika also evokes solar resonances, the unmoving sun atop the world axis, evoking the Buddha and his enlightenment .The axis is capped by a series of parasols (chattras) honorific elements that protect relics below in the heart of the mound.

The chattras is a link to another theme closely linked to the Buddha – that of kingship. The imperial parasol indicates the rank and status accorded to a monarch. The temporal chakravartin who through the turning of the wheel , subjugates the four quarters and maintains a paradisaical state through the rule of dharma or righteousness. His capital is the centre of the world , and his grave dome the hub of the earth .

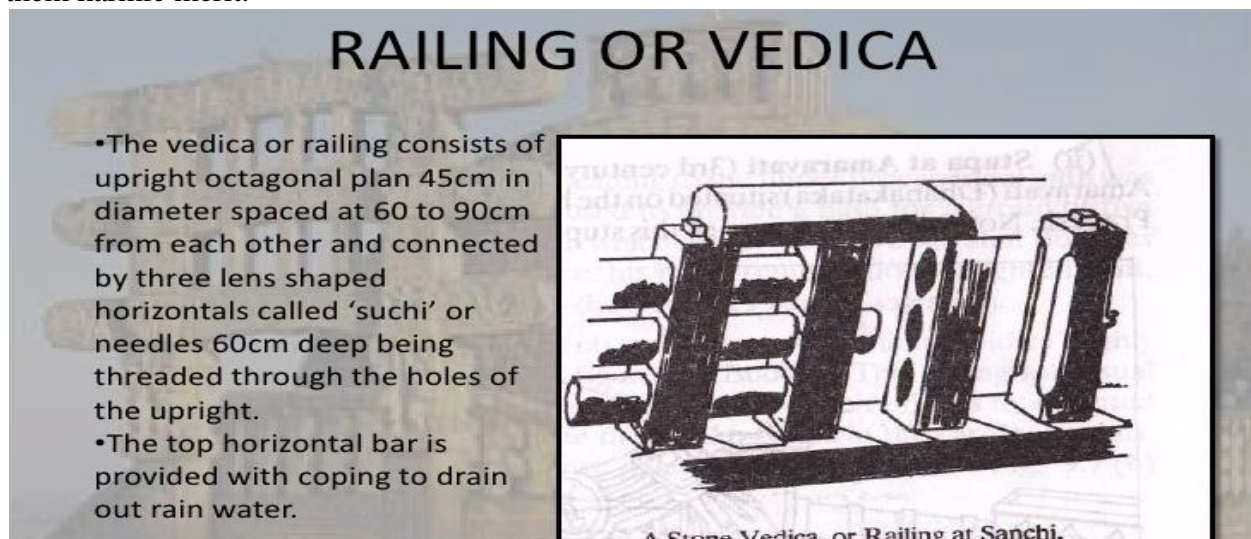
In a parallel, yet, supra-terrestrial identity, the Buddha subjugates the “realm of the spirit”, “rolls back the veil of ignorance” . He is the upholder of transcendent dharma – the cosmic sovereign. This analogous symmetry is repeated in events spanning the Buddha’s life and it finds expression in the honour accorded to the stupa both in terms of worship and the iconographic template through the overt usage of regal themes .

In analyzing the sculptural adornments on the railings and gateways, I would tend to disagree with Susan Huntinton in her statement that the sculptures served a “subsidiary/ secondary” purpose. They may be locationally on the extremities, the outer bounds of the complex – however they are at the critical point of inflexion, the marker of the entry into sacred portals. Along with the gateways they symbolize a transformative potency -an entry into an ordered realm, in the presence of the Buddha’s relics, into the complex that is the “essence of transcendental reality, nirvana”. Their intent and meaning in this context cannot be secondary.

In my opinion, the imagery, successfully completes the task and intent of the asokan edicts, which despite their spread and scale, were curtailed by demands of literacy. I link back to the edicts, as the earliest examples of visual narrative, the reliefs at Bharhut showcase a spirit similar to that of the edicts- lay precepts and morality, a focus on virtues and meritorious deeds through the depiction of Jataka tales (49% of the reliefs at Bharhut portray these stories)

The dual potency of a visually alive medium, and the familiarity of stories would have created a field of influence that would have ensured maximization of participation and effect. While one sees an inversion of themes at Sanchi and Amravati, where the depiction of key episodes from the life of Buddha take centre stage. (At Amravati one also sees the advent of the anthropomorphic image of the Buddha which had hitherto been totally symbolic)- the role of the ornate sculptures and decorative motifs remained focussed and goal oriented. With a rich vocabulary of stories, themes, symbols and narrative modes, the ornate railings and gateways enriched the experience of the stupa. The ancient sculptor was able to craft eloquent expressions that served to re-emphasize the credo of Buddhism and helped in propagating the faith. The sculptures were efficacious means for proselytization, through their vivid narration of the greatness of Buddha’s quest, the portrayal of virtues, merit and moral excellence, and their emphasis on the importance of holy pilgrimage and worship.

This art also spelt the democratization of the stupa complex, not only were the narratives mass in their appeal, their collective commissioning transformed the stupa to a participative, shared entity. This art stood for “the art of the people, used for the glorification of the religion”. The stupa became a veritable punyakshetra (a field of spiritual merit) where votive reliefs of pious devotees could win them karmic merit.



This theme of democratization is also evident in the profusion of images of nagas vrisakha devatas, yakshas and yakshinis . These indicate the assimilatory efforts of the religion which resulted in an amalgamation of pre-buddhistic folk traditions and autochthonous cults into its folds. The stupa became a veritable showpiece for ancient motifs and in turn gets charged with the symbolism and mythology of these primitive expressions and beliefs. This integration powerfully signals the inclusiveness of the religion, the reconciliation of antagonistic principles. Its a magical, harmonious union , a force that charges the railings and gateways with deeper meaning and primeval energy. With the incorporation of the nagas came the life force of fertility and birth. These guardians of the sustaining, nourishing terrestrial waters kept a protective watch over the stupa and its devotees. With the yakshas, the soil genii of fertility, riches and prosperity, the stupa was imbued with notions of abundance, growth and fertility and these benign, munificent creatures poured their blessings over those who passed through the gates into the holy enclosure. The pre-aryan cult of tree worship , the pre-buddhistic goddess gaja laxmi ,among other traditions found a place on the stupa portals. The emphasis accorded to them demonstrates that they were no less important than the buddhistic precepts in the scheme of the stupa. They were all “ parts of one and the same vital process” .

The simplistic design of the stupa belies a deep significance that is epitomized in every element. The architectural fabric links the stupa back to cosmogonic codes and themes of kingship. In doing so it imbues with a sacrality and symbolism that transcends religious constructs and links it to the realm of ageless principles. The stupa is an “imago mundi” a representation of the cosmos on earth. It is the realm of the chakravartin (chakravartikshetra), albeit a supra-terrestrial one . The decorative motifs imbue it with terrestrial life forces – the potency of nature, of indigenous vitality . It is under the union of this primeval energy and universal principles that stupa formalizes and executes its basic purpose , and wherein lies its importance and centrality– that of a “magical structural milieu” which evokes the buddha and allows the devotee to commune with him in a sacred, ordered, potent, divine world, and chart his own progress to spiritual salvation.

CIRCUMAMBULATION is a ritual term meaning literally "to walk a circle around" a holy place, person, or object. Such rituals are related to the widespread significance of the sacred circle, which is the architectural ground plan and ideational scheme of such monuments as the stupa, such cities as Banaras and Jerusalem, and such ritual constructions as the medicine lodges and Sun Dance lodges of the North American Plains Indians. Thus, this topic is related to that of the sacred circle or the *maṇḍala* and is its ritual extension. One walks around what is set apart, circumscribed as charged or sacred; one might even say that circumambulation sets something apart by circumscribing it with one's own body. It is also to be noted that circumambulation, as a rite of both centering and bonding, is related in some ways to the many types of circle dancing such as the Ghost Dance of the Plains Indians, the maypole dances of the British Isles, and the circular dances and marches of the Shakers; such dance forms, however, will not be discussed here. In plains, it is symbolically going around the holy structure.

1. It is a railing
2. It is the direction provider of those who circumambulate the stupa.

The Vedic air the railing is the first and original structural circumambulation of the Stupa. Apart from offering protection to the stupa premises and

Circumambulation is a fundamental rite of orientation, and is often thought of as a human repetition of the apparent movement of the sun. The Lakota would walk "sunwise" around a fire or a ritual arena. The sense of this direction as the natural order also appears in Hindu ritual texts such as the *Śatapatha Brāhmaṇa* and the *Gṛhyasūtras*, which speak of the sunwise movement of ritual performance in rites meant to secure the blessings of the gods. This sunwise circling is known as *pradakṣiṇa*, "going to the right." *Pradakṣiṇa* around the sacred fire or the teacher, and later around the temple, became an act of centering and honoring in the Hindu tradition.

In Native American and Hindu traditions, as in many others, reversing the direction of circling was considered a reversal of the natural order and was associated with catastrophe or death. This circling to the left, contrary to the apparent course of the sun, was called *prasavya* in the Hindu tradition and was associated with the left hand and with rites for the dead, for the ancestors, and for the *nāga*s, or serpents. Anticipating or recovering from disasters, the Lakota circle counterclockwise after the fashion of the "thunder beings," whose movement, unlike that of the sun, is antinatural. In sixteenth-century England this turning in an unnatural direction came to be called *widdershins* and was associated with danger, magic, and witches.

In the Hindu tradition today, *pradakṣiṇa* is simultaneously an act of taking a place, deity, or person as one's center and of honoring that center, keeping it ever on the side of the auspicious right hand. The most concise *pradakṣiṇa* honoring the sacred place on which one stands, is simply to turn all the way around in place, as pilgrims do at the very southern tip of India at Kanyā Kumārī. The most extensive is the *pradakṣiṇa* of the entire subcontinent of India, from the north at Badrināth, to the east at Purī, to the south at Rāmeśvaram, to the west at Dvārakā (Dwarka), and back to the north again. One of India's great rivers, the Narmadā of central India, has a traditional circumambulation in which pilgrims, beginning wherever they wish, walk its entire length of 801 miles from Amarakantaka to the Bay of Cambay and back again. Mountains too are circumambulated, as in the well-known routes around Kailāsa in the Himalayan north, Arunācala in the Tamil country of the south, and Kamadgiri and Govardhan in the northern sanctums of Rāma and Kṛṣṇa, respectively. Many of India's sacred cities also have *pradakṣiṇa* routes, the best known being the Pañcakroṣī *pradakṣiṇa* of the city of Banaras (modern-day Varanasi). This sacred circuit of the city takes pilgrims five days to perform, passing 108 shrines along the way and circumscribing with their footsteps the perimeter of the sacred zone of the city where simply to die is to attain *mokṣa* ("liberation").

More common, however, is simply the *pradakṣiṇa* of the sanctum sanctorum, the *garbhagrha*, in a Hindu temple. Depending upon the size of the temple, the pilgrim will circumambulate either the entire complex or merely the inner courts before approaching the deity for *darśana*. There may be several circumambulatories, which usually will include their own circuit of ancillary shrines. In some popular temples, especially in the North, this is a very "close" circumambulation, with the devout running their hands along the temple walls, frequently stopping to touch the place at the back of the temple nearest the image of the divine inside. In the South, however, especially in Kerala and Karnāṭaka, there are often circumambulatory markers, outside of which the honorific circuit must be made, at a respectful distance of several feet from the temple itself.

The circumambulation of a center also formed a strong part of the early Buddhist tradition of worship, especially the circling of the stupa with its hemispherical dome, originally said to house a relic of the Buddha. The dome of the stupa, called the *aṇḍa* ("egg"), was said to have cosmic significance as the dome of heaven: the smaller superstructure on top was Mount Meru, and the surmounting umbrellas signaled the Buddha's world-kingship. The entire stupa was surrounded by a

fence, with gates in the four principal directions. Between the fence and the *aṇḍa* was a *pradakṣiṇapatha*, a circumambulatory path. Very often, as in the case of the stupa of Amaravati in the Andhra area of India, there was an upper circumambulatory of the *aṇḍa* itself, with its own enclosing rail. The famous stupa of Borobudur in Java was built in nine levels, with a circumambulatory around each of the lower six levels that took the pilgrim not only around the stupa but also past bas-reliefs depicting the earthly life, the previous lives, and the instructive deeds of the Buddha.

The circling of the stupa, called the *chedi* in modern Thailand, continues as a common part of festival rituals. In the evening during the Thai celebration of Viśākha Pūjā (the day of the Buddha's birth, enlightenment, and death) monks and laity circle the *chedi* three times, holding lighted candles. Other festival days are marked with a similar threefold circumambulation.

The divine also circumambulates, reaffirming the sacred claim upon the territory circumscribed by the route. In Sri Lanka, for example, the annual procession of the relic from the Temple of the Tooth takes a circumambulatory route through the city of Kandy. In South India, such annual circuits of the gods are common. During the Chittarai festival in Madurai, for example, when the goddess Mīnākṣī moves in her giant chariot through the concentric rectangular circumambulatory streets of the city, she reclaims the four directions as her own.

In the ancient Hebrew tradition, the story of Joshua's siege of Jericho displays the power of the Lord in encircling the city. For six days Joshua's army, led by the ark of the covenant and seven priests with seven trumpets of rams' horns, made one circuit a day around the city; on the seventh day they made seven circuits and the city wall fell (*Jos.* 6). In the later tradition, circumambulatory circuits (*haqqafot*) are performed both to mark holy ground and, it would seem, to remember the power of the Lord that was with the children of Israel in the siege of Jericho.

The most festive *haqqafot* take place during the Feast of Booths, Sukkot, when those present make seven ceremonial circuits carrying the festal bouquet of willow branches and lemons around the altar in the synagogue. In the time of Philo Judaeus the procession, like that of Joshua, took place once a day for six days and seven times on the seventh. At Simḥat Torah, *haqqafot* are performed with the scrolls of the Torah being carried around the synagogue.

SEE MORE

Christian worship has tended to focus the attention of the worshiper directionally toward the east or vertically toward the vaulting heavens, rather than inward toward an encompassed center. Even so, Christian architecture displays a tension between the center, which can be circumambulated, and the "transcendent" or the "east," which cannot. In the Middle Ages, churches were built with ambulatories to facilitate the movement of pilgrims through the church and around the altar, beneath which or near which a relic was enshrined. Circumambulation is an important part of pilgrimages, such as that of Saint Patrick's Purgatory on an islet in Lough Derg in Ireland, where pilgrims walk around the basilica four times, saying seven decades of the rosary beads. In the Christian tradition, as in others as well, circumambulation is often part of rites of consecration. For instance, when the new basilica of Our Lady of Guadalupe in Mexico City was consecrated in 1976, the consecrating procession circled the building sprinkling it with sanctified water, anointing it with holy oil, and fumigating it with incense.

The Muslim *ḥājj* has the circumambulation (*ṭawāf*) of the Ka‘bah as one of its central rites. The original meaning of *ḥājj* is "to describe a circle," and this circling of the Ka‘bah is a pre-Islamic rite, said to have been done naked, a practice that was prohibited by the Prophet. Here the circles are made with the left side, said to be the side of the heart facing toward the sacred Ka‘bah. The *ṭawāf* consists of seven circuits of the Ka‘bah. The full pilgrimage contains three *ṭawāfs*: the initial *ṭawāf* on arrival, which is part of the ordinary *‘umrah*, or lesser pilgrimages; a *ṭawāf* on return from the journey to Arafat; and a farewell *ṭawāf* before leaving.

The *ṭawāf* is interpreted in a spiritual way by theologians such as al-Ghazālī, who describes *ṭawāf* as a form of prayer. *Ṭawāf* is not merely the circling of the body around the Ka‘bah but the circling of the heart around God. In doing *ṭawāf*, the faithful are like the angels circling the throne of God. Some Sūfīs were believed to have reached such a high peak that the Ka‘bah came to circumambulate them, and not they the Ka‘bah.

In many traditions, circumambulation is associated not only with places of holiness or of worship, but also with life-cycle rites. Marriage rites often involve circling, since a wedding is preeminently a rite of bonding and union. In some traditional Jewish communities, the bride makes either three or seven *haqqafot* around the groom at the wedding. The circling establishes a common world for the couple. Roman weddings, for instance, called for the circling of the bride and groom around the family altar. In the Agni Pradakṣiṇa rite of the Hindu marriage, the bride follows the groom three times around the sacred fire, her sari tied to his dhoti. The rite immediately precedes the "seven steps," the legal culmination of the marriage ceremony. Interestingly, this rite repeats the groom's three circuits around the sacred fire during his initiation rite, the Upanayana, just before he received the sacred Sāvitrī mantra from the *gurū* and thus established the primary bond of his years of education.

In addition to being a rite of honoring, centering, and bonding, circumambulation also can set apart what is circumscribed. This is especially the case for the "dangerous holy," that is, the dead. Both the dead and places associated with the dead are circumambulated, sometimes counterclockwise, as a protective or apotropaic rite to keep the spheres of the living and dead apart.

In the Sephardic and Hasidic traditions of Judaism, seven *haqqafot* are made around a cemetery prior to burial. It has also been the custom in Ireland, Holland, Germany, and elsewhere in northern Europe to carry the casket in procession three times, sunwise, around the cemetery before burial. According to the *Mahāparinirvāṇa Sūtra*, five hundred of the Buddha's disciples circled his body before his cremation pyre was lit. The Hindu cremation rite today begins as the chief mourner, usually the eldest son, circles the pyre four times counterclockwise, carrying the flaming bundle of sacred *kuśa* grass and touching the body symbolically with each round, finally lighting the pyre at the head. In Buddhist Thailand as well the body is circumambulated three times before the cremation. In the case of a king or member of the royal family, a special palace-mountain pavilion called the *phra meru* is built for the cremation. On arrival, the body is borne around the *phra meru* three times, *uttaravatta*, in a "left-hand direction," before being placed upon the elaborate pyre. While the threefold circumambulation in the Buddhist tradition ordinarily marks reverence for the Buddha, the Dharma, and the Saṅgha, here it is said to remind the living of the three wearisome worlds of *samsāra*— that of earth, of heaven, and of hell.

Sacred space and symbolic form at Lakshmana Temple, Khajuraho (India)

by Dr. Cristin McKnight Sethi .

Ideal female beauty



Sculpture of a woman removing a thorn from her foot, northwest side exterior wall, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 C.E. (image source)

Sculpture of a woman removing a thorn from her foot, northwest side exterior wall, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 C.E. ([image source](#))

Look closely at the image to the left. Imagine an elegant woman walks barefoot along a path accompanied by her attendant. She steps on a thorn and turns—adeptly bending her left leg, twisting her body, and arching her back—to point out the thorn and ask her attendant’s help in removing it. As she turns the viewer sees her face: it is round like the full moon with a slender nose, plump lips, arched eyebrows, and eyes shaped like lotus petals. While her right hand points to the thorn in her foot, her left hand raises in a gesture of reassurance. Images of beautiful women like this one from the northwest exterior wall of the Lakshmana Temple at Khajuraho in India have captivated viewers for centuries. Depicting idealized female beauty was important for temple architecture and considered auspicious, even protective. Texts written for temple builders describe different “types” of women to include within a temple’s sculptural program, and emphasize their roles as symbols of fertility, growth, and prosperity. Additionally, images of loving couples known as *mithuna* (literally “the state of being a couple”) appear on the Lakshmana temple as symbols of divine union and *moksha*, the final release from *samsara* (the cycle of death and rebirth).[1] The temples at Khajuraho, including the Lakshmana temple, have become famous for these amorous images—some of which graphically depict figures engaged in sexual intercourse. These erotic images were not intended to be titillating or provocative, but instead served ritual and symbolic function significant to the builders, patrons, and devotees of these captivating structures.[2]



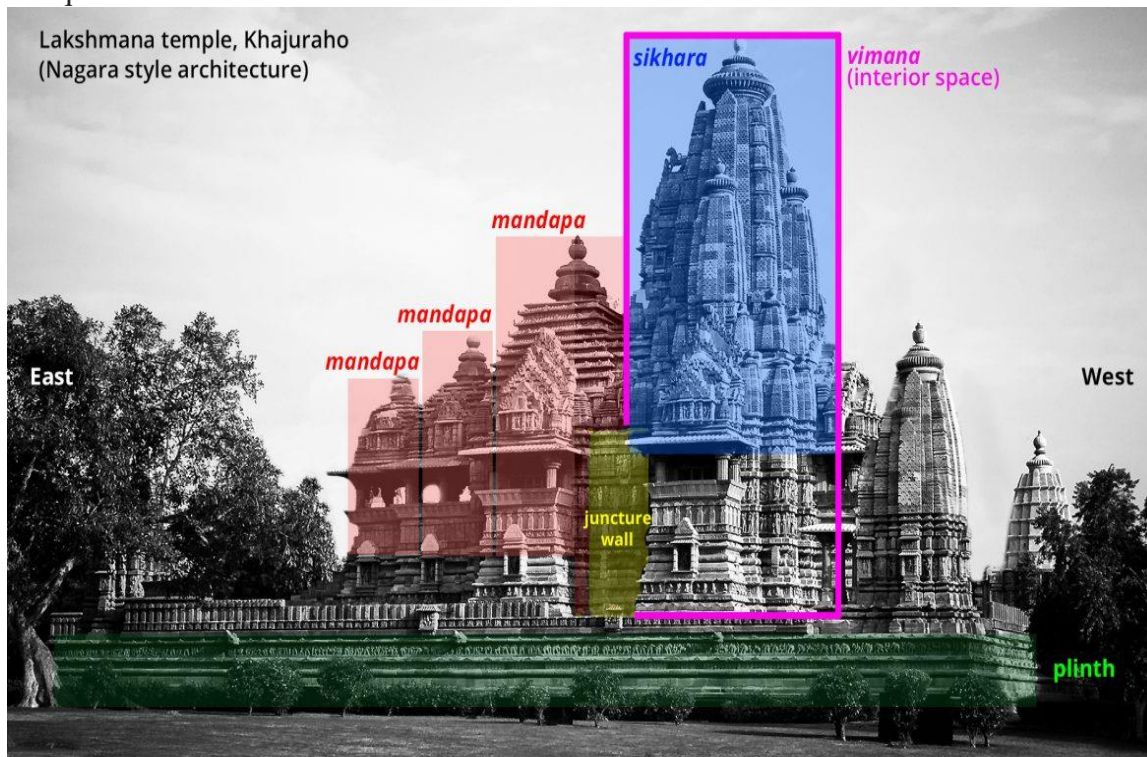
Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 C.E. (Chandella period), sandstone (photo: Christopher Voitus, CC BY-SA 3.0)

Chandella rule at Khajuraho

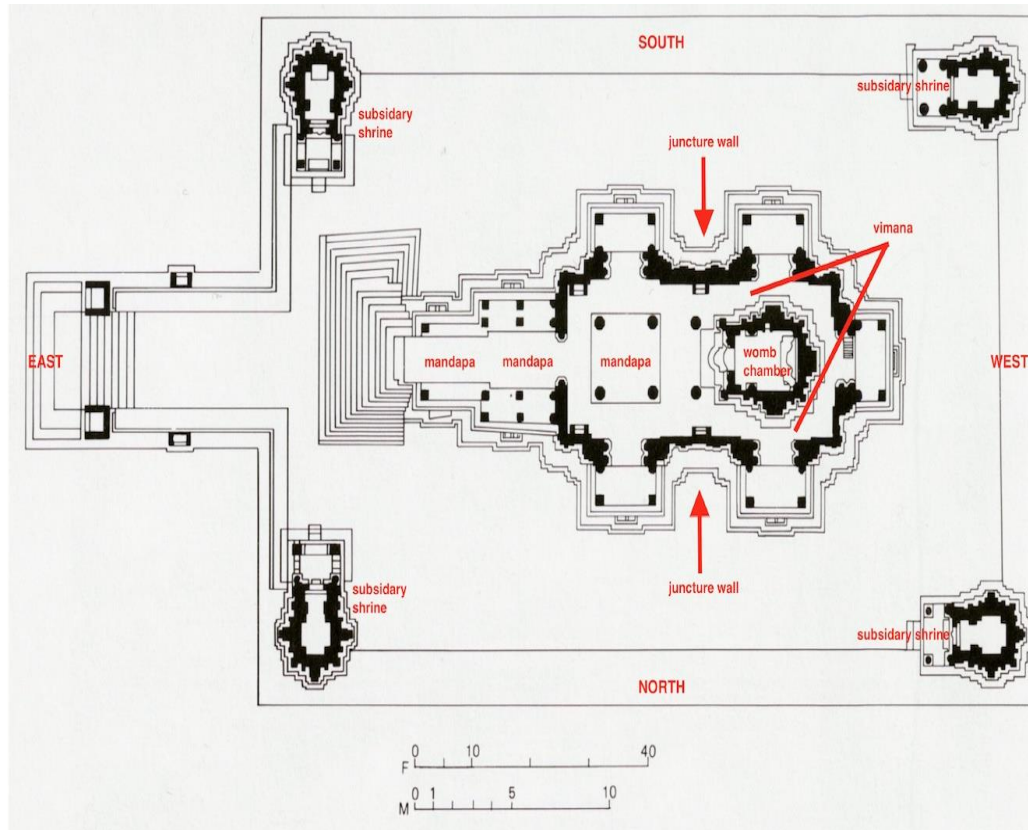
The Lakshmana temple was the first of several temples built by the Chandella kings in their newly-created capital of Khajuraho. Between the 10th and 13th centuries, the Chandellas patronized artists, poets, and performers, and built irrigation systems, palaces, and numerous temples out of sandstone. At one time over 80 temples existed at this site, including several Hindu temples dedicated to the gods Shiva, Vishnu, and Surya.[3] There were also temples built to honor the divine teachers of Jainism (an ancient Indian religion). Approximately 30 temples remain at Khajuraho today. The original patron of the Lakshmana temple was a leader of the Chandella clan, Yashovarman, who gained control over territories in the Bundelkhand region of central India that was once part of the larger Pratihara Dynasty. Yashovarman sought to build a temple to legitimize his rule over these territories, though he died before it was finished. His son Dhanga completed the work and dedicated the temple in 954 C.E.

Nagara style architecture

The central deity at the Lakshmana temple is an image of Vishnu in his three-headed form known as Vaikuntha[4] who sits inside the temple's inner womb chamber also known as *garba griha* (above)—an architectural feature at the heart of all Hindu temples regardless of size or location. The womb chamber is the symbolic and physical core of the temple's shrine. It is dark, windowless, and designed for intimate, individualized worship of the divine—quite different from large congregational worshipping spaces that characterize many Christian churches and Muslim mosques.



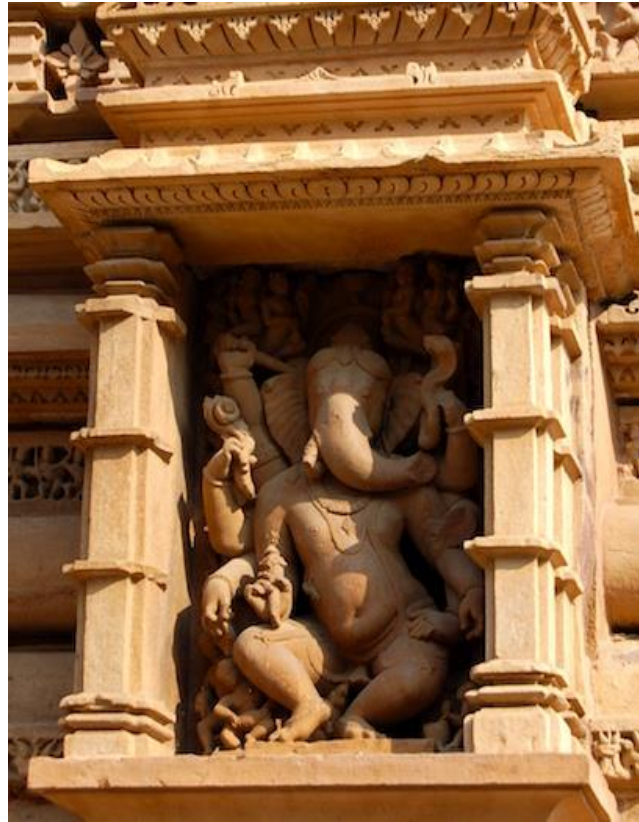
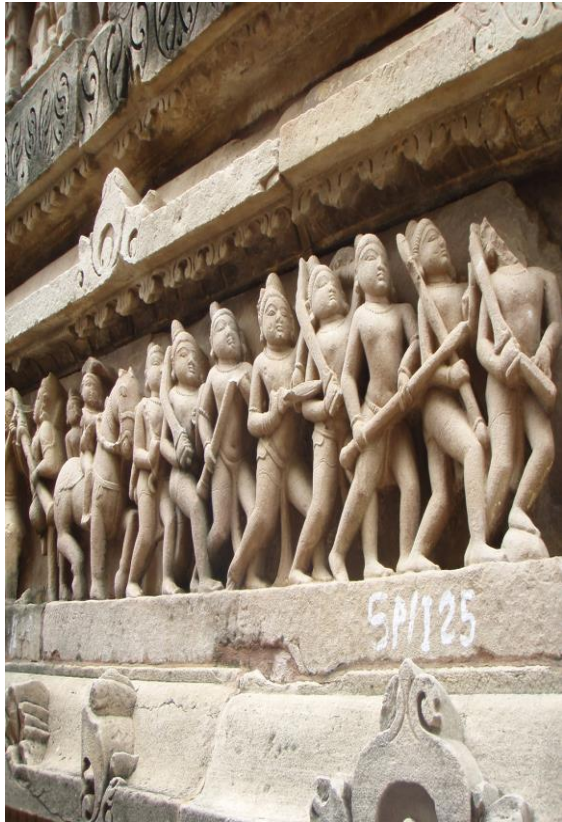
The Lakshmana Temple is an excellent example of Nagara style Hindu temple architecture.[5] In its most basic form, a Nagara temple consists of a shrine known as *vimana* (essentially the shell of the womb chamber) and a flat-roofed entry porch known as *mandapa*. The shrine of Nagara temples include a base platform and a large superstructure known as *sikhara* (meaning mountain peak), which viewers can see from a distance.[6] The Lakshmana temple's superstructure appear like the many rising peaks of a mountain range.



Plan of Lakshmana temple

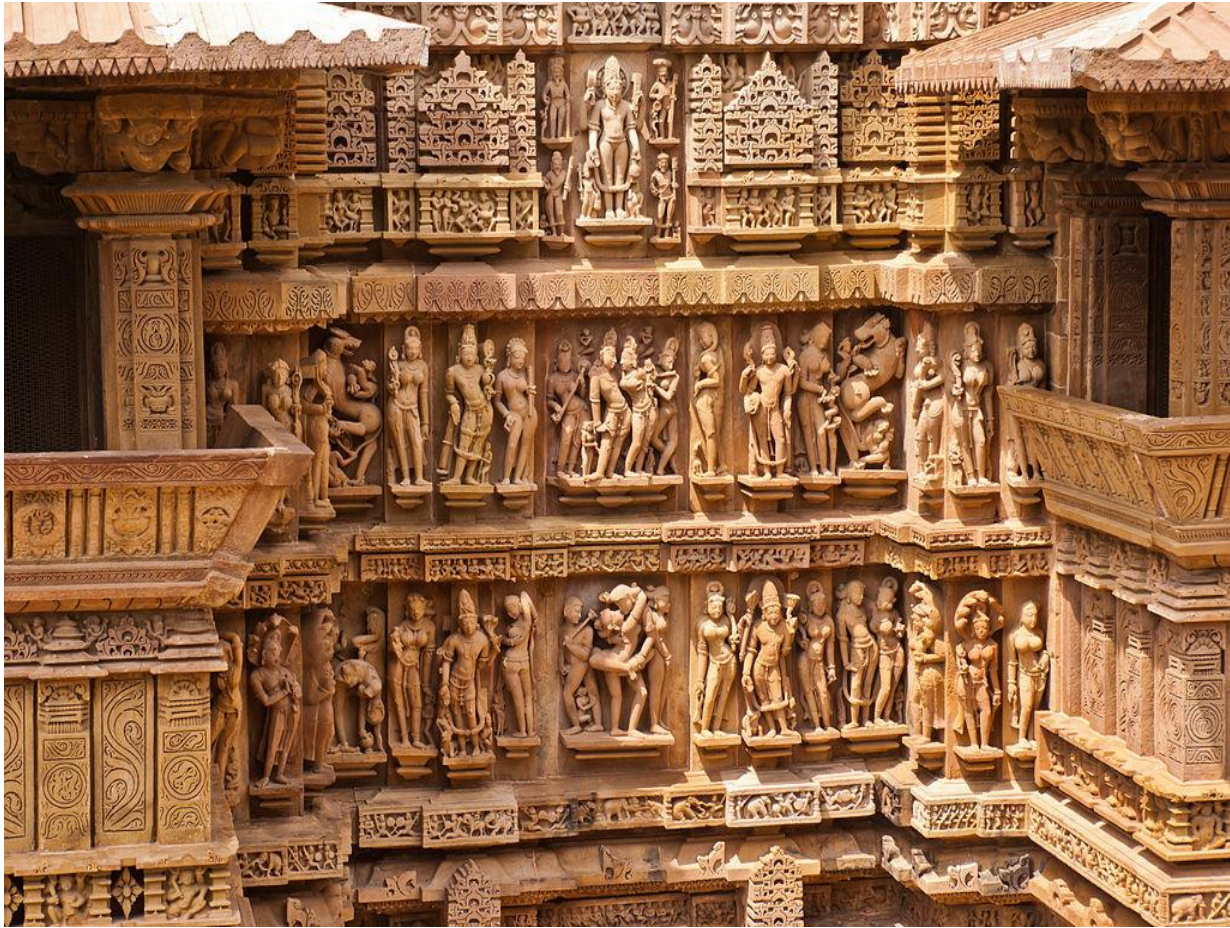
Approaching the divine

Devotees approach the Lakshmana temple from the east and walk around its entirety—an activity known as circumambulation. They begin walking along the large plinth of the temple's base, moving in a clockwise direction starting from the left of the stairs. Sculpted friezes along the plinth depict images of daily life, love, and war and many recall historical events of the Chandella period.



Section of a narrative frieze encircling the temple at the level of the plinth, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 (photo: Sheep”R”Us, CC BY-NC-ND 2.0) PIC AT RIGHT Ganesha in niche, exterior mandapa wall, south side, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 (photo: Manuel Menal, CC BY-SA 2.0)

Devotees then climb the stairs of the plinth, and encounter another set of images, including deities sculpted within niches on the exterior wall of the temple (view in Google Street View). In one niche (left) the elephant-headed Ganesha appears. His presence suggests that devotees are moving in the correct direction for circumambulation, as Ganesha is a god typically worshipped at the start of things. Other sculpted forms appear nearby in lively, active postures: swaying hips, bent arms, and tilted heads which create a dramatic “triple-bend” contrapposto pose, all carved in deep relief emphasizing their three-dimensionality. It is here —specifically on the exterior juncture wall between the *vimana* and the *mandapa* (see diagram above)—where devotees encounter erotic images of couples embraced in sexual union (see image below and here on Google Street View). This place of architectural juncture serves a symbolic function as the joining of the *vimana* and *mandapa*, accentuated by the depiction of “joined” couples. Four smaller, subsidiary shrines sit at each corner of the plinth. These shrines appear like miniature temples with their own *vimanas*, *sikharas*, *mandapas*, and womb chambers with images of deities, originally other forms or avatars of Vishnu. Following circumambulation of the exterior of the temple, devotees encounter three *mandapas*, which prepare them for entering the *vimana*. Each *mandapa* has a pyramidal-shaped roof that increases in size as devotees move from east to west.



Figural groupings on the temple exterior including Shiva, Mithuna, and erotic couples, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 (photo: Antoine Taveneaux, CC BY-SA 3.0). [View this on Goole Street View.](#)

Figural groupings on the temple exterior including Shiva, Mithuna, and erotic couples, Lakshmana temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 (photo: [Antoine Taveneaux](#), CC BY-SA 3.0). [View this on Goole Street View.](#)

Once devotees pass through the third and final *mandapa* they find [an enclosed passage](#) along the wall of the shrine, allowing them to circumambulate this sacred structure in a clockwise direction. The act of circumambulation, of moving around the various components of the temple, allow devotees to physically experience this sacred space and with it the body of the divine.



Entrance to the Mandapa, Lakshmana Temple, Khajuraho, Chhatarpur District, Madhya Pradesh, India, dedicated 954 (photo: Antoine Taveneaux, CC BY-SA 3.0)

Notes:

[1] *Mithuna* figures appear on numerous Hindu temples and Buddhist monastic sites throughout South Asia from as early as the 1st century C.E.

[2] Some scholars suggest that these erotic images may be connected to Kapalika tantric practices prevalent at Khajuraho during Chandella rule. These practices included drinking wine, eating flesh, human sacrifice, using human skulls as drinking vessels, and sexual union, particularly with females who were given central importance (as the seat of the divine). The idea was that by indulging in the bodily and material world, a practitioner was able to overcome the temptations of the senses. However, these esoteric practices were generally looked down upon by others in South Asian society and accordingly very often were done in secrecy, which raises questions about the logic of including Kapalika-related images on the exterior of a temple for all to see.

[3] There is also at least one temple at Khajuraho, the Chausath Yogini Temple, dedicated to the Hindu Goddess Durga and 64 ("chausath") of her female attendants known as yoginis. It was built by a previous dynasty who ruled in the area before the Chandella kings rose to power.

[4] The original Vaikuntha at Lakshmana temple was itself politically significant: Yashovarman took it from the Pratihara overlord of the region. Susan Huntington indicates that the stone image currently on view at Lakshmana temple, while indeed a form of Vaikuntha, is not in fact the original (metal) image which Yashovarman appropriated from the Pratihara ruler. Appropriating another ruler's family deity as a political maneuver was a widespread practice throughout South Asia. For more on this practice, see the work of Finbarr B. Flood, *Objects of Translation: Material Culture*

and *Medieval 'Hindu-Muslim' Encounter* (Princeton: Princeton University Press, 2009), particularly Chapter 4. A similar Vaikuntha image now appears in the central shrine of the Lakshmana temple and is notable for its depiction of the deity's three heads with a human face at the front (east), a lion's face on the left (south), and a boar's face on the right (north)—the latter two of which are now badly damaged. An implied, though not visible fourth face is that of a demon's head at the rear of the image (west-facing) which has led some scholars to identify this form as Chaturmurti or four-faced.

[5] In general, there are two main styles of Hindu temple architecture: the Nagara style, which dominates temples from the northern regions of India, and the Dravida style, which appears more often in the South.

[6] The base platform is sometimes known as *pitha*, meaning "seat." A flattened bulb-shaped topper known as *amalaka* appears at the top of the superstructure or *sikhara*. The *amalaka* is named after the local amla fruit and is symbolic of abundance and growth.

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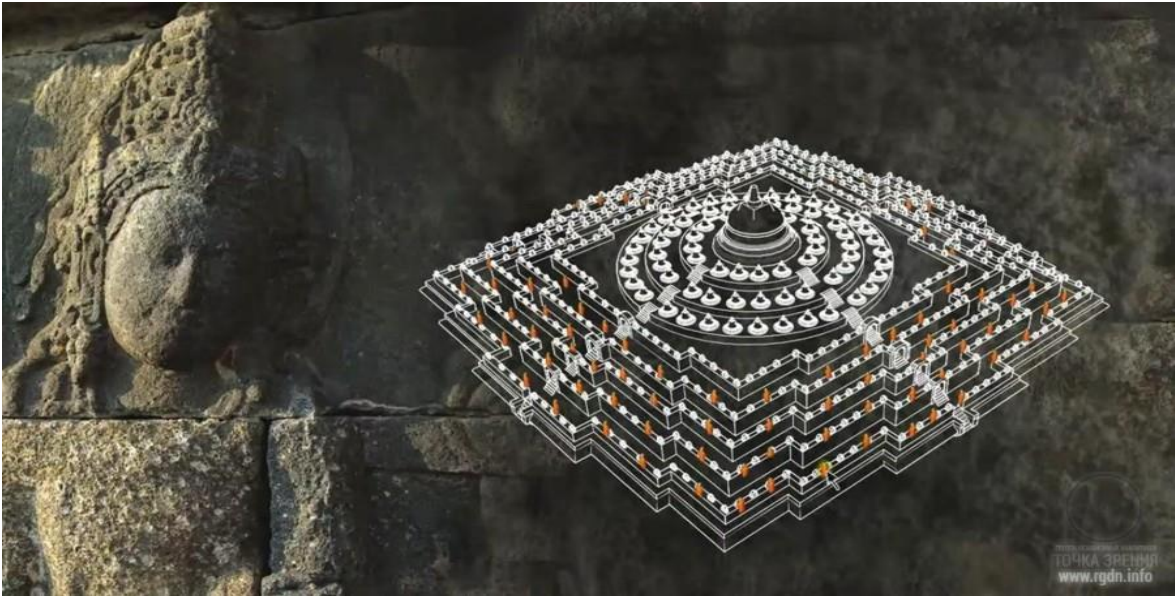
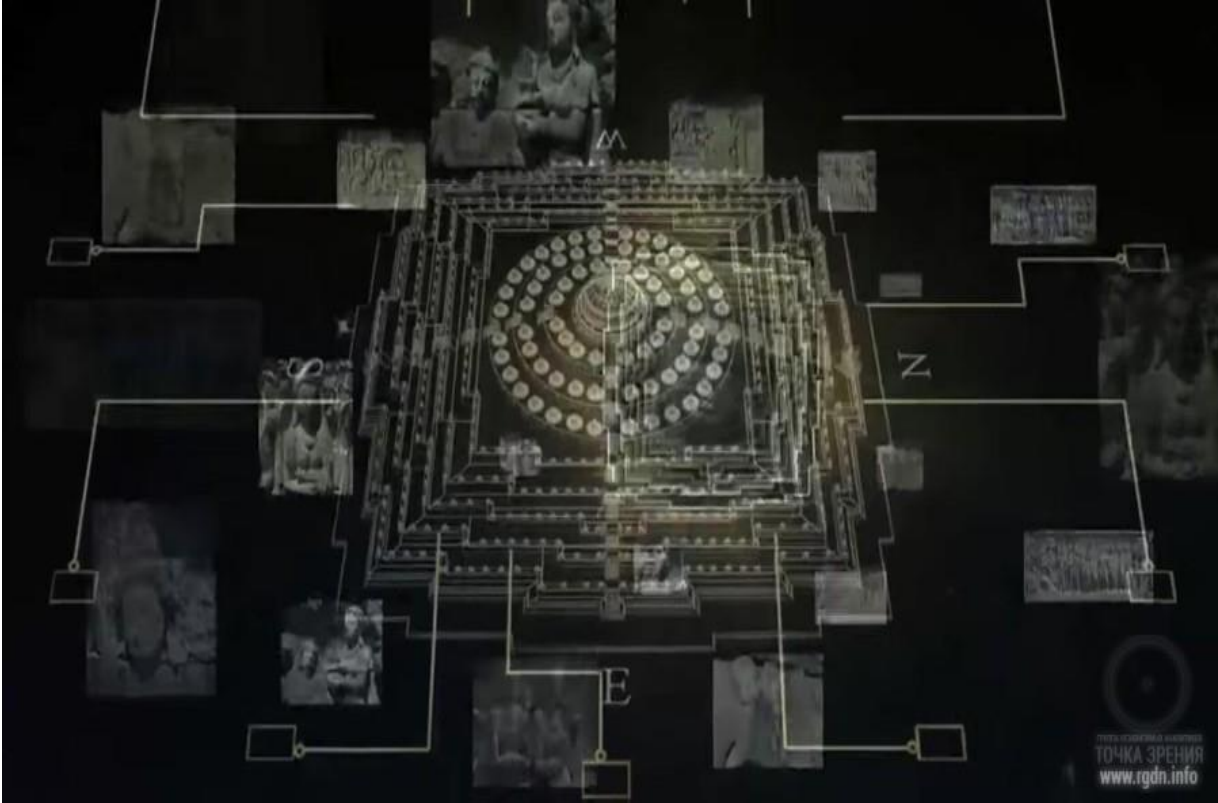
Diana L. Eck (1987)

CHAPTER 5

The Stupa & Temple as a MANDALA

Empires such as Bagan, Ayutthaya, Champa, Khmer, Srivijaya and Majapahit are known as "mandala" in this sense. Our temple is the second largest Buddhist temple in the world after Angkor Wat. Constructors erected this monument in the shape of a mandala and an opening Lotus flower on a square base (118 x 118 m) that smoothly turns into a circle.¹







Borobudur has eight tiers: the five lower ones are square, whereas the three upper ones are round. The shape of the building itself resembles a mandala and represents a scheme of the universe according to Buddhist beliefs, where heaven and earth are united. On the upper tier there are 72 small stupas around a big central stupa. Every stupa is bell-shaped. Inside the stupas, there are Buddha statues.

The temple complex contains 1,460 bas-reliefs with religious motifs. Relief panels describe the world of passions and the world of human perceptual development. Gradually ascending the helical serpentine road, a traveller perceives the world of matter and reaches the spiritual world.

The temple structure may be divided into three components:

- the temple base,
- the temple summit.
- the temple body,

The temple base is 118 x 118 m in width and 4 m in height. It is made of smooth plates with three tiers and 20 corners. The temple body consists of five square platforms-tiers: the higher one ascends the smaller every next tier is. The very first platform of the “monument body” is located 7 metres away from the edge of the base. Every subsequent platform is shifted 2 metres relative to the previous platform. The temple summit consists of three rounded platforms, on which 72 small stupas and the main stupa in the centre are installed. The central stupa is the highest point of the monument, towering 35 metres above the temple foot. It represents a bell-shaped stupa, 7 metres in height, topping the huge pyramid.

1.The lowest level of the temple complex, called Kamadhatu, represents the world of passions. 160 images of sensory manifestations have not been preserved to nowadays – we know about the existence of those from ancient manuscripts only.

2.The second level – the five tiers called Rupadhatu – symbolizes the real world and contains religious themes. The entire history of Buddhism is reflected in sculptures and bas-reliefs. Here,

there are 432 Buddha statues: 104 on the first and second terraces (each), 88 on the third terrace, 72 on the fourth, and 64 on the fifth.

3. The remarkable beauty is completed by the three upper rounded terraces. This is the Arupadhatu level. There are 32 stupas on the lowest terrace, 24 on the middle, and 16 on the upper. A natural-sized statue of Buddha is inside each of the stupas. The largest stupa – the symbol of eternity – finishes the building.

$32+24+16 = 72$: an interesting interpretation of the structure of the world.



10 th: The most interesting is the secret of the “tenth terrace”. It was discovered totally accidentally that bas-reliefs are carved under the ground on Borobudur base walls, just like on the six lower terraces of the stupa. About 1,500 square metres of valuable bas-reliefs have turned to be hidden under the ground. The lower tier of the bas-relief describes the afterlife, and we can assume this was the reason why human eyes were not supposed to see it. An enormous piece of work was deliberately concealed from people, since only all-seeing deities could admire the bas-reliefs.





There is an assumption that Borobudur was constructed in a shape of Buddha sitting on a Lotus flower. In 1949 geologists discovered deposits that were interpreted as the bottom of a lake. There is a probability that the temple complex was located on a lake. By the constructors' plan, the entire magnificence of the temple was above the lake surface, and Buddha statue crowned the entire structure.

Buddhist monks who were building Borobudur implemented the idea of “a bible in stone”, having left the knowledge to descendants for many centuries. Images on the walls told about Buddha’s life. Following the way along the galleries, a person approached enlightenment. In order to read this textbook in stone, one needed to cover almost 5 km. Visitors covered the way to the very top of the temple, moving clockwise through all the eight tiers. Every platform represents a stage of education on the way of transition from the earthly plane to the heavenly plane.

At first sight, all statues of Buddha look alike, but there is a subtle difference between them in a certain position of Buddha’s hands See Chapter44

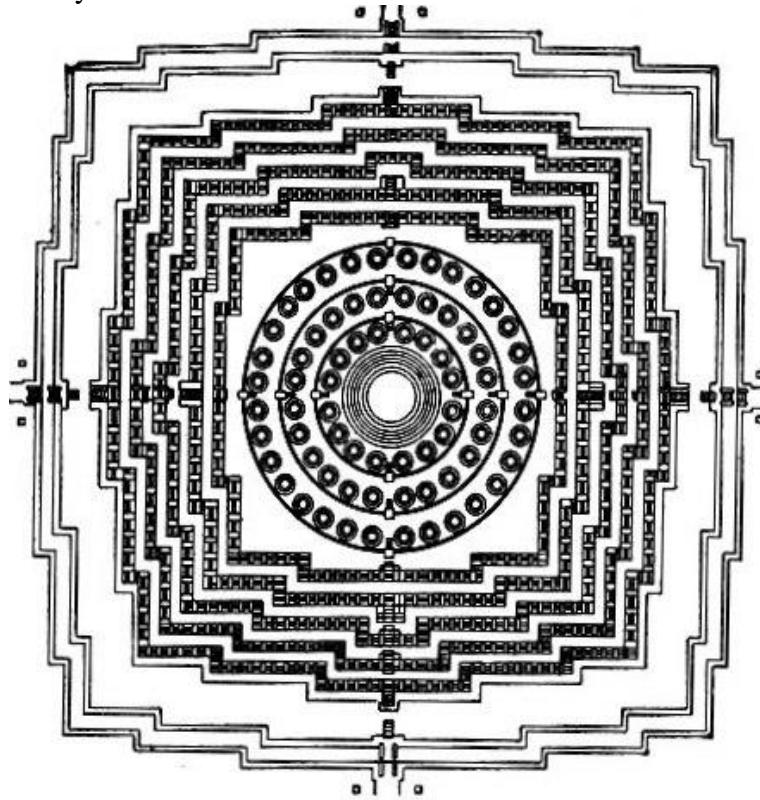
Biggest Mandala in the world

Borobudur is biggest Mandala in the world, when You see from sky You can see the Mandala, if You see further, You can see 3 Temple in one straight line (Mendut Temple, Pawon Temple and Borobudur Temple) betwen that, there is Elo river and Progo river and it was built at 8th century

Thus, most likely the architecture of the Borobudur is based on a Javanese variant of Buddhism, for if we look at the decoration in greater detail we obviously can confirm that its origin is based on Indian mythology and Buddhist iconography, however, we can also clearly see how these fundamental elements have been strongly combined with local (that is, Javanese) influences. The style in which the characters are depicted on the Borobudur differ greatly from the traditional Indian (Buddhist) iconography. The statues are depicted in other bodily postures, and with less refined details as they have in India; the Javanese obviously had a different idea of physical beauty and how this ought to be depicted, and that’s why on the Borobudur the voluptuous curves of the body as familiar in Indian iconography are altered according to local Javanese perception of beauty (by which the female body is dressed in more clothes, and often can only be distinguished from the male body by the curves of their breasts).



If we consider the assumption of the Borobudur representing a *maṇḍala*, then the main *stūpa* signifies the final destination of the spiritual path, which is situated in the center of the cosmos. At this point one becomes united with the five transcendental Buddhas of the Formless Realm: Vairocana in the center, Akṣobhya in the East, Ratnasambhāva in the South, Amitābha in the West, and Amoghasiddhi in the North. This particular line-up corresponds with the *Vajradhātu Maṇḍala* and the *Garbhadhātu Maṇḍala* in Tibet and Nepal. One could gain access to the center of the cosmos by entering the *maṇḍala* from the outside, and gradually moving further inwards. In this context, a *maṇḍala* can be interpreted as a palace with four entrance gates at the four cardinal points of the Universe, stretching the entire cosmos. The palace is a metaphor for human manifestation in this world, which, by means of using the *maṇḍala* as a meditation object, guides the practitioner to the ultimate (spiritual) goal in life. Visualization techniques such as these are still being practised in Vajrayāna Buddhism today.



Though the assumption of the Borobudur as a *maṇḍala* seems possible, this view remains yet impossible to prove. In spite of the previously mentioned similarities with the *maṇḍalas*, there are, however, also many differences. Beside the five transcendental Buddhas many other deities – both male and female – are often seen depicted in *maṇḍalas*. However, neither of these deities can be found on the Borobudur. Instead we do find many other depicted Buddhas on the Borobudur, but these do not display any of the features similar to other male or female deities. Thus, the other Buddhas do not function as a mere substitution for the various other deities (like guards, gatekeepers, goddesses of worship or Taras) commonly seen in *maṇḍalas*. Therefore, we may assume, that, as already had been suggested, the Borobudur displays a variant of Buddhism in the way it manifested in Java at the time of the reign of the Sailendra dynasty. This particular local variant of Buddhism was based on Indian influences and Mahāyāna Buddhism, which came to Java from China during the heydays of the Tang dynasty (618-906). The unique combination of these aspects would eventually become the Buddhism of Java. Then there also was the Hindu dynasty of

Sanjaya that ruled on Java during the same period of the Sailendra dynasty. The fact that the Sanjaya shared their power with the Sailendra dynasty – for example, through donations for the construction of the Kalasan temple – illustrates, that, apart from its religious function, the Borobudur also formed an important expression of power.³

The role of royal patronage and religious institution⁴

The Borobudur monument combines the symbolic forms of the stupa (a Buddhist commemorative mound usually containing holy relics), the temple mountain (based on Mount Meru of Hindu mythology), and the mandala (a mystic Buddhist symbol of the universe, combining the square as earth and the circle as heaven). The style of Borobudur was influenced by Indian Gupta and post-Gupta art. In all the regions of Southeast Asia, the arts flourished under the patronage of the kings. About the time of the birth of Christ, tribal groups gradually organized themselves, after some years of settled life as rice cultivators, into city-kingdoms, or conglomerations of villages. A king was thus little more than a paramount tribal chieftain. Since the tribes had been accustomed to worshipping local spirits, the kings sought a new spirit that would be worshiped by the whole community.

One reason that the gods of Hinduism and Buddhism were so readily acceptable to Southeast Asia was this need for new national gods. The propagation of the new religions was the task of the kings, and consequently the period from the 1st to the 13th century was a great age of temple building all over Southeast Asia.

Architecture, sculpture, and painting on the temple walls were the arts that flourished. In the ancient empires of eastern Indochina and the islands, scholars of Sanskrit, the language of the sacred works of Hinduism, became part of the king's court, producing a local Sanskrit literature of their own. This literary activity was confined to the hereditary nobility and never reached the people, except in stories from the great Hindu epics *Mahabharata* and *Ramayana*. Because the Hindu religious writings in Sanskrit were beyond the reach of the common people, Hinduism had to be explained to them by Hindu stories of gods and demons and mighty men. On the other side of the peninsula, in the Pyu-Burmese empire of Prome, which flourished before the 8th century, there was no such development—first, because Hinduism was never widely accepted in Burma and, second, because the more open Burmese society developed neither the institution of a god-king nor that of a hereditary nobility. Although Pali scholars surrounded the king in later Pagan, Pali studies were pursued not at the court but at monasteries throughout the kingdom so that even the humblest villager had some faint contact with Pali teachings. While the courts of the kings in Cambodia and Java remained merely local centres of Sanskrit scholarship, Pagan became a centre of Pali learning for Buddhist monks and scholars even from other lands. As in the case of stories from the Indian epics, stories of the Jatakas (birth stories of the Buddha) were used to explain Buddhism to the common people, who could not read the scriptures written in Pali. Just as scenes from the great epics in carving or in fresco adorned the temples in Cambodia and Java, scenes from the *Jatakas* adorned the Pagan temples.

The patronage of the king and the religious enthusiasm of the common people could not have produced the great temples without the enormous wealth that suddenly became available in the region following the commercial expansion. With the Khmer and Javanese empires, the wealth was produced by a feudalistic society, and so the temples were built by the riches of the king and his nobles, combined with the compulsory labour of their peasants and slaves, who probably derived some aesthetic pleasure from their work because of their religious fervour. Nonetheless, their

monuments, such as Borobudur, in Java, and Angkor Wat, in Cambodia, had an atmosphere of massive, all-conquering power. At Pagan, where wealth was shared by the king, the royal officials, and the common people, the temples and the monasteries were built by all who had enough not only to pay the artisans their wages but also to guarantee their good health, comfort, and safety during the actual construction. The temples were dedicated for use by all monks and lay people as places of worship, meditation, and study, and the kings of Pagan did not build a single tomb for themselves. The Khmer temple of Angkor Wat and the Indonesian temple of Borobudur were tombs in that the ashes of the builders would be enshrined therein; the kings left stone statues representing them as gods for posterity to worship, whereas at Pagan there was only one statue of a king, and it depicted him on his knees with his hands raised in supplication to the Buddha. Consequently, the atmosphere that pervaded the temples of Pagan was one of joy and tranquillity.

The mandala is likened by some to a "floor plan of the universe." The type most familiar in the West is an intricately patterned painting on cloth or paper that often takes the general form of a circle within a square.

The word "mandala" comes from the Sanskrit verbal root "mand" (meaning to mark off, decorate, set off) and the Sanskrit suffix "la" (meaning circle, essence, sacred center).

The mandala's symbolic power can be traced back to millennia-old roots in Indian temple architecture, which created sacred spaces linking the worshiper to the larger cosmos. In these temples, time and space were represented in a vocabulary of circles and squares. Similarly, a mandala helps believers visualize the universe and their place in it, often in relation to a specific deity found in the center of the image.

the evolution of the symbol has happened throughout Asia under the influence of various religious and artistic traditions over a period of several thousand years--some complex; others quite simple offering proof of the continuing vitality of the mandala and its role in Buddhist devotions. The mandala is of significant importance in both Hinduism and Buddhism. Both religions adopt the mandala as a peaceful and creative symbol. Hence, the speculative project finds a balance to build a memorial, which will signify peace and harmony of the Tamil community. The scale of the mandala here is monumental imposing the idea of spirituality and peace. Contemplating the mandala does not only provide insight into reality, the Cosmos but also communion with it.

Mandala is the mystery that pervades all existence. Mandala alleviates suffering individually as well as in society. Contemplation can help overcome antagonism, conflict, stress and even war. Bindu as a symbolism is the beginning of the process that culminates into a mandala.

In Buddhism, the mandala is a ritual instrument, much like a mantra, used to assist meditation and concentration. Throughout history, these pictorial temples--intricate, two-dimensional, multi-colored patterns

of concentric circles, squares, and other shapes--have signified the human need for wholeness, order, and balance. But while many people of the West accept mandalas as representative of a cosmic force, few understand they are meant to be blueprints as well. Indeed, a Tantric Buddhist meditator studies a two-dimensional mandala like an architect, building up in his mind the image of a palace encompassing the sacred principles of Buddhist philosophy.

MANDALA AND BUDDHIST TEMPLE ARCHITECTURE

The mandala in Buddhism is a cosmic model depicting Buddha's dwelling place as the center of the universe. Like in the Hindu temples, the structuring of the Buddhist temples has also been predominantly based on the spiritual model of the mandala. Illustrations can be seen both in the form

of two-dimensional mandalas as well as three-dimensional mandalas. The two-dimensional mandalas which are drawings composed of squares and concentric circles could be temporarily painted on various material or drawn on the ground or sand or other natural substances using coloured powder. Customs involving ceremonious gatherings along with prayers and chantings while drawing the mandalas are believed to alleviate difficulties and be of greater good to an individual or a community. These ceremonies could even last up to a number of days.

Three-dimensionally, the mandala diagram becomes a visual model of the built environment. In the Buddhist worship place, the central space is significant having a statue of the Buddha fronted by a worshipping space surrounded by walls. This is encircled by a circumambulating space. The circumambulation pathway is a space of psychological awakening before reaching the spiritual pinnacle

MANDALA AND HINDU TEMPLE ARCHITECTURE

Although there have been various arguments by authors of Indian temple architecture like Stella Kramrisch and Michael W. Meister about the applicability of the Vastu Purusha Mandala as a governing device for temple architecture, it is safe to say that for formulating the layout of the temple, the Vastu Purusha Mandala has been an imperative tool. Though the 8 x 8 grid or the Manduka Vastu Mandala has been used in various temples of Indian architecture, it is to be noted that regional differences have played a major influence on the workability of the mandala design throughout India.

Customarily, mandalas were spaces for the symbolic consciousness of universal theories which help in the awakening of the individual psyche. The mandalas can be thought of as diagrams that function as a cue to reach a contemplational state which is the primary aim of the tradition. The form of the temples that are based on the regulating lines of the mandala were meant to create spaces that bring about a “physical and spatial” communion between God and man.

A mandala (emphasis on first syllable; Sanskrit मण्डल, maṇḍala – literally "circle") is a geometric configuration of symbols with a very different application. In various spiritual traditions, mandalas may be employed for focusing attention of practitioners and adepts, as a spiritual guidance tool, for establishing a sacred space and as an aid to meditation and trance induction. It is used as a map (in Shintoism) in the Indian religions of Hinduism, Buddhism, Jainism or Japanese religion of Shintoism representing deities, or in the case of Shintoism, paradises, kami or actual shrines.

In New Age, the mandala is a diagram, chart or geometric pattern that represents the cosmos metaphysically or symbolically; a time-microcosm of the universe, but it originally meant to represent wholeness and a model for the organizational structure of life itself, a cosmic diagram that shows the relation to the infinite and the world that extends beyond and within minds and bodies.

The basic form of hinduism mandalas is a square with four gates containing a circle with a center point and it is called also a yantra. Each gate is in the general shape of a T. Mandalas often have radial balance.

A yantra is similar to a mandala, usually smaller and using a more limited colour palette. It may be a two- or three-dimensional geometric composition used in sadhanas, puja or meditative rituals, and may incorporate a mantra into its design. It is considered to represent the abode of the deity. Each yantra is unique and calls the deity into the presence of the practitioner through the elaborate symbolic geometric designs. According to one scholar, "Yantras function as revelatory symbols of cosmic truths and as instructional charts of the spiritual aspect of human experience"^[5]

Many situate yantras as central focus points for Hindu tantric practice. Yantras are not representations, but are lived, experiential, nondual realities. As Khanna describes:

Despite its cosmic meanings a yantra is a reality lived. Because of the relationship that exists in the Tantras between the outer world (the macrocosm) and man's inner world (the microcosm), every symbol in a yantra is ambivalently resonant in inner–outer synthesis, and is associated with the subtle body and aspects of human consciousness.

Political meaning

The Rajamandala (or Raja-mandala; circle of states) was formulated by the Indian author Kautilya in his work on politics, the Arthashastra (written between 4th century BCE and 2nd century BCE). It describes circles of friendly and enemy states surrounding the king's state.

In historical, social and political sense, the term "mandala" is also employed to denote traditional Southeast Asian political formations (such as federation of kingdoms or vassalized states). It was adopted by 20th century Western historians from ancient Indian political discourse as a means of avoiding the term 'state' in the conventional sense. Not only did Southeast Asian polities not conform to Chinese and European views of a territorially defined state with fixed borders and a bureaucratic apparatus, but they diverged considerably in the opposite direction: the polity was defined by its centre rather than its boundaries, and it could be composed of numerous other tributary polities without undergoing administrative integration.

Mount Meru

A mandala can also represent the entire universe, which is traditionally depicted with Mount Meru as the axis mundi in the center, surrounded by the continents.

Wisdom and impermanence

In the mandala, the outer circle of fire usually symbolises wisdom. The ring of eight charnel grounds represents the Buddhist exhortation to be always mindful of death, and the impermanence with which samsara is suffused: "such locations were utilized in order to confront and to realize the transient nature of life". Described elsewhere: "within a flaming rainbow nimbus and encircled by a black ring of dorjes, the major outer ring depicts the eight great charnel grounds, to emphasize the dangerous nature of human life". Inside these rings lie the walls of the mandala palace itself, specifically a place populated by deities and Buddhas.

Five Buddhas

One well-known type of mandala is the mandala of the "Five Buddhas", archetypal Buddha forms embodying various aspects of enlightenment. Such Buddhas are depicted depending on the school of Buddhism, and even the specific purpose of the mandala. A common mandala of this type is that of the Five Wisdom Buddhas (a.k.a. Five Jinas), the

1. Buddhas Vairocana,
2. Aksobhya,
3. Ratnasambhava,
4. Amitabha and
5. Amoghasiddhi.

When paired with another mandala depicting the Five Wisdom Kings, this forms the Mandala of the Two Realms.

Practice

Mandalas are commonly used by tantric Buddhists as an aid to meditation.

The mandala is "a support for the meditating person", something to be repeatedly contemplated to the point of saturation, such that the image of the mandala becomes fully internalised in even the minutest detail and can then be summoned and contemplated at will as a clear and vivid visualized image. With every mandala comes what Tucci calls "its associated liturgy ... contained in texts

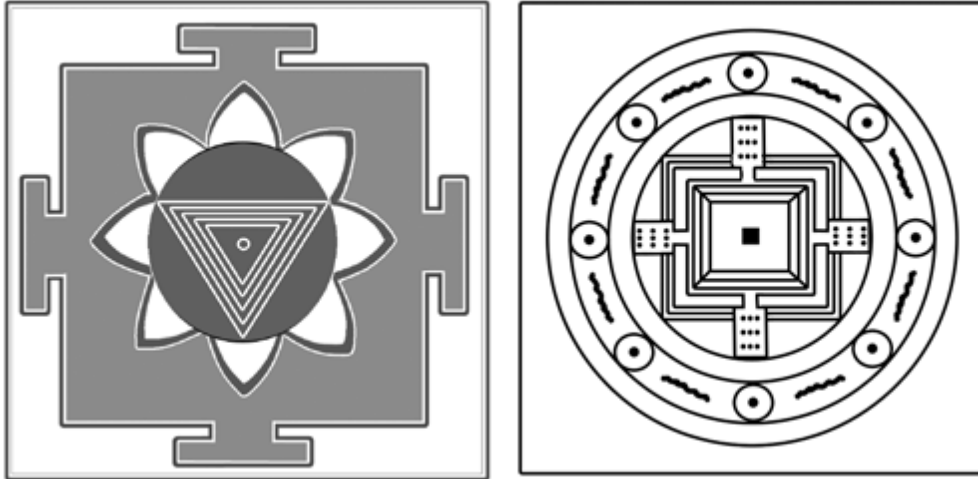
known as tantras" instructing practitioners on how the mandala should be drawn, built and visualised, and indicating the mantras to be recited during its ritual use.

By visualizing "pure lands", one learns to understand experience itself as pure, and as the abode of enlightenment. The protection that we need, in this view, is from our own minds, as much as from external sources of confusion. In many tantric mandalas, this aspect of separation and protection from the outer samsaric world is depicted by "the four outer circles: the purifying fire of wisdom, the vajra circle, the circle with the eight tombs, the lotus circle". The ring of vajras forms a connected fence-like arrangement running around the perimeter of the outer mandala circle.

As a meditation on impermanence (a central teaching of Buddhism), after days or weeks of creating the intricate pattern of a sand mandala, the sand is brushed together into a pile and spilled into a body of running water to spread the blessings of the mandala. External ritual and internal sadhana form an indistinguishable whole, and this unity finds its most pregnant expression in the form of the mandala, the sacred enclosure consisting of concentric squares and circles drawn on the ground and representing that adamant plane of being on which the aspirant to Buddha hood wishes to establish himself. The unfolding of the tantric ritual depends on the mandala; and where a material mandala is not employed, the adept proceeds to construct one mentally in the course of his meditation."

Conclusions:

1. Borobudur in its base is a regular square with 118-m sides.
2. Such layout is used in meditative practices of Hinduism and Buddhism to intensify processes of inner concentration during meditation.
3. The numbers 7, 72. were applied in the temple design and construction, which evidences the availability of relevant knowledge at that time.
4. No wonder, the temple complex is under UNESCO protection, i.e. it is not available for further studies.
5. If we look at Borobudur from above, we can see it represents a complete mandala.
6. The temple has 8 tiers: 5 square and 3 round ones. On the upper tier, there is the large stupa – a bell-shaped monument with a statue of Buddha inside.
7. Borobudur is situated approximately 2,439.85 km (1,516.05 miles) away from Angkor Wat.
8. If we look at mutual disposition of some ancient religious sites from the North Pole, interesting correlations may be observed.
9. At the upper tier there are 72 small bell-shaped, stupa-like towers located around the big central tower.
10. Between Chandi Mendut and Borobudur there is the small Chandi Pavon – at a distance of approximately 1,150 metres away from Mendut and 1,750 metres away from Borobudur. Disposition of the structures complies with the golden ratio.



A mandala and a yantra

Mandala in the form of a circle with an indication of a square and a point in the centre, and a four-sided pyramid with six steps and fourfold division;

12. Kali Yantra (translated from Sanskrit, “kala” means “time”; this word originates from the Indo-European root that means spinning; a word that is close in its meaning in Russian is “kolo”); in Hindu mythology it means cyclical creations and destructions of the Universe, rotation of time in the concept of rebirth of the Soul and of a subject of fate.

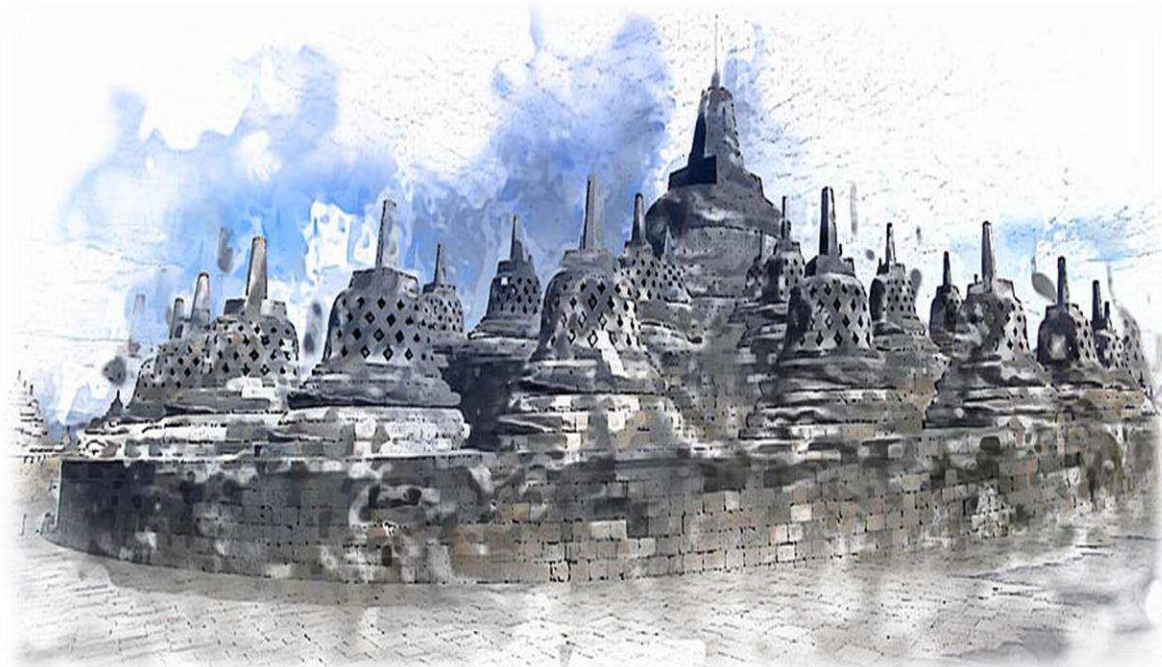
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CHAPTER 7

The STUPA as a STEP PYRAMID

The Buddha says:—“

They who speak much are blamed. They who speak a little are blamed. They who are silent are also blamed. In this world there is none who is not blamed.”

Based on inscriptions found on some of the stones of the monument, archaeologists agree that construction of Borobudur was probably begun around 760 AD and completed by about 830, the Golden Age of the Sailendra dynasty, under the reign of King Samaratunga. Sailendras were of foreign origin, either from South India or from Indo-China, and ruled Sumatra and Java from the 8th through the 13th centuries. Under their rule, the islands were major centers of Buddhist scholarship. The Javanese had been carving stone statues and inscriptions since about 400 AD, but between 700 and 900 AD, many of the Island's greatest shrines were erected.

Javanese society of that time must have been healthy and wealthy enough to support an endeavor such as the building of Borobudur. It would have required plentiful manpower to haul the stone – as much as 45,700 cubic yards taken from nearby streams and rivers, all fitted perfectly together without mortar. Skilled craftsmen would have been needed to carve the images, which were completed after the stones were in place, and abundant agricultural resources to provide food.

By the middle of the 9th century, Borobudur was completed with a large monastery at the southwest foot of the hill. "Today it takes a trained eye to see Borobudur from a distance," says Asian art historian, Jan Fontein.

"But we know that, in ancient times, this stone was covered with a kind of white plaster – called "plaster as hard as diamond" or "vajalaya" – which may have been a base for colors and just as the pilgrim who went to Chartres saw the cathedral rise up from miles away, so the pilgrim who came to Borobudur may have seen the monument in ancient times, hours before he reached it."

Records from the 9th and 10th centuries show that Borobudur was a center of pilgrimage for about 150 years during a short but intense period of Buddhism. Chinese coins and ceramics found at Borobudur from the 11th to the 15th centuries suggest that pilgrims continued to visit Borobudur during that time. nearby village of Bore; most *candi* are named after a nearby village. If it followed Javanese language, the monument should have been named “BudurBoro”. Raffles also suggested that *Budur* might correspond to the modern Javanese word *Buda* (“ancient”)—i.e., “ancient Boro”. However, another archaeologist suggests the second component of the name (*Budur*) comes from Javanese term *budhara* (“mountain”).

The construction and inauguration of a sacred Buddhist building—possibly a reference to Borobudur—was mentioned in two inscriptions, both discovered in Kedu, Temanggung Regency. The Karangtengah inscription, dated 824, mentioned a sacred building named *Jinalaya* (the realm of those who have conquered worldly desire and reached enlightenment), inaugurated by Pramodhawardhani, daughter of Samaratunga. The Tri Tepusan inscription, dated 842, is mentioned in the *sima*, the (tax-free) lands awarded by Çrī Kahulunnan (Pramodhawardhani) to ensure the funding and maintenance of a *Kamūlān* called *Bhūmisambhāra*. *Kamūlān* is from the word *mula*, which means “the place of origin”, a sacred building to honor the ancestors, probably

those of the Sailendras. Casparis suggested that *Bhūmi Sambhāra Bhudhāra*, which in Sanskrit means “the mountain of combined virtues of the ten stages of Boddhisattvahood”, was the original name of Borobudur.



The emblem of Central Java province and Magelang Regency bears the image of Borobudur. It has become the symbol of Central Java, and also Indonesia on a wider scale



Borobudur, or **Barabudur** (Indonesian: *Candi Borobudur* romanized: *Candhi Barabudhur*) is a 9th-century Mahayana Buddhist temple in Magelang Regency, not far from the town of Muntilan, in Central Java, Indonesia. It is the world's largest Buddhist temple. The temple consists of nine stacked platforms, six square and three circular, topped by a central dome. It is decorated with 2,672 relief panels and 504 Buddha statues. The central dome is surrounded by 72 Buddha statues, each seated inside a perforated stupa.

Built in the 9th century during the reign of the Sailendra Dynasty, the temple design follows Javanese Buddhist architecture, which blends the Indonesian indigenous cult of ancestor worship and the Buddhist concept of attaining Nirvana. The temple demonstrates the influences of Gupta art that reflects India's influence on the region, yet there are enough indigenous scenes and elements incorporated to make Borobudur uniquely Indonesian. The monument is a shrine to

the Lord Buddha and a place for Buddhist pilgrimage. The pilgrim journey begins at the base of the monument and follows a path around the monument, ascending to the top through three levels symbolic of Buddhist cosmology: *Kāmadhātu* (the world of desire), *Rūpadhātu* (the world of forms) and *Arūpadhātu* (the world of formlessness). The monument guides pilgrims through an extensive system of stairways and corridors with 1,460 narrative relief panels on the walls and the balustrades. Borobudur has one of the largest and most complete ensembles of Buddhist reliefs in the world. Evidence suggests that Borobudur was constructed in the 9th century and subsequently abandoned following the 14th-century decline of Hindu kingdoms in Java and the Javanese conversion to Islam.^[7] Worldwide knowledge of its existence was sparked in 1814 by Sir Thomas Stamford Raffles, then the British ruler of Java, who was advised of its location by native Indonesians.^[8] Borobudur has since been preserved through several restorations. The largest restoration project was undertaken between 1975 and 1982 by the Indonesian government and UNESCO, followed by the monument's listing as a UNESCO World Heritage Site. Borobudur is the largest Buddhist temple in the world, and ranks with Bagan in Myanmar and Angkor Wat in Cambodia as one of the great archeological sites of Southeast Asia. Borobudur remains popular for pilgrimage, with Buddhists in Indonesia celebrating Vesak Day at the monument. Borobudur is Indonesia's single most visited tourist attraction.

Like the rest of Southeast Asia, Indonesia seems to have been most strongly influenced by India from the 1st century CE. The islands of Sumatra and Java in western Indonesia were the seat of the empire of Sri Vijaya (8th-13th century), which came to dominate most of the area around the Southeast Asian peninsula through maritime power. The Sri Vijayan Empire had adopted Mahayana and Vajrayana Buddhism, under a line of rulers named the Sailendra. The Sailendras was the ardent temple builder and the devoted patron of Buddhism in Java. Sri Vijaya spread Mahayana Buddhist art during its expansion into the Southeast Asian peninsula. Numerous statues of Mahayana Bodhisattvas from this period are characterized by a very strong refinement and technical sophistication, and are found throughout the region. One of the earliest Buddhist inscription in Java, the Kalasan inscription dated 778, mentioned about the construction of a temple for the goddess Tara.



The statue of Prajñāpāramitā from Singhasari, East Java, on a lotus throne.

Extremely rich and refined architectural remains are found in Java and Sumatra. The most magnificent is the temple of Borobudur (the largest Buddhist structure in the world, built around 780-850 AD), built by Sailendras. This temple is modelled after the Buddhist concept of universe,

the Mandala which counts 505 images of the seated Buddha and unique bell-shaped stupa that contains the statue of Buddha. Borobudur is adorned with long series of bas-reliefs narrated the holy Buddhist scriptures. The oldest Buddhist structure in Indonesia probably is the Batujaya stupas at Karawang, West Java, dated from around the 4th century. This temple is some plastered brick stupas. Borobudur is located in an elevated area between two twin volcanoes, Sundoro-Sumbing and Merbabu-Merapi, and two rivers, the Progo and the Elo. According to local myth, the area known as Kedu Plain is a Javanese "sacred" place and has been dubbed "the garden of Java" due to its high agricultural fertility. During the restoration in the early 20th century, it was discovered that three Buddhist temples in the region, Borobudur, Pawon and Mendut, are positioned along a straight line. A ritual relationship between the three temples must have existed, although the exact ritual process is unknown.

However, Buddhist art in Indonesia reach the golden era during the Sailendra dynasty rule in Java. The bas-reliefs and statues of Bodhisatva, Tara, and Kinnara found in Kalasan, Sewu, Sari, and Plaosan temple is very graceful with serene expression, While Mendut temple near Borobudur, houses the giant statue of Vairocana, Avalokitesvara, and Vajrapani.

Buddhist religious architecture developed in the Indian subcontinent. Three types of structures are associated with the religious architecture of early Buddhism: monasteries (viharas), places to venerate relics (stupas), and shrines or prayer halls (chaityas, also called *chaitya grihas*), which later came to be called temples in some places.

The initial function of a stupa was the veneration and safe-guarding of the relics of Gautama Buddha. The earliest surviving example of a stupa is in Sanchi (Madhya Pradesh).

In accordance with changes in religious practice, stupas were gradually incorporated into chaitya-grihas (prayer halls). These are exemplified by the complexes of the Ajanta Caves and the Ellora Caves (Maharashtra). The Mahabodhi Temple at Bodhi Gaya in Bihar is another well-known example.

The pagoda is an evolution of the Indian stupas.

A characteristic new development at Buddhist religious sites was the stupa. Stupas were originally more sculpture than building, essentially markers of some holy site or commemorating a holy man who lived there. Later forms are more elaborate and also in many cases refer back to the Mount Meru model.

One of the earliest Buddhist sites still in existence is at Sanchi, India, and this is centred on a stupa said to have been built by King Ashoka (273–236 BCE). The original simple structure is encased in a later, more decorative one, and over two centuries the whole site was elaborated upon. The four cardinal points are marked by elaborate stone gateways.

As with Buddhist art, architecture followed the spread of Buddhism throughout south and east Asia and it was the early Indian models that served as a first reference point, even though Buddhism virtually disappeared from India itself in the 10th century.

Decoration of Buddhist sites became steadily more elaborate through the last two centuries BCE, with the introduction of tablets and friezes, including human figures, particularly on stupas. However, the Buddha was not represented in human form until the 1st century CE. Instead, aniconic symbols were used. This is treated in more detail in Buddhist art, Aniconic phase. It influenced the development of temples, which eventually became a backdrop for Buddha images in most cases.

As Buddhism spread, Buddhist architecture diverged in style, reflecting the similar trends in Buddhist art. Building form was also influenced to some extent by the different forms of Buddhism in the northern countries, practising Mahayana Buddhism in the main and in the south where Theravada Buddhism prevailed.

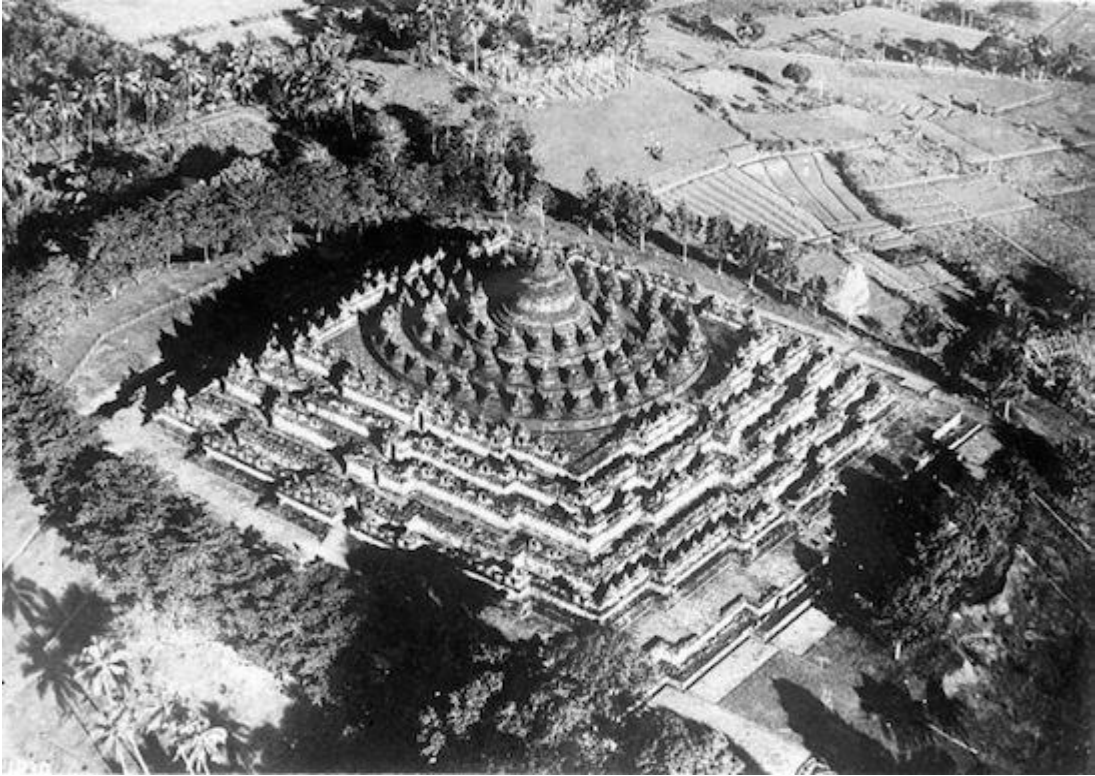
Ancient lake hypothesis

Speculation about a surrounding lake's existence was the subject of intense discussion among archaeologists in the 20th century. In 1931, a Dutch artist and scholar of Hindu and Buddhist architecture, W.O.J. Nieuwenkamp, developed a hypothesis that the Kedu Plain was once a lake and Borobudur initially represented a lotus flower floating on the lake.^[15] It has been claimed that Borobudur was built on a bedrock hill, 265 m (869 ft) above sea level and 15 m (49 ft) above the floor of a dried-out paleolake.

Dumarçay together with Professor Thanikaimoni took soil samples in 1974 and again in 1977 from trial trenches that had been dug into the hill, as well as from the plain immediately to the south. These samples were later analysed by Thanikaimoni, who examined their pollen and spore content to identify the type of vegetation that had grown in the area around the time of Borobudur's construction. They were unable to discover any pollen or spore samples that were characteristic of any vegetation known to grow in an aquatic environment such as a lake, pond or marsh. The area surrounding Borobudur appears to have been surrounded by agricultural land and palm trees at the time of the monument's construction, as is still the case today. Caesar Voûte and the geomorphologist Dr J.J. Nossin in 1985–86 field studies re-examined the Borobudur lake hypothesis and confirmed the absence of a lake around Borobudur at the time of its construction and active use as a sanctuary. These findings *A New Perspective on Some Old Questions Pertaining to Borobudur* were published in the 2005 UNESCO publication titled "The Restoration of Borobudur".

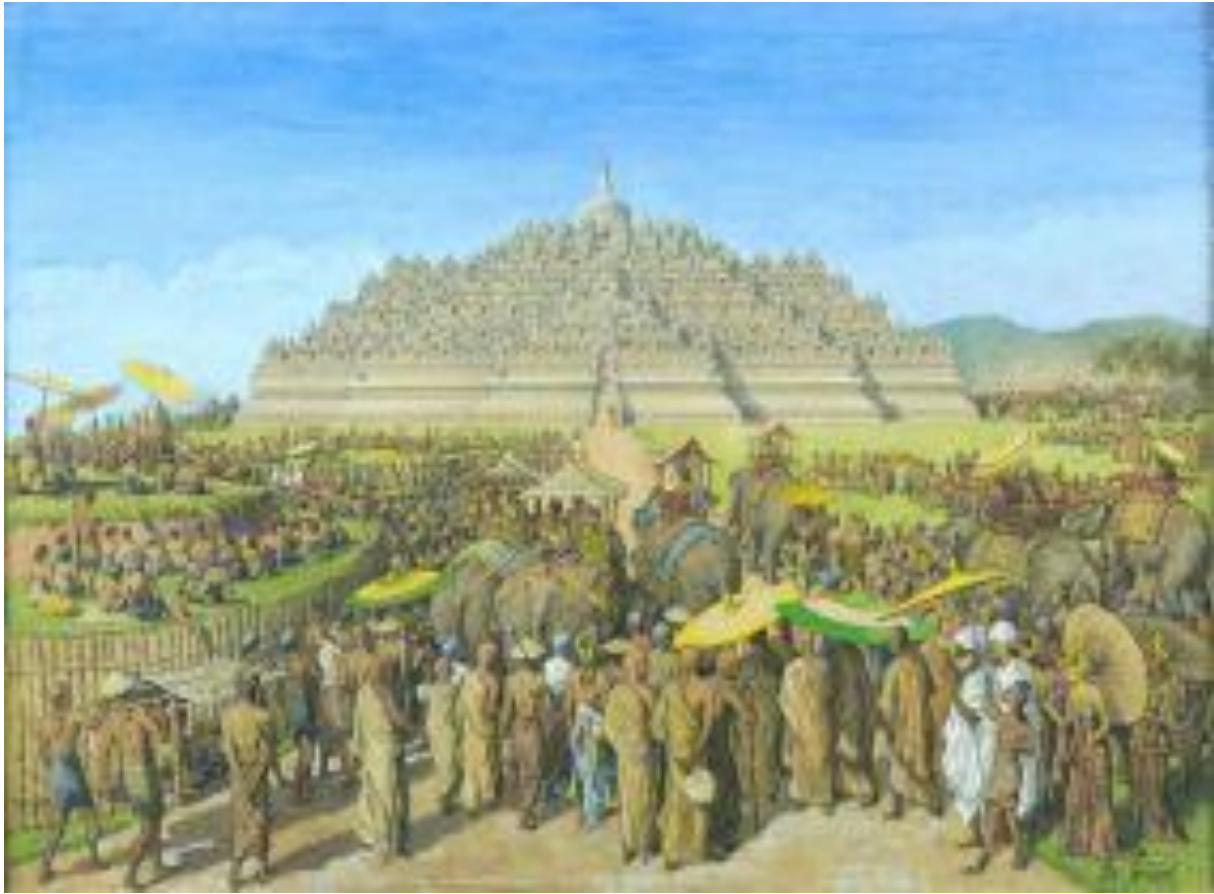
Architect: Built in the 9th century during the reign of the Sailendra Dynasty, the temple was designed in Javanese Buddhist architecture, which blends the Indonesian indigenous cult of ancestor worship and the Buddhist concept of attaining Nirvana. The temple also demonstrates the influences of Gupta art that reflects India's influence on the region, yet there are enough indigenous scenes and elements incorporated to make Borobudur uniquely Indonesian. The architect Gunadharma, considered by many today to be a man of great vision and devotion. Gunadharma or Gunadarma is claimed as the name of the architect of Borobudur, the ninth-century Buddhist monument in Central Java, Indonesia. Many sources say that he came from Nepal, and was born in the province of Lalitpur, Patan of Nepal in the 16th century. His art style included Javanese Buddhism architecture. His most famous creation, Borobudur, is the largest Buddhist temple in the world

The temple has been described in a number of ways. Its basic structure resembles that of a pyramid, yet it has been also referred to as a caitya (shrine), a stupa (reliquary), and a sacred mountain. In fact, the name Śailendra literally means "Lord of the Mountain." While the temple exhibits characteristics of all these architectural configurations, its overall plan is that of a three-dimensional mandala—a diagram of the cosmos used for meditation—and it is in that sense where the richest understanding of the monument occurs.



Aerial photo of Borobudur (Tropenmuseum Collection)

Construction:



A painting by G.B. Hooijer (c. 1916—1919) reconstructing the scene of Borobudur during its heyday

Borobudur was likely founded around 800 CE. But there is no written record of who built it or of its intended purpose. The construction time has been estimated by comparison between carved reliefs on the temple's hidden foot and the inscriptions commonly used in royal charters during the 8th and 9th centuries. This corresponds to the period between 760 and 830 CE, the peak of the Sailendra dynasty in central Java, when it was under the influence of the Srivijayan Empire. The construction has been estimated to have taken 75 years and been completed during the reign of Samaratungga in 825.

There is confusion between Hindu and Buddhist rulers in Java around that time. The Sailendras were known as ardent followers of Buddhism, though stone inscriptions found at Sojomerto suggest they may have been Hindus. It was during this time that many Hindu and Buddhist monuments were built on the plains and mountains around the Kedu Plain. The Buddhist monuments, including Borobudur, were erected around the same time as the Hindu Shiva Prambanan temple compound. In 732 CE, the Shivaite King Sanjaya commissioned a Shivalinga sanctuary to be built on the Wukir hill, only 10 km (6.2 mi) east of Borobudur.

Construction of Buddhist temples, including Borobudur, at that time was possible because Sanjaya's immediate successor, Rakai Panangkaran, granted his permission to the Buddhist followers to build such temples. In fact, to show his respect, Panangkaran gave the village of Kalasan to the Buddhist community, as is written in the Kalasan Charter dated 778 CE. This has led some archaeologists to believe that there was never serious conflict concerning religion in Java as it was possible for a Hindu king to patronize the establishment of a Buddhist monument; or for a Buddhist king to act



likewise. However, it is likely that there were two rival royal dynasties in Java at the time—the Buddhist Sailendra and the Saivite Sanjaya—in which the latter triumphed over their rival in the 856 battle on the Ratubaka plateau. This confusion also exists regarding the Lara Jonggrang temple at the Prambanan complex, which was believed to have been erected by the victor Rakai Pikatan as the Sanjaya dynasty's reply to Borobudur, but others suggest that there was a climate of peaceful coexistence where Sailendra involvement exists in Lara Jonggrang.

Some 1,200 years ago builders carted two million stones from local rivers and streams and fit them tightly together without the aid of mortar to create a 95-foot-high (29-meter-high) step pyramid. More than 500 Buddha statues are perched around the temple. Its lower terraces include a balustrade that blocks out views of the outside world and replaces them with nearly 3,000 bas-relief sculptures illustrating the life and teachings of the Buddha. Together they make up the greatest assemblage of such Buddhist sculpture in the world.

Climbing Borobudur is a pilgrimage in itself, meant to be experienced physically and spiritually according to the tenets of Mahayana Buddhism. As the faithful climb upward from level to level, they are guided by the stories and wisdom of the bas-reliefs from one symbolic plane of consciousness to the next, higher level on the journey to enlightenment. But Borobudur was mysteriously abandoned by the 1500s, when the center of Javan life shifted to the East and Islam arrived on the island in the 13th and 14th centuries. Eruptions deposited volcanic ash on the site and the lush vegetation of Java took root on the largely forgotten site.

Architecture: From Darkness to Light: The idea of moving from the darkness into the light is the final element of the experience of Borobudur. The temple's pathway takes one from the earthly realm of desire (*kamadhatu*), represented and documented on the hidden narratives of the structure's earthbound base, through the world of forms (*rupadhatu*) as expounded on the narratives carved

along the four galleries set at right angles, until one finally emerges into the realm of formlessness (*arupadhātu*) as symbolized and manifested in the open circular terraces crowned with 72 stupas.



However, the symbolization of enlightenment these stupas represent is not intended to be merely aesthetic. Buddhist stupas and mandalas are understood as “spiritual technologies” that harness spiritual “energies” in the creation of sacred space. The repetition of form and the circumambulatory progress of the pilgrim mimic, and thereby access, the cosmological as a microcosm. The clockwise movement around the cosmic center reproduces the macrocosmic path of the sun. Thus, when one emerges from the dark galleries representing the realms of desire and form into the light of the “formless” circular open air upper walkways, the material effect of light on one’s physical form merges concomitantly with the spiritual enlightenment generated by the metaphysical journey of the sacred path.

Light, in all its paradoxes, is the ultimate goal. The crowning stupa of this sacred mountain is dedicated to the “Great Sun Buddha” Vairocana. The temple sits in cosmic proximity to the nearby volcano Mt. Merapi. During certain times of the year the path of the rising sun in the East seems to emerge out of the mountain to strike the temple’s peak in radiant synergy. Light illuminates the stone in a way that is intended to be more than beautiful. The brilliance of the site can be found in how the Borobudur mandala blends the metaphysical and physical, the symbolic and the material,

the cosmological and the earthly within the structure of its physical setting and the framework of spiritual paradox.

Borobudur and the concept of path in Buddhism

Paths have been pervasive in human civilization. We are all familiar with the streets, trails, and lanes along which we routinely travel. Ancient Roman roads are utilized in some places even today. In contemporary computer culture we follow “paths” on webpages as we find our way to the information or experience we are searching for or find unexpectedly. There are simulated paths in complex first-person virtual reality video environments, where role-playing games formulate their content around the path to be conquered. The idea of path is an important concept in Buddhism, and is essential in understanding the meaning and purpose of one of the most remarkable and impressive monuments in the world: Borobudur.



Borobudur, Indonesia (photo: Claire André, CC BY-NC-ND 2.0)

Located on the island of Java in Indonesia, the rulers of the Śailendra Dynasty built the Temple of Borobudur around 800 C.E. as a monument to the Buddha (exact dates vary among scholars). The temple (or candi in Javanese, pronounced “chandi”) fell into disuse roughly one hundred years after its completion when, for still unknown reasons, the rulers of Java relocated the governing center to another part of the island. The British Lieutenant Governor on Java, Sir Thomas Stamford Raffles,

only rediscovered the site in 1814 upon hearing reports from islanders of an incredible sanctuary deep within the island's interior.



photo: Wilson Loo Kok Wee (CC BY-NC-ND 2.0)

Set high upon a hill vertically enhanced by its builders to achieve a greater elevation, Borobudur consists of a series of open-air passageways that radiate around a central axis mundi (cosmic axis). Devotees circumambulate clockwise along walkways that gradually ascend to its uppermost level. At Borobudur, geometry, geomancy, and theology all instruct adherents toward the ultimate goal of enlightenment. Meticulously carved relief sculptures mediate a physical and spiritual journey that guides pilgrims progressively toward higher states of consciousness.

The entire site contains 504 statues of the Buddha. 1460 stone reliefs on the walls and opposite balustrades decorate the first four galleries, with an additional 1212 decorative reliefs augmenting the path. The relief sculptures narrate the Buddha's teachings (the Dharma), depict various events related to his past lives (Jataka tales), and illustrate didactic stories taken from important Buddhist scriptures (sutras). Interestingly, another 160 relief sculptures adorn the base of the monument, but are concealed behind stone buttresses that were added shortly after the building's construction in order to further support the structure's weight. The hidden narrative reliefs were photographed when they were discovered in the late 19th century before the stones were put back to help ensure the temple's stability.



Borobudur, photo: Gildardo Sánchez (CC BY-NC-SA 2.0)

Moving past the base and through the four galleries, the devotee emerges onto the three upper terraces, encountering 72 stupas each containing a three-dimensional sculpture of a seated Buddha within a stone latticework. At the temple's apex sits the large central stupa, a symbol of the enlightened mind.

The archaeological excavation into Borobudur during reconstruction suggests that adherents of Hinduism or a pre-Indic faith had already begun to erect a large structure on Borobudur's hill before the site was appropriated by Buddhists. The foundations are unlike any Hindu or Buddhist shrine structures, and therefore, the initial structure is considered more indigenous Javanese than Hindu or Buddhist.

Design



Borobudur ground plan taking the form of a Mandala

The monument is both a shrine to the **Lord Buddha** and a place for Buddhist pilgrimage. The journey for pilgrims begins at the base of the monument and follows a path around the monument and ascends to the top through three levels symbolic of Buddhist cosmology: **Kāmadhātu** (the world of desire), **Rupadhatu** (the world of forms) and **Arupadhatu** (the world of formlessness).

Zone 1: Kamadhatu (*The phenomenal world, the world inhabited by common people*)

Borobudur's hidden **Kamadhatu** level consists of 160 reliefs depicting scenes of Karmawibhanga Sutra, the law of cause and effect. Illustrating the human behavior of desire, the reliefs depict robbing, killing, rape, torture and defamation. A corner of the covering base has been permanently removed to allow visitors to see the hidden foot, and some of the reliefs.

Zone 2: Rapudhatu (*The transitional sphere, humans are released from worldly matters*)

The four square levels of **Rapudhatu** contain galleries of carved stone reliefs, as well as a chain of niches containing statues of Buddha. In total there are 328 Buddha on these balustrade levels which also have a great deal of purely ornate reliefs. The Sanskrit manuscripts that are depicted on this level over 1300 reliefs are Gandhawyuha, Lalitawistara, Jataka and Awadana. They stretch for 2.5km. In addition there are 1212 decorative panels.

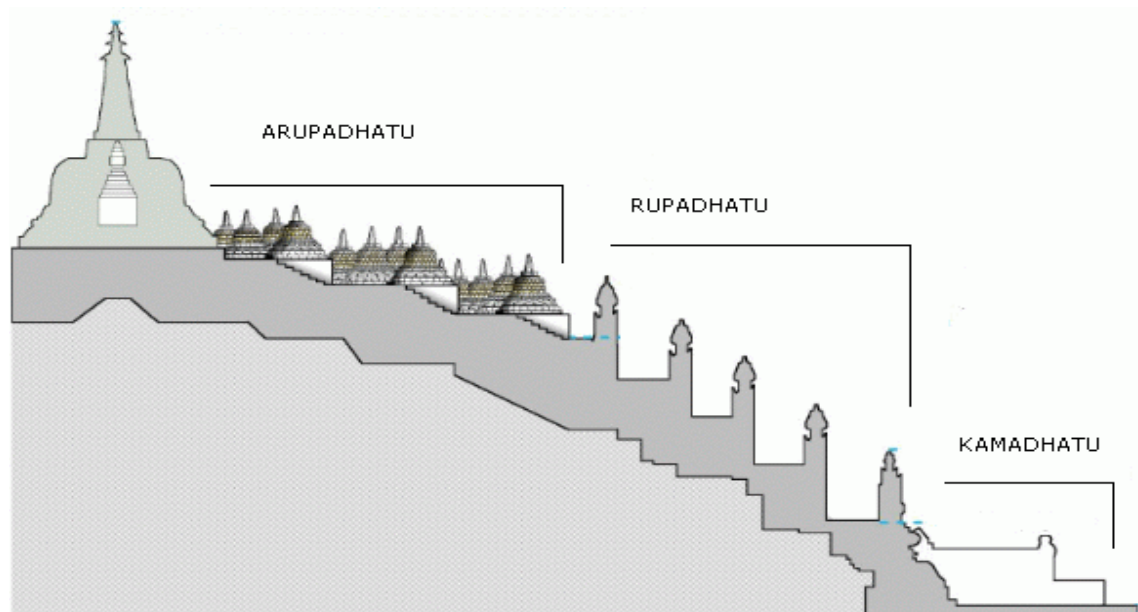
Zone 3: Arupadhatu (*The highest sphere, the abode of the gods*) The three circular terraces leading to a central dome or stupa represent the rising above the world, and these terraces are a great deal less ornate, the purity of form is paramount.

The terraces contain circles of perforated stupas, an inverted bell shape, containing sculptures of Buddha, who face outward from the temple. There are 72 of these stupas in total. The impressive central stupa is currently not as high as the original version,

which rose 42m above ground level, the base is 9.9m in diameter. Unlike the stupas surrounding it, the central stupa is empty and conflicting reports suggest that the central void contained relics, and other reports suggest it has always been empty.

The monument guides pilgrims through an extensive system of stairways and corridors with 1,460 narrative relief panels on the walls and the balustrades. Borobudur has the largest and most complete ensemble of Buddhist reliefs in the world.

Borobudur is built as a single large stupa and, when viewed from above, takes the form of a giant tantric Buddhist *mandala*, simultaneously representing the Buddhist cosmology and the nature of mind. The original foundation is a square, approximately 118 metres (387 ft) on each side. It has nine platforms, of which the lower six are square and the upper three are circular. The upper platform features seventy-two small stupas surrounding one large central stupa. Each stupa is bell-shaped and pierced by numerous decorative openings. Statues of the Buddha sit inside the pierced enclosures.



The design of Borobudur took the form of a step pyramid. Previously, the prehistoric Austronesian megalithic culture in Indonesia had constructed several earth mounds and stone step pyramid structures called *punden berundak* as discovered in Pangguyangan site near Cisolokand in Cipari near Kuningan. The construction of stone pyramids is based on native beliefs that mountains and high places are the abode of ancestral spirits or *hyangs*. The *punden berundak* step pyramid is the basic design in Borobudur, believed to be the continuation of older megalithic tradition incorporated with Mahayana Buddhist ideas and symbolism.

As mentioned earlier the monument's three divisions symbolize the three "realms" of Buddhist cosmology, namely *Kamadhatu* (the world of desires), *Rupadhatu* (the world of forms), and finally *Arupadhatu* (the formless world). Ordinary sentient beings live out their lives on the lowest level, the realm of desire. Those who have burnt out all desire for continued existence leave the world of desire and live in the world on the level of form alone: they see forms but are not drawn to them. Finally, full Buddhas go beyond even form and experience reality at its purest, most fundamental level, the formless ocean of nirvana. The liberation from the cycle of *Samsāra* where the enlightened soul had no longer attached to worldly form corresponds to the concept of *Śūnyatā*,

the complete voidness or the nonexistence of the self. *Kāmadhātu* is represented by the base, *Rupadhatu* by the five square platforms (the body), and *Arupadhatu* by the three circular platforms and the large topmost stupa. The architectural features between the three stages have metaphorical differences. For instance, square and detailed decorations in the *Rupadhatu* disappear into plain circular platforms in the *Arupadhatu* to represent how the world of forms—where men are still attached with forms and names—changes into the world of the formless.

Congregational worship in Borobudur is performed in a walking pilgrimage. Pilgrims are guided by the system of staircases and corridors ascending to the top platform. Each platform represents one stage of enlightenment. The path that guides pilgrims was designed to symbolize Buddhist cosmology.

In 1885, a hidden structure under the base was accidentally discovered. The "hidden footing" contains reliefs, 160 of which are narratives describing the real *Kāmadhātu*. The remaining reliefs are panels with short inscriptions that apparently provide instructions for the sculptors, illustrating the scenes to be carved. The real base is hidden by an encasement base, the purpose of which remains a mystery. It was first thought that the real base had to be covered to prevent a disastrous subsidence of the monument into the hill. There is another theory that the encasement base was added because the original hidden footing was incorrectly designed, according to *Vastu Shastra*, the Indian ancient book about architecture and town planning. Regardless of why it was commissioned, the encasement base was built with detailed and meticulous design and with aesthetic and religious consideration.

Building structure

Approximately 55,000 cubic metres (72,000 cu yd) of andesite stones were taken from neighbouring stone quarries to build the monument. The stone was cut to size, transported to the site and laid without mortar. Knobs, indentations and dovetails were used to form joints between stones. The roof of stupas, niches and arched gateways were constructed in corbelling method. Reliefs were created *in situ* after the building had been completed.

The monument is equipped with a good drainage system to cater to the area's high stormwater runoff. To prevent flooding, 100 spouts are installed at each corner, each with a unique carved gargoyle in the shape of a giant or makara.

Hilly Construction: Borobudur differs markedly from the general design of other structures built for this purpose. Instead of being built on a flat surface, Borobudur is built on a natural hill. However, construction technique is similar to other temples in Java. Without the inner spaces seen in other temples, and with a general design similar to the shape of pyramid, Borobudur was first thought more likely to have served as a *stupa*, instead of a temple. A *stupa* is intended as a shrine for the Buddha. Sometimes stupas were built only as devotional symbols of Buddhism. A temple, on the other hand, is used as a house of worship. The meticulous complexity of the monument's design suggests that Borobudur is in fact a temple.

The basic unit of measurement used during construction was the *tala*, defined as the length of a human face from the forehead's hairline to the tip of the chin or the distance from the tip of the thumb to the tip of the middle finger when both fingers are stretched at their maximum distance. The unit is thus relative from one individual to the next, but the monument has exact measurements. A survey conducted in 1977 revealed frequent findings of a ratio of 4:6:9 around the monument. The architect had used the formula to lay out the precise dimensions of the fractal and self-similar geometry in Borobudur's design. This ratio is also found in the designs of Pawon and Mendut, nearby Buddhist temples. Archeologists have conjectured that the 4:6:9 ratio and the *tala* have calendrical, astronomical and cosmological significance, as is the case with the temple of Angkor Wat in Cambodia. The main structure can be divided into three components: base, body,

and top. The base is 123 m × 123 m (404 ft × 404 ft) in size with 4 metres (13 ft) walls.¹ The body is composed of five square platforms, each of diminishing height. The first terrace is set back 7 metres (23 ft) from the edge of the base. Each subsequent terrace is set back 2 metres (6.6 ft), leaving a narrow corridor at each stage. The top consists of three circular platforms, with each stage supporting a row of perforated *stupas*, arranged in concentric circles. There is one main dome at the center, the top of which is the highest point of the monument, 35 metres (115 ft) above ground level. Stairways at the center of each of the four sides give access to the top, with a number of arched gates overlooked by 32 lion statues. The gates are adorned with Kala's head carved on top of each and Makaras projecting from each side. This Kala-Makara motif is commonly found on the gates of Javanese temples. The main entrance is on the eastern side, the location of the first narrative reliefs. Stairways on the slopes of the hill also link the monument to the low-lying plain.

CHAPTER 7

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The Main Stupa of Borobudur as Gnomon and Its Relation With Pranotomongso Calendar System

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Abstract. The role of main Stupa of Borobudur as the time marker had been hypothesized[1]. To verify that, we model the main stupa of Borobudur as gnomon, calculated by the its shadow path made by the Sun, and verified the model by observing the shadow path during two Vernal Equinox in 2009 and 2010[2]. In this work we continue the calculation by elaborating the Pranotomongso Calendar System, javanese calendar system based on solar movement[3], and reconstruct the model of the main stupa as gnomon (bencet in Javanese language)[4] by numerical simulation.

1. Introduction

Borobudur is a well-known Buddhist temple, located near Magelang (Central Java, Indonesia). Its geographics coordinate is 110 12 10.34 E 7 36 30.49 S. The main structure of Borobudur can be divided into three components: foot, body, and head. Borobudurs head part consist of a main stupa at the center and three terraces which is (more or less) circular in shape. Top terrace contain 16 little stupas, with radius = 24 m. Middle terrace contain 24 little stupas, with radius = 37 m. This terrace is 1.5 m lower than top terrace. Bottom terrace contain 32 little stupas, with radius = 53 m. This terrace is (also) 1.5 m lower than middle terrace. The stupas of each terrace distributed evenly at the edge of each terrace. The main stupa with three terraces called Arupadhatu. We suspect this Arupadhatu configuration is serve a purpose as a chronometer, with the main stupa as the gnomon.

In this work we reconstruct Borobudur as if how it was suppose to looks like at the time it

as built. We include cakra, part of main stupa that is now detached from main stupa for some technical reasons. Cakra adds 7.5 m to the height of main stupa, making it 20.44 m in total, relative to top terrace.

Javanese culture recognize a system to track time for everyday use, known as pranotomongso. Pranotomongso use bencet (a kind of sundial) to measure time. With this in mind, we try to incorporate pranotomongso as a time tracking system to Borobudur as a chronometer.

2. Method

We make a model of (our) ideal Borobudur, based on the position, size and orientation of actual Borobudur based on our previous work (Hariawang et al., 2010). In the model, we incorporate correction for precession (Hariawang, 2010). Our model is Borobudur (as we suspect) circa 800 CE, around the time it was built. We study pattern of shadow of main stupa (+cakra) relative to little stupas position in each terrace (series of pictures to the right). We try to find any interesting pattern of the falling shadow, that can be used as a marker of time for them who use Borobudur as a chronometer (if our guess is right).

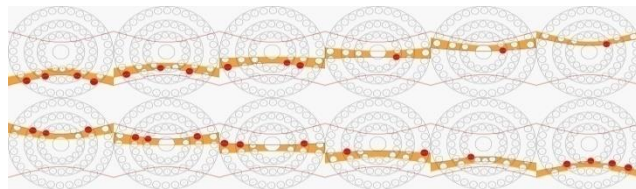


Figure 1. Series of shadow of main stupa for 12 mongsos. Edge of the shadows with dark color is signified the shadow of beginning of that mongso.

3. Discussion

In Figure 1, we present regular pattern of the shadow cast by main stupa during each mongso. During the beginning of each mongso, the shadow falls (more or less) exactly on specific stupa(s), marked by filled red circle. From the repeating pattern we suspect that those stupas may play important role as time marker for the ancient people. To verify this, we have to figure out a mathematical pattern behind it. For this work, we just identified a specific stupas suspected as marker on specific time (mongso). There is an indication that ancient mathematical of sanskrit[6] might hold the clue on astronomical calculation by ancient people. We will elaborate the mathematical sanskrit as the means to define the pattern and the specific astronomical purpose (if any) of Borobudur.

4. Acknowledgement

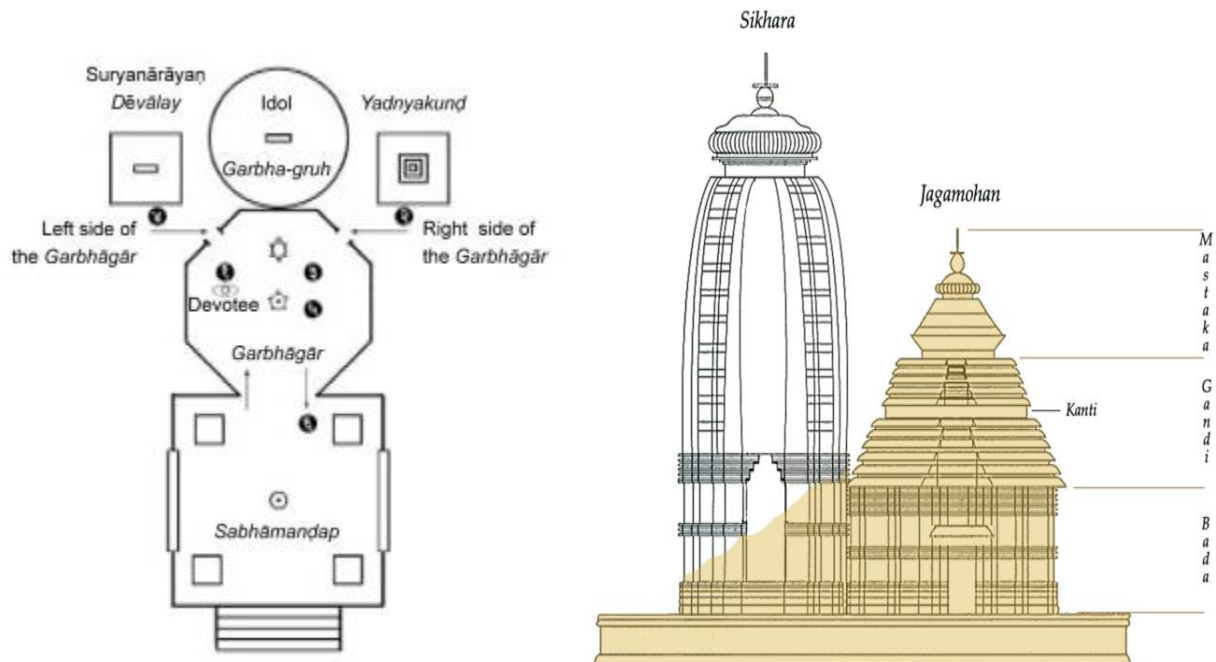
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CHAPTER 8

ELEMENTS OF INDIAN TEMPLES and STUPAS



Plan: The earliest architecture in India is that of cottage type. It is a circular, bottle or dome shaped. Mud and Bamboo sticks were used for construction. In the course of evolution number of plans were incorporated in the temple architecture, such as circular plan, square, rectangular, elliptical, upsidal, stellar, etc. A text like Manasara mentions 32 types of square plans 1 . Plan is essential for any structural temple. Plans of the temples depend upon the number of components that existed within the temple.

The simplest plan of the temple consists of a garbhagriha and sabhamandapa or porch. This simple plan does not imply that the structure belonged to the earliest period. The temples constructed in the later period also have simple plans. Construction of a temple depends upon the financial position of the builder. When an antarala is added in-between garbhagriha and mandapa, then the plan of the temple becomes little larger. When a pradakshinapatha (circumambulatory path) is added to garbhagriha and antarala, the plan of the temple becomes wider. Then it is called as Sandhara' temple. In the course of time, number of components of the, temple increased like mandapas, shrines for subsidiary deities; priikaras, etc, and the plan of the temple became large and wider.

Mandala: With the arrival of Agamas in Hindu religion, the details of architecture became more sophisticated in the temple and reflected the fundamental symbolism of Mandalas. The Yoga Tattva Upanishad speaks about the symbolism in terms of the five fundamental elements that constitute the material basis of the entire cosmos. Earth elements are represented by 'a Square', Water with a 'semicircle', fire by a 'Triangle', air by a 'six- angled figure' and ether (sky) by a circle. The point without dimension dot (bindu) is the focus of all energy . The icon in the sanctum occupies the central position and the temple represents the other necessary forms. The architectural details of a sophisticated temple reflect this fundamental symbolism. The above five forms are represented in a Mandala known as Vishva-Karma Mandala,' which is regarded as fundamental to all temple architecture 3 . The four sides of the Mandala symbolize the four main directions and the corners of the square represents four mid-directions and each of the eight quarters is presided over by a deity. The inner circle symbolizes the 'Creator' (Brahma), which is symbolic of activity, guarded by the eight directions.

The Mandala is symbolic of the entire universe. The 'allmaker' (Creator) is also the progenitor. The whole mass of scripture, consisting of manuals of architecture, sculpture and painting collectively are known as Agama. Early temples were reputed to be built by this All-maker . In early days, this vertical emphasis was

laid on only one tier (prathama tala). Later, number of tiers (talas) were added to this superstructure. It was believed that the entire area, which the vimana or sikhara overlooked was rendered holy and the area covered by this sikhara, would be prosperous. Superstructures of temples of Kalinga type are simple with series of receding courses forming stepped pyramids. Another type of superstructure that is of storied type contains several talas (storeys.)

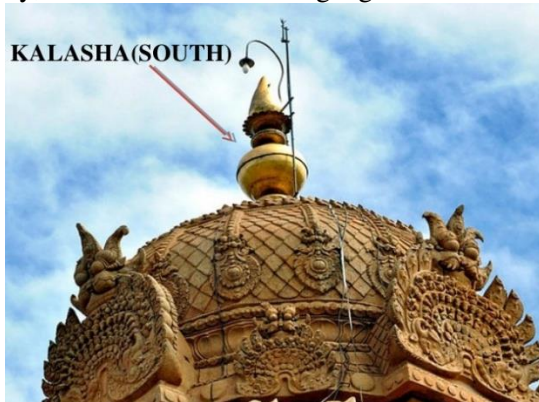
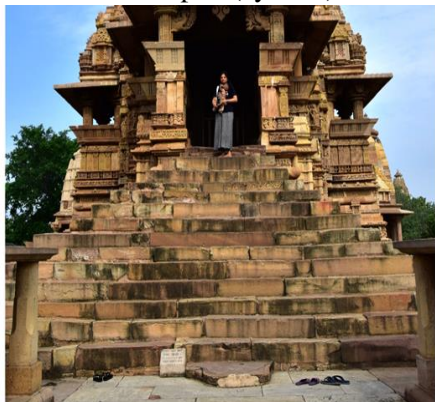
Texts like Vishnu Tilaka, Manasara, Mukutaganta, Silparatna, layamata and Isana Shivaguru Paddhati and Bhave Prakasana give broad account of sikhara features such as Nagara, Dravida and Vesara. In addition to these Nagara, Dravida and Vesara type sikharas, Vishnu Mn Ira and Markhandcya Samhita grouped the temples into nine and added six more types such as Sarvadesika, Kalinga, Varata, Mandira, Bhavana and .yoga. But Silvaprasna and liana Shivaguru Paddhati referred only three classifications, Nagar. Dravida and Vesara

Nagara: Actually means squarish, cruciform in plan and its sikhara has a vertical emphasis.

Vesara: Circularly emphasized horizontal aspect shape, like domical or octagonal or in the shape of vaulted roof. Another feature is storeyed towers and tall gopuras. It is a combination of Dravida and Nagara style of Sikhara features.

Dravida- Polygonal or octagonal (six or eight sided): It is circular in plan or apsidal. General conception is that Nagara type of temples prevails in the land between the Himalayas and Vindhya ranges. Vesara type of temples exists inbetween Vindhya ranges and Krishna river and Dravida type of temples prevails inbetween River Krishna and Kanyakumari⁷.

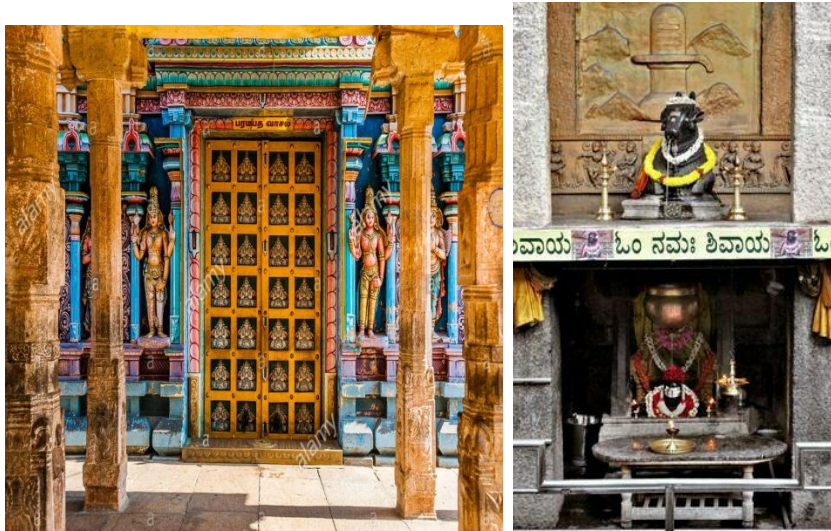
The term sikhara meaning 'Mountain peak' may indicate that it signified 'Meru' meaning mountain or Kai lasa , , so tall and sacred place of Shiva. The North Indian vimana or Sikhara is crowned by a large circular (Wheel shaped) capstone block known as 'amalaka' (ribbed disc resembling an amalaka fruit, Emblic Myrobalan), while its South Indian counterpart ends in a cupola (Srnga) or Wagon roof (khakra). The South Indian vimana is broader and shorter than the North Indian vimana. The North Indian temples rise from a pedestal (Pitha or Jagati), though the wall (tiara) and main body (gandi) to the head (mastaka), which consists of a rib, is surmounted by a 'skull' (khapuri) on which is installed the Kalasa (finial). And on top of finial will be seen the weapon (ayudha) of the deity, a trident or a discus flag e.g.



Jagati(See my paper on Jain temple Jagati elsewhere on academia.edu and researchgate.net) Temples in Orissa and Khajuraho The The Jaina temple at Cudne, Goa stands on Pitha (Jagati) like North Indian temple. Compared to the North Indian Temple Sikharas, in the Dravidian vimana, the height is less emphasized. The plan of the Virnana could be round or square. It could also be six- sided or eight- sided. It could retain one form uniformly from the base to the top or combine two or more plans at different storeys, sometimes as many as sixteen, but the prevailing style is devoid of such differentiation into storeys. It rises above the sanctum with flat roof of the sanctum (Bhumika or Kapotha) as its base (adhithana).

Kalasa It was an old custom to install a crowing member in the form of a sacrificial 'Vase (Kalasa)' made of metal. kalasa denotes a mark of exaltation . It occupies the topmost part of the temple below the Ayuda. (Pineal). Porch The rectangular porch in front of the Sanctum sanctorium (Mukhamandapa or **Mukha —sala**) is a pillared hall, allowing the devotees to stand and watch the worship rituals as they are conducted inside the sanctum. When the temple became popular and devotees increased, the sanctum needed additional hall and

this porch became merely a vestibule (antarala) 21 . Its main function is to accommodate more devotees of the temple. The porch (vestibule) is structurally connecting the sanctum with the additional hall (assembly hall). Like the antarala in front of the sanctum, a low raised structure called 'Sukhanasi' crowned antarala. It is erected in front of the Sikhara, which stands on sanctum proper. Unlike the sanctum covered by flat roof stone slabs, antarala is also filled in the similar manner, which serves as the base (adhithana) for the super structure.



The doors of the temple must always be two panelled and the two are described as mother and daughter ' Brihat-Samahita prescribes that the door must be located in the middle of the front wall and that it must be in the same direction as the idol. According to Agnipurana, the door must always be placed in one of the four directions and never in the corners. Suprabhediiigama recommends gateways in all the four directions on the outer wall. Texts mentioned that Devadar wood is best for temple doors.

. Texts prescribe the rules about the several aspects of door like jamb, lintel (dwara-sakha), door panels (kabata), door joints (dwara sandhi), door planks (phalaka), bolt (kila-bhajana), tower over the door way (dwara gopura) and the chamber associated with the door way (dwara-koshtha). Dwiira-Sakha (door jamb) is single panelled in early temples without much ornamentation. Ornamentation developed in the later period in the door panels, and it became familiar as Sakhas in temple architecture such as Lata Sakha, Patra Sakha, Pushpa Sakha, etc. The popular simple form of doorconsists of only three sakhas in it.

Sometimes the images of Gajalakshmi or Ganesh at the centre of lintel occasionally with Purnakumbhas on either side, Dweirapalas or Ganga, Yamuna or Purnakumbhas at the base also can be seen in the Dwara Sakhas in the medieval period. Mahadeva temple at Curdi is the best example for tri-sakha dw&a. Tri-sakha dwara also can be seen at Saptakoteswar temple at Opa.

Pranala or water chute takes out ablution water from garbhagriha. It passes through garbhagriha wall (generally towards north) and extends to a considerable length away from wall (e.g Pranalas of Mahadev temple, Curdi and Tambdi Surla were extended up to the adhithana mouldings of the temple). Majority of the pranalas are in simple long block with a channel cut into it. Some pranalas are highly decorated and the mouths of the Icirtimukhas are crocodile or ox or makara or lion or creeper scroll etc., emerge as channel. Generally main deity used to be placed over the pranala in al- most all the temples in Goa. Some prdruilas

have beautiful mouldings like as in the Adhithana of the temple, e.g., Brahma temple in Sattari Taluka.



A Chandrasilis (Moon-Stones) Chandrasila— or Moonstones were in the form of semicircular slabs on floor in front of doors forming a step in the beginning or in the main entrance (e.g, in front of the rock cut cave temples at Haravalem). The terminology itself suggests their shape i.e., semi circular 26. Their outline was carved on the floor slabs later (mainly in front of the garbhagriha door e.g. Curdi, Tambdi Surla and Opa temples. Subsequently, the semi-circle took leaf shape with a point at the centre and two scrolls on the sides. The Chandrsirds in the Mahadev temple at Curdi, Tambdi Surla and Saptakoteshwar temple at Opa with a pointed tip are shown in relief on the floor slab in front of the garbhagriha doors.



Kopeswar temple. Highly ornamented chandrashila at entrance

Air and light entrances: chandrasiliis(Windows) or Jalavatayanas meant for allowing light and air into temples have provided artists with a space for exhibiting their skill by carving creepers, flowers, figures and several perforations. Some Jalavatayanas are decorated with creepers containing circular perforations
Torana is another interesting feature involved in stylized temples. Temples like Mahalasa, Manguesh, Naguesh, etc, have chitra toranas in the drooped wall of their Mandapa ceilings. Besides Chitra torana, the texts mention two other types of torana

- 1) Patra torana (fashioned like the lotus leaves) and
- 2) Makara torana (arch with makara).

The Makara torana enshrined in the temple was suitable for the residence of Brahmins and Kshatriyas while Chitratoranas was suitable for Vaisyas and Patratorana was useful for Sudras. Sabhainandapa or Navaranga or MaCamandapa When the temple became very popular and the participants increased in number there was a need for an additional hall of larger dimension to sanctum and antarala to accommodate large assemblies. (e



.g. Navaranga).

This sabhamandapa used to be pillared hall with or without kakshasana. These type of larger halls were found more in some places according to the requirements of the temple such as Natya mandapa, Bhoga mandapa, Kalyana mandapa etc., and they can be seen mainly in Orissan temple architecture. Mahadeva temple at Tambdi Surla is the best example for its sabhamandapa with kakshasana. Modern temples like Malialsa, Ramn-ath etc., have kakshasanas within the large 96 97 halls (Mandapas) but those are not aesthetic enough like that of Tambdi Surla temple. The area of the temple comprising of the sanctum and the halls as well as the tanks and gardens came to be enclosed by a wall (prakara). But this was a later innovation and can be seen in many of the South Indian temples. Walls The treatment of walls also depicts a wide range from simple plain to decorated with pilasters, turrets and figures. Some of the mukhamandapas and Sabhamandapas are open and some are covered with jalavatayanas (perforated door screens) niches and figures. Mahadev Temple at Tambdi Surla and temple fragments of Saptakoteswar temple near St Cajetan Church, Old Goa are the best examples.

Chajjas: A projected horizontal band called bandana runs in the middle of the wall of sanctum and antarala of Tambdi Surla temple with Kudya stambhas with regular intervals resembling the features of later Chalukyan period. Eaves The main function of eave or chajja is to protect wall from rainwater. It projects forward from the ceiling level, so that water is thrown away from wall surface. The slightly projecting eaves with curved upper surface to facilitate the flow of water are found in several temples. Especially in Goa, the rainfall is more and it continues for a long period. Hence almost all the structures in Goa require slanty roofs and eaves for easy disposal of rainwater. Ceilings Ceilings are different types. 1) Domicial ceiling 2) Flat ceiling 3) Rectangular ceiling 4) Square ceiling 5) Circular ceiling 6) Rotated squares ceiling 7) Octagonal ceiling, etc.,



Placing smaller triangular slabs over the corners of the lower square forms the upper square. A flat slab is placed at the top for covering the central gap. The space of the ceiling is reduced at the top by creating these

squares. The lower square is exactly half of the ankara and the upper square is half of that of the lower. A flat slab one-fourth of the size of the ankara is used at the top. The squares not only reduce the areas but also break the monotony of the comparatively plain interior 29. This type of ceiling 98 99 appeared in the rock cut cave at Khandepar for the first time in Goa where the ceilings of the monolithic rock are cut in the shape of trabeat (lantina type). This system became more sophisticated in the structural temples such as Mahadev temple at Curdi and Tambdi Surla in the later period.

The central bays in the Nandimandapa ceiling is decorated with a variety of circular inverted lotus in the same temple. Here lotus petals were more projected and a lotus bud was shown very prominently in the centre and the star shaped central lotus is encircled with similar type of lotuses. The ceiling slabs of eastern side bay of mandapa are also adorned with the star shaped circular lotuses in it. Similarly, in the later temples like Mahalasa, Manguesh, Nciguesh, Shantadurga, have lotus decoration in ,mkjnbvcyghthe wooden ceilings in the mandapas. These temples generally have domical shape ceilings on the octagonal base for sanctum. The domical ceilings are almost plain and no decorations are found in them.

100 Pillars Pillars supporting the corners of garbhagriha and antarala are known as canton pillars. The canton pillars are prominently shown in the rock-cut cave architecture. Rock cut caves at Khandepar is the best example for this feature. Here the canton pillars are chiselled in the monolithic rock in the corners of garbhagriha and antarala, canton pillars can be made out of basalt (volcanic rock). Pillars supporting various mandapas of temples are found in various shapes, such as square pillars, round pillars, projected square pillars, octagonal pillars, sixteen sided pillars, star shaped pillars etc. These pillars consist of a pedestal, shaft, capital, abacus and corbels. Square Pillars: Square pillars first appeared in the rock cut cave temples. These pillars are simple massive and plain, and can be seen in the rock cut cave temples at Harvalem, Limgaon, Veliguem Surla, Narve, Kusyacherann in Goa. 101 Round Pillars: Simple round pillars consist of a lower square block and the remaining circular portion with pot at the top. This type of pillars can be seen in the Nandimandapa of Mahadev temple at Curdi. These pillars have a square base, a rectangular malasthana, an octagonal and a circular shaft with a top pot and a square capital with pothikas on its top.



Accessory structures Very few temples contain accessory structures like Nandi shrine or Nandi mandapa separately in front of the temple or otherwise these are attached to the main temple. Some temples have separate shrines for subsidiary deities, (Parivara- devta or Gramdevta) on either side of the main temple or backside or in the front of the main temple. Maximum number of accessory structures in Goa belongs to Ravalnath, Sateri, Ganesh and Durga.

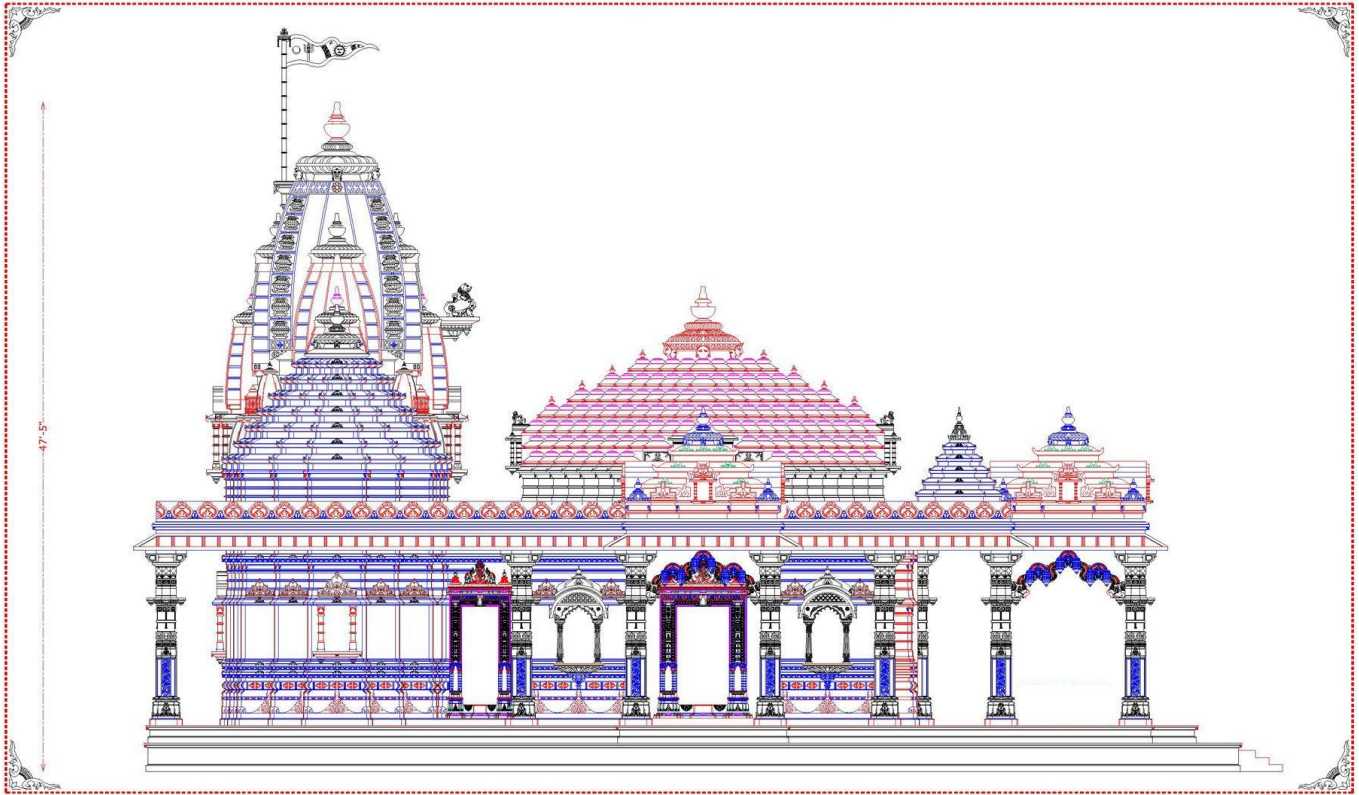
Tulasi Tulasi is the most important plant for Hindus. because Lakshmi's presence is recognized in the Tulasi plant. Every year on the twelfth day of the bright half of Kartik, Tulasi Vivah (marriage) is celebrated. Tulasi or holy basil is worshipped with profound respect everywhere. People keep a Tulasi plant in front of their house on a specially made stand called Tulasi Vrindavan and worship with great veneration to keep the

environment free from bacterious and unwanted prying eyes (burl nazar) into their houses.



Dhvaja-Stambha (FLAG-STAFF): Hayasirsha — samhita, a Pancharatra text reveals that a building (prasada) without a flag would be in vain. 'Shiva-sarvasva' describes the purpose of the flag as indication of the insignia of the deity or of the characteristic vehicle of the icon that is within the sanctum. Ancient texts mentioned that where the flag was hoisted in front of the temple; Gods as well as manes used to be delighted. The text also assigns Vishnu (protector) to the top, Brahma (creator) to the middle and Shiva (destroyer) to the bottom of the 107 flag-staff. 36 . Hosting the flag suggests setting out to conquer. The devotee coming into the temple would have firm resolve to conquer his own baser nature. To look at the flag would be a reminder for him in this regard. The Sanskrit word for the flag or banner dhvaja strictly means whatever that is raised. Whatever raises man to a higher level of understanding and activities is a dhvaja. It is a call that God is high and above. The characteristic animal and the insignia of the icon on the banner gives a direction to the devotee's desire and will. When the devotee sees the banner and bows before it, he resolves to rise higher. The benefit of the flag-mast is here said to be "obtainment of all that is desired". The canonical texts favour wooden or bamboo poles. In course of time, the wooden pole was covered with copper, brass or even with silver.

Bali-Pitha (The Dispensing Seat): The sanctum, adytum garbhagriha, which is the most important structural detail, is closely associated with the Bali-Pitha that is installed in front of the sanctum directly facing the icon. Actually there will be several 'seats' of this nature, installed in various ritualistically determined positions inside the enclosure and outside the sanctum. However, the one in front of the sanctum is the 'Chief seat'. (Pradhana-pitha). It is a low stone altar, frequently planned in the form of a flat, relatively elaborate form with a base, cornices, wall surface and the top lotus. The canons specify that the real temple should comprise of the sanctum, the tower on top of it, the icon inside it and the dispensing seat in front of it 3:9. 110 Water Tank: Water tank or snanaghat is essential for Hindu temple. Before entering into the temple, the devotee must purify (parishuddh) with taking bath or clean and wash hands and legs and head. Water tank is also necessary for daily requirement of water for deities and cleaning of temple. Providing Snanaghat (bathing ghat or pushkar) on the banks of major rivers near the temple is ancient practice jri India. All the 12 major rivers in India have bathing ghats to celebrate 'Pushkar'. The Pushkar celebrations come once in twelve years after rotation at all the major rivers from North to South (e.g., Ganga nadi pushkar. Yamuna nadi pushkar, Godavari nadi pushkar and Krishna nadi Pushkar.



CHAPTER 9

Stepped pyramid and similar corbelling method in Stupas & temples of Cambodia and Indonesia



Comparison between left: Borobudur of Java (825) and right: Bakong of Cambodia (881), both temples had similar basic design of stepped pyramid and similar corbelling method, which suggest there was a connection of technical and cultural influence between ancient Java and Cambodia. Central Javanese temples were not built anywhere and anyhow, quite the contrary: their position within the landscape and their architectural design was determined by a series of socio-cultural, religious and economical factors

A **step pyramid** or **stepped pyramid** is an architectural structure that uses flat platforms, or steps, receding from the ground up, to achieve a completed shape similar to a geometric pyramid. Step pyramids are structures which characterized several cultures throughout history, in several locations throughout the world. These pyramids typically are large and made of several layers of stone. The term refers to pyramids of similar design that emerged separately from one another, as there are no firmly established connections between the different civilizations that built them.

As well as menhirs, stone tables, and stone statues Austronesian megalithic culture in Indonesia also featured earth and stone step pyramid structure, referred to as *punden berundak* as discovered in Pangguyangan site near Cisolok and in Cipari near Kuningan. are the abode for the spirit of the ancestors. The step pyramid is the basic design of 8th century Borobudur Buddhist monument in Central Java. However the later temples built in Java were influenced by Indian Hindu architecture, as displayed by the towering spires of Prambanan temple. In the 15th century Java during the late Majapahit period saw the revival of Austronesian indigenous elements as displayed by Suku temple that somewhat resembles a Mesoamerican pyramid, and also stepped pyramids of Mount Penanggungan.

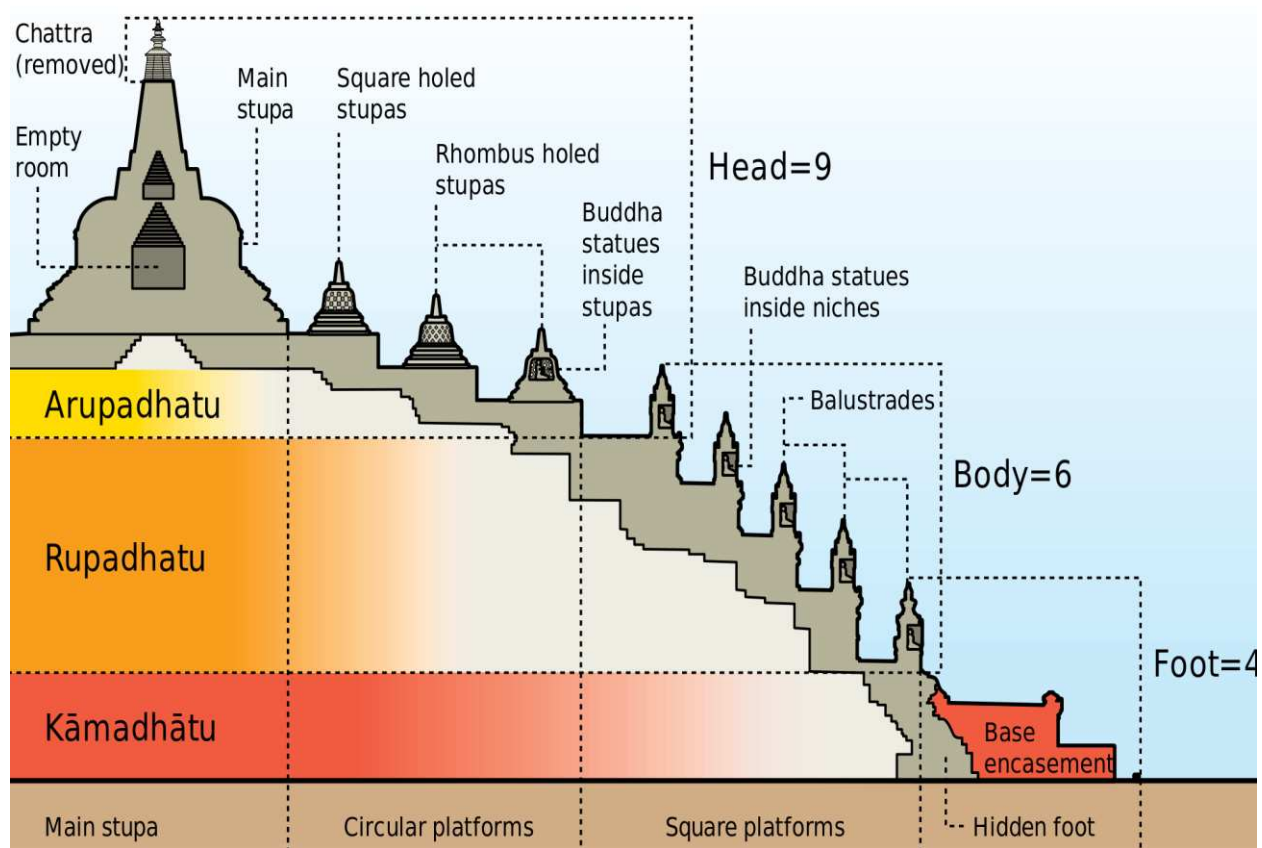
Architecture of Borobudur

Borobudur design as a stepped pyramid: Built with about 2,000,000 cubic feet (56,600 cubic metres) of gray volcanic stone, Borobudur encloses a small hill and is shaped like a stepped pyramid with three major levels—a square base, a middle level of five square terraces, and an upper level of three circular terraces—totaling, in effect, nine lesser sections. This ancient pyramid temple is unique. Unlike other ancient temples built on a flat surface, Borobudur was constructed on a hill, 265 meters above sea level and 15 meters above the dry lake surrounding it.

The lake's existence was cause for intense discussions between archaeologists during the twentieth century since it was thought that Borobudur was built on the banks of the lake or even floated on it.

Borobudur Cross Section and Building Ratio

Borobudur, Central Java, Indonesia



Archaeological site of Borobudur during the reconstruction suggests that the adherents of Hinduism and Indian Faith have begun to build large buildings on Borobudurs of the hill before the site was awarded the Buddhists. Foundations unlike a Hindu or Buddhist Shrine structures, and therefore, the original structure is more indigenous Javanese than a Hindu or a Buddhist.

Architecture. Design.

Borobudur is built as a single large stupa, and when viewed from above, has the form of a giant tantric Buddhist mandala, simultaneously representing the Buddhist cosmology and nature of mind. The original Foundation is a square, approximately 118 m 387 ft on each side. It has nine platforms, of which the lower six square and three circular. The upper platform features seventy-two small

stupas surrounding one large Central stupa. Each stupa is bell-shaped and pierced by numerous decorative openings. Buddha statues sitting inside a hollow shell.

The design of Borobudur which was in the form of a stepped pyramid. Earlier, in the prehistoric Austronesian megalithic culture in Indonesia was built several earthen mounds and stone step pyramid structure called punden berundak as discovered on the website Pangguyangan near attractions and Cipari in the district of Kuningan. The construction of stone pyramids is based on their own beliefs that mountains and high places are the abode of spirits or ancestors hyangs. In punden berundak step pyramid is the basic design of Borobudur, which is a continuation of older megalithic tradition Incorporated with Mahayana Buddhist ideas and symbolism.

The monuments of the three divisions symbolize the three "spheres" of Buddhist cosmology, namely Kamadhatu the world of desires, Rupadhatu the world of forms, and finally Arupadhatu formless world. Ordinary sentient beings live their lives at a low level, the realm of desire. Those who burned out all desire for continued existence to leave the world and the desire to live in peace on the level of form: they see the form, but not drawn to them. Finally, full Buddhas go beyond even form and experience reality at its purest, most fundamental level, the formless ocean of Nirvana. Liberation from the cycle of Samsāra, where enlightened souls are not attached to worldly form corresponds to the concept of Sūnyatā, the complete voidness or absence of the self. Kāmadhātu is represented base Rupadhatu on the five square platforms of the body, and Arupadhatu with three circular platforms and the large top of the stupa. The architectural features between three stages of metaphorical differences. For instance, square and detailed decorations in Rupadhatu disappear in a simple circular platforms in the Arupadhatu to represent how the world of forms, where people with forms and names - changes into the world of the formless.

Joint worship in Borobudur is performed in the walking pilgrimage. The pilgrims guided by a system of staircases and corridors, climbing to the upper platform. Each platform represents one stage of enlightenment. The path that leads pilgrims was designed to symbolize Buddhist cosmology.

In 1885, a hidden structure under the base was accidentally discovered. "Hidden level" contains reliefs, 160 of which are narratives describing the real Kāmadhātu. The remaining reliefs are panels with short inscriptions that apparently provide instructions for the sculptors, illustrating the scene to be cut. The real base is hidden in the shell base, the purpose of which remains a mystery. It was first thought that the real base should be covered to prevent a disastrous subsidence of the monument on the hill. There is another theory, in the shell of the base was added because the original hidden Foundation was incorrectly designed, according to Vastu Shastra, the Indian ancient book about architecture and town planning. Regardless of why it was commissioned, housing the base was built with detailed and meticulous design and aesthetic and religious considerations.

Architecture. The structure of the building

Approximately 55.000 cubic meters of 72.000 cubic meters of andesite stones were taken from neighbouring stone quarries to the construction of the monument. The stone was cut to size on site and laid without mortar. Knobs, indentations and dovetails were used to form joints between stones. The roof of the stupa, niches and arched gate was built into the eaves. The reliefs were created on the spot after the building was completed.

The monument is equipped with a good drainage system to meet the high drains. To prevent flooding, 100 spouts are installed at each corner, each with a unique carved Gargoyle in the shape of a giant or Makara.

Borobudur differs markedly from the overall design of other structures built for this purpose. Instead of built on a flat surface, Borobudur was built on a natural hill. However, the construction technology is similar to other temples in Java. Without the inner spaces seen in other temples, and the overall design resembles the shape of pyramid, Borobudur was first thought more likely to have served as a stupa, instead of a temple. Stupa is intended as a temple for Buddha. Sometimes stupas were built only as devotional symbols of Buddhism. The temple, on the other hand, is used as a prayer house. The meticulous complexity of the monuments suggests that Borobudur is actually a temple.

Little is known about Gunadharma, the architect of the complex. His name is repeated from Javanese folk tales, not from written inscriptions.

Basic unit of measurement in the construction was in Paphos, defined as the length of a human face from the forehead hairline to tip of chin and tip of the thumb to the tip of the middle finger when both fingers are stretched at the maximum distance. Thus, the block is relative from one individual to another, but the monument has exact measurements. A survey conducted in 1977 revealed frequent findings of a ratio of 4:6:9 around the monument. The architect used the formula to lay out the exact dimensions of fractals and self-similar geometry in the design Borobudurs. This ratio is also found in the designs of pawon temple and mendut temple, near Buddhist temples. Archaeologists have suggested that 4:6:9 ratio and the Tala have been a calendar, astronomical and cosmological significance, as is the case with the temple of Angkor Wat in Cambodia.



The basic structure can be divided into three components: base, body and top. The base 123 m x 123 m 404 m x 404 ft. in size with 4 m 13 ft wall. The body is composed of five square platforms, each of diminishing height. The first terrace is located at 7 meters 23 feet from the edge of the base. Each subsequent terrace is situated in a depth of 2 m 6.6 feet, leaving a narrow corridor at each stage. The top consists of three circular platforms, with each stage supporting a row of perforated stupas, arranged in concentric circles. There is one main dome at the center, the top of which is the highest point of the monument, 35 m 115 feet above ground level. The stairs in the center of each of the four sides give access to the top, with several arched gates overlooked a 32 lion statues. The gate is decorated with Kalass head carved on the top of each and Makaras projecting from each side. This Kala-Makara motif is often found on the gates of the Javanese temples. The main entrance is located

on the East side, in place of the first narrative reliefs. Stairs on the hillside and connects the monument to the lowland plain.¹

Built from nearly two million stone blocks of andesite, a bluish-gray volcanic stone, Borobudur is shaped like a stepped pyramid, the base of which is 402 feet long from north to south and 383 feet long from east to west; the height is now 95 feet above ground level. The colossal monument consists of six rectangular terraces topped by three concentric circular terraces.

Four of the terraces are galleries, each enclosed by a balustrade and an inner wall, open to the sky and carved with sculptures.



At first sight, the square galleries are an overwhelming mass of images depicting the activities of gods and mortals carved in the dark volcanic stone along the wide processional paths. There are more than 1,300 narrative panels illustrating the life of Buddha and Buddhist texts, the largest and most complete collection of Buddhist reliefs in the world. Originally, there were over 500 statues of the Buddha,* 432 seated in lotus position on the square terraces and 72 meditating inside the bell-shaped stupas on the top terraces. There are no elaborate carvings on

these three upper levels.

Sir Thomas Raffles, the British governor of Indonesia responsible for the excavation of Borobudur in 1814, speculated that Borobudur may have originally been a holy place of pilgrimage for believers of the Mahayana branch of Buddhism.

Monks from the nearby monastery would have led pilgrims along the galleries, using the carved panels to illustrate the stories of their faith and the way of the Buddha as they circled their way to the top of the monument.

Lacking further historical information, Raffles was unable to determine the exact date of Borobudur's construction. But he knew that in the 13th and 14th centuries, Islam had replaced Buddhism as the island's religion, and he thought it unlikely that Borobudur would have been built since then. Also, ancient records showed that in the 10th century, the region around Borobudur had been mysteriously deserted, and all construction in central Java had stopped then. From the detailed carvings, Raffles concluded that Borobudur had been built sometime between the eighth and tenth centuries, during a period of relative peace in East Asia, after the nomadic and religious invasions had run out of steam.

No one knows what happened to the culture that built the monument. Perhaps Merapi had erupted, choking the rice lands with layers of volcanic ash. Whatever the cause, the population moved to East Java in a mass exodus, and Borobudur was left behind, its meaning lost in time.

1. <https://amp.www.google-wiki.info/233717/1/borobudur.html>

The Golden age of Cambodia

The École Française d'Extrême-Orient (EFEO) began restoration work at Angkor Wat in 1908. Between 1986 and 1992, the Archaeological Survey of India (ASI) carried out restoration work on the temple. Bayon was restored by EFCO followed by Japanese Government Team for the Safeguarding of Angkor (JSA). Ta Prohm is being restored by Archaeological Survey of India. Throughout Cambodia's long history, religion has been a major source of cultural inspiration. Over nearly two millennia, Cambodians have developed a unique Cambodian culture and belief system from the syncreticism of indigenous animistic beliefs and the Indian religions of Buddhism and Hinduism. Indian culture and civilization, including its languages and arts reached mainland Southeast Asia around the 1st century AD. It is generally believed that seafaring merchants brought Indian customs and culture to ports along the Gulf of Thailand and the Pacific en route to trade with China. The Kingdom of Funan was most probably the first Cambodian state to benefit from this influx of Indian ideas. There is also French influence as well.



Angkor Wat, the most famous Cambodian heritage site.//Traditional Khmer house from 1800's

The Golden age of Cambodia was between the 9th and 14th century, during the Angkor period, during which it was a powerful and prosperous empire that flourished and dominated almost all of inland Southeast Asia. However, Angkor would eventually collapse after much in-fighting between royalty and constant warring with its increasingly powerful neighbors, notably Siam and Dai Viet. Many temples from this period however, like Bayon and Angkor Wat still remain today, scattered throughout Thailand, Cambodia, Laos, and Vietnam as a reminder of the grandeur of Khmer arts and culture. Cambodia's unparalleled achievements in art, architectures, music, and dance during this period have had a great influence on many neighboring kingdoms, namely Thailand and Laos. The effect of Angkorian culture can still be seen today in those countries, as they share many close characteristics with current-day Cambodia.

Khmer architecture

The Angkorian architects and sculptors created temples that mapped the cosmic world in stone. Khmer decorations drew inspiration from religion, and mythical creatures from Hinduism and Buddhism were carved on walls. Temples were built in accordance to the rule of ancient Khmer architecture that dictated that a basic temple layout include a central shrine, a courtyard, an enclosing wall, and a moat. Khmer motifs use many creatures from Buddhist and Hindu mythology, like the Royal Palace in Phnom Penh, use motifs such as the garuda, a mythical bird in Hinduism. The architecture of Cambodia developed in stages under the Khmer empire from the 9th to the 15th century, preserved in many buildings of the Angkor temple. The remains of secular architecture from this time are rare, as only religious buildings were made of stone. The

architecture of the Angkor period used specific structural features and styles, which are one of the main methods used to date the temples, along with inscriptions.

In modern rural Cambodia, the nuclear family typically lives in a rectangular house that may vary in size from four by six meters to six by ten meters. It is constructed of a wooden frame with gabled thatch roof and walls of woven bamboo. Khmer houses are typically raised as much as three meters on stilts for protection from annual floods. Two ladders or wooden staircases provide access to the house. The steep thatch roof overhanging the house walls protects the interior from rain. Typically a house contains three rooms separated by partitions of woven bamboo. The front room serves as a living room used to receive visitors, the next room is the parents' bedroom, and the third is for unmarried daughters. Sons sleep anywhere they can find space. Family members and neighbors work together to build the house, and a house-raising ceremony is held upon its completion. The houses of poorer persons may contain only a single large room. Food is prepared in a separate kitchen located near the house but usually behind it. Toilet facilities consist of simple pits in the ground, located away from the house, that are covered up when filled. Any livestock is kept below the house. Chinese and Vietnamese houses in Cambodian towns and villages are typically built directly on the ground and have earthen, cement, or tile floors, depending upon the economic status of the owner. Urban housing and commercial buildings may be of brick, masonry, or wood.

Religion in Cambodia.

Cambodia is predominantly Buddhist with 80% of the population being Theravada Buddhist, 1% Christian and the majority of the remaining population follow Islam, atheism, or animism.

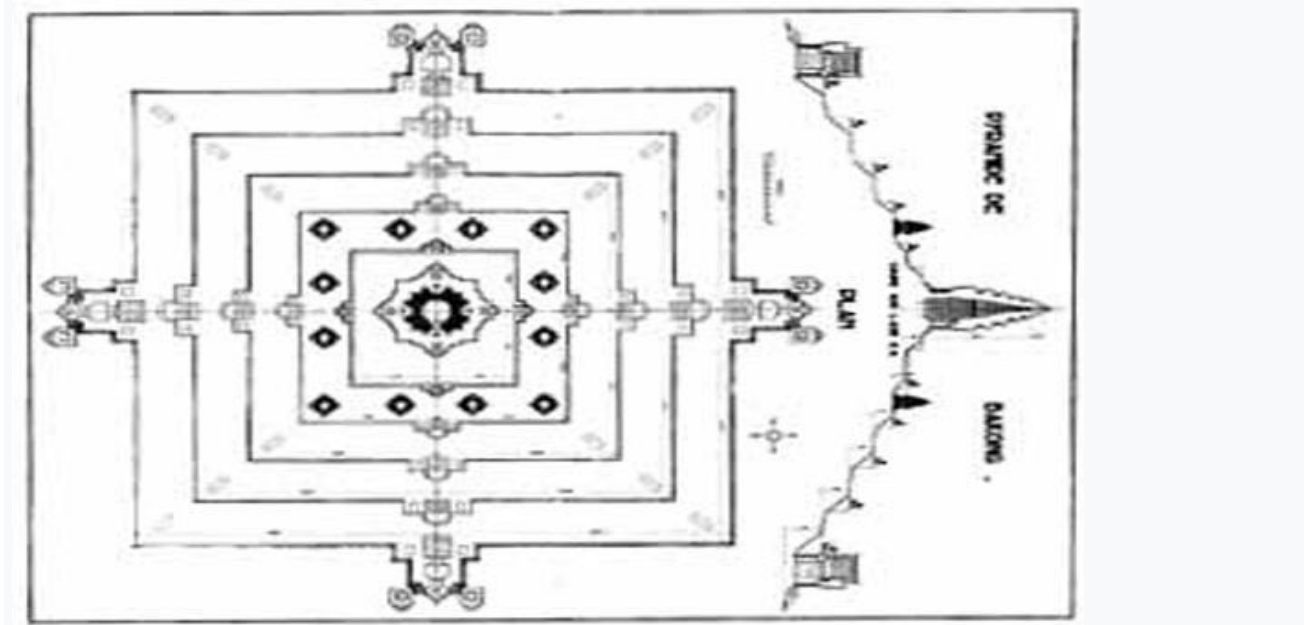


Buddhist nun at Angkor Wat, Siem Reap, Cambodia. // Pchum Ben, also known as "Ancestors' Day

Buddhism has existed in Cambodia since at least the 5th century CE. Theravada Buddhism has been the Cambodian state religion since the 13th century CE (excepting the Khmer Rouge period), and is currently estimated to be the faith of 90% of the population.^[3] A smaller number of Cambodians, mostly of Vietnamese and Chinese descent, practice Mahayana Buddhism. The main orders of Buddhism practiced in Cambodia are Dhammayuttika Nikaya and Maha Nikaya.

Bakong in Cambodia is the first temple mountain of sandstone constructed by rulers of the Khmer empire at Angkor near modern Siem Reap in Cambodia. In the final decades of the 9th century AD, it served as the official state temple of King Indravarman I in the ancient city of Hariharalaya, located in an area that today is called Roluos.

The structure of Bakong took shape of stepped pyramid, popularly identified as temple mountain of early Khmer temple architecture. The striking similarity of the Bakong and Borobudur temple in Java, going into architectural details such as the gateways and stairs to the upper terraces, suggests strongly that Borobudur was served as the prototype of Bakong. There must have been exchanges of travelers, if not mission, between Khmer kingdom and the Sailendras in Java. Transmitting to Cambodia not only ideas, but also technical and architectural details of Borobudur, including arched gateways in corbelling method.



Other than examining bas-reliefs carved on the temple's walls, the study of ancient Javanese society is also conducted through archaeological relics. The Wonoboyo hoard golden artefacts attest to the wealth, art, and culture as well as the aesthetic achievement of the Medang Kingdom. The artefacts show the intricate artwork and technical mastery of the ancient Javanese goldsmith. The hoard was estimated to date from the reign of King Balitung.^[44] The treasure has been identified as belonging to a noble or a member of the royal family.^[45]

The earliest temple in the Southern Central Java Mataram region was the Hindu Shivaist Gunung Wukir temple, linked to Canggal inscription (732 CE) built by King Sanjaya. Almost 50 years later the oldest Buddhist temple was built in Prambanan region, the Buddhist Kalasan temple, linked to Kalasan inscription (778 CE) and King Panangrakan. From this time, the kingdom saw exuberant temple construction projects, such as Sari, Manjusirgha, Lumbung, Ngawen, Mendut, Pawon and peaked in the construction of Borobudur, the massive stone mandala, that took shape of a mountain temple pinnacled with stupas that completed c. 825 CE.

The monumental Hindu temple of Prambanan in the vicinity of Yogyakarta — initially built during the reign of King Pikatan (838–850), and expanded continuously through the reign of Lokapala (850–890) to Balitung (899–911) — is a fine example of ancient Medang Mataram art and architecture. The description of a grand temple compound dedicated for lord Shiva, and the public project to shift the course of the river near the temple (Opak river) to run straight along western wall of temple compound was also mentioned in Shivagrha inscription. The grand temple complex was dedicated to the Trimurti, the three highest gods in the Hindu pantheon (Shiva, Brahma, Vishnu). It was the largest Hindu temple ever built in Indonesia, evidence of the immense wealth and cultural achievement of the kingdom.

Other Hindu temples dated from Medang Mataram Kingdom era are: Sambisari, Gebang, Barong, Ijo, and Morangan. Although the Shivaist regain the favour, Buddhist remain under royal patronage. The Sewu temple dedicated for Manjusri according to Kelurak inscription was probably initially built by Panangkaran, but later expanded and completed during Rakai Pikatan's rule, whom married to a Buddhist princess Pramodhawardhani, daughter of Samaratunga. Most of their subjects retained their old religion; Shivaists and Buddhists seemed to co-exist in harmony. The Buddhist temple of Plaosan, Banyunibo and Sajiwan were built during the reign of King Pikatan and Queen Pramodhawardhani, probably in the spirit of religious reconciliation after the succession disputes between Pikatan-Pramodhawardhani against Balaputra.

Medang kingdom had an exceptionally intense relations with the regional hegemon Srivijaya of Sumatra. In earlier period, the relations was close and intimate, as Sailendran kings of Java has formed an alliance with Maharaja of Srivijaya and the two royal houses seems to be merged. In later period however, the relations was deteriorated to warfare, as Dharmawangsa launched failed attempt to capture Palembang, and Srivijaya well-crafted retaliation ensued. In its eastern boundary, the Medang kingdom seems to subjugate the neighboring Bali, and pulled the island into its sphere of influence.

The Khmer art and architecture during the formative early Angkor era also believed to being influenced by Javanese art and architecture; the striking similarity of the Bakong temple in Cambodia to Borobudur, strongly suggests that Bakong was inspired by Borobudur's design. There must had been exchanges of travellers, if not mission, between Kambuja and Java. Transmitting to Cambodia not only ideas, but also technical and architectural details, including arched gateways in corbelling method.

The Kaladi inscription (c. 909 CE), mentioned Kmir (Khmer people of the Khmer Empire) together with Campa (Champa) and Rman (Mon) as foreigners from mainland Southeast Asia that frequently came to Java to trade. The inscription suggests a maritime trade network has been established between kingdoms in mainland Southeast Asia and Java.

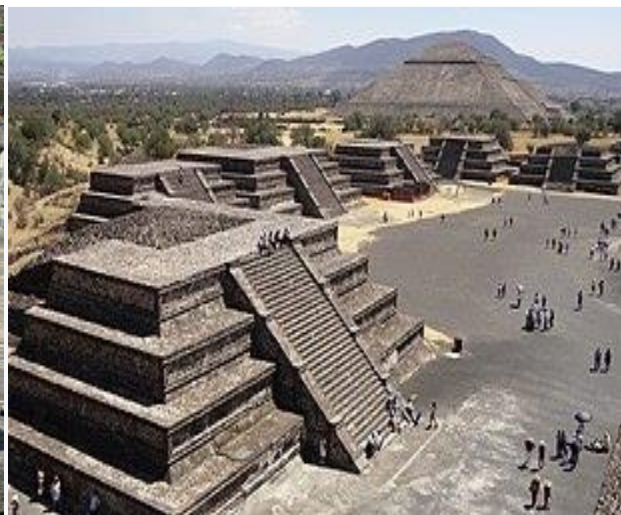
The name of the Medang Kingdom was mentioned in the Laguna Copperplate Inscription of the Philippines' Tondo, dated 822 saka (c. 900 CE), discovered in Lumban, Laguna, Philippines. The discovery of the inscriptions, written in the Kawi script in a variety of Old Malay containing numerous loanwords from Sanskrit and a few non-Malay vocabulary elements whose origin is ambiguous between Old Javanese and Old Tagalog, suggests that the people or officials of the Medang Kingdom had embarked on inter-insular trade and foreign relations in regions as far away as the Philippines, and that connections between ancient kingdoms in Indonesia and the Philippines existed.

In 802 AD, the first king of Angkor Jayavarman II declared the sovereignty of Cambodia. After ups and downs, he established his capital at Hariharalaya. A few decades later, his successors constructed Bakong in stages as the first temple mountain of sandstone at Angkor.^[3] The inscription on its stele (classified K.826) says that in 881 King Indravarman I dedicated the temple to the god Shiva and consecrated its central religious image, a lingam whose name Sri Indresvara was a combination of the king's own and the suffix "-esvara" which stood for Shiva ("Ísvara"). According to George Coedès, the devarāja cult consisted in the idea of divine kingship as a legitimacy of royal power but later authors stated that it doesn't necessarily involve the cult of physical persona of the ruler himself.

Bakong enjoyed its status as the state temple of Angkor for only a few years, but later additions from the 12th or 13th centuries testify that it was not abandoned. Toward the end of the 9th century, Indravarman's son and successor Yasovarman I moved the capital from Hariharalaya to the area north of Siem Reap now known as Angkor, where he founded the new city of Yaśodharapura around a new temple mountain called Bakong.



SITE:



A statue of a lion guards the stairs on the central pyramid./Step Pyramid in South America
The site of Bakong measures 900 metres by 700 metres, and consists of three concentric enclosures separated by two moats, the main axis going from east to west. The outer

enclosure has neither a wall nor gopuram and its boundary is the outer moat, today only partially visible. The current access road from NH6 leads at the edge of the second enclosure. The inner moat delimits a 400 by 300 metres area, with remains of a laterite wall and four cruciform gopuram, and it is crossed by a wide earthen causeway, flanked by seven-headed nāgas, such as a draft of nāga bridge . Between the two moats there are the remains of 22 satellite temples of brick. The innermost enclosure, bounded by a laterite wall, measures 160 metres by 120 metres and contains the central temple pyramid and eight brick temple towers, two on each side. A number of other smaller buildings are also located within the enclosure. Just outside the eastern gopura there is a modern buddhist temple.

The pyramid itself has five levels and its base is 65 by 67 metres. It was reconstructed by Maurice Glaize at the end of the 1930s according to methods of anastylosis. On the top there is a single tower that is much later in provenance, and the architectural style of which is not that of the 9th century foundations of Hariharalaya, but that of the 12th-century temple city Angkor Wat.

Though the pyramid at one time must have been covered with bas relief carvings in stucco, today only fragments remain. A dramatic scene-fragment involving what appear to be asuras in battle gives a sense of the likely high quality of the carvings. Large stone statues of elephants are positioned as guardians at the corners of the three lower levels of the pyramid. Statues of lions guard the stairways.

Anastylosis (from the Ancient Greek: , ana = "again", and = "to erect [a stela or building]") is an archaeological term for a reconstruction technique whereby a ruined building or monument is restored using the original architectural elements to the greatest degree possible. It is also sometimes used to refer to a similar technique for restoring broken pottery and other small objects.

Methodology: The intent of anastylosis is to rebuild, from as much of the original materials that is left after usually thousands of years of abuse, historical architectural monuments which have fallen into ruin. This is done by placing components back into their original positions. Where standing buildings are at risk of collapse, the method may entail the preparation of drawings and measurements, piece-by-piece disassembly, and careful reassembly, with new materials as required for structural integrity; occasionally this may include new foundations. When elements or parts are missing, modern materials (of restoration grade) may be substituted, such as plaster, cement, and synthetic resins.

The international Venice Charter of 1964 details criteria for anastylosis. First, the original condition of the structure must be confirmed scientifically. Second, the proper placement of each recovered component must be determined. Third, supplemental components must be limited to those necessary for stability (that is, substitute components may never lie at the top), and must be recognizable as replacement materials. New construction for the sake of filling in apparent lacunae is not allowed

IMAGINED PASTS: ANASTYLOSIS AND THE CREATION OF THE THAI NATIONAL PAST- John Victor Crocker-<https://openresearch-repository.anu.edu.au/bitstream/1885/7344/6/Crocker-03Volume2.pdf>

Criticism:Such techniques have been used in both the Cambodian and the Indonesian structures. Anastylosis has its detractors in the scientific community. In effect, the method poses several problems:

- no matter how rigorous preparatory studies are, any errors of interpretation will result in errors, often undetectable or incorrigible, in reconstruction.
- damage to the original components is practically inevitable.
- an element may be, or may have been reused in, or may have originated in, different buildings or monuments from different periods. To use it in one reconstruction obviates its use in others.

A primitive anastylosis was carried out in 1836 at the Acropolis in Athens, where the Temple of Athena Nike was re-erected from remaining parts. Starting in 1902, the Greek architect Nikolas Balanos used anastylosis in order to restore a collapsed portion of the Parthenon, restore the Erechtheion, and rebuild the Nike Temple a second time. Iron clamps and plugs which had been used earlier had started to rust and had caused heavy damage to the original structure. These were removed and replaced with precious metal clamps. When the temple was once again rebuilt additional newly identified original fragments were added. Currently, anastylosis is being applied to the Parthenon.

India

Several monuments protected by Archeological Survey of India have been restored, including Shekhavati havelis, Humayun's Tomb, etc.

Indonesia



One of the earlier examples of anastylosis: the Borobudur in Java, Indonesia

Early in the 20th century, Dutch archaeologists carried out anastylosis of the stupa at the Buddhist temple complex at Borobudur in Java, Indonesia between 1907 and 1911. The Prambanan Hindu temple complex was excavated and was partially reconstructed between 1911 and 1953, also reconstructed using anastylosis method. The recent practice of anastylosis in Indonesia is the reconstruction of Kedulan temple, built in 869, the temple was buried under volcanic layers for centuries, until was discovered in 1993. The restoration of the entire Kedulan Temple complex is expected to be completed by the end of 2018.

The temple—essentially a variation of a step pyramid—is a sanctuary and Buddhist pilgrimage place. The pilgrims' journey starts at the base of the monument and proceeds along a path that surrounds it while climbing to the top through the three levels of Buddhist cosmology; *Kamadhatu* (the world of desires), *Rupadhatu* (the world of forms), and finally *Arupadhatu* (the formless world).

During the trip, the monument guides pilgrims through a system of stairs and corridors.



Prambanan (Javanese: Rara Jonggrang) is a Hindu temple complex dating from the 9th century CE located near Bokoharjo, on the island of Java in Indonesia. Prambanan is the largest Hindu temple in Indonesia and one of the largest Hindu temples in Southeast Asia. Dedicated to the Trimurti of Hinduism — Brahma, Vishnu, and Shiva — Prambanan's architecture conforms to Hindu architectural traditions based on the Vastu Shastra, and the temple thus reflects the Hindu conceptions of the cosmos in its design and layout. Despite its grandeur and rich exterior ornamentation, the Javanese abandoned Prambanan within 100 years of its completion around c. 950 CE. Although the ravages of time and natural disasters took their toll on Prambanan, the Javanese never forgot the ruins, and Prambanan continued to play a part in Javanese folklore. Research and the restoration of Prambanan began in earnest in the early 20th century CE, and the temple complex was declared a UNESCO World Heritage Site in 1991 CE. It is today one of the most visited historical sites in Indonesia.

History & Geography

Prambanan is located some 17 km (11 miles) northeast of the Indonesian city of Yogyakarta, near the border between the two provinces of Yogyakarta and Central Java, on the island of Java. The ruins themselves lie 0.5 km south of the village of Prambanan.

The period in which the Javanese constructed Prambanan and neighboring temples is shrouded in legend and mystery. Strong cultural and religious influence arrived in what is now present-day Indonesia from the Indian subcontinent, beginning around the 1st century CE. This influence grew rapidly from c. 400 CE onwards. Hindu and Buddhist merchants and traders, settled in the region, intermarried with the local population, and facilitated long-distance trade relations between the indigenous Javanese, ancient India, and the rest of Southeast Asia. Over the centuries, the Javanese blended the culture and religions of ancient India with their own.

Some historians contend that Prambanan's construction began under the orders of King Rakai Pikatan (r. 830-860 CE?) at some point between c. 840-850 CE. Rakai Pikatan oversaw the construction and design of the main temple complex, while other structures were built soon thereafter by later kings, including Rakai Kayuwangi (r. 850-898 CE), Balitung (r. 899-911 CE), Daksa (r. 910-919 CE), and Tulodong (r. 919-924 CE). At some point, locals diverted a nearby river to flow past the temple complex as well. Rakai Pikatan and his successors belonged to the Hindu Sanjaya dynasty, which was the rival of the Buddhist Sailendra dynasty for power in the “Medang” or Mataram kingdom in central Java. It is worth noting that the Sailendra dynasty oversaw the construction of the Buddhist temple of Borobudur. As Borobudur is located only 19 km (12 miles) from Prambanan, some scholars interpret Prambanan's genesis as a direct artistic, political, and religious response to that of Borobudur and in turn the competitive Sailendra dynasty.

It is even said that Rakai Pikatan's wife, Princess Pramodhawardhani (fl. 820-860 CE), was the daughter of King Samaratungga (r. 812-833 CE) who may have overseen Borobudur's construction. (Despite all this, other Javanese historians see the "Sailendra" and "Sanjaya" dynasties as one and the same family, interpreting the religious patronage of Buddhism or Hinduism as the result of a ruler's personal belief.) **THERE IS A LEGEND THAT A JAVANESE PRINCESS WAS TURNED TO STONE BY HER CRUEL HUSBAND & SO BECAME THE BEAUTIFUL IMAGE OF THE HINDU GODDESS DURGA NOW DECORATING THE TEMPLE'S EXTERIOR.**

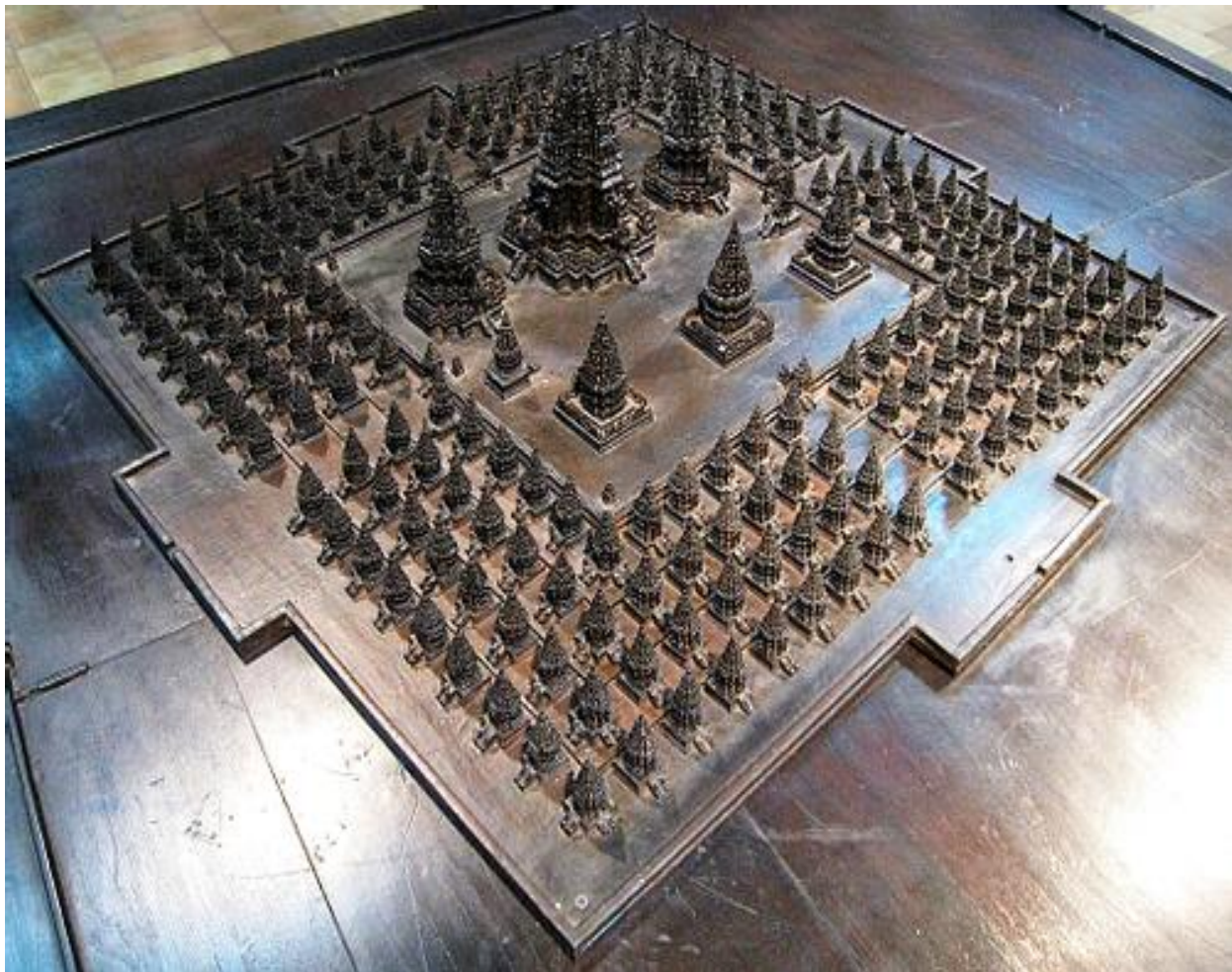
Prambanan is a 9th-century Hindu temple compound in Central Java, Indonesia, dedicated to the Trimurti, the expression of God as the Creator (Brahma), the Preserver (Vishnu) and the Destroyer (Shiva). A UNESCO World Heritage Site, it is the largest Hindu temple site in Indonesia, and one of the biggest in Southeast Asia. It is characterized by its tall and pointed architecture, typical of Hindu temple architecture, and by the towering 47-metre-high (154 ft) central building inside a large complex of individual temples. Prambanan attracts many visitors from around the world. The temple compound is located approximately 17 kilometres northeast of the city of Yogyakarta on the boundary between Central Java and Yogyakarta provinces. Others believe that the term "candi" itself is believed was derived from Candika, one of the manifestations of the goddess Durga as the goddess of death. This suggests that in ancient Indonesia the "candi" had mortuary functions as well as connections with the afterlife. Historians suggest that the temples of ancient Java were also used to store the ashes of cremated deceased kings. The statue of god stored inside the garbhagriha of the temple is often modeled after the deceased king and considered to be the deified person of the king portrayed as Vishnu or Shiva according to the concept of devaraja. The example is the statue of king Airlangga from Belahan temple portrayed as Vishnu riding Garuda. The candi architecture follows the typical Hindu architecture traditions based on Vastu Shastra. The temple layout, especially in central Java period, incorporated mandala temple plan arrangements and also the typical high towering spires of Hindu temples. The candi was designed to mimic Meru, the holy mountain the abode of gods. The whole temple is a model of Hindu universe according to Hindu cosmology. All temples contained in Prambanan temple consist of three parts. These parts, among others, consists of the base of the temple, the body of the temple, and the roof of the temple. This division of building structures is in harmony with the traditions that exist in the ancient Hindu-Buddhist world.

In Shiva Temple, the base is equipped with a nice decorated ledge. This kind of shape reminds anyone who sees it going like to the Borobudur Temple. Each of the four steps leading up to the gates of the monument that has a large Kala head. This Kala is a monster like a lion very loyalty to God Shiva. In Java, Kala became the most popular protective figure and can be seen in every door and niche. At Shiva Temple, its east gate is surrounded by two large niches containing the statues of Shiva's gatekeepers, the good Nandhishvara and the ruthless Mahakala. The body of the temple is divided into two by a corridor, a pattern that shows the architecture of East Java. Above and below the corridor, the wall is interspersed with a series of niches with kala and reliefs that bear the roof of the temple above. This architectural figurine, which is quite common in India, is also used as a Buddhist temple niche decoration near this area, Kalasan Temple.

The upper part of Shiva Temple consists of a series of smaller levels that repeat the temple's

body shape with a smaller scale. The roof is also decorated by a dome with moon-shaped parts on it and decorated with fake doors, pillars, and motifs of kala. Each dome is a miniature of the temple that holds the basic principle of Hindu-Buddhist thought, the balance between the macro cosmos, which is represented by its temple, and the micro cosmos, represented by its dome.

In Java, Hindu temples usually have box-shaped ornaments on it, while Buddhist temples are usually crowned with stupas. Striped ball ornaments in Prambanan Temple may have prompted the confusion of the first western visitor, so they often regard the Prambanan Temple complex as a Buddhist monument. Thus, parts of the temples that exist in Prambanan not only a mere architectural process. Moreover, the parts that are divided into three contain symbolic meanings that make Prambanan Temple as evidence of cultural life that existed in the past.



Prambanan Complex Model-by Gunawan Kartapranata (CC BY-SA)

Prambanan, an Hindu temple in Indonesia-general architectural and morphological analysis-Srishti Dokras.Uday Vasant
Dokrashttps://www.researchgate.net/publication/342662695_Prambanan_an_Hindu_temple_in_Indonesia-general_architectural_and_morphological_analysis

Cooperation between Khmer and Javanese? According to ancient Khmer sources, King Jayavarman II (r. 802-835 CE), the founder of the Khmer Empire (802-1431 CE), spent much of his life in Java, and was appointed by Samaratunga as the governor of Indrapura, which later became the capital city of Champa around c. 875 CE. It is said that Jayavarman visited both Borobudur as well as Prambanan, which inspired him to build the city of Angkor Wat on a grand scale. This is quite possible as the Sailendra and Sanjaya dynasties exerted much political and cultural influence through their thalassocracies in what is present-day Java, Sumatra, Malaya, and southern Cambodia in the 8th, 9th, and 10th centuries CE.

ABANDONEMENT: VOLCANIC ERUPTIONS FROM MOUNT MERAPI IN THE 10TH CENTURY CE & COUNTLESS EARTHQUAKES MAY HAVE IMPACTED PRAMBANAN'S APPEAL AS A PLACE OF WORSHIP & PILGRIMAGE.

Prambanan's abandonment mirrors that of nearby Borobudur. As the center of political power shifted from central to eastern Java under the reign of King Mpu Sindok (fl. 928 CE), Prambanan became less important politically and culturally to the ancient Javanese. The Sanjaya dynasty had successfully usurped power from the Sailendra dynasty, leaving the island of Java under their near complete suzerainty. Volcanic eruptions from Mount Merapi in the 10th century CE and countless earthquakes may have impacted Prambanan's appeal as a place of worship and pilgrimage as well among the Hindu faithful.

Over time, Prambanan deteriorated and became surrounded by a dense jungle. The Dutch explorer C. A. Lons reported his “rediscovery” of Prambanan in 1733 CE to Dutch colonial officials, but the temple was never completely forgotten by the Javanese in their histories, myths, and legends. A very popular Javanese legend is that of Rara Jonggrang, which is set in Prambanan and its neighboring temples. In the legend, a Javanese princess is turned to stone by her cruel husband. The princess is said to be beautiful image of the Hindu goddess Durga located within the north wing of Shiva's temple at Prambanan. Restoration work began in 1885 CE, but accelerated in 1918 CE. These efforts were halted when Indonesia was invaded in 1941 CE by the Japanese during World War II. In 1953 CE, the Temple of Shiva was reconsecrated to Hindu believers, and Prambanan was restored once again following the 2006 CE Yogyakarta earthquake. Intermittent archaeological excavation and restoration continue in and around Prambanan today.

Set in the fertile Prambanan Plain, Prambanan is but one of 30 temples built between c. 750-950 CE in a 30 square km (11.5 square miles) area. Lying just a few kilometers to Prambanan's north are three ancient Buddhist Temples built in the 8th century CE — Lumbung, Bubrah, and Sewu — while 2.5 km to Prambanan's south and southeast lie the ruins of the 9th-century CE Buddhist temples of Ratu Boko and Sojiwan, respectively. Some 3 km to Prambanan's west are also the 8th-century CE Buddhist Sari Temple, the Kalasan Temple, which dates to c. 778 CE, and the Sambisari Temple, which dates from the 9th century CE and is dedicated to Shiva.

Prambanan consists of six temples all situated in an elevated courtyard, which is in turn encompassed by 224 minor temples now ruined. The greater the distance a temple is from the main complex, the smaller it is in height and space. A small wall surrounds the smaller temples, just as a large wall encompasses the main complex. Prambanan has a 47 m (154 ft) tall central temple — dedicated to Shiva — which sits inside a complex of other temple structures in a concentric mandala layout. Prambanan, in ways similar to Borobudur, delineates the celestial hierarchy and transposes them to three distinct temple zones. Horizontally and vertically, Prambanan exudes Hindu conceptions of heaven.

The largest three temples, the holiest sites within the main complex, are dedicated to the triad of Hindu gods. Shiva's temple is the most prominent with Brahma's temple lying to the south of Shiva's

temple, and Vishnu's temple lying to the north of Shiva's temple. Directly parallel to these magnificent temples are three smaller temples, each dedicated to mythological animal figures that provide protection, companionship, and transportation to the aforementioned gods: Garuda, a mythical winged creature, Hamsa the swan, and Nandi the bull.

The Temple of Shiva is the most ornate of the three massive temples, containing a series of elegant carvings along the inner wall, which depict the scenes from the ancient Indian epic *The Ramayana*. This temple contains four rooms, including an inner sanctuary with a statue of Shiva, while another chamber near the inner sanctuary contains a large statue of Shiva's son, Ganesha. The southern room of Shiva's temple is dedicated to Batara Guru who, according adherents of Javanese Hinduism, is an avatar of Shiva that gives prophecy, presents, and other human abilities. There is also a statue of the sacred bull calf, gatekeeper, and vehicle (*vahana*) of Shiva, Nandi, which sits in front of the Temple of Shiva. The walls in the Temple of Brahma continue the narration of *The Ramayana*, while the Temple of Vishnu is decorated with carvings retelling the epic battles of Krishna along its terrace.

Did You Know The Prambanan Temple Is The Largest Hindu Temple Site In Indonesia With 240 Temples?



Image Courtesy: World Travel Bug-by Gizele Menezes April 30, 2020 1018

Indonesia is known to be a melting pot of ancient traditions, cultures, and history and is home to some of the world's most marvellous architectural structures. One of these is the Prambanan Temple. Built in the 9th century, it is the largest Hindu temple complex in Indonesia, housing about 240 temples structures. The temple is a UNESCO World Heritage site and is dedicated to the Trimurti – Shiva (the Transformer), Vishnu (the Preserver), and Brahma (the Creator). The highlight of the temple lies in the central compound, where eight major and eight minor temples are assembled on a raised platform, creating an architectural crescendo, the highest of which is Candi Shiva Mahadeva. 'Candi' means temple or shrine.



Image Courtesy: Temple Purohit

History Of The Prambanan Temple

The building of Prambanan commenced in the middle of the 9th century, around 50 years after Borobudur, which is the largest Buddha temple in the world. While little is known about the early history of the temple, it is thought to have built by Rakai Pikatan to commemorate the return of the Hindu dynasty in Java. However, in the mid-16th century, a great earthquake toppled many of the temples, and Prambanan remained in ruins for years. While efforts were made to clear the site in 1855, it was only in 1937 that reconstruction was first attempted. In 1953, the reconstruction of the main Shiva temple was completed and inaugurated by an Indonesian politician Sukarno. Prambanan again suffered extensive damage in the 2006 earthquake. Although the main temples survived, hundreds of stone blocks collapsed. Today, the main structures have been restored, but a lot of work remains to be done.

Architecture Of The Prambanan Temple

The temple follows the typical Hindu architectural traditions based on the Vastu Shastra and has incorporated the Mandal temple plan arrangements. The whole complex contains 240 individual stone temples, many of which are scattered in ruins. The temple complex is divided into three zones. The outer zone is an open space, which serves as a yard for priests or worshippers, whereas the middle zone has 224 small shrines arranged into four concentric rows around the central compound. These shrines are called Candi Perwara, meaning 'guardian temples'.



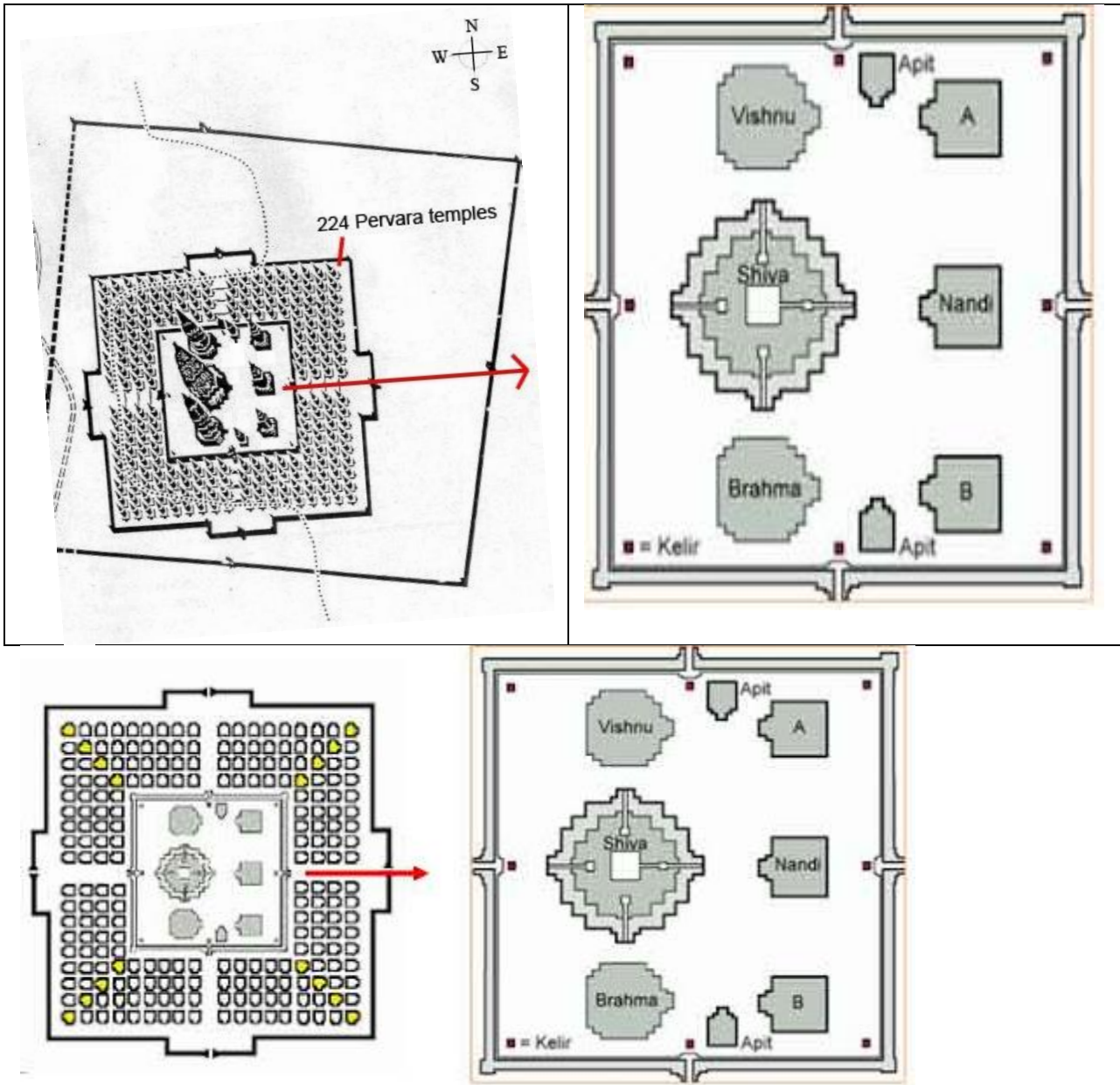
Image Courtesy: All Indonesia Tourism

The Candi Shiva Mahadeva is centrally located and is one of the finest temples in the complex. Lavishly carved, the main spire of the temple soars as high as 47m high. The inner wall of the gallery encircling the temple contains vibrant scenes from the Ramayana. The impressive Candi Vishnu touches 33m and sits north of Candi Shiva Mahadeva. It houses a four-armed image of Vishnu inside the inner sanctum. Candi Brahma is Candi Vishnu's twin temple. Located south of Candi Shiva Mahadeva, it is again adorned with the final scenes of the Ramayana. In the inner chamber, a four-headed statue of Brahma is beautifully crowned. The Prambanan Temple, on the whole, attracts many visitors from around all the world all year round! You too must visit this architectural brilliance once in your life and experience divinity and calm like no other!

Last Word:

Architectural temples of the middle classical era such as Prambanan and Borobudur temples are thought to have inspired the temples in Indochina. It has become a common guess both among the tour guides in Cambodia or the researchers who reviewed the Khemer Kingdom Architecture. The existence of the relationship between the temple in Java and the temple in Cambodia is possible because Jayawarman II, who later build the kingdom of Khemer, once lived in Java when large middle classical temple style architecture was built. To find out the architectural connections of temples in Java and in Cambodia then the first thing to do is to know all the architectural unsurts in both temples. So the purpose of this study is to know the unsurts of spatial, plan, figures and temple ornaments of the middle classical era of Java and pre-Angkor temple era.

This research is done by qualitative method of comparative. Qualitative research is applied by visiting and observing physical objects, then discussed using theories relating to research topics. While the object is selected using purposive sampling method, with the basic object of research is closely related to the style, wholeness and scale. Of the 80 points used in identifying architectural unsurts in the mass structure, floor plan, figures, and ornaments, the authors found 13 very similar points, 50 points to Bakong but not similar, and 17 points missing from Bakong. Based on these results the allegation that the temple of the middle classical era of Java has a relationship with the transitional era are becoming stronger¹



1. THE IDENTIFICATION OF CENTRAL JAVA CLASSIC ERA'S ARCHITECTURE (BOROBUDUR AND PRAMBANAN, 9TH CENTURY) ON THE TEMPLE IN THE CAMBODIA'S TRADITIONAL ERA (BAKONG, 9TH CENTURY) MORPHOLOGICAL TYPOLOGY STUDIES (MASS ORGANIZATION, FLOOR PLAN, FIGURE AND ORNAMENTS). *Galih Andika Pratomo ; Rahadhian Prajudi Herwindo*

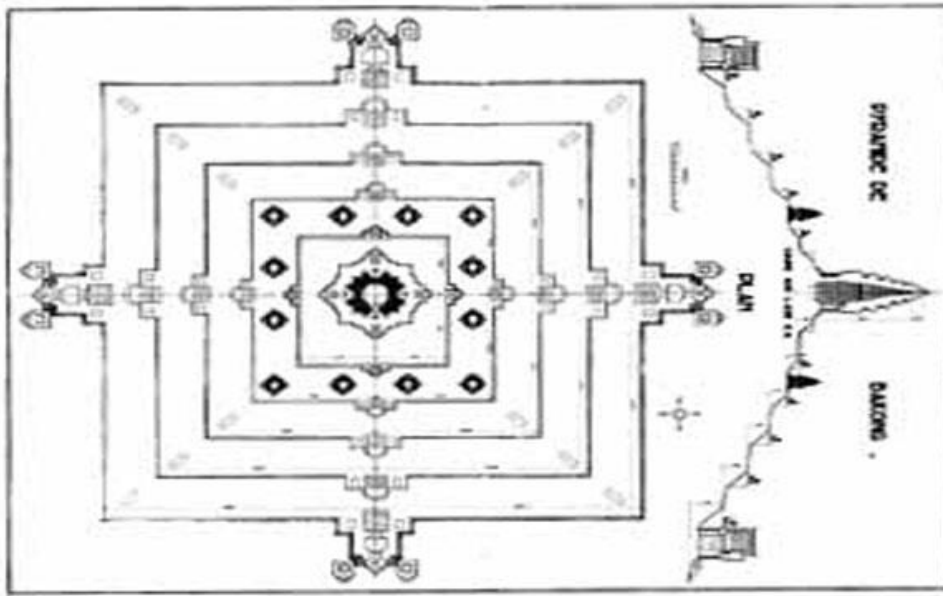


Consecration of bakong: Bakong on the other hand was consecrated in 881, during the reign of Indravarman (877-889). This is the first of the temple-pyramids, which later became standard for all Khmer kings. It is a temple as well as a symbol of the king's reign and the magnitude of his power. On the walls of the three decreasing rectangular terraces we can identify the series of reliefs which has already pleased our eyes in Angkor Wat and Bayon. Unfortunately, in Bakong galleries do not protect the reliefs, thus the ornaments on the are hardly distinguishable on the few centimeters of intact, adjoining surfaces. On the corners of the terraces we can see battle elephants; the stairway leading to the main sanctuary, like



in all the later Khmer temples, is decorated

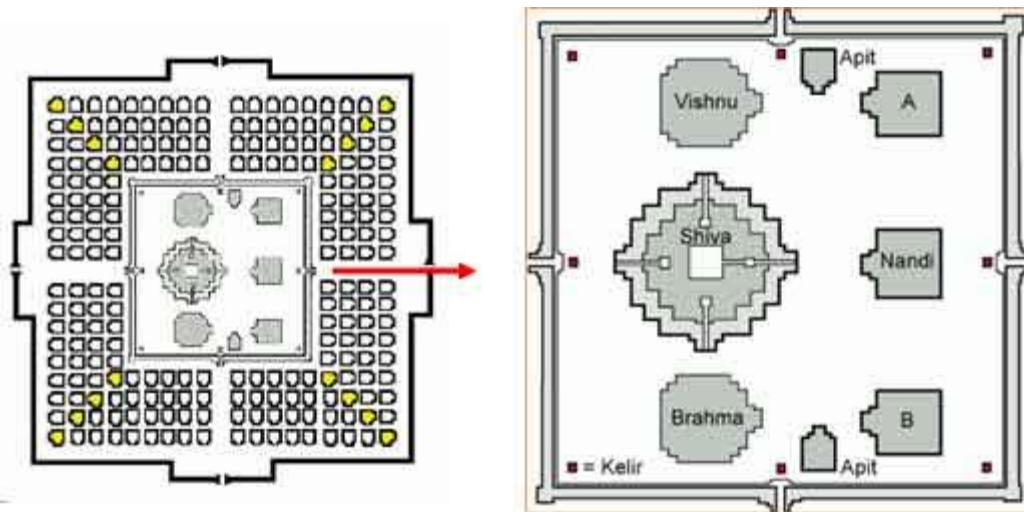
with stylized lions.



Bakong

Daerah Istimewa Yogyakarta is a well-known city in Java Island, Indonesia. Yogya (as it is usually called) has a unique charm, which is felt on every visit. Every one who goes there returns with wonderful memories, making Yogya a good site for tourism. Prambanan Temple is the product of phenomenal artistic labour in Yogya, built on Kingdom of Mataram Kuno in the ninth – tenth century. It was in Sanjaya Dynasty (when Rakai Pikatan and Rakai Balitung are governing the Kingdom).

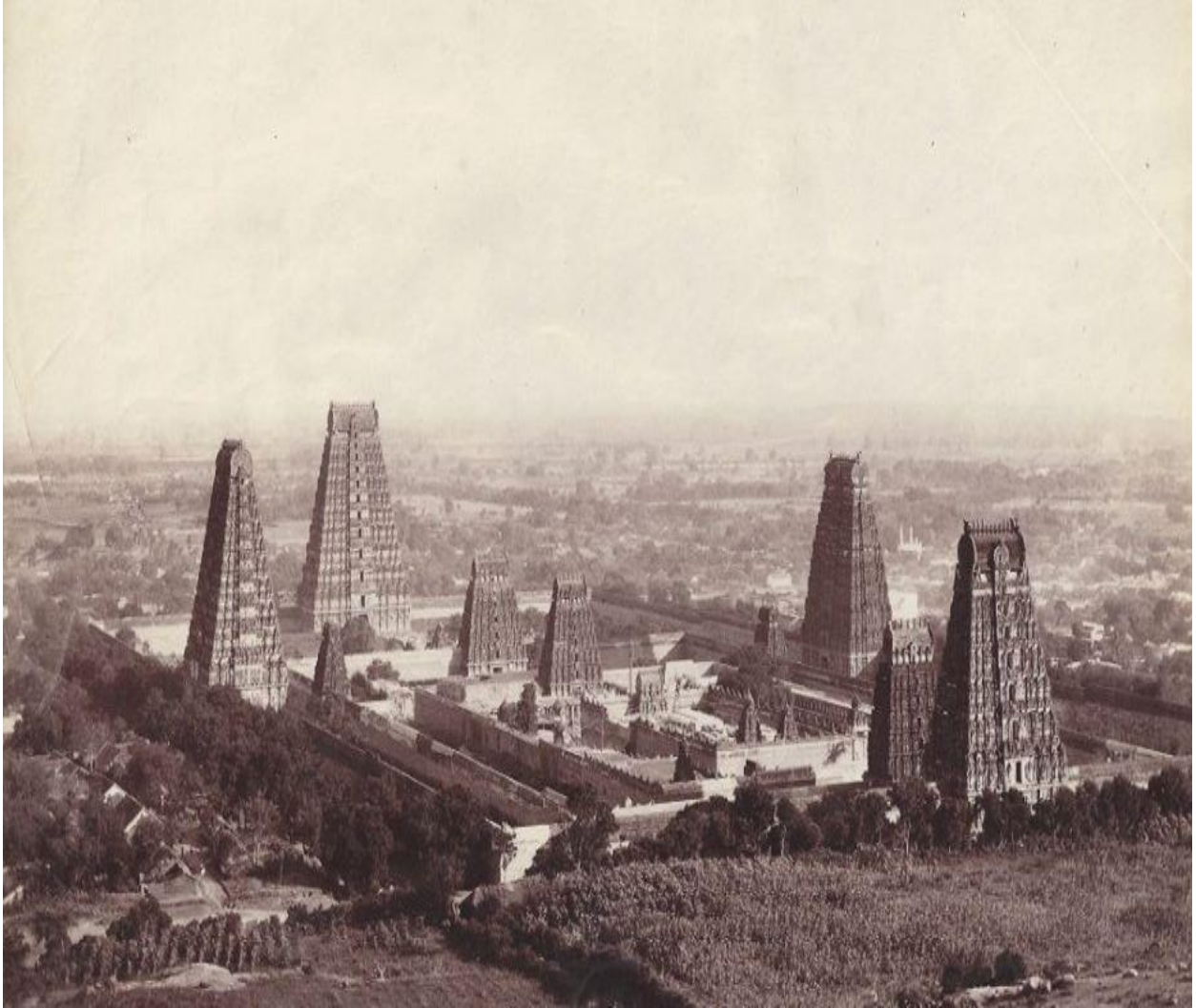
Prambanan Temple has 1,000 statues, three main temples in front center (primary yard) with bigger than others, namely Vishnu, Brahma, and Shiva Temples. Those three temples are symbols of 'Trimurti' (Tri = tiga = three; Murti = dewa = God in Hindu belief; (English: 'three forms'; Sanskrit: trimurti) is a concept in Hinduism in which the cosmic functions of creation (dewa Brahma), maintenance (dewa Vishnu), and destruction (dewa Shiva). These three deities have been called "the Hindu triad" or the "Great Trinity,". All of the temples face the east. Besides, there are 2 flank temples, 4 kelir temples, 4 corner temples and other smaller temples are around of the three main temples. See Map below.



According to the legend, Prambanan temple was built due to a love affair legend. When Prince Bandung Bondowoso asked for Roro Jonggrang to marry him, she doesn't want, because he killed King Ratu Boko (Jonggrang fathers), so Jonggrang asked to Bondowoso an impossible task: build temple with 1,000 statues in one night. If he fulfilled the task, he could marry her. The request was nearly fulfilled when Jonggrang asked the villagers to pound rice and to set a fire in order to look like morning had broken. Feeling cheated, Bondowoso, having only completed 999 statues, and cursed Jonggrang to be the thousandth statue. Through the intervention of Shiva, the petrified body became the idol or mascot that now stands in the north of the "Shiva Temple" at Candi Prambanan..

CHAPTER 10
STUPA / HINDU TEMPLE AND THE STRUCTURE OF HUMAN BODY:
COMPARISON

“The vastu-purusha-mandala represents the manifest form of the Cosmic Being; upon which the temple is built and in whom the temple rests. The temple is situated in Him, comes from Him, and is a manifestation of Him. The vastu-purusha-mandala is both the body of the Cosmic Being and a bodily device by which those who have the requisite knowledge attain the best results in temple building.” (Stella Kramrisch,; The Hindu Temple, Vol. I)



A Temple's Garba-griham (main sanctum) is equated with human head; antarala (vestibule) is equated with human neck; ardha – mandapam (half-hall) is compared with human chest; maha – mandapam (main hall) is equated with the stomach; flag-post is viewed along with human male organ; and gopuram or temple gateway tower is viewed along with human feet.

“Everything is governed by one law. A human being is a microcosmos, i.e. the laws prevailing in the cosmos also operate in the minutest space of the human being.”

The Agama shastras are based in the belief that the divinity can be approached in two ways. It can be viewed as nishkala, formless – absolute; or as sakala having specific aspects.

Nishkala is all-pervasive and is neither explicit nor is it visible. It is analogues, as the Agama texts explain, to the oil in the sesame-seed, fire in the fuel, butter in milk, and scent in flower. It is in human as antaryamin, the inner guide. It has no form and is not apprehended by sense organs, which includes mind.

Sakala, on the other hand, is explicit energy like the fire that has emerged out of the fuel, oil extracted out of the seed, butter that floated to the surface after churning milk or like the fragrance that spreads and delights all. That energy can manifest itself in different forms and humans can approach those forms through appropriate means. The Agamas recognize that means as the archa, the worship methods unique to each form of energy-manifestation or divinity.

The idea of multiple forms of divinity was in the Vedas. Rig Veda at many places talks in terms of saguna, the supreme divinity with attributes. The aspects of the thirty-three divinities were later condensed to three viz. Agni, the aspect of fire, energy and life on earth; Vayu, the aspect of space, movement and air in the mid-region; and Surya the universal energy and life that sustains and governs all existence, in the heavenly region, the space. This provided the basis for the evolution of the classic Indian trinity, the Brahma, Shiva and Vishnu.

The concept of polytheism gave tremendous impetus to all branches of Indian arts, literature and iconography. The polytheism is, in fact, the lifeblood of iconography; for it is only through a divinity with aspects one can represent and worship ones ideal with love, adoration and earnestness. Making an image involves an understanding of its attributes, virtues, powers, characteristics, symbols and its disposition. An image is the visual and concrete form of idealism; the idioms of beauty grace and power nurtured and honed by generations after generations. It is a representation of a community's collective aspirations.

Since the very purpose of the temple structure is the image residing in it; and the temple is regarded the virtual expansion of the image, let us talk for a while about temple iconography.

The word icon is derived from Greek eikon; and it stands for a sign or that which resembles the god it represents. In the Indian tradition what is worshipped is Bimba, the reflection or Prathima, the image of god, but not the god itself. Bimba means reflection, like the reflection of moon in a tranquil pool. That reflection is not the moon but an image (prathima) of the moon. In other words, what is worshipped in a temple is an idea, a conception or the mental image of god, translated to a form in stone or metal or wood; but, it is not the god itself.

The structural harmony, the rhythm and a fine sense of proportion is the hall mark of Indian temple architecture. It not merely resolves the contradictions but also expresses harmony by encompassing all contradictions, transforming into pure and uncompromised details of structure. The aim of a proportional system, meaning not merely symmetry, is to manifest a sense of coherence and harmony among the elements of the temple and it's whole.

The proportional harmonization of design, therefore, is of utmost importance in the construction of a temple. It is believed that the power and purity of the structure radiates from its exact proportions and measures as specified in the texts. It is also believed that a meticulously well constructed temple radiates peace and joy; and ensures the welfare of the world and its people.

Without harmony, symmetry and proportion there can be no principles in the design of any temple. This is analogues to the precise relation between the features and organs of a well proportioned,

good-looking person. The ancient texts, therefore, insist on a high degree of precision in their measurements.

The standard text mentions “Only if the temple is constructed correctly according to a mathematical system can it be expected to function in harmony with the universe. Only if the measurement of the temple is in every way perfect, there will be perfection in the universe as well.”

The Hindu temple is a feast of a variety of visual aspects, and wherever one engages one of them, entering a doorway, circumambulating or approaching the inner sanctuary or worshipping there— one is accessing an aspect of the whole.

The rules of Vastu-shastra render beauty, structural stability and quality of spaces by virtue of light, sound and volume management. They also evoke in the devotee an attuning of his person to its structure and ambience.

Hindu Temples take their cue from the structure of Human body. The vast Hindu canonical literature on Agamic texts, Devalaya Vastu (Temple Vastu astrology) and sacred geography describe the temple as a cosmic man, the ‘Purusha’ (cosmic man). Before we proceed further, let us briefly discuss the concept of the Vastu Purusha Mandala.

The faith that Earth is a living organism, throbbing with life and energy; is fundamental to the Vastu Shastra. That living energy is symbolized as a person; he is the Vastu Purusha. The site for the proposed construction is his field; Vastu Purusha Mandala. In fact the Vastu Purusha Mandala, the site plan, is his body; and it is treated as such.

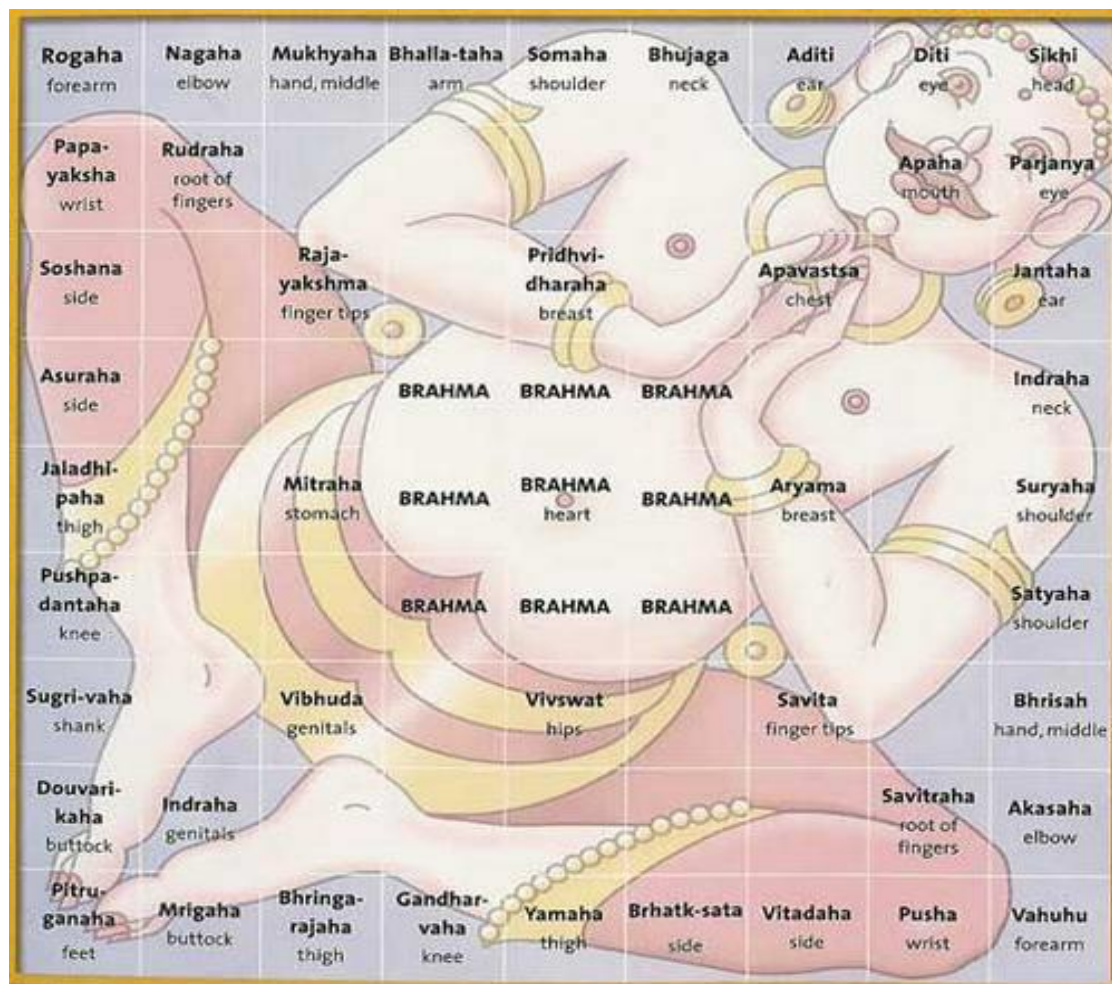
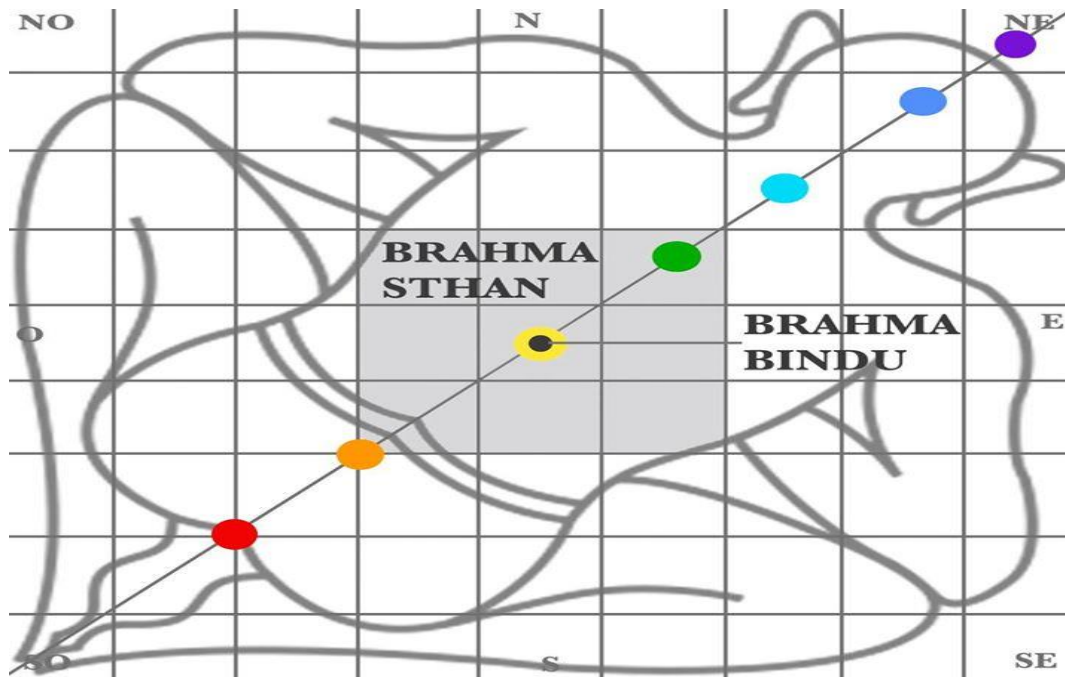
His height extends from the South West corner (pitrah) to the North East corner (Agni). The Vastu Purusha Mandala also depicts the origin of the effects on the human body. All symbolisms flow from these visualizations.

Purusha means ‘person’ literally and refers to Universal Man. Purusha is the body of god incarnated in the ground of existence, divided within the myriad forms. He is also that fragmented body simultaneously sacrificed for the restoration of unity.

Vastu Purusha is associated with the Earth and its movable and immovable basic elements of nature, such as the earth, water, fire, air and space; just as a human being does. The Vastu purusha mandala is in some ways a development of the four pointed or cornered earth mandala having astronomical reference points. Further, the Vastu Purusha Mandala is also the cosmos in miniature; and the texts believe “what obtains in a microcosm, obtains in macrocosm too (yatha pinde thatha brahmande).”

The science of Vastu is believed as part of the Indian architecture. Vastu Shastra developed during the period of 6000 BC and 3000 BC and the ancient Indian text Mayamatam represents Vastu Purusha as the presiding deity for all land structure meant for temples or houses.

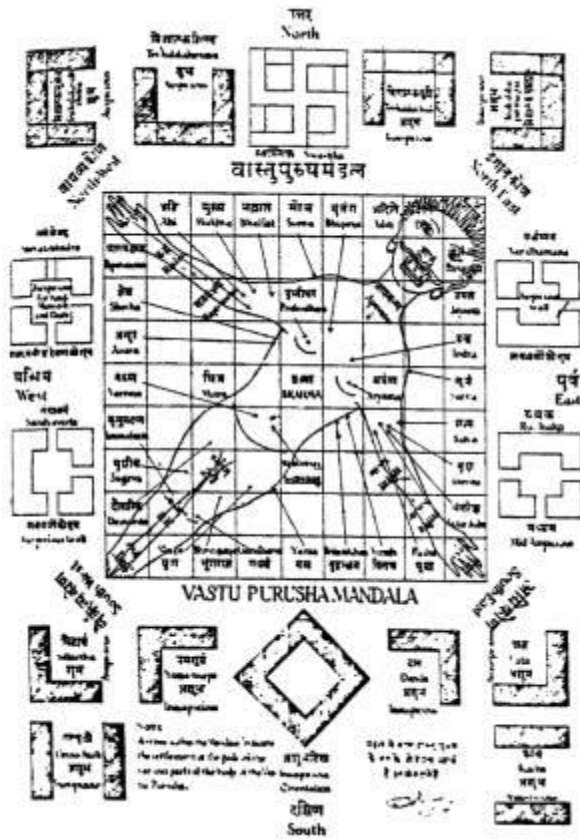
Vastu Purusha Mandala is the metaphysical plan of a temple incorporating course of the heavenly bodies and supernatural forces. This Mandala square is divided into $(8 \times 8 = 64)$ 64 metaphysical grids / modules or pada for temples. (For dwelling places $9 \times 9 = 81$ metaphysical grids / modules or pada).



The Vastu Purusha is visualized as lying with his face and stomach touching the ground; to suggest as if he is carrying the weight of the structure. His head is at North East (ishanya) and his legs are at the South West corner (nairutya).

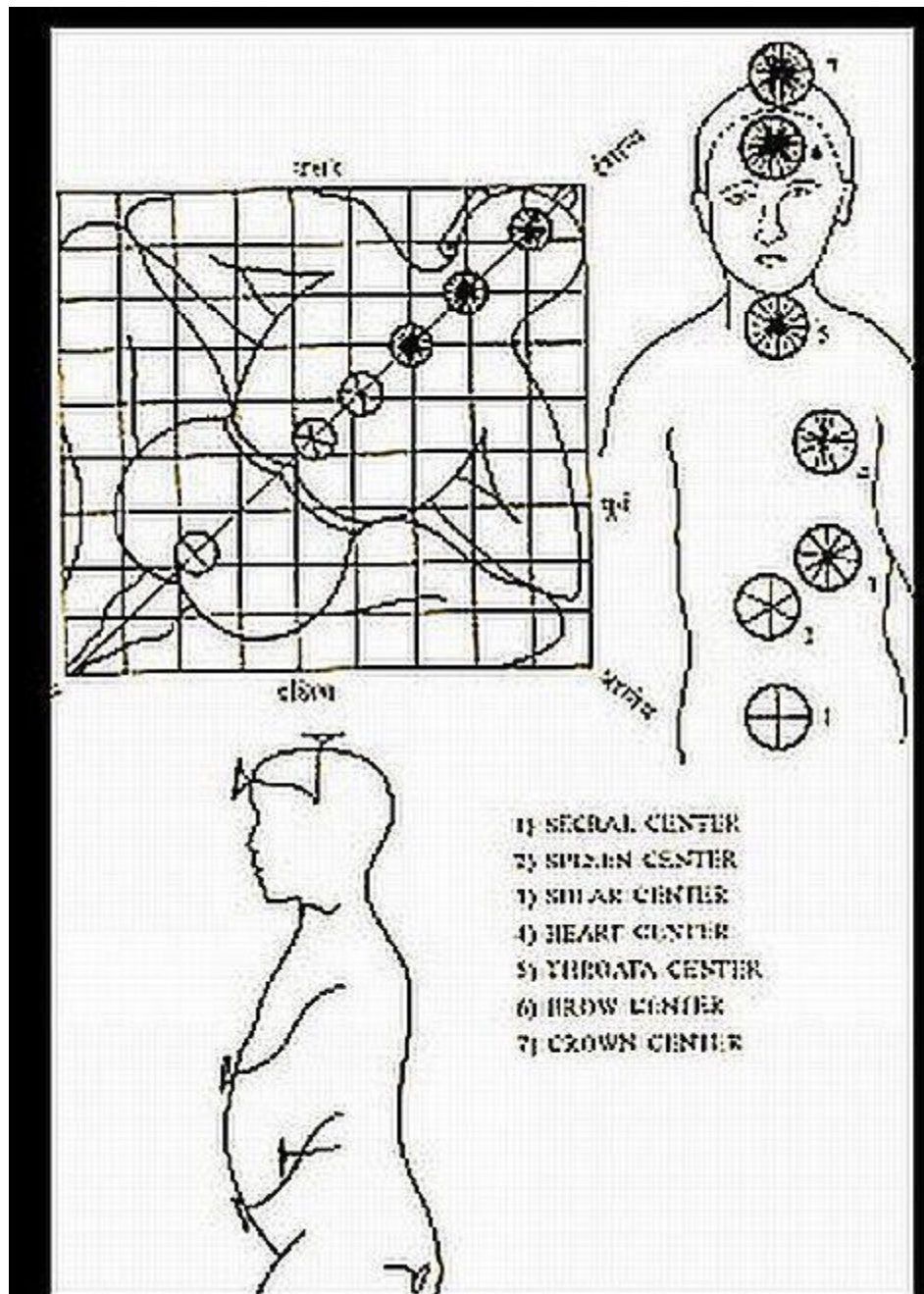
The South West corner (nairutya) where the Vastu Purusha has his legs corresponds to the Muladhara chakra and denotes the earth principle.

Just as the legs support the weight of the body, the base (adhistana) for the muladhara should be stable and strong. Accordingly, the South West portion of the building is the load bearing area; and should be strong enough to support heavy weights. Just as the feet are warm, the South West cell represents warmth and heat; even according to the atmospheric cycles the South West region receives comparatively more heat.



Svadhista chakra is in the lower stomach region near the kidneys. It is related to water principle (apa). On the Vastu Purusha Mandala; it is to the South and to the West. Therefore the wet areas like bathroom etc are recommended in the south or in the west portions of the building. It is for sewerage (utsarjana).

Manipura Chakra is at the navel; and relates to energy or fire or tejas. While in the womb of the mother, the fetus is fed with the essence of food and energy through the umbilical chord connected with its navel. The Vastu Purusha Mandala shows Brahma at the navel of the Vastu Purusha. Further, the lotus is the base (Adhistana) of Brahma. Thus navel connects Brahman with Jiva or panda or life. It is left open and unoccupied. The central portion of the building is to be kept open. It is believed that Vastu Purusha breaths through this open area.

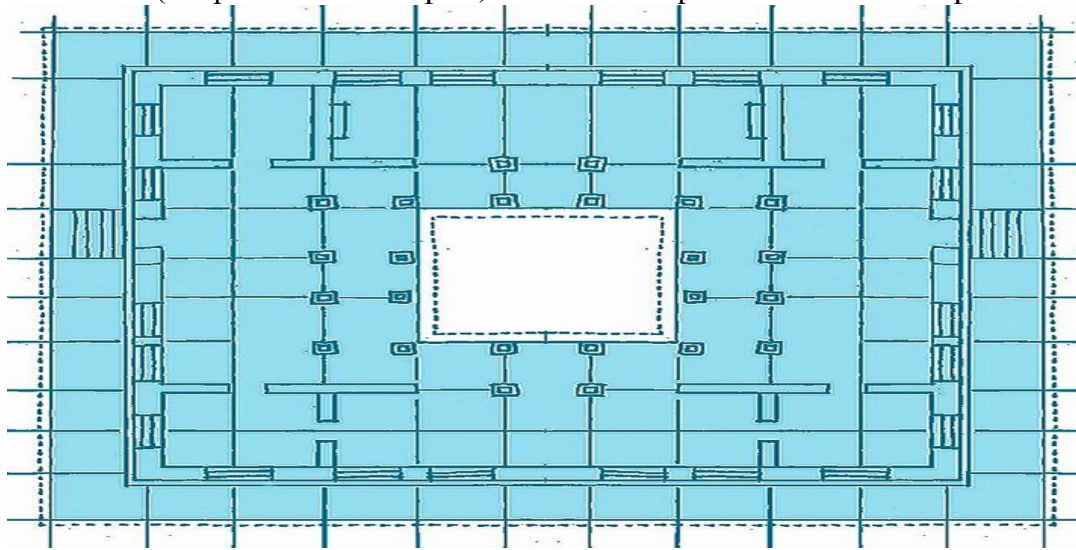


Anahata chakra is near the heart. It is related to vayu air regulated by lungs. The lung region of the Vastu Purusha should be airy. Vishuddaha chakra is near the throat from where the sounds come out and reverberate in space. This region represents Space (Akasha). The word OM is uttered through throat. The echo of that sound vibrates in the hallow of the bone-box of the head and in the space in brain. The head of Vastu Purusha is in the North East corner (Ishanya). The ajna chakra is between the eyebrows. This direction is related to open spaces (akasha). Atmospherically, North East is cooler; and so should be ones head. The puja room Devagraha is recommended in the North east portion of the house.

The limbs of Vastu Purusha, other than the above are also related to the construction of the building. Liver (yakrt) is towards South East. The cooking area is recommended in South East, because it is related to Agni. The rays of sun reach here first and cleanse the atmosphere.

The North West, vayuvya, is presided over by air vayu. The Organs like spleen, rectum of the Vastu Purusha fall in this portion. The store room is recommended here; perhaps because the spleen in the body does the work of storing and restoring blood.

Directions in Hindu tradition are called as Disa, or Dik. There are four primary directions and a total of 10 directions: East, South-East (Agneya), West, North-West (Vayavya), North, North-East (Isanya), South, South-West (Nauritya), Zenith (Urdhva), Nadir (Adho). There are ‘Guardians of the Directions’ (Dikpala or Dasa-dikpala) who rule the specific directions of space.



1. North east Direction ruled by Ishanya Shiva (Load of Water) influences balanced thinking
2. East Direction ruled by Indra (Load of Solar) – influences long life
3. South east Direction ruled by Agneya or Agni (Load of Fire) (Energy Generating) influences comfort, peace, prosperity and progeny.
4. South Direction ruled by Yama (Lord of Death or Lord of Death / Damage) yields nothing but mourning, depression and pain. If this direction used properly safeguards from envy of others and cast of all evils.
5. West Direction ruled by Varuna (Load of Water / Lord of Rain) (Neptune) influences reputation, fame, prosperity and success.
6. South west Direction ruled by Nairitya – Deity Lord (Demon) Nairitya influences Protection, strength and stability
7. North west Direction ruled by Vayu or Vayavya (Load of Wind) influences peace
8. North (Kuber) – Deity Lord Kuber or Lord of Wealth (Finance) and keeper of riches influences good strength, better business sufficient in flow of money, education, industrial growth etc.
9. Center ruled by Lord Brahma (Creator of Universe)

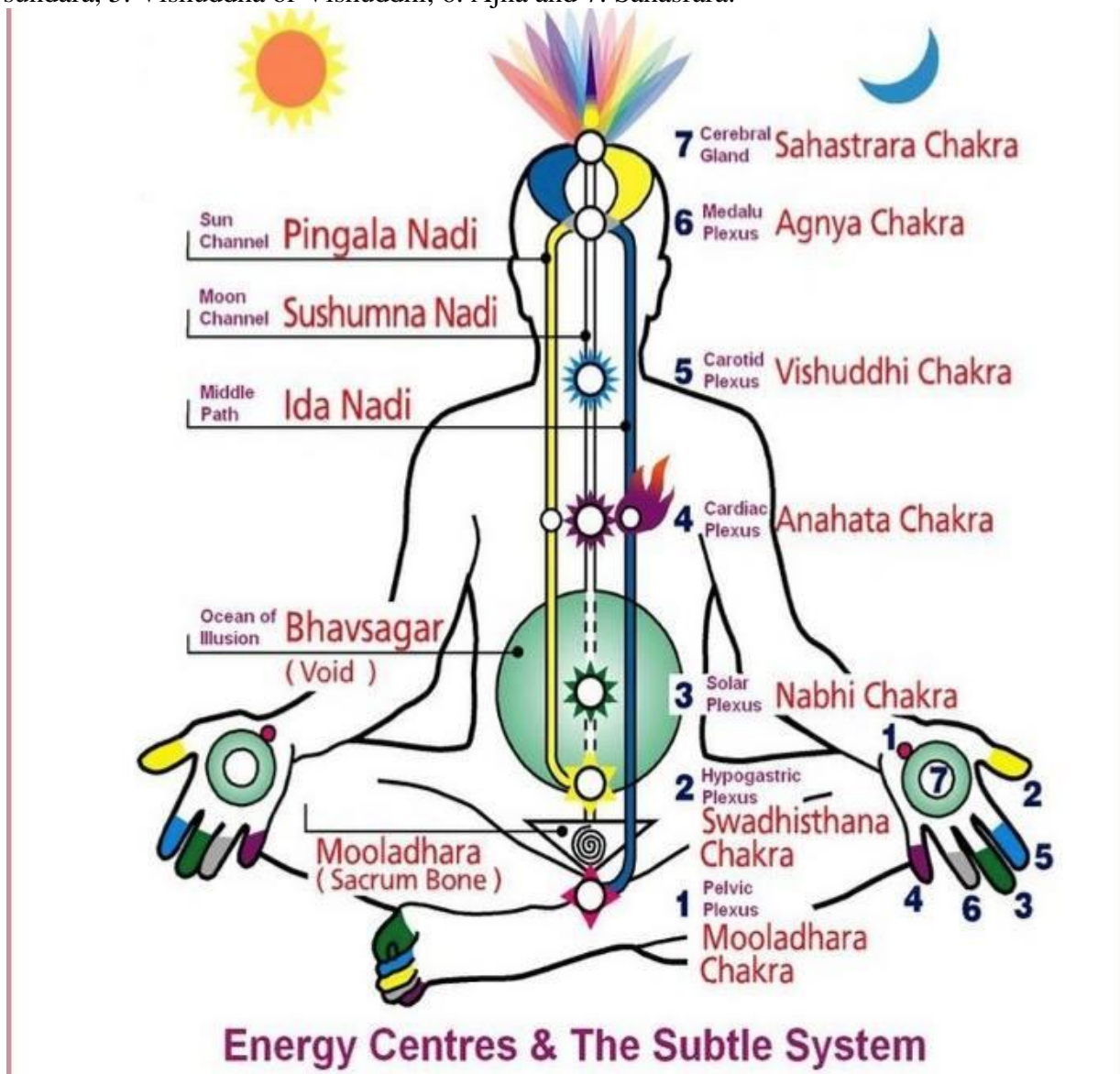
The ‘Aham Brahmasmi’ (“I am Brahman. I am part of the Universe.”) is the great sayings (Mahavakya) mentioned in Brihadaranyaka Upanishad 1.4.10. of Yajur Veda. The meaning is that ‘Whatever is in the Universe, is present in me’ (and ‘whatever is in me, is part of the Universe’). Indian temples represents the macrocosm of the universe and the structure of the human body represents the microcosm. Veda also says “Yatha Pinde tatha Brahmande”. It means what is going

on within human being is the same as what is going on in universe. According to the Tamil Saint Tirumular “our body is a temple”. Here I would like to quote Stella Kramrisch:

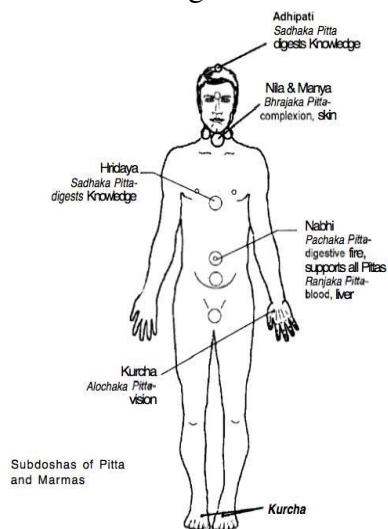
“The vastu-purusha-mandala represents the manifest form of the Cosmic Being; upon which the temple is built and in whom the temple rests. The temple is situated in Him, comes from Him, and is a manifestation of Him. The vastu-purusha-mandala is both the body of the Cosmic Being and a bodily device by which those who have the requisite knowledge attain the best results in temple building.” (Stella Kramrisch,; The Hindu Temple, Vol. I)

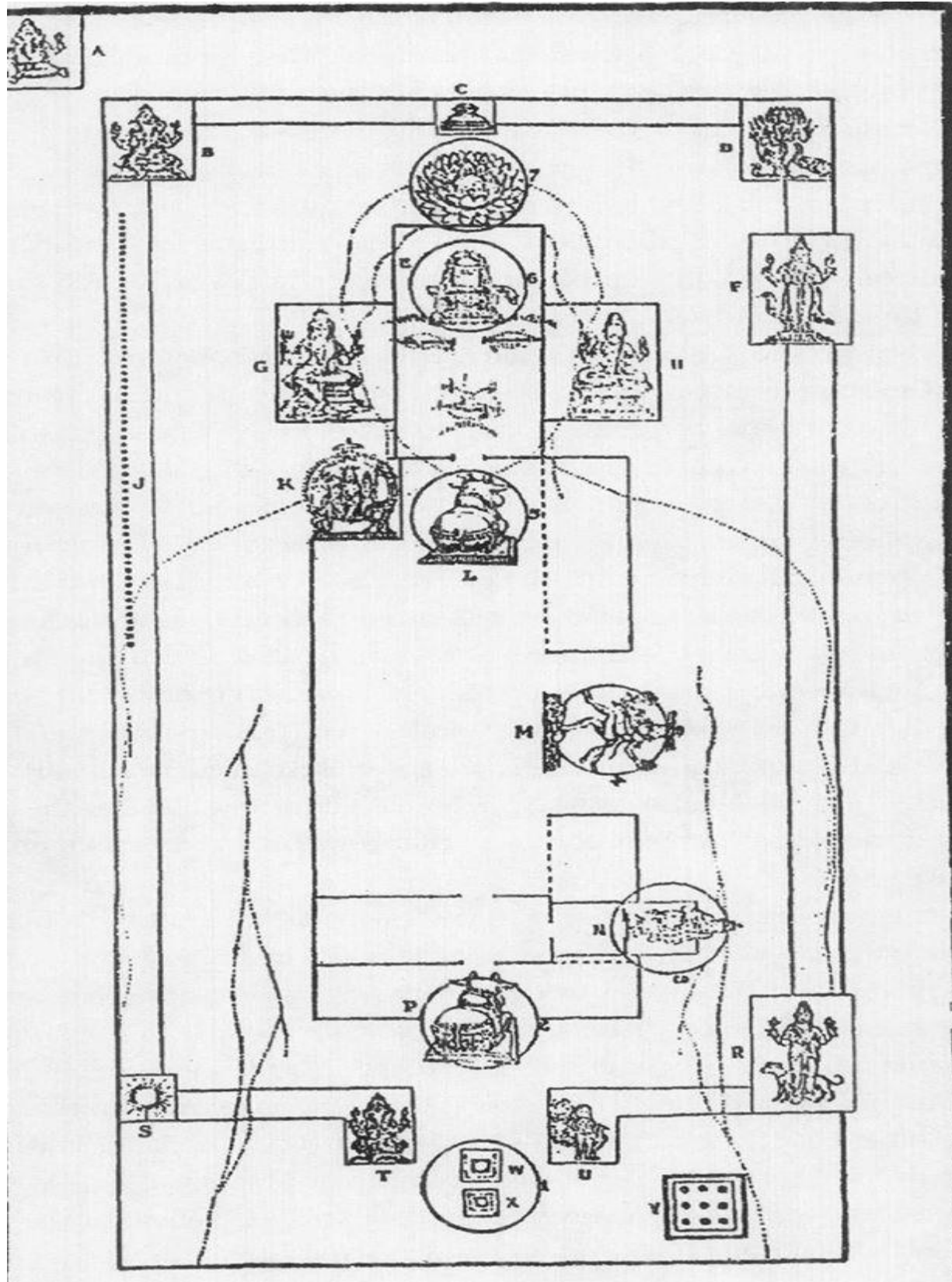
The concept of chakra features in tantric and yogic traditions of Hinduism. In Yoga, Kundalini Shakti means the ‘coiled power.’ It is compared to a serpent that lies coiled while resting or sleeping.

Chakras are vital energy points (Kundalini energy) in the human anatomy, i.e. breath channels, or nadis, and the winds (vayus), that are centres of life force (prana), or vital energy. They include: 1. Muladhara, 2. Swadhisthana, 3. Manipura or manipuraka, 4. Anahata, Anahata-puri, or padma-sundara, 5. Vishuddha or Vishuddhi, 6. Ajna and 7. Sahasrara.



1. Muladhara or root chakra located at the base of the spine in the coccygeal region (governs senses). According to Vastu Mandala South-West (Nauritya) – Deity Lord (Demon) Nauritya influences protection, strength and stability.
2. Swadhisthana or Adhishthana at the lower stomach region or the sacrum of the human. Vastu direction West (Varuna) – Lord Varuna (Neptune) Lord of Water or Rain. Formation of temple tank or water bodies in South or West will influence reputation, fame, prosperity and success.
3. Manipura or Manipuraka at the digestive glands (governs digestion through pancreas and adrenal glands) of the human. Digestion involves energy of fire. Female bears navel, womb and umbilical chord. According to Vastu Mandala Lord Brahma or Lord of Creation seated on lotus flower base (Adishtana) rules this point. Cosmic Brahma bridges the cosmic human navel or life. If this point in temple should be left open, the vital energy flows and the wholeness resides with blessings and protection.
4. Anahata, Anahata-puri, or Padma-sundara located at chest (governs lungs, immune system – thymus of human being). As per Vastu Mandala Lord Vayu or Lord of Wind rules this point. This grid relates to air and regulation of air. If this grid is allowed to flow air and the peace and comfort resides.
5. Vishuddha or Vishuddhi located at the throat i.e., thyroid glands (governs sound, speech communication and sense of security of human being). Mantras chanted by cosmic human being bridges with cosmic Ishanya. Comic Ishanya is represented in OM, a Pranava Mantra form. According to Vastu Mandala Lord Shiva in Ishanya form rules this grid and represents the space or Akasha. Mantras chanted here will reverberate in space. If left free from obstacles and less occupation or weight, there will be balanced power.
6. Ajna or third eye located at pineal glands or between the eye brows; the two side nadis ‘Ida’ (yoga) and ‘Pingala’ are terminating and merge with the central channel ‘Sushumna’ (governs higher and lower selves and trusting inner guidance of human being). As per Vastu Mandala this direction is also related to open spaces (‘Akasha’) and to the North East corner (Ishanya). The sanctum (Garbagriha or womb chamber) is recommended at this grid, the seat of the divinity.
7. Sahasrara or pure consciousness chakra located at the crown of the head – symbolized by a lotus with one thousand multi-coloured petals. According to Vastu Mandala Anja is the sanctum. The vimanam and shikara forms the space element and the currents of life ascends through the ‘Brahma-randra shila’ or stone slab placed at ‘griva’ (neck) of the vimana. The finial of the shikara of the vimanam is the grid at which unseen sahasrara located.





Source: Hindu Temple vol 1. by Stella Kramrisch

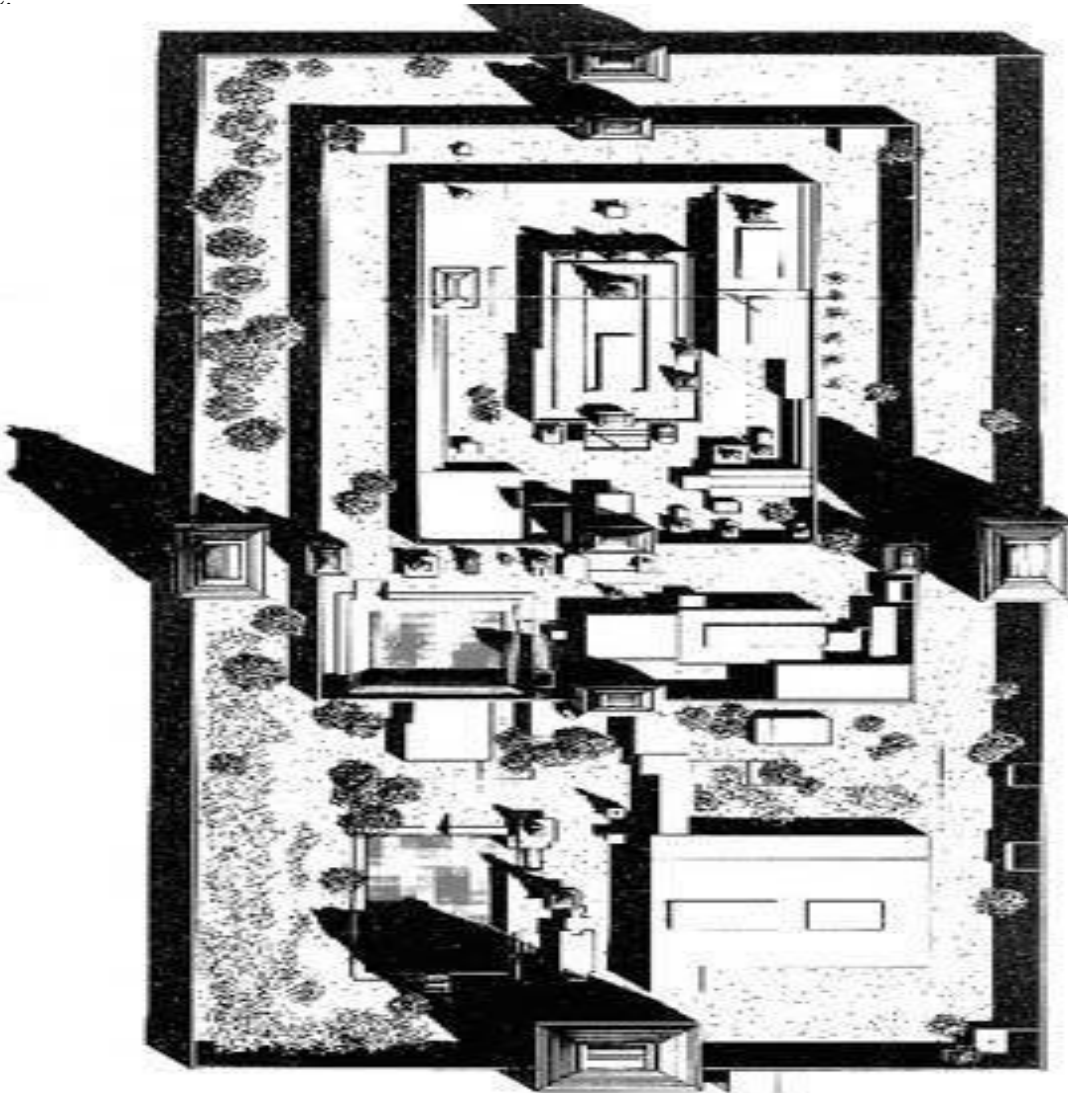
The picture shown here is reproduced from Hindu Temple vol 1. by Stella Kramrisch demonstrate that how the temple structure can be compared with the human body. It is apt to quote the Sanskrit sloga from “Viswakarmyam Vastu Shastra”:

“Garba Gruha Sirahapoktam antaraalam Galamthatha Ardha Mandapam Hridayasthanam Kuchisthanam Mandapomahan Medhrasthaneshu Dwajasthambam Praakaram Janjuangeecha Gopuram Paadayosketha Paadasya Angula Pokthaha Gopuram Sthupasthatha Yevam Devaalayam angamuchyathe”

Meaning: Garba-griham (main sanctum) is equated with human head; antarala (vestibule) is equated with human neck; ardha – mandapam (half-hall) is compared with human chest; maha – mandapam (main hall) is equated with the stomach; flag-post is viewed along with human male organ;and gopuram or temple gateway tower is viewed along with human feet.

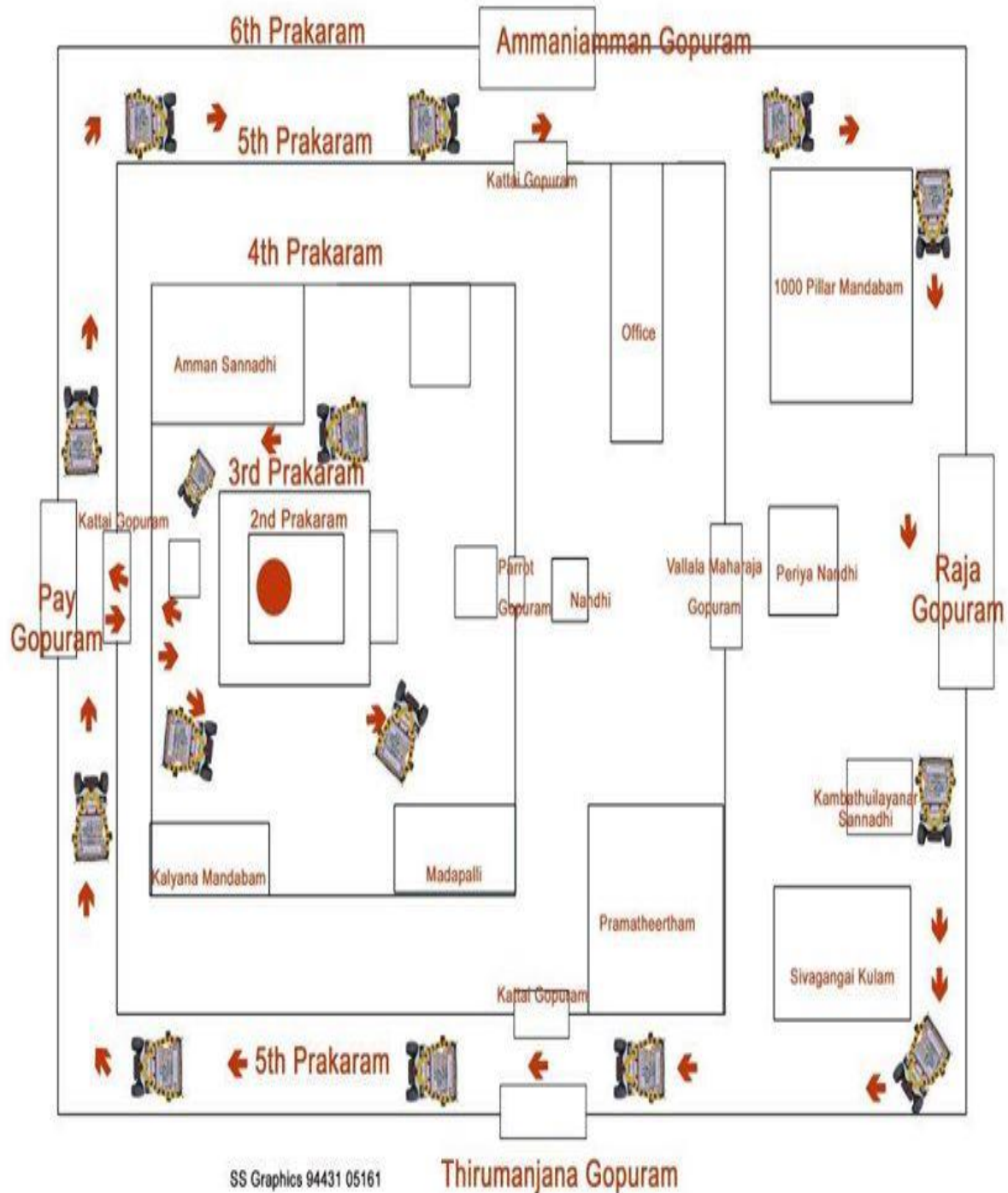
Symbolism of the temple

A Temple is a huge symbolism; it involves a multiple sets of ideas and imagery. See opp. Page: The temple is seen as a link between man and god; and between the actual and the ideal. As such it has got to be symbolic. A temple usually called Devalaya, the abode of God, is also referred to as Prasada meaning a palace with very pleasing aspects. Vimana is another term that denotes temple in general and the Sanctum and its dome, in particular. Thirtha, a place of pilgrimage is it's another name.



Arulmigu Arunachaleswarar Thirukoil Thiruvannamalai

Battery Car Route



The symbolisms of the temple are conceived in several layers. One; the temple complex, at large, is compared to the human body in which the god resides. And, the other is the symbolisms associated with Vimana the temple per se, which also is looked upon as the body of the deity. And the other is its comparison to Sri Chakra.



Sri Chakra

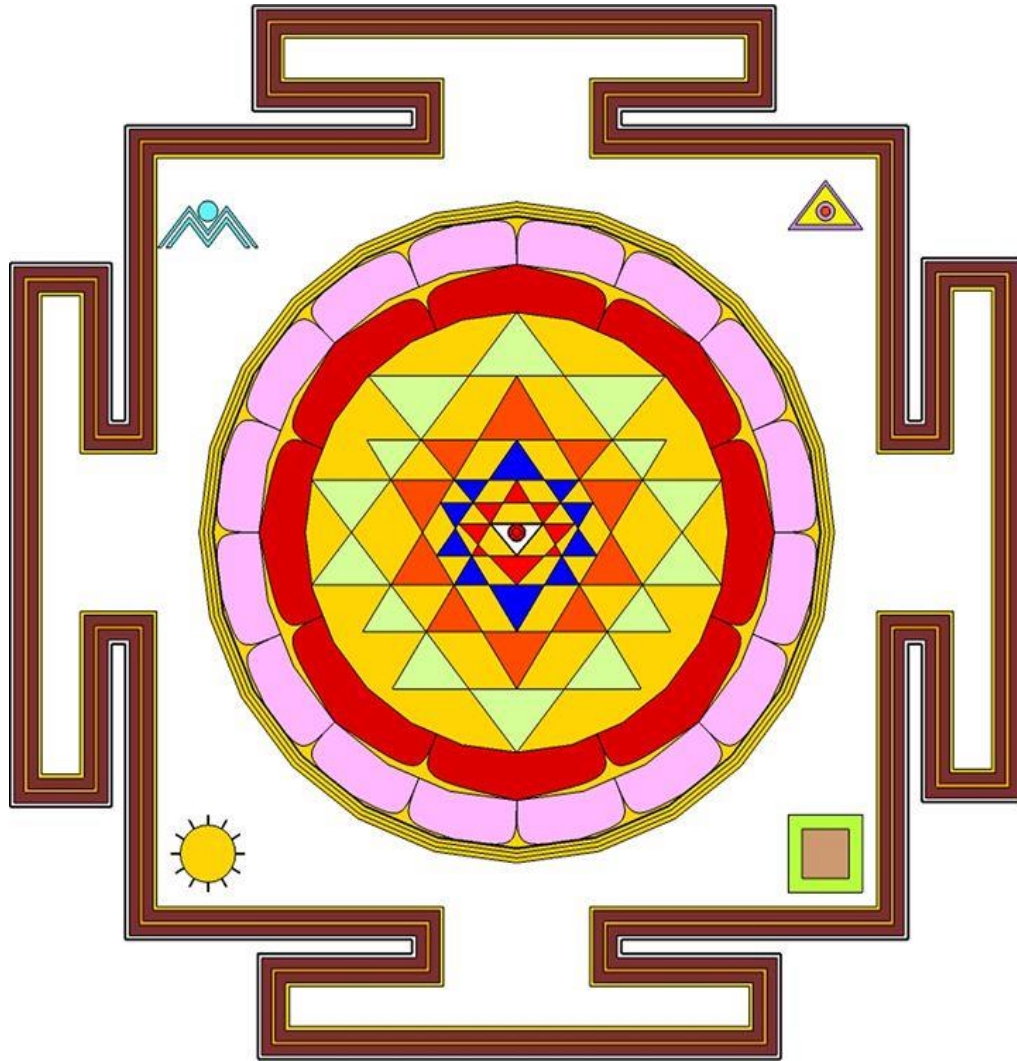
बिन्दु-त्रिकोण वसुकोण दशारयुग्ममन्त्रश्च नागदलसंयुत षोडशारम् ।
वृत्तत्रयं च धरणीसदनत्रयंच श्रीचक्रमेतदुदितं परदेवतायाः ॥

The point, the triangle, the eight-cornered figure, the two ten-edged figures, the 14- cornered figure, eight petals, 16 petals, the three circles and the three squares - This is called the Sri Chakra of the Supreme Deity.

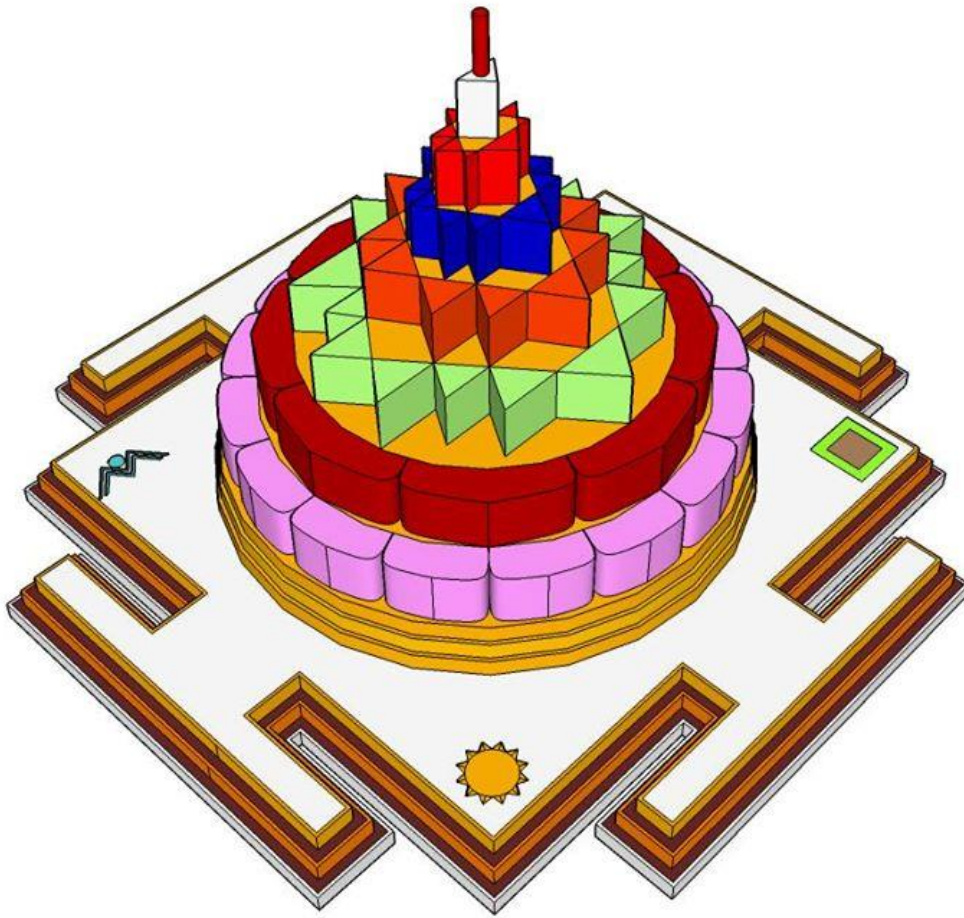
Let's start with the temple complex being looked upon as a representation of Sri Chakra.

At the centre of the temple is the image of divinity and its purity that generations after generations have revered and venerated. That image residing at the heart of the temple is its life; and is its reason. One can think of an icon without a temple; but it is impossible to think of a temple without an icon of the divinity. The very purpose of a temple is its icon. And, therefore is the most important structure of the temple is the Garbagriha where the icon resides.

In fact, the entire temple is conceived as the manifestation or the outgrowth of the icon. And, very often, the ground-plan of a temple is a mandala. Just as the Sri Chakra is the unfolding of the Bindu at its centre, the temple is the outpouring or the expansion of the deity residing in Brahmasthana at the centre.



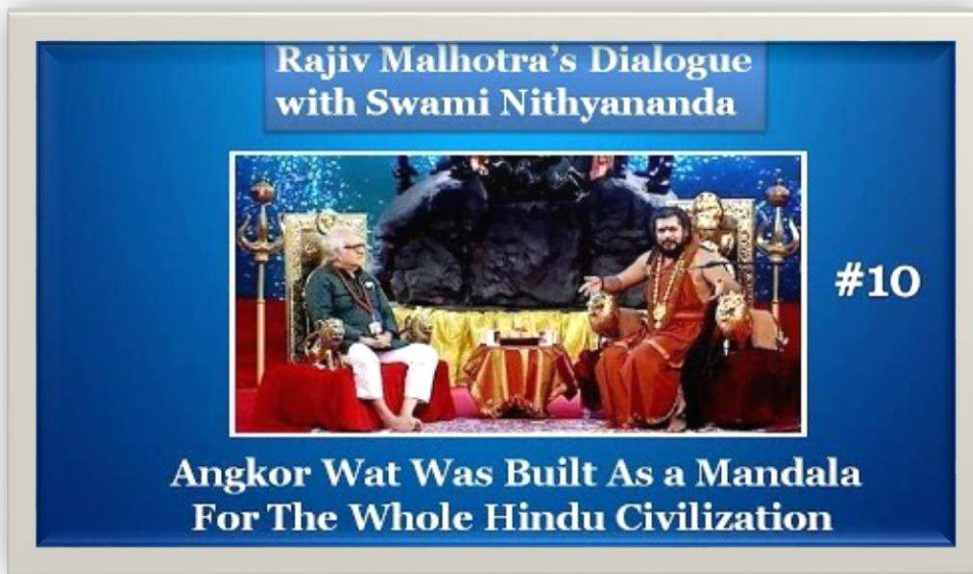
The temple as also the Sri Chakra employs the imagery of an all – enveloping space and time continuum issuing out of the womb. In the case of Sri Chakra the Bindu is the dimension-less and therefore imperceptible source of energy. The idol, the Vighraha, in the Garbagriha represents the manifestation of that imperceptible energy or principle; and it radiates that energy.



The devotee- both at the temple and in Sri Chakra- moves from the gross to the subtle. In the temple, the devotee proceeds from the outer structures towards the deity in the inner sanctum, which compares to the Bindu in the Chakra. The Sri Chakra upasaka too proceeds from the outer Avarana (enclosure) pass through circuitous routes and successive stages to reach the Bindu at the centre of the Chakra, representing the sole creative principle. Similarly the devotee who enters the temple through the gateway below the Gopura (feet of the Lord) passes through several gates, courtyards and prakaras, and submits himself to the Lord residing in the serenity of garbhagrha, the very hearts of the temple, the very representation of One cosmic Principle.

CHAPTER 11

STUPA as Cosmos & spiritual light house



In early days, Temples and Stupas served as the major landmarks of the land. A place was recognized either using the palaces or temples from afar due to their height or social and cultural placement. As the palaces were prone for being ruined due to assault, temples served as the chief landmark for the passengers travelling on foot or carriages from afar. It was a beacon- a light house to guide the visitors. Many served as Guest Houses for travelers especially priests and missionaries or just as identifiable marks on the landscape-“ Where is the konark Stupa? ‘ Oh There on the right”

ELEMENTS OF HINDU TEMPLE ARCHITECTURE

It was the later half of the 7th century that the Hindu temple structures of India began to acquire a definite form with consolidation of design structures all over India.

Elements of Hindu temple:

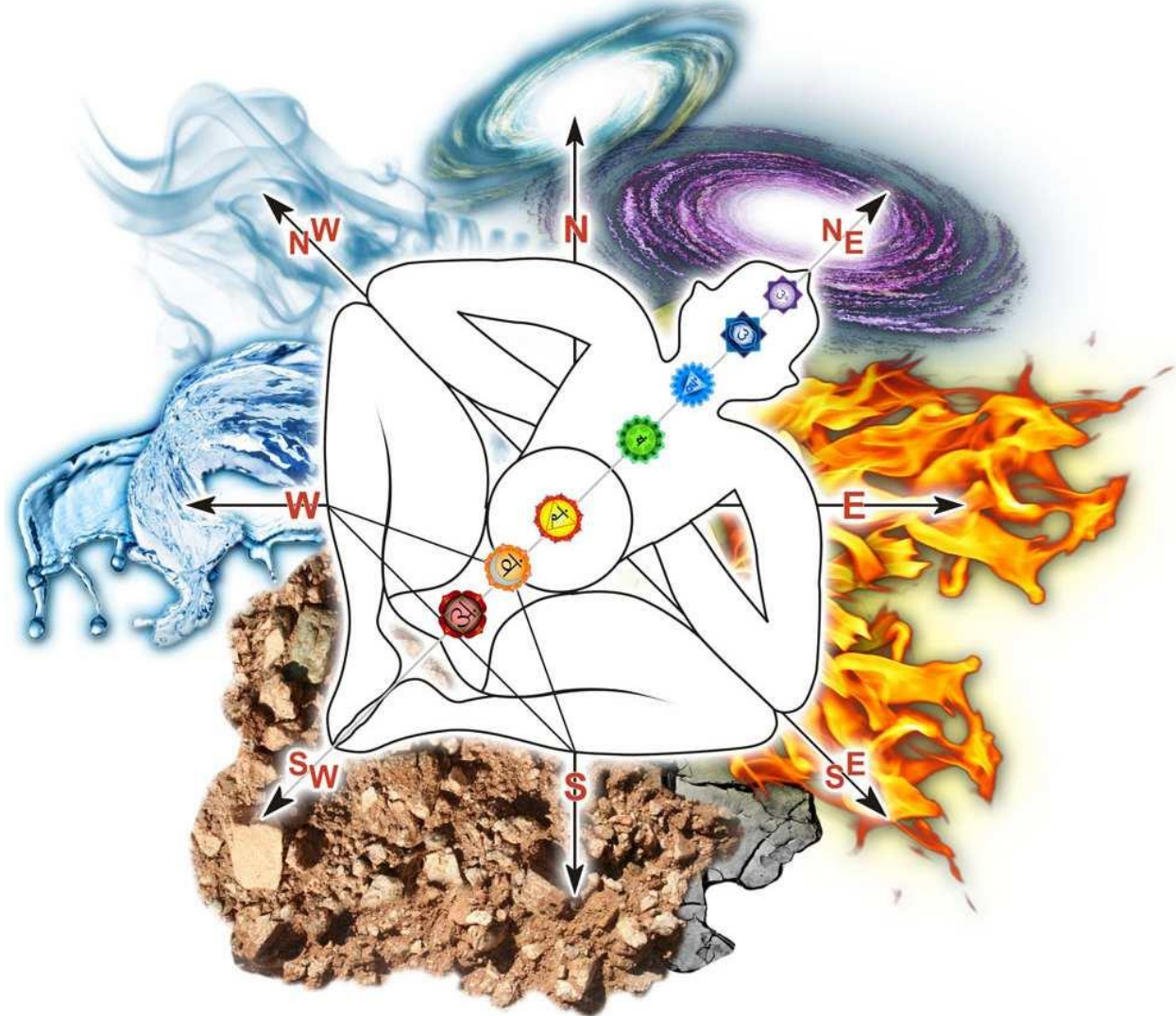
1. 'Ardhamandapa' meaning the front porch or the main entrance of the temple leading to the mandapa. It unites the main sanctuary and the pillared hall of the temple. 'Antarala' meaning the vestibule or the intermediate chamber.
2. 'Garbhagriha' meaning the womb chamber. The shape and the size of the tower vary from region to region. It is the pyramidal or tapering portion of the temple which represents the mythological 'Meru' or the highest mountain peak. 1. 'Sikhara' meaning the tower or the spire. The devotees walk around the deity in clockwise direction as a worship ritual and symbol of respect to the temple god or goddess. There is an enclosed corridor carried around the outside of garbhagriha called the Pradakshina patha' meaning the ambulatory passageway for circumambulation
Garbhagriha (cella or inner chamber). the lower portion inside the Vimana is called Shikhara and upper as the Vimana is called as the Sikhara . The visitors are not allowed inside the chamber is mostly square in plan and is entered by a doorway on its eastern side. It is nucleus and the innermost chamber of the temple where the image or idol of the deity is placed.
3. 'Gopurams' meaning the monumental and ornate tower at the entrance of the temple complex, specially found in south India
4. 'Mandapa', is the pillared hall in front of the garbhagriha, for the assembly of the devotees. In some of the earlier temples the mandapa was an isolated and separate structure from the sanctuary known as 'Natamandira' meaning temple hall of dancing, where in olden days ritual of music and dance was performed. It is used by the devotees to sit, pray, chant, meditate and watch the priests performing the rituals.
5. The Amalaka the fluted disc like stone placed at the apex of the sikhara.
6. 'Toranas', the typical gateway of the temple mostly found in north Indian temple
7. 'Pitha', the plinth or the platform of the temple

In order to make easy the roaming folk to recognize the locations easily, the Gopuram's of the temples had to be built elevated. That tiled way for the elevated Gopuram's. By way of seeing the Gopuram's form expanse, passengers planned the approximate distance of their target from their location. Gopuram's were built extremely high to serve as landmarks as well as for traveler distance's.

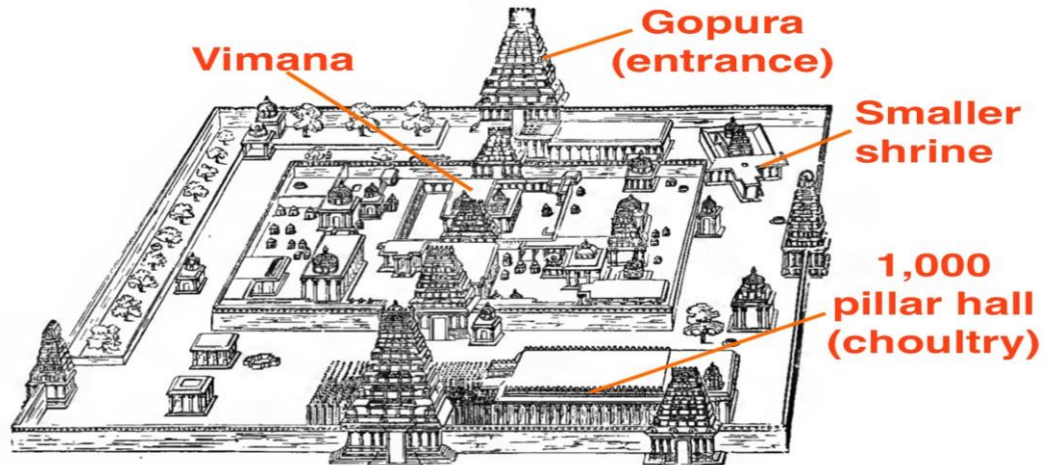
Additionally, temples served as the main protection for travelers. When people travel between places, they stay at the temple building to take rest. Before they commence the new part of their journey, they would respect God and begin.

Representatively, the **Temple Gopuram** or the access to the temple represents the feet of the divinity. A devotee bows at the feet of the Lord at the entry as he steps into the temple and proceed towards the chamber, leaving behind the world of contradiction. A *Gopura* is usually constructed with an enormous stone base and a superstructure of brick and support. It is rectangular in sketch and topped by a barrel-vault roof crowned with a row of finials. When viewed from apex, the Gopura too resembles a mandala; with sculptures and carvings of Yalis and mythological animals to be found in the outer enclosed space. Humans and divine beings are in the central enclosures. The crest of the *Gopura*, the *Kalasha*, is at the centre of the *Mandala*. These sculptures follow a selection

of themes resulting from the Hindu mythology, mainly those associated with the presiding idol of the temple where the *gopuram* is positioned. Gopuras come into view to have inclined revision in the temple plan and outline. The spaces just about the shrine became hierarchical; the further the space was from the central shrine, the lesser was its distinction. The farthest ring had buildings of a more practical or a secular nature – shops, dormitories, sheds, workshops etc., thus transforming the temple from a merely place of worship to the center of a vibrant alive city.



A **mandala** (emphasis on first syllable; Sanskrit मण्डल, maṇḍala – literally "circle") is a geometric configuration of symbols. In various spiritual traditions, mandalas may be employed for focusing attention of practitioners and adepts, as a spiritual guidance tool, for establishing a sacred space and as an aid to meditation and trance induction. In the Eastern religions of Hinduism, Buddhism, Jainism and Shintoism it is used as a map representing deities, or specially in the case of Shintoism, paradises, kami or actual shrines. In New Age, the mandala is a diagram, chart or geometric pattern that represents the cosmos metaphysically or symbolically; a time-microcosm of the universe, but it originally meant to represent wholeness and a model for the organizational structure of life itself, a cosmic diagram that shows the relation to the infinite and the world that extends beyond and within minds and bodies.



Temple at Tiruvallūr (from Rām Rāz's Essay on the Architecture of the Hindus).

MANDALA:

Religious meaning

In Hinduism, a basic mandala, also called a *yantra*, takes the form of 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.



A *yantra* is similar to a mandala, usually smaller and using a more limited colour palette. It may be a two- or three-dimensional geometric composition used in *sadhanas*, puja or meditative rituals, and may incorporate a mantra into its design. It is considered to represent the abode of the deity. Each *yantra* is unique and calls the deity into the presence of the practitioner through the elaborate

symbolic geometric designs. According to one scholar, "Yantras function as revelatory symbols of cosmic truths and as instructional charts of the spiritual aspect of human experience"

Many situate *yantras* as central focus points for Hindu tantric practice. *Yantras* are not representations, but are lived, experiential, nondual realities. As Khanna describes:

Despite its cosmic meanings a *yantra* is a reality lived. Because of the relationship that exists in the Tantras between the outer world (the macrocosm) and man's inner world (the microcosm), every symbol in a *yantra* is ambivalently resonant in inner–outer synthesis, and is associated with the subtle body and aspects of human consciousness.

The term 'mandala' appears in the Rigveda as the name of the sections of the work, and Vedic rituals use mandalas such as the Navagraha mandala to this day.

The science behind these constructions is that, the temple architecture gives cosmic force to the main idol in the Garbha Griha. Firstly, the Juathaskambam acts like an antenna and receives the cosmic force from the space and through a subversive channel it is linked to the main idol in the Garbha-graha. The cosmic force continuously flows through the Jathuskambam to the statue and energises it. Secondly, the celestial power fetched through the field gives the idol effulgence and metaphysical powers. The cosmic-force is additionally maintained by noise waves (Vedic chants – Read about the Significance of Chanting) and the pyramid like tomb. The pyramid like construction helps to intensify and protect the cosmic force. These are the reasons for anybody to feel a positive energy, goodness, serenity or divinity when we approach the interior sanctum.

The copper plate has the propensity to suck part the Ether when that penetrates from the copper and the Herbal resulting in powerful atomic force that penetrates through the skin to heal the human, and that's why the copper plate is put on the temple tower.

The idol is washed with various materials (milk, sandal paste, oil) to preserve the idols. The idol is adorned with flowers and ornaments for mental and visual boost. But the diverse postures of the idol (sitting/standing, number of hands, weapons they hold) do have meaning in emitting the cosmic force.

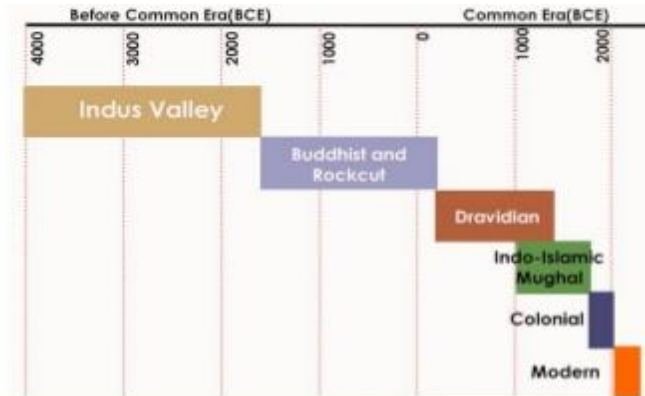
Thus the temples serve up as the scientific room to receive the shower of cosmic force or God's blessing.

From my understanding Temple Gopurams are an important part of any Hindu temples and there are specific reasons for their existence. They are:

- 1) Temple Gopurams are built to receive the positive energy from the universe. Cosmic rays will be received by the Gopuram and it will be passed to the statue in the temple.
- 2) Gopuram will also receive the energy from thunder/lightning and pass it to the ground. So it acted as a layer of protection for the temple and the nearby areas.
- 3) Temple Gopuram were built largely to depict the culture and art of ancient people
- 4) It also used to act as a landmark in olden days to find out the cities, way to different places.
- 5) In olden days , kings built temples in order to give job to the people of the country and along with that future generations will come to know the architectural talents that ancient people had.
- 6) The small carvings and statues in temple gopuram depict the story of the god and also will show life lessons.

Buddhist Architecture-Viharas BUDDHIST ARCHITECTURE

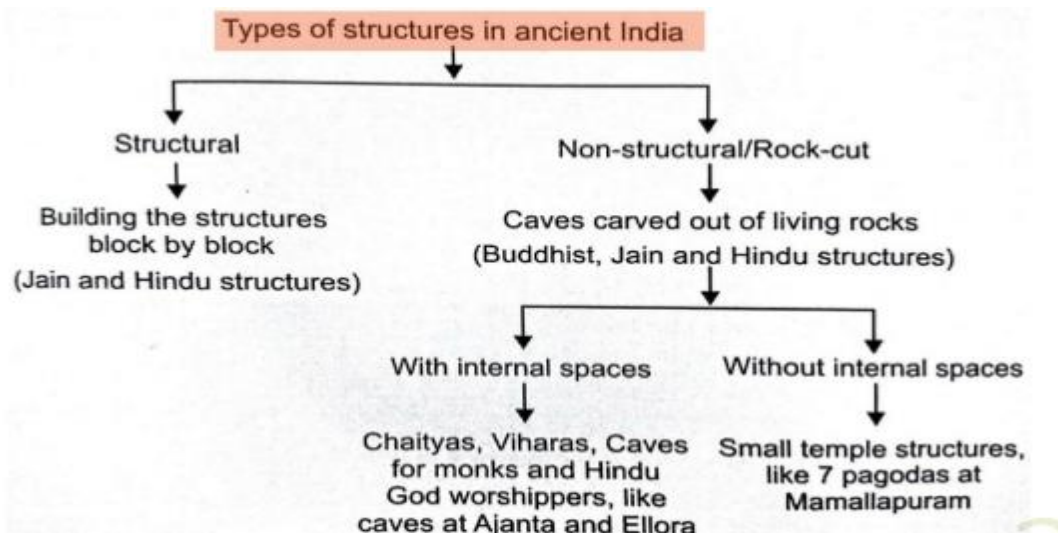
History Timeline



- *Vedic Civilization : 5000 B.C.*
- *Indus & Saraswati Civilizations : 2500 - 1000 B.C.*
- *Birth of Jainism and Buddhism 563 - 400 B.C.*
- *Golden Age of Indian Unity & Govt : Mauryan Dynasty : 325 - 175 B.C.*
- *Golden Age of Indian Arts & Sciences : Gupta Dynasty : 300 - 650 A.D.*
- *Regional Kingdoms and Muslim Invasions : 700 – 1200 A.D.*
- *The Mughal Empire : 1300 - 1700 A.D.*
- *The British East-India Company : 1600 A.D.*
- *The British Empire : 1700 - 1900 A.D.*
- *India's Freedom Struggle : 1857 - 1947*
- *Independence : 1947*
- *Modern India 2020 Vision : 20th and 21st Century*

The early structures that were built during the empires were permanent in nature and long lasting. Non-Structural or rock-cut means that they were carved out of mountain cliff or huge rocks.

The Buddhist Architecture began with the development of various symbols, representing aspects of the Buddha's life(563BCE- 483BCE). Indian Emperor Ashoka, not only established Buddhism as the state religion of his large Magadh empire, but also opted for the Architectural monuments to spread Buddhism in different places. The major features of this style are Stupas, Stambhas, Chaityas, Viharas. Beginning of Buddhist architecture in India was in the 3rd century BCE.. Three types of structures are associated with the religious architecture of early Buddhism: monasteries



1. (Viharas), places to venerate relics
2. (stupas), and shrines or prayer halls
3. (chaityas also called chaitya grihas), which later came to be called temples in some places.

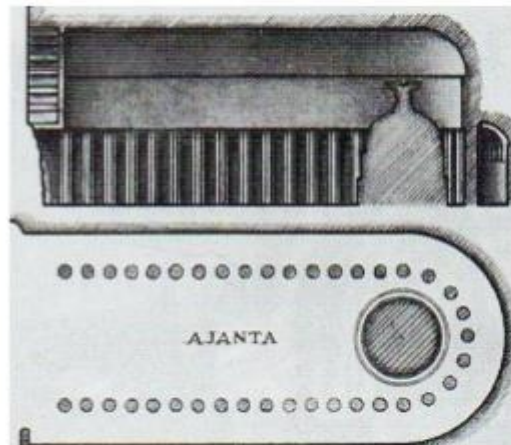
This religion initially did not involve making of figures or idols but gradually the followers started making sculptural representations of Buddha. There are 2 phases of Buddhism:

1. HINAYANA- 2ND CENTURY BC- 2ND CENTURY AD

2. MAHAYANA- 3RD CENTURY AD – 7TH CENTURY AD

Viharas initially were only temporary shelters used by wandering monks during the rainy season, but later were developed to accommodate the growing and increasingly formalized Buddhist monasticism(monkhood). An existing example is at Nalanda (Bihar). The initial function of a stupa was the veneration and safe-guarding of the relics of the Buddha. The earliest surviving example of a stupa is in Sanchi (Madhya Pradesh). In accordance with changes in religious practice, stupas were gradually incorporated into chaitya-grihas (prayer halls). These reached their high point in the 1st century BC, exemplified by the cave complexes of Ajanta and Ellora (Maharashtra). The Pagoda is an evolution of the Indian stupa. Buddhist architecture in India

- 100ft by 40ft by 33ft
- Same roof ribs
- Two tiered stupa with circular base and elongated dome



Cave No 10 at Ajanta

Buddhist architecture emerged slowly in the period following the Buddha's life, along with the Hindu temple architecture. Brahmanist temples at this time followed a simple plan – a square inner space, the sacrificial arena, often with a surrounding ambulatory route separated by lines of columns, with a conical or rectangular sloping roof, behind a porch or entrance area, generally framed by freestanding columns or a colonnade. The external profile represents Mount Meru, the abode of the gods and centre of the universe. The dimensions and proportions were dictated by sacred mathematical formulae. This simple plan was adopted by Early Buddhists, sometimes adapted with additional cells for monks at the periphery (especially in the early cave temples such as at Ajanta, India). The basic plan survives to this day in Buddhist temples throughout the world. • The profile became elaborated and the characteristic mountain shape seen today in many Hindu temples was used in early Buddhist sites and continued in similar fashion in some cultures. • In others, such as Japan and Thailand, local influences and differing religious practices led to different architecture.

Gupta period temple at Sanchi besides the Apsidal hall with Maurya foundation Evolution of Buddhist Architecture Early Buddhist Architecture.

Early Buddhist temples: Early temples were often timber, and little trace remains, although stone was increasingly used. Cave temples such as those at Ajanta have survived better and preserve the plan form, porch and interior arrangements from this early period. As the functions of the monastery-temple expanded, the plan form started to diverge from the Brahmanist tradition and became more elaborate, providing sleeping, eating and study accommodation. A characteristic new development at religious sites was the stupa. Stupas were originally more sculpture than building. • One of the earliest Buddhist sites still in existence is at Sanchi, India, and this is centred on a stupa said to have been built by King Ashoka (273-236 BCE). The original simple structure is encased in a later, more decorative one, and over two centuries the whole site was elaborated upon. The four cardinal points are marked by elaborate stone gateways. As with Buddhist art, architecture followed the spread of Buddhism throughout south and east Asia and it was the early Indian models that served as a first reference point, even though Buddhism virtually disappeared from India itself in the 10th century. The Borobudur Temple, Indonesia Buddhist Temple during Gupta Period.

Decoration of Buddhist sites became steadily more elaborate through the last two centuries BCE, with the introduction of human figures, particularly on stupas. However, the Buddha was not represented in human form until the 1st century CE. Instead, aniconic symbols were used. This is treated in more detail in Buddhist art, Aniconic phase. It influenced the development of temples, which eventually became a backdrop for Buddha images in most cases. Temples became Backdrop for Buddha images Buddhisttemples

Architectural History FEATURES OF BUDDHIST ARCHITECTURE

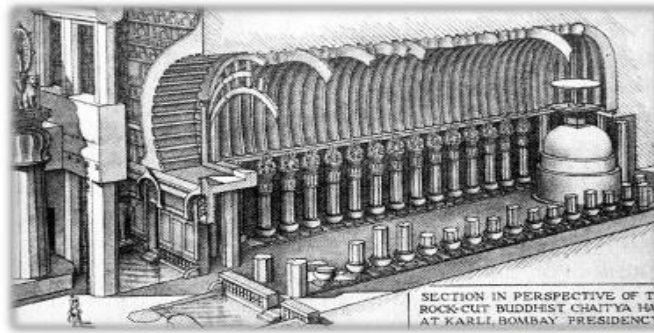
The major features of this style are: Stupas (Buddhist shrine) Stambhas (Pillars) Chaityas (Caves) Vihaaras (Monasteries) • Out of these, the prominent examples of Chaitya Hall and Viharas can be found in Rock-Cut Architecture. Even the Stupa can be found in certain Chaitya halls in a miniature form. Features of Buddhist architecture.

Vihaaras (MONASTRIES)

- They were the residential places of the Buddhist priest(monks).
- The main hall was entered through a doorway, leading to an assembly hall, dining chambers and meditation cells.
- The walls depict figures of the Buddha.
- The columns were of 60 meters height and well-chiselled.



Typical Plan of a Vihaara
PRESENTATION BY- AR. ROOPA CHIKKALGI



SECTION IN PERSPECTIVE OF THE
ROCK-CUT BUDDHIST CHAITIYA HALL
AT KARLI, BOMBAY, PRESIDENCY

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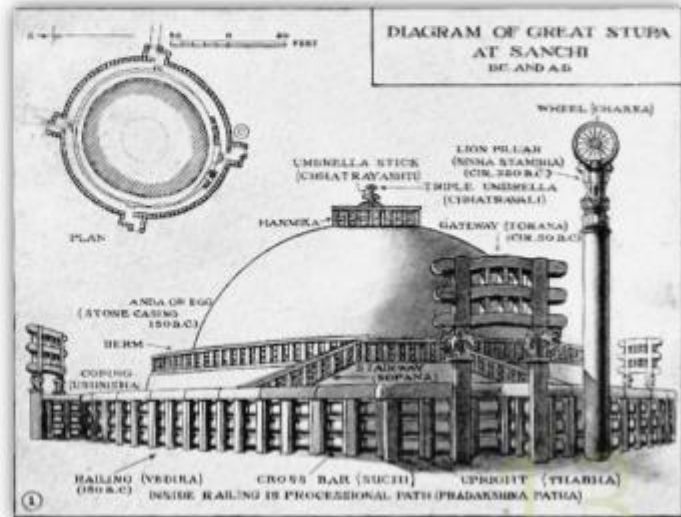
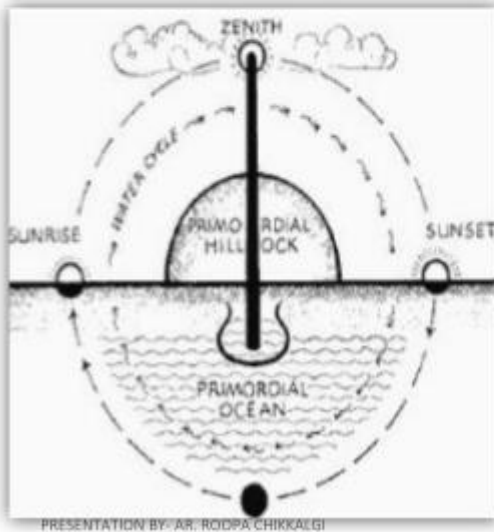
Stupas (domes) DEFINITION: Dome-shaped structures used to house sacred relics of the monks and hence also known as “Relic-shrines”. CONSTRUCTION MATERIALS: Earth materials covered with stones or bricks. The plan, elevation and the basic structure all derived from the circle. STUPA IS MOUND OF THE EARTH ENCLONG A RELIC CAN BE COMPARED WITH THE MASSIVE FORM OF THE GREAT PYRAMIDS OF EGYPT. THEY ALSO CALLED AS THUPPA IN PALI, DAGABA IN SIMBALI, TOPE IN ENGLISH & DHATUGRABH IN SANSKRIT. (DHATUGRABH=RELICS PRESERVED IN VESSEL CLASSIFIED INTO THREE TYPES.:

1. SARIKA STUPA-raised over body relics.
2. PARIBHOJIKA STUPA - erected over the articles, like the bowl, the sanghati
3. UDDESHIKA STUPA- Stupas built as commemorative monuments.

Structural Features: The spherical dome symbolized the infinite space of the sky. The dome is called as anda or egg. The dome is a solid brick work is 36.60M in dia, and 16.46M high. • A large hemispherical dome which is flat at the top, and crowned by a triple umbrella or Chattra on a pedestal surrounded by a square railing or Harmika. A railing enclosed called Vedica which is about 3.35 M high leaving an ambulatory passage or pradikshina path with the gateways. The upper ambulatory passage (midhi) 4.87M high from the ground and 1.8M wide. There are four gateways known as Toronas at the cardinal points of the campus. Toronas built by ivory or metal worker. Elevation Plan.

Stupas (domes)

- **DEFINITION:** Dome-shaped structures used to house sacred relics of the monks and hence also known as “Relic-shrines”.
- **CONSTRUCTION MATERIALS:** Earth materials covered with stones or bricks. The plan, elevation and the basic structure all derived from the circle.



PLANNING OF SANCHI STUPA

Stone vedica Upper Ambulatory 1.8m wide 3.35m high Harmika or triple umbrella Suchi 60 cm dia Urdhava patas 45cm dia 60-90 cm/c Ushnisha Steps leading to upper ambulatory Lower Ambulatory 3.35 m. high.

- STUPA IS MOUND OF THE EARTH ENCLOSING A RELIC CAN BE COMPARED WITH THE MASSIVE FORM OF THE GREAT PYRAMIDS OF EGYPT
- THEY ALSO CALLED AS THUPPA IN PALI, DAGABA IN SIMBALI, TOPE IN ENGLISH & DHATUGRABH IN SANSKRIT. (DHATUGRABH=RELICS PRESERVED IN VESSEL)

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Toranas at Sanchi Toranas are associated with Buddhist stupas like the Great Stupa in Sanchi, as well as with Jain and Hindu structures, and also with several secular structures. In the 1st century BCE, four elaborately carved toranas (ornamental gateways) and a balustrade encircling the entire structure were added around the Sanchi Stupa built during the Mauryan period.

Stambhas (pillars) The next development was the free standing monolithic columns erected over sites selected because of their sacred associations. They were basically stone objects.

DEFINITION: In the context of Hindu Mythology, stambha, is believed to be a cosmic column.

DESIGN: A stambha consists of a circular column or shaft slightly tapering towards the summit (monolithic). On top of this shaft is the Persepolitan bell or the inverted lotus shaped base. Above this is the abacus on top of which rests the crowning sculpture. These three portions were carved out of a single stone (monolithic). The famous iron pillar from the Gupta period is a fine specimen, withstanding exposure to rain & storm, yet remaining smooth and unruined bearing testimony to the mastery of Indian metal-casting.

Iron Pillar Ashokan Pillar

CHAITYAS -A Buddhist shrine or prayer hall with stupa at one end. Made for large gatherings of devotees. Made in rock-cut due to permanency of structure. Chaityas were influenced by ascetic lifestyle of Vedic period and tendency of hermits to retire in solitude. **Basic Characteristics** Accommodates Stupa. Apsidal Plan. No division between nave and chaitya i.e space for congregational service not clearly defined. Vaulted hall. Colonnades. Side aisles.

Why a Chaitya Hall? : The stupa evolved from being a funerary mound carrying object of worship, had a sacral value. Building needed to accommodate copies of stupa and provide shelter. A structural house for religious activities. Birth of temples with idol worship. Building had almost circular plan and a domed roof.

Chaityas (caves) The next significant development was the rock-cut architecture. Its earliest and most imp. Marvel was the Lomas Rishi Cave, at Barabar hills, Bihar. Derived from timber huts and

wooden arch. of Vedic times. They were rectangular halls, with finely polished interior walls. There were a number of well proportioned pillars, generally around 35, and a semi-circular roof. Opposite one entrance stood a stupa. All the pillars have capitals on them, with carvings of a kneeling elephant mounted on bell-shaped bases.

Architecturally, chaityas show similarities to Roman Design concepts of columns and arch. The monks built many structures which were carved out of a single massive rock, done with hammer and chisel, bare hands. The chaityas were almost 40 meters long, 15 meters wide and 15 meters high. Chaityas (caves)

DESIGN: The pillars had three parts: prop, which is the base which is buried into the ground; the shaft, the main body of the pillar which is polished and chiseled; and capital, the head of the pillar where figures of animals are carved. The Stupa at the end of the Chaitya Hall has an umbrella at the top. This Umbrella suggests association with Buddhism. There is a wooden facade, made out of teak wood. The facade makes it look as if the entire structure was resting on the back of an elephant with ivory tusks and metal ornaments.

Architectural Features: Wooden construction inspired from Vedic period imitated in natural rock. Supplemented with wooden surfaces for e.g.. Screens etc. (half timber construction) Shows similarities to Roman concept of column and arch, but no evidence of any relation.

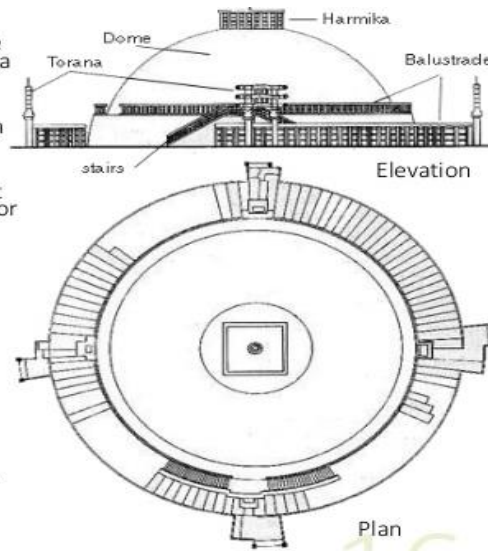
Architectural Features Rectangular halls with finely polished interior walls. Well proportioned pillars with capitals(around 35). Semi circular roof. Pillar had three parts: prop, base buried in ground and shaft. Stupa at the end. Extensive use of motifs, decorative and

- Sanchi Stupa is located 40 km north east of Bhopal, and 10 km from Besnagar and Vidisha in the central part of the state of Madhya Pradesh.
- Sanchi Stupa was built by Ashoka (273-236 B.C.)
- Sanchi Stupa is located on the top of the Sanchi hill, which rises about 100M high above the plain.
- The 'Great Stupa' at Sanchi is the oldest stone structure in India



symbolic.

- The spherical dome symbolized the infinite space of the sky. The dome is called as anda or egg.
- The dome is a solid brick work is 36.60M in dia, and 16.46M high.
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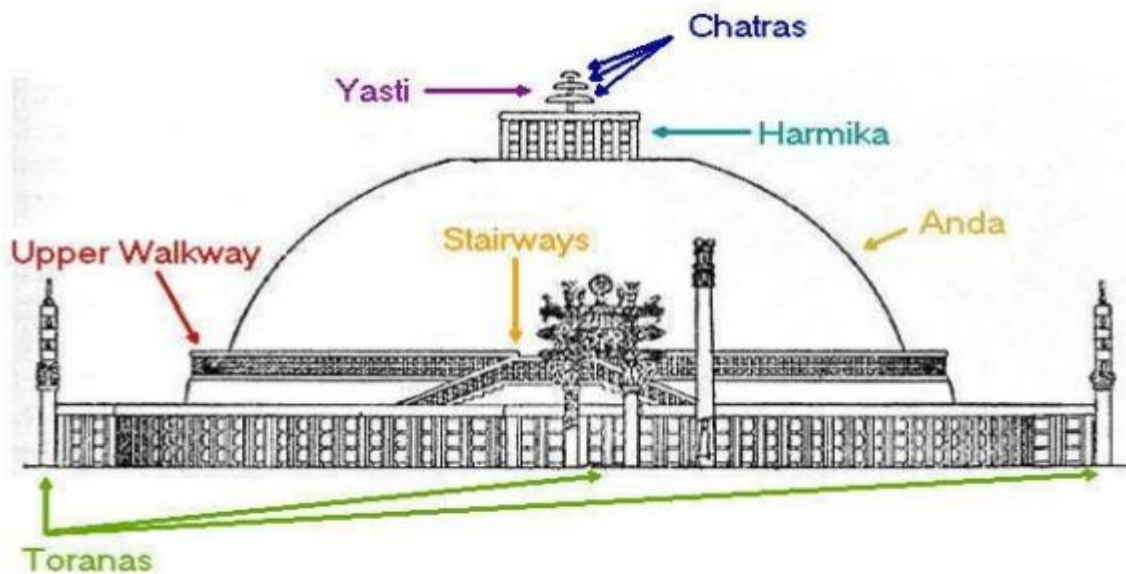


PRESENTATION BY: AR, ROOPA CHIKKALGI

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Chaitya Arch : Chaityas normally had a great-horseshoe archway with a wall or screen below. There was sun window in center of the archway for light.
Evolution of Chaitya Hall

VIHARAS A monastery, arrangement of cells for accomodation of monks Dwellings were simply wooden construction/thatched bamboo huts Near settlements on trade routes After first century AD, Viharas came in as educational institutes



10

Basic Characteristics Quadrangular court for gathering Surrounded by small cells Front wall incorporated a shrine for image of Buddha Cells had rock cut platforms for beds Viharas were not alike in design Doorways were on sides of the walls of main hall. Construction and Materials Rock-cut architecture basically used wooden construction down to joinery details Hardly structural In brick, corbelled arches are used, and very large bricks to for large span motifs used floral patterns, animals(used throughout the kingdom)

Vihaaras (MONASTRIES) They were the residential places of the Buddhist priest(monks). The main hall was entered through a doorway, leading to an assembly hall, dining chambers and meditation cells. The walls depict figures of the Buddha. The columns were of 60 meters height and well-chiselled. Typical Plan of a Vihaara

WHY WESTERN GHATS •Uniformity of texture in hills. Horizontally stratified. Ends in perpendicular cliffs. BUILDING STRATEGY Cliff was made perpendicular Entry was made A small excavated for architect monk Excavation from top to bottom .Subsequently other cells were build. Ajanta Cave No. 10 100ft by 40ft by 33ft Same roof ribs Two tiered stupa with circular base and elongated dome. Bhaja(150 b.c) Most primitive hall. 55ft by 26ft, side aisles 3.5ft wide and high stilted vault 29ft high with closed rank wood ribs. Facades have numerous mortice holes for fixing elaborate wooden frontages Simple stupa with cylindrical base and a wooden harmikaa and chhatri. One central doorway+2 side ones. Projection balcony supported on four pillars. H shaped framework held by projection beams.

Ajanta No.9 Entire hall rock carved. Rectangular plan, ceilings of side aisles flat with perpendicular pillars. Doorway in centre and a window on either side, topped by elegant cornice. Lattice windows around archways. No wooden ribs bracing the vaults.

Mahayana Phase- 400 A.D -600 A.D: Basic Characteristics -Main seats of this school were Ajanta, Ellora, Auarnghabad. There was a change in iconography since both schools perceived different imagery of Buddha. Elements of Chaitya Halls remained same. Viharas became finer and more elaborate. Ajanta Cave No. 26 •68ft by 36ft by 31 ft. Last Ajanta Hall. More ornamented, right from pillars, elaborate triforium, and recessed panels. Portico had 3 doorways with Chaitya window above. Decline of style by excessive workmanship.

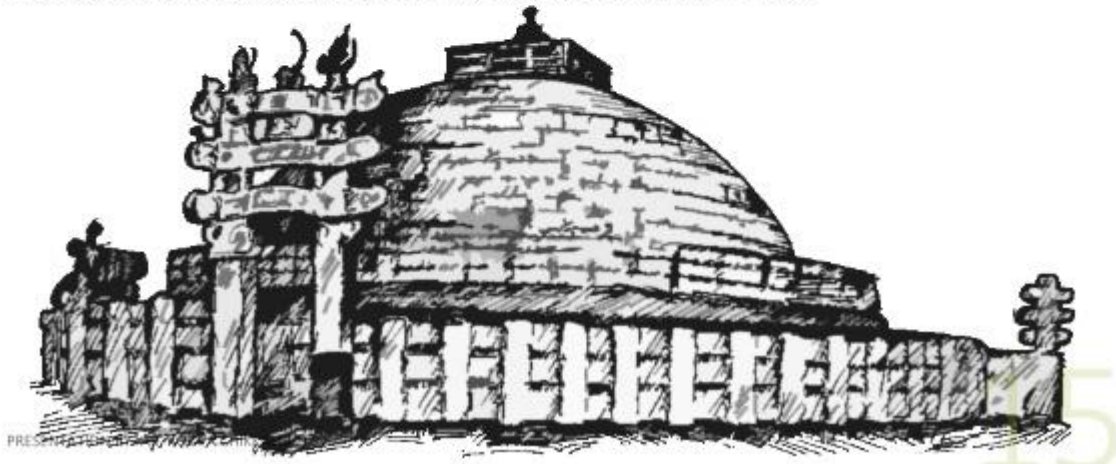
Ellora Caves: Caves excavated out of low ridge hills, Buddhists occupied best site. Dhedwada group(caves 1 to 5) and 6 to 12 were two main groups Mahanwada cave(no.5) had both monastery and hall, it had two parallel platforms for seating of priests Later group had chaitya hall no. 10 Cave no. 2 has 48 pillars colonnade attached with side gallery. Cushion pillar comes in focus now. Caves 66 to 12 -Largest monasteries. No. 12 is known as tin thaal(three stories), can lodge 40 priests (108ft by 60 ft). Does not have any ornamentation. Access is through pillared verandah. All three floors are different.

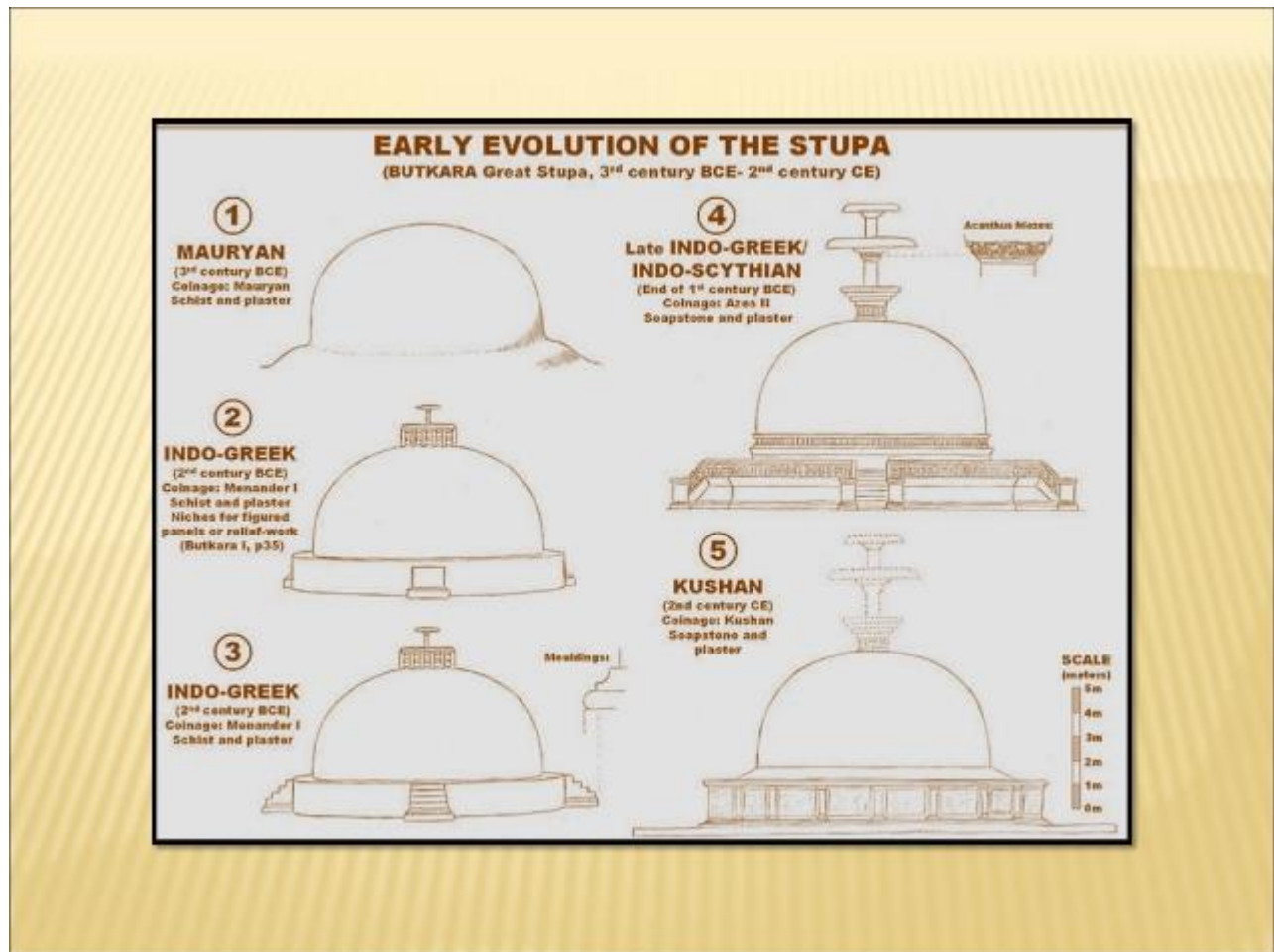
Inspiration and influence. Inspired from Vedic wooden construction techniques, prevalent to Buddhism coming in vogue. Inspired Indian temples, for eg. Early Brahmanical temples in South India (for eg. Chaitya window motif), temples at Sanchi. Even Jain caves got influenced from Buddhism, for eg. Udaigiri. Spread to North East. Temples Since the same guild of artists worked for all the religions, there is hardly any difference in the treatment of the Buddhist, Brahmanical and Jain temples in a particular region at a given period. The oldest existing temple is temple at

Sanchi, which is also the earliest known example of Gupta temple style. The only décor was at the entrance present with bands of scrolls and pillars. This temple lays the logical foundation of temple architecture in North India, which developed in due course a shikhara over its basic form. The Mahabodhi Temple is a Buddhist temple in Bodh Gaya, marking the location where the Buddha, is said to have attained enlightenment. Bodh Gaya is located about 96km from Patna, Bihar. Next to the temple, on its western side, is the holy Bodhi tree and the monastery there the Bodhimanda Vihara. The tallest tower is 55 metres (180 ft) tall. Holy Bodhi tree Mahabodhi Temple

Sanchi Stupa

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- The 'Great Stupa' at Sanchi is the oldest stone structure in India



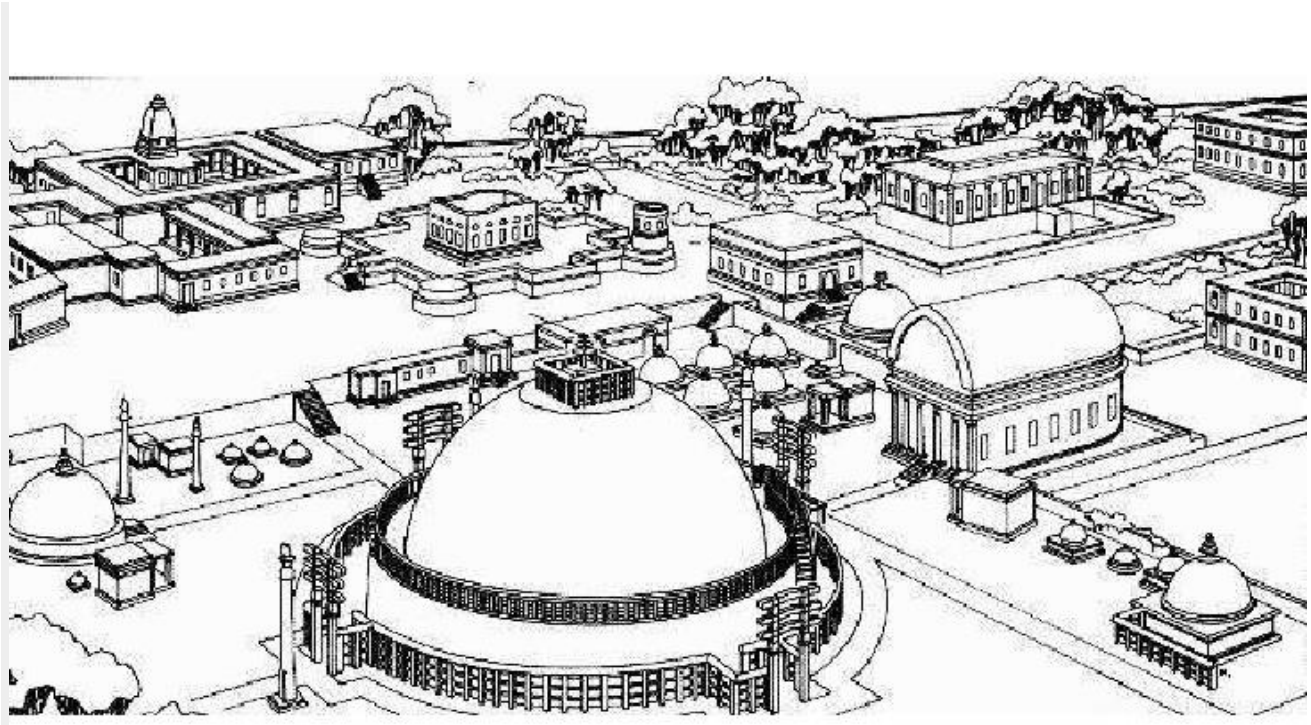


The 'Great Stupa' at Sanchi is the oldest stone structure in India. Sanchi Stupas is located on the top of the Sanchi hill, which raise about 100M high above the plain. Sanchi Stupa was built by Ashoka (273-236 B.C.) Sanchi Stupa is located 40 km north east of Bhopal, and 10 km from Besnagar and Vidisha in the central part of the state of Madhya Pradesh.

LOCATION: Stupas were erected over the sacred relics of the monks and worshiped with great reverence. They are therefore known as Relic-Shrines. The stupa more then a funeral mound was planned like a Vedic village.

Great Stupa, Sanchi (Madhya Pradesh)- Dharmaksha stupa

SITE PLANNING



There are four gateways known as Toranas at the cardinal points of the campus. Toranas built by ivory or metal worker. Plan and elevation of Sanchi Stupa. The terrace (midi) 4.87M high from the ground was added thus creating a separate and upper ambulatory passage 1.8M wide. At the base of the dome is a high circular terrace probably meant for parikrama or circumambulation and an encircling balustrade. ☞ a railing enclosed called Vedica which is about 3.35 M high leaving an ambulatory passage or pradikshina path with the gateways. ☞ a large hemispherical dome which is flat at the top, and crowned by a triple umbrella or Chattra on a pedestal surrounded by a square railing or Harmika. ☞ The dome is a solid brick work is 36.60M in dia, and 16.46M high. The spherical dome symbolized the infinite space of the sky, abode of God. The dome is called as anda or egg or.

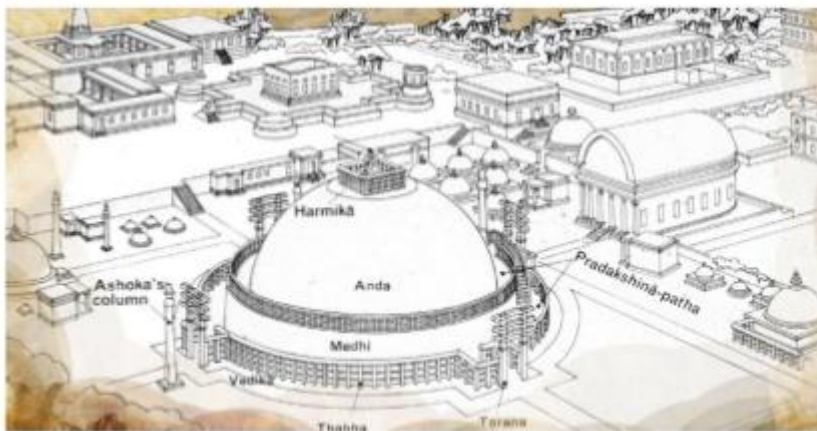
The top panels is crowned with Tri-Ratna symbol of the Buddhist trinity, Buddha, the law (dharma) and monastic community (sangha) with wheels of justice in the centre which rest on elephant ☞ The panels have volutes at their terminal ends surmounting with animal sculpture. ☞ These columns support three separate horizontal panels between each of which is row of ornamental balusters. ☞ Torona consist of 2 square upright columns with capitals or lion of elephant heads denoting strength. ☞ The total height of this erection is about 10. 36M with a width of 3M. Ashok chakra The Gateway 'Torona' ☞haped pedestal.

FEATURES Harmika or triple umbrella Upper Ambulatory 1.8m wide 3.35m high Stone vedica Ushnisha Urdhava patas 45cm dia 60-90 cm/c Suchi 60 cm dia Lower Ambulatory 3.35 m. high Steps leading to upper ambulatory. Front View of sanchi stupa Column of Torna Front View of Torna Elephants and Yakshi of the Eastern Torana, Great Stupa, Sanchi, mid-1st century BC - AD 1st century View of Torna from upper ambulatory. these niches were mostly provided to erect Buddha's statue. Delicately carved with beautiful floral and geo-metrical patterns. Site Map ☞ a line of sculptured ornaments. run below it ☞ The facing of stone basement has 8 niches, ☞ The Stupa

consist of large tower built in stone masonry at the basement for a height of 13M and in brick masonry above for a height 34M. built by Ashoka and later rebuilt in the Gupta period. π situated Benares. 6.5KM to the north of a commemorative Stupa, built in 7th century.

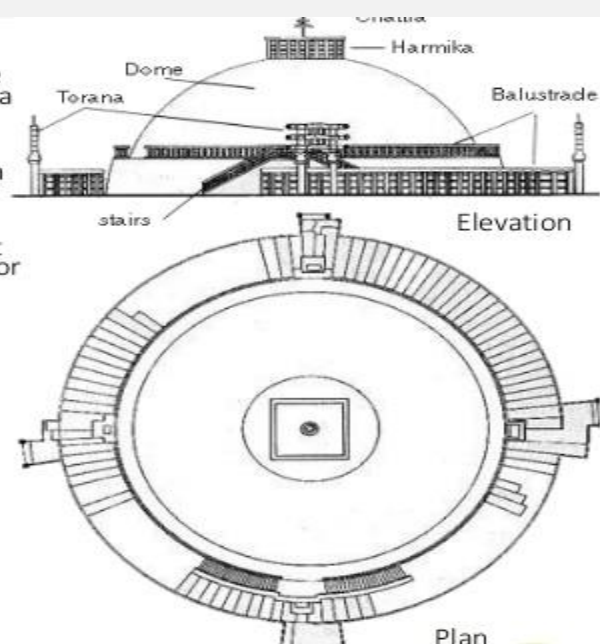
Buddhist architecture in India

- Viharas initially were only temporary shelters used by wandering monks during the rainy season, but later were developed to accommodate the growing and increasingly formalized Buddhist monasticism(monkhood). An existing example is at Nalanda (Bihar).
- The initial function of a stupa was the veneration and safe-guarding of the relics of the Buddha. The earliest surviving example of a stupa is in Sanchi (Madhya Pradesh).

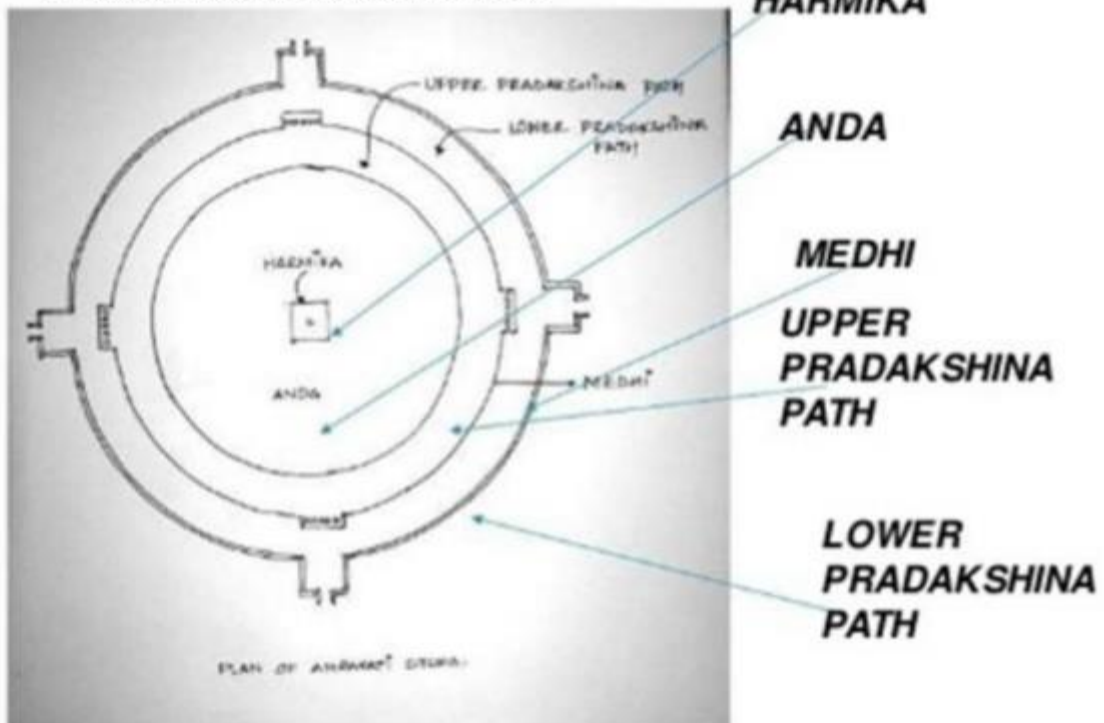


- In accordance with changes in religious practice, stupas were gradually incorporated into chaitya-grihas (prayer halls).
- These reached their high point in the 1st century BC, exemplified by the cave complexes of Ajanta and Ellora (Maharashtra).
- The Pagoda is an evolution of the Indian stupa.

- The spherical dome symbolized the infinite space of the sky. The dome is called as anda or egg.
- The dome is a solid brick work is 36.60M in dia, and 16.46M high.
- A large hemispherical dome which is flat at the top, and crowned by a triple umbrella or Chattra on a pedestal surrounded by a square railing or Harmika.
- A railing enclosed called Vedika which is about 3.35 M high leaving an ambulatory passage or pradikshina path with the gateways.
- The upper ambulatory passage (midhi) 4.87M high from the ground and 1.8M wide.
- There are four gateways known as Toranas at the cardinal points of the campus. Toranas built by ivory or metal worker.



PLANNING OF SANCHI STUPA



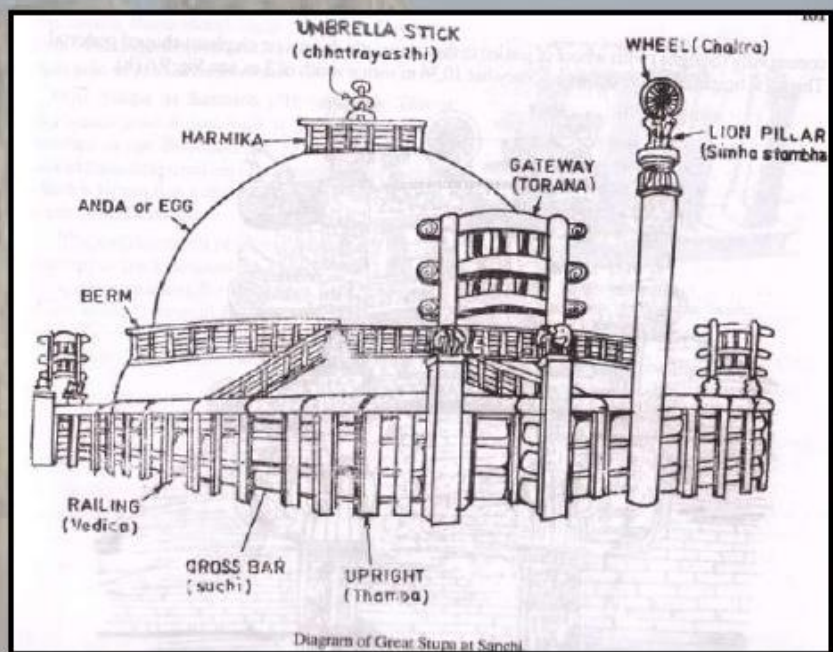
PRESENTATION BY: AR. ROOPA CHIKKALGI

17

gateways known as 'TORANAS' at the cardinal points to the compass and are slightly staggered from the railing enclosing stupa.

- The ambulatory or pradakshina path is fenced by railing 3.35m high all around the stupa.

- Outside the railing there once stood the famous ashoka pillar, the fragments of which are noticed now to the right of southern torana



Buddhist Architecture- Stupa

- STUPA IS MOUND OF THE EARTH ENCLOSING A RELIC CAN BE COMPARED WITH THE MASSIVE FORM OF THE GREAT PYRAMIDS OF EGYPT
- THEY ALSO CALLED AS THUPPA IN PALI, DAGABA IN SIMBALI, TOPE IN ENGLISH & DHATUGRABH IN SANSKRIT. (DHATUGRABH=RELICS PRESERVED IN VESSEL)

CLASSIFIED INTO THREE TYPES.

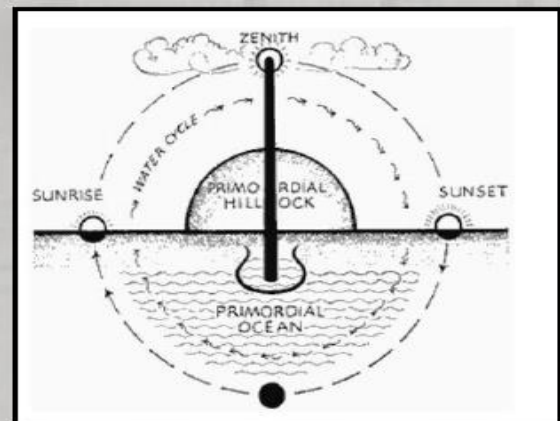
- *SARIKA STUPA*-raised over body relics.
- *PARIBHOJIKA STUPA* - erected over the articles, like the bowl, the sanghati
- *UDDESHIKA STUPA*- Stupas built as commemorative monuments.



PRESENTATION BY- AR. RODPA CHIKKALGI

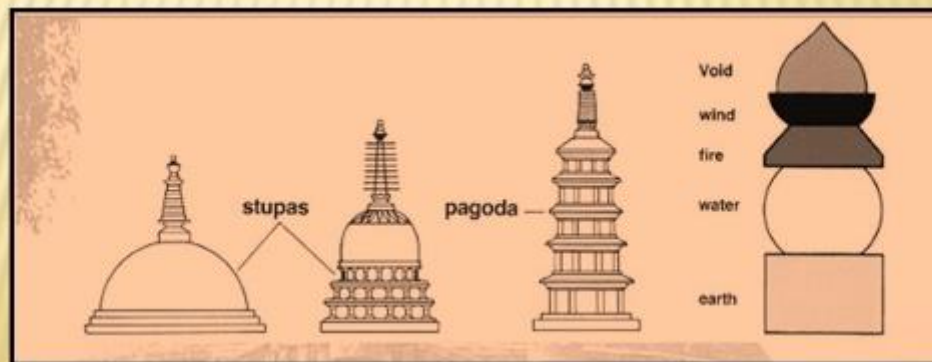
STUPA

- A stupa is a mound-like structure containing buddhist relics, typically the remains of Buddha, used by Buddhists as a place of worship.
- These stupas are the circular tumuli built of earth, covered with stone or brick, the plan, elevation, section and the total form of which were all derived from circle.



Stupa became a cosmic symbol in response to a major human condition: death. With the enlightenment of the Buddha, stupa became a particularly buddhist symbol.

- After many years of teaching Buddha died at the age of 80 .his body was cremated and ashes were divided in to eight parts the ashes were then deposited in several special mound -shaped monuments called Stupas
- Umbrella were often mounted at the top of stupa as a sign of honor and respect
- Also known as thupa ,thope, pagoda ,dagoba



MANDALA AND HINDU TEMPLE ARCHITECTURE

Although there have been various arguments by authors of Indian temple architecture like Stella Kramrisch and Michael W. Meister about the applicability of the Vastu Purusha Mandala as a governing device for temple architecture, it is safe to say that for formulating the layout of the temple, the Vastu Purusha Mandala has been an imperative tool. Though the 8 x 8 grid or the Manduka Vastu Mandala has been used in various temples of Indian architecture, it is to be noted that regional differences have played a major influence on the workability of the mandala design throughout India. Customarily, mandalas were spaces for the symbolic consciousness of universal theories which help in the awakening of the individual psyche. The mandalas can be thought of as diagrams that function as a cue to reach a contemplational state which is the primary aim of the tradition. The form of the temples that are based on the regulating lines of the mandala were meant to create spaces that bring about a “physical and spatial” communion between God and man. ¹

The Vastu Purusha Mandala contains a minimum of nine sections signifying the directions north, south, east, west, northeast, northwest, southeast, southwest and the centre represented as square grids. In the Vastu Purusha Mandala, the Purusha’s head is located in the northeast direction and this is considered utmost sacred. In the southwest are his feet and his knees and elbows in the northwest and southeast. Kept open and clear in the centre part of the diagram are his main organs and his torso. Starting from a single undivided square of 1 x 1 there are grid patterns ranging up to 32 x 32 thus making it 1024 sections. Architecturally, the adaptation of the Vastu Purusha Mandala has been seen in the design of houses, palaces, temples and even cities. Integrating it into the design brings a certain amount of order in the design. Here, the squares are assumed as cubes of architectural spaces.

The five elements of earth, water, fire, air and space correspond with specific sections of the Vastu Purusha Mandala. The south-west direction is associated with the element of earth(Bhumi); south-east with the elements of fire (Agni); north-east with the element of water (Jala); north-west with the element of air (Vayu) and the centre space with the element of space (Akasha). ²



Indian temples are microcosm of Cosmos, acting as a connecting bridge between physical world and divine world through their proportional arrangement. Mandapa, which were entrance porches in the beginning became an integral part of the temple plan in providing additional functions and in form providing an ex- pression of cosmos especially in elevation. Ashapuri temples analyzed here, corresponds to Nagara temple proportions varying in proportions they belong to two different styles of nagara Architec- ture. From the study of Adam Hardy it is said that they possessed temples of different styles in Nagara other than these two. The site of Ashapuri seems to be a place for the development of the Nagara school of archigecture.

ANGKOR WAT

Angkor Wat was built by the king of the Khmer Empire first as a Hindu, then a Buddhist temple complex. It is known as one of the largest monuments ever built. Hence, this great Buddhist temple provides clear, physical evidence that Hinduism and Buddhism were brought to the region by the Indians, and adopted by early Southeast Asian empires like the Khmer Empire.

The pagodas of Angkor Wat are also a physical depiction of the Hindu concept of Mandala. In addition, the gates of the temple also resemble the gates of the symbol of Mandala. This concept is Hindu in nature and is believed to have been brought to pre-modern Southeast Asia from India. It is probable that these ideas were then "borrowed" by the Khmer Empire, and depicted through its great temple.



Angkor Wat also has a Gopura. A Gopura is a monumental tower often built at the entrance of temples - a distinctive feature of South Indian architecture. The presence of this structure at Angkor Wat indicates that there was Indian influence in the architecture of the Khmer Empire.

In addition, the temple has many bas-reliefs depicting stories from the Indian epics, the Mahabharata and Ramayana. This shows that these stories were clearly influential in early Southeast Asia as they repeatedly adorn the walls of Angkor Wat, which was seen as a sacred and important place. This demonstrates just how strong Indian influence was in the Khmer Empire.

Furthermore, even though hundreds of years have passed, Angkor Wat is still a national symbol and major source of pride of Cambodia today. The fact that Indianisation of the Khmer Empire from the 7th to 14th century has continued to shape the heritage and identity of modern Cambodia indicates the lasting impact Indianisation had on the region.

Mandala in Meenakshi temple Madurai with biggest GOPURAMs in the world Temple Structure

The entire structure, when viewed from above, represents a mandala. A mandala is a structure built according to the laws of symmetry and loci. There are various shrines built within the temple complex.

The temple occupies a huge area in the heart of Madurai as it spreads over 14 acres. The temple is enclosed with huge walls, which were built in response to the invasions. Apart from the two main shrines, which are dedicated to Sundareswarar and Meenakshi, the temple has shrines dedicated to various other deities like Ganesha and Murugan. The temple also houses goddesses Lakshmi, Rukmini, and Saraswati.

The temple also has a consecrated pond named ‘Porthamarai Kulam.’ The term ‘Potramarai Kulam’ is a literal translation of ‘pond with a golden lotus.’ The structure of a golden lotus is placed at the center of the pond. It is said that Lord Shiva blessed this pond and declared that no marine life would grow in it. In the Tamil folklore, the pond is believed to be an evaluator for reviewing the worth of any new literature.



Image Credit:

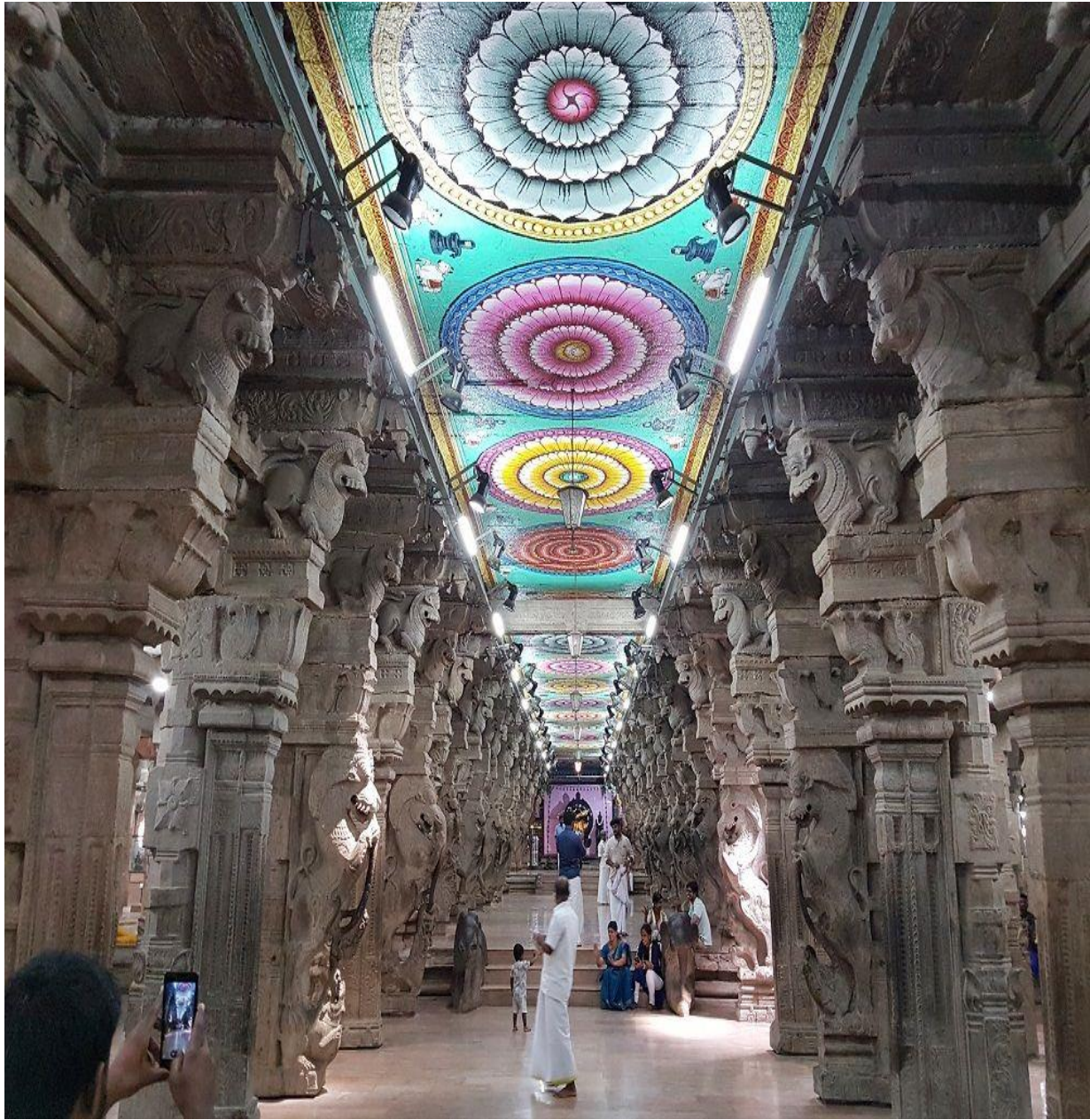
The temple has four main towering gateways (gopurams) that look identical to each other. Apart from the four 'gopurams,' the temple also houses many other 'gopurams' that serve as gateways to a number of shrines. The temple has a total of 14 towering gateways. Each one of them is a multi-storey structure and displays thousands of mythological stories and several other sculptures. The major 'gopurams' of the temple are listed below:

- **Kadaka Gopuram** – This towering gateway leads to the main shrine that houses Goddess Meenakshi. The gateway was rebuilt by Tumpichi Nayakkar during the mid-16th century. The 'gopuram' has five storeys.
- **Sundareswarar Shrine Gopuram** – This is the oldest 'gopuram' of the temple and was built by Kulasekara Pandya. The 'gopuram' serves as a gateway to the Sundareswarar (Lord Shiva) shrine.
- **Chitra Gopuram** – Built by Maravarman Sundara Pandyan II, the gopuram depicts the religious and secular essence of Hinduism.
- **Nadukkattu Gopuram** – Also called as the 'Idaikattu Gopuram,' this gateway leads to the Ganesha shrine. The gateway is placed right in between the two main shrines.
- **Mottai Gopuram** – This 'gopuram' has fewer stucco images when compared to the other gateways. Interestingly, 'Mottai gopuram' had no roof for nearly three centuries.
- **Nayaka Gopuram** – This 'gopuram' was built by Visvappa Nayakkar around 1530. The 'gopuram' is astonishingly similar to another gateway called 'Palahai Gopuram.'

The temple also has numerous pillared halls called 'Mandapams.' These halls were built by various kings and emperors and they serve as resting places for pilgrims and devotees. Some of the most important 'mandapams' are given below:

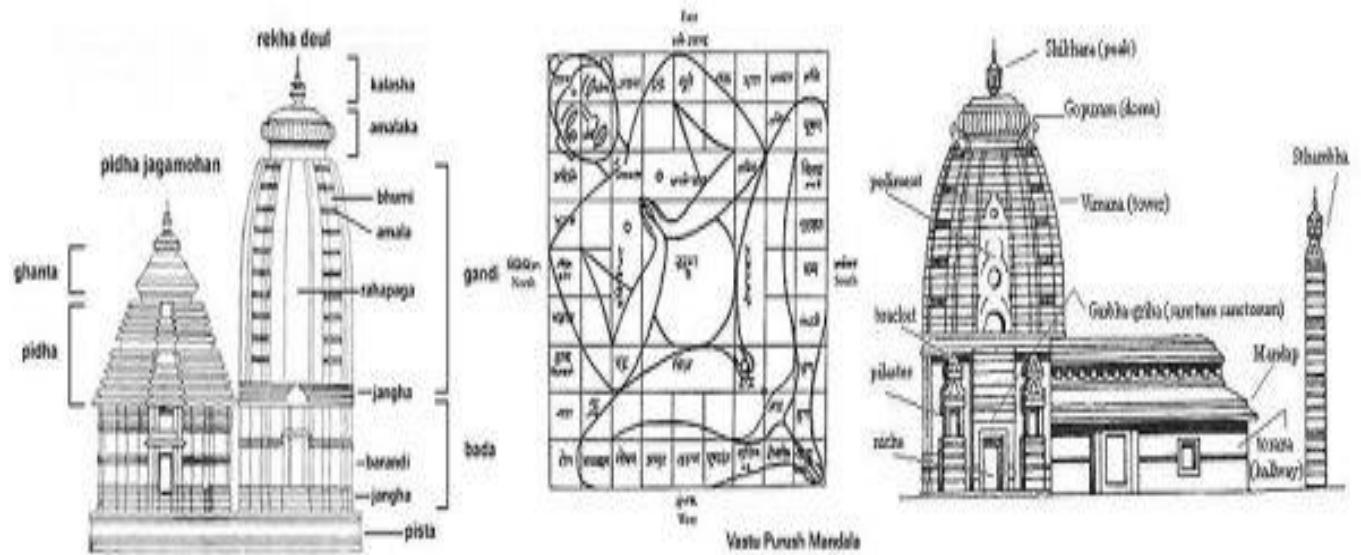
- **Ayirakkal Mandapam** – It literally translates to 'hall with thousand pillars.' The hall, which was built by Ariyanatha Mudaliar, is a true spectacle as it is supported by 985 pillars. Each and every pillar is sculpted magnificently and has images of Yali, a mythological creature.
- **Kilikoonda Mandapam** – This 'mandapam' was originally built to house hundreds of parrots. The parrots that were kept there in cages were trained to say 'Meenakshi'. The hall, which is next to the Meenakshi shrine, has sculptures of characters from Mahabharata.
- **Ashta Shakthi Mandapam** – This hall houses the sculptures of eight goddesses. Built by two queens, the hall is placed in between the main 'gopuram' and the gateway that leads to the Meenakshi shrine.
- **Nayaka Mandapam** – 'Nayaka Mandapam' was built by Chinnappa Nayakkar. The hall is supported by 100 pillars and houses a Nataraja statue.





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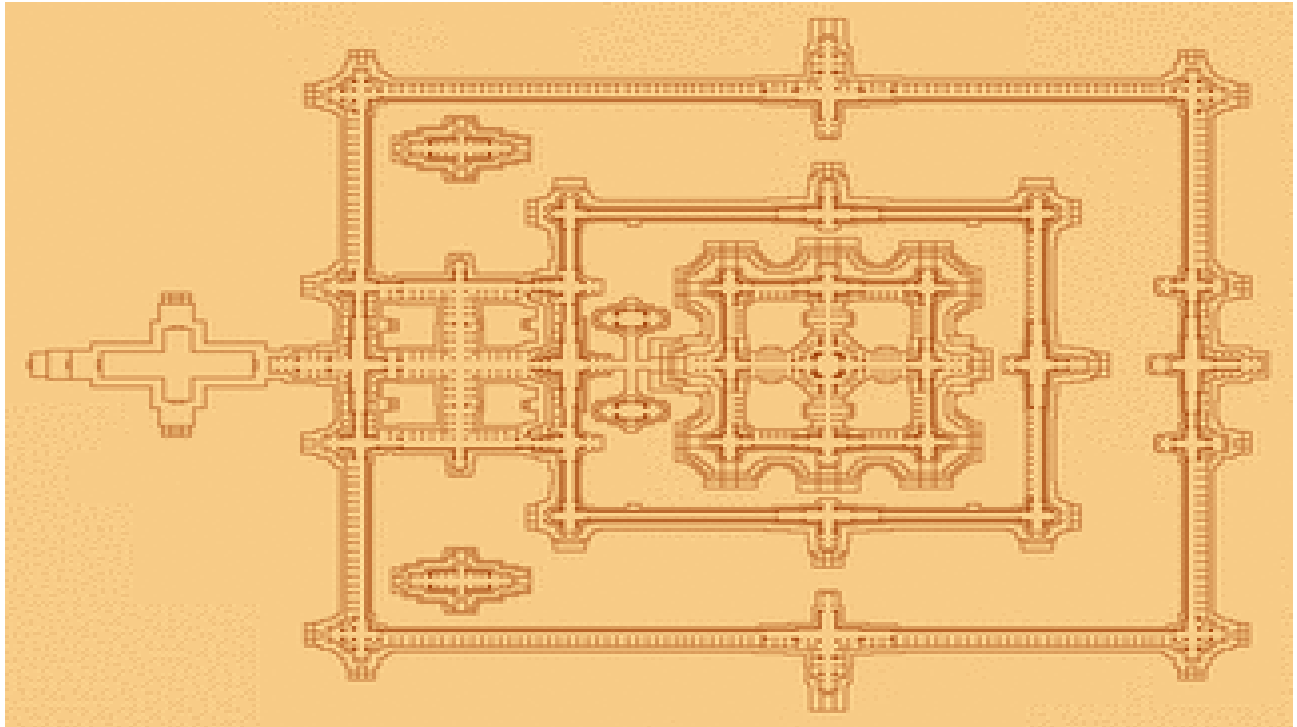
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Note how the architectural layout of the temple greatly resembles the symbol of Mandala. For example, you can spot the building's centre point, as well as the four gates on the outermost wall.



Rough Layout of Angkor Wat



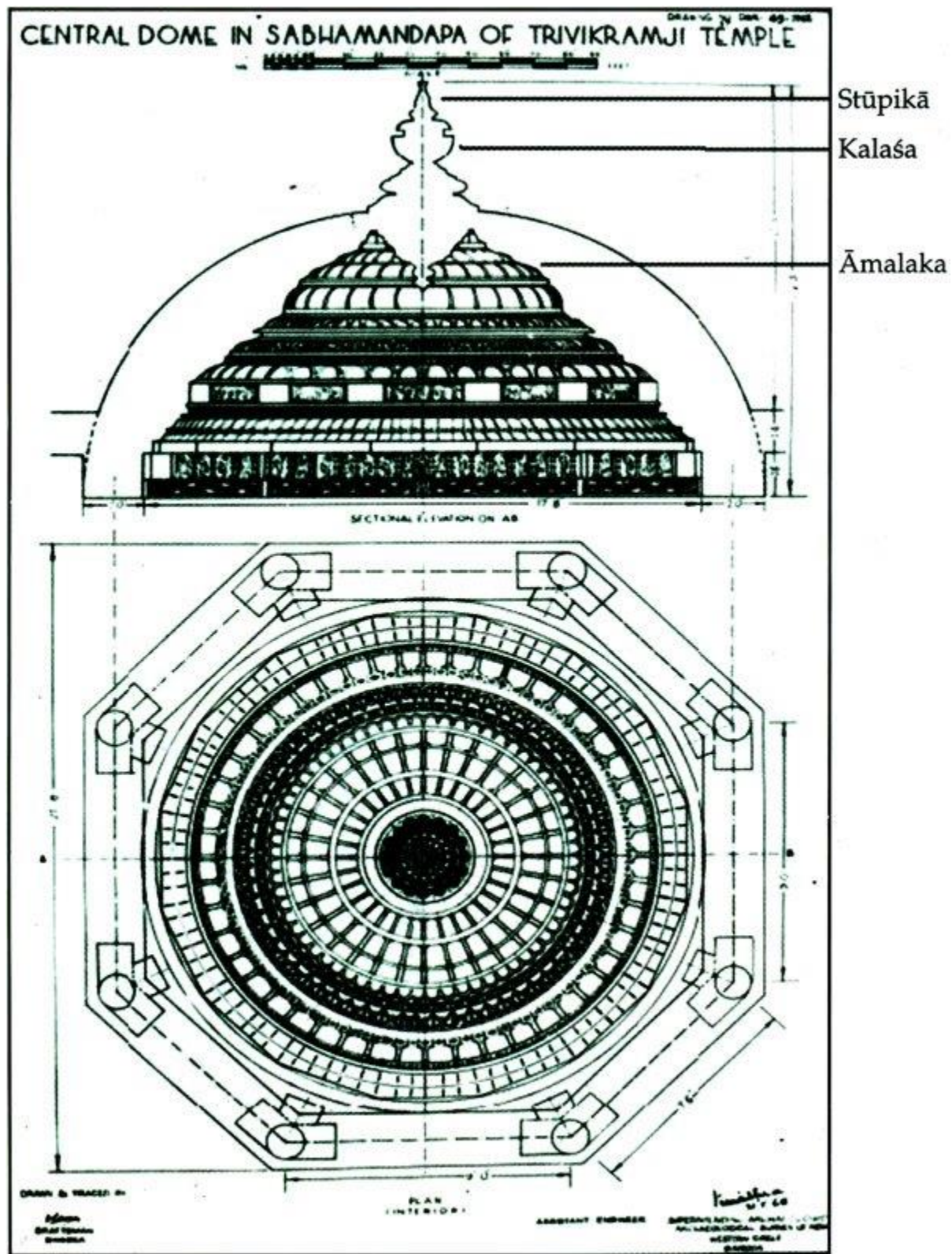


The Third Tier GOPURAM

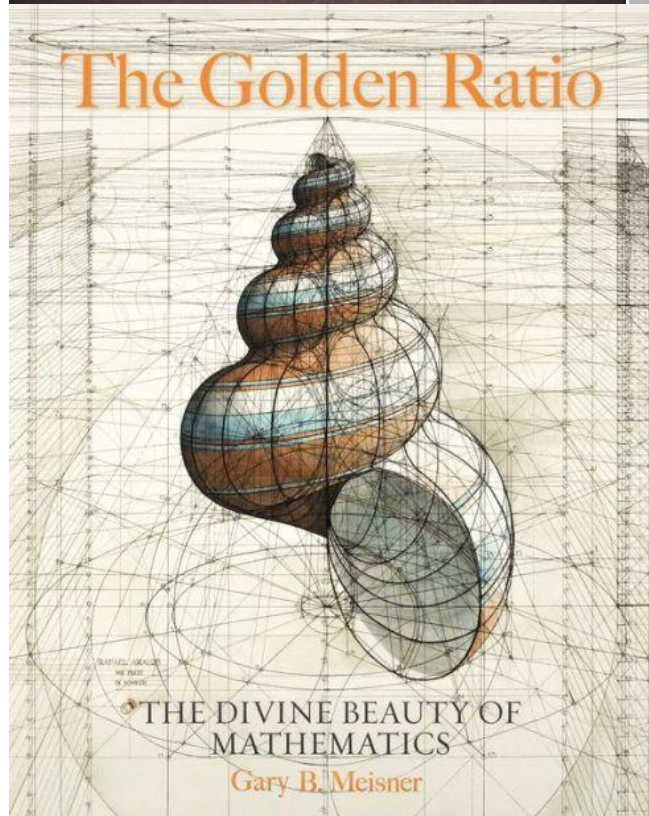
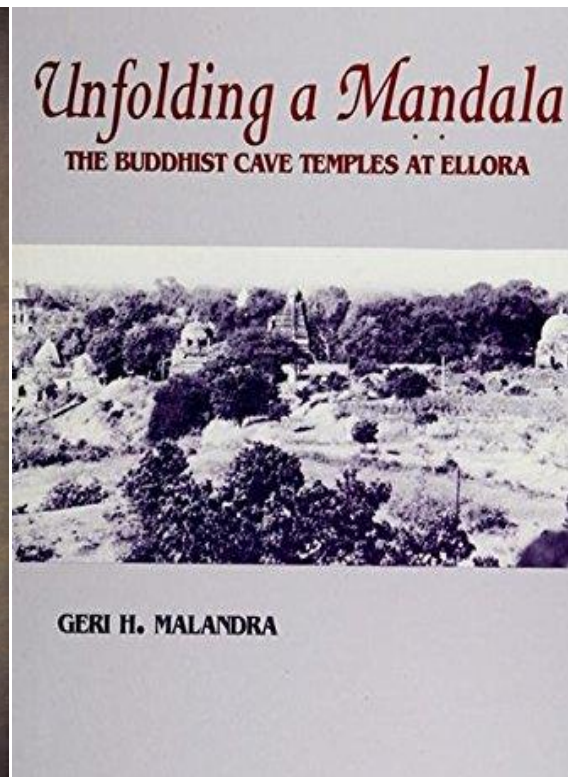
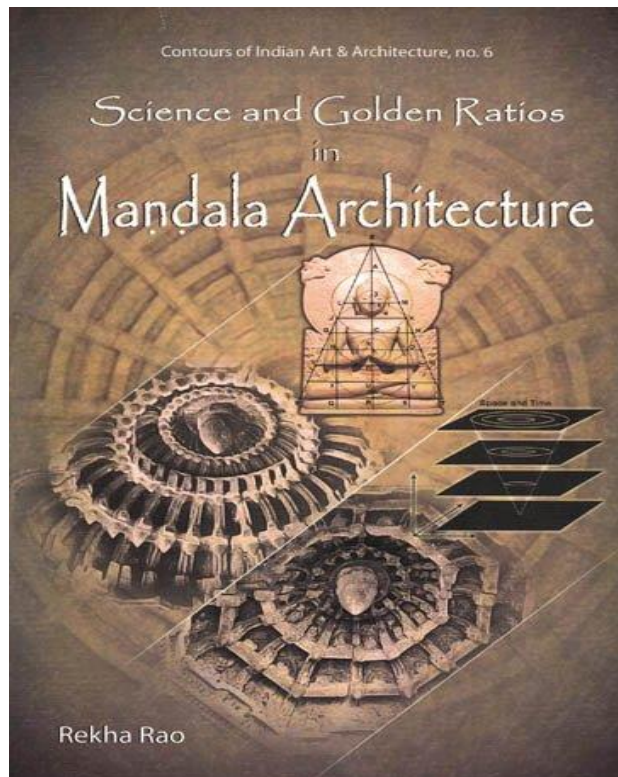


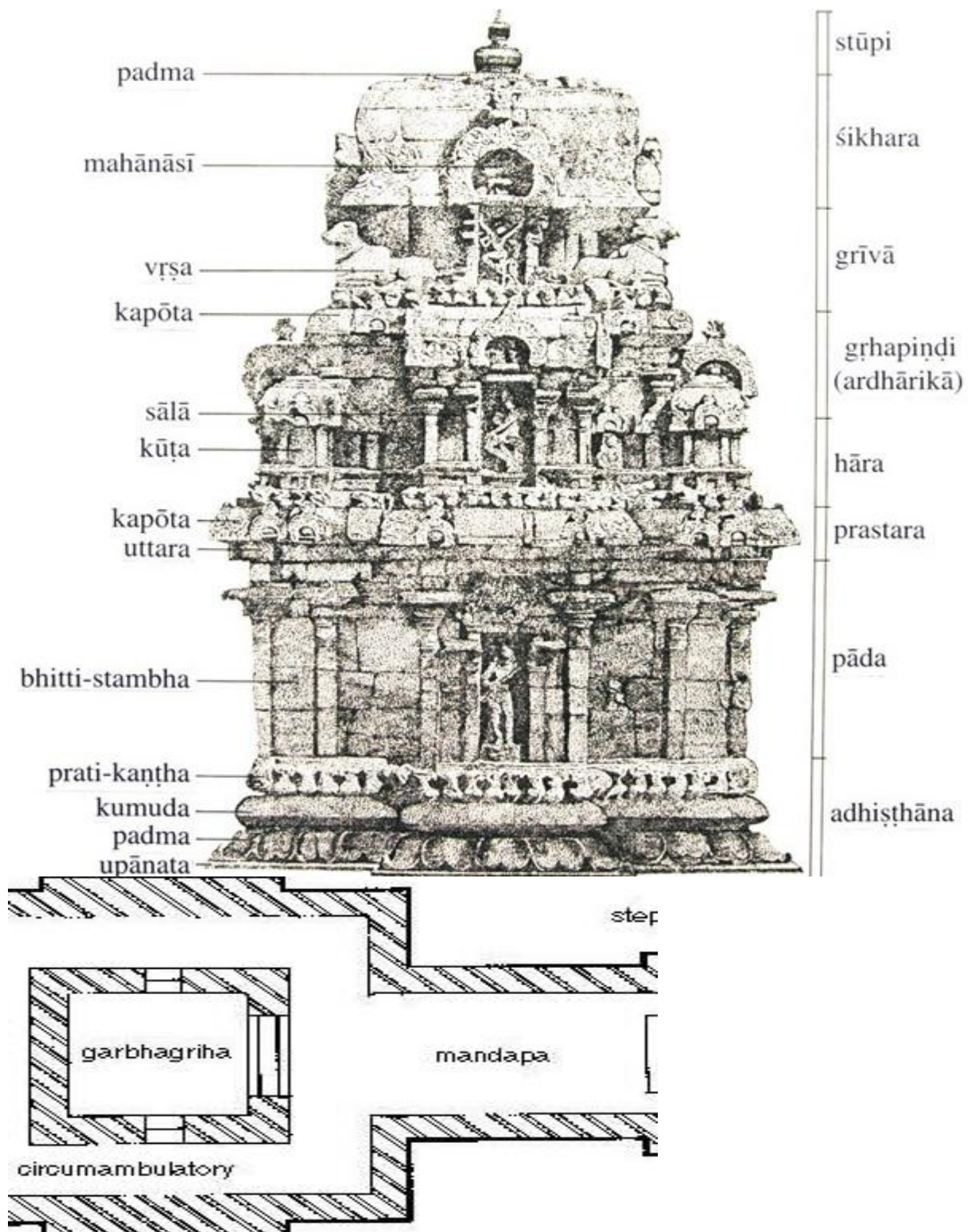


វិថីក្រសាល ប្រើប្រាស់ អង្គរ២០១១



Pl. 2: Figure of the plan and cross-section of the śikhara, with stūpikā.





“The Vastu Purusha Mandala represents the manifest form of the Cosmic Being; upon which the temple is built and in whom the temple rests. The temple is situated in Him, comes from Him, and is a manifestation of Him. The Vastu Purusha Mandala is both the body of the Cosmic Being

and a bodily device by which those who have the requisite knowledge attain the best results in temple building.” – Stella Kramrisch ; The Hindu Temple, Vol. I

Vastu Purush Mandala has been in existence for thousands of years, will continue till eternity. It is the fundamental principle which continues to create and run the whole universe - both at the macro and the micro level. If we can decode its secret and follow its eternal principles for construction, we can ensure a life full of health, wealth, peace and prosperity.

The Vastu Purush Mandala is a cosmic geometrical wonder used to design temples amongst other structures. When we observe the energy fields that develop at different stages of a building – starting from the stage of a vacant plot - to the digging of land - to the laying of the foundation - to the completion of the building - and finally to the point when it is inhabited by the people – we unravel the secrets of the Vastu Purusha Mandala.

Image of the Universe: The Vastu Mandala is the omnipresent, omnipotent soul of every building. It is based on the principle that Man and Universe are analogous in their structure and spirit. Vastu Purush Mandala is thus a Yantra or an image of the Universe. Hindus believe that the body is the image of the entire Universe (See figure below). Vastu Purusha Mandala is a combination of 45 Devas and Asuras present in a geometrical figure. The Devas represent our consciousness and the Asuras our ignorance and fear. The war between consciousness and ignorance goes on each moment within all of us. It is not just a Puranic story, it's the reality we live in each moment.

DECODING THE DEVTAS & ASURAS The 45 Energy Fields PADAVINAYASA
ModularGrid After Shilanyas and construction of foundation walls, this is the first energy field to develop in the plot.

BRAHMA DEVTAS vs ASURAS THE ETERNAL WAR- Energy Fields Next to Brahma
ARYAMA The Power of Connections VIVASWAN The Power of Revolution or Change
MITRA The Power of Inspiration & Action BHUDHAR The Power of Manifestation DEVA
VITHI

The 8 Energy Fields in the Diagonal Directions
NORTH EAST Apaha Apahavatsa SOUTH WEST Indra Indrajaya SOUTH EAST Savita Savitur NORTH WEST Rudra Rajyakshma
MANUSHYA VITHI

1. **NORTH EAST APAHA** Generates the energies responsible for healing **APAHAVATSA**
Carries the healing powers to the occupants ww.anantvastu.com
2. **SOUTH EAST SAVITA** Energies that help to initiate any process or action **SAVITUR**
Energies that give capabilities to continue those actions and overcome all challenges
3. **SOUTH WEST INDRA** Energies that establish stability and enhance growth **INDRAJAYA**
The tools and the channels through which one can achieve growth

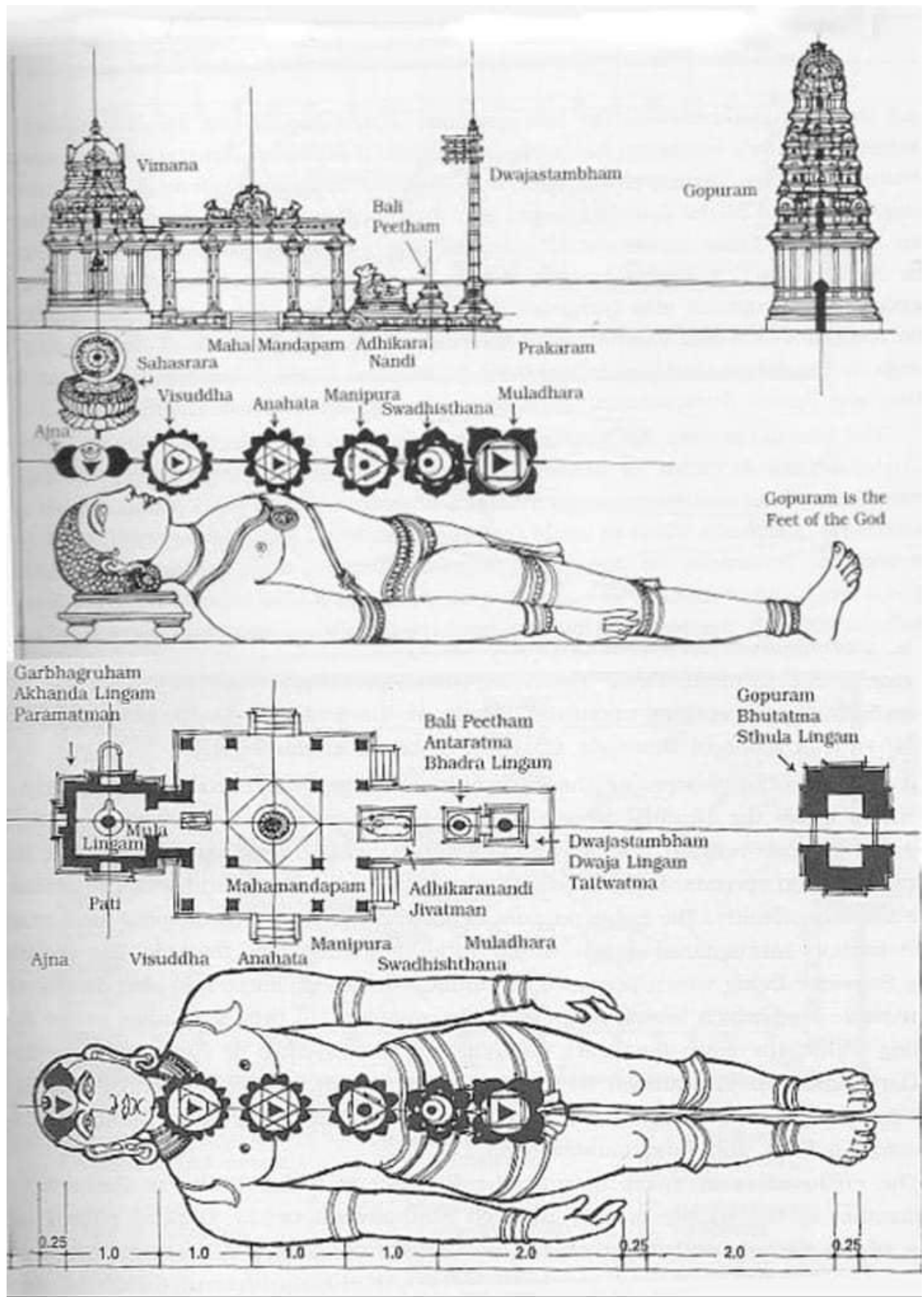
4. .NORTH WEST RUDRA Energies responsible for support and ensure flow of activities and life RAJYAKSHMA Energies which uphold the support and stabilise the mind . The 32 Energy Fields of the Outer Periphery PAISHACHA VITHI . These are also the 32 Possible Entrance Locations . The 32 Energy Fields of the Outer Periphery ADITI Mother of the Devtas, this energy field provides security and helps one connect with himself/herself) DITI Mother of the Asuras, this energy field gives the powers of a wider vision and to see the actual truth of life.SHIKHI Symbolic of a pointed flame, this field gives the power of ideas and the ability to project one's thoughts to the world PARJANYA The giver of rains, this field has the powers to bless the occupants with fertility and fulfilment of all their wishes
NORTH EAST
5. SOUTH EAST BHRISHA The power of friction needed to initiate any action , thinking or activity AAKASH The energy that provides the space for manifestation ANILA The energy of air or vayu, it helps to uplift the fire or push further the actions initiated PUSHAN The energy of nourishment, it blocks the path of enemies The 32 Energy Fields of the Outer Periphery.
6. SOUTH WEST BHRINGRAJ The energy which extracts nutrients from the food and removes the waste MRIGHA The energy that drives curiosity and imparts skills PITRA The energy of the ancestors which provides all means of safety and happiness required for existence DAUWARIK The safe keeper, represents lord Nandi-the trusted vehicle of lord Shiva. The energy of being genius and highly knowledgeable The 32 Energy Fields of the Outer Peripher
7. NORTH WEST SHOSHA The power of detoxification from negative emotions POPYAKSHMA The energy which gives addiction, diseases and the feeling of guilt ROGA The energy which provides support in the hour of need NAGA The energy which gives emotional enjoyments and cravings The 32 Energy Fields of the Outer Periphery
8. NORTH MUKHYA The chief architect or lord Vishwakarma, this energy field defines the main purpose of the building & also helps in their manifestation BHALLAT The energy field which grants colossal abundance, it magnifies the efforts and their results SOMA The energy field of Kubera - the lord of all wealth and money. It ensures a smooth flow of money and opportunities BHUJAG The the lord of hidden treasures, this energy field is the preserver of medicines. It safeguards the health of the occupants The 32 Energy Fields of the Outer Periphery
9. EAST JAYANT The energy which gives the sense of being victorious, it refreshes the mind and body MAHENDRA The energy which grants the power of administration and connectivity SURYA The core controller, this energy fields imparts health , fame and farsightedness SATYA The energy which establishes goodwill, status, authenticity and credibility The 32 Energy Fields of the Outer Periphery
10. SOUTH VITATHA The energy field of falsehood, pretension and the unreal GRUHAKSHAT The power which binds the mind and defines its limits YAMA The power of expansion, this energy field binds the world in laws GANDHARVA The energy of

preservation of health & vitality. This energy also governs all kinds of arts and music The 32 Energy Fields of the Outer Periphery

11. WEST SUGREEV The power which grants the ability to receive all knowledge
PUSHPADANT The power which grants blessings and fulfills all desires VARUN The lord of the seas, this energy field observes and runs the whole world. It is the granter of immortality ASURA The the energy field that releases the mind from temptations and gives depth in spirituality The 32 Energy Fields of the Outer Periphery.

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CHAPTER 12

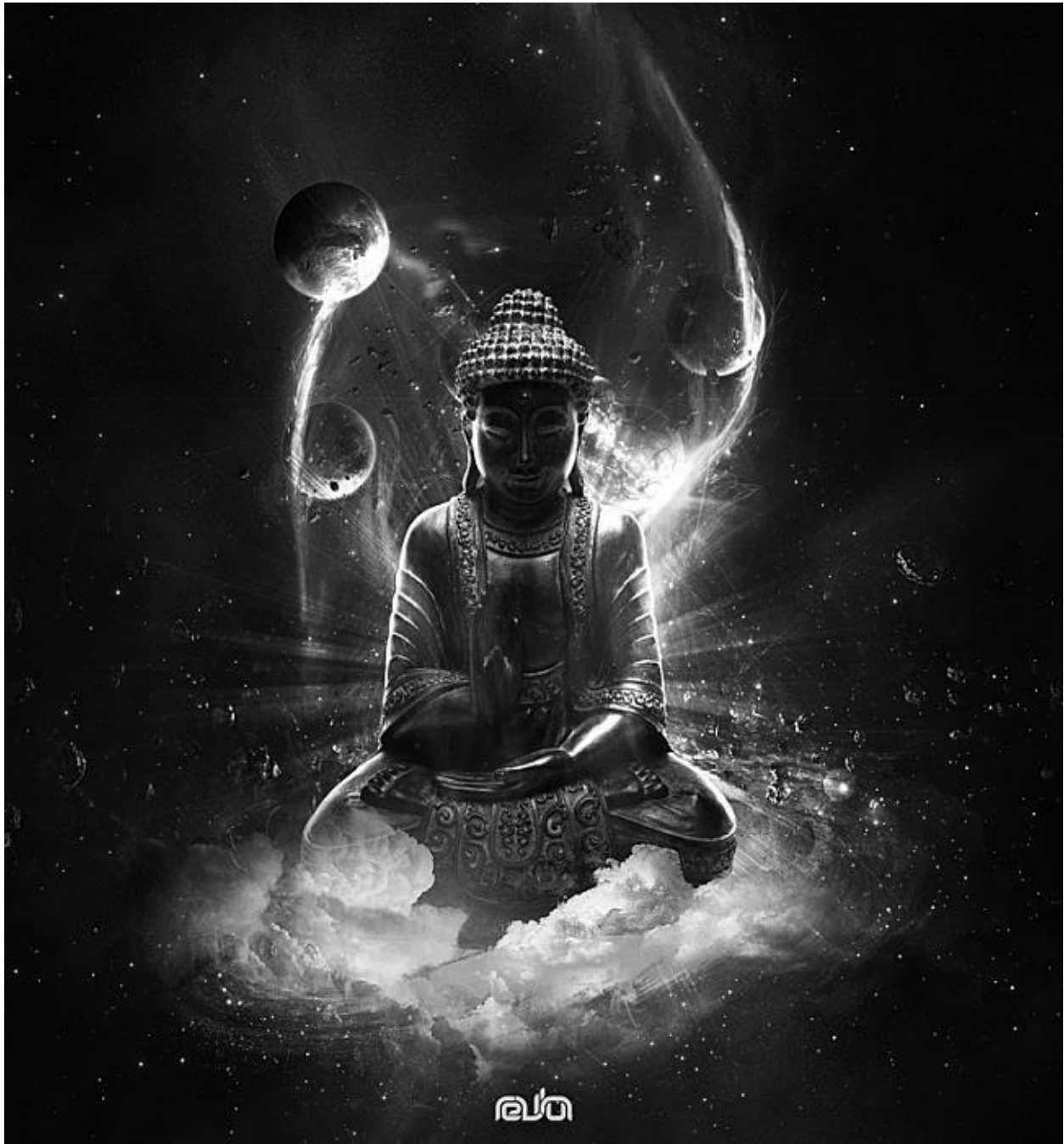
Buddhism in the Srivijaya Empire

BUDDHISM IN SRIVIJAYA the BUILDERS of BORUBUDUR STUPA

Palembang, a major city of the Srivijaya Empire, became a well-known stop for Chinese Buddhist pilgrims on their way to India, the birthplace of Buddhism. More than one thousand Buddhist monks lived in the city, and Buddhist travelers were welcomed there to study Buddhist texts.

A particularly popular form of Buddhism in the Srivijaya Empire was Vajrayana Buddhism, a mystical form of the religion that involved the cultivation of magical or supernatural powers through *yantras*, or special symbols. The Srivijaya Empire became a center for this form of Buddhism. One reason the version of Vajrayana Buddhism that developed in the Srivijaya Empire was so successful was that Srivijayan leaders combined Buddhist thought with indigenous beliefs about magic—another example of cultural syncretism. Vajrayana Buddhism originated in India but became popular in the Srivijaya empire during the same time period, indicating that trade connections between the two regions in the seventh century may have influenced each other's religions.

The influence of Buddhism also affected political structures in the Srivijaya Empire. Srivijayan rulers incorporated Buddhist philosophy into their public image. For example, an inscription detailing a speech from a park dedication in 684 CE depicts a Srivijayan king, Sri Jayanasa, as a *bodhisattva*, or someone who has already achieved buddhahood. By praying aloud during his speech that the park would provide a benefit to all living things, Sri Jayanasa showed that he was attempting to position himself as a religious authority as well as a political one. This dedication is the first time on record that a Srivijayan ruler also claimed the role of a religious figure. The fact that the king felt associating himself with Buddhism would help his image indicated the importance of Buddhism in the Srivijaya Empire during the seventh century.





Srivijayan bronze torso statue of Bodhisattva Padmapani (Avalokiteshvara), eighth century CE (Chaiya, Surat Thani, Southern Thailand). The statue demonstrates the Central Java art influence. In 1905 Prince Damrong Rajanubhab removed the statue from Wat Wiang, Chaiya, Surat Thani to Bangkok National Museum, Thailand.

Srivijayan bronze torso statue of Bodhisattva Padmapani (Avalokiteshvara), eighth century CE (Chaiya, Surat Thani, Southern Thailand). The statue demonstrates the Central Java art influence. In 1905 Prince Damrong Rajanubhab removed the statue from Wat Wiang, Chaiya, Surat Thani to Bangkok National Museum, Thailand.

Malay language

Old Malay was the language of business and trade in the Srivijaya Empire. To successfully navigate the ports and marketplaces throughout the Malay Archipelago, a person had to be able to speak Old Malay. Establishing a standard means of communication made business transactions more efficient.

Old Malay is an Indonesian language from the Austronesian family. Written inscriptions show that Old Malay contains loanwords from Sanskrit, an Indo-Aryan language used throughout South Asia. Persian and Arabic influences found in Old Malay suggest that the language adapted due to the influence of people the Srivijayans traded with.

It is not clear that Old Malay was actually the ancestor of Classical Malay, but this is thought to be quite possible. Old Malay was influenced by the Sanskrit literary language of Classical India and a scriptural language of Hinduism and Buddhism. Sanskrit loanwords can be found in Old Malay vocabulary. Malay is a major language of the Austronesian language family. Over a period of two millennia, from a form that probably consisted of only 157 original words. Malay has undergone various stages of development that derived from different layers of foreign influences through international trade, religious expansion, colonisation and developments of new socio-political trends. The oldest form of Malay is descended from the Proto-Malayo- Polynesian language spoken by the earliest Austronesian settlers in Southeast Asia. This form would later evolve into Old Malay when Indian cultures and religions began penetrating the region. Old Malay contained some terms that exist today, but are unintelligible to modern speakers, while the modern language is already largely recognisable in written Classical Malay of 1303 CE.

Malay evolved extensively into Classical Malay through the gradual influx of numerous Arabic and Persian vocabulary, when Islam made its way to the region. Initially, Classical Malay was a diverse group of dialects, reflecting the varied origins of the Malay kingdoms of Southeast Asia. One of these dialects that was developed in the literary tradition of Melaka in the 15th century, eventually became predominant. The strong influence of Melaka in international trade in the region resulted in Malay as a *lingua franca* in commerce and diplomacy, a status that it maintained throughout the age of the succeeding Malay sultanates, the European colonial era and the modern times. From 19th to 20th century, Malay evolved progressively through a significant grammatical improvements and lexical enrichment into a modern language with more than 800,000 phrases in various disciplines.

The beginning of the common era saw the growing influence of Indian civilisation in the archipelago. With the penetration and proliferation of Dravidian vocabulary and the influence of major Indian religions, Ancient Malay evolved into the Old Malay language. The Dong Yen Chau inscription, believed to be from the 4th century CE, was discovered in the northwest of

Tra Kieu, near the old Champa capital of Indrapura, modern day Vietnam; however, it is considered to be in the related Old Cham language rather than Old Malay by experts such as Graham Thurgood. The oldest uncontroversial specimen of Old Malay is the 7th century CE Sojomerto inscription from Central Java, Kedukan Bukit Inscription from South Sumatra and several other inscriptions dating from the 7th to 10th centuries discovered in Sumatra, Malay peninsula, western Java, other islands of the Sunda archipelago, and Luzon. All these Old Malay inscriptions used either scripts of Indian origin such as Pallava, Nagari or the Indian-influenced Old Sumatran characters.

The Old Malay system is greatly influenced by Sanskrit scriptures in terms of phonemes, morphemes, vocabulary and the characteristics of scholarship, particularly when the words are closely related to Indian culture such as *puja*, *kesatria*, *maharaja* and *raja*, as well as on the Hindu-Buddhist religion such as *dosa*, *pahala*, *neraka*, *syurga* or *surga* (used in Indonesia-which was based on Malay), *puasa*, *sami* and *biara*, which lasts until today.

It is popularly claimed that the Old Malay of the Srivijayan inscriptions from South Sumatra is the ancestor of the Classical Malay. However, as noted by some linguists, the precise relationship between these two, whether ancestral or not, is problematical and remained uncertain. This is due to the existence of a number of morphological and syntactic peculiarities, and affixes which are familiar from the related Batak and Javanese languages but are not found even in the oldest manuscripts of Classical Malay. It may be the case that the language of the Srivijayan inscriptions is a close cousin rather than an ancestor of Classical Malay.^[11] Moreover, although the earliest evidence of Classical Malay had been found in the Malay peninsula from 1303, Old Malay remained in use as a written language in Sumatra right up to the end of the 14th century, evidenced from Bukit Gombak inscription dated 1357 and Tanjung Tanah manuscript of Adityavarman era (1347–1375).

CLASSICAL –Malay

The period of Classical Malay started when Islam gained its foothold in the region and the elevation of its status to a state religion. As a result of Islamisation and growth in trade with the Muslim world, this era witnessed the penetration of Arabic and Persian vocabulary as well as the integration of major Islamic cultures with local Malay culture. Earliest instances of Arabic lexicons incorporated in the pre-classical Malay written in Kawi was found in the Minyetujoh inscription dated 1380 from Aceh. Pre-Classical Malay took on a more radical form as attested the 1303 CE Terengganu Inscription Stone and the 1468 CE Pengkalan Kempas Inscription from Malay peninsula. Both inscriptions not only serve as the evidence of Islam as a state religion, but also as the oldest surviving specimen of the dominant classical orthographic form, the Jawi script. Similar inscriptions containing various adopted Arabic terms with some of them still written the indianised scripts were also discovered in Sumatra and Borneo.



The Pre-Classical Malay evolved and reached its refined form during the golden age of the Malay empire of Melaka and its successor Johor starting from the 15th century. As a bustling port city with a diverse population of 200,000 from different nations, the largest in Southeast Asia at that time, Melaka became a melting pot of different cultures and languages. More loan words from Arab, Persian, Tamil and Chinese were absorbed and the period witnessed the flowering of Malay literature as well as professional development in royal leadership and public administration. In contrast with Old Malay, the literary themes of Melaka had expanded beyond the decorative *belles-lettres* and theological works, evidenced with the inclusion of accountancy, maritime laws, credit notes and trade licenses in its literary tradition. Some prominent manuscripts of this category are *Undang-Undang Melaka* ('Laws of Melaka'), *Undang-Undang Laut Melaka* (Melakan Maritime Laws) and *Hukum Kanun Pahang* ('Laws of Pahang'). The literary tradition was further enriched with the translations of various foreign literary works such as *Hikayat Muhammad Hanafiah* and *Hikayat Amir Hamzah*, and the emergence of new intellectual writings in philosophy, tasawuf, tafsir, history and many others in Malay, represented by manuscripts like *Sulalatus al-Salatin* and *Furu' Al-Masa'il*.

Melaka's success as a centre of commerce, religion, and literary output has made it an important point of cultural reference to the many influential Malay sultanates in the later centuries. This has resulted the growing importance of Classical Malay as the sole lingua franca of the region. Through inter-ethnic contact and trade, the Classical Malay spread beyond the traditional Malay speaking world^[18] and resulted in a trade language that was called *Bahasa Melayu pasar* ("Bazaar Malay") or *Bahasa Melayu rendah* ("Low Malay") as opposed to *Bahasa Melayu tinggi* (High Malay) of Melaka-Johor. It is generally believed that Bazaar Malay was a pidgin, perhaps influenced by contact between Malay, Chinese and non-Malay natives traders. The most important development, however, has been that pidgin Malay creolised, creating several new languages such as the Ambonese Malay, Manado Malay,

Makassar Malay and Betawi language. Apart from being the primary instrument in spreading Islam and commercial activities,

Malay also became a court and literary language for kingdoms beyond its traditional realm like Aceh, Banjar and Ternate and also used in diplomatic communications with the European colonial powers. This is evidenced from diplomatic letters from Sultan Abu Hayat II of Ternate to King John III of Portugal dated from 1521 to 1522, a letter from Sultan Alauddin Riayat Shah of Aceh to Captain Sir Henry Middleton of the East India Company dated 1602, and a golden letter from Sultan Iskandar Muda of Aceh to King James I of England dated 1615.

The early phase of European colonisation in Southeast Asia began with the arrival of the



Portuguese in the 16th century and the Dutch in the 17th century. This period also marked the dawn of Christianization in the region with its stronghold in Ambon, Banda and Batavia. In facilitating early missionary works, religious books and manuscripts began to be translated into Malay of which the earliest was initiated by a pious Dutch trader, Albert Ruyl in 1611. The book titled *Sovrat A B C* and written in Latin alphabet not only means in introducing Latin alphabet but also the basic tenets of Calvinism that includes the Ten Commandments, the faith and some prayers. This work later followed by several Bibles translated into Malay. The era of Classical Malay also witnessed the growing interest among foreigners in learning the Malay language for the purpose of commerce, diplomatic missions and missionary activities. Therefore,

many books in the form of word-list or dictionary were written. The oldest of these was a Chinese-Malay word list compiled by the Ming officials of the Bureau of Translators during the heyday of Melaka Sultanate. The dictionary was known as *Ma La Jia Guo Yi Yu* (Words-list of Melaka Kingdom) and contains 482 entries categorised into 17 fields namely astronomy, geography, seasons and times, plants, birds and animals, houses and palaces, human behaviours and bodies, gold and jewelleries, social and history, colours, measurements and general words. In the 16th century, the word-list is believed still in use in China when a royal archive official Yang Lin reviewed the record in 1560 CE. In 1522, the first European-Malay word-list was compiled by an Italian explorer Antonio Pigafetta, who joined the Magellan's circumnavigation expedition. The Italian-Malay word-list by Pigafetta contains approximately 426 entries and became the main reference for the later Latin-Malay and French-Malay dictionaries.

Pre Modern: 19th century was the period of strong Western political and commercial domination in Southeast Asia. The Dutch East India Company had effectively colonised the East Indies, the British Empire held several colonies and protectorates in Malay peninsula, Sarawak and North Borneo, the French possessed part of Indo-China, the Portuguese established their outposts in Timor, while the Spaniards and later the Americans gained control



over the Philippines, where the Malay language did not thrive. The Dutch and British colonists, realising the importance in understanding the local languages and cultures particularly Malay, began establishing various centres of linguistic, literature and cultural studies in universities like Leiden and London. Thousands of Malay manuscripts as well as other historical artefacts of Malay culture were collected and studied. The use of Latin script began to expand in the fields of administration and education whereby the influence of English and Dutch literatures and languages started to penetrate and spread gradually into the Malay language.

At the same time, the technological development in printing method that enabled mass

production at low prices increased the activities of authorship for general reading in the Malay language, a development that would later shifted away Malay literature from its traditional position in Malay courts.^[38] In addition, the report writing style of journalism began to bloom in the arena of Malay writing. A notable writer of this time was Abdullah bin Abdul Kadir with his famous works *Hikayat Abdullah*, *Kisah Pelayaran Abdullah ke Kelantan* and *Kisah Pelayaran Abdullah ke Mekah*. Abdullah's authorship marks an early stage in the transition from the classical to modern literature, taking Malay literature out of its preoccupation with folk-stories and legends into accurate historical descriptions.

Many other well known books were published such as two notable classical literary work, *Sulalatus Salatin* and *Taj Al-Salatin*. There were other famous religious books of the era which were not only published locally but also in countries like Egypt and Turkey. Among the earliest examples of Malay newspapers are *Soerat Kabar Bahasa Malaijoe* of Surabaya published in 1856, *Bintang Timor* of Padang published in 1965 and *Jawi Peranakan* of Singapore published in 1876. There was even a Malay newspaper published in Sri Lanka in 1869, known as *Alamat Langkapuri*. Earlier in 1821, the first Malay magazine was published in Melaka known as *Bustan Arifin* and in 1856, a Malay magazine titled *Bintang Oetara* was published in Amsterdam.

In education, the Malay language of Melaka-Johor was regarded as the standard language and became the medium of instruction in schools during colonial era. Starting from 1821, Malay-medium Schools were established by the British colonial government in Penang, Melaka and Singapore. These were followed by many others in Malay states of the peninsular. This development generated the writings of text books for schools, in addition to the publication of reference materials such as Malay dictionaries and grammar books. Apart from that, an important position was given towards the use of Malay in British administration, which requires every public servant in service to pass the special examination in Malay language as a condition for a confirmed post, as gazetted in *Straits Government Gazette 1859*. In Indonesia, the Dutch colonial government recognised the Melaka-Johor Malay used in Riau as High Malay and promoted it as a medium of communication between the Dutch and local population. The language was also taught in schools not only in Riau, but also East Sumatra, Java, Kalimantan and East Indonesia.

Modern Malay (20th century) The flourishing of pre-modern Malay literature in 19th century led to the rise of intellectual movement among the locals and the emergence of new community of Malay linguists. The appreciation of language grew and various efforts were undertaken by the community to further enhance the usage of Malay as well as to improve its abilities in facing the challenging modern era. Among the efforts done was the planning of a corpus for Malay language, first initiated by *Pakatan Belajar-Mengajar Pengetahuan Bahasa* (Society for the Learning and Teaching of Linguistic Knowledge), established in 1888. The society that was renamed in 1935 as *Pakatan Bahasa Melayu dan Persuratan Buku Diraja Johor* (The Johor Royal Society of Malay language and Literary works), involved actively in arranging and compiling the guidelines for spelling, dictionaries, grammars, punctuations, letters, essays, terminologies and many others. The establishment of Sultan Idris Training College (SITC) in Tanjung Malim, Perak in 1922 intensified these efforts. In 1936, Za'ba, an outstanding Malay scholar and lecturer of SITC, produced a Malay grammar book series entitled *Pelita Bahasa* that modernised the structure of the Classical Malay language and became the basis for the Malay language that is in use today.^[42] The most important change was in syntax, from the

classical passive form to the modern active form. In the 20th century, other improvements were also carried out by other associations, organisations, governmental institutions and congresses in various part of the region.

Writing has its unique place in the history of self-awareness and the nationalist struggle in Indonesia and Malaysia. Apart from being the main tools to spread knowledge and information, newspapers and journals like *Al-Imam* (1906), *Panji Poestaka* (1912), *Lembaga Melayu* (1914), *Warta Malaya* (1931), *Poedjangga Baroe* (1933) and *Utusan Melayu* (1939)

became the main thrust in championing and shaping the fight for nationalism. Writing, whether in the form of novels, short stories, or poems, all played distinct roles in galvanising the spirit of Indonesian National Awakening and Malay nationalism

Malay language was proclaimed as the unifying language for the nation of Indonesia later. In 1945, the language which later renamed "Bahasa Indonesia", or Indonesian in 1928 became the national language as enshrined in the constitution of an independent Indonesia. Later in 1957, Malay language was elevated to the status of national language for the independent Federation of Malaya (later reconstituted as Malaysia in 1963). Then in 1959, Malay language also received the status of national language in Brunei, although it only ceased to become a British protectorate in 1984. When Singapore separated from Malaysia in 1965, Malay became the national language of the new republic and one of the four official languages. The emergence of these newly independent states paved the way for a broader and widespread use of Malay (or Indonesian) in government administration and education. Colleges and universities with Malay as their primary medium of instruction.

The Indonesian language as the unifying language for Indonesia is relatively open to accommodate influences from other Indonesian ethnics' languages, most notably Javanese as the majority ethnic group in Indonesia, Dutch as the previous coloniser, and English as the international language. As a result, Indonesian has wider sources of loanwords, as compared to Malay used in Malaysia, Singapore and Brunei. It was suggested that the Indonesian language is an artificial language made official in 1928.^[45] By artificial it means that Indonesian was designed by academics rather than evolving naturally as most common languages have, to accommodate the political purpose of establishing an official unifying language of Indonesia.^[45] By borrowing heavily from numerous other languages it expresses a natural linguistic evolution; in fact, it is as natural as the next language, as demonstrated in its exceptional capacity for absorbing foreign vocabulary. This disparate evolution of Indonesian language led to a need for an institution that can facilitate co-ordination and co-operation in linguistic development among countries with Malay language as their national language. The first instance of linguistic co-operation was in 1959 between Malaya and Indonesia, and this was further strengthened in 1972 when MBIM (a short form for *Majlis Bahasa Indonesia-Malaysia* – Language Council of Indonesia-Malaysia) was formed. MBIM later grew into MABBIM (*Majlis Bahasa Brunei-Indonesia-Malaysia* – Language Council of Brunei-Indonesia-Malaysia) in 1985 with the inclusion of Brunei as a member and Singapore as a permanent observer. Other important institution is Dewan Bahasa dan Pustaka established in 1956. It is a government body responsible for co-ordinating the use of the Malay in the two countries. The system known as *Fajar Asia* (or 'the Dawn of Asia') appeared to use

the Republican system of writing the vowels and the Malayan system of writing the consonants. This system only existed during the Occupation. In 1972, a declaration was made for a joint spelling system in both nations, known as *Ejaan Rumi Baharu* (New Rumi Spelling)



in Malaysia and *Sistem Ejaan Yang Disempurnakan* (Perfected Spelling System) in Indonesia. With the introduction of this new common spelling system, all administrative documents, teaching and learning materials and all forms of written communication is based on a relatively uniform spelling system and this helps in effective and efficient communication, particularly in national administration and education. Despite the widespread and institutionalised use of Malay alphabet, Jawi script remains as one of the two official scripts in Brunei, and is used as an alternate script in Malaysia. Day-to-day usage of Jawi is maintained in more conservative Malay-populated areas such as Pattani in Thailand and Kelantan in Malaysia. The script is used for religious and Malay cultural administration in Terengganu, Kelantan, Kedah, Perlis and Johor. The influence of the script is still present in Sulu and Marawi in the Philippines while in Indonesia, Jawi script is still widely used in Riau and Riau Island province, where road signs and government buildings signs are written in this script.

The **Võ Cạnh inscription** is the oldest Sanskrit inscription ever found in Southeast Asia, discovered in 1885 in the village of Võ Cạnh, about 4 km from the city of Nha Trang, Vietnam. This inscription is in the form of a 2.5 m high stone stele, with three uneven

sides inscribed with the inscription lines.

The inscription mentions the name of King Sri Mara, which according to paleographic analysis was to whom it was erected by his descendants around 2nd or 3rd century CE.^[3]

There are still debates whether the inscription was a legacy of Lâm Ấp, Champa, or Funan. George

Coedès mentioned the possibility of identifying Sri Mara with Fan Shih-man (c. 230 CE), which according to the Chinese chronicles was one of the rulers of Funan. Coedès considered the Võ Cảnh inscription as proof of the first wave of Indianization in Southeast Asia. Currently, the inscription is stored in the National Museum of Vietnamese History in the city of Hanoi, Vietnam.

The Sanskrit text written on this inscription has been severely damaged. Of the three sides of the inscription stele, on the first side at least the first six lines are almost completely blurred, and so are the first eight lines on the second side.^[6] On the third side, even only a few characters can still be read.

The parts of the text that can still be read contain the following phrases:

- *"compassion for the creatures"*
- *"the priests, of course, who have drunk the ambrosia of the hundred words of the king"*
- *"the ornament... by that which is the joy of the family of the daughter of the grandson of King Sri Mara... has been ordained"*
- *"those who are seated on the throne"*
- *"that which has to do with silver or gold"*
- *"material treasure"*
- *"all that is provided by me as one who is kind and useful"*
- *"my minister Vira"*
- *"the edict which bring the welfare of the creatures, by the better of the two karin, the going and coming of this world"*

□

The mention of "the joy of the family of the daughter of the grandson of King Sri Mara .." may indicate the existence of a matrilineal system, which applies inheritance of assets to female relatives. The word *karin* can mean "ivory" or "tax", which here may mean the king was a generous person.

The use of certain Sanskrit terms in the inscription text, according to Jean Filliozat, shows the possibility that Valmiki's Ramayana epic was spread on the Indochina peninsula at the time this inscription was made. The Hindu religious terms used in the inscriptions is thought to date from pre-puranic time.

The historical origin of Vajrayana is unclear, except that it coincided with the spread of the mentalistic schools of Buddhism. It flourished from the 6th to the 11th century and exerted a lasting influence on the neighbouring countries of India. The rich visual arts of Vajrayana reach

their culmination in the sacred mandala, a representation of the universe used as an aid for meditation.



Buddhism: Vajrayana (Tantric or Esoteric) Buddhism

Mystical practices and esoteric sects are found in all forms of Buddhism. The mystical tendency that Buddhism inherited from Indian religion became increasingly pronounced. Following the codification of the Theravada canon—which according to tradition emerged orally shortly after the Buddha's demise.



Japanese art: Esoteric Buddhism

The court in Heian-kyō was justifiably wary of Buddhism, at least in any powerfully institutionalized form. Attempts by the Nara court to use Buddhism as a complicit pacifier in the pursuit of state goals had run afoul; in expenses incurred in erecting massive monuments.



Japanese architecture: Esoteric Buddhism

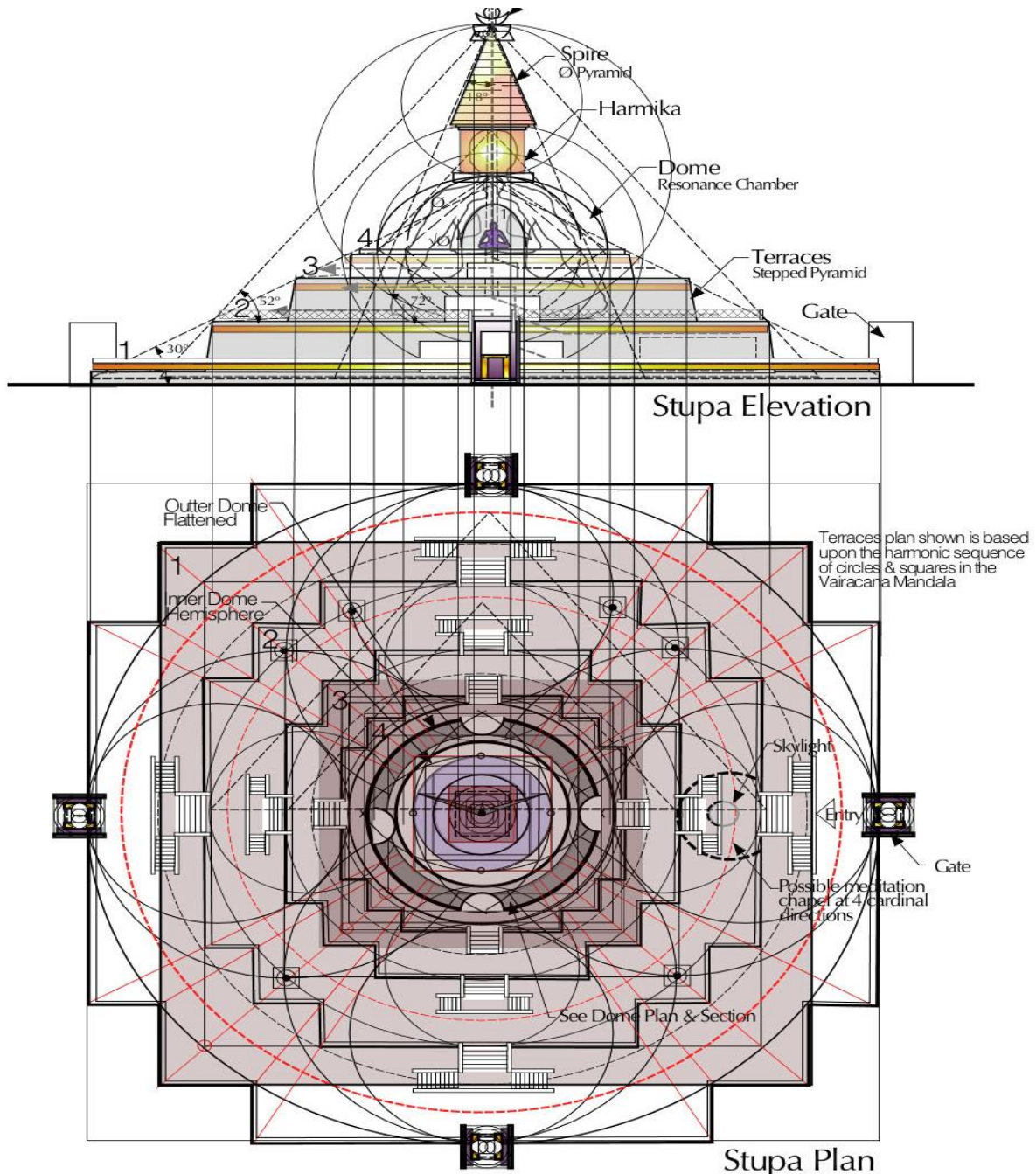
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Vajrayana, (Sanskrit: “Thunderbolt Vehicle” or “Diamond Vehicle”) form of Tantric Buddhism that developed in India and neighbouring countries, notably Tibet. Vajrayana, in the history of Buddhism, marks the transition from Mahayana speculative thought to the enactment of Buddhist ideas in individual life. The term vajra (Sanskrit: “thunderbolt,” or “diamond”) is used to signify the absolutely real and indestructible in a human being, as opposed to the fictions an individual entertains about himself and his nature; yana is the spiritual pursuit of the ultimately valuable and indestructible. Other names for this form of Buddhism are Mantrayana (“Vehicle of the Mantra”), which refers to the use of the mantra to prevent the mind from going astray into the world of its fictions and their attendant verbiage and to remain aware of reality as such; and Guhyamantrayana, in which the word *guhya* (“hidden”) refers not to concealment but to the intangibility of the process of becoming aware of reality.

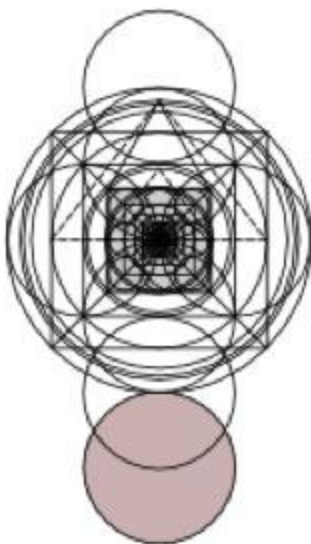
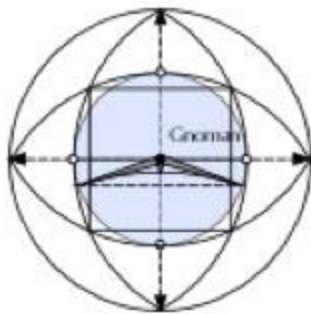
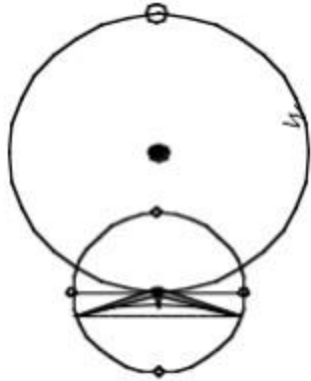
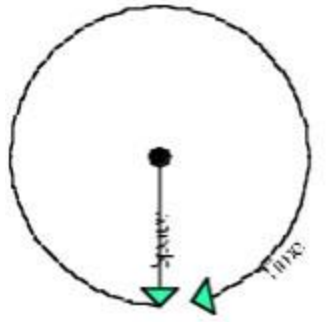
Philosophically speaking, Vajrayana embodies ideas of both the Yogachara discipline, which emphasizes the ultimacy of mind, and the Madhyamika philosophy, which undermines any attempt to posit a relativistic principle as the ultimate. Dealing with inner experiences, the Vajrayana texts use a highly symbolic language that aims at helping the followers of its disciplines to evoke within themselves experiences considered to be the most valuable available to human beings. Vajrayana thus attempts to recapture the enlightenment experience of the historical Buddha.

In the Tantric view, enlightenment arises from the realization that seemingly opposite principles are in truth one. The passive concepts *shunyata* (“emptiness”) and *prajna* (“wisdom”), for example, must be resolved with the active *karuna* (“compassion”) and *upaya* (“skillful means”). This fundamental polarity and its resolution are often expressed through symbols of sexuality (*see yab-yum*). **Chakra**, also spelled **Cakra**, Sanskrit **Cakra**, (“wheel”), any of a number of psychic-energy centres of the body, prominent in the occult physiological practices of certain forms of Hinduism and Tantric Buddhism. The chakras are conceived of as focal points where psychic forces and bodily functions merge with and interact with each other. Among the supposed 88,000 chakras in the human body, six major ones located roughly along the spinal cord and another one located just above the crown of the skull are of principal importance. Each of these seven major chakras (in Buddhism, four) is associated with a specific colour, shape, sense organ, natural element, deity, and mantra (monosyllabic prayer formula). The most important of these are the lowest chakra (*mūlādhāra*), located at the base of the spine, and the highest *sahasrāra*, at the top of the head. The *mūlādhāra* encircles a mysterious divine potency (*kuṇḍalinī*) that the individual attempts, by Yogic techniques, to raise from chakra to chakra until it reaches the *sahasrāra* and self-illumination results.

STUPA: LAYOUT & ORIENTATION



The Stupa of the Great Awakening



4	9	2
3	5	7
8	1	6

Magic Square of 3
The Harmika

The MANDALA MATRIX: Layout of the Mandala: each step on the path is a plane of consciousness or dimension

1. Outer world, Physical dimensions, Samsara
2. Rings of protection and preparation of body, emotions and mind
3. Gates at 4 directions, 7-14 steps
4. Mt Meru-Temple/Palace of the Deity, central cosmic mountain
5. Inner sanctum, circles of deities,
6. Central Deity,
7. Bindu,
8. Portal to nirvana, the void.

CIRCUMAMBULATION around the stupa circles the squares of the plan both figuratively and geometrically.

LAYOUT & ORIENTATION: In every beginning, the first action is the manifestation of being, a singularity, a point, existent but immeasurable. This moves within the infinite void, extending itself into a universe through a process of subdivision. And so it is with the creation of a mandala or stupa. The mandala is thus a geometric model of that universe, a sacred space for the manifestation of being and so also is the stupa whose plan is based upon the mandala.

The mandala is laid out from a point placed on the ground as if a blank canvas, infinite in potential, which is to be the center of the design. It is the point of Being where the compass is placed, opened across the surface to draw a circle, the boundary of what is Becoming. These actions recapitulate the manifestation of space and time. A second circle of the same dimension is drawn from the circumference of the first representing the “other”...duality and thus the possibility of manifestation. These two are the fusion from which oscillation, that is vibration, arises and from this then form. The process is so endlessly repeated in the course of infinite “time” as to be completely incomprehensible, when being first became consciousness.

The layout of the stupa or temple on the ground replicates this process, beginning with the deployment, that is orientation, of space to the four cardinal directions. This is done by first planting a gnomon or pillar at the center of the structure which represents the navel of the world, the axis mundi. The place or location of the center is determined geomantically where energy ley lines and/or a vortex in the earth already exist or which are brought to the site. It is ritually placed for the stupa in a “vajra striking” ceremony, hitting the ground with a vajra scepter which fixes or pins the energy at the center.

The center becomes the bindu, the original portal to the infinite/absolute, the goal of the journey through the mandala or stupa, to enlightenment. A circle is then drawn with a radius of 8 standard units determined for the site location as a multiple of the calculated geophysical foot or cubit which then becomes the dimension the main interior sacred space. This will be the only dimension needed as the rest of the mandala plan is generated by a progression of geometrically projecting a series of squares and circles both outward and inward which mirrors a cosmic process of creation. This circle is actually the second circle...the first being the apparent path of the sun around the earth which in truth, is the orbit of the earth around the sun. The path of the sun itself is a repeat of the first circle made by the movement of original Being into space and time.

By connecting the points on this circle where the shadow of the top of the gnomon intersect it as the sun crosses the sky during the course of the day, produces a true east/west line. If this is done on the spring and fall equinoxes, this line will pass through the gnomon pole. Drawing two more circles of the same diameter using the crossing points of the gnomon produces a vesica piscis diagram that produces a true north south line through the gnomon. The vesica is one of the key

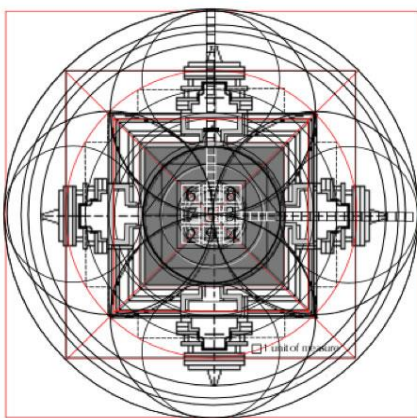
diagrams in sacred geometry symbolizing the fusion of opposites, i.e. duality into a singularity. The square drawn with its corners at the points of the vesica will square, i.e. equate in perimeter, to the original circle's circumference. This squaring of the circle is a way of equating symbolically the realm of spirit with the physical world or matter. It is done both geometrically and by the golden ratio known as phi (Φ , 1,618...) in sacred geometry. True east, the direction of the rising sun, is now established, the direction the stupa will face.

MATRIX MANDALA: Working outward by 4 units another circle within a square is drawn which represents the base of a four sided pyramid symbolizing the cosmic mountain of Mt. Meru. From there a sequence of larger squares related in the $\sqrt{2}$ harmonic ratio that will define the location of three terrace walls. The $\sqrt{2}$ is an irrational number(1.414...) without finite value corresponding to the creative principle of generation. These are the lower planes or dimensions of multi-dimensional reality. The outer circle is the boundary of the mandala and surrounding rings representing levels of physical, emotional, mental and spiritual preparation to enter the mandala.

The circle within this square is the realm or palace of the deity to whom the mandala is dedicated, being, for example, Vairocana, the chief among the five cosmic Dhyani Buddhas. These are represented by four more circles of the same size whose circumferences pass through the original center and which are placed at the four directions. These also represent the five elements: space, air, fire, water, earth.

Working inwards there is a sequence of ascending circles becoming smaller in the $\sqrt{2}$ harmonic ratio which represent the higher dimensions and will define the size of the elements on top of the dome such as the Harmika, Spire and Bowl. The Adi Buddha is infinite, unlimited by form and incorporates the entire Buddhist cosmos, is accessed through the Bindu portal. The stupa symbolizes the Buddha's enlightened mind. Therefore maps the Buddhist path to enlightenment.

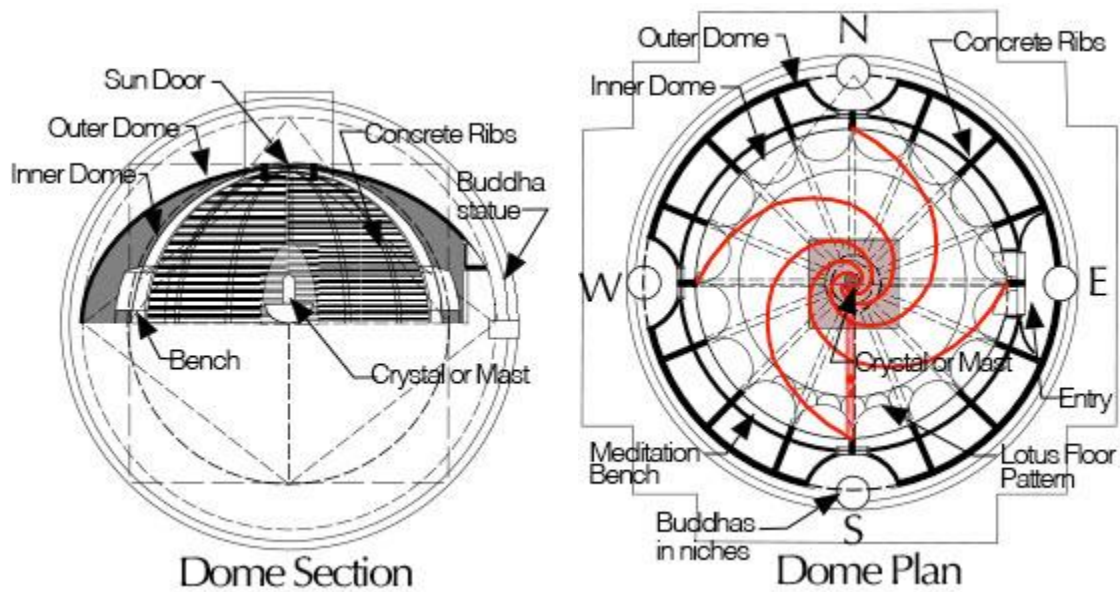
Adding circles for the Samsara realms and for nirvana complete the model of the cosmos.



Mandala Geometry-Plan of the Temple
Map of the Universe



The Boudhannath Stupa
Kathmandu, Nepal



The Stupa of the Great Awakening is born out of a prophecy which says that “when the Boudhanath Stupa in Kathmandu, Nepal collapsed, it would rise again in the west.” It is thus modeled after this Great Stupa and to be built near Pleasant Valley in the Hudson River Valley of New York state. It is a project of the Bodhivastu Foundation for Enlightened Activity,



www.thegreatawakening.org

ABOUT THE AUTHOR- SRISHTI DOKRAS

An Architect by choice and design, she completed a BACHELOR OF ARCHITECTURE Degree from the now famous Institute of Design Education and Architectural Studies, Nagpur,India.

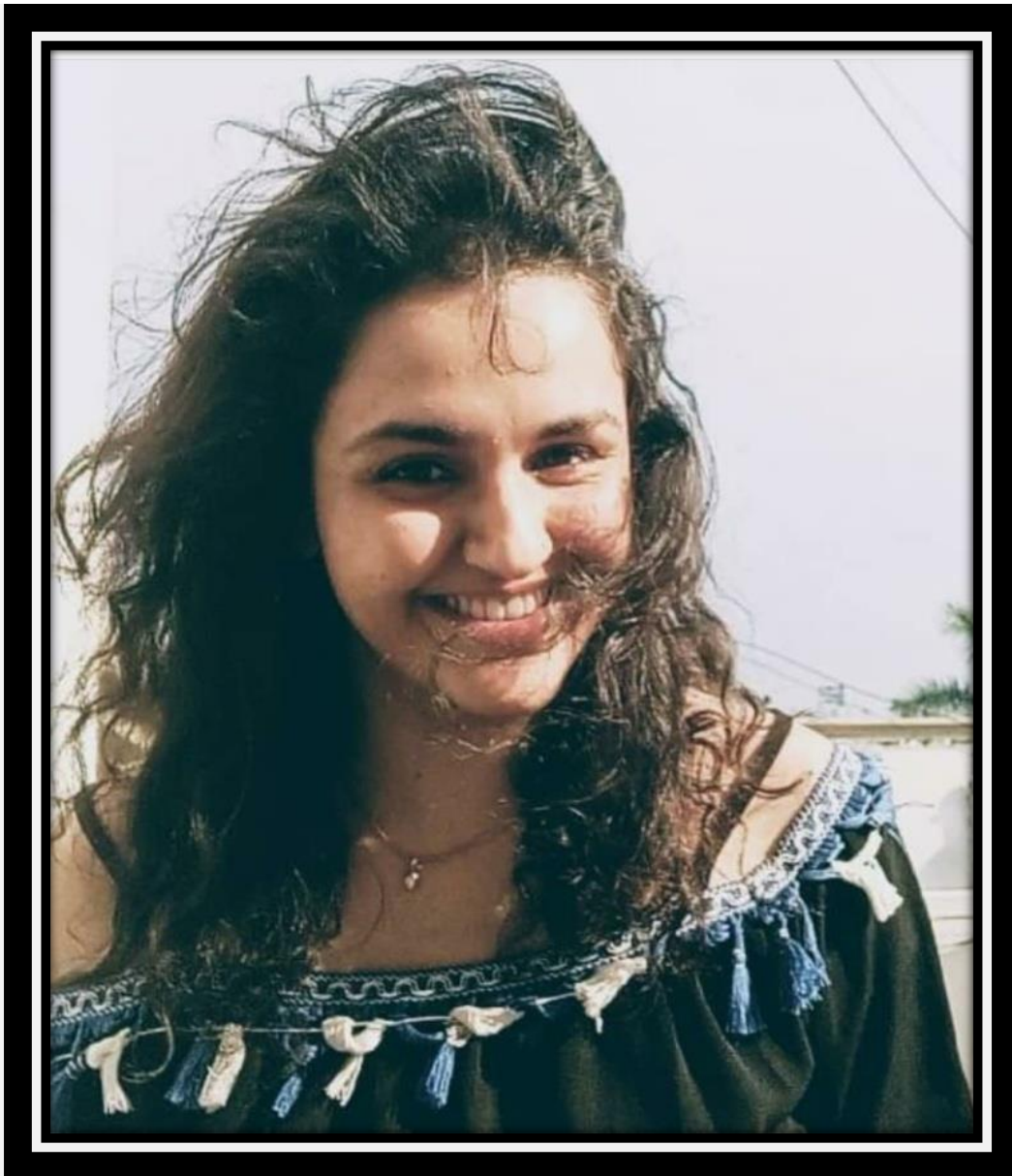
Her distinguished design and architectural experience has taken her to Mumbai, Pondicherry and Hyderabad. She has also visited Dubai, Australia and Seattle, USA as a visiting architect. Srishti has worked for Vivek Varma Architects , Mumbai ,Uday Dighe and Associates , Mumbai, Ashok Mokha Architects Nagpur ,and Shama Dalvi in Auroville.Currently working in the REVIT domain in BASE 4 corporation at Nagpur, the main work center of Base4,USA. She has been a part of the design map of the Nagpur Metro; Google corporate office Hyderabad, residential houses in the city of Pondicherry –AUROVILLE, India and Nagpur, India. Restaurant Designs for Kettle and Brew Beverages Pvt Ltd, PUNE,India

She has attended the bamboo and earth construction workshop , Auroville • Attended construction workshop organized by Indian Institute of Engineers • Participated in N.A.S.A. 2015 • Held 1st position in Product Design/Competition “ Light em up ” at Regional Level • Shortlisted for S.A. Deshpande Trophy/organized by Indian Institute of Architects , Nagpur

Visiting Architectural scholar at Melbourne, Sydney , Australia and Seattle, Deira Dubai and New Jersey USA

Srishti has published 46 research and allied papers and 5 books on CREATIVITY & ARCHITECTURE. She also contributed a chapter on REVIT software for the book Human Resources in Project Management. Her particular area of interest is INTERIORS DESIGN. Some of the Collected works of Srishti: 1. The GREAT WALL of CHINA an Architectural Foray 2. Architecture of Hotels 3. The Vastu-Purusha-Mandala in Temple Architecture 4. Prambanan, a Hindu temple in Indonesia-general architectural and morphological analysis 5. HINDU TEMPLE ARCHITECTURE of BHARAT-SOME MUSINGS 6. Autodesk Revit for Project Management 7. VERTICAL GARDENS - an Architectural Perspective.pdf 8. Theme Park and Architecture 9. Philosophy and Architecture 10. AYODHYA in ITS ARCHITECTURE Myth and Reality 11. The

Nagara Architecture of Khajuraho 12. Hotel Design- Architectural Breviary 13. Hindu Temple Architecture 14. Lanka 15. Cambodia and Angkor Vat 16. reativity and Architecture



ABOUT THE AUTHOR DR UDAY DOKRAS



GEM & RUDRAKSHA VAASTU

Giving Design to the Lord's Creation

Dr Uday Dokras,

MBA(CALSTATE,USA,)Ph.D.(Stockholm,Sweden)

Chief Vaastu Consultant

Director- Indo Nordic Gem Research Institute

Former Vaastu Consultant to the Former President Albert Rene' of Seychelles
Gurugram,Nagpur 440012,India, Stockholm,SWEDEN and TAMPEREFORS,
Finland

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About the Author

The author has worked for 30 years in the human resources arena in India and abroad. He was Group Vice -President of MZI Group in New Delhi and has anchored Human Relations in Go Air and Hotel Holiday Inn;was General Manager-Health Human Resources at the Lata Mangeshkar Hospital amd Medical college. Is currently Consultant to Gorewada International Zoo,Nagpur and visiting Faculty at the Central Institute of Business Management and Research, Nagpur.

In Sweden he anchored HR in Stadbolaget RENIA, SSSB and advisor to a multi millionaire. He has studied in Nagpur, India where he obtained degrees of Bachelor of Science, Bachelor of Arts(Managerial Economics) and Bachelor of Laws. He has done his Graduate Studies in labour laws from Canada at the Queen's University, Kingston; a MBA from USA, and Doctorate from Stockholm University, Sweden. Apart from that he has done a Management Training Program in Singapore.

A scholar of the Swedish Institute, he has been an Edvard Cassel Fund and Wineroth Fund Awardee. A scholar for the Swedish Institute for 5 years.

In 1984 he was involved with the Comparative Labour Law Project of the University of California, Los Angeles, U.S.A. He was also visiting lecturer there. In 1985 he was invited by the President of Seychelles to do a study of the efficacy of the labour laws of Seychelles.

Author of a book on a Swedish human resource law, his brief life sketch is part of the English study text book of 7 th Class Students in Sweden - "**Studying English. SPOTLIGHT 7**" - and 8th Class students in Iceland - "**SPOTLIGHT 8- Lausnir.**"

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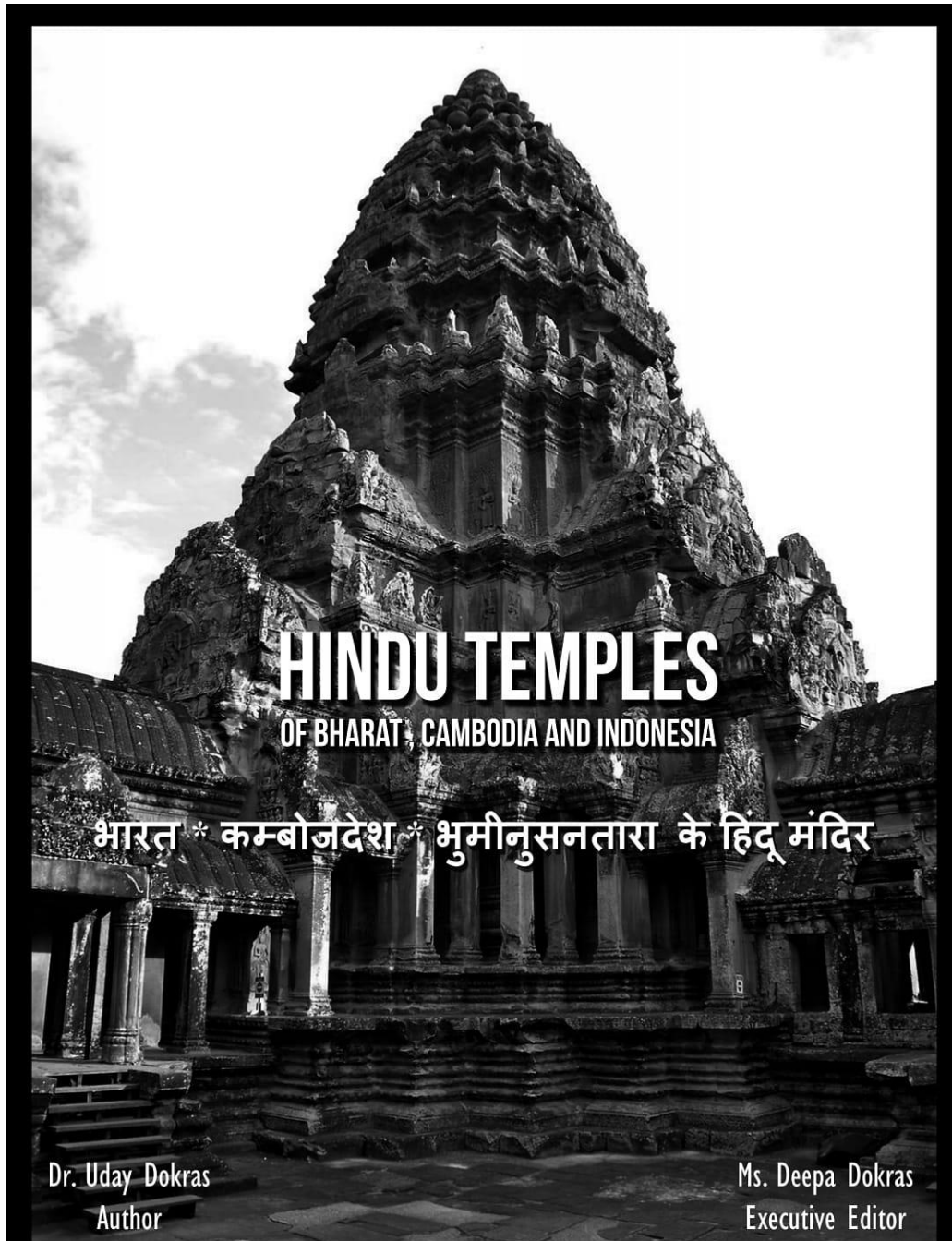
B.Sc., B.A. (Managerial Economics), LL.B., Nagpur University, India

Certificat'e en Droit, Queen's University. Ontario, Canada,

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Ph.D. Stockholm University, Sweden,

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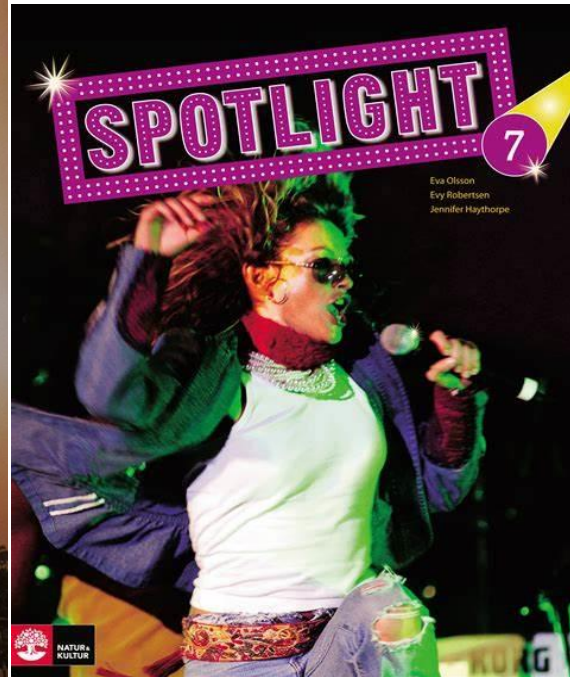
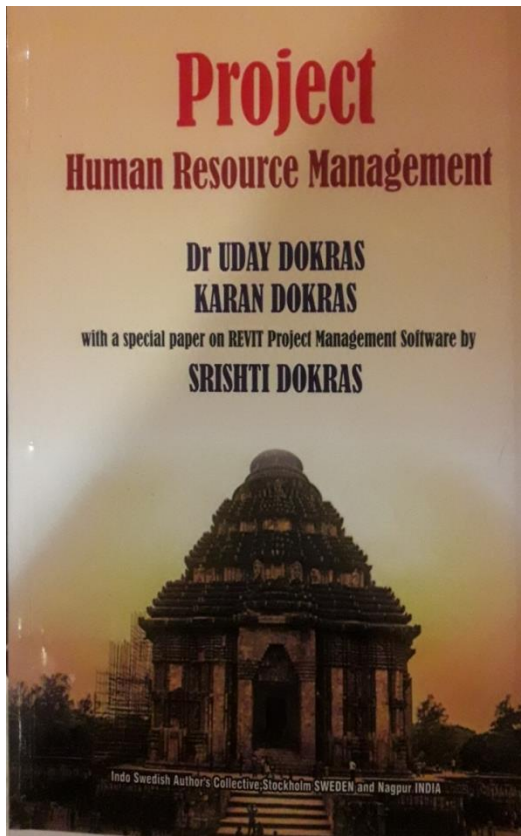


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the Newspaper Times of India March 24,



Iceland Sweden both countries use the English Text SPOTLIGHT-one of the lessons in which is about Dr Uday Dokras



Prof. S. Deshpande, President of the Indian Institute of Architects, New Delhi INDIA releasing the book of Dr Dokras HINDU TEMPLES on the web in CARONA gimes(May 2010)

Book on 'Theme Park HR' launched

■ Staff Reporter

THE book 'Theme Park Human Resource Engineering' written by authors Dr Uday Dokras and Mansse Bhandari recently.

Speaking on the occasion Balwant Chawla, Chairman, The Polo Amusement Group, New Delhi And Tashkent, Uzbekistan the chief guest, complemented the writers for choosing such an unique subject and writing this one of a kind book. First in the world on this subject.

This book is a comprehensive guide to manage employees working in all entertainment related businesses such as Malls, Theatres, Multi-plexes, amusement and Theme parks, Casinos, Malls, family entertainment centers etc.

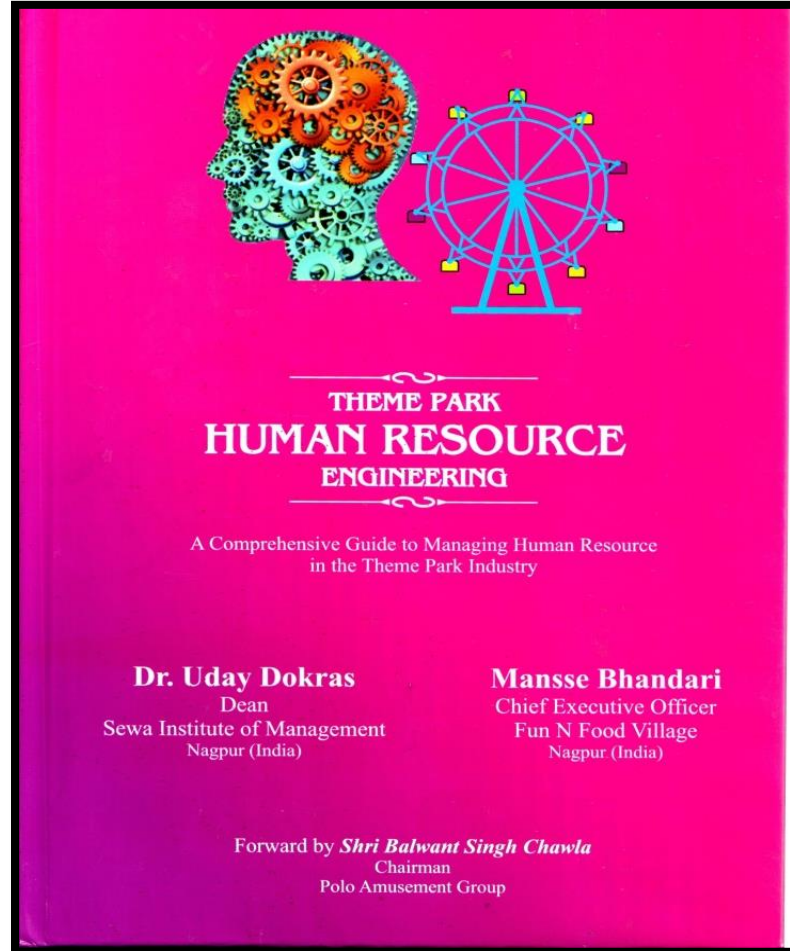
In 11 chapters the authors deal with recruitment, training, discipline, bringing about efficiency and value add to the business using human resource interventions. This is the first book of its kind in the world and is the first time the subject has been tackled. The authors Mansse Bhandari and Dr Uday Dokras have been associated in the Human Resource field for 30 years. Ms. Bhandari is the CEO of Fun 'N' Food Village, Nagpur and was head of Human Resource at the Iceland Park in Dubai for 5 years. Dr Uday Dokras has written 2 other books on HR and was Head HR of GO Airlines in Mumbai. He has been the GM of Hotel Holiday Inn, Mumbai.

This book has been published by the Sewa Institute of Management, a new



Dr Uday Dokras and Mansse Bhandari.

Institute that has taken up the challenge of introducing the Theme Park Management Science to the world.



City author launches book on web from home

■ Staff Reporter

RENOWNED author Dr Uday Dokras, a prolific writer has penned a 450 page book on the Hindu Temples of Bharat and Cambodia. It is his eighth book and his co-author for this book is Deepa Dokras, a noted historian. He launched the book directly onto the worldwide web from home.



The book deals with how Hinduism reached the far East and the architecture of Hindu temples there and here in our country.

There is very little research done on this subject, claims Dr Uday and Deepa Dokras. Both described the technical aspects of building these temples as well as focuses in detail on temples of Nagpur and others in Cambodia and India.

Dr Uday Dokras pens a trilogy on Hinduism

This is 17th book by Dr Uday Dokras and 6th by his daughter

■ Staff Reporter

INDOLOGISTS and Hinduologists, Dr Uday Dokras and his daughter Srishti Dokras, an Architect have just released their trilogy on Hindu temples of South-East Asia and Indo China, titled 'Devraja' on the Net.

This is the 17th book by Dr Dokras and sixth by Srishti Dokras. Between the two, they have written 160 research papers on temple construction, Hindu religion in far away nations, design and management available for all to read on researchgate.net.

Spanning 1,200 pages in 3 volumes, the tales are centered on Devraja, the God King of many of these countries who embraced Hinduism and built some of the biggest and most majestic tem-



Dr Uday Dokras and Srishti Dokras

ple monuments in honour of God Vishnu far away in Cambodia and Indonesia.

"How many of us know that Garuda, the giant bird which is Lord Vishnu's vehicle is the national symbol of Thailand, holds a *Trishul* in its hands and name of the national air carrier-is Garuda Airways or that the national flag of Cambodia depicts a Hindu tem-

ple on it - The Angkor Wat. Even fewer know that the Cham people of Vietnam are Brahmins or that the king of Thailand has Hindu priests performing all religious rituals in spite of being a Buddhist - as a national tradition," said Dr Dokras.

Devrajas or God King and Raja Dharma or Hinduism flourished in South-East Asian countries for more than 400 years and constructed the largest Hindu temples in the world. These 3 volumes trace the significance and history of these developments of how the Hindu religion spread to these countries, its expediency in making the Kings of these nations Devrajas, under Hinduism, in order to better lead their people, informed Dr Dokras.

The introduction to the book has been written by famous British Artist Kenny Perry, who is associated with Dr Uday Dokras' books and has contributed original digital art to adorn this picturesque trilogy full of more than 300 art works.

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Prof Deshpande launches two books of Dr Dokras

PROF SA Deshpande, former Head of the Department of Architecture, Visvesvaraya National Institute of Technology and President of the Indian Institute of Architects, e-launched two books of Dr Uday Dokras.

Prof Deshpande appreciated Dr Dokras for writing three books in three months during lockdown. While e-launching the books, he said, "Time will always go by. What distinguishes us is how we use that time for our benefit."



(Left) Prof S A Deshpande and Dr Uday Dokras releasing books.

The two new books by Dr Uday Dokras, who has done PhD from Sweden and is son of former Principal VRCE Vasant Dokras, are about 'Hinduism -- Celestial Mysteries of the Borobudur Temple' and 'Mysteries of the Holy Flower Lotus'. Dr Dokras was once consultant for Gorewada Zoo. Presently, he works for Kettle & Brew Beverages, Pune as online management consultant. Earlier,

on April 31, Dr Dokras had launched the book Hindu Temples of Bharat & Cambodia. Hindu temples and symbolism has existed for several years. It is a fascinating subject that needs to be brought to light for all interested in the mysteries of Hinduism. All of Dr Dokras' 10 books are available gratis for reading on academia.edu and <https://www.yumpu.com/en/human2resources>, stated a press release.

Dr.Uday Dokras

Ph.D (Stockholm, Sweden)
MBA (U.S.A)

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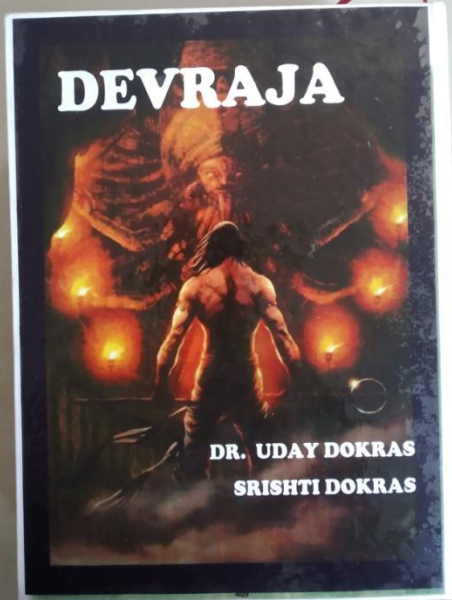
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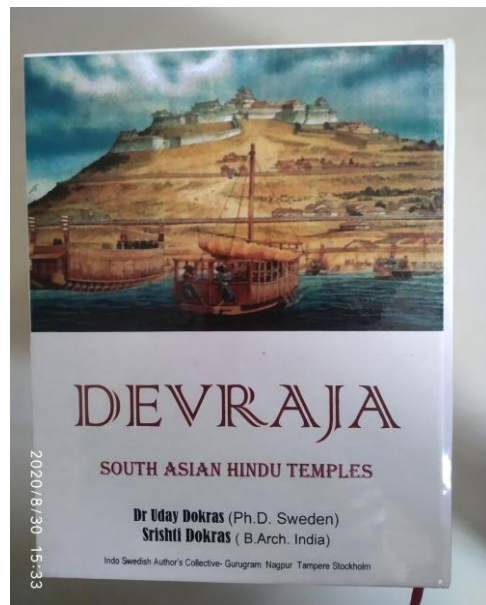
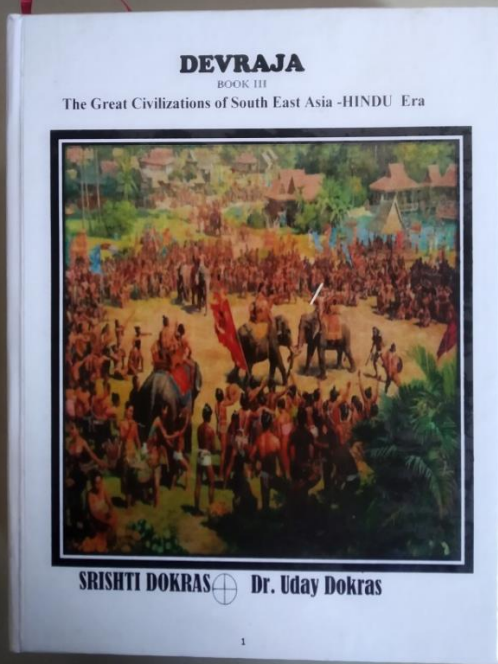
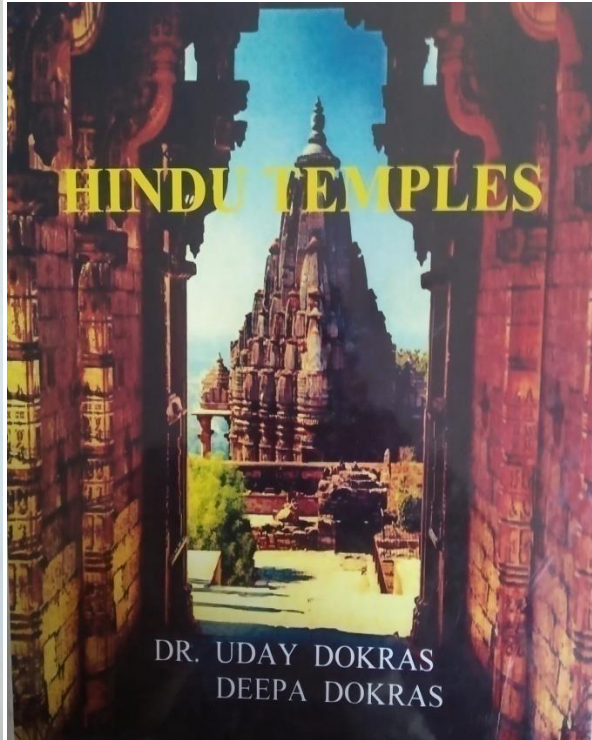
udaydokras@gmail.com



Some of my books

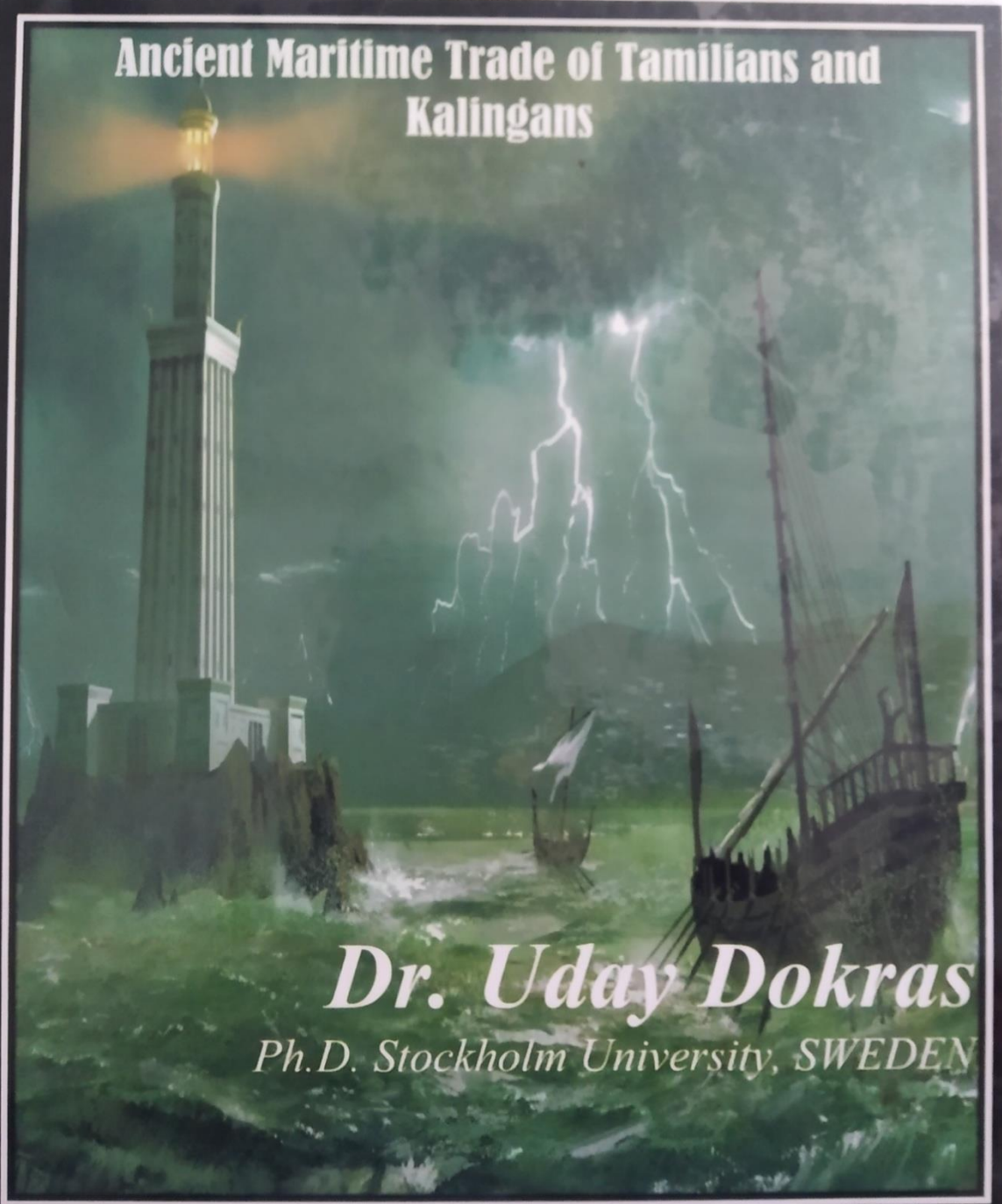


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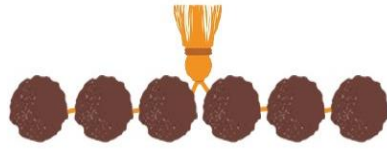
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Ph.D. Stockholm University, SWEDEN

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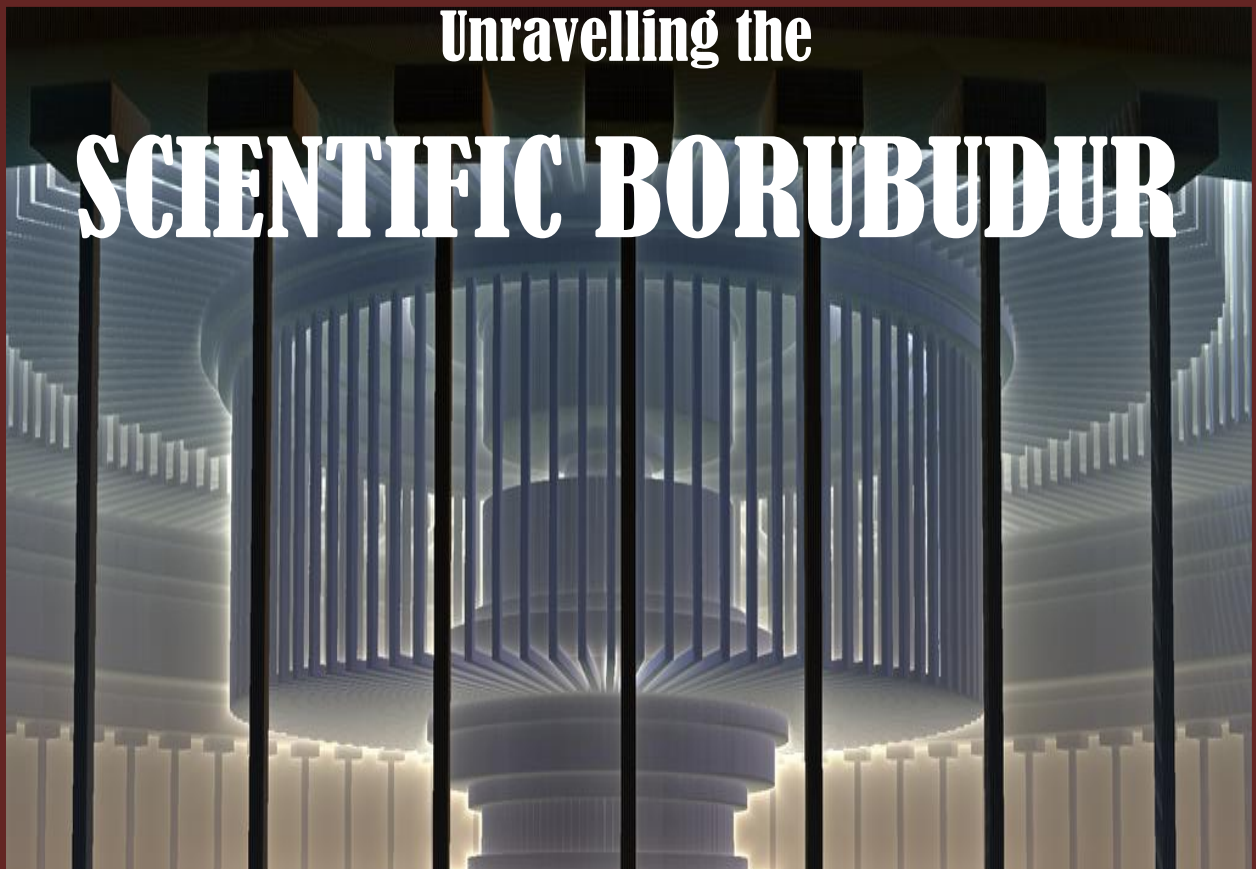


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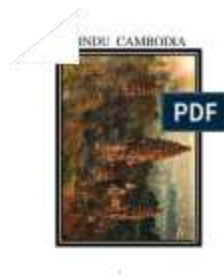


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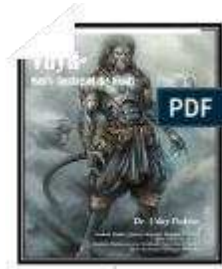
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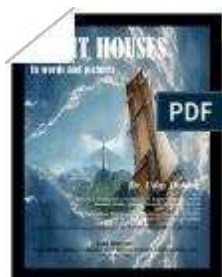
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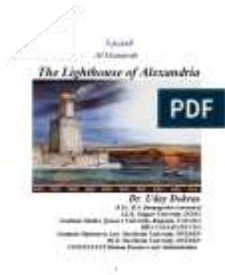


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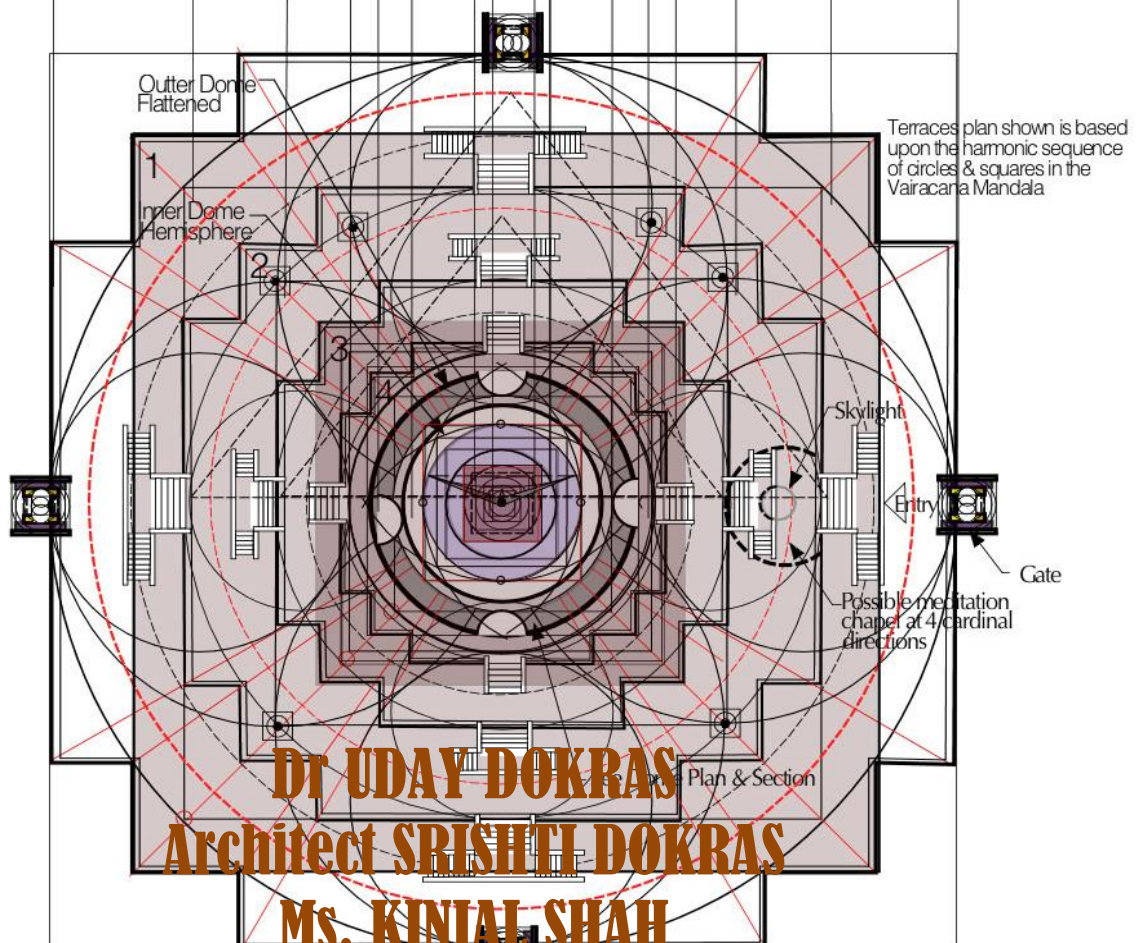
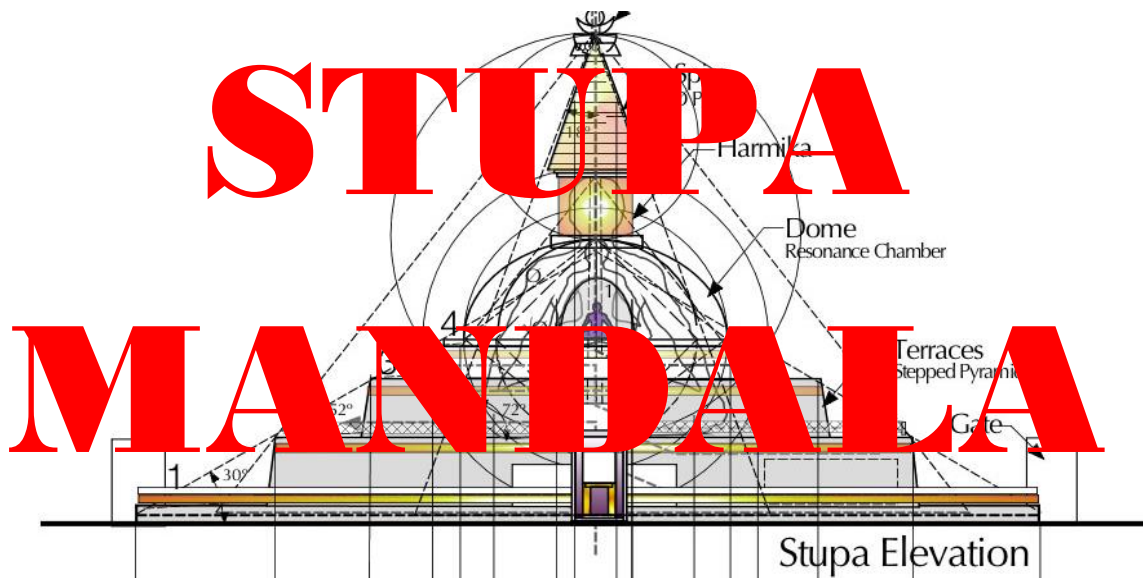
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