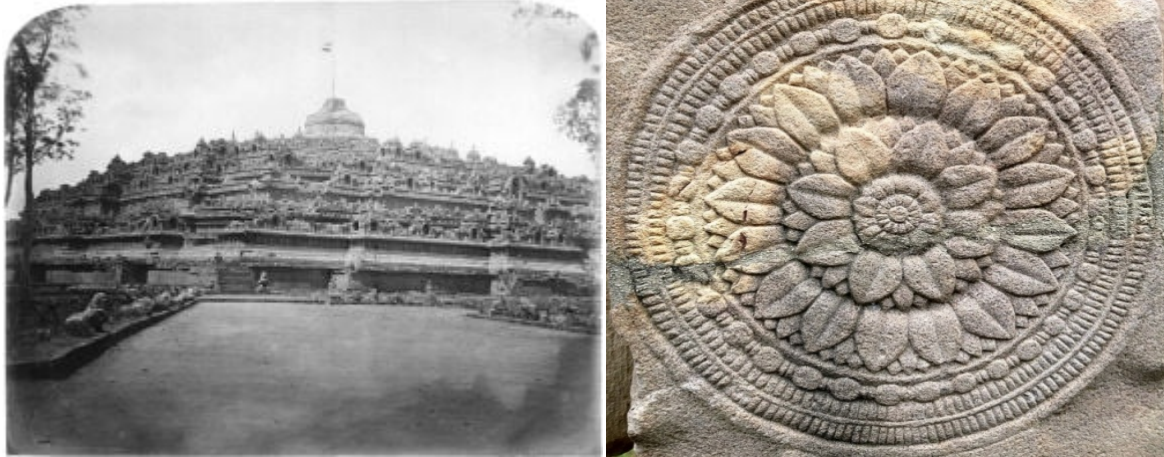


3 MANDALAS

The 3 circular platforms & the big stupa of Borobudur

Dr Uday Dokras Phd Stockholm



Sanchi

The first photograph by Isidore van Kinsbergen (1873) after the monument had been cleared up.

With over 17,000 islands, Indonesia is the world's largest island country and boasts of mesmerising history and culture but did You Know Indonesia Houses The World's Largest Buddha Temple, With 504 Buddha Statues and Covering a Vast Area of 56,600 Cubic Metres?

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. This design is a mix of Javanese style and Gupta dynasty architecture, reflecting the blend of indigenous and Indian aesthetics in ancient Java. Over 500 statues of Buddha are positioned around Borobudur, and Borobudur contains roughly 3,000 bas-relief sculptures. The design of Borobudur, a temple-mountain symbolizing the structure of universe, influenced temple built as Angkor, Cambodia.

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. It was built in three tiers: a pyramidal base with five concentric square terraces, the trunk of a cone with three circular platforms and, at the top, a monumental stupa. The walls and balustrades are decorated with fine low reliefs, covering a total surface area of 2,500 m².



Each of the monument's three main levels represents a stage on the way to the bodhisattva ideal of enlightenment; symbolizing this spiritual journey, a pilgrim begins at the eastern stairway and walks clockwise around each of the monument's nine levels before reaching the top, a distance of more than 3 miles (5 km).

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).

The monument is built to represent the universe according to Buddhist cosmology, divided into the Spheres of Desire, Form and Formlessness. Kamadhatu, the Sphere of Desire, is represented by the panels of the hidden base, which depict man's concern for worldly desires and pleasures.

The temple is well-known because it is enormous, for one thing. There are nine different levels, and it is a three-mile walk to wind one's way from the base to the stupa at the top. Each of the three main stages of the temple stands for one of the stages on a Buddhist's path to enlightenment. Tawang Monastery, located in Tawang city of Tawang district in the Indian state of Arunachal Pradesh, is the largest monastery in India.



There are no internal cell shrines, and the terraces are solid. Borobudur is thus a Buddhist stupa in the Indian sense. Each of the square terraces is enclosed in a high wall with pavilions and niches along the whole perimeter, which prevents the visitor on one level from seeing into any of the other levels.

The goal of Buddhism is to become enlightened and reach nirvana. Nirvana is believed to be attainable only with the elimination of all greed, hatred, and ignorance within a person. Nirvana signifies the end of the cycle of death and rebirth.

Each of the monument's three main levels represents a stage on the way to the bodhisattva ideal of enlightenment; symbolizing this spiritual journey, a pilgrim begins at the eastern stairway and walks clockwise around each of the monument's nine levels before reaching the top, a distance of more than 3 miles (5 km). At the lowest level, which is partially hidden, are hundreds of reliefs of earthly desires, illustrating *kama-dhatu* ("the realm of feeling"), the lowest sphere of the Mahayana Buddhist universe. On the next level, a series of reliefs depict *rupa-dhatu* (the middle sphere and "the realm of form") through events in the life of the Gautama Buddha and scenes from the *Jatakas* (stories of his previous lives). The upper level illustrates *arupa-dhatu*, "the realm of formlessness," or detachment from the physical world; there is little decoration, but lining the terraces are 72 bell-shaped stupas, many still containing a statue of the Buddha, partly visible through the perforated stonework. During the Waicak ceremony, which occurs once a year during a full moon, thousands of saffron-robed Buddhist monks walk in solemn procession to Borobudur to commemorate the Buddha's birth, death, and enlightenment.

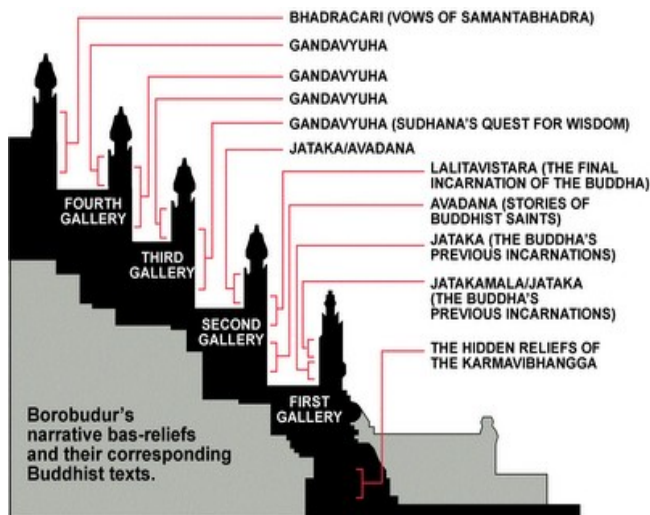
Buddhist symbolism is the use of symbols (Sanskrit: *pratīka*) to represent certain aspects of the Buddha's Dharma (teaching). Early Buddhist symbols which remain important today include the Dharma wheel, the Indian lotus, the three jewels and the Bodhi tree. Anthropomorphic symbolism depicting the Buddha (as well as other figures) became very popular around the first century CE with the arts of Mathura and the Greco-Buddhist art of Gandhara. New symbols continued to develop into the medieval period, with Vajrayana Buddhism adopting further symbols such as the stylized double vajra. In the modern era, new symbols like the Buddhist flag were also adopted.

Many symbols are depicted in early Buddhist art. Many of these are ancient, pre-Buddhist and pan-Indian symbols of auspiciousness (*mangala*). According to Karlsson, Buddhists adopted these signs because "they were meaningful, important and well-known to the majority of the people in India." They also may have had apotropaic uses, and thus they "must have been a way for Buddhists to protect themselves, but also a way of popularizing and strengthening the Buddhist movement." At its founding in 1952, the World Fellowship of Buddhists adopted two symbols to represent Buddhism. These were a traditional eight-spoked Dharma wheel and the five-colored flag. Perhaps the most admired and discussed symbol of Buddhist religion and art is the mandala, a word which, like guru and yoga, has become part of the English language. Its popularity is underscored by the use of the word mandala as a synonym for sacred space in scholarship world over, and by its presence in English-language dictionaries and encyclopedias. Both broadly define mandalas as geometric designs intended to symbolize the universe, and reference is made to their use in Buddhist and Hindu practices.

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 Sailendra 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.

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).



Borobudur, northwest view

The Gupta Dynasty ruled the North Central India between the 4th and 6th centuries CE and is considered a golden age for arts. The Dynasty was founded by Chandragupta I who acceded to the throne in 320 CE. The Guptas were the first to build Hindu and Buddhist temples to fulfill a certain purpose. This style of architecture displays a variety of beautifully adorned towers, engravings and carvings, and rock cut shrines in their temples. Unfortunately very few among the many temples of the Gupta Dynasty survive today.

During the Gupta empire—from about 320 to 550 CE—emperors used Hinduism as a unifying religion and helped popularize it by promoting educational systems that included Hindu teachings; they also gave land to brahmins. The Gupta emperors helped make Hinduism the most popular religion on the Indian subcontinent. North Central India saw the first purpose-built Hindu (and also Buddhist) temples which evolved from the earlier tradition of rock-cut shrines.

Mahavairocana Tantra

Buddhist Tantric texts began appearing in the Gupta Empire period though there are texts with elements associated with Tantra that can be seen as early as the third century. By the eighth century, Tantra was a dominant force in North India and the number of texts increased with numerous Tantric pandits writing commentaries.

The earliest known datable Buddhist Tantra is possibly the Mahavairocana Tantra, which was mentioned and collected by the Chinese pilgrim Wu-xing (無行) c. 680 CE.

Some of the material is also similar to content in the Yoga Upanishads. Buddhist Tantric traditions were variously influenced by Śaiva and Pancharatra Hindu traditions, local god/goddess cults, Yaksha or nāga rites, as well as drawing on pre-existing Mahāyāna Buddhist ideas and practices.

Many early Buddhist Tantric texts, later termed “action Tantras” (kriyā tantra), are mostly collections of magical mantras or phrases for mostly worldly ends called mantrakalpas (mantra manuals) and they do not call themselves Tantras. Later Tantric texts from the eighth century onward (termed variously Yogatantra, Mahayoga, and Yogini Tantras) advocated union with a deity (deity yoga), sacred sounds (mantras), techniques for manipulation of the subtle body and other secret methods with which to achieve swift Buddhahood. Some Tantras contain antinomian and transgressive practices such as ingesting alcohol and other forbidden substances as well as sexual rituals. Some of the unique themes and ideas found in the Buddhist Tantras is the revaluation of the body and its use in attaining great bliss (mahasukha), a revaluation of the role of women and female deities, and a revaluation of negative mental states, which can be used in the service of liberation as the Hevajra Tantra says "the world is bound by passion, also by passion it is released".

Buddhist Tantra quickly spread out of India into nearby countries like Tibet and Nepal in the eighth century, as well as to Southeast Asia. Buddhist Tantra arrived in China during the Tang Dynasty (where it was known as Tangmi) and was brought to Japan by Kukai (774–835), where it is known as Shingon. It remains the main Buddhist tradition in Nepal, Mongolia and Tibet where it is known as Vajrayana.

There are between 1500 and 2000 surviving Indian Buddhist Tantric texts in the original Sanskrit, and over 2000 more Tantras solely survive in translation (mostly Tibetan or Chinese). In the Tibetan canons, there are 450 Tantras in the Kanjur collection and 2400 in the Tengyur.

Cosmos: In Gupta-era India, the square was considered to be the perfect shape and often used as a representation of the cosmos. Gupta temples often served as monuments to multiple deities, not just one, so this understanding of things united within the cosmos is significant. Gupta rule, while solidified by territorial expansion through war, began a period of peace and prosperity marked by advancements in science, technology, engineering, art, dialectics, literature, logic,

mathematics, astronomy, religion, and philosophy. Buddhism greatly influenced the Indian religion. It gave to Indian people a simple and popular religion. It rejected ritualism, sacrifices and dominance of priestly class. Buddhism spread rapidly because its teachings were very simple and it was taught in the language of the people. The patronage of two great emperors — Ashoka and Kanishka — made it a world religion. Its opposition to the caste system made it popular among the castes that were considered low.

The Borobudur monument combines the symbolic forms of the stupa (a Buddhist commemorative mound usually containing holy relics), 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 sky.)

The Shailendra-dynasty (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 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 Bodhi Gaya. Balaputra was styled a descendant from the Shailendra dynasty and grandson of the king of Java. <https://www.thehansindia.com/posts/index/Hans/2016-05-31/Understanding-Gupta-Architecture/231823>

Relations with Indic Kingdoms

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. 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

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.

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 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

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.

From an architectural point of view, a monument like Borobudur can only have been the culmination of a long period of artistic gestation three to four centuries until the breakthrough development in the Pāla domain, which transformed a *stūpa* into a *maṇḍala* of life-size Buddhas, and developed in the narrative reliefs at Somapura and Vikramaśīla. 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. **Pala dynasty**, ruling dynasty in Bihar and Bengal, India, from the 8th to the 12th century. Its founder, Gopala, was a local chieftain who rose to power in the mid-8th century during a period of anarchy. His successor, Dharmapala (reigned c. 770–810), greatly expanded the kingdom and for a while was in control of Kannauj. Pala power was maintained under Devapala (reigned c. 810–850), who carried out raids in the north, the Deccan, and the peninsula; but thereafter the dynasty declined in power, and Mahendrapala, the Gurjara-Pratihara emperor of Kannauj in the late 9th and early 10th centuries, penetrated as far as northern Bengal. Pala strength was restored by Mahipala I (reigned c. 988–1038), whose influence reached as far as Varanasi, but on his death the kingdom again weakened.

Ramapala (reigned c. 1077–1120), the last important Pala king, did much to strengthen the dynasty in Bengal and expanded its power in Assam and Orissa; he is the hero of a Sanskrit historical poem, the *Ramacarita* of Sandhyakara. On his death, however, the dynasty was virtually eclipsed by the rising power of the Senas, though Pala kings continued to rule in southern Bihar for 40 years. The main capital of the Palas appears to have been Mudgagiri (now Munger) in eastern Bihar. The Palas were supporters of Buddhism, and it was through missionaries from their kingdom that Buddhism was finally established in Tibet. Under Pala patronage a distinctive school of art arose, of which many noteworthy sculptures in stone and metal survive.

Site and plan of Borobudur

Association of the positioning of Borobudur Temple with the four nearby temples

Borobudur Temple is located in the west of Elo River. The temple possesses several meanings related to the belief of Mahayana Buddhism. Moreover, in the past, Borobudur had served as the center of other sacred buildings surrounding it. Within a distance of 5 km around the temple, there are three other temples affiliated with Mahayana Buddhism, among which are Pawon Temple (1,150 m from Borobudur) and Mendut (2,900 m). Borobudur, Pawon and Mendut Temples are located in the west of Elo River, and Ngawen is, in fact, located in the east side of the river, which is, in turn, 4 km away from Borobudur. According to previous studies, Borobudur, Pawon, and Mendut Temples are positioned on a straight line and they form a triadic (a group of three) of sacred buildings affiliated to Mahayana Buddhism.

However, according to Totok Roesmanto, the imaginary axis connecting the three temples is not a straight line, and it is interpreted that they were the centers of religious rituals and processions in the past. Furthermore, it is suggested that the three temples were closely associated with Mount Merapi. Nevertheless, further examination of the map shows an additional temple called Ngawen Temple, from which a parallel imaginary axis can also be drawn, connecting it to the other three temples. Thus, on the basis of this fact, it can be interpreted that, in the past, the procession of the religious rituals might begin in Ngawen Temple and end in Borobudur.

Discussions on structures built during the Hindu–Buddhist era are highly associated with religious context. Revealing the religious background of a structure requires an observation of the components of the building. Temples in Indonesia can be classified in two major groups, namely Hindu and Buddhist temples. One of the main features of Buddhist temples is the existence of the stupas. A stupa is a bell-shaped structure of the shrine, which is a unique feature of Buddhist temples. Nevertheless, to explore more about the religious affiliation of a specific structure, we need to focus on the statues, reliefs, sketches, and other ornaments of structures.

Tantra and Mountains

Whether mountains or deserts, vast places have a special spiritual attraction, making one feel tiny and insignificant in comparison with the greater forces of nature. Clearly we would eventually be drawn to perhaps the most mysterious mountain of them all, Mt. Kailash.

The ancient region in Western Tibet known as Shangshung, and beyond to parts of Spiti, Kinnaur, Zaskar and Ladakh are all Lands of the Tantric Mountains.

Tantra was introduced to Tibet in the 8th century by Padma Sambhava. It was integrated into Tibetan Buddhism and was later encompassed by the different sects to varying degrees. Padma Sambhava meditated in many places, including a cave in the western valley of Kailash, and his influence remains strong in Tibet. The Tibetan culture of the 11th century reached as far north as Ladakh, and we have given relevant background details of this.

Before Buddhism gained a foothold in Tibet, another equally mysterious faith, Bon or Bonpo, was observed by the people. The Bon also practised forms of shamanism and demonic cult worship. Some scholars believe that Tantra predates Hindu and Buddhist ideas, and is descended from more ancient mediaeval cults involving worship of the mother goddesses. Whether Tantra predates Bon has never been established.

Borobudur and Merapi Volcano: 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. Perhaps Mount 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. Some scholars believe that famine caused by an eruption of Mount Merapi forced the inhabitants of Central Java to leave their lands behind in search of a new place to live. When people once again inhabited this area, the glory of Borobudur was buried by ash from Mount Merapi.

Mountain peaks, according to Buddhist thought, are the place where contact with divine truth may take place. There are 129 volcanoes in Indonesia and smoke can be seen emerging from the mountaintop at least 300 days a year. Mount Merapi, which stands at about 9,551 feet (2,911 meters) tall, lies in one of the world's most densely populated areas and dominates the landscape immediately north of the major city of Yogyakarta, on the island of Java. It is a stratovolcano being the youngest and southernmost of a volcanic chain extending north and northwest, to the Mount Ungaran volcano. The name Merapi could be loosely translated as "Mountain of Fire" from the Javanese combined words "Meru," meaning "mountain," and "api," meaning "fire." Tectonically, Merapi is situated at the subduction zone where the Indo-Australian Plate is sliding beneath the Eurasian Plate. It is

part of the Pacific Ring of Fire – a section of fault lines and volcanoes stretching from the western coast of South America, Alaska through Japan and Southeast Asia.

Merapi has been active for about 10,000 years. The volcano's biggest and most devastating eruptions occurred in 1006 and 1930. The eruption of 1006 was so bad that many believe the existing Hindu kingdom in the area was destroyed, as it spread ash over all of central Java. During the 1930 eruption more than 1,300 people were killed."The material has to travel 30 miles [48 km] to get to the surface; there has to be enough propellant force to push them all that way and out. Merapi is the poster child for unstable lava domes," Wunderman said. "The dome on Merapi rests on a steep, unstable environment, and it is easy for pieces to break off and do damage; for example, hot gases can be released and form a superheated, high speed cloud that rolls down the mountain. The volcano is considered sacred by some local people who believe a supernatural kingdom exists atop Merapi, according to Indhonesia.com, an informational website about Indonesia. Every year a priest climbs to the top to make an offering.

Creation

Merapi is very important to Javanese, especially those living around its crater. As such, there are many myths and beliefs attached to Merapi. Although most nearby villages have their own myths about the creation of Mount Merapi, they have numerous commonalities. It is believed that when the gods had just created the Earth, Java was unbalanced because of the placement of Mount Jamurdipo on the west end of the island. In order to assure balance, the gods (generally represented by Batara Guru) ordered the mountain to be moved to the centre of Java. However, two armourers, Empu Rama and Empu Permadi, were already forging a sacred keris at the site where Mount Jamurdipo was to be moved. The gods warned them that they would be moving a mountain there, and that they should leave; Empu Rama and Empu Permadi ignored that warning. In anger, the gods buried Empu Rama and Empu Permadi under Mount Jamurdipo; their spirits later became the rulers of all mystical beings in the area. In memory of them, Mount Jamurdipo was later renamed Mount Merapi, which means "fire of Rama and Permadi."

Spirit *Kraton* of Merapi

The Javanese believe that the Earth is not only populated by human beings, but also by spirits (*makhluk halus*). Villages near Merapi believe that one of the palaces (in Javanese *kraton*) used by the rulers of the spirit kingdom lies inside Merapi, ruled by Empu Rama and Empu Permadi. This palace is said to be a spiritual counterpart to the Yogyakarta Sultanate, complete with roads, soldiers, princes, vehicles, and domesticated animals. Besides the rulers, the palace is said to also be populated by the spirits of ancestors who died as righteous people. The spirits of these ancestors are said to live in the palace as royal servants (*abdi dalem*), occasionally visiting their descendants in dreams to give prophecies or warnings.

Spirits of Merapi

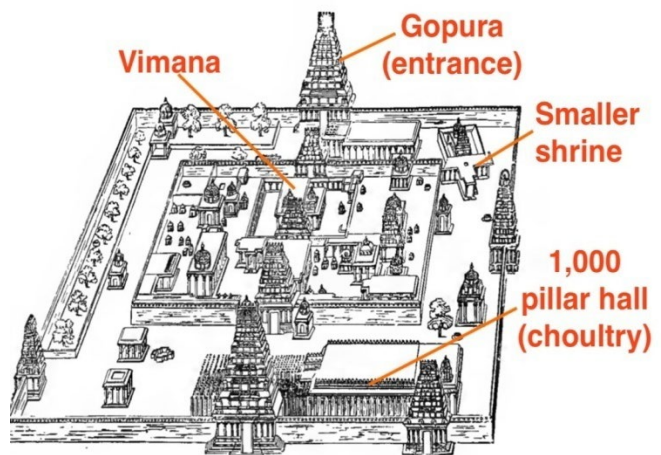
To keep the volcano quiet and to appease the spirits of the mountain, the Javanese regularly bring offerings on the anniversary of the sultan of Yogyakarta's coronation. For Yogyakarta Sultanate, Merapi holds a significant cosmological symbolism, because it forms a sacred north-south axis line between Merapi peak and Southern Ocean (Indian Ocean). The sacred axis is signified by Merapi peak in the north, the Tugu Yogyakarta monument near

Yogyakarta main train station, the axis runs along Malioboro street to Northern Alun-alun (square) across Keraton Yogyakarta (sultan palace), Southern Alun-alun, all the way to Bantul and finally reach Samas and Parangkusumo beach on the estuary of Opak river and Southern Ocean. This sacred axis connected the hyangs or spirits of mountain revered since ancient times—often identified as "Mbah Petruk" by Javanese people—The Sultan of Yogyakarta as the leader of the Javanese kingdom, and Nyi Roro Kidul as the queen of the Southern Ocean, the female ocean deity revered by Javanese people and also mythical consort of Javanese kings.

Architecture: From Darkness to Light

Borobudur covers a total surface area of around 2,500 m². The monument is a marvel of design, decorated with 2,672 relief panels and originally 504 Buddha statues. The architecture and stonework of this temple have no equal. It was built without using any cement or mortar! The structure is like a set of massive interlocking Lego blocks held together without any glue. 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. It was built in three tiers: a pyramidal base with five concentric square terraces, the trunk of a cone with three circular platforms and, at the top, a monumental stupa.

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 (*arupadhatu*) as symbolized and manifested in the open circular terraces crowned with 72 stupas.



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

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

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.

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.



Borobudur

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.

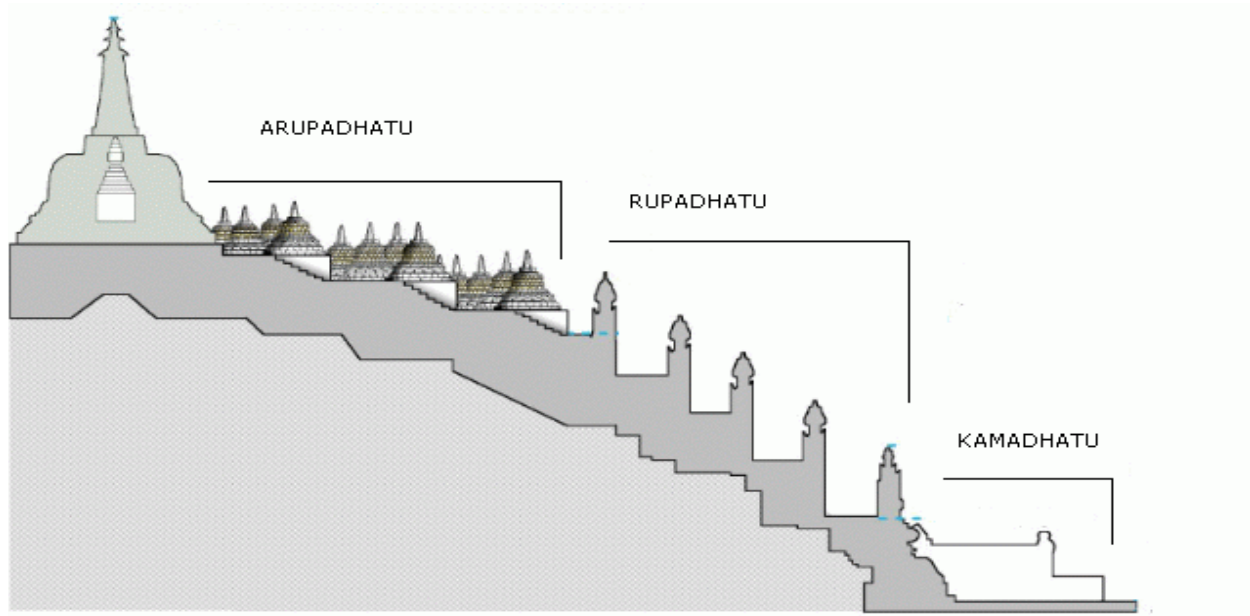
Zone 2: Rapudhatu (*The transitional sphere, humans are released from worldly matters*)

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 Realm of existence concept of the Design element of the Stupa

Loka (Sanskrit: लोक) is a concept in Indian religions, that means plane or realm of existence.

3 lokas of HINDUISM



Vishvarupa of Vishnu as the Cosmic Man with the three realms: heaven - Satya to Bhuvar loka (head to belly), earth - Bhu loka (groin), underworld - Atala to Patala loka (legs).

The most common arrangement of lokas in Hinduism are into three parts.

The scholar Deborah Soifer describes the development of the concept of lokas as follows:

The concept of a loka or lokas develops in the Vedic literature. Influenced by the special connotations that a word for space might have for a nomadic people, *loka* in the Veda did not simply mean place or world, but had a positive valuation: it was a place or position of religious or psychological interest with a special value of function of its own. Hence, inherent in the 'loka' concept in the earliest literature was a double aspect; that is, coexistent with spatiality was a religious or soteriological meaning, which could exist independent of a spatial notion, an 'immaterial' significance. The most common cosmological conception of lokas in the Veda was that of the trailokya or triple world: three worlds consisting of earth, atmosphere or sky, and heaven, making up the universe."

3 lokas

There is a cosmological view in Buddhism called Trailokya. In early Buddhism, based upon the Pali Canon and related Agamas, there are three distinct realms:- First the *Kama Loka*, or the

world of sensuality, in which humans, animals, and some devas reside, the second is *Rupadhatu Loka*, or the world of material existence, in which certain beings mastering specific meditative attainments reside, and the third is *Arupadhatu Loka*, or the immaterial, formless world, in which formless spirits reside. Arahants, who have attained the highest goal of Nirvana have unbound themselves from individual existence in any form, in any realm, and cannot be found here, there, or in between, i.e., they are found in no loka whatsoever.

We do not know what the design of the unfinished Hindu temple before the Borobudur was, but one can make a suggestive guess that it may have been a 3 layered structure like the one in Hindu Cosmology and the Buddhist design took inspiration from it.

Buddhist spatial cosmology, which describes the arrangement of the various worlds within the universe/ The plan of the Borobudur temple complex in Java mirrors the three main levels of Buddhist cosmology. The highest point in the center symbolizes Buddhahood.

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 Panguyangan site near Cisolok and 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 run-off. 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.

Features-Outer enclosure

uring the visit, which began at 4 am, I was able to witness the spectacle of the sunrise from the temple, where the bluish light of dawn slowly unveils the mountains surrounding the temple, while a thick fog that emanates from the Javanese jungle makes you feel like being in a not earthly place, closer to heaven.



BOROBUDUR, THE ARCHITECTURAL MANDALA.



In Buddhism, the mandala represents a landscape of the universe with Buddha in its center, and shows the different steps in the process of finding the truth. Borobudur was built on a hill, following the layout of a giant mandala, representing the Buddhist cosmology. It consists of nine

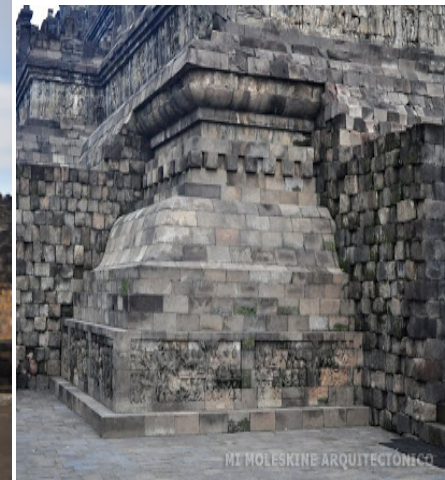
platforms divided into three sections:

- The upper three are circular platforms, called *Arupadhatu*, and have a slightly curved oval shape consisting of two minor axes aligned with the cardinal points and two major axes aligned with the intermediate directions.

- The six lower platforms are square, called *Rupadhatu*,

- Moreover, in 1885 a structure in the base was discovered and it was called *Kamadhatu*.

The lower platform probably also had a structural function to prevent the collapse of the structure. It was added after the temple was finished, as it can be seen in one of the corners, where the older reliefs have been exposed.



The architectural layout leads the visitor throughout a system of stairs in order to ascend to the platforms and reach the top of the structure, a clear representation of the journey towards a spiritual "enlightenment". The pilgrims walked each platform twice, in order to learn from the reliefs on each side.

Between the latest square platform and the first circular one there is an arch topped by an intimidating figure of a guardian. It is a reference to a transition to a more pure place, where evil spirits had no access. The bell-shaped stupas contain the figure of a Buddha. This is quite unusual, I have not seen it in other Asian countries, perhaps due to a syncretism between Buddhism and ancient Javanese traditions, where ancient ascetics used to go to meditate in caves.



An interesting detail is that the openings of the stupas of the first two levels are in diamond shape, while those of the stupas of the upper platform are in square shape. (Note the different form of the pieces of stone). Perhaps this symbolized the path perfection, to the enlightenment that every pilgrim aspired by climbing and meditating through the different platforms.

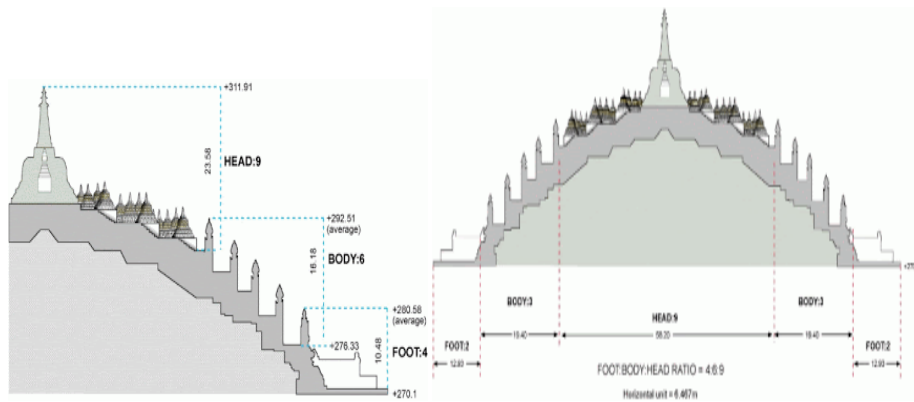


The last great stupa, crowned by an octagonal pinnacle, has no opening and some people say that inside there used to be a golden Buddha, stolen by a Dutchman explorer, but this theory has not been proved. The simplicity of its form contrasts with the baroque richness of the reliefs that are located in the platforms below, and I imagine that has to do precisely with the austerity and simplicity that Buddha preached.



ASTROLOGICAL-COSMOLOGICAL-MATHEMATICAL RELATIONS IN BOROBUDUR

The structure can be divided into three main elements: the base, the central part and the top, which in analogy to the feet, body and head represent the three states of mental preparation: the Kamadhatu or world of desires, the Rupadhatu or world of forms and the Arupadhatu or formless world. A 1977 study by the professor found a ratio of 4:6:9 for the composition of both the three parts of the temple as well as each of the temple main parts. This ratio is equal to that found in the temples of Pawon and Mendut as well as the impressive complex of Angkor Wat in Cambodia.



Section of the temple according to Professor Atmadi. Image courtesy of Borobudur.tv

The researcher Mark Long, who has been studying the calendrical, astronomical and cosmological relations in Borobudur for several years, based on its own survey of the complex, proposed that the same ratio of 4:6:9 can be applied to the width of the whole monument. North South Section, where according to Mark Long the same 4:6:9 ratio was used, such as in the height of the temple.

It is thought that the architect of Borobudur, named Gunadharma, believed that the plans of temples played a direct role in determining the fate of each occupant of the structure, so the architect's role should be to harmonize the forces of the microcosm that govern human life with the macrocosm that governs the life of the gods. Gunadharma took the *tala* as a measurement

unit, which is the distance between the thumb and little finger when they are stretched to their maximum separation, a system widely used in India. Because this measure varies little from person to person it is possible that the *tala* form an important person may have been employed as a method of standardization. Mark Long has found that the extent of the *tala* used in the monument was 22.9 cm.

Based on his own measurements, Long stated that the overall dimensions are based on a number of *talas* that symbolize important events in the Hindu calendar, specifically a calendar called Vatsu Purusha Mandala. In the faces and square corners of this diagram the solstices and equinoxes are represented. The arrangement of the stupas follows a well-studied geometric pattern, avoiding, for example, being placed in the main diagonals of the monument, where it was believed the important divine energies flow.

DECORATION: Borobudur aside of the symbolism in their mandalic architectural layout displays also many references to the life of Buddha, both in reliefs and statues. The reliefs have an educational role. The scenes represent the history of Buddha, his various incarnations and the path that the faithful should follow to reach Nirvana.



The Buddha statues, many of whom are maimed and some missing, are distributed differently in the square platforms than in the circular ones. In the five square platforms, called Rupadhatu, the Buddhas, numbering 432, are located in niches, placed in rows in the outer part of the balustrades. The number of Buddhas diminishes as platforms get higher. Thus, the first platform contains 104 niches, the second 104, the third 88, the fourth 72 and the fifth 64.



Details of Borobudur/ Extreme left pic Model top temple-Photo courtesy of Davey Sarge

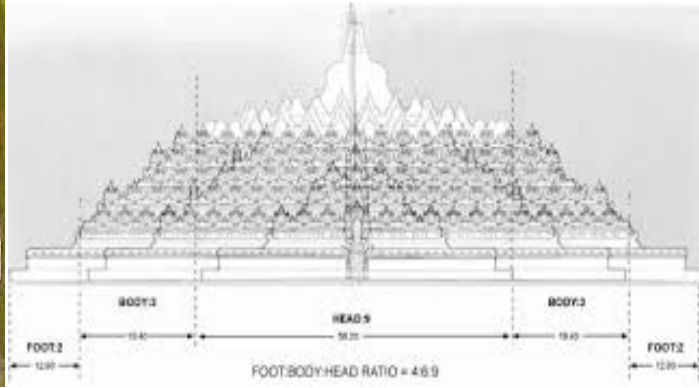
The upper platforms or *Arupadhatu*, contain 72 small latticed stupas (which are mound-shaped structures, typical of early Buddhism) that surround a larger stupa more. Thus, in the first level there are 32 stupas, 24 in the second and 16 in the third level.

While at first glance the Buddhas seem to be the same, sitting lotus position, which is sitting on crossed legs. However, the different hand position represents various states of meditation.

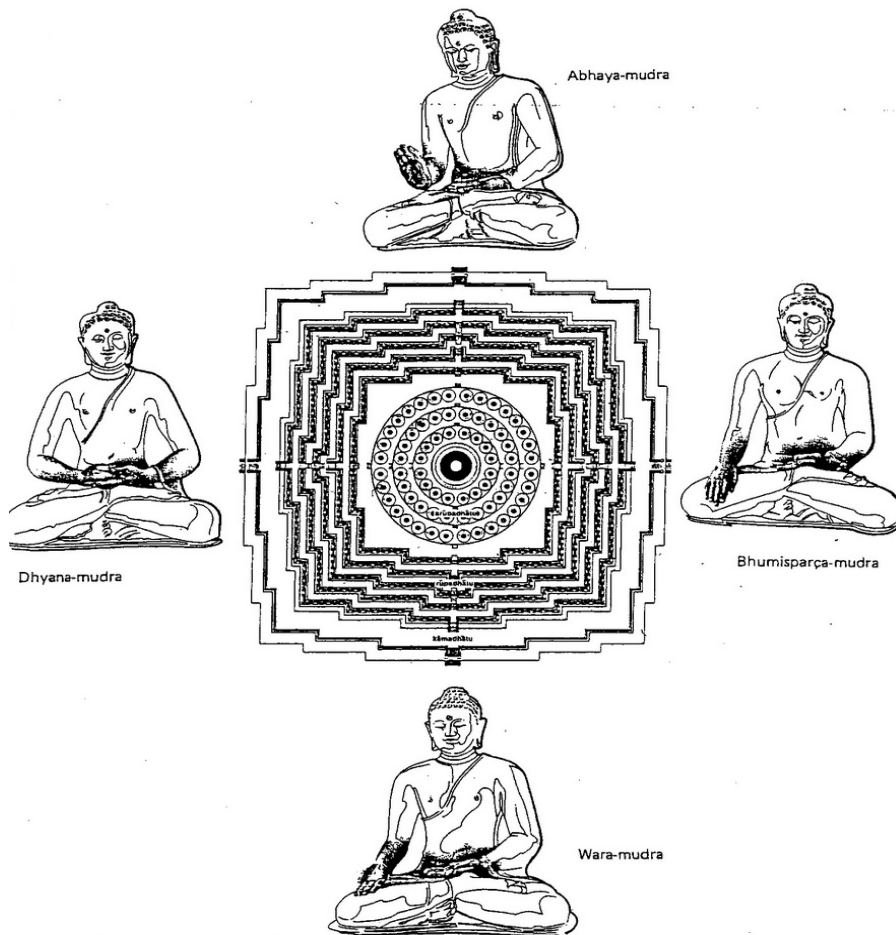
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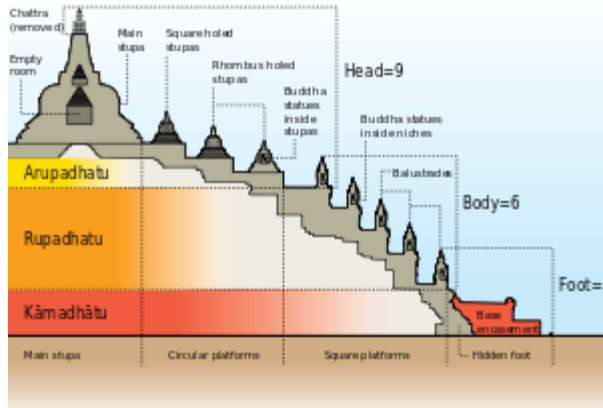
Aerial view of the concentric circulatory



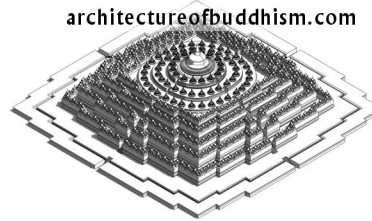
Paharpur stupa on Left as a Mandala and Borobudur on right also in cross section



Borobudur Cross Section and Building Ratio
 Borobudur, Central Java, Indonesia



architectureofbuddhism.com



Borobudur, Indonesia from "The Golden Lands" ISBN 1 978 0 7892 1194 1
 Architectural diagram copyright Vikram Lal



MANDALA

A mandala "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 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:

Plan And Symbolism Of Candi Borobudur

The monument is arranged as an ascending series of three circular platforms that rest upon six square ones, capped by a large central stupa. It is symmetrical in plan with respect to the four cardinal directions, with the principal entrance on its eastern side.

The original base was decorated with 160 relief panels depicting the law of cause and effect (karma); unable to support the rest of the building, this collapsed during construction and was replaced by a more substantial platform that covered the original reliefs. Today, four of the original karma panels have been re-exposed at the southeast corner ("A", in the diagram).

The facade of the building is decorated with carvings that include makaras, guardian figures, and 432 Buddha statues (108 on each side) that are set into niches. 108 is the number of physical marks (such as urna, ushnisha, etc.) that distinguish a Buddha, and also has numerological significance as the product of $27 \times 4 = 3 \times 3 \times 3 \times 2 \times 2 =$ three threes times two twos.) The buddhas on the lower four levels of each side display a characteristic directional mudra: bhumisparsa on the east, varada on the south, dhyana on the west, and abhaya on the north. On all four sides of the top row, the statues are in vitarka mudra.

The balustraded walls of the square terraces form a roofless, winding corridor on each level (numbers "1" - "4" in the diagram). The walls of the corridors are decorated with reliefs:

- 1, outer wall: lower and upper tiers: jataka stories
- 1, inner wall: lower tier: avadanas; upper tier: life of Shakyamuni
- 2, outer wall: jatakas and avadanas; inner wall: Gandavyuha
- 3-4, inner and outer walls: Gandavyuha

The jatakas and avadanas are popular stories about the past lives (incarnations) of human beings like Shakyamuni, who eventually became bodhisattvas as the result of their selfless actions. The life of Shakyamuni, on the upper tier of corridor 1, is taken from an Indonesian version of the Lalitavistara Sutra, that describes his birth, spiritual journey, and enlightenment. The Gandavyuha Sutra (the last chapter of the Avatamsaka Sutra) is the story of a pilgrim named Sudhana, who visited 54 teachers¹ in the course of a spiritual quest. All of these reliefs, in other words, are teaching aids that instruct visitors in how to become a bodhisattva, the spiritual goal of Mahayana Buddhist practice.

After circumambulating the teaching corridors with their pictorial reliefs, the pilgrim ascends to the open upper platform that is occupied by 72 buddha statues ("S" in the diagram), each displaying dharmachakra mudra and enclosed in its own small, pierced, stupa. (The number 72 again has numerological significance, being the product of $9 \times 8 = 3 \times 3 \times 2 \times 2 \times 2 =$ two threes times three twos.) Two of these small stupas have been opened ("O" in the diagram) for display to modern visitors. Many scholars believe that this level represents the Buddhist Realm Of Formlessness (i.e. the spiritual world), a higher reality in contrast to the Realm Of Form (i.e. the physical world) that is depicted in the corridor reliefs. The entire plan, with its square and circular elements, can also be interpreted as a physical mandala through which the pilgrim may navigate in order to further his spiritual growth.

The large central stupa that crowns the monument has a hollow chamber within, that is completely walled off from the outside. When opened during restoration, it was found to contain an unfinished Buddha image that may represent a transcendent spiritual state. Besides these interpretations, the monument as a whole with its overall form and various levels and decorations can be seen both as a symbolic stupa, and as a world-mountain. All of these symbolic meanings are compatible with each other, and probably all were intended to apply here. Such multivalent symbolism was culturally available and readily understood both to the builders of the monument and to those who utilized it in their religious activities. This large and magnificent work can also be seen, in secular terms, as a most impressive demonstration of the power and piety of the Sailendra kings who organized and financed its construction.

The measurements of the monument are given by Soediman (in "Borobudur Cultural Heritage," Studies in Conservation, Vol. 18, No. 3, August 1973, pp. 102-112) as 123m (400 ft) each side, by 31m (100 ft) high-----

¹J. W. Heisig, *Way of Enlightenment, Way of Salvation, Studies In Interreligious Dialogue* 14 (2004), p. 57. Fifty four is half of 108. Most commentators quote a figure of fifty two teachers, omitting to count Maitreya and Samantabhadra.

What is the representation of Borobudur structure?

At Borobudur Temple, the kamadhatu is represented by the base, the rupadhatu by the five square terraces, and the arupadhatu by the three circular platforms as well as the big stupa. Borobudur's design is a mix of Javanese style and Gupta dynasty architecture, reflecting the blend of indigenous and Indian aesthetics in ancient Java. Over 500 statues of Buddha are positioned around Borobudur, and Borobudur contains roughly 3,000 bas-relief sculptures.

The entire edifice is crowned by a large stupa at the centre of the top circle. The way to summit extends through some 4.8 km of passages and stairways. The design of Borobudur, a temple-mountain symbolizing the structure of universe, influenced temple built as Angkor, Cambodia.

Buddhist elements in the Borobudur: 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. 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.

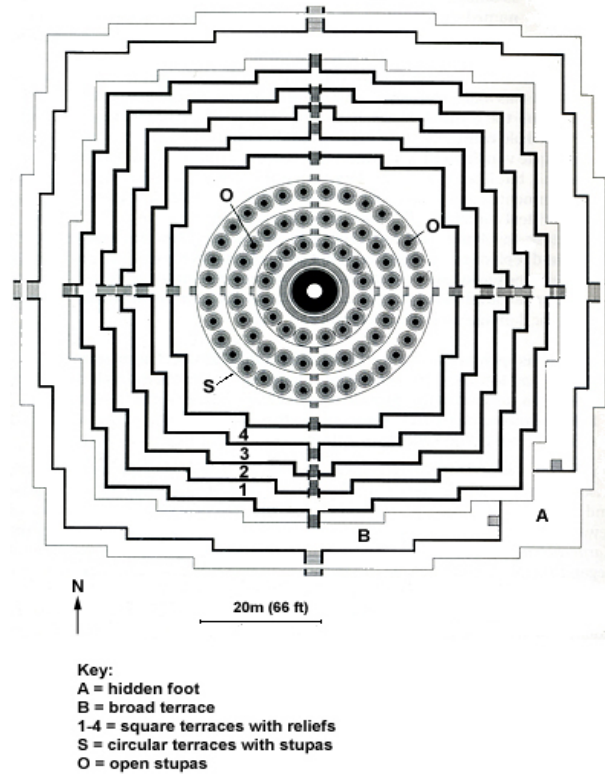
The monument is built to represent the universe according to Buddhist cosmology, divided into the Spheres of Desire, Form and Formlessness. Kamadhatu, the Sphere of Desire, is represented by the panels of the hidden base, which depict man's concern for worldly desires and pleasures. The physical movement of circumambulating the structure symbolizes the non-physical—or spiritual—path of enlightenment. In a real sense, then, the concept of ...

Around the circular platforms are 72 openwork stupas, each containing a statue of the Buddha. The monument was restored with UNESCO's help in the 1970s. The structure, composed of 55,000 square meters of lava-rock is erected on a hill in the form of a stepped-pyramid of six rectangular storeys. A total of 72 of these stupas are arranged on three circular terraces around the main central stupa.

Buddha statues — The structure comprises six square platforms topped by three circular platforms, decorated with 2,672 relief panels and 504 Buddha statues. Besides decorated with beautiful reliefs, Borobudur Temple also has 504 statues of Buddha sitting all of which are carved on a round stone ...



A carved spout (*makaras*) for water drainage.



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

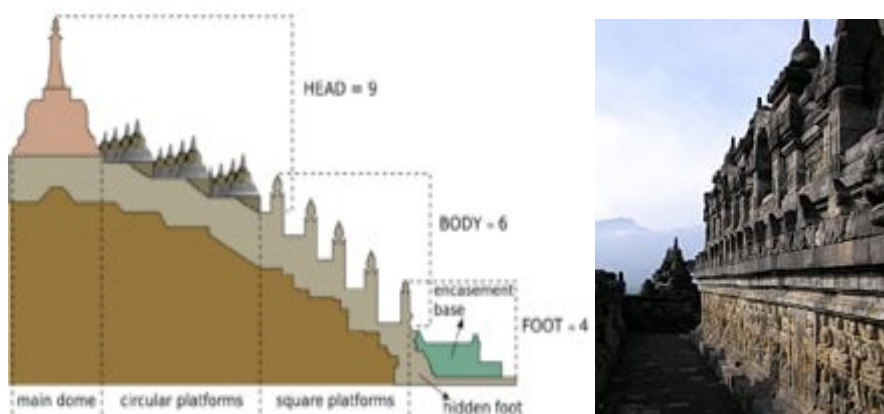
Approximately 55,000 m³ (almost 2 million cubic feet) of stones came from neighboring rivers to build the monument. Workman cut the stone to size, transporting them to the site and laid without mortar. Knobs, indentations and dovetails formed joints between stones. Artists created reliefs *in-situ* after the building had been completed. The monument enjoys a good drainage system to cater for the area's high storm water run-off. To avoid inundation, 100 spouts embellish each corner with a unique carved gargoyles (*makaras*). Stairways climb up at the center of each side with a number of gates, watched by a total of 32 lion statues.

Borobudur differs markedly with the general design of other structures built for that purpose. Instead of building on a flat surface, Borobudur sits on a natural hill. The building technique has similarities with other temples in Java. With no inner space as in other temples and its general design similar to the shape of pyramid, Borobudur at

first had been mistaken as a *stupa* instead of a temple (or *candi* in Indonesian).^[13] A *stupa* serves as a shrine for the Lord Buddha. Sometimes craftsmen build stupas only as devotional symbols of Buddhism. A temple, on the other hand, serves as a house of deity and have inner spaces for worship. The complexity of the monument's meticulous design suggests a temple.

The structure comprises six square platforms topped by three circular platforms, decorated with 2,672 relief panels and 504 Buddha statues.^[14] Seventy-two Buddha statues seated inside the perforated stupa surround a main dome, located at the center of the top platform. The monument serves both as 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 circumambulating the monument while ascending to the top through the three levels of Buddhist cosmology, namely, *Kamadhatu* (the world of desire); *Rupadhatu* (the world of forms); and *Arupadhatu* (the world of formless). During the journey, the monument guides the pilgrims through a system of stairways and corridors with 1,460 narrative relief panels on the wall and the balustrades.

Pilgrimage constitutes the central congregational worship in Borobudur. The system of staircases and corridors ascending to the top platform guide pilgrims. Each platform represents one stage of enlightenment. The symbolism of sacred knowledge according to the Buddhism cosmology served as the model for the path that guides pilgrims.^[15]



Half cross-section with 4:6:9 height ratio for foot, body and head, respectively.

Scant records about the architect Gunadharma exist.^[16] Javanese legendary folk tales, rather than written in old inscriptions, serve as the only account of his name, referred to as the one who "... bears the measuring rod, knows division and thinks himself composed of parts."^[16] The architect had used the formula to lay out the precise dimensions of Borobudur. The nearby Buddhist temples of Pawon and Mendhut have identical formula. Archaeologists conjectured the purpose of the ratio formula and

the *tala* dimension has calendrical, astronomical and cosmological themes, as of the case in other Buddhist temple of Angkor Wat in Cambodia.

The main vertical structure divides into three groups: base (or foot), body, and top, resembling the three major division of a human body. The base measures 123x123 m² square in size and 4 meters (13 ft) high of walls. Five square platforms each with diminishing heights compose the body. The first terrace sets back 7 meters (23 ft) from the edge of the base. The other terraces set back by 2 meters (6.5 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. One main dome sits at the center, the top reaches the highest point of the monument (35 meters or 115 ft above ground level). Stairways at the center of each side with a number of gates, watched by a total of 32 lion statues, provide access to the upper part. The main entrance stands on the eastern side, the location of the first narrative reliefs. Stairways linking the monument to the low-lying plain rise on the slopes of the hill.

The monument's three-fold division symbolizes the three stages of mental preparation towards the ultimate goal according to the Buddhism cosmology, namely *Kamadhatu* (the world of desires), *Rupadhatu* (the world of forms), and finally *Arupadhatu* (the formless world). The base represents *Kamadhatu*, five square platforms (the body) *Rupadhatu*, and the three circular platforms and the large topmost stupa *Arupadhatu*. The architectural features between three stages have metaphorical differences. For instance, square and detailed decorations in the *Rupadhatu* disappear into plane less circular platforms in the *Arupadhatu* to represent how the world of forms—where men remain attached with forms and names—changes into the world of the formless.^[18]

In 1885, restorers discovered a hidden structure under the base. The "hidden foot" contains reliefs, 160 providing narrative describing the real *Kamadhatu*. The remaining reliefs, panels with short inscriptions, describe instruction for the sculptors, illustrating the scene they would carve. An encasement base hides the real base that served an unknown function. The encasement base had been built with detailed and meticulous design with aesthetics and religious compensation.

Reliefs

Borobudur contains approximately 2,670 individual bas reliefs (1,460 narrative and 1,212 decorative panels) covering the façades and balustrades. The total relief surface measures 2,500 m², the panels distributed at the hidden foot (*Kamadhatu*) and the five square platforms (*Rupadhatu*).

The narrative panels, telling the story of Sudhana and Manohara, group into eleven series encircled the monument with the total length of 3,000 meters (1.86 miles). The hidden foot contains the first series with 160 narrative panels and the remaining ten series distribute throughout walls and balustrades in four galleries starting from the eastern entrance stairway to the left. Narrative panels on the wall read from right to left, while on the balustrade read from left to right. That conforms with *pradaksina*, the ritual of circumambulation performed by pilgrims who move in a clockwise direction while keeping the sanctuary to their right.

The hidden foot depicts the story of the karma law. The walls of the first gallery have two superimposed series of reliefs; each consists of 120 panels. The upper part depicts the biography of Buddha, while the lower part of the wall and also balustrades in the first and the second galleries tell the story of Buddha's former lives.^[20] The remaining panels depict Sudhana's further wandering about his search; terminated by his attainment of the Perfect Wisdom.

The law of karma (Karmavibhangga)

The 160 hidden panels form a discontinuous story, each panel providing one complete illustration of cause and effect. Depictions of blameworthy activities, from gossip to murder, with their corresponding punishments have been etched. Praiseworthy activities, including charity and pilgrimage to sanctuaries, and their subsequent rewards, appear. The pains of hell and the pleasure of heaven, as well as scenes of daily life, complete with the full panorama of *samsara* (the endless cycle of birth and death), have been illustrated.

The birth of Buddha (Lalitavistara)



One relief on a corridor wall.

The story starts from the glorious descent of the Lord Buddha from the Tushita heaven, and ends with his first sermon in the Deer Park near Benares. The relief shows the birth of Buddha as Prince Siddharta, son of King Suddhodana and Queen Maya of Kapilavastu (in present-day Nepal).

Twenty-seven panels showing various preparations, in heavens and on earth, to welcome the final incarnation of Bodhisattva precede the story.^[21] Before descending from Tushita heaven, Bodhisattva entrusted his crown to his successor, the future Buddha Maitreya. He descended on earth in the shape of white elephants with six tusks, penetrated to Queen Maya's right womb. Queen Maya had a dream of that event, which had been interpreted that his son would become either a sovereign or a Buddha.

While Queen Maya felt the time to give the birth had arrived, she went to the Lumbini park outside the Kapilavastu city. She stood under a plaksa tree, holding one branch with her right hand and she gave birth to a son, Prince Siddharta. The story on the panels continues until the prince became Buddha.

Narrative Panels Distribution			
section	location	story	#panels
hidden foot	wall	Karmavibhanga	160
first gallery	main wall	Lalitavistara	120
		Jataka/Avadana	120
	balustrade	Jataka/Avadana	372
		Jataka/Avadana	128
second gallery	main wall	Gandavyuha	128
	ballustrade	Jataka/Avadana	100
third gallery	main wall	Gandavyuha	88
	ballustrade	Gandavyuha	88

fourth gallery	main wall	Gandavyuha	84
	ballustrade	Gandavyuha	72
Total			1,460

Prince Siddharta story (Jataka) and other legendary persons (Avadana)

Jatakas constitute stories about the Buddha before his birth as Prince Siddharta. Avadanas bare similarity with jatakas except with a main figure other than Bodhisattva himself. Other legendary persons have been attributed with the saintly deeds. Jatakas and avadanas receive treatment in one and the same series in the reliefs of Borobudur.

The first twenty lower panels in the first gallery on the wall depict the *Sudhanakumaravadana* or the saintly deeds of Prince Sudhanakumara. The first 135 upper panels in the same gallery on the balustrades have been devoted to the thirty four legends of the *Jatakamala*. The remaining 237 panels depict stories from other sources, as do for the lower series and panels in the second gallery. Some jatakas stories have been depicted twice, for example the story of King Sibhi.

Sudhana search of the Ultimate Truth (Gandavyuha)

Gandavyuha, a story about Sudhana's tireless wandering in search of the Highest Perfect Wisdom, covers two galleries (third and fourth) and also half of the second gallery. They comprise in total 460 panels. The principal figure of the story, the youth Sudhana, son of an extremely rich merchant, appears on the 16th panel. The preceding 15 panels form a prologue to the story of the miracles during Buddha's *samadhi* in the Garden of Jeta at Sravasti.

During his search, Sudhana visited no less than thirty teachers but none of them had satisfied him completely. Manjusri then instructed him to meet the monk Megasri, where he received the first doctrine. Sudhana journey continues to meet in the following order Supratisthita, the physician Megha (Spirit of Knowledge), the banker Muktaka, the monk Saradhvaja, the upasika Asa (Spirit of Supreme Enlightenment), Bhismottaranirghosa, the Brahmin Jayosmayatna, Princess Maitrayani, the monk Sudarsana, a boy called Indriyesvara, the upasika Prabhuta, the banker Ratnachuda, King Anala, the god Siva Mahadeva, Queen Maya, Bodhisattva Maitreya and then back to Manjusri. Each meeting has given Sudhana a specific doctrine, knowledge and wisdom. Those meetings appear in the third gallery.

After the last meeting with Manjusri, Sudhana went to the residence of Bodhisattva Samantabhadra, depicted in the fourth gallery. The entire series of the fourth gallery has been devoted to the teaching of Samantabhadra. The narrative panels finally end with the Sudhana's achievement of the Supreme Knowledge and the Ultimate Truth.



A detailed carved relief stone./A Buddha statue with the hand position of *dharmachakra mudra* (turning the Wheels of the Law).

Apart from the story of Buddhist cosmology carved in stones, Borobudur has many Buddha statues. The cross-legged Buddha statues, distributed on the five square platforms (the *Rupadhatu* level) and on the top platform (the *Arupadhatu* level), sit in lotus positions.

The Buddha statues stand in niches at the *Rupadhatu* level, arranged in rows on the outer sides of the balustrades. As platforms progressively diminish to the upper level, the number of Buddha statues decreasing. The first balustrades have 104 niches, the second 104, the third 88, the fourth 72 and the fifth 64. In total, 432 Buddha statues appear at the *Rupadhatu* level.^[14] At the *Arupadhatu* level (or the three circular platforms), Buddha statues stand inside perforated stupas. The first circular platform has 32 stupas, the second 24 and the third 16, totaling 72 stupas. Of the total 504 Buddha statues, over 300 have been mutilated (mostly headless) and 43 have been stolen.

The preparation of a mandala is an artistic endeavor, but at the same time it is an act of worship. In this form of worship concepts and form are created in which the deepest intuitions are crystallized and expressed as spiritual art. The design, which is usually meditated upon, is a continuum of spatial experiences, the essence of which precedes its existence, which means that the concept precedes the form.

Science and Golden Ratios in Mandala Architecture

In its most common form, the mandala appears as a series of concentric circles. Each mandala has its own resident deity housed in the square structure situated concentrically within these circles. Its perfect square shape indicates that the absolute space of wisdom is without aberration. This square structure has four elaborate gates. These four doors symbolize the bringing together of the four boundless thoughts namely - loving kindness, compassion, sympathy, and equanimity. Each of these gateways is adorned with **bells**, garlands and other decorative items. This square form defines the **architecture** of the mandala described as a four-sided palace or

temple. A palace because it is the residence of the presiding deity of the mandala, a **temple** because it contains the essence of the Buddha.

The series of circles surrounding the central palace follow an intense symbolic structure. Beginning with the outer circles, one often finds a ring of fire, frequently depicted as a stylized scrollwork. This symbolizes the process of transformation which ordinary human beings have to undergo before entering the sacred territory within. This is followed by a ring of thunderbolt or diamond scepters (vajra), indicating the indestructibility and diamond like brilliance of the mandala's spiritual realms.

In the next concentric circle, particularly those mandalas which feature wrathful deities, one finds eight cremation grounds arranged in a wide band. These represent the eight aggregates of human consciousness which tie man to the phenomenal world and to the cycle of birth and rebirth.

Finally, at the center of the mandala lies the deity, with whom the mandala is identified. It is the power of this deity that the mandala is said to be invested with. Most generally the central deity may be one of the following three:

R E F E R E N C E S

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Borobudur's Pāla forebear? A field note from Kesariya, Bihar, India,*swati chemburkar*