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Borobudur: The Top Plan and the Upper Terraces

by JOHN M. LUNDQUIST

Introductory Remarks and Survey of the Literature

There is possibly no more famous or more widely illustrated image from Asian art than the top plan of Borobudur, the 8th-9th century A.D. Buddhist temple on the island of Java. The plan view of Borobudur has become the paradigm of the *maṇḍala*, and is frequently illustrated in books on Eastern religions without any particular reference to Borobudur, but rather simply as cover art. And yet, incredibly, after the hundreds of books and articles that have been published on the temple of Borobudur, there still remains one fundamental error, repeated in virtually every publication which includes illustrations of the building: the top plan is almost universally published in an inaccurate version that originated in the 19th century (Leemans 1873: pls. III-IV). Only recently, in two volumes that contain extensive photographs and plans, both published in 1990, has the top plan been published accurately for the first time in books intended for a wider audience ⁽¹⁾.

The misconceptions that have existed concerning the top plan of Borobudur have to do with the three terraces at the top of the temple, those that carry the seventy-two open-work *stūpas*. The erroneous top plans show all three upper terraces as perfectly circular (Fig. 1). And in fact the majority of authors commenting on the temple and its religious significance refer to the 'circular terraces', and work this viewpoint into their interpretations of the ritual processes that might have taken place at Borobudur. As the aerial photographs in the two recently published books clearly show (and as direct overhead aerial photographs have always shown), the first two of the upper three terraces are elliptical, that is slightly squared or rounded off at the corners, while only the third is distinctly circular (Figs. 2-3).

Furthermore, when we incorporate the design motifs of the seventy-two *stūpas*

(*) I wish to thank Michael P. Lyon for a stimulating conversation that gave me the impetus that led to this essay, and Lizabeth Merritt for perceptive comments that improved the focus and style of the essay.

(1) Soekmono, De Casparis & Dumarçay 1990. The oblique aerial view is found on pp. 148-49, in a photograph by George Gerster, while the accurate top plan (by Jacques Dumarçay, first published in 1978) is found on the gatefold following p. 163. Miksic 1990: plan on p. 41. Jacques Dumarçay published the correct top plan in Dumarçay 1983: pl. 10. He also published the same plan in Dumarçay 1978: fig. 4, p. 17.

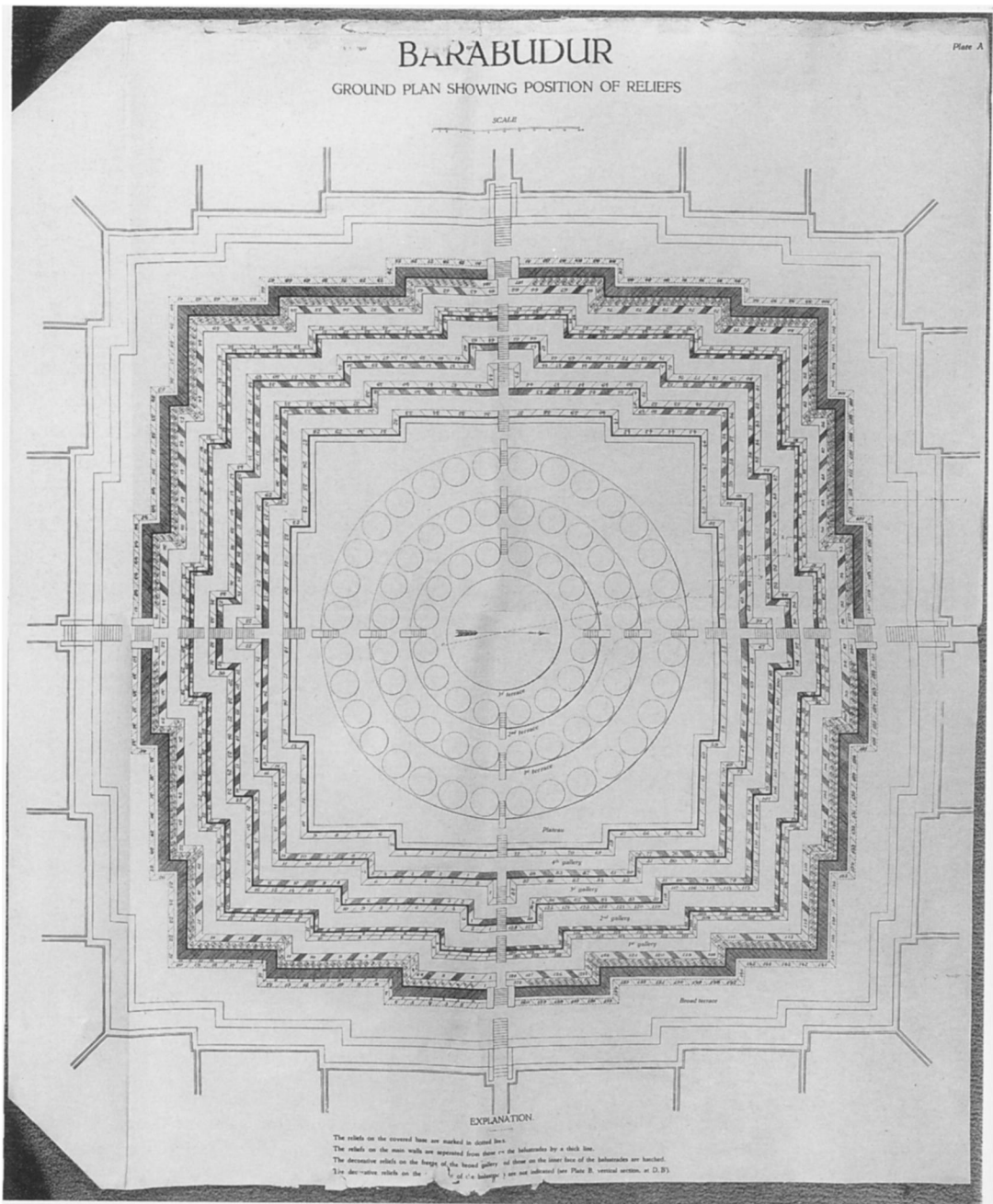


Fig. 1 - Top Plan of Borobudur. (After Krom 1986).

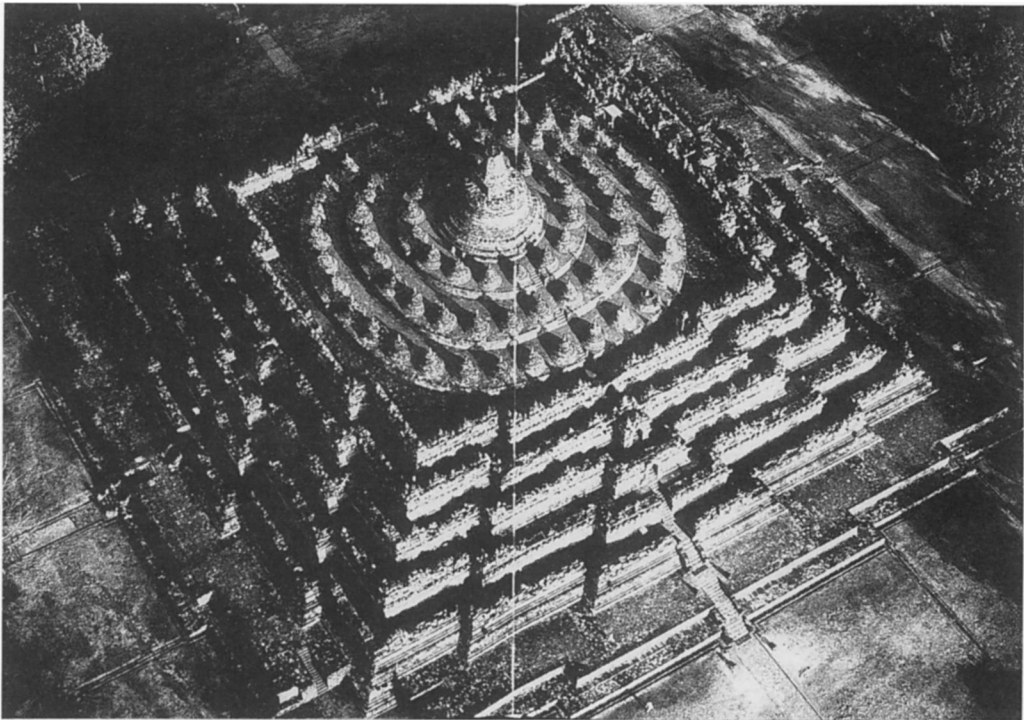


Fig. 2 - Aerial View of Borobudur. (After Soekmono, De Casparis & Dumarçay 1990: 148-49. Photo G. Gerster).

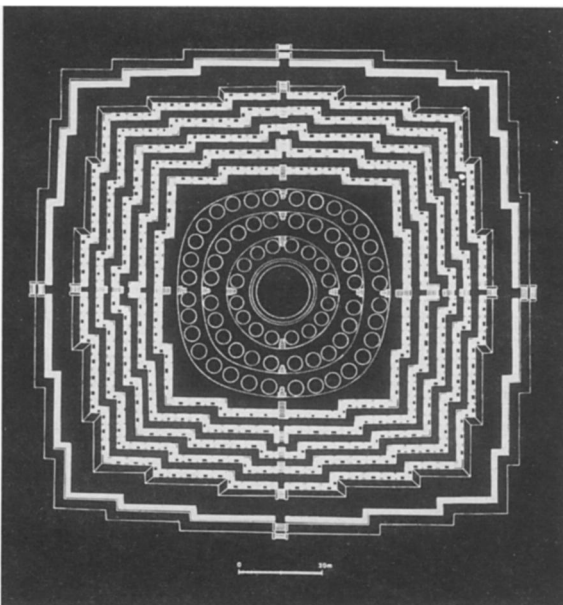


Fig. 3 - Top Plan of Borobudur. (After Soekmono, De Casparis & Dumarçay 1990: 167. Drawing by J. Dumarçay).

into our understanding of the shape of the three upper terraces, as well as the number of *stūpas* on each terrace, we must accept that these factors were all consciously included by the builders, and that our understanding of the ritual processes of the temple is correspondingly both changed and increased. The *stūpas* on the two elliptical terraces have diamond-shaped lattice work, and square *harmikās*, while the *stūpas* on the third, circular terrace have square lattice work and octagonal *harmikās*. As far as I am aware, there is not a single author who has taken all of these factors into account in his interpretation of the temple. In fact, some of the most recent learned studies of the Borobudur have included the erroneous top plan as a reference point for the study, while the authors refer to the 'circular terraces', and give no attention to the differences in design of the *stūpas*, nor attempt to correlate all of this information as part of their interpretation. In one recent study by Adrian Snodgrass, the author includes on the same page two aerial views of the temple, one of them oblique the other directly overhead (this latter clearly shows the elliptical shape of the first two terraces), along with the usual erroneous artist's top plan (Snodgrass 1985: 142) (Fig. 4). In the excellent 1981 study edited by Luis O. Gomez and Hiram W. Woodward, Jr, the authors illustrate the inaccurate top plan on p. xvii. Several essay writers in this volume refer to the 'circular terraces'.

In his fascinating imaginary reconstruction of an ancient ritual journey through the temple's galleries, Alex Wayman brings the initiates up to the level of the 'three circles surrounding the central *stūpa*', where they can see 'seventy-two smaller *stūpas*, all with the sameness of ensouled stars [...]'. As to the question 'why the seventy-two smaller stupas are ranged in three circles, the guide continues: There are three mysteries of the Buddha — Body, Speech, and Mind' (Wayman 1981: 156-57).

In the most recent, exhaustive study of the *Stūpa*, Kottkamp actually refers in several footnotes to the *Borobudur, Prayer in Stone* volume, but reproduces the erroneous, circular top plan of Borobudur. He also refers to 'circular' terraces (²).

While there are no scholars who incorporate the actual shape of the three upper terraces into their interpretations of Borobudur, there are several who note the differing design motifs on the *stūpas* themselves. Thus N.J. Krom (1986, vol. 2: 150), Lokesh Chandra (1980: 311), and John Miksic (³). But none of these develops the full implications of the design differences as part of the ritual program, nor does any of them relate the *stūpa* designs to the shape of the three terraces, or the number of *stūpas* on each terrace. Lokesh Chandra gives a very brief suggestion as to the significance of the designs on the *stūpas* of the 'circular platforms', relating them to the presence of geometric motifs in paintings from Khotan, and to Khotanese Buddhist texts which state that 'transformations of the Buddha exist sometimes in the form of Mount Sumeru,

(²) Kottkamp 1992: For the top plan, see p. 649. For one of many references to circular terraces, see p. 365.

(³) Miksic 1990: 55. On this same page, Miksic, who reproduced the correct top plan on p. 41 of the same volume, refers to the 'round terraces'.

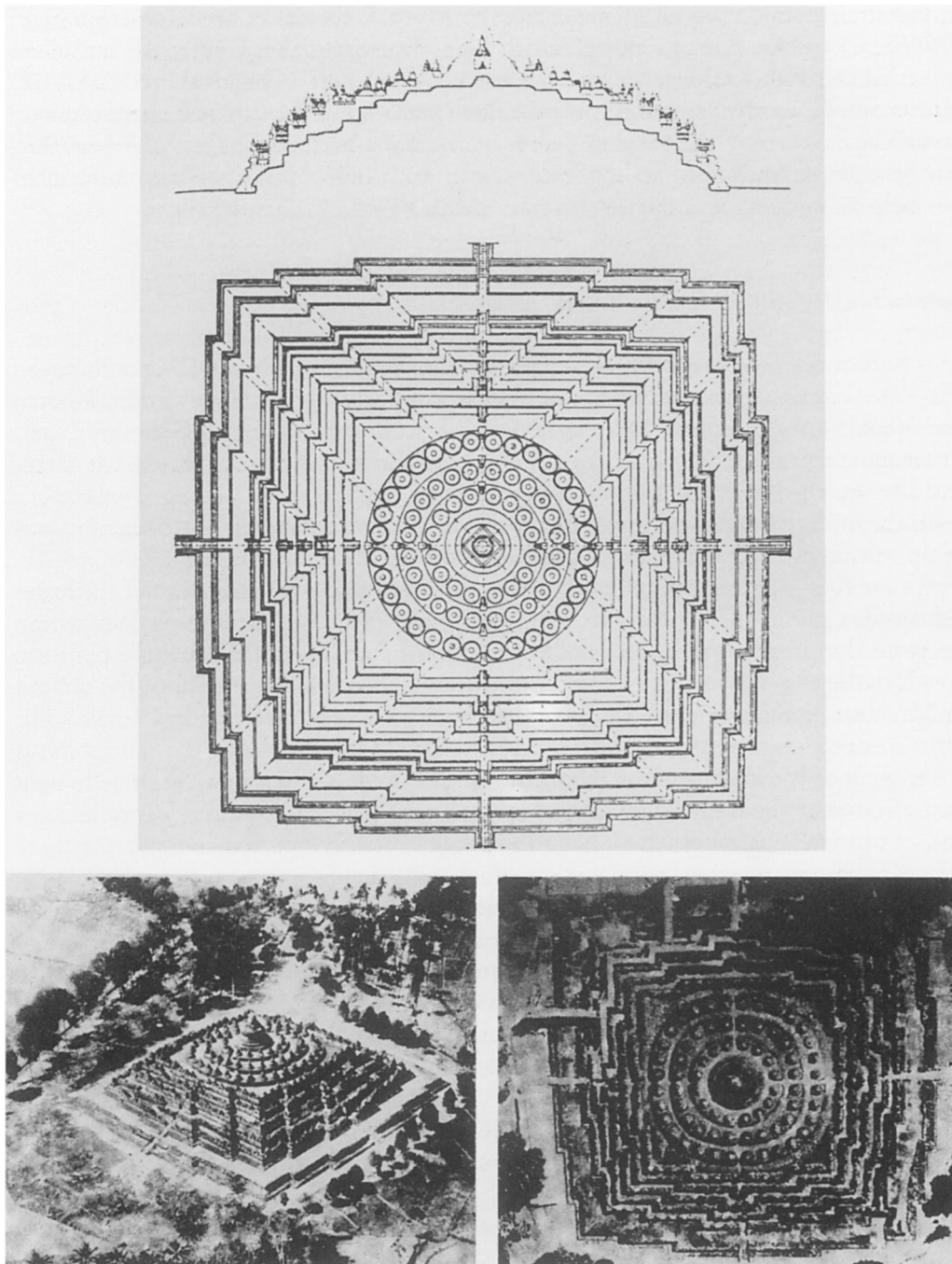


Fig. 4 - Borobudur. a. Section. b. Plan. c. Oblique aerial view. d. Aerial view from directly over head.
(After Snodgrass 1985: 142).

[...] of circle-nets, [...] of all square things, [...] and of all sorts of ornamentation [...]. This highly fruitful line of inquiry, which I will develop further below, was not taken any further by this scholar in his article mentioned here (Chandra 1980: 311-12). Miksic raises the questions concerning the non-circularity of the first two upper terraces, as well as concerning the varying shapes of the *stūpa* perforations and the *harmikās*, but he ends his questions on a negative note, concluding that the *Lotus Sūtra* does not help us answer such queries (Miksic 1990: 41).

Borobudur, Its Ritual, and the Upper Terraces

Borobudur is a magnificent temple of the Tantric (esoteric) Diamond Realm Maṇḍala (*Vajradhātu*) type, and has its closest architectural equivalents in the Tibetan and Nepalese Ādibuddha (*Vajradhāra*) temples, such as Kumbum in Gyantse, Tibet. The temple represents the sacred mountain of the Hindu-Buddhist tradition, Mt Meru, and the ascent of the mountain/temple in a circumambulating fashion (*pradakṣiṇa*), takes the initiate through an elaborate process of learning the sacred doctrines by means of the reliefs carved into the square galleries of the first four levels (Tucci 1989: 169-70). There are four hundred thirty-two Buddhas arranged along the four sides of the lower balustrades, giving the appearance, from a distance, of *Siddhas* meditating deep within caves on the sides of the sacred mountain. As the initiate would reach the platform on which the elliptical and circular levels were raised, he would have reached the summit of Mt Meru, having left the world of appearances of the lower, gallery levels. His ultimate goal was the summit of Meru, represented at Borobudur by the central *stūpa*, the summit of Mt Meru and thus the center of the universe, within which it is thought that a statue of the primordial Ādibuddha was once placed. That level, formlessness and emptiness, must be reached, not all at once or directly by circumambulating three 'circular' galleries, but must consist in a gradual, transitional process of circumambulation and instruction. The gradualness and transitional nature of the ritual is reflected in the gradualness of the architecture: square, with insets and projections (the shape of the lower terraces), elliptical (the first two upper terraces), and circular.

There is throughout a gradual progression, circumambulating, moving to higher levels, moving inward toward the center or heart of the sacred mountain. Nowhere at Borobudur is there in the architecture a sudden or drastic jump from one architectural or sculptural or design program to another. Everything is achieved in subtle, gradual transitions. On conceptual grounds alone it does not make sense to consider the upper terraces as being architecturally homogeneous, or as representing a single, unified ritual process throughout.

It is important to recognize that the actual shape of the upper terraces, and of the design features on the *stūpas* that stand on these terraces, is crucial to a full understanding of the reasons why the temple was built in this way. This understanding also extends our comprehension of the ritual processes that took place there. To ignore

the shape of the terraces, the design features of the *stūpas*, and the number of *stūpas* on each terrace, along with other important details, and to fail to integrate the combination of these details into our understanding, is to gloss over with generalities details in the building and in the ritual that must have had exceptional importance to those for whom Borobudur was a living spiritual edifice.

Alex Wayman has established the theoretical basis for understanding the architecture of Borobudur within the Tibetan Tantric scriptural and pictorial tradition. Central to this are various Tantric texts from the Tibetan Tripiṭaka, translated by him in his article 'Symbolism of the Maṇḍala Palace'. The same article contains an illustration of a Mt Meru Temple Banner, which can also be used to further our understanding of Borobudur (Wayman 1973: 82-109). Our understanding of the texts translated by Wayman can be supplemented by materials translated by Lessing and Wayman in *Fundamentals of the Buddhist Tantras* (1968), and Mt Meru Temple paintings in the Yung-Ho-Kung Tibetan Temple in Beijing, illustrated with commentary by F.D. Lessing (1942, vol. 1: 101-13, pls. XXIII-XXIV).

The Mt Meru Temple Banner (Wayman 1973: 104, pl. 9) (Fig. 5), shows a pyramidal base constructed of five square platforms. This base is meant to represent Mt Meru. At its summit one can see a three-tiered palace in the shape of a Chinese pagoda. The section of the *Fundamentals of the Buddhist Tantras* that corresponds to the palace section of the banner, gives instructions for its generation following the generation of Mt Meru: 'Above it, he is to imagine a canopy [appearing] in an instant. On top of that [canopy], he generates the complete characteristics of an eaved palace and generates within it various seats; and he may also generate within the palace *stūpas* of the varieties "victorious" and "radiant"'. So here we have the rationale for the building of Borobudur: a pyramidal base representing Mt Meru, with a round, three-tiered *stūpa*-like palace at its summit, resting in the clouds (Chandra 1980: 310-11; Wayman 1973: 175-77). The palace in the painting in the Yung-Ho-Kung is called the 'palace of Indra' (Lessing 1942: 101). Other Tibetan texts stipulate the palace of the primordial Buddha, the Ādibuddha, as sitting atop Mt Meru. Indeed, it was from the top of Mt Meru that the Ādibuddha went to proclaim the Yoga Tantras, before appearing in the world of humankind as the Buddha Śākyamuni. Thus also the Diamond-Realm or *Vajradhātu* Maṇḍalas show the Ādibuddha seated in the midst of the circular palace atop Mt Meru (Lessing 1942: 111-13; Chandra 1980: 310-11). As part of the palace, various kinds of *stūpas* may be constructed. And this brings us to a more detailed discussion of the upper terraces.

Analysis of the Upper Terraces and Their Ritual

By virtue of their shape, the three upper terraces must break down into three groups, the first two, elliptical terraces (which represent two distinct groups within themselves), and the third, circular one. The first elliptical terrace contains thirty-

two *stūpas*, the second twenty-four. The Buddhas that can be seen through the lattice work of these *stūpas* all sit in the posture of *dharmacakra* (Fig. 6), the *mudrā* of turning the wheel of the law, or, in the opinion of some scholars, in the *mudrā* of *bodhyaṅgi*, the member of enlightenment. The *aṇḍa* of each *stūpa* on these two levels has diamond-shaped lattice work, with square *harmikās* (Fig. 7). The third terrace, which is perfectly circular, has sixteen *stūpas*, in this case with square lattice work in the *aṇḍa*, and with octagonal *harmikās* (Fig. 8). The Buddhas seated inside these *stūpas* have the same *mudrā*.

The many symbols of Buddhist Tantric teaching involved in these terraces are breath-taking in their quantity, variety, subtlety and sheer teaching power. The first symbolism that strikes one here is the number symbolism of the *stūpas* themselves, namely the series thirty-two, twenty-four, and sixteen, and the total, seventy-two. First of all, with respect to the overall number of *stūpas*, seventy-two. Alex Wayman has convincingly related this number to a doubling of the number of deities in a *Vajradhātu* Maṇḍala, thirty-six, relating this to a verse from a Tantra preserved in the Tibetan Tripiṭaka: 'Like the wheel of the law, it has sixteen spokes along with a nave. It is possessed of a triple series, and the spokes are to be doubled' (Wayman 1973: 93).

Furthermore, Borobudur sits very close to the equator, such that on a clear night 'the zodiacal stars north and south of the ecliptic would be viewed with equal clarity'. As also pointed out by Wayman, within the ancient astrological series of thirty-six decanates, the number seventy-two would refer to the thirty-six star groups north and south of the equator. Thus the upper terraces of Borobudur would have been constructed to represent a cosmological scheme, with the primary ritual occurring under the starry night-time sky, and indeed it is common within Buddhist meditational practices for devotees to remain awake into the night, and for rituals to take place at that time (Wayman 1981: 153-54 and fn. 60, 61).

The seventy-two *stūpas* oriented in this way also further underline the symbolism of Borobudur as a heavenly temple, with the 'palace of Indra' on its top, the upper terraces actually situated within the starry sky, above Mt Meru, as the Mt Meru Temple Banner indicates.

The Tantra quoted above from the Tibetan Tripiṭaka included the phrase 'Like the wheel of the law, it has sixteen spokes along with a nave. It [i.e. the *maṇḍala*] is possessed of a triple series'. The center point of the upper terraces was the innermost one, the only one that is actually circular. And at the center of this terrace stood the innermost *stūpa*, within which would have sat the statue of the Ādibuddha, completely out of sight. The circular terrace is the one that had 'sixteen spokes', that is sixteen *stūpas*. This innermost circle would have brought to the mind of the initiate the Sixteen Aspects of the Four Noble Truths. But it [i.e. the *maṇḍala*] is also a 'triple series', that is, there are three terraces in the *maṇḍala* palace of the *Akaniṣṭha* heaven, the place where 'Gautama was initiated as a Complete Buddha [...]'. Within the Mahāyāna tradition, which Borobudur certainly represents, some initiates, at least, must have come with the idea of being able to reach into the 'pure abodes'

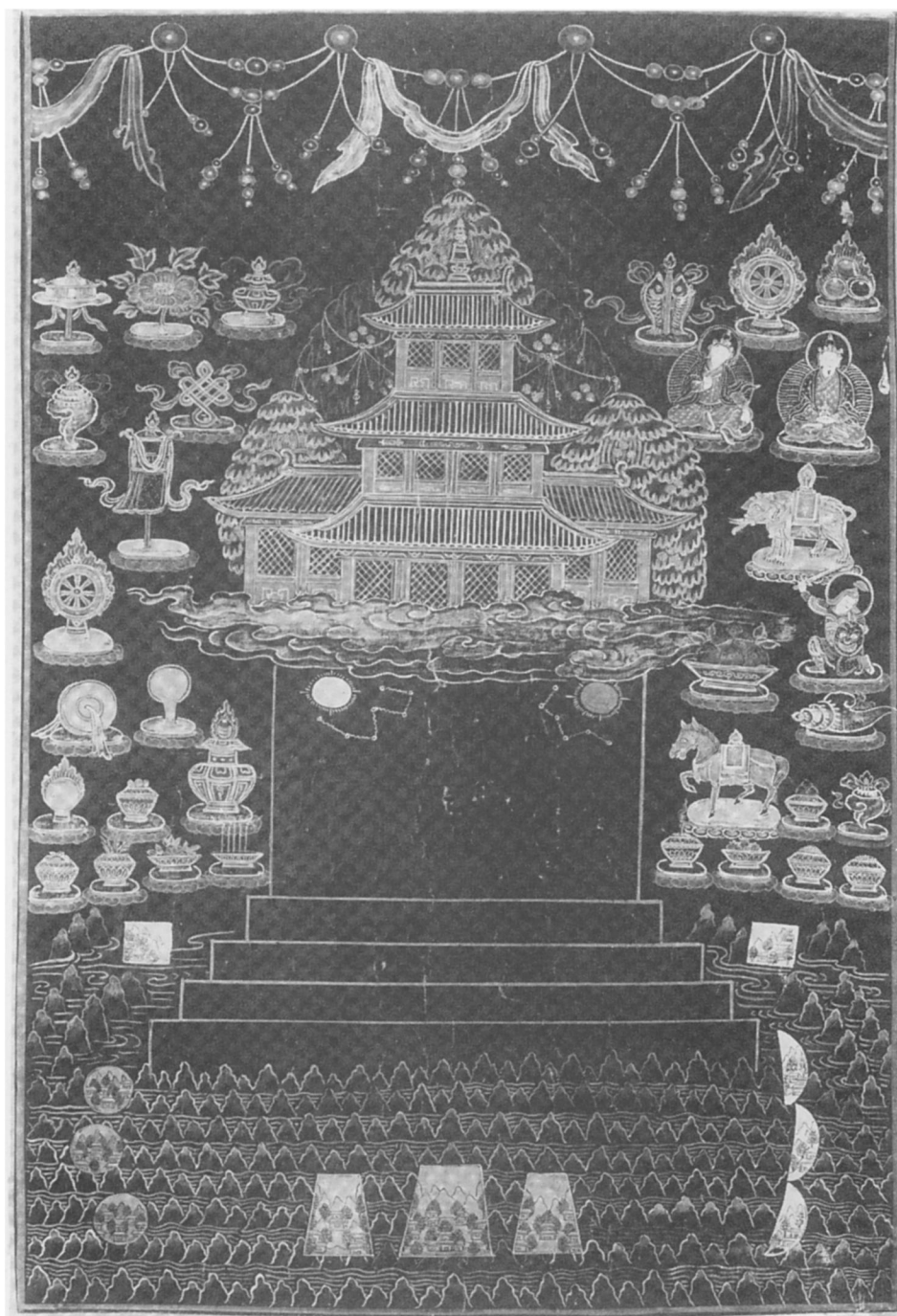


Fig. 5 - Mt Meru Temple Banner. (After Wayman 1973: 104).

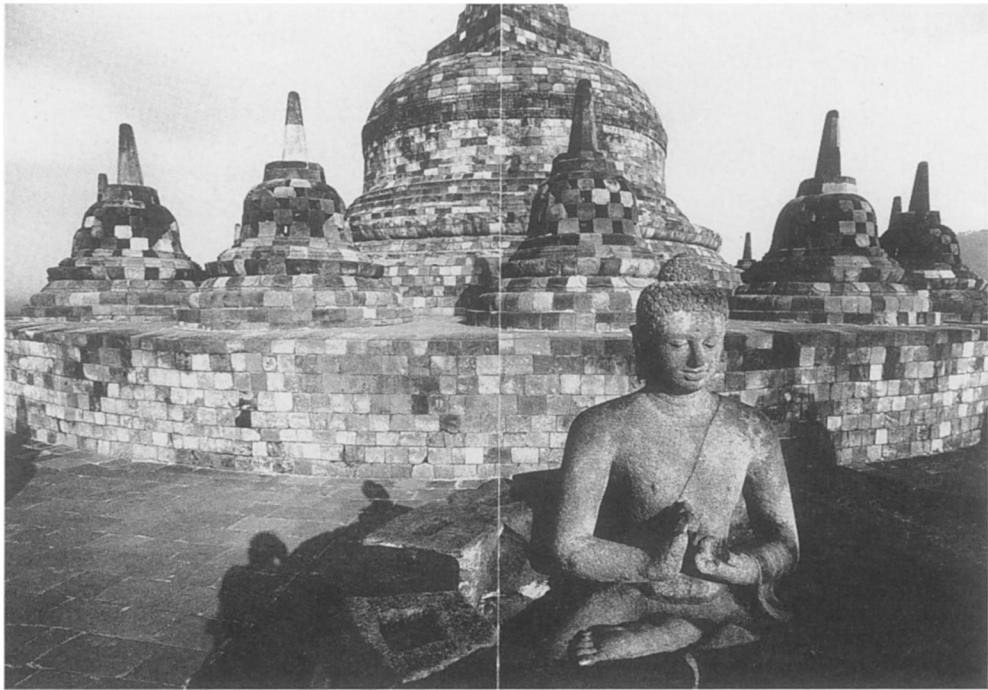


Fig. 6 - The Third Upper Terrace and the Inner Stupa, Borobudur Temple, Java, Indonesia. (After Soekmono, De Casparis & Dumerçay 1990: 104-5. Photo R. Burri).



Fig. 7 - The Three Upper Terraces and the Inner Stupa, Borobudur Temple, Java, Indonesia. (Photo J.M. Lundquist).

where the ultimate stage of a Bodhisattva could be attained (Wayman 1973: 91-92). As Wayman stated, 'The "center" is taken as a round palace which is the symbol standing for the *dharmadhātu*' (*ibid.*: 95).

As we move inward from the outer, elliptical terrace, with its thirty-two *stūpas*, we move in a decreasing series of eight, rising in height with each new terrace, to the twenty-four *stūpas* of the middle, elliptical terrace, and to the inner, circular terrace, with its sixteen *stūpas*. Taken together, these three series, moving from the outer to the inner, constitute the Body, Speech and Mind of the Buddha. The progression of the *stūpas* in the series of eight naturally brings to the mind of the initiate many things: the Eight-Fold Noble Path, the Eight Auspicious Symbols, the Eight Liberations.

Another central symbolism of these terraces is the Wheel of the Law, with its twelve interdependent links in the chain of causation. The Wheel of the Law has been set in motion, based on the Buddha's first sermon at Benares. According to the Mahāyāna tradition, the Buddha preached his first sermon on Mt Meru, thus the symbolism of the Borobudur terraces would correlate with such a tradition: the Buddhas sitting in the *stūpas* can all be interpreted to be in the *mudrā Dharmacakra*, turning of the Wheel of the Law, and the *stūpas* were constructed with a symbolism that relied strongly on the first sermon (Miksic 1990: 53). In the commentary of the Tibetan saint, Buddhaguhya, to the Tantra quoted at length by Wayman (1973: 96), he writes:

The *dharmadhātu* is primordially pure; the nave is a symbol showing that. The spokes are a symbol of the perfection of compassion with skill in the means; and *dharma* is the realm exhibited at the nave.

At Borobudur, the primordial perfection was to be found at the center, in the central *stūpa*, where the statue of the Ādibuddha sat. The Ādibuddha was the primordial Buddha, the primal, non-dual essence, the source of universal mind, from which

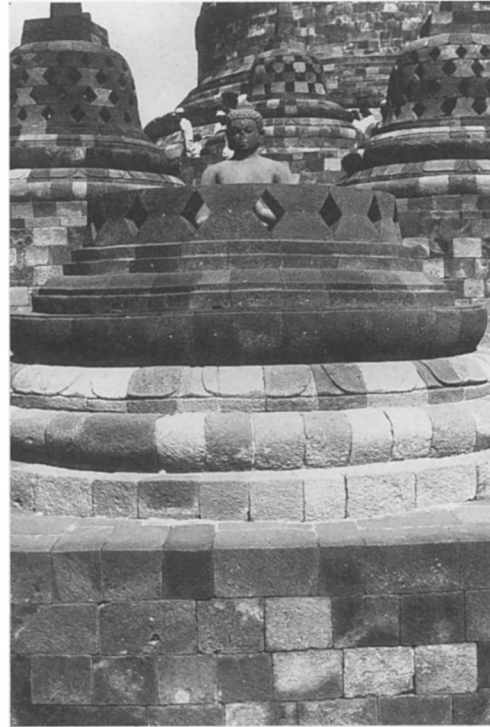


Fig. 8 - The Three Upper Terraces, Borobudur Temple, Java, Indonesia. (Photo J.M. Lundquist).

everything emanated, from which the physical universe originated (Lundquist 1993: 18; Olschak 1987: 188-96). 'The nave is a symbol showing that'.

In the same text (Wayman 1973: 96) Buddhaguhya said:

In order to take it that way, the garland of jewels which shows knowledge surrounds the circle.

Putting all of this together within the framework of an initiation ritual which has brought the initiate to the three upper terraces, I take it to mean that when the initiate has reached the two elliptical terraces, those which are not perfectly circular and therefore are not yet the primordial purity of *dharmadhātu*, that the initiate is, as it were, circumambulating or reprising the Wheel of the Law. The second terrace actually has twenty-four *stūpas*, the doubling of which from twelve may correspond directly to the twelve interdependent links, perhaps through a kind of reduplication based on emphasis. The rhythmical circumambulation, from thirty-two, to twenty-four, to sixteen *stūpas*, rising in height at each new terrace, may even have built up a tension in the initiate, as the perfection of the center drew ever closer. As he reached the inner, circular terrace, with its sixteen *stūpas*, he had passed beyond the limitations of the Wheel of the Law and, by internalizing the principles of the Eight-Fold Noble Path, represented ritually through the series of eights mentioned above, he reached the circle of the Sixteen Aspects of the Four Noble Truths. Here as well, according to Buddhaguhya, the initiate would call to mind the sixteen *sattvas*, whose perfection of compassion is represented by the sixteen spokes of the wheel.

With the initial promulgation of the Law by the Buddha, the Wheel of the Law was set into motion. When one had overcome the effects of the twelve interdependent links in the chain of causation one had reached the center, where 'the spokes are a symbol of the perfection of compassion with skill in the means and *dharma* is exhibited at the nave' (Wayman 1973: 96). At that point in the ritual where the initiate circumambulated the circular terrace, the initiate achieved the status of one of the *sattvas*.

This leaves one very important aspect of the upper terraces, and their roles in the initiation ritual carried out there. I am referring to the design motifs of the *stūpas* themselves. I have attempted to differentiate the three terraces based on their shape and on the numbers of *stūpas* on each terrace. The *stūpas* on the two elliptical terraces have diamond-shaped lattice work on their *aṇḍas*, and square *harmikās*. The *stūpas* on the circular terrace have square lattice work on the *aṇḍa* and octagonal *harmikās*. Furthermore, the spires on top of each *stūpa* are all, as far as I can determine, octagonal.

It has generally been thought that the *stūpas* of the three terraces are 'unique in Buddhist architecture' (Soekmono, De Casparis & Dumarçay 1990: 155). There certainly is no obvious parallel to them among the huge numbers of *stūpas* that are known from the Buddhist world. But there is a parallel, one that I think goes far towards solving many, but certainly not all, of the unresolved issues in the purpose

and function of Borobudur. We have been introduced above (Lessing & Wayman 1968) to the ritual from *Mkhas Grub Rje's* Tantra to the ritual for the generation of the *maṇḍala* palace above Mt Meru, and for the generation of the deities that will reside in it. There we are introduced to the phrase:

Above it, he is to imagine a canopy [appearing] in an instant. On top of that [canopy], he generates the complete characteristics of an eaved palace and generates within it various seats; and he may also generate within the palace *stūpas* of the varieties 'victorious' and 'radiant' (*ibid.*: 175).

Thus there are various types of *stūpas*, two of which are named in this text.

The Auspicious Stūpa of Many Doors

According to Tibetan texts relating to the purposes and architecture behind *stūpa* construction, translated by Giuseppe Tucci, there are traditions that there were eight classic *stūpas* built in the earliest period of Buddhism, each one of which was based on one of the great founding events of Buddhism, with corresponding architecture and symbolism. Furthermore, in his great work on the *stūpa*, Tucci gathered together dozens of *tsha-tsha*, mold-made clay plaques or figurines which frequently show images of various types of *stūpas*. These objects, which probably originated at the eight most sacred sites of Buddhism, were then brought to Tibet by pilgrims, where they have been found. Of the many *stūpa* types mentioned in the texts, and pictured on the *tsha-tsha*, one type stands out as representing, in my opinion, the *stūpa* type that was intended for the upper terraces of Borobudur by the builders. This type is the *bkra-sis sgo-man mchod-rten*, the 'auspicious *stūpa* of many doors'. Two of those illustrated by Tucci give an especially clear conception of the appearance of this type of *stūpa* (Tucci 1988: pls. X, XIa) (Figs. 9-10).

The Tibetan texts translated by Tucci associate the 'auspicious *stūpa* of many doors' with the third most important event within Buddhism, the first preaching at Benares. One of the texts (Tucci 1988: 127-28; see also p. 126, and pp. 21-24) states:

The third was erected in Benares by the five Bhadravargiyas and is called 'the auspicious stupa of many doors'. It is known that it was founded at the time of the first sermon: it is square and has 108 doors in relief as maximum number, fifty six as medium number and sixteen as minimum number. Furthermore, if there are four doors for each side, they represent the four truths, if they are eight the eight liberations, if they are twelve the twelve causal links, if sixteen the sixteen gradations of the void.

We thus see that there was a *stūpa* type characterized by 'many doors', that this type represented the first sermon, and that the number of doors carried with it a specific



Fig. 9 - *Tsha-Tsha*. (After Tucci 1988: table X).



Fig. 10 - *Tsha-Tsha*. (After Tucci 1988: table XI).

symbolism of the Buddhist doctrine. It seems possible to me that the *stūpas* on the upper terraces at Borobudur were intended to be 'auspicious *stūpas* of many doors'. This means that an understanding of the symbolism of Borobudur and its ritual will be lacking if the exact *stūpa* type of the terraces is not taken into account (insofar as this can be known — I am proposing that this issue is now solved), and also if the number of 'doors' that is, in the case of Borobudur the lattice-work, are not counted. Since the *stūpas* on Borobudur are miniature, of a larger scale to be sure than those on the *tsha-tsha* figurines, but still miniature, there seems to be no objection to seeing the lattice-work in this way. This would also solve the controversy of identifying the *mudrā* of the seated Buddhas: Since the *stūpa* type is that of the first sermon, the *mudrā* has been correctly identified as *Dharmacakra*.

Borobudur has been widely compared to the Tibetan and Nepalese Ādibuddha *stūpas*, which were also constructed on the basis of the Diamond-Realm or *Vajradhātu maṇḍala*. What has not been generally understood — in fact Tucci is the only scholar I am aware of who has called attention to this fact — is that the most famous of the Ādibuddha temples, Kumbum in Gyantse, Tibet is a *bkra-sis sgo-man mchod-rted*, 'lucky *stūpa* of many doors' (Tucci 1989: 172; see now Ricca & Lo Bue 1993). The parallels between the architecture, symbolism and ritual of Kumbum and Borobudur have been drawn by Lama Anagarika Govinda (1976: 63-70). The same author also published two photographs of the Kumbum (*ibid.*: frontispiece and facing p. 35) and this allows one to see, particularly from the frontispiece photograph, the 'many doors' of Kumbum.

(The photographs reproduced here are my own — Figs. 11-12). Since, at Kumbum, the upper portions of the building are covered with a dome and a campana, the architectural similarities of the two temples are not as obvious. Floor plans of the two reveal the close similarities more directly ⁽⁴⁾ (Fig. 13 = Kumbum. For Borobudur, see Fig. 3). In fact, based on the floor plan published by Tucci, what comes across most vividly from these comparisons is that the *stūpas* on the upper terraces at Borobudur are miniature 'auspicious *stūpas* of many doors', and that they are in fact typologically miniature versions, albeit with many unique design features which are doubtless rooted in Javanese soil, of the temple-type that we see at Kumbum. Furthermore, based on Tucci's sketch plan, the Dome, that level just below the highest level, called the Campana by Tucci, is not perfectly round, but is rather, oblong. The Campana, where the statue of the supreme deity of the temple, Vajradhāra sits in a darkened cell, is circular (Tucci 1989: 169, fig. A, 297-300; Ricca & Lo Bue 1993: 307, 313). From the point of view of the plans therefore, Borobudur and Kumbum are virtually identical.

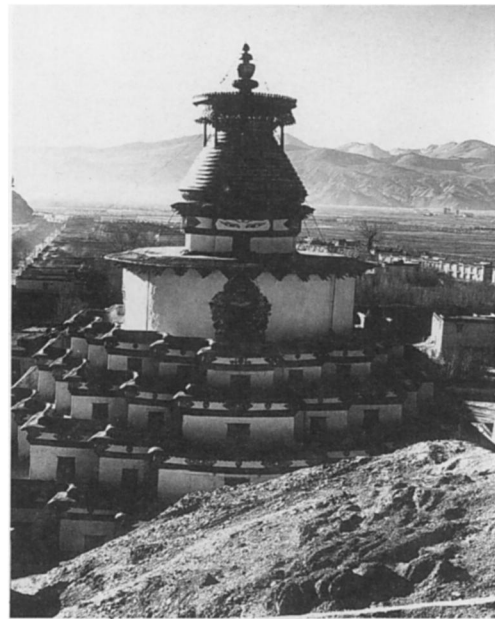


Fig. 11 - Kumbum Temple, Gyantse, Tibet.
(Photo J.M. Lundquist).

⁽⁴⁾ A consolidated top plan of the Kumbum can be seen in Tucci 1989: 169. And see Ricca & Lo Bue 1993: 224, 246, 263, 288, 301, 306-7, 313.



Fig. 12 - Kumbum Temple, Gyantse, Tibet. (Photo J.M. Lundquist).

As nearly as it is possible for me to determine, the numbers of lattice-work diamonds and squares on the *stūpas* of the upper terraces are the following: For all of the *stūpas* on the two elliptical terraces: sixty four diamond-shaped openings each (Fig. 14). For the sixteen *stūpas* on the uppermost, circular level: forty square openings each ^(?) (see Figs. 6-7). Each *stūpa* rises out of a lotus blossom. In addition, the spires on each of the *stūpas* of the upper terraces have a hollow center, and were constructed in two pieces, with the top half fitting over the bottom half (Soekmono, De Casparis & Dumarçay 1990: 154) (Fig. 15).

The rhythmical diminution in the number of *stūpas*, from thirty-two, to twenty-four, to sixteen, was pointed out above. Here we see the number eight, so central to Buddhist teachings, at work in the diminution series, and in the arithmetic of the series: 4×8 ; 3×8 ; 2×8 . The octagonal spires similarly emphasize and reinforce the doctrinal value of the number eight. Additionally, the width and height of each terrace, and the height of the *stūpas* illustrate the same rhythmical sequence: the first terrace is 6.40 m wide, the second 5.80 m wide, and the third 5.40 m wide. The first terrace

^(?) For a photograph of the three terraces, and a view of the topmost *stūpa*, Lundquist 1993: 82.

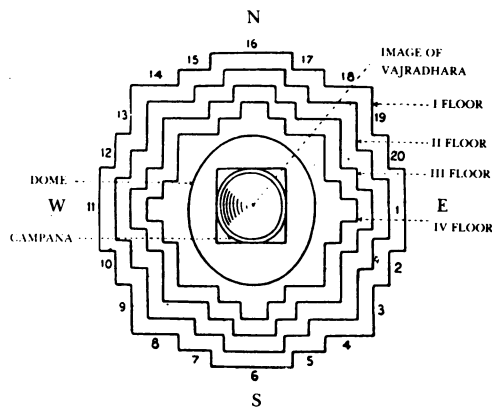


Fig. 13 - Top Plan of the Kumbum Temple, Gyantse, Tibet. (After Tucci 1989: 169).



Figs. 14-15 - Second Upper Terrace, Borobudur Temple, Java, Indonesia. (Photos J.M. Lundquist).

is 1.90 m high, the second 1.80 m high, and the third 1.70 m high. The *stūpas* of the first terrace are 1.90 m high, those of the second 1.80, and those of the third 1.70 m high (Krom & Van Erp 1931: 220-21). Finally, the numbers of lattice-work openings in each *stūpa* — sixty-four in the *stūpas* of the first two terraces, forty in those of the upper terraces — if my estimates are correct — must also be taken into account. These numbers are all divisible by eight.

The Ritual Process at Borobudur — A Summary

It is now possible to attempt to summarize the ritual process that initiates at Borobudur would have experienced on the upper terraces. The initiate would have

mounted the stairs from the fourth level on the East side, and would have found himself at the East door of the Maṇḍala Palace of *Vajradhātu*. The guide would have been a guru, an initiated master. In all probability the ritual would have taken place during the night at the Solstice. If the *stūpas* were gilded, as some authors believe was the case, the effect would have been incandescent.

The guide would have led the initiates in circumambulating each terrace, pointing out all of the features that were included in the construction of the temple.

It will be valuable here to quote at greater length some of the relevant Tantric texts translated by Wayman. These texts doubtless give a vivid idea of how the teaching and initiation might actually have proceeded, and what instructions would have been given, although it is obviously not possible to fully know the content of the ritual.

First, a text that gives the underlying rationale for the architecture of the *maṇḍala*, and of the diamond symbolism.

One should contemplate as below, a spot of earth made of diamond; across, a diamond enclosure; above, a tent; in the middle, a dreadful burning ground. In the midst of that, one sees a palace with a single courtyard and made entirely of jewels — with four corners, four gates, decorated with four arches, having four altars, and radiant with nets and so on, and with nymphs.

[And another text (Wayman 1973: 82-83):] Surrounded by a diamond line, beautified with eight posts, decorated with four gates, arches, altars, banners and half-banners, and so on.

The Tantric texts that deal with the ‘Symbolism of the Maṇḍala Palace’ (the title of Wayman’s article from which I am quoting) enumerate the many themes of the teachings that were represented in the architecture of the temple. Number symbolism in relationship to the architecture plays a major role in these texts (Wayman 1973: 83-84):

Where the *maṇḍala* is explained is the sublime *maṇḍala*. The palace is knowledge, erection of an edifice of consciousness.

The four outer corners establish equality of measure. The mind of maitri, etc. is explained as the four lines.

The recollection of praxis of *dharmā* is explained as the diamond line. The liberation from all views is explained as the knowledge line.

The four liberations are the gates. The four right elimination-exertions are the arches and involve posts.

The four stations of mindfulness are understood as the four courtyards. The four bases of magical power are the four gate projections.

The seven ancillaries of enlightenment are the adornment with garlands and flower bundles. The eightfold Noble Path is explained as the eight posts.

There is a constant, repetitive, alternating symbolism at work in the initiation ritual — the many numerical sequences are reinforced architecturally and are constantly

contrasted, alternated, interchanged: 4×8 ; 3×8 ; 2×8 ; the octagonal spires; the diamond (*vajra*)-shaped open-work on the *stūpas* of the first two terraces transformed into the square open-work on the third terrace, while the *harmikās* on the third terrace become octagonal. The spires are octagonal throughout. But everywhere in the open-work series there is the divisibility by eight and four: note particularly the forty square lattice-work openings on each *stūpa* of the third terrace (see the passage quoted from Wayman 1973: 82-83).

The 'Cosmic Vairocana' from Balawaste

There is one additional feature that needs to be discussed, that is probably of great importance in understanding the ritual processes of Borobudur. In his article of 1980, Lokesh Chandra quoted from the *Avatamsaka-sūtra*, which refers to the earliest tradition of the iconography of the Vairocana Buddha in Central Asian Khotan. It is stated that 'The transformations of the Buddha exist sometimes in the form of Mt Sumeru, of rivers, of whirl-winds, of whirl-pools, of circle-nets, of earth altars, of forests, of towers, of mountain peaks, of all square things, of wombs, of lotuses, of gold, of the bodies of all sentient beings, of clouds, of the thirty-two major and eighty minor signs, of a radiant halo, of pearl nets, of gate panels, and of all sorts of ornamentations'.

The most famous example of Central Asian painting that illustrates this principle is the 'Cosmic Vairocana', or Meditating Buddha, from Balawaste, near Khotan, with the many Tantric symbols painted onto the entire upper body area of the figure (Bussagli 1963: 55, 58-61; Williams 1973: 117-29. The passage can be consulted in Williams 1973: 120) (Fig. 16).

According to Lokesh Chandra (1980: 312):

The latticed *stūpas* enshrining the Vairocana Buddhas in the Borobudur represent the architectonic transcreating of the *stūpas* depicted on the body of Vairocana in the *Avatamsaka* tradition as can be seen from the mural fragments from Khotan.

Thus the *stūpa* can represent the body of the Buddha himself, and the ornamentation incorporated into the architecture of the *stūpa* is analogous to the marks that are to be seen on the body of the Buddha.

The body becomes a palace, the hallowed basis of all the Buddhas. [And further:] Surrounded by a diamond line, beautified with eight posts, decorated with four gates, arches, altars, banners and half-banners, and so on. How is Vajrasattva understood as the principal meaning there? *Because he has marks born of the sky*, is supreme without beginning or end, the great self-existence of Vajrasattva is said to be the Glorious Supreme Primordial (Wayman 1973: 83. Emphasis added).



Fig. 16 - Buddha in Meditation. Wall Painting, probably from Balawaste. Mid-6th century A.D. (After Bussagli 1963: 55).



Fig. 17 - Kumbum Temple, Gyantse, Tibet. (Photo J.M. Lundquist).

The *stūpas* on the upper terraces of Borobudur thus bring to mind the Nepalese *stūpas*, which depict a human figure on the outside, with painted eyes on the *harmikā*, as though a Buddha is seated in a pose of meditation within the building. (Fig. 17 — here, the Newari influenced Kumbum). The Buddhas sitting within the Borobudur *stūpas* are analogous to the Cosmic Vairocana of Balawaste: the ‘marks’ on the exterior of the *stūpa*, the lattice-work, are the marks that are depicted on the bodies of Buddha images, according to the instructions of the *Avatamsaka-sūtra*, quoted above. That these were ‘marks born of the sky’ (*ibid.*) underlines the cosmic orientation of the temple. As we see from the Mt Meru Temple Banner, the Maṇḍala Palace is to be located in the heavens. Its architectural symbolism therefore would be celestial in its referents, and this in turn would reinforce Wayman’s arguments that the primary rituals would have taken place at night, during the Solstice, or perhaps better would have begun during the day, on the lower terraces, and would have progressed up through the temple, to have culminated in the heavenly light of night-time.

Alex Wayman identified two constellations in the star groups represented on the Temple Banner: Ursa Major and the Pleiades. The moon and the sun are represented on the Temple Banner just below the eaved palace. Ursa Major is connected with the sun, the Pleiades with the moon (Wayman 1973: 107-8).

Conclusion

To conclude, Giuseppe Tucci's summary statement of the idea underlying the architecture of Kumbum, in Gyantse, may also be appropriate with respect to Borobudur (1989: 169-70):

The modest result of that devoted circumambulation of so sacred a monument cannot overshadow the symbolic value of the edifice and the mystic significance attributed to it and that was at the basis of its very construction. The building is the *chos-skuldbharma-kaya*, the body of the law made visible: to go through the chapels was almost an identification with the highest spiritual planes. That is why the progressive mounting from floor to floor corresponds also to an ascension towards truths ever more subtle and secret. Ascending one passes from an order of tantric cycles to the higher ones: one starts with the Kriyatantras and reaches on the top of the building to the Anuttaratantras. In this way one traverses through all the mysticism and esoteric liturgy of Mahayana in a short time.

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