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Of Palaces and Pagodas: Palatial Symbolism in the Buddhist Architecture of Early Medieval China

Abstract This paper is an inquiry into possible motivations for representing timber-frame architecture in the Buddhist context. By comparing the architectural language of early Buddhist narrative panels and cave temples rendered in stone, I suggest that architectural representation was employed in both masonry and timber to create symbolically charged worship spaces. The replication and multiplication of palace forms on cave walls, in “pagodas” (*futu* 浮圖, *fotu* 佛圖, or *ta* 塔), and as the crowning element of free-standing pillars reflect a common desire to express and harness divine power, a desire that resulted in a wide variety of mountainous monuments in China. Finally, I provide evidence to suggest that the towering Buddhist monuments of early medieval China are linked morphologically and symbolically to the towering temples of South Asia through the use of both palace forms and sacred *maṇḍalas* as a means to express the divine power and expansive presence of the Buddha.

Keywords Pagoda, *ta*, mandala, Sumeru, Yicihui pillar, Yongningsi, Songyuesi

From South to East Asia, from narrative relief panels to surface decoration both in caves and freestanding worship spaces, Buddhist sites are replete with depictions of timber buildings. Narrative reliefs not only allow us to read the story of the life of the Buddha, they also provide a window into the visual language of the region in which the panels were produced. Yet representations of timber architecture on cave facades are also seen in non-narrative contexts to contain or frame images of deities. This is imitation architecture of a different sort—one thought to reflect a type of “theophany,” or Buddhist miracle.¹ By

¹ The multiplicity of divine beings in Buddhist art of this period occurs in a number of

comparing representations of timber architecture created in live rock and masonry from 5th and 6th century North China with textual sources of the same period, I suggest that “imitation” palatial forms were used to denote the supreme and divine status of the Buddha. Furthermore, the multiplication of palace facades on caves and on towering pagodas reflects a desire to express and harness that divine power, a desire that resulted in the creation of a variety of towering monuments in China using the same design methods of contemporary towering temples in South Asia.

Cave as Infinite Palace: South Asian Precedents and East Asian Interpretations

Cave temples such as the paired caves Caves 5–6 at Yungang Grottoes, created in the second half of the fifth century with significant support from the Northern Wei (386–534 CE) elite, are covered with a multiplicity of Buddhist images contained in architectonic niches of various forms (Figs. 1, 2). Located at the sacred site of Mt. Wuzhou 武州 (周) 山 near the Northern Wei (386–534 CE) capital of Pingcheng (mod. Datong, Shanxi), these famous caves are believed to have been carved prior to the move of the Northern Wei capital to the city of Luoyang in 494. As is well known, Buddhist grottoes in China developed from a longstanding tradition in South Asia. Caves there, excavated from live rock, form the precedent for the replication of timber architecture in stone, and in that way are a form of “*fangmuzuo*” (imitation timber architecture) though expressing the

different textual sources, including the Miracle(s) of Śrāvastī in the *Divyāvadāna* (early centuries CE), the *Saddharmapuṇḍarīkasūtra* (妙法蓮華經 or *Lotus Sūtra*, Ch. translation 3rd c. CE), the *Buddhāvataṃsakasūtra* (佛華嚴經 often simplified as 華嚴經 or *Flower Garland Sūtra*, Ch. translation by Buddhahadra 418–21 CE), and *Bramajālasūtra* (梵網經 or *Brahmā’s Net Sūtra*, Chinese indigenous scripture, early 5th c. CE). In his *The Dynastic Arts of the Kushans*, 235–38, John Rosenfield notes that representations of a multiplicity of Buddhist deities seem to have a greater “emblematic” than “narrative” function, and might be better described as a kind of Buddhist theophany than having a specific tie to an individual sutra. Yet, Eugene Wang makes a compelling argument for an emphasis on the *Lotus Sūtra* at Yungang. For multiplicity as a prerequisite gathering to the arrival of Prabhūtaratna as described in the *Lotus Sūtra*, see Eugene Wang, *Shaping the Lotus Sutra*, 18. The *Flower Garland Sūtra*, translated in the early 5th century and in evidence in visual representations by the mid-fifth century, and its contemporary, the indigenous Chinese *Brahmā’s Net Sūtra*, are thought to have had a significant effect on the imperial courts of China during the 5th–6th centuries. For more on the transmission and writing of these works, see Aramaki Noritoshi, “The Huayan Tradition in Its Earliest Period,” in *Reflecting Mirrors: Perspectives on Huayan Buddhism*, edited by Imre Hamar, 169–77.



Fig. 1 Timber façade of Cave 6, Yungang Grottoes, 17th century reconstruction (Courtesy of Scott Gilchrist)



Fig. 2 Detail of the Great Departure narrative panel, Cave 6, Yungang Grottoes, late 5th cen. CE (Courtesy of Scott Gilchrist)

typical South Asian, rather than East Asian, timber tradition. It is useful then to review these earlier Buddhist caves and inquire into the possible symbolic content behind this specific iconography.

Buddhist grottoes excavated in central and west India during the 3rd century BCE through the 2nd century CE are typically composed of a combination of different types of architecture based on freestanding prototypes. These include the apsidal “*caitya* hall” (*caitya-gr̥ha*, literally “*caitya* house”), designed for a combination of circumambulation and congregational worship, and the *vihāra* or monastic quarters. According to Debala Mitra, the *caitya-gr̥ha* likely developed in imitation of freestanding worship spaces focused on the veneration of the *stūpa*, the quintessential Buddhist monument.²

The origin of the *stūpa* as an object of veneration has long been the subject of discussion and debate.³ Scholars agree that the circular mound pre-dates Buddhism, when it was used as a funerary monument to contain the remains of a deceased individual after cremation. The form was used for that purpose for the remains of the Buddha, at his instruction, and came to be a multivalent symbol of the *parinirvāna* of the Buddha, his teachings, and even the Buddha himself.⁴ Other scholars go further to suggest that the *stūpa* is more than a “symbol,” it is a manifestation of the sacred power of the Buddha and therefore cognate with the Buddha and his teachings.⁵

The form of the Buddhist *stūpa* is highly idiosyncratic however, and was elaborated as Buddhism developed. By the early centuries BCE-CE it consisted of as many as seven parts, including: a (1) drum to elevate the (2) mound, a (3) central pillar (*yaṣṭi*) extending upwards from a (4) reliquary chamber, through a (5) square base (*harmikā*) surrounded by a (6) railing (*vedikā*). The *yaṣṭi* is then crowned by one or more (7) ceremonial umbrellas (*chattra*). There is evidence to suggest that the masonry monuments left to us today originally incorporated timber, as remains of wooden pillars have been found in cavities extending from the top of some *stūpa* mounds to their bases.⁶ The term *caitya*, which may have

² Debala Mitra, *Buddhist Monuments*, 41–42.

³ The literature on the significance of the South Asian *stūpa* is very rich, with multiple separate volumes and articles dedicated to its explication from both historical and religious perspectives. See, for example, Jason Hawkes and Akira Shimada, eds., *Buddhist Stūpas in South Asia*; Adrian Snodgrass, *The Symbolism of the Stūpa*; Anna Livera Dallapiccola (with Stephanie Zingel-Ave Lallemand), *The Stūpa: Its Religious, Historical and Architectural Significance*; and Anagarika Brahmacari Govinda, *Psycho-cosmic Symbolism of the Buddhist Stūpa*.

⁴ Mitra, *Buddhist Monuments*, 21, and 21n.1.

⁵ John C. Irwin, “Origins of Form and Structure in Monumental Art, (*Editor’s Summary*)” in Karel Werner, ed., *Symbols in Art and Religion*, 61.

⁶ Mitra, *Buddhist Monuments*, 24, and 24n.12. Peter Harvey suggests that these may have been pre-Buddhist *yupas* that would have been encased in the *stūpa* by “converted brahmins.” See Peter Harvey, “Venerated Objects and Symbols of Early Buddhism,” in Karel Werner, ed., *Symbols in Art and Religion*, 90.

originally denoted a corporeal relic, came to be used by Buddhists to refer to the *stūpa*, but could also refer to a “...temple, sacred tree (*vrkṣa-caitya*) and even an image of Buddha.”⁷ The *caitya-gr̥ha* is known to have co-existed at sites already containing open-air *stūpas*, such as the Buddhist ritual site at Sāñcī (Fig. 3). The primary rite of worship at a *stūpa* is circumambulation (*pradakṣiṇā*) to the right following and replicating the course of the sun. Buildings may have been constructed to cover a *caitya* and devotee to provide space for this rite in inclement weather. The form developed from a circular hall to an apsidal shape, which was recreated in live rock when the grottoes were carved. Vidya Dehejia has detailed the timber origins of the pointed-arch facades in rock-cut caves, seen in an early stage at the 3rd century BCE Lomas R̥ṣi cave in Bihar, at the time of King Aśoka.⁸ The famous Buddhist cave temples excavated in the Western Ghats beginning in the 2nd century BCE were also imitation timber architecture following contemporaneous Indic models.⁹ Curved timber rafters still frame the interior barrel vault as an overt reference to arcuated-timber prototypes (Fig. 4).¹⁰

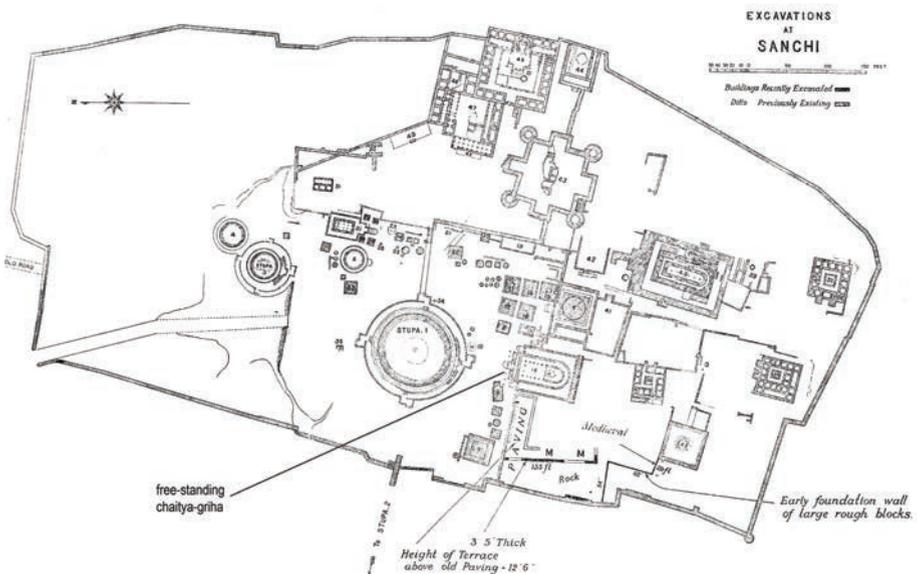


Fig. 3 Site of Sāñcī, plan showing freestanding *stūpas* and apsidal *caitya* halls (After Marshall, *A Guide to Sanchi*, Plate X)

⁷ Mitra, *Buddhist Monuments*, 21.

⁸ Vidya Dehejia, *Early Buddhist Rock Temples: A Chronology*, 71–73.

⁹ Mitra, *Buddhist Monuments*, 41–48, and Dehejia, *Early Buddhist Rock Temples*, 71–91.

¹⁰ Mitra, *Buddhist Monuments*, 154–55, and Dehejia, *Early Buddhist Rock Temples*, 79.



Fig. 4 Hall with timber ribs and stūpa-shaped *caitya*, Caitya Hall, Karla Caves, 1st–2nd cen. CE (Courtesy of University of Michigan, History of Art Department, Visual Resources Collections)

Yet the cave entries allowed for a sculptural expression, potentially of religious belief, through the carving of miniaturized palaces on the surface of the rock. Although the façades of these caves are largely destroyed, some of the original decoration still exists. In it we see that the surface of the stone was carved in a manner recognizable as an entry into a palatial residence. A close reading of the façade of the *caitya* hall at Karla will help to illustrate this point. Dating to approximately the 2nd century CE, the 38-meter high *caitya* hall at Karla stands out as one of the grandest Buddhist grottoes in South Asia. The weathered remains of a columned façade are still evident, though damaged beyond recognition. There may also have been two large, freestanding pillars framing the approach to the site, though only one is currently extant. Beyond the columned façade are an entry verandah and an internal façade with three doorways. The central doorway is marked by a large horseshoe arch leading into the apsidal hall with a *stūpa* at the apse. The side doors lead to the circumambulatory path. Although the arch itself is made of stone, it is believed to be a representation of a freestanding timber ritual hall. The underside of the arch is carved with rafters and below the rafters is a *caitya* window filled, at the upper portion, with a timber screen braced with vertical struts.

Of interest for this paper is the imitation-timber relief carving on the sides of

the verandah extending out on the left and right of the doorways into the cave interior (Fig. 5). Here we see miniaturized versions of the same arched entryway. They are organized in registers, each separated by a railed verandah carved from the living rock. A closer examination reveals that these arched forms denote both windows and doorways, depending on size and location. Windows appear to be in the shape of dormers attached to a perpendicularly located barrel-vaulted hall, perhaps similar to the barrel vaulting inside the *caitya-gr̥ha* itself. Thus, once the viewer enters into the cave through the original gate of the façade, the walls of the mountain itself reveal story upon story of miniaturized palaces. The whole is supported at its base by elephants, whose heads and front legs emerge from underneath the first level of balcony, suggesting an extended space behind the façade.¹¹ The veranda walls, then, allow the devotee to visualize numerous Buddhas and Buddha realms all existing concurrently.



Fig. 5 Right side of Verandah, Caitya Hall, Karla Caves, 1st–2nd cen. CE (Courtesy of University of Michigan, History of Art Department, Visual Resources Collections)

¹¹ Mitra quotes an early inscription at the site stating that, “this has been described as the ‘most excellent rock-cut mansion in Jambudvīpa’ (India).” See *Buddhist Monuments*, 154.

Narrative reliefs on the gateways (*torāṇa*) to Stūpa 1 at Sāñcī from a century or more before the Karla reliefs help to illuminate the morphology of the architectural forms. The scene of the Great Departure found on the East Torāṇa Gateway of Stūpa 1 reveals that the *caitya* windows and railings on the walls of the Karla verandah are abstracted forms of royal palaces (Fig. 6).¹² A relief in continuous narrative structure, the Great Departure shows the moment when the young Prince Gautama Siddhārtha leaves his palace to follow the path of an ascetic and ultimately attain enlightenment. The palace is composed of multi-storied structures whose floors are denoted by a railing enclosing a balcony. The roofing is composed of barrel-vaulted halls, which end in a horseshoe arch with a pointed finial. This secular form is the same as that of the *caitya* hall, and, given the use of timber to heighten the illusion of freestanding architecture in the Buddhist cave, one can reasonably conclude that the relief is a representation of South Asian timber palaces as would have been familiar to local residents at the time.¹³ Their replication in miniature on the walls of the Karla verandah



Fig. 6 Great Departure, East Torana Gateway, Sāñcī Stūpa No. 1, ca. 1st cen. BCE (Courtesy of University of Michigan, History of Art Department, Visual Resources Collections)

¹² Dehejia, “On Modes of Visual Narration in Early Buddhist Art,” 385.

¹³ Indeed the reliefs on Buddhist monuments are so detailed that they have long been used to reconstruct the architectural landscape of early India. See Ananda K. Coomaraswamy (1877–1947), “Early Indian Architecture: Palaces,” in *Essays in Early Indian Architecture*, 32–69.

is an effective expression of the transformative power and expansive presence of the Buddha.¹⁴

The construction of cave temples in South Asia continued through the early centuries CE as Mahāyāna Buddhism became dominant. New cave temples excavated in the 5th century, such as Cave 19 at Ajanta, were also decorated with the barrel-vaulted forms punctuated with horseshoe arch dormers. Yet, by this stage in the development of the form, multiple stories shown as regular registers of miniaturized palaces at Karla are further abstracted, and appear at Ajanta as two rounded levels that made up a long cornice punctuated with horseshoe windows and separated by a colonnade (Fig. 7).



Fig. 7 Façade of Cave 19, Ajanta Caves, late 5th cen. CE, detail (Photo by Marcin Białek, licensed under Creative Commons Attribution-Share Alike 3.0-2.5-2.0-1.0 via Wikimedia Commons)

Additionally, artists filled the palace scenes with anthropomorphic images of

¹⁴ The replication of the body of the Buddha as an expression of his superior wisdom and divine power is frequently seen in narrative panels of one of the most well-known miracles, the Great Miracle of Sāvastī found in Chapter 12 of the *Divyāvadāna*. See Mitra, *Buddhist Monuments*, 5, and Andy Rotman, trans., *Divine Stories: Divyāvadāna*, vol. 1: 278–81.

the Buddha, a marked difference from the earlier “aniconic” period of Buddhism.¹⁵

The same principles were employed in the massive Buddhist caves excavated in what is now west and north China but the style of architecture was transformed for a local audience. Contemporary with the excavation of Cave 19 at Ajanta more than three thousand miles away, narrative scenes in Cave 6 at Yungang, exemplify the transmission and translation of visual forms from South Asia into the East Asian context. The cave itself consists of a full size timber-frame entry vestibule, reconstructed in the Qing dynasty (Fig. 1), and a cave interior with a square central pillar. The latter’s narrative panels are primarily positioned at eye-level in a direction that suggests the practice of *pradakṣiṇā* within the cave.¹⁶ They begin around the central pillar and then continue onto the interior walls of the cave, suggesting that viewers were expected to make multiple rotations around the central pillar. Within this group of scenes from the life of the Buddha we find another version of Siddhārtha departing the palace, this time modified for an audience accustomed to a different architecture. The style of the building from which the young Siddhārtha emerges is one that developed using the local materials of the Yellow River valley (Fig. 2). Rather than the arcuated construction of barrel-vaulted halls punctuated with arched dormer windows, the palace shown in this relief appears to be of trabeated (post-and-lintel) construction elevated on a solid platform accessed by a staircase. A railing is used to indicate the staircase and extends around the front of the building enclosing the platform. The building is entered on the side parallel to the roof ridge rather than on a gable end, and a large bivalve door is indicated in shallow relief. The roof itself is composed of lines, suggesting ceramic roof tiles, and supported by fork-shaped and inverted-V shaped bracket arms, which in freestanding structures would have been made of timber. An indication of timber columns may have been painted onto the surface of the now-damaged walls, but is no longer evident. Regardless, the solid platform, timber framing, and tiled roof all suggest a type of architecture that has a history in the Yellow River valley dating back to at least 1000 BCE.

But can this image of the palace of Gautama Siddhārtha be considered *fangmuzuo*? The narrative panels display how the concept of palace was

¹⁵ For more on aniconism in early Buddhist art, see Vidya Dehejia, “Aniconism and the Multivalence of Emblems.”

¹⁶ Discussion of the archaeology and dating of the caves can be found in Su Bai, *Zhongguo shikusi yanjiu*, 76–88. A full description of the narrative panels in Cave 6 can be found in Patricia E. Karetzky, *Early Buddhist Narrative Art: Illustrations of the Life of the Buddha from Central Asia to China, Korea, and Japan*, 122–27. For more on the significance of *pradakṣiṇā* in South Asian temple architecture and its relationship to cyclical time, see Stella Kramisch, *The Hindu Temple*, 89, 106.

communicated visually in the new context of East Asia, but the multiplication of those imitation wooden forms along the interior surface of the cave appears to have a slightly different symbolic effect. Like the interior of the verandah at Karla, the multitude of palatial facades is consistent with other themes of multiplicity in contemporary *sūtras*, themes thought to signify the transformative power and infinite presence of the Buddha.

Indeed, the experience of entering the late-fifth-century caves is overwhelming (Fig. 8). The walls of remaining verandahs and interiors are carved with Buddhist imagery, both individual icons in niches and narrative panels. Similar to Ajanta, we see extensive use of the image of the Buddha in combination with a multitude of otherworldly figures and architectural forms. Along the circumambulatory path, a viewer becomes entirely immersed in the internal world of the cave, where narrative panels of the Buddha's life are combined with iconic images of Buddhas and bodhisattvas housed within palatial shelters of various types.



Fig. 8 Verandah of Cave 9, Yungang Grottoes, late 5th cen. CE (Courtesy of Scott Gilchrist)

Although the dormer windows of South Asia are present, they are seen in concert with other forms of shelter—parasol, trapezoidal niche, *caitya* arch, and tiled roof (with or without timber bracketing).¹⁷ Overall, the images appear to be in luxurious settings with layers of textiles filling the space between the structure and the figures. Regardless of precisely what *form* the setting might take, the message on the cave walls is clear: the divine Buddha resides in a palace. In that sense, the forms appear cognate; all denote the Buddha's princely origins and high spiritual status. Even pillars framing the niches are carved with more niches at reduced scale. Beyond a representation of a narrative, the *fangmuzuo* here is used to suggest that the grotto is an entire Buddhist universe, where each niche implies a hall, and perhaps even a larger palace complex, behind the surface. The use of palatial forms to suggest the vast multiplicity of Buddha worlds may have been a reflection of the increasing influence of the *Buddhāvataṃsaka* (Buddhabhadra's trans., early fifth century CE) and *Brahmajālasūtra* (mid-fifth century CE) on the northern courts of China during the fifth and sixth centuries. I will return to this theme below.

Gongta zhidu 宫塔制度: The Palatial Tower System for Generating a Cosmic Mountain

Sculptures of Buddhist divinities at Yungang and other cave temples east of the Taklamakan Desert were sheltered by façades made to look like freestanding buildings constructed of timber and other perishable materials—imitation palaces but constructed of real materials.¹⁸ Although most have been lost to time, seventeenth-century restorations provide some sense of the image of the whole

¹⁷ The trapezoidal niche is frequently seen in reliefs from the Gandhara region. See Kurt A. Behrendt, *The Buddhist Architecture of Gandhāra*, 212–15 and Figs. 86, 127.

¹⁸ In his passage on the Lei River 灤水, Li Daoyuan describes an excavation of cave temples along the Wuzhoushan River 武州(周)山水, which was likely the Yungang Grottoes. He stated that the “river turns again eastward passing to the south of the numinous cliff; excavating into the stone and opening up the mountains, they built structures along the cliff [face]; the True Likeness(es) are grand and majestic, a rarity in the mundane world; the halls (of the monasteries) along the mountains and beside the rivers face each other through the smoky mist” (其水又東轉逕靈巖南，鑿石開山，因巖結構；真容巨壯，世法所希；山堂水殿，煙寺(烟峙)相望). It is unclear here whether the “True Likeness” (*zhenrong* 真容) referred to the large-scale images, such as those in Caves 16–20, or the site overall. In either case the passage indicates timber façades were present along the cliff face in the early sixth century. Li Daoyuan 酈道元 (d. 527 CE), *Commentary on the Classic of Waterways*, 13.316. Characters in parenthesis reflect those found in the *Yongle dadian* edition of this text. Excerpts from this passage are cited in Annette L. Juliano, “New Discoveries at the Yungang Caves,” 85, and more fully, in Alexander Soper, “Literary Evidence for Early Buddhist Art in China,” 97.

(Fig. 1).¹⁹

Not only would timber facades have enclosed the chapels along the cliff face at Yungang, ample evidence exists to confirm that freestanding monasteries of the period were also made in the manner of full-scale, timber-frame palaces with ceramic roof tiles. Examination of one of the most prominent examples of the period, the imperially sponsored Yongningsi 永寧寺, located in the heart of the Northern Wei capital at Luoyang, suggests that concepts of mountain and palace were critical to the housing of divinities in this period, regardless of where they were built.

In his mid-sixth-century *Luoyang qielanji* 洛陽伽藍記, Yang Xuanzhi 楊銜之 tells us that Yongningsi was founded by Empress Dowager Ling 靈太后 in 516. The monastery was perceived to be on par with, and formally similar to, the imperial palace. The complex was surrounded by a wall covered with rafters and ceramic roof tiles, “in the manner of a contemporary palace wall” (若今宮牆也). Each of the four sides of the complex was punctuated by gateways. The gatehouse on the south side was three stories high with a “structure resembling that of the contemporary Duanmen [gatehouse of the imperial palace]” (形製似今端門). A Buddha Hall 佛殿 in the north portion of the main ritual compound was said to have been made in the style of the main audience hall of the imperial palace, the Hall of the Supreme Ultimate (形如太極殿). The lavish decoration of the buildings and the wealth of materials used in the production of images (said to have been made of gold, pearl, and jade, among other media), clearly impressed visitors, who left inscriptions stating that the Treasure Hall on Mt. Sumeru (須彌寶殿) and the Palace of Purity in Tuṣita Heaven (兜率淨宮) could not compare to it.²⁰ The description suggests that 6th-century residents of Luoyang imagined the heavenly palaces of the divine Buddhas to have the overall appearance of the imperial palaces of which they were most familiar—those with pounded earth platforms, a timber frame, and ceramic roof tiles—if enhanced with more sumptuous materials.

The similarity between the architecture of Yongningsi and the imagined appearance of Mt. Sumeru was not, it seems, limited to the main worship hall. The most prominent building in the complex, and the first one described in *Luoyang qielanji*, was the nine-story (*jiuceng* 九層) *futu* 浮圖 sitting just south of the Buddha Hall. The building appeared to be constructed entirely of timber but had a central core of adobe brick.²¹ Yang Xuanzhi described the

¹⁹ For a summary of the archaeological excavations confirming Northern Wei timber facades covered with ceramic roof tiles on the paired caves, see Juliano, “New Discoveries at the Yungang Caves,” 84–85.

²⁰ The monastery of Yongningsi was detailed by Yang Xuanzhi (6th c.), *Luoyang qielanji jiaojian*, 2–17. For an English translation see Yang Hsüan-chih, *A Record of Buddhist Monasteries in Lo-yang*, translated by Yi-t’ung Wang, 13–42.

²¹ Zhongguo shehui kexueyuan kaogu yanjiusuo, ed., *Bei Wei Luoyang Yongningsi, 1979–1994 nian kaogu fajue baogao 1979–1994*, 17–19.

overwhelming appearance in great detail:

Rising nine hundred Chinese feet above the ground, it formed the base for a mast that extended for another one hundred Chinese feet; thus together they soared one thousand Chinese feet above the ground, and could be seen as far away from the capital as one hundred *li*. When the foundation was initially excavated, deep underground were found thirty golden statues. The empress dowager believed this was a sign of her belief in [Buddhist] teachings, and because of this the construction was more excessive. On top of the mast was a golden, jeweled urn²² with the capacity of twenty-five piculs. Underneath the jeweled urn were thirty tiers of golden dew basins with golden bells hanging from the rims of each basin. Additionally there were four rows of chains linking the mast to the four corners of the *futu*; golden bells, each the size of a one-picul jar, were suspended from the linkworks. The *futu* had *nine* levels (*ji* 級), with golden bells suspended from the corner of each one, totaling 120 in all. The *futu* had four sides, each having three doors and six windows. Painted in vermilion, each door had five rows of gold nails. Altogether there were 5,400 nails on the twenty-four panels of the twelve double doors. In addition, the doors were adorned with knockers made of golden rings. The construction embodied the best of masonry and carpentry in the elegance of its design and its excellence of construction. Its Buddhist aspects (*foshi* 佛事) were exquisite and ingenious, are mysterious and cannot be fully understood. Its carved beams and gold door-knockers fascinated the eye. On long nights when there was a strong wind, the harmonious jingling of the bejeweled bells could be heard more than ten *li* away.²³

The nine-level timber-frame Yongningsi *futu* as described here is a structure normally referred to in the Chinese/East Asian context as a *ta* 塔. *Ta* is usually translated into English as pagoda or *stūpa*, but as early as the eleventh century

²² I have chosen to translate *baoping* as “jeweled urn” to retain a possible connection with the *baoping* used to hold the ashes of the Buddha in Wei Shou’s “Treatise on Buddhism and Daoism.” See Wei Shou (506–72), *Weishu*, 3028.

²³ This translation follows Yang, *A Record of Buddhist Monasteries in Lo-yang*, 15–16, with modifications. The original text reads: 中有九層浮圖一所，架木為之，舉高九十丈。有刹復高十丈，合去地一千尺。去京師百里，已遙見之。初掘基至黃泉下，得金像三十軀。太后以為信法之徵，是以營建過度也。刹上有金寶瓶，容二十五石。寶瓶下有承露金盤三十重，周匝皆垂金鐸，復有鐵鎖四道，引刹向浮圖。四角鎖上亦有金鐸，鐸大小如一石甕子。浮圖有九級，角皆懸金鐸，合上下有一百二十鐸。浮圖有四面，面有三戶六牕，戶皆朱漆。扉上有五行金釘，其十二門二十四扇，合有五千四百枚。復有金鑲鋪首，殫土木之功，窮造形之巧。佛事精妙，不可思議。繡柱金鋪，駭人心目。至於風永夜，寶鐸和鳴，鏗鏘之聲聞及十餘里。 See Yang, *Luoyang qielanji jiaojian*, 11–12.

could mean simply a high mound.²⁴ The complex relationship between the Chinese terms is worth reviewing here. *Futu* is considered to be an early transliteration of the Sanskrit word “Buddha” into Chinese, and can refer to the Buddha, Buddhism, and, perhaps through their frequent use to house relics, a *stūpa* or towering pagoda. In pre-Tang sources, *futu* 浮圖/浮屠 was used interchangeably with *fotu* 佛圖 and *fota* 佛塔.²⁵ The clearest connection between *futu* and the term “*stūpa*” is found in Xuanzang’s 玄奘 (602–664) seventh-century *Xiyuji* 西域記. When describing the town of Tirmidh, he gives an explanation of his use of the term *sudubo* 窣堵波 to describe the objects he found there over other Chinese terms:

These *sudubo* are what used to be called *futu*, also called *toupo*, also called *tapo*, also called *sitobo*, also called *soudoubo*, these are all mistakes.²⁶

From this passage it is easy to conclude that *ta* 塔 is an abbreviated form of the transliteration of the word for the mounded *stūpa* in a language other than Sanskrit. In this case, it could be short for *tapo* 塔婆 which might be a transliteration of the Prakrit *thūpo* or the Pali *thūpa*.²⁷ Xuanzang did not describe the shape of the *sudubo*. However, this latter term is a clearer transliteration of “*stūpa*” than *futu*, *fotu*, or *fota*, which all appear closer to pronunciations of “Buddha.” Perhaps for Xuanzang potential differences in architectural form were less important than the similar reliquary function. By the seventh century, all terms could be used to describe objects containing the Buddha, either through relics or images. All were thus considered cognate with the body of the Buddha.

²⁴ The *Foguang da cidian* and the *Daikanwajiten* both provide “*stūpa*” as the first definition of *ta*. “Pagoda” is an English word derived from the sixteenth-century Portuguese word *pagode*, which referred to multi-tiered temples encountered by sixteenth-century traders in South and East Asia. The Western term was also used to refer to the images found within them. See “pagoda, n.,” OED Online, accessed June 13, 2013.

²⁵ *Weishu*, Chapter 102, 2277. In this source we see that a building called a “100-*zhang futu*” 百丈佛圖 could also be called a *fota* 佛塔 within the same passage. Modern architectural dictionaries also define *ta* as a shortened form of the phrase “*fota*.” See Lü Songyun and Liu Shizhong, *Zhongguo gudai jianzhu cidian*, 266. Measurements follow Qiu Guangming, *Zhongguo lidai duliangheng kao*, 68.

²⁶ Xuanzang 玄奘 (602–64), *Da Tang Xiyuji*, Chapter 1, Taishō 51.2087, 872–71. The entry describes the monasteries in the kingdom of Tirmidh (Damiguo 咄蜜國) and is the primary source for determining the meaning of the Northern Wei terms *fotu* or *futu*. For an English translation see *The Great Tang Dynasty Record of the Western Regions*, translated by Li Rongxi, 32. The original text reads: 諸窣堵波即舊所謂浮圖也，又曰鑰婆，又曰塔婆，又曰私鑰簸，又曰戴斗波，皆訛也。

²⁷ This is a common conclusion. See, for example, John Kieschnick, *The Impact of Buddhism on Chinese Material Culture*, 31, n. 18.

In that way, Xuanzang may have been using *sudupo* (and, by extension, *futu*) like *caitya*, denoting the sacred traces of the Buddha regardless of form or type of relic.²⁸

Yet in pre-Tang Chinese sources, possible forms of the *futu* do appear to be of some concern. For example, in his “Treatise on Buddhism and Daoism” (*Shi Lao zhi* 釋老志) in the *Weishu* 魏書, Wei Shou 魏收 (506–72) discusses both the *ta* and the *futu/fotu*. *Ta* was the foreign term (*huyan* 胡言) for a structure used to house the jeweled urn 寶瓶, which contained the remains of the historical Buddha. It was a “palatial space” (*gongyu* 宮宇) for the relics that functioned as a memorial temple (*zongmiao* 宗廟).²⁹ Interestingly, Wei Shou emphasizes the number of “levels” in the construction of *fotu* /*futu*:

After the White Horse Monastery had been built in Luo[yang], the *fotu* was richly decorated, the paintings were extremely fine, and they became the model for the four directions (throughout the land). In general, the palatial *ta* system (used for the *fotu*), followed the ancient Indian form but built it up in layers from one level to three, five, seven, or nine. The common people passed down [the tradition], calling it “*futu*” or “*fotu*.”³⁰

But what was the ancient Indian shape that made up the multi-layered “palatial *ta* system”? The most recognizable form of Buddhist architecture in South Asia is the *stūpa*, and, although a few scholars have noted the connection between the Hindu temple and the Chinese Buddhist *ta*, most architectural historians in China have interpreted the passage as referring to its domed form.³¹ The use of miniaturized palatial forms on Buddhist grottoes provides an important connection. In the *caitya-grha*, the *stūpa* is a marker of the Buddha’s presence, with or without a sacred relic. The term *grha* means “house” or “home,” therefore the *caitya* at Karla is literally *housed* by the cave (or, originally, hall), which is decorated with arcuated South Asian palatial forms, including registers

²⁸ For more on the issue of relics (or lack thereof) in many early “pagodas” see Eugene Wang, “Pagoda and Transformation: The Making of Medieval Chinese Visuality,” 17–20.

²⁹ Wei Shou, *Weishu*, 3028.

³⁰ *Ibid.*, 3029. This translation loosely follows Leon Hurvitz, trans., *Treatise on Buddhism and Taoism: An English Translation of the Original Chinese Text of Wei-Shu CXIV and the Japanese Annotation of Tsukamoto Zenryū*, 47. The original text reads: 自洛中構白馬寺，盛飾佛圖，畫迹甚妙，為四方式。凡宮塔制度，猶依天竺舊狀而重構之，從一級至三、五、七、九。世人相承，謂之「浮圖」，或云「佛圖」。

³¹ See, for example, the discussion in Fu Xinian, ed., *Zhongguo gudai jianzhu shi*, vol. 2: *Sanguo, Liang Jin, Nan-Beichao, Sui-Tang, Wudai jianzhu*, 198–99. A few have noted the similarity between the Indic towering temple and the Chinese *fota*, including Zhang Gong, *Han-Tang Fosi wenhua shi*, 154–55, and Wu Qingzhou, in his *Jianzhu zheli, yijiang yu wenhua*, 127–38.

of railings, barrel vaults, and horseshoe arches, and its consequent expression of the multiplicity of the Buddhist universe through the language of palatial architectural forms.³² How does the cave relate to the *futu*? What is its symbolic potential?

The Yongningsi *futu* may have been constructed as a type of imitation architecture, similar not only to the sculpted walls of Cave 6 at Yungang but also to the full-size palatial facades constructed of timber originally cladding its exterior. Interestingly, the *futu* in Yongningsi is not described as a tower (*lou* 樓) but rather a nine-story (*ceng*) or -level (*ji*) structure. This may have been an important distinction. As is well known, as early as the Western Han dynasty (206 BCE–9CE), transcendent beings were known to favor towering residences (*xianren hao louju* 仙人好樓居), and it would therefore be appropriate to imagine this new kind of divinity as residing in a tower as well.³³ But the Yongningsi *futu* was more than just a multi-storied structure. The excavation of thirty images of the Buddha at the building site was considered to be a miracle and resulted in an expansion of patronage. As noted above, although described as being constructed of timber, excavations show a combination of timber and earthen construction, where the central 7x7 bays of the 38.2 meter-square base were constructed of adobe brick surrounded by timber columns. Statuary niches were likely set into the east, south, and west sides of this core, with a staircase along the north side.³⁴ The staircase allowed the structure to be climbed by laity, an activity only restricted, it seems, after the emperor and empress discovered one could see directly into the palace from its heights.³⁵

Yang Xuanzhi's description of the building indicates that each level was a representation of the single-story timber palace multiplied both horizontally and vertically. The façade of each of the four sides had three doorways and six windows, allowing each level to be a replication of the level below. Although each level of the Yongningsi pagoda was crowned with a single set of eaves, it is possible that the replication of palace forms also occurred along the façade. Again, Yang Xuanzhi describes the levels as nine bays wide, with three doors and six windows, but he does not discuss the way in which they were organized. If the structure was intended to be the multiplication of a single-storied building, one might expect the three doorways to be grouped in the center with one window between each (total of 5 bays), and the additional four windows in the side bays.³⁶ However, in the excavation report published in 1996 and subsequent

³² Monier-Williams, *A Sanskrit-English Dictionary*, 361.

³³ Ban Gu, *Hanshu*, 1241.

³⁴ Zhong Xiaoqing, "Bei Wei Luoyang Yongningsi ta," 52–54, and Zhongguo shehui kexueyuan kaogu yanjiusuo, *Bei Wei Luoyang Yongningsi*, 13–19.

³⁵ Yang, *Luoyang qielanji*, 13.

³⁶ This is the distribution suggested in Fu, ed., *Zhongguo gudai jianzhu shi*, vol. 2: 208–11.

reconstruction by Zhong Xiaoqing, the three doorways were each separated by two windows (Fig. 9).³⁷ This is an odd configuration for a nine-bay-wide hall, which would usually have the doorways grouped together in the central bays with windows in the side bays. Yet the essential form of the palace hall seen at Yungang has a doorway in a central bay, often with figures in side bays. Similarly, each of the twelve façades on the upper levels of the famous Songyuesi Pagoda, a Buddhist monument sponsored by the Northern Wei court and constructed within a decade of the Yongningsi *futu*, is three-bays wide. In this case, it is composed of a doorway and two windows (Figs. 10, 11). As imitation architecture, each façade would be a replication of the essential palatial hall in triplicate resulting in a similar twelve façades around the sacred center under a single set of eaves. Like the caves at Karla and Ajanta, where the barrel-vaulted halls of the palace and the *caitya* arches set into them suggest the presence of another manifestation of the Buddha, the three-bay façade with central doorway suggests entry into another Buddha realm.

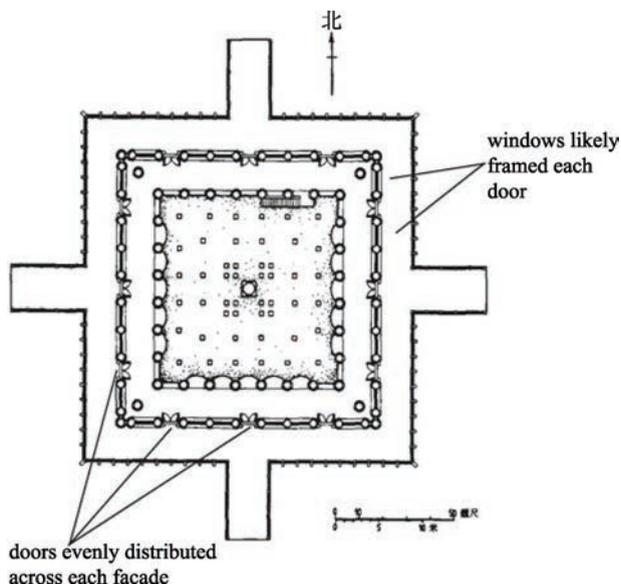


Fig. 9 Yongningsi *futu*, plan showing distribution of doorways (After Zhong Xiaoqing, “Bei Wei Luoyang Yongningsi ta,” 56)

With its timber façade and masonry core, the Yongningsi *futu* must have appeared very much like the cave temple before its timber façade fell away. Yet,

³⁷ See Zhongguo shehui kexueyuan kaogu yanjiusuo, *Bei Wei Luoyang Yongningsi*, 13–19, and Zhong Xiaoqing’s reconstruction in “Bei Wei Luoyang Yongningsi ta fuyuan tantao.”

a substantial difference lies in the plan of the structure. The mountain façade is chaotic, with unpredictable surfaces. It is only through carving the interior that the mountain can be rendered into regular forms. The Yongningsi *futu* was square in plan—as is the cosmic Mt. Sumeru—but rather unlike a *stūpa*. Given that the earliest *stūpas* were neither multi-storied nor composed of palaces, it seems the *stūpa* itself is the wrong model for the shape of the *futu* or *fotu* in the Northern Wei period.



Fig. 10 Songyuesi Pagoda, view from the south (Photo by Tracy Miller)

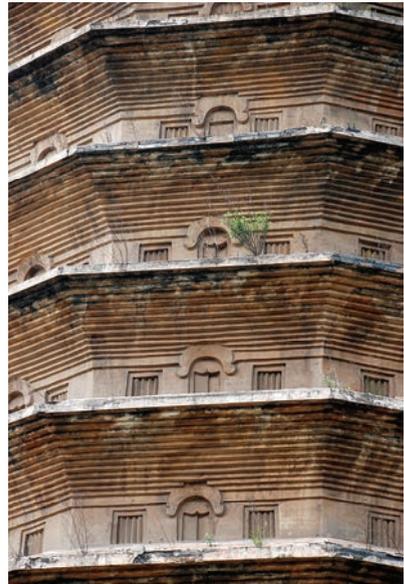


Fig. 11 Songyuesi Pagoda, detail (Photo by Tracy Miller)

“Fangmu” in South Asia and the Indic Temple

During the early centuries CE a new type of temple was being developed in South Asia; its purpose was to shelter anthropomorphic sculptures of Buddhist and Hindu deities. In northern India especially, the towering “Hindu” temple was also called a *prāsāda*—a Sanskrit term meaning palace. The builders of temples at important Buddhist ritual sites, including the Mahābodhi temple at Bodh Gaya,

the site of the Buddha's enlightenment, used the essential elements of the *prāsāda* palace, those appearing on the walls of the cave temples, to create a tower of palaces.³⁸ As detailed by Michael Meister, the dramatic form of the Hindu temple, both north and south, organized the morphemes of the language of Indian palatial architecture around a central vertical axis to create a symbolically potent architecture (Figs. 12 and 13).

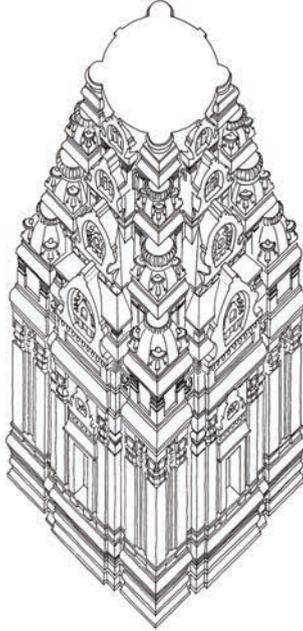


Fig. 12 Rājīvalocana Temple, Rajim, Madhya Pradesh, original construction 600 CE, axonometric drawing showing the palatial pillared halls used to compose the north Indian temple (Drawing by Robert DeJäger, courtesy of Michael Meister)

³⁸ Although currently from a much later rebuilding, there is evidence to suggest that even early forms of the temple at Bodh Gaya followed the same morphology as other towering temples of the region. Interestingly, Faxian (*ca.* 337–422 CE) describes the temple at Bodh Gaya, or Mahābōdhi mandira (temple) in modern Hindi, as a “*da ta* 大塔,” rather than using a transliteration of the word *stūpa*, such as *sudupo* or *tapo*. James Legge, trans. *A Record of Buddhistic Kingdoms: Being an Account by the Chinese Monk Fa-hien of His Travels in India & Ceylon in Search of the Buddhist Books of Discipline*, 31. This would suggest that Faxian (and others) may have used *ta* to refer to objects other than the mounded *stūpa*, and perhaps he was using *ta* in a manner consistent with a broader use of the term *caitya*, which could also mean “pyramidal column containing the ashes of a deceased person, a sacred tree (especially a religious fig-tree) growing on a hall, temple, or place of worship” in addition to a funerary mound or *stūpa*. Monier-Williams, *A Sanskrit-English Dictionary*, 402. The possibility of the Indic temple as a model for the East Asian pagoda has also been explored in Wu Qingzhou, *Jianzhu zheli, yijiang yu wenhua*, 127–38.



Fig. 13 Dharmarāja ratha, Māmallapuram, ca. 7th century, granite, detail showing palatial components of superstructure over pillared hall in the south Indian temple (Photo by Bernard Gagnon, licensed under Creative Commons Attribution-Share Alike 3.0-2.5-2.0-1.0 via Wikimedia Commons, http://commons.wikimedia.org/wiki/File:Bhima_and_Dharmaraja_temples.jpg#mediaviewer/File:Bhima_and_Dharmaraja_temples.jpg)

Such multi-tiered structures represent the temple as palace (Skt. *prāsāda*, a word not commonly used for the temple in the South) for the enshrined divinity, using the morphology of terraces, vaults, gables, and pavilions taken from an urban architecture in ancient India known to us through Buddhist rock-cut replicas.... Organized around a central axis, however, the temple regularizes such an architecture to meet its symbolic needs.³⁹

Critical to the creation of the Indic temple was the use of the *vāstupuruṣa maṇḍala* as a ground plan to organize the miniaturized palace forms (Fig. 14).⁴⁰ Composed of three parts, *vāstu*, *puruṣa*, and *maṇḍala*, Stella Kramrisch describes *vāstu* as “the extent of Existence in its ordered state...,” *puruṣa* as the “Cosmic Man, the origin and source of Existence.... The plan of the building is

³⁹ Meister, “Prāsāda as Palace,” 256.

⁴⁰ Ibid., “Prāsāda as Palace: Kutina Origins of the Nagara Temple,” 256–57.

used in the foundation of a monument that might aid in the quest personal transformation.

Stella Kramrisch further explains that the altar from which the *maṇḍala* derives was also a means of representing and controlling time. When rendered into a building plan, the border is divided into 32 units, representing the regents of the four planets, who rule over the cardinal-direction points (the equinoctial and solstitial points), and the regents of the 28 Nakshatras, or the lunar mansions of the course of the moon. She emphasizes that the “solar-spatial symbolism is primary and the lunar symbolism is accommodated within the Vāstu-diagram.”⁴⁵ If we understand the plan of the Yongningsi *futu* in this system, the 9 bays in each façade corresponds to the 9x9 *vāstupuruṣa maṇḍala*, resulting in 32 bays around the periphery.

The *vāstupuruṣa maṇḍala* forms the ground plan on which the Indic temple is built, but, as in China, there are few examples of pre-sixth-century towering temples extant in South Asia. However, towering Buddhist temples at major pilgrimage sites were commemorated in small sculptures and plaques, presumably sold as souvenirs, from as early as the 2nd and 3rd centuries CE (Fig. 15).⁴⁶

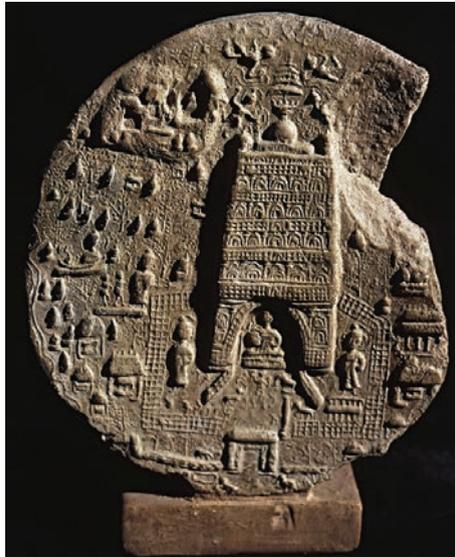


Fig. 15 Terracotta plaque of towering Buddhist Temple from Kumrahar, Bihar, 2–3rd cen. CE, Patna Museum (Courtesy of University of Michigan, History of Art Department, Visual Resources Collections)

⁴⁵ *Ibid.*, 31.

⁴⁶ John Guy, “The Mahābodhi Temple: Pilgrim Souvenirs of Buddhist India,” 356–67.

Like the *stūpa* and the Yongningsi *futu*, the temple in the Kumrahar plaque shown in Figure 15 contains the Buddha(s) at its generative center. Multiple stories are indicated here by railings at the floor level and a series of *caitya* windows above. Emerging from the upper portion of the storied temple is a *harmikā* and *vedikā* supporting a bulbous *stūpa*-like form (perhaps a jeweled urn?), from which extends the *yaṣṭi* crowned by what appears to be *chattras*, topped by a smaller circular finial. The form could well be understood as a *gongta*, a Buddhist “tower of palaces,” and a simple substitution of East Asian palatial forms would transform the tower on the plaque into an East Asian pagoda. But more evidence is needed to prove East Asian builders knew of South Asian temple-building techniques when constructing their own symbolically-potent Buddhist monuments.

The Yicahui Pillar: A Palace of the Buddha in Time and Space

What is obscured in the complexity of the Yongningsi *futu* and the Songyuesi *ta* is made more explicit in another sixth-century Buddhist monument of North China, the Yicahui Stone Pillar 義慈惠石柱 (Fig. 16). This example of imitation architecture from the Northern Qi dynasty (550–77) provides evidence to suggest that patrons of Buddhism understood, at least to some degree, the use of the *maṇḍala* as a tool to control time and space. The Buddha hall crowning the Yicahui Pillar (567–70), although an example of *fangmuzuo*, is considered to be one of our best examples of Buddhist architecture of the period. When the monument is taken as a whole, it suggests that towering Buddhist architecture in East Asia could function as a magical device to help perpetuate the law at a time when the devotional society (*yiyi* 邑義), for which this pillar was a marker, was concerned about an imminent downfall of Buddhist teachings called the age of the end of the dharma or final dharma (*mofa* 末法).⁴⁷ Morphologically, the Yicahui Pillar inverts the *futu*: the body of the object is a pillar rather than a palace and the crowning element is a palace rather than a pillar. Yet this inversion is based on a shared palatial symbolism, and may reflect regional distinctions present in South Asia at the time of its construction.

⁴⁷ Tracy Miller, “Naturalizing Buddhist Cosmology in the Temple Architecture of China: The Case of the Yicahui Pillar,” 17–36. For more on the *mofa* (including its translation as “final dharma”) see Robert E. Buswell and Donald S. Lopez, *The Princeton Dictionary of Buddhism*, 545.



Fig. 16 Yicahui Pillar, limestone, ca. 567–70 CE (Photo by Tracy Miller)

Fu Xinian documents the five parts of the Yicahui Pillar: the foundation stone (2 m×2 m; h. 30 cm, presently set into a new pavilion constructed to protect the monument), a pillar base (1.23 m×1.18 m×54 cm) the upper portion of which is carved to become a twelve-petal lotus; a tapered octagonal pillar (2 sections; total height 4.54 m), a rectangular stone base, or abacus, which is fixed in place horizontally across the top of the pillar (1.26 m×1.05 m×0.28 m), and a 3×2 bay temple hall (79 cm×69 cm; Fig. 17). Although the current pillar is made from limestone, it was originally made of wood only to be replaced with stone between 567–70.⁴⁸ Similar in overall composition to the funerary pillars of the

⁴⁸ Fu, *Zhongguo gudai jianzhu shi*, vol. 2: 153–54.

Southern Dynasties (317–589 CE), differences in both context and form prevent it from being understood as the same object.⁴⁹ Close examination indicates that it is a marker of the magical power of Buddhism, perhaps even a tool to enhance the efficacy of ritual practice.



Fig. 17 Yicahui pillar, limestone, ca. 567–70 CE, detail of palatial shrine showing Buddhist figure in central bay and location of three diagrams (Photo by Tracy Miller)

Because the would-be timber elements of the 3×2 bay palatial hall are rendered so precisely, architectural historians consider it an important example of the style of sixth-century timber architecture in China.⁵⁰ But here I would like to focus on it as an example of *imitation* timber architecture. We can see that it encapsulates the ability of stone to preserve critical formulae for perpetuating the Buddhist law and facilitating rebirth in a Buddhist paradise for the deceased within the devotional society. Front and back facades are composed of a doorway and two windows, the whole crowned with a dramatic ceramic-tiled roof. Within each timber doorway is a figure of a Buddha, each distinguished by different

⁴⁹ Liu Dunzhen made the connection between the two monuments in his detailed 1934 article, “Dingxingxian Bei Qi shizhu,” 177. Differences are detailed in Miller, “Naturalizing Buddhist Cosmology.”

⁵⁰ See, for example, Fu, *Zhongguo gudai jianzhu shi*, 155.

mudrās, and although the figure on the north side is quite damaged, the figure on the south side is likely in the position of teaching (*dharmacakra-pravartanamudrā*). It appears, therefore, to be a doubling of the form of the Buddha.

The “decoration” on the sides of the hall and bottom of the abacus immediately capture the viewer’s attention, and suggest that the Buddhist architecture of the 5th–6th centuries sought to accomplish more than merely placing the Buddha in a palatial setting. Rather we see suggestions of a belief in the magical power of architecture to facilitate rebirth. The underside of the stone, the portion most visible to a viewer looking at the column, holds detailed carving of lotus blossoms, lotus buds, stylized disks, and a complex figure composed of seven interconnected circles, six surrounding a center (Fig. 18).⁵¹ The figures are a key to deriving the plan for the Buddha hall crowning the pillar. Four of the interconnected circles are incised into each of the four corners of the foundation. Two lotus blossoms, each with eight petals, appear on the north and south sides of the foundation. Similarly, one lotus blossom, also of eight petals, is placed on each of the narrower east and west sides. Combined, the ten forms match the number of columns in the building above.⁵²

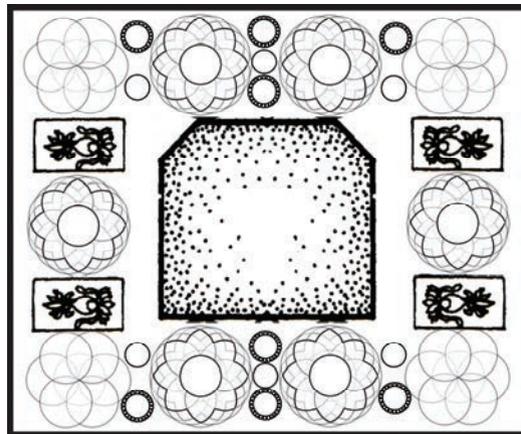


Fig. 18 Abacus bottom, Yicahui pillar (Line drawing after Liu Dunzhen, “Dingxingxian Bei Qi shizhu,” 171; redrawn to show how original construction circle can be used to generate lotus forms)

If one superimposes the diagram onto the plan of the Buddha hall, we can see

⁵¹ The disks are frequently understood to be Chinese coins, but close examination does not reveal a coin shape. There are two different forms, one with petals, or potentially rays, and another without, suggesting moon-sun and/or seed-blossom. This identification is speculative, however.

⁵² Miller, “Naturalizing Buddhist Cosmology,” 20–21.

how each of the petals was used to locate the pillars of that miniature building (Fig. 19)

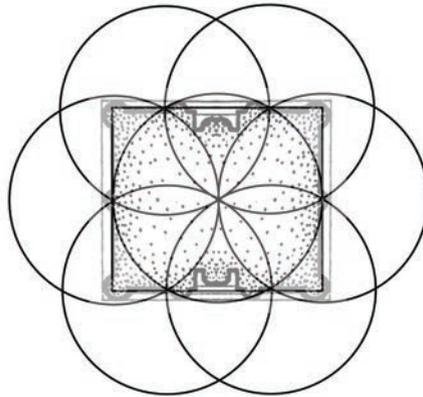


Fig. 19 Yicahui pillar, plan of Buddha hall showing location of inner columns using diagram on abacus (Modified from Liu Dunzhen, “Dingxingxian Bei Qi shizhu,” 171)

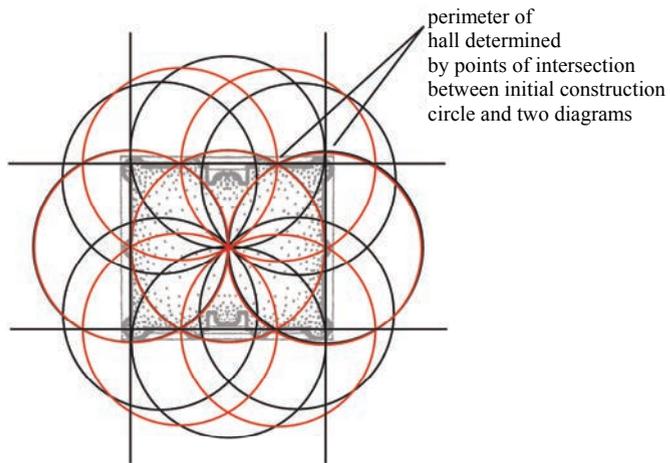


Fig. 19a Addition of second diagram based on lotus blossom (8 circles around a center) showing how both were used to determine the dimensions of the hall

The use of the circle to derive the square form was critical to the implementation of the *vāstumandāla*. The circle was used to determine the cardinal directions so that the diagram might be properly oriented to the rotation of the celestial bodies. The circle also lacked the corners of the square, which

were thought to be points of weakness.⁵³ This process was only slightly different than the similar system used in the 3rd century BCE *Kaogongji* 考工記, a critical part of the *Rites of Zhou* (*Zhouli* 周禮) from the end of the Western Han dynasty (206 BCE–9 CE),⁵⁴ a similarity which may have made Buddhist cosmography more acceptable to an East Asian audience.⁵⁵

The use of this *maṇḍala*-like diagram also displayed how the plan of a rectangular Chinese palace and South Asian temple could be generated by the same method, and potentially contain the same regenerative powers. The craftsmen responsible for the Yicihui Pillar, or the ritual specialists guiding them, seem to have designed the abacus to emphasize how the columns are cognate with the lotus, an emblem of not only pure rebirth, but also the shape of the Mahāyanā cosmos. The images of the diagram on the side façade are matched by the images of the lotus bud underneath the abacus. The six columns located by the intersection of the circles are each matched by an eight-petal lotus blossom underneath the abacus, a lotus blossom that was generated by a circle of the radius as those in the original diagram. Thus both lotus and diagram were generated by the single circle. The column form also seems to be implicated in this design. Conceptions of space indigenous to the Yellow River valley have long emphasized a nine-part division. Yet there are ten columns in the miniature Buddha Hall and ten diagrams underneath the abacus. In the Buddhist context, the center is not on a single plane with the cardinal and inter-cardinal directions. Rather, the center includes zenith and nadir, resulting in six (n, e, s, w, z, n) or ten (n, ne, e, se, s, sw, w, nw, z, n) directions rather than nine.⁵⁶ By elevating the building on a column extending upwards from the twelve-petal lotus at the base, the additional directions of nadir and zenith are incorporated into the monument as a whole.

The twelve-petal lotus used for the base of the pillar can also be created though a further rotation of the six circles in the diagram. Twelve is associated with the lunar divisions of the year and the twelve constellations of the zodiac, giving the monument potential as a device to access time. Twelve is also associated with the twelve-fold chain of dependent origination discussed in the *Sūtra of Resolving Doubts Concerning the Semblance Dharma* (*Xiangfa jueyijing* 像法決疑經), an indigenous Chinese text dating to the sixth century.⁵⁷ Taken as a

⁵³ Meister, “Mundeśvarī: Ambiguity and Certainty in the Analysis of a Temple Plan,” 85–86.

⁵⁴ Boltz, *Zhou li*, 25–26.

⁵⁵ Miller, “Naturalizing Buddhist Cosmology.”

⁵⁶ An excellent overview of the incorporation of zenith and nadir into Buddhist cosmology can be found in Akira Sadakata, *Buddhist Cosmology: Philosophy and Origins*, 19–30.

⁵⁷ Kyoko Tokuno, “The Book of Resolving Doubts Concerning the Semblance Dharma,” 270. This connection is also discussed in Liu Shufen, “Bei Qi Biaoyixiang Yicihui shizhu—zhonggu Fojiao shehui jiuji de ge’an yanjiu.”

whole, the monument succeeds in embodying time and space in a manner able to suggest the complexity of the Mahāyanā Buddhist cosmos and the potential for rebirth at a higher place and in another time (Fig. 20).

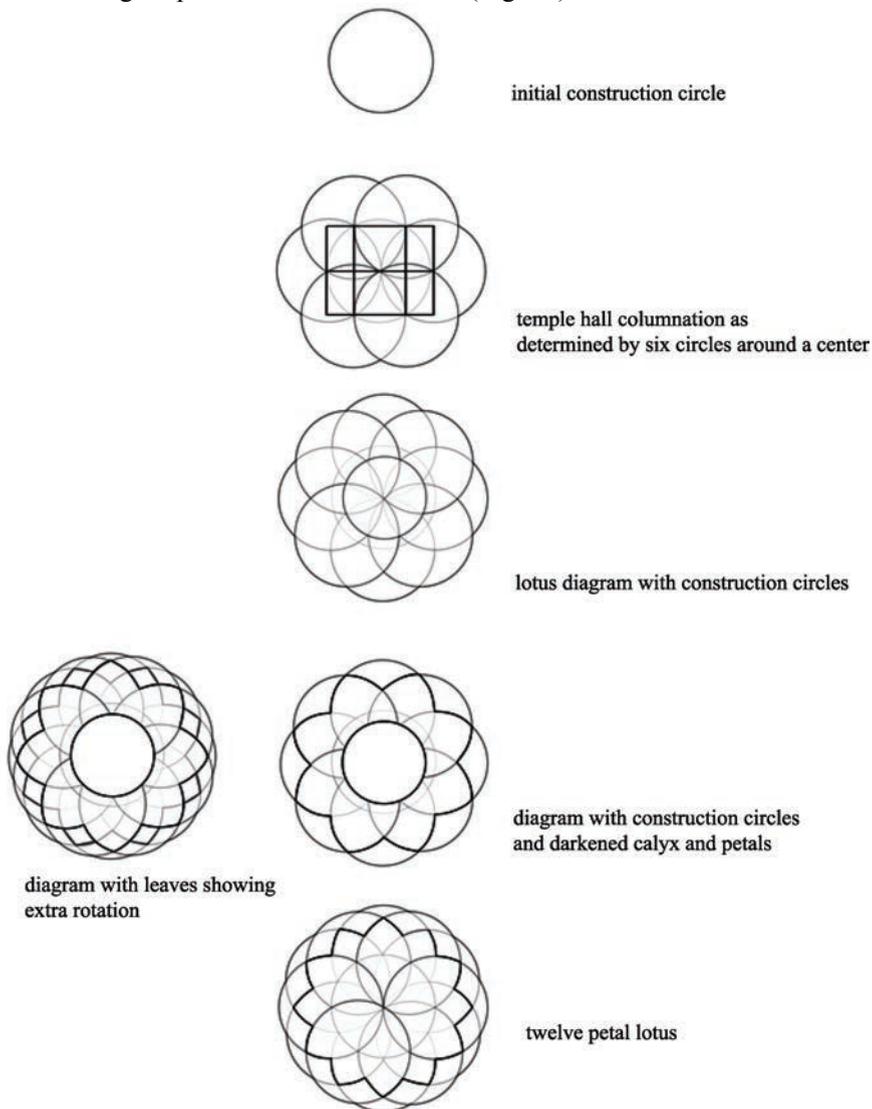


Fig. 20 Generation of diagrams on the Yicahui pillar abacus from a circle of a single radius (Tracy Miller, “Naturalizing Buddhist Cosmology,” 36)

The diagrams on the Yicahui pillar are, evidently, a key to understanding the use of the *maṇḍala* for a ground plan in the context of North China. Might they

be applied to the plan of another monument? With its twelve-sided exterior and eight-sided interior, the divisions of time and space had already been folded into the ground plan of the Songyuesi pagoda. Through the multiplication of the 3-bay palatial façade, the square plan of the Yongningsi *futu* was able to suggest the twelve-fold division of time through the square grid plan. Although the use of a grid alone does not prove the South Asian *maṇḍala* was used to generate the plan; the use of the circles to derive the columnation of a timber-frame building, as seen on the base of the Yicihui pillar, is much more suggestive of artistic transmission. Interestingly, when applied to the plan of the Yongningsi *futu*, one reconstructed based on archaeology of the site, it is possible to determine the rationale behind its highly idiosyncratic column system.

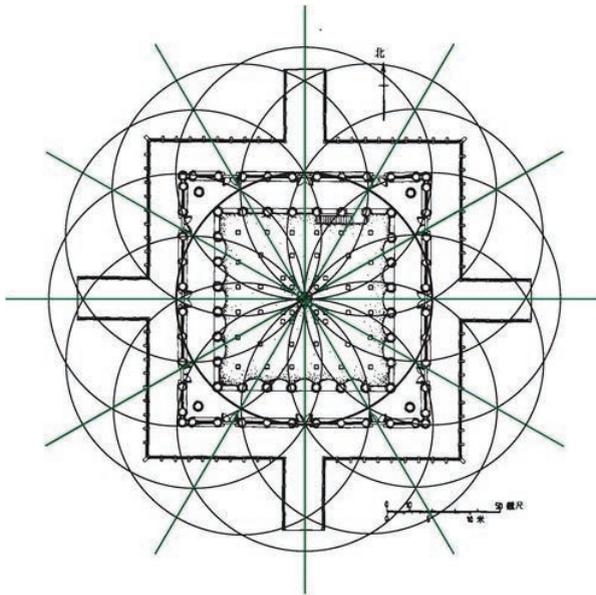


Fig. 21 Yongningsi *futu*, plan showing central construction circle with twelve circles (Modified from Zhong Xiaoqing, “Bei Wei Luoyang Yongningsi ta,” 56)

Careful examination of the column grid excavated at Yongningsi shows that the corner columns are just slightly out of line with the inner columns. Furthermore, each exterior corner is supported by a combination of four columns distributed in a cluster of three on the exterior and one set slightly inward on the interior. Zhong Xiaoqing suggests that the unusual configuration was the result of additional structural support used to reinforce the corners.⁵⁸ However, application of the method for locating columns seen on the Yicihui Pillar abacus

⁵⁸ Zhong, “Bei Wei Luoyang Yongningsi ta,” 58–59.

provides another possible explanation. If we take the width of the exterior columns as the diameter of the primary construction circle, we can see how the addition of twelve circles around the center locates the corners of the third ring from the center and the outer column ring as well as the interior six columns on each side of the fifth ring which frames the adobe brick core (Fig. 21). A further rotation of the circles, to include twenty-four rather than twelve around the periphery shows us the location of the corners of the *futu* platform (Fig. 22). Yet, because the columns are not aligned in a regular grid, another system (or systems) must also have been employed to generate the plan. The abacus of the Yicihui Pillar also displayed a nine-circle diagram, eight around a center. If we overlay a nine-circle diagram composed of the circles of the same diameter, we see that the two diagrams intersect with the original circle at eight points around the perimeter. Connecting those points to make a square finds the location of the additional columns set in from the four corners, suggesting they were placed for more than purely structural support, as previously supposed (Figs. 23, 24).

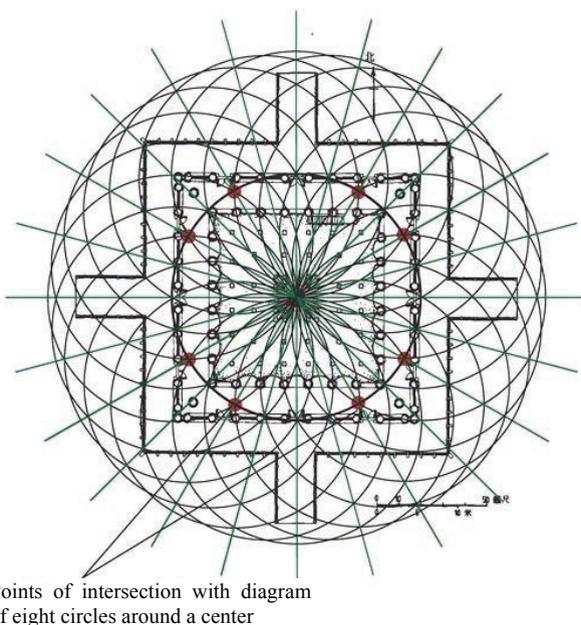
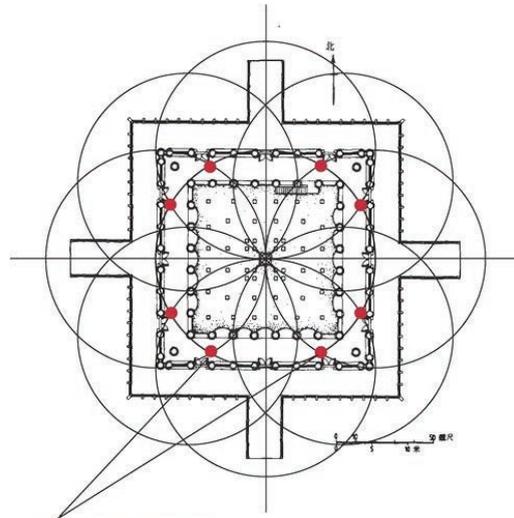


Fig. 22 Yongningsi *futu*, plan showing central construction circle with twenty-four circles (Modified from Zhong Xiaoqing, “Bei Wei Luoyang Yongningsi ta,” 56)

If South Asian methods of temple-building were being employed in the making of the Yongningsi *futu*, then the grids of either 8x8 or 9x9 squares (or both) should also be in evidence. If we overlay a 9x9-square grid onto the width of the interior columns, then the locations of all but the corner columns on each



Points of intersection with diagram of eight circles around a center

Fig. 23 Yongningsi futu, plan showing central construction circle with eight circles (Modified from Zhong Xiaoqing, "Bei Wei Luoyang Yongningsi ta," 56)

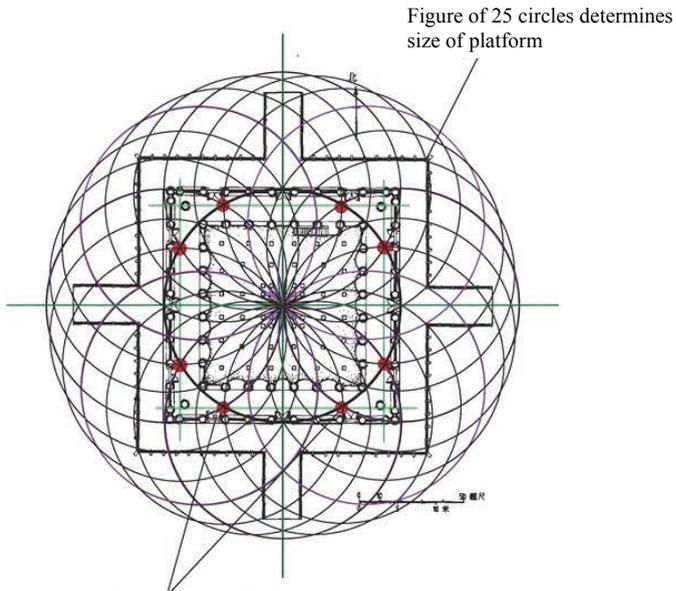


Figure of 25 circles determines size of platform

Points of intersection of diagrams with eight and twelve circles around the center

Fig. 24 Yongningsi futu, plan showing central construction circle with eight circles and twenty-four circles showing points of intersection used to locate interior corner columns (Modified from Zhong Xiaoqing, "Bei Wei Luoyang Yongningsi ta," 56)

column ring are revealed. Again, another system might be at work. Unfortunately, neither an 8x8 square grid the width of the construction circle nor the 9x9 grid revealed anything when laid directly on top of the plan. However, if one takes an 8x8 grid with a width equivalent to the diameter of the original construction circle, rotate it 45 degrees, and lay it over the plan, each corner column sits at a crossing point. A straight line connecting each of these corners results in the column grid for the entire interior through an intersection of the two grids (Fig. 25).

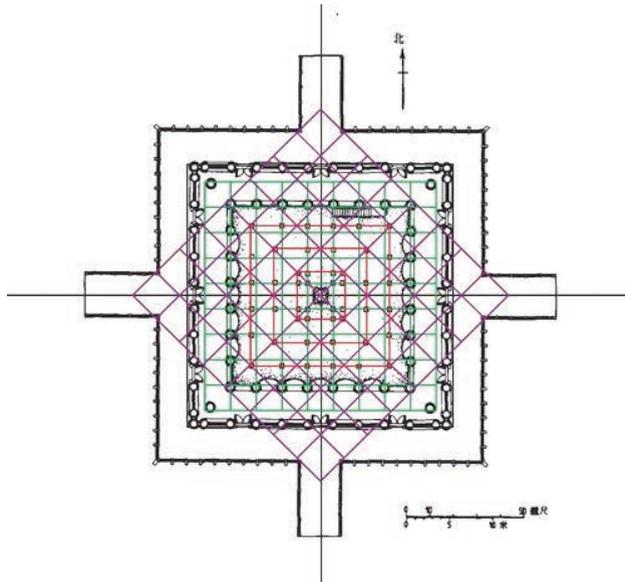


Fig. 25 Yongningsi *futu*, plan showing intersection 9x9 mandala used to locate inner grid columns, and 8x8 mandala, turned 45°, used to locate the inner corner columns (Modified from Zhong Xiaoqing, “Bei Wei Luoyang Yongningsi ta,” 56)

Evidently, the use of the *vāstupuruṣa maṇḍala*, like other aspects of South Asian temple architecture, was not restricted to temples dedicated to the deities of Hinduism but could also be used in the Buddhist context. By using basic tools of gnomon and a cord, the diameter of the desired length and width of the structure as a builders’ compass, craftsmen could determine the location of each structural column by the crossing points of a series of ephemeral circles petals which themselves took the shape of a vast lotus blossom. But, if this building diagram were unseen in the final *futu*, which would have been built directly on top of it, why go through the effort?

As an imperial monument sponsored by an empress dowager who longed to display belief in Buddhism, we should expect a complex system, one that would

reflect the current beliefs in the ability of the cosmic Buddha to define and embody the universe. The use of the Indic grid, both the 8x8 grid of the temples of the Brahmins and 9x9 grid of the temples and palaces of the Kṣatriya military rulers, reflects Vedic ideas of the *puruṣa*, the anthropomorphic universal creative force that defines and protects the ritual space.⁵⁹

At the Northern Wei court, the newly translated *Buddhāvataṃskasūtra* (Flower Garland Sūtra) and the newly composed *Brahmajālasūtra* (Sūtra of Brahma's Net) used strong visual metaphors for communicating the complexity of the Mahāyāna cosmos, but with the Vairocana Buddha as the source of generative power rather than the Vedic *puruṣa*.⁶⁰ In the Lotus Repository World 蓮花藏世界 chapter of the *Buddhāvataṃskasūtra* we read that the Buddhist universe was constructed from innumerable "wind wheels" (*fenglun* 風輪). Above the wind wheels is a fragrant ocean, from which emerges a giant lotus which itself contains seeds encapsulating miniature versions of itself: numerous other worlds, each with its own Mt. Sumeru, fragrant ocean, and continents.⁶¹ This vision seems to have been actualized, at least temporarily, in the ground plan of the Yongningsi *futu* during the construction process. The multiplicity of façades in the elevation may also relate to the metaphor of the net present in the *Buddhāvataṃskasūtra* and the *Brahmajālasūtra*. Following the *Buddhāvataṃskasūtra*, the *Brahmajālasūtra* expounds upon the vastness of the Lotus Repository World. In one passage, when Śākyamuni Buddha is inspired by the nets of Brahma (or the King of Brahma Heaven) to rethink how to explain the nature of the expansive Buddhist universe, he states:

Innumerable worlds are just like the eyes in this net. Each and every world is different from the other, and the differences are innumerable. It is the same with the gateways of the Buddha's teachings.⁶²

⁵⁹ The combination of *maṇḍalas* in the plan of the *futu* may have been influenced by a concern for protecting the vulnerable corners, or *mahāmarmas* of the grid. See Kramrisch, *The Hindu Temple*, 52–57. By using the rotated 8x8 *maṇḍala* to locate the corners of the column rings, the corners of the 9x9 *maṇḍala* are protected.

⁶⁰ Aramaki, "The Huayan Tradition in Its Earliest Period," 169–87.

⁶¹ T. 278: 9.412b8–9 (Buddhabhadra translation, early fifth century CE). A detailed discussion of the Lotus Repository World can also be found in Sadakata, *Buddhist Cosmology: Philosophy and Origins*, 144–57.

⁶² The original *sūtra* with the Taehyeon (Silla) commentary can be found in: *Exposition of the Sūtra of Brahma's Net*, translated by A. Charles Muller, 218. I have followed this translation with only one minor modification. More on the composition of the *Brahma's Net Sūtra* and its relationship to the *Buddhāvataṃskasūtra* can be found in Aramaki, "The Huayan Tradition in Its Earliest Period," 169–87. I would like to thank Karil Kucera for suggesting this connection in her comments on an earlier draft of this paper. The original text reads: 無量世界、猶如網孔、一一世界、各各不同、別異無量。佛教門亦復如是。吾今來此世界八千返。

Thus the doorways on each side of each story could be understood as one of the eyes in a net, an entry into a one of a myriad distinct Buddha worlds, and a doorway into the Buddha's teachings. The single building would have had the potential to serve as a map of the universe and model of its vastness all while encoding the divisions of time and space in the combinations of twelve and eight circles originating from that single circle whose diameter is the width of the building. Like the grottoes at Yungang, the multiplication of palatial façades signifies the multiplicity of Buddha worlds. Yet, by using the *maṇḍala* as a building plan, the mountainous adobe interior has become cognate with both cosmic mountain and the body of the cosmic Buddha, who sits atop the blossom of the Lotus Repository World.⁶³

The replication of palaces at multiple levels around a central axis communicates the regenerative power of the diagram as plan for the temple, as well as the three-dimensional space of the temple itself.⁶⁴ The central axis is critical in the symbolism of both the stūpa and the towering temple, and is thought to symbolize the cosmogonic moment of the earth's creation in the larger Vedic tradition.⁶⁵ Wei Shou's "palatial *ta* (tower) system" (discussed above) seems an apt description of a complex monument able to not only impress the viewer with its magnificence but also to express the infinite power of the divine Buddha who resides in a palace on Mt. Sumeru.

The same twelve-fold division of doorways is expressed in the twelve-sided exterior of the Songyuesi Pagoda, suggesting a similar symbolism was at work. As the earliest freestanding pagoda, we can walk into the monument to discover the octagon of its interior plan. In the past a wooden staircase was built along the walls, allowing the devoted to circumambulate the central space (which likely originally held an image) as they climbed to a higher realm. Each of these Buddhist monuments was crowned with the spire that marked the apex of North

⁶³ Wong, "The Mapping of Sacred Space: Images of Buddhist Cosmographies in Medieval China," 60; Sadakata, *Buddhist Cosmology*, 154–55.

⁶⁴ Kramrisch suggests that the 9x9 grid was "drawn in closer conformity with the 'body' of the Vāstupuruṣa," and was the preferred plan of the Kṣatriyas, *The Hindu Temple*, 46–47. The concept of Puruṣa here resembles conceptions of body of the Buddha, particularly the Vairocana Buddha of the *Buddhāvataṃsakasūtra*; see Dorothy Wong, "The Mapping of Sacred Space: Images of Buddhist Cosmographies in Medieval China," 60. If the deified Mahāyāna Buddha was understood as the *mahāpuruṣa*, then perhaps the inclusion of the term "*tu*" in the compounds for the towering Buddhist temples *fotu/futu* (as well as in early transliterations of the term "Buddha") were a reference to the use of this type of *maṇḍala* for a building plan.

⁶⁵ John Irwin, "The Axial Symbolism of the Early Stūpas: An Exegesis," and Michael Meister, "De- and Re-Constructing the Indian Temple," 395–400. Zhong Xiaoqing argues that the cavity at the center point of the pagoda likely accommodated a central wooden pillar extending through the entire structure; "Bei Wei Luoyang Yongningsi ta," 58.

Indian towering temples, Buddhist and Hindu alike.

The crowning element of the Yicihui pillar is the palace, suggesting a different source for its symbolism. Although only preserved in stone from the 7th century, the rock-cut temples at Māhamallapuram are thought to reflect a fully formed regional style distinct from North India, one that became the dominant Dravida temple architecture of South India (Fig. 12). Both temple styles are based on the symbolism of the palace as shelter for divinity, with multiple stories of miniature pavilions used to create a superstructure constructed using the *vāstupuruṣa maṇḍala* as a guide. But in the South Indian temple the concept of “shelter” is preserved in the crowning *śikhara*—in this case referring to the upper crowning member only, one that takes the form of a pyramidal or octagonal roof. Thus the “South Indian temple, though it condenses its palace storeys as time progresses, never loses its palace form.”⁶⁶ Similar to the Yicihui pillar, the central space of cosmic creation in the South Indian temple is crowned by the essential form of the palace, suggesting multiple routes of stylistic transmission in the development of Buddhist art under the Northern Qi. Influences in temple architecture from India’s southern kingdoms could have been transmitted to China via maritime travel routes such those used by the famous monk Faxian 法顯 (337–ca. 422 CE) on his return to China from India in the early fifth century.⁶⁷ As a monument constructed for the sake of rebels against the Northern Wei dynasty, the Yicihui Pillar may then have been part of a different Northern Qi style of Buddhist art, one that emphasized maritime rather than overland connections to the homeland of the Buddha.⁶⁸

Conclusion

In the case of the Buddhist monuments discussed above, imitation timber architecture was used to do more than represent narratives of the lives of the Buddha, it was used to denote the power of the Buddha’s presence and to provide individuals access to that power. Following the South Asian tradition, the image of “palace”—timber represented in stone—was used on the rock-cut cave temples to signify the presence of the princely Buddha permeating the indigenous sacred landscape. By the fifth century CE the forms of palace had

⁶⁶ Meister, “Prāsāda as Palace,” 256.

⁶⁷ For more on Faxian’s 法顯 travels, see Faxian, *A Record of Buddhistic Kingdoms: Being and Account by the Chinese Monk Fa-hien of His Travels in India & Ceylon (A.D. 399–414) in Search of the Buddhist Books of Discipline*.

⁶⁸ For more on the connection between the Northern Qi and South India during the sixth century, see Angela Howard, “Buddhist Cave Sculpture of the Northern Qi Dynasty: Shaping a New Style, Formulating New Iconographies,” 6–25.

been expanded to include the local visual vocabulary of the Yellow River valley: trabeated timber-frame halls covered with ceramic roof tiles. Freestanding towering Buddhist temples also existed from this period. The Kumrahar plaque, the Yongningsi *futu* and the Songyuesi pagoda all employed architectural forms, rendered in clay, timber, and brick, in a manner similar to that seen in the cave shrines. In these works the “imitation” of palace forms appears to be critical to imbuing the monument with meaning and transformative potential. The evidence discussed above reveals that imitation could be manufactured from any material, including timber itself. Like their contemporary Hindu counterparts, the development of the towering temple appears to have been based on the use of construction circles and the *vāstupuruṣa maṇḍala* to determine a ground plan. Employing the *maṇḍala* to organize the theophany of the rock-cut shrine allowed for the creation of the idealized cosmic mountain as an expression of the power of the divine Buddha in any location. We see overt evidence for the use of *maṇḍalas* carved onto the abacus of the 6th-century Yicahui Pillar, a monument contemporary with the documentation of its use for South Asian buildings in the *Brihat Samhita*. Here the columns of the Chinese-style palace were located using the same technique as was used to generate the square *maṇḍala*, the basis for the construction of the Hindu temple. Using the method delineated on the pillar, we can see how larger freestanding buildings were magically charged with the power of the *maṇḍala*. The replication of the palace form as an appropriate shelter for divinity was critical to the sacred program in all of these contexts, and speaks to the significance both of the freestanding indigenous architectural language and the abilities of pre-modern craftsmen to incorporate new cosmologies to unleash the symbolic potential of that language.

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