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 mandalas 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 Saddharmapuṇḍarikāsūtra (妙法蓮華經 or Lotus Sūtra, Ch. translation 3rd c. CE), the Buddhāvatārapakasūtra (華嚴經, often simplified as華嚴經 or Flower Garland Sūtra, Ch. translation by Buddhabhadra 418–21 CE), and Brahmajālasūtra (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 Sūtra, 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-gṛha, literally “caitya house”), designed for a combination of circumambulation and congregational worship, and the vihāra or monastic quarters. According to Debala Mitra, the caitya-gṛha 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 (yaśā) extending upwards from a (4) reliquary chamber, through a (5) square base (harmikā) surrounded by a (6) railing (vedikā). The yaśā 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

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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 Lallemant), *The Stūpa: Its Religious, Historical and Architectural Significance*; and Anagarika Brahmacari Govinda, *Psycho-cosmic Symbolism of the Buddhist Stūpa*.
⁶ Mitra, *Buddhist Monuments*, 24, and 24n.12. Peter Harvey suggests that these may have been pre-Buddhist āṇapas 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 (vrksa-caitya) and even an image of Buddha.” The caitya-grha is known to have co-existed at sites already containing open-air stūpas, such as the Buddhist ritual site at Sāncī (Fig. 3). The primary rite of worship at a stūpa is circumambulation (pradaksīna) 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 Rishi cave in Bihar, at the time of King Aśoka. 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. Curved timber rafters still frame the interior barrel vault as an overt reference to arcuated-timber prototypes (Fig. 4).

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

7 Mitra, Buddhist Monuments, 21.
10 Mitra, Buddhist Monuments, 154–55, and Dehejia, Early Buddhist Rock Temples, 79.
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-gṛha 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.\footnote{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.}

The veranda walls, then, allow the devotee to visualize numerous Buddhas and Buddha realms all existing concurrently.
Narrative reliefs on the gateways (*toras*) 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 Torana 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

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\(^{13}\) 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*, 32–89.
is an effective expression of the transformative power and expansive presence of the Buddha.\(^\text{14}\)

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 Bialek, 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 Śrāvastī 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.\textsuperscript{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 pradaksīṣa within the cave.\textsuperscript{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 fāngmuzuo? The narrative panels display how the concept of palace was

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

\textsuperscript{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 pradaksīṣa 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). 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 Buddhāvatamsaka (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 宮塔制度: 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. Although most have been lost to time, seventeenth-century restorations provide some sense of the image of the whole

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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 濃水, Li Daoyuan describes an excavation of cave temples along the Wuzhouhan River 武州(尚)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(煙峙)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 facades were present along the cliff face in the early sixth century. Li Daoyuan 醈道元 (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.
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, 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, Yang Xuanzhi tells us that Yongningsi was founded by Empress Dowager Ling 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 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 Tuita Heaven (兜率淨宮) could not compare to it. 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 futu sitting just south of the Buddha Hall. The building appeared to be constructed entirely of timber but had a central core of adobe brick. 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.

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 urn 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.

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

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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。有剎復高十丈，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。剎上有金寶瓶，容二十五石。寶瓶下有承露金盤三十重，周圍皆懸金鐸，復有鐵鎖四道，引剎向浮圖。四角山上亦有金鐸，鐸大小如一石甕子。浮圖有九級，角角皆懸金鐸，合上下游一百二十鐸。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。復有金錘鋪首，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. 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. The clearest connection between futu and the term “stūpa” is found in Xuanzang’s (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.

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. 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 fotu” 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 呆蜜國) 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，又曰輪廂，又曰塔廂，又曰私廂，又曰載斗廂，皆譯也.

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 \textit{sudupo} (and, by extension, \textit{futu}) like \textit{caitya}, denoting the sacred traces of the Buddha regardless of form or type of relic.\footnote{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.} Yet in pre-Tang Chinese sources, possible forms of the \textit{futu} do appear to be of some concern. For example, in his “Treatise on Buddhism and Daoism” (\textit{Shi Lao zhi} 落老志) in the \textit{Weishu} 魏書, Wei Shou 魏收 (506–72) discusses both the \textit{ta} and the \textit{futu/fotu}. \textit{Ta} was the foreign term (\textit{huyan} 胡言) for a structure used to house the jeweled urn \textit{寶瓶}, which contained the remains of the historical Buddha. It was a “palatial space” (\textit{gongyu} 宮宇) for the relics that functioned as a memorial temple (\textit{zongmiao} 宗廟).\footnote{Wei Shou, \textit{Weishu}, 3028.} Interestingly, Wei Shou emphasizes the number of “levels” in the construction of \textit{fotu/futu}:

After the White Horse Monastery had been built in Luo[yang], the \textit{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 \textit{ta} system (used for the \textit{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 \textit{“futu”} or \textit{“fotu.”}\footnote{Ibid., 3029. This translation loosely follows Leon Hurvitz, trans., \textit{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, 犹依天竺舊狀而重構之, 世} But what was the ancient Indian shape that made up the multi-layered “palatial \textit{ta} system”? The most recognizable form of Buddhist architecture in South Asia is the \textit{stūpa}, and, although a few scholars have noted the connection between the Hindu temple and the Chinese Buddhist \textit{ta}, most architectural historians in China have interpreted the passage as referring to its domed form.\footnote{See, for example, the discussion in Fu Xinian, ed., \textit{Zhongguo gudai jianzhu shi}, vol. 2: \textit{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 \textit{fota}, including Zhang Gong, \textit{Han-Tang Fosi wenhua shi}, 154–55, and Wu Qingzhou, in his \textit{Jianzhu zheli, yijiang yu wenhua}, 127–38.} The use of miniaturized palatial forms on Buddhist grottoes provides an important connection. In the \textit{caitya-grha}, the \textit{stūpa} is a marker of the Buddha’s presence, with or without a sacred relic. The term \textit{grha} means “house” or “home,” therefore the \textit{caitya} at Karla is literally \textit{housed} by the cave (or, originally, hall), which is decorated with arcuated South Asian palatial forms, including registers.
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. 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* 重) or -level (*ji* 级) 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. 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.

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.

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. However, in the excavation report published in 1996 and subsequent

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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). 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 facades 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 facades 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 facade with central doorway suggests entry into another Buddha realm.

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.

“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 prāśāda—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 prāśāda palace, those appearing on the walls of the cave temples, to create a tower of palaces. 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 Rājivalocana 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 Mahābōdhiṃandira (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 Buddhist Kingdoms: Being and 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, yifang yu wenhua*, 127–38.
Such multi-tiered structures represent the temple as palace (Skt. prāśāda, 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 mandala as a ground plan to organize the miniaturized palace forms (Fig. 14).40 Composed of three parts, vāstu, puruṣa, and mandala, 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

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39 Meister, “Prāśāda as Palace,” 256.
in the likeness of the Puruṣa, or the totality of manifestation,” and Maṇḍala, “denot[ing] any closed polygon.”41

By using it as the ground plan for a temple, builders encode the altar of the first sacrifice—that used at the moment of the earth’s creation, when the spirit (Puruṣa) preventing the separation of the earth from the heavens was pinned to the earth by protective deities—directly into the foundation of the temple itself.42 The vāstupuruṣa maṇḍala is a square, but it can be converted to another closed polygon, or a circle, based on ritual necessity. The 6th-century Bṛhat Samhitā describes two major building plans based on grids of either 8x8 (for temples and shrines used by the Brāhmaṇas) or 9x9 (for palaces and temples used by the Kṣatriya caste of military rulers).43 Protective deities are represented on the plan as occupants of the individual squares on the periphery, or, in the case of the 8x8 plan, half-squares at the corners. In either plan the width is three units with the central unit being 3x3 or 2x2 squares. This is considered to be the space of the generative principle, brahman.44 With the vāstupuruṣa maṇḍala as its plan, the building is in the “likeness of Puruṣa,” the pinned deity now being

42 Ibid., 67–97.
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 mandala 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.”

If we understand the plan of the Yongningsi futu in this system, the 9 bays in each façade corresponds to the 9x9 vāstupurusa mandala, resulting in 32 bays around the periphery.

The vāstupurusa mandala 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).

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)

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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 yaśī 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 Yicihui 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 Yicihui Stone Pillar (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 Yicihui 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). Morphologically, the Yicihui 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.

Fu Xinian documents the five parts of the Yicihui 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 × 0.54 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

Southern Dynasties (317–589 CE), differences in both context and form prevent it from being understood as the same object. 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.

Because the would-be timber elements of the $3 \times 2$ bay palatial hall are rendered so precisely, architectural historians consider it an important example of the style of sixth-century timber architecture in China. 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

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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, Yicihui 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)](image)

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

The use of this \textit{mandala}-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 Mahāyāna 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.\textsuperscript{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 through 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 \textit{Sūtra of Resolving Doubts Concerning the Semblance Dharma (Xiangfa jueyijing 像法決疑經)}, an indigenous Chinese text dating to the sixth century.\textsuperscript{57} Taken as a

\textsuperscript{55} Miller, “Naturalizing Buddhist Cosmology.”
\textsuperscript{56} An excellent overview of the incorporation of zenith and nadir into Buddhist cosmology can be found in Akira Sadakata, \textit{Buddhist Cosmology: Philosophy and Origins}, 19–30.
\textsuperscript{57} Kyoko Tokuno, “The Book of Resolving Doubts Concerning the Semblance Dharma,” 270. This connection is also discussed in Liu Shufen, “Bei Qi Biaoyixiang Yichui 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 Mahāyāna Buddhist cosmos and the potential for rebirth at a higher place and in another time (Fig. 20).

![Diagram](attachment:figure_20.png)

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

The diagrams on the Yicihui pillar are, evidently, a key to understanding the use of the *mandala* 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 *maṇḍāla* 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 Yichui 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.

![Diagram](image)

**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. However, application of the method for locating columns seen on the Yichui Pillar abacus

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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 Yichi 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).

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

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 Xiaqing, “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](image.png) 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 Xiaqing, “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 $8 \times 8$ grid of the temples of the Brahmins and $9 \times 9$ 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 *Buddhāvatsākṣasūtra* (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 *Buddhāvatsākṣasūtra* 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 facades in the elevation may also relate to the metaphor of the net present in the *Buddhāvatsākṣasūtra* and the *Brahmajālasūtra*. Following the *Buddhāvatsākṣasūtra*, 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. $^{62}$

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$^{59}$ The combination of māralas 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 $8 \times 8$ mārala to locate the corners of the column rings, the corners of the $9 \times 9$ mārala are protected.


$^{62}$ 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 *Buddhāvatsākṣasūtra* 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，今今來此世界八千返。
Thus the doorways on each side of each story could be understood as one of the eyes in a net, an entry into 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 mandala 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 cosmogenic 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

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64 Kramrisch suggests that the 9x9 grid was “drawn in closer conformity with the ‘body’ of the Vāstu puruṣa,” 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 Buddhāvatātpakasātra; 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 mandala for a building plan.
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 vastupurusa mapāśala 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

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66 Meister, “Prāśāda 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 fatu 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 vāśīpurusa 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 Yicihui 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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