

Between One and Many: Multiples, Multiplication and the Huayan Metaphysics

HSUEH-MAN SHEN

New York University

I. Introduction

IN THE EARLY AFTERNOON hours of 25 September 1924, the Leifengta 雷峰塔 Pagoda located on a bluff overlooking the scenic West Lake in present-day Hangzhou collapsed (Fig. 1), revealing multiple copies of the *Dhāraṇī of the Seal on the Casket of the Secret Whole-body Relic of the Essence of All Tathāgatas* (s. Sarvatathāgatadhiṣṭhānaḥṛdayaguhyadhātu karaṇḍamudrā-dhāraṇī; c. Yieqie rulai xin mimi quanshen sheli baoqie yin tuoluoni jing 一切如來心祕密全身舍利寶篋印陀羅尼經, hereafter, *Dhāraṇī Sutra of the Seal on the Casket*).¹ The printed texts were rolled up and enclosed inside hollow bricks that once formed the upper stories of the pagoda.² These scrolls commonly bear dedicatory inscriptions referring to Qian Chu 錢俶 (929–88, r. 947–78), the last king of Wuyue 吳越 (907–78), a wealthy independent kingdom covering present-day Zhejiang, Shanghai, and the

Read at the Academy 1 November 2011.

¹ There are two Chinese translations, one by Amoghavajra (705–74) and the other by Dānapāla (fl. 982). See *Taisho Tripitaka* (hereafter T.), T 1022A.19.710a–712b, T 1022B.19.712b–715a, and T 1023.19.715a–717c.

² Other treasures of the Leifengta Pagoda would have to wait until the 2001 excavation of the pagoda foundation, at which point archaeologists revealed an underground relic burial. For a report of the excavation, see Zhejiang sheng wenwu kaogu yanjiusuo (ed.), *Leifeng ta yizhi* (Beijing, 2005).



Figure 1. The Leifengta Pagoda before collapse (c.1924). Hangzhou, Zhejiang province. After Tianjin shehui kexueyuan chubanshe (ed.), *Qiantu jiangcheng: ershi shiji chu Changjiang liuyu jingguan tuji* (Tianjin, 1999), pp. 18–19.

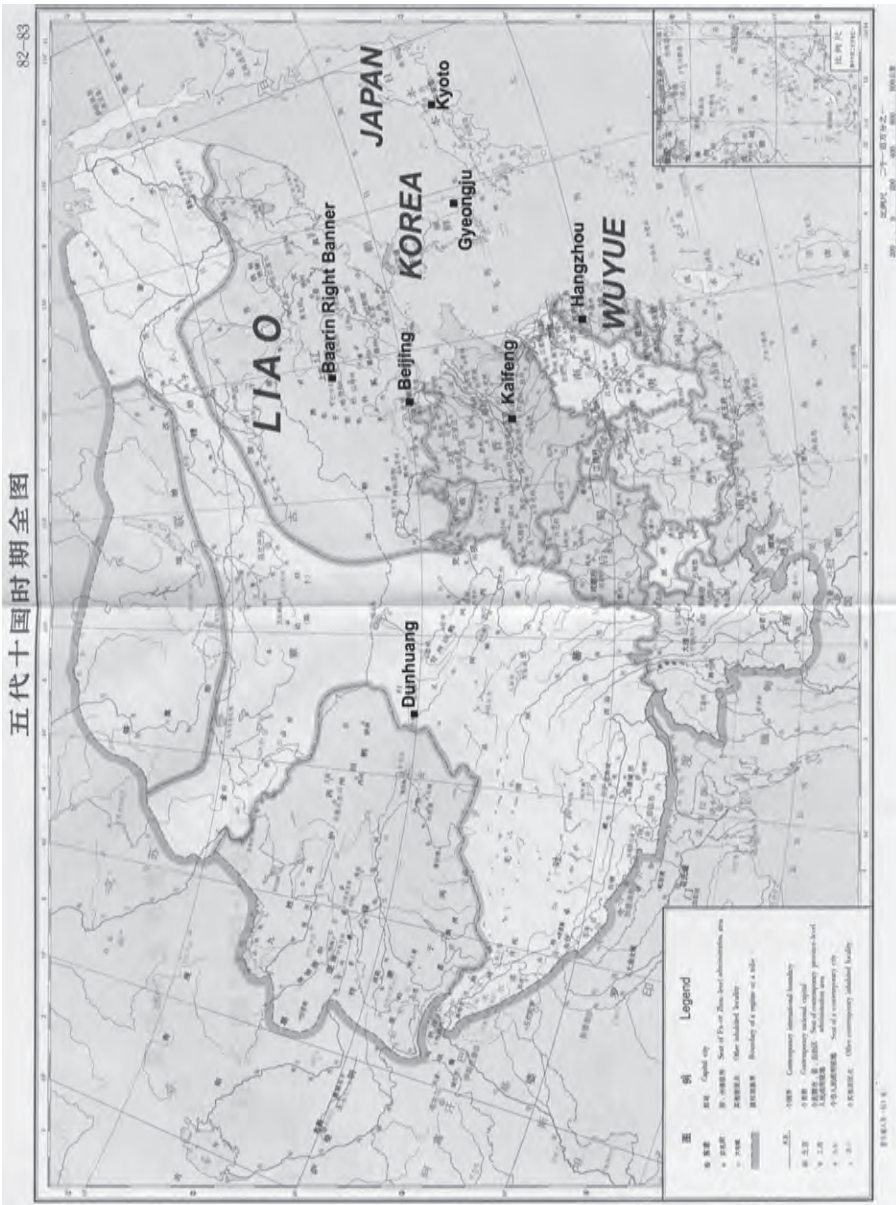


Figure 2. Map of China (c. 943). Edited from Tan Qixiang (ed.), *Zhongguo lishi ditu ji*, vol. 5, *Sui, Tang, Wudai Shiguo shiqi* (Shanghai, 1982), nos. 82-3.

southern portion of Jiangsu province (Fig. 2). The inscription on the scrolls is accompanied by an illustration preceding the *Dhāraṇī Sutra of the Seal on the Casket*, and it reads: ‘Qian Chu, Generalissimo of the Army of the World, King of Wuyue, has made 84,000 copies of this sutra, and interred them into the brick pagoda at the West Gate as an enduring offering. Noted on a day of the eighth month of the year of *yihai* [equivalent to 975].’ 天下兵馬大元帥吳越國王錢俶造此經八萬四千卷入西關塔永充供養乙亥八月日紀 (Fig. 3).³

The exact quantity of and circumstances in which these scrolls were retrieved from the site of the Leifengta Pagoda are not entirely clear to us. But there are about fifty known copies world-wide. Modern scholarship has shown that at least three printings were made between 956 and 975, and that several sets of woodblocks were used to produce those scrolls.⁴ Apart from the Leifengta Pagoda, similar scrolls were found in the remains of other pagoda sites in the region. For example, several scrolls of the sutra, dated to 956, were found inside the stone pagoda at the Tianningsi 天寧寺 Temple site in Huzhou, Zhejiang province. Another scroll, also dating from 956, was excavated from the underground deposit beneath a brick pagoda in Wuwei, Anhui province.⁵

Buddhist histories record that the *Dhāraṇī Sutra of the Seal on the Casket* was printed contemporaneously with the casting of pagoda miniatures in matching numbers. According to a thirteenth-century Buddhist text, *Fo zu tong ji* 佛祖統紀 (A comprehensive account of Buddha and patriarchs), Qian Chu followed the example of the Indian King Aśoka, and commissioned 84,000 miniature pagodas made of precious metals. Inserted into each of those 84,000 pagodas was a scroll of the *Dhāraṇī Sutra of the Seal on the Casket*. The project took ten years to complete, after which the miniature pagodas together with the inserted texts were

³ Unless otherwise indicated, all translations provided in this paper are mine.

⁴ See Zhang Xiumin, ‘Wudai Wuyue guo de yinshua’, *Wenwu*, 12 (1978), 74–6; Sören Edgren, ‘The printed Dharani-Sutra of A.D. 956’, *The Museum of Far Eastern Antiquities*, 44 (1972), 141–52; Tsuen-hsuei Tsien, ‘Paper and printing’, in Joseph Needham (ed.), *Science and Civilisation in China, Volume 5: Chemistry and Chemical Technology, part. 1* (Cambridge, 1985), pp. 157–9; Shih-shan Susan Huang, ‘Early Buddhist illustrated prints in Hangzhou’, in Lucille Chia and Hilde de Weerdt (eds.), *Knowledge and Text Production in an Age of Print: China, 900–1400* (Leiden and Boston, MA, 2011), pp. 135–65, especially 135–42.

⁵ A print dated to 956 exists in the royal collection of Sweden. See Edgren, ‘The printed Dharani-Sutra’. See also Zhang, ‘Wudai Wuyue guo de yinshua’, 74; ‘Wuwei Song ta xia chutu de wenwu’, *Wenwu*, 1 (1972), 77–8. In addition to the above-mentioned dates of 956 and 975, an earlier printing dated to 965 was found in 1971 in Zhejiang Shaoxing. See Xu Yuanting’s catalogue entry for ‘The Amitabha Sutra’, in Lin Boting (ed.), *Grand View: Special Exhibition of Sung Dynasty Rare Books* (Taipei, 2006), pp. 194–5.



Figure 3. *Dhāraṇī Sutra of the Seal on the Casket* (part). Ink on paper. Date 975. H. 6 cm. Collection of Zhejiang Provincial Museum. After Zhejiang sheng wenwu yanjiusuo (ed.), *Leifeng yizhen* (Beijing, 2002), p. 71.

distributed throughout the Wuyue kingdom.⁶ Since the 1950s, more than twenty such miniature pagodas have been found in the former Wuyue territory. A large majority of these pagodas were made of gilt bronze, while some others were made of gilt iron; they were cast in a method employing modular techniques of production, but each of them was finished individually. Many bear dated inscriptions which, despite slight differences in phrasing, are identical in content to those on the above-mentioned printed scrolls.

At the Wanfota 萬佛塔 Pagoda in modern Zhejiang Jinhua, for example, as many as fifteen miniature pagodas, several of them inscribed and dated, were found underneath the foundation of the brick pagoda (Fig. 4). Their inscriptions consistently refer to King Qian Chu as the patron; one such inscription reads ‘King of Wuyue, Chu, has respectfully made precious pagodas totaling 84,000, as an enduring offering. Noted in the year of *yichou*. 吳越國王俶敬造寶塔八萬四千所永充供養時乙丑歲記’ The year of *yichou* is equivalent to 965, and it corresponds to the second printing of the *Dhāraṇī Sutra of the Seal on the Casket*. Another pagoda is engraved with an inscription reading ‘King of Wuyue, Qian Hongchu, has respectfully made 84,000 precious pagodas. Noted in the year of *yimao*. 吳越國王錢弘俶敬造八萬四千寶塔乙卯歲記.’ That year, 955, happens to be exactly a year before the first printing of the *Dhāraṇī Sutra of the Seal on the Casket*.⁷

Historical texts also relate that a significant number of Qian Chu’s mini-pagodas went beyond Wuyue and travelled to Japan.⁸ An eighteenth-

⁶ Zhi Pan (1220–75), *Fo zu tong ji* (1269), *juan* 43, T 2035.49.394c.

⁷ It is noteworthy that a small number of pagoda miniatures dated to the same time period fall out of line with those cast bronze or iron pagodas commissioned by King Qian Chu. Although they are in similar shape and iconography with the Qian Chu pagodas, these miniature pagodas are generally larger in size, and they are often hand-crafted. Besides, they often contain a small reliquary (in either vessel or coffin shape) inside, which, in turn, contains the relic grains. Moreover, their dedicatory inscriptions point to private donors rather than the imperial court of Wuyue—the only exceptions being those silver miniature pagodas found inside the Leifengta Pagoda in Hangzhou. These silver pagodas, enshrined respectively inside the top and foundation parts of the Leifengta Pagoda, are believed to be associated with King Qian Chu, who sponsored the construction of the Pagoda. Given their distinctive craftsmanship and usage, it is likely that those miniature pagodas of larger size were made separately at local workshops to serve a purpose different from that of Qian Chu’s 84,000 pagodas. For examples of such miniature pagodas, see Zhejiang sheng wenwu kaogu yanjiusuo, *Leifengta yizhi*, pp. 66 and 124–33, figures 88, 185–6, 190–203; Suzhou Bowuguan (ed.), *Suzhou bowuguan cang Huqiu Yunyansi ta Ruiguangsi ta wenwu* (Beijing, 2006), pp. 188–96, 198–9.

⁸ Abundant historical texts show that from the second half of the Tang period frequent contacts were made between the south-easterners, the Japanese, and the Koreans by sea. South-east China had been in contact with Buddhist missions from Japan and Korea for some considerable time



Figure 4. Miniature pagoda. Five Dynasties (Wuyue), dated 955. Gilt bronze. H. 22.6 cm. From the foundation of Wanfota Pagoda in Jinhua, Zhejiang province. After Tokyo National Museum and Asahi Shimbun (eds.), *Chūgoku kokuhō ten* (Tokyo, 2004), pl. 144.

century text titled ‘Epigraphic Writings’ (c. *Jinshi qi* 金石契, printed in 1794) cites from the Song-dynasty (960–1127) text ‘Record of the Shengxiang Monastery at Longshan’ (c. *Longshan Shengxiangsi ji* 龍山聖相寺記), and claims that five hundred such pagoda miniatures were given

before the formation of the Wuyue State during the Five Dynasties period. This area had a long tradition of Buddhist practice before it came under the control of the Wuyue State. During the Wuyue period, many foreign monks on study missions from Japan and Korea were attracted to this area. Monks from Wuyue also went to Japan and Korea to spread the word or to obtain scriptures. See Edmund H. Worthy, ‘Diplomacy for survival: domestic and foreign relations of Wu Yueh’, in Morris Rossabi (ed.), *Chinese among Equals: the Middle Kingdom and its Neighbors, 10th–14th Centuries* (Berkeley and Los Angeles, CA, 1982), p. 36; David W. Chappel (ed.), *T’ien-T’ai Buddhism: an Outline of the Fourfold Teachings by Korean Monk Chengqan* (Tokyo, 1983), pp. 25–30; Hino Kaisaburō, ‘Tō, Godai Tō-a shu kokumin no kaijō hatten to bukkyō’, in his *Hokutō Ajia kokusai kōryūshi no kenkyū: jō*, *Tōyō shigaku ronshū*, 9 (Tokyo, 1984), pp. 188–229, esp. pp. 206–29 (originally published in 1962–4).

as gifts to a Japanese envoy.⁹ Additionally, in his short essay ‘Record of a Printed Dhāraṇī Sutra of the Seal on the Casket’ (*j. Hōkyōyin kyō ki 寶篋印經記*, dated 965), the Japanese monk Dōki 道喜 referred to a bronze pagoda which he was able to view at a friend’s house. He went on to identify it with the one brought to Japan by Monk Nichien 日延, who visited Wuyue during the Tengyō 天慶 era (938–47) on a diplomatic mission. Dōki described the pagoda as follows.

The pagoda measures approximately nine *cun* inches. On the four sides are cast and carved images of Buddhas and Bodhisattvas. Protruding from the four corners of the top are niches in the form of horse ears. Additional images of Buddhist deities as big as date-stones can be found in there as well. When I upheld it for a close examination, a sack fell out from the pagoda. Upon opening it, I saw a sutra scroll, whose frontispiece notes: ‘Qian Hongchu, Generalissimo of the World, King of Wuyue, has [made and] deposited 84,000 copies of the *Dhāraṇī Sutra of the Seal on the Casket*. Noted in Xiande the third year, the year of *bingchen*, after having enshrined the sutras inside precious pagodas as an offering, and having transferred the merits [to all sentient beings].’¹⁰

Dōki’s description conforms to the attributes of known examples of the Qian Chu pagodas: they typically have a cubic body, a tiered base, and are crowned by tiered lintels on top. A prominent mast rises from the centre of the roof, and the four corners of the roof are embellished with acanthus-shaped gable decorations. An arched door opens on each side of the body, within which is a narrative scene based on a *jataka* tale referring to the previous births of Buddha Śākyamuni. Since the early twentieth century, a number of such pagoda miniatures have been discovered in Japan, confirming the stories about the transmission of the Qian Chu pagodas to Japan. Archaeological records also show that Qian Chu’s

⁹The text ‘Jinshi qi’ is also known as ‘Jin tu tong ta kao’ 金塗銅塔考 (Study of gilt bronze miniature pagodas). The original text is quoted in Sekine Shun’ichi, ‘Sen Kōshū hachiman yonsen tō nitsuite’, *MUSEUM*, 441 (1987), 12. Sekine lists the surviving examples of the miniature pagodas found in Japan and China, and discusses the function and the prototype of them. He has also quoted several historical texts, in which the distribution of the miniature pagodas into Japan was recorded. See Sekine Shun’ichi, ‘Sen Kōshū hachiman yonsen tō nitsuite’, *MUSEUM*, 441 (1987), 12–20, esp. 12–13. For archaeological evidence from Korea, see Umehara Sueji, ‘Owōl wang Chōn Hong-suk P’alman sach’ōn t’ap’, *Kogo misul*, 81 (1967), 288.

¹⁰... 高九寸餘，四面鑄鏤佛菩薩像。德宇四角上有龕形，如馬耳。內亦有佛菩薩像，大如棗核。捧持瞻視之頃，自塔中一囊落。開見有一經，其端紙注云：『天下都元帥吳越國王錢弘俶摺本寶篋印經八万四千卷之內。安寶塔之中，供養迴向已畢。顯德三年丙辰歲記也。』... Only the latter part of the original essay survived in its original form. It is preserved in a manuscript (dated 965) now in the collection of the Saifuku-in Monastery in Hiroshima, Japan. Luckily, the essay is quoted in its entirety in the chronicle *Fusō ryakki*, ed. Kōen (d.1169). See *kan* 26 of *Fusō ryakki* in *Shintei zōho, Kokushi taikēi*, dai 12-kan (Tokyo, 1932).

pagodas travelled as far as the heart of the Song, Wuyue's rival state in the north.¹¹

King Qian Chu's grand project to replicate and multiply both the sacred text and the symbolic architecture of a Buddhist pagoda raises a number of questions concerning multiples and multiplication. Most central to our concerns about multiples is the question of the original and the copy. This can relate to the definition of these terms—what constitutes an original or a copy?—and the relationship between them. The emphasis placed on connoisseurship with regards to much of Western art history implies the importance of confirming original authorship. Copies executed with the same virtuosity as an original are less valuable due to their status as reproductions.¹² However, with regards to Buddhist art in middle-period China or East Asia, one can attribute originality to either the object or the iconography—the individual maker may not always be known, but a specific iconography can serve as a prototype for future reproductions.

Questions of copying and replication lead us to the larger theme of representation and the accompanying concept of the referent or prototype. The case studies to be examined in this lecture, including cult objects and relics, posit the art object as a vehicle through which the prototype can be realised in the material world. Does, then, the referent or prototype necessarily require representation? How might these concepts reveal themselves in Buddhist art in China? Of particular concern is the production or transmission of affect, either through ritual ceremonies that activate the object or through resemblance to the prototype. Are certain methods of (re-)production more effective in producing affect? To what extent must

¹¹ Examples have come from Henan and Hebei provinces, where they were enshrined in relic pagodas (1032) at the Fushengsi Temple in Henan Dengxian and the Jingzhisi Temple (977) in Hebei Dingzhou. For excavation reports, see Henan sheng gudai jianzhu baohu yanjiusuo and Henan sheng wenwu yanjiusuo (Guo Jianbang, Chen Jue and Guo Musen), 'Henan Dengzhou shi Fushengsi ta digong', *Wenwu*, 6 (1991), 38–47; Dingxian bowuguan, 'Hebei Dingxian faxian liangzuo Songdai taji', *Wenwu*, 8 (1972), 39–51.

¹² For sample discussions of the concept of replication as used by contemporary scholars, see Whitnes Davis, *Replications: Archaeology, Art History, Psychoanalysis* (University Park, PA, 1996), esp. pp. 1–31. See also Robert S. Nelson, 'Appropriation', in Robert S. Nelson and Richard Shiff (eds.), *Critical Terms for Art History* (Chicago, IL, and London, 1996), pp. 116–28. The conference proceedings *Retaining the Originals: Multiple Originals, Copies, and Reproductions*, ed. Kathleen Preciado and published as a special issue of *Studies in the History of Art*, vol. 20 (Washington, DC, 1989) addressed various issues concerning reproductions in Western Art. Alexander Nagel and Christopher Wood's recent book is representative of new approaches to the issue of temporality, which often involves evaluation of copies. See Alexander Nagel and Christopher S. Wood, *Anachronic Renaissance* (New York, 2010).

a copy be visually faithful to its original? The presentation or installation of the object must also be considered, as its efficacy does depend, to some extent, upon the circumstances in which it is viewed.

I am especially interested in the concept of quantifying and picturing infinity within the context of Buddhist belief, as such an abstract notion is by definition impossible to represent. What strategies are favoured, and how do they tie into the overarching religious or philosophical schema? What do they reveal about Chinese notions of originals, copies, and the production of affect? These questions are addressed throughout this lecture which shows that groups of identical copies function collectively to materialise abstract concepts associated with infinity or Buddhist metaphysics in a way that no singular objects could possibly achieve.

II. Do numbers count?

The reproductions of both the sutra and the pagoda were closely tied with each other in King Qian Chu's grand project, because it is so prescribed in the sutra itself. The *Dhāraṇī Sutra of the Seal on the Casket* recounts how the Buddha lamented the fact that the wonderful *Dharma* ought to disappear in the Latter Days of the Buddhist Law (or the Final *Dharma*). He then explained that a 'seven-treasure stupa' enshrining a Buddha's 'whole body' would defy decay during the difficult time.¹³ The narrative continues that the *Dhāraṇī Sutra of the Seal on the Casket* is precisely such an embodiment of the Buddha's body, and a stupa enshrining the very text would be a seven-treasure stupa. A substantial reward is promised to those who enshrine the sutra into the body of a stupa. It especially assures protection from enemies and disasters in the context of the Final *Dharma*. For the kings of Wuyue, the Final *Dharma* coincided with the rise of the Song dynasty and its final assimilation of their kingdom. Under these circumstances, Qian Chu placed his faith in the words of this sutra, following the Buddha's instruction to reproduce it and use its magical properties to preserve votive pagodas as well as his kingdom. Clearly inserting the sutra into both the body structure of the Leifengta Pagoda, and inside those miniature pagodas, was meant to transform the pagoda into a seven-

¹³ For an explanation of the notion of 'buddha' (i.e. one buddha, and the many buddhas coexisting in different world spheres within the Buddhist universe), and the plurality in which each of the many buddhas formulates his own teaching and reveals his own world of salvation, see Luis O. Gómez, *The Land of Bliss: the Paradise of the Buddha of Measureless Light: Sanskrit and Chinese Versions of the Sukhāvativyūha Sūtras* (Honolulu, HI, 1996), pp. 9–11.

treasure stupa and to celebrate the Buddha's presence in exchange for peace and protection.¹⁴

One significant point highlighted in the *Dhāraṇī Sutra of the Seal on the Casket* is its capability to self-duplicate. The Buddha explains that the text itself embodies all of the buddhas existing in the past, the present, and the future. Simply duplicating or reciting the sutra once would amount to duplication or recitation of all the sacred texts expounded by all of the '990,000,000 buddhas in all of the ten directions' in the Buddhist universe, thus yielding 990,000,000 times more merits. Since one scroll alone generates an incredibly large amount of merits, duplicating the text 84,000 times can only maximise the amount of merits to an extent beyond imagination. Following the same logic, a stupa containing the sutra is also the embodiment of all buddhas in the universe. Thus, duplicating the stupa in 84,000 copies translates into immeasurable amount of merits in return.¹⁵ If the sacred text multiplies itself as long as there is faith in it then, theoretically speaking, the actual number in which the text is replicated becomes irrelevant. In other words, there is no difference between transcribing one, ten, 10,000, or 84,000 copies, as long as one believes in the power and efficacy of the text. If the above induction is accepted as true, then we must ask why King Qian Chu bothered to commission, or claimed to have commissioned, 84,000 copies of the sutra?

III. Qian Chu's pagoda/scroll project and relic cult

The choice of 84,000 was not random. It was a means through which King Qian Chu connected himself with the sage King Aśoka (r. c.269–232 BC) of India. Legend has it that, after gathering all the *śarīra* relics that were dispersed following the cremation of Buddha Śākyamuni, King Aśoka

¹⁴The summary is based on Eugene Wang, 'Tope and topos: the Leifeng Pagoda and the discourse of the demonic', in Judith Zeitlin and Lydia Liu (eds.), *Writing and Materiality in China* (Cambridge, MA, 2003), pp. 491–2. A pagoda is the Chinese version of the Indian stupa, which is a burial mound erected to enshrine Buddhist relics. Despite their shared function and symbolic meaning, a stupa and a pagoda are significantly different in their appearances. While a stupa typically comprises a raised platform, a dome body, and a prominent top structure including the *harmika* (a square platform with railings) and the *chatrayashti* (parasols), a Chinese pagoda generally has a multilayered tall body that is derived from indigenous watch-towers. In view of the above differences, a distinction between the two words is made throughout this paper to refer to respective types of architecture.

¹⁵See T 1022B.19.712c–713b.

redistributed them and, within one day, built 84,000 commemorative stupas across the Jambudvīpa (the world where ordinary human beings live), contributing to the spread of Buddhism all over the known world. Therefore, by commissioning the same number of pagodas, and through subsequent distribution of the pagodas throughout the country, Qian Chu forged a firm connection between himself and Aśoka of India.

The story of King Aśoka's building 84,000 stupas was employed by the Chinese Buddhist clergy as evidence of the early transmission of the doctrine and the presence of its founder in their land, contributing to the *śarīra* relic cult in China.¹⁶ *Fa yuan zhu lin* 法苑珠林 (Forest of gems in the garden of the *Dharma*), a Buddhist encyclopaedia compiled in 668 by Monk Daoshi 道世, listed nineteen of the Aśoka stupas that had miraculously surfaced in China. Among them, that 'discovered' at Kuaijiishan Maoxian 會稽山鄞縣, in modern Ningbo of Zhejiang province, is the most well known and best documented.¹⁷ A temple named after Aśoka was erected to enshrine the Maoxian stupa, and by the end of the Tang dynasty (618–907) the temple became a centre for the worship of Buddha relics. Local knowledge of the Aśoka stupas and their Chinese legacy must have helped to establish Qian Chu's grand project as an analogue of Aśoka's.

The *śarīra* is a Sanskrit word that has no equivalent in English. But the key to its appreciation lies in the word 'corpus', which need not necessarily refer to the entire body but may also refer to a minute part of it. The first *śarīra* was, of course, the corpse of Śākyamuni Buddha. After solemn funeral rites, the Buddha was cremated and the *śarīra* emerged. Eight kings of the neighbouring kingdoms fought with each other for a share of the *śarīra*. Finally by dividing the *śarīra* into eight and distributing them amongst the eight kings, the warfare was brought to an end. Then eight stupas were erected to enshrine the *śarīra* in the eight kingdoms. The Buddhists, regarding the *śarīra* as the Buddha himself, came to worship the *śarīra* at the stupas and to meditate on the Buddha's teachings. Shortly thereafter, the practice of worshipping stupas in which the *śarīra* were housed arose.¹⁸

¹⁶For a discussion on how the story was used to validate the belief about the early transmission of Buddhism to China, and how it was employed to authenticate relics discovered in China, see Tansen Sen, *Buddhism, Diplomacy, and Trade: the Realignment of Sino-Indian Relations, 600–1400* (Honolulu, HI, 2003), pp. 59–64.

¹⁷Dao Shi (fl. seventh century), *Fa yuan zhu lin* (668), *juan* 38, T 2122.53.585a–b.

¹⁸See John S. Strong, 'The Buddha's funeral', in Bryan J. Cuevas and Jacqueline I. Stone (eds.), *The Buddhist Dead: Practices, Discourses, Representations, Studies in East Asian Buddhism*, 20 (Honolulu, HI, 2007), pp. 32–59.

The relics were further divided to meet the need for *śarīra*, but eventually the authentic *śarīra* could no longer meet their widespread demand. Buddhists then found comfort in texts in which the Buddha himself provided what can only be called a recipe for manufacturing *śarīra* whenever the supply of real relics ran out. Beads made of precious stones, like crystal and amber, or even sand or stone, were taken as substitutes for the real *śarīra* of the Buddha. This shows that the authenticity of *śarīra* is irrelevant in the relic cult. In addition, as the sutra manuscripts and prints were the heritage of the Buddha's teachings, Buddhists worshipped them as they did the physical remains of the Buddha. Therefore stupas were also erected to enshrine scriptures.¹⁹ In terms of the transmission of efficacy, a *śarīra* relic is efficacious not necessarily as a discreet copy of the original but rather as a continuation, in equal measure and of the same degree of efficacy.

The power of relics was often translated into political authority in medieval East Asia. Just as essential as authenticity is to the power of a relic, an authentic piece of relic is a powerful testimony to the legitimacy of whoever owns it. Therefore, submission of a relic (as well as the associated presence of the Buddha) was symbolically to relinquish one's control of his territory. Ever since its miraculous appearance at Maoxian in 281, several emperors, including King Qian Liu 錢鏐 (r. 907–32), grandfather of Qian Chu, had commanded the stupa miniature to be transferred from the temple for worship at court. In 978, King Qian Chu surrendered himself and his kingdom to the Song emperor Taizong 太宗 (r. 976–97), subsequently offering the Maoxian stupa to Taizong in 983.

Qian Chu's project eventually connected him with Buddha Śākyamuni, who foretold Aśoka's ability to manipulate the spirits and build 84,000 relic stupas overnight. *Fa yuan zhu lin* recounts that in his previous life as an innocent boy, Aśoka made a devout offering to the Buddha. Impressed by the boy's sincerity, the Buddha predicted that a hundred years after his own entry into nirvana, the boy would be reborn as a king named Aśoka. He would become a *cakravartin* (an ideal universal ruler) and rule over the entire world of Jambudvīpa. All the spirits and celestial beings would surrender, and they would open the Eight Great Stupas for him. With the

¹⁹The practice of using sand, pebbles, gemstones or animal bones as a substitute for proper remnants of Śākyamuni's bodily remains demonstrates a remarkable flexibility in the definition of what constitutes a *śarīra* relic, and supports an ever-growing number of relics circulating in the world. It is based on the Buddhist discourse about the relationship between the parts and the whole. The self-duplicative nature of the *Dhāraṇī Sūtra of the Seal on the Casket* is derived from the same Buddhist perception, a theme to which I shall return.

śarīra thus yielded, he would command all spirits in existence and build 84,000 stupas within a day.²⁰ Prior to Qian Chu, Emperor Yangdi 煬帝 (r. 604–18) of Sui 隋 and Empress Wu Zetian 武則天 (c.623–705) had already attempted to follow Aśoka's example, by commissioning simultaneous burials of relics at multiple sites all over the country. By copying Aśoka, they superimposed their image with that of Aśoka, and asserted their legitimacy as rulers. If revelation of the Aśoka stupa at Maoxian confirmed Wuyue as one of the many Buddhist worlds in the universe, then the distribution of Qian Chu's 84,000 pagodas to Japan did the same to incorporate Japan into the Buddhist universe, while also repositioning Wuyue at the centre. Qian Chu not only followed in the footsteps of his Indian predecessor by commissioning 84,000 miniature pagodas, but also distributed them within and outside Wuyue in a way that paralleled Aśoka.

To actually make 84,000 relic pagodas, Qian Chu would have had to overcome two major obstacles. First, he would have to prove the authenticity of the Maoxian relic, from which 84,000 replicas were to derive. And then he would have to be able to generate sufficient amounts of Buddha relics for the 84,000 pagodas he was going to build. But without any description in the text about the physical appearance of the relic, how could one possibly duplicate something he does not know? According to the Buddhist teachings, the appearance of a relic is not to be comprehended in physical terms. Rather, the presence, and hence the authenticity, of any relic is manifested in the reliquary, in which they are enshrined. In other words, a reliquary embodies or materialises the relic, whose presence is otherwise impossible to grasp.²¹

In view of the above, a reliquary in an archaic form that relates to antiquity would be desirable, because its age value adds to the authority and consequently the authenticity of the relic contained inside. Given that the Maoxian stupa was believed to be one of the original stupas commissioned by King Aśoka, its form was naturally adopted as the model for duplication in Qian Chu's time. According to history, the Maoxian stupa is cubic in shape. Its surface resembles that of black stone, although it is

²⁰T 2122.53.585a.

²¹As Monk Daoxuan (596–667) put it in his *Ji shenzhou sanbao gantong lu*, being the sacred bones, *śarīra* relics are not to be pursued in physical terms. Another seventh-century monk also advises that the Authentic Body is not to be sought after in bodily forms and materiality. See *Ji shenzhou sanbao gantong lu*, *juan 1*, T 2106.52.410b and *Guang hong ming ji*, *juan 12*, T 2103.52.174c. See also Hsueh-man Shen, 'Pictorial representations of the Buddha's Nirvana in Chinese relic deposits', *East Asia Journal: Studies in Material Culture*, 1.1 (2003), 25–48.

not actually made of stone. It measures one *chi* foot and four *cun* inches tall, and seven *cun* inches wide. Similar to a Khotanese stupa, it has five discs stacked on top, and has an opening on each of its four sides. Covering the body of the stupa are images of various Buddhist deities.²² Interestingly, the above description coincides with the appearance of those stupa images represented on a number of sixth-century stone steles retrieved from the premises of Longxingsi 龍興寺 Temple in Shandong Qingzhou, and other sites in Hebei province (Fig. 5). A comparable example in actual architectural form surviving from around the same period is the Simenta 四門塔 Pagoda (built in 611) at the site of Shentongsi 神通寺 Temple in Jinan, Shandong province.²³ The meaning of those stupa images on the steles is not entirely clear to us. However, it has been proposed that they may relate to the 84,000 stupas commissioned by King Aśoka.²⁴ This particular type of stupa image continued to be depicted throughout the Tang dynasty, as evidenced by the relief carvings that survive from the cave-temple sites at Baoshan and Lanfengshan in Henan Anyang, as well as by the large stupa built with pounded earth still standing at the Jiaohe ruin site in modern Turfan, Xinjiang Autonomous Region.²⁵

Meanwhile, spiritual relics in the form of printed texts substituted for the corporeal relics of the Buddha and became the object of veneration in the case of the Qian Chu pagodas. An immediate benefit of such a substitution is that it avoids the embarrassment of a shortage of relic bones in Wuyue. The substitution was probably preferable because, according to the Buddhist teachings, it removes one's attachment to the world of phenomena and concentrates the mind on the spiritual body of the Buddha, which will last forever. The new focus on the spiritual relic not only solved the problem of a potential shortage but removed the burden of mass-reproducing relics. The technology of woodblock printing, which had become convenient to use by the tenth century,²⁶ became particularly useful under such circumstances, because it not only expedited the process of reproduction but also ensured faithful transcription of the sacred text.

²² T2122, 53:585b.

²³ Lukas Nickel (ed.), *The Return of the Buddha: Buddhist Sculptures of the 6th Century from Qingzhou, China* (Zürich, 2001), cat. nos. 5–6, pp. 126–32.

²⁴ Katherine Tsiang, 'Miraculous flying stupas in Qingzhou sculpture', *Orientalism*, 31.10 (2000), 45–53, esp. 51.

²⁵ Henan sheng gudai jianzhu baohu yanjiusuo (ed.), *Baoshan Lingquansi* (Zhengzhou, 1991); Meng Fanren, 'Jiaohe gucheng xingzhi buju tedian yanjiu', *Kaogu xuebao*, 4 (2001), 483–508.

²⁶ For a summary of the early history of woodblock printing in China, see Tsiang, 'Paper and printing', 146–59.



Figure 5. Standing Buddha with attendants and a flying stupa on top. Northern Qi dynasty, dated 570. Marble with pigments and gold. H. 97 cm. From Haocheng, Hebei province. After Tokyo National Museum and Asahi Shimbun (eds.), *Chūgoku kokuhō ten* (Tokyo, 2000), pl. 138.

Without the errors or mistakes often involved in transcription of manuscripts, all of the sacred texts are identical both in appearance and in content, hence equally efficacious.

IV. The number 84,000 as a numerical metaphor

Numbers are used extensively in Buddhist scriptures. They help group and categorise complex concepts, practices, and a wide variety of deities. Well-known examples include the so-called ‘Four Noble Truths’, the ‘Six Places of Rebirth’, the ‘Seven Treasures’, the ‘Eight Consciousnesses’, the ‘Buddhas of Ten Directions’, and the ‘Twelve Nidānas (Twelve Clauses about Dependent Origination)’. According to many traditions within Mahāyāna Buddhism, and especially in the *Flower Garland Sutra* (s: Avataṃsaka Sūtra; c: Huayan jing 華嚴經), on the way to becoming a buddha a bodhisattva proceeds through ‘ten grounds’ or ‘fifty-two stages’. After the ten grounds, one attains complete enlightenment and becomes a buddha.

However, larger numbers like 3,000 or 84,000 function differently in Buddhism. These remarkably large numbers are used as a quantifier to signify a large, indefinite number, rather than indicate an actual numerical value. As a ‘numerical metaphor’ (or ‘suanshu piyu’ 算術譬喻, as pronounced in numerous Buddhist texts in Chinese),²⁷ 84,000 conveys symbolic connotation relating to incommensurability, be it the power of Buddha, or the amount of merit derived from worship. Buddha Śākyamuni explains in the *The Sūtra on Contemplation of Amitāyus* (c: Fo shuo guan Wuliangshoufo jing 佛說觀無量壽佛經) the importance of contemplating and visualising various aspects of the Pure Land of Buddha Amitābha, in attaining rebirth there. The ninth of the thirteen visualisation exercises advocated by Śākyamuni prescribes the contemplation of Amitābha Buddha himself:

²⁷The term ‘suanshu piyu’ appears in many scriptures, and mostly in the context where the immeasurability of merits is being emphasised. For example, see the *Diamond Sutra* (s. *Vajracchedikā-prajñāpāramitā-sūtra*; c. *Jingang bore poluomi jing*), trans. Kumārajīva (c.350–409), T 235.8.750c and 751c; the *Lotus Sutra* (s. *Saddharma-puṇḍarīka-sūtra*; c. *Miaofa lianhua jing*), trans. Kumārajīva, juan 5, T 262.9.38a, 39c, 44c. Similarly, expressions like ‘fei shi suanshu suo neng zhi zhi’ 非是算數所能知之, meaning ‘not to be comprehended in numerical terms’, are commonly found in popular texts like the *Smaller Sukhāvativyūha* (c. *Fo shuo Amituo jing*). See *Fo shuo Amituo jing* (402), trans. Kumārajīva, T 366.12.347a–b.

The Buddha Amitayus [Amitābha] possesses *eighty-four thousand* physical characteristics, each having *eighty-four thousand* secondary marks of excellence. Each secondary mark emits *eighty-four thousand* rays of light; each light shining universally upon the lands of the ten directions, embracing, and not forsaking, those who are mindful of the Buddha. It is impossible to describe in detail these rays of light, physical characteristics and marks, transformed Buddhas, and so forth. But you can see them clearly with your mind's eye through contemplation. . . . To attain this contemplation is to perceive the bodies of all the Buddhas. By perceiving these, one also realises the Buddha's mind. . . . In contemplating him [Amitāyus], begin with one of his physical characteristics. Visualise only the white tuft of hair between his eyebrows until you see it quite clearly and distinctly. When you visualise it, all the *eighty-four thousand* physical characteristics will spontaneously become manifest. When you see Amitāyus, you will also see innumerable Buddhas of the ten directions. Having visualised these innumerable Buddhas, you will receive from each the prediction of your future Buddhahood . . .²⁸

Moreover, the so-called 'eighty-four thousand (kinds of) teachings' refers to the 84,000 lessons credited to the Buddha as a cure of all sufferings, and eventually *all* of the teachings expounded by the Buddha during his lifetime to save all beings from 84,000 delusions.²⁹ The *Sutra on the Worthy Kalpa* (s: Bhadrakalpikasūtra; c: Xianjie jing 賢劫經) explains the logic and calculation summing up to 84,000.³⁰ The notion is further elaborated in a number of commentaries, including the *Notes on the Meaning of Vimalakīrti Sutra* (c: Weimo yi ji 維摩義記) by Monk Huiyuan 慧遠 (523–92), which explains in the voice of the Buddha:

There are 350 Ways to enlightenment, for each of which one should practice the Six Perfections. It thus comes to 2,100 Liberations. Using these 2,100 Liberations to overcome the Four Great Elements [i.e. the impermanent physical body] and the [attraction of] the Six Senses gives rises to a total of 21,000 Liberations. These 21,000 Liberations then heal the Four Maladies of the Mind, hence summing up to the number of 84,000.³¹

Numerical metaphors are particularly useful in explaining the Mahāyāna cosmology, in which multiple Buddhist worlds coexist. Mahāyāna Buddhism

²⁸ Buddhist catalogues attribute the translation of the extant Chinese version of the *Contemplation Sutra* to Kālayaśas (fl. 424–42), but the sutra is likely to have been either a Central Asian or Chinese compilation as Sanskrit versions are absent. See T 365. 12.343b–c. The English translation of the Chinese text is quoted from Hisao Inagaki, *The Three Pure Land Sutras: a Study and Translation from Chinese* (Kyoto, 1994), pp. 332–4.

²⁹ It is a term commonly referred to in the Buddhist texts. For example, see *Ju she lun shu*, T 1822.41.492c; *Shengman shizhou yisheng da fangbian fang guang jing*, T353.12.218a; *Cheng shi lun*, juan 9, T 1646.32.314a; *Xian jie jing*, juan 2 and juan 6, T 425.14.12c–13a, 44c.

³⁰ See T 425.14.44c. The sutra was translated into Chinese by Dharmarakṣa (b. c.230) in c.300.

³¹ See T 1776.38.504c.

accepts the cosmos described as the ‘trichiliocosm’, which refers to a world system of three-thousandfold multi-thousand worlds. A great trichiliocosm consists of a thousand medium dichiliocosm constituted by a thousand small chiliocosm. The small chiliocosm, in turn, covers a thousand separate world-systems, each with its own Sumeru (central world-mountain Meru), Cakravāḍa (a ring of iron mountains), Sun, Moon, and four continents.³²

V. The parts and the whole

Deeply rooted in the Mahāyāna cosmology is the relationship between the one and the multiple, or the parts and the whole, a theme explored particularly by the Huayan school of Buddhism. Based on the *Flower Garland Sutra*,³³ the Huayan school was established around the end of the Sui (581–618) and the beginning of Tang dynasties, and it flourished in China during the Tang dynasty. By the tenth century, it gained popularity among the Buddhist practitioners living in the south-east (Wuyue) and north-east (Liao) parts of China. Huayan metaphysics perceive the Buddhist cosmos as an infinity of similarly structured universes. They illustrate a world in which the relationship between the parts and the whole is essential, and argue that when the ultimate truth of emptiness manifests to the viewer each phenomenon is paradoxically perceived as *interpenetrating* with and *containing* all others. Each and every phenomenon is not only seen to contain each and every other phenomenon, but all phenomena are also seen to contain the totality of the unobstructed interpenetration of all phenomena.³⁴ This paradoxical violation of the conventional order of time and space is best explained in the ‘Essay on the Golden Lion’ (*c*: Huayan jin shizi zhang 華嚴金獅子章), composed by Monk Fazang 法藏 (643–712).³⁵ This essay articulates that the lion represents the Buddhist universe, and parts of the lion represent the various phenomena of the universe, while

³² See Luis O. Gómez, ‘The whole universe as a Sutra’, in Donald S. Lopez, Jr. (ed.), *Buddhism in Practice* (Princeton, NJ, 1995), pp. 106–12.

³³ The sutra is actually a compendium of a number of texts, many of which originally circulated as sutras in their own right, that were combined sometime around or before the beginning of the fifth century when it was first brought to China from Khotan (408) and subsequently translated by Buddhābhadrā (418–22). See *Da fang guang fo Huayan jing*, 60 juan, T 278.9.395a–788b. A more developed version of the text was later translated by the Khotanese master Śikṣānanda at the very end of the seventh century (695–599). See *Da fang guang fo Huayan jing*, 80 juan, T 279.10.1a–442c. See also Luis O. Gómez, ‘The whole universe as a Sutra’.

³⁴ See Peter N. Gregory, *Tsung-mi and the Sinification of Buddhism* (Honolulu, HI, 2002), p. 7.

³⁵ Fazang (643–712), ‘Huayan jin shizi zhang’, 1 juan, T 1881.45.667a–670c.

gold represents the ultimate truth of emptiness. Although the parts of the lion seem distinct and unrelated, the essence of the lion itself—that is, gold—remains the same. Within each and every hair of the lion, paradoxically, exists the golden lion. All of the lions contained in each and every hair simultaneously penetrate into one hair. Therefore, within each and every hair there are infinite lions: simultaneously the whole of things creates itself, the ultimate truth and concrete manifestations are interfused, and the manifestations are mutually identical.³⁶

The Huayan notion regarding interpenetration and the relation between the one and the multiple relates to a process of repeating objects in a self-similar way. Such a process in which an image self-replicates into infinity is analogous to the so-called ‘infinite recursion’ in mathematics. The infamous fractal Sierpinski Triangle, described for the first time by the Polish mathematician Waclaw Sierpinski in 1915, explains the process particularly well. A Sierpinski Triangle is generated by considering a triangle as an initiator and connecting the mid points of its three edges to form four small triangles. These triangles can be regarded as three copies of the original, each at one-half scale. The process starts out with an equilateral triangle where the infinite succession of removals of equilateral triangles takes place inside the triangle. The first portion to be removed is a triangle with corners at the midpoints of the sides of the original triangle. The three equilateral triangular areas that remain within the original triangle are each broken up into four equilateral triangles, of which the central one is removed. This process may continue endlessly to infinity, and a fractal form is generated.³⁷

The Sierpinski Triangle is one of the basic examples of ‘self-similar’ sets that can be reproduced at any magnification or reduction.³⁸ Like the Sierpinski Triangle, the so-called Cantor Set (first described in 1883 by German mathematician Georg Cantor) is also a technique from which fractals may be generated. The Cantor Set is built by repeatedly removing

³⁶ See Dale S. Wright, ‘The significance of paradoxical language in Hua-Yen Buddhism’, *Philosophy East and West*, 32.3 (1982), 325–38.

³⁷ See K. R. Venugopal and L. M. Patnaik (eds.), *Computer Networks and Intelligent Computing: 5th International Conference on Information Processing, ICIP 2011, Bangalore, India, 5–7 Aug. 2011* (New York, 2011), p. 241; Jan Gullberg, *Mathematics: from the Birth of Numbers* (New York, 1997), pp. 631–2.

³⁸ See Waclaw Sierpinski, *Pythagorean Triangles*, trans. Ambikeshwar Sharma (New York, 1962); Ronald C. J. Russell, *Sierpinski Triangle* (VSD, 2012). Gilbert Helmborg explains, in his *Getting Acquainted with Fractals*, how similar fractals may be constructed in spaces of greater dimension, such as in the case of the Sierpinski Triangle. See Gilbert Helmborg, *Getting Acquainted with Fractals* (Berlin and New York, 2007), p. 41.

the middle thirds of a set of line segments. There are as many points left behind in this process as those that were removed, and thus the Cantor Set is uncountable. It is also self-similar, because it is equal to two copies of itself, if each copy is shrunk by a factor of three.³⁹ Cantor conceived infinity as belonging to a realm of transfinite numbers, quantities and ratios which can be reckoned with and placed in precisely calculable relationship with one another.⁴⁰ Cantor's way of conceiving infinity then inspired the French philosopher Alain Badiou (b.1937), whose *Being and Event* considers the place of ontology and of the event in terms of set theory.⁴¹

The Huayan metaphysics of 'one thing contains all things in existence, and that all things contain one' is not easy to depict or represent in visual terms. To articulate a notion as abstract as such, concrete numbers like 84,000 become useful, because they make tangible the otherwise incredible and formless notion of all/infinity. It also opens up the possibility of depicting infinity in physical terms, and in finite numbers. After all, the only way to draw infinity is through drawing finite numbers (of multiples). Thus, the number 84,000 may not be so big that it cannot be enumerated, but it is undeniably a big step towards infinity, in comparison with quantifiers like 'dozens' or 'hundreds'.

VI. Mythical numbers in various pagoda projects in East Asia

It is unclear whether 84,000 prints of the *Dhāraṇī Sutra of the Seal on the Casket* were actually made during King Qian Chu's time. Similarly, no one seems to know the exact number in which the Aśoka stupa was replicated around the same time. However, some miniature pagodas surviving from China and Japan provide a clue. These pagodas are reported to

³⁹Gerald Edgard, *Classics on Fractals* (Boulder, CO, 2004).

⁴⁰Cantor's discovery of ways to compare the sizes of infinite sets led to a number of surprising insights. One which is relevant to the Buddhist philosophy in question is that the whole set of real numbers can be mapped one-to-one onto the real numbers between 0 and 1. In a very real sense, every element of the real number system has a corresponding element in the decimal numbers between 0 and 1, and with essentially the same structure, so this segment of the whole mirrors the whole exactly. See Herbert B. Enderton, *Elements of Set Theory* (New York, 1977), esp. pp. 130–1. I am grateful to Professor Robert Knapp for bringing the above analogy to my attention.

⁴¹Badiou uses set theory to identify the relationship of being to history, Nature, the State, and God. He argues that only set theory allows one to conceive a 'pure doctrine of the multiple', an area he deemed as never satisfactorily dealt with by the Greek tradition of philosophy. See Alain Badiou, *Being and Event*, trans. Oliver Feltham (London and New York, 2005). See also Christopher Norris, *Badiou's Being and Event: a Reader's Guide* (London and New York, 2009), esp. pp. 14–36, 50–64, 79–88, 128–38.



Figure 6. Miniature pagoda. Five Dynasties (Wuyue). Gilt bronze. H. 18.5 cm. From the Seiganji Temple in Fukuoka, Japan. Nara National Museum, *Seichi Nimpō*, pl. 33.

contain a single-character inscription referring to a numbering system which utilises the so-called ‘Thousand-Character Essay’ (c. Qian zi wen 千字文). For instance, the miniature pagoda currently in the collection of Seiganji 誓願寺 Temple in Fukuoka is marked with the character *hua* 化 (Fig. 6). The same character appears on a pagoda excavated from the sutra mound on Nachisan 那智山 Mountain in Wakayama-ken. Another pagoda miniature from Nachisan bears the character *an* 安 (Fig. 7). An additional pagoda in the collection of Kongōji 金剛寺 Temple in Ōsaka is inscribed with the character *tong* 同.⁴² A gilt bronze pagoda retrieved from the Chongfusi 崇福寺 West Pagoda in Zhejiang Chongde is inscribed on two sides of the square pagoda body with the same character *ji* 己.⁴³ All of these characters exist in the ‘Thousand-Character Essay’, which contains exactly one thousand characters, of which none is ever repeated. It is used as a primer for teaching Chinese characters to children. Since the essay was universally known, its sequence of characters was sometimes used in place of the numbers one to 1,000 as a tamper-resistant way to write such numbers. In the essay, the character *hua* takes up the 137th position, followed by the character *ji*, which holds the place for number 183. The character *an* is the 287th to appear in the sequence, and the character *tong* is the 357th. Those characters were cast, rather than carved on to the metal surface, indicating that they were an integral part of the initial design. Thus, by pinning down the sequence to which those miniature pagodas originally belonged, one can safely argue that, at the very least, 357 pagoda miniatures were made under the blessing of King Qian Chu of Wuyue. One may even logically suspect that no more than a thousand such miniature pagodas were actually produced. However, one cannot completely rule out the possibility that there could be multiples of 357 pagodas. Close examination of the two pagoda miniatures bearing the same character *hua* shows that they were cast at slightly different positions on the pagoda, thus indicating the use of different moulds for casting. Unfortunately most of the pagoda miniatures are either not formally published or remain unpublished, making it impossible to assess the possibility further. Nevertheless, if it turns out to be the case that fewer than 84,000 pagodas were actually made, how are we supposed to understand the gap between the alleged number (i.e. 84,000) and the actual number of pagodas produced during Qian Chu’s reign?

⁴² For illustrations of these miniature pagodas, see Nara National Museum (ed.), *Shōrai bijutsu* (Nara, 1967), pls. 161–2; Nara National Museum (ed.), *Seichi Ninpō—Nihon Bukkyō 1300-nen no genryū: subete wa koko kara yatte kita* (Nara, 2009), pls. 33–5.

⁴³ ‘Chongde xian Chongfusi chaixie dong xi liang ta tading bufen shi faxian wenwu sishiqi jian’, *Wenwu cankao ziliao*, 1 (1956), 61–2.



Figure 7. Miniature pagoda. Five Dynasties (Wuyue). Gilt bronze. H. 18.5 cm. From the sutra mound on Nachisan Mountain in Wakayama-ken, Japan. Nara National Museum, *Seichi Ninpō*, pl. 34.

As explained earlier, the number 84,000 makes tangible the otherwise abstract notion of infinity. It is also a concrete number that draws nearer the conceptual gap between one and many. However, it is still a challenge to replicate or to multiply anything in 84,000 copies, considering the limited technology to mass-produce during the tenth century. Nonetheless, cognitive science shows that not as many is needed to give the illusion of 84,000. Scientists have discovered that people do not necessarily count all the way toward large numbers. There is a strict limit as to the number of objects we are able to enumerate at one given time. It has been demonstrated that ‘subitising’—meaning recognising the numbers one, two, and three without any appearance of counting—in human adults depends on circuits of our visual system dedicated to localising and tracking objects in space. Beyond the borderline of the subitising limit lies the realm of approximation. Laboratory experiments have shown that we may overestimate or underestimate numerosity depending on how the objects are spread out on a plane. Our estimations are also sensitive to context.⁴⁴ This, then, creates room for manipulation, which is likely to be the case with King Qian Chu’s grand project; there might well be many fewer pagodas than thought. But the inscription accompanying each of the known scrolls or pagodas consistently and constantly reminds us of the existence of a much larger group (that is, a total of 84,000) to which the current object belongs. Thus, the grouping assumed in the written words shifted our attention from the single object to the group. Through the historical association with King Aśoka and the *implied multiplicity*, the power of the group is transferred to individual objects within it, visualising the paradoxical relationship between the one and the many.

Parallels existed elsewhere in East Asia. About a hundred years after Qian Chu’s effort, and concerned with the coming of the Latter Days of the Law (or *mofa* 末法 in Chinese), the Liao people in north-eastern China launched a similar project to enshrine multiples of a single sutra inside a

⁴⁴ A summary of recent research on the topic is given by Stanislas Dehaene in his *The Number Sense: How the Mind Creates Mathematics* (Oxford, 1997), pp. 64–77. See also S. Dehaene and L. Cohen, ‘Dissociable mechanisms of subitizing and counting—neuropsychological evidence from simultanagnosic patients’, *Journal of Experimental Psychology: Human Perception and Performance*, 20 (1994), 958–75; C. D. Frith and U. Frith, ‘The Solitaire Illusion: an illusion of numerosity’, *Perception & Psychophysics*, 11 (1972), 409–10; L. M. Trick and Z. W. Pylyshyn, ‘What enumeration studies can show us about spatial attention: evidence for limited capacity preattentive processing’, *Journal of Experimental Psychology: Human Perception and Performance*, 19 (1993), 331–51; L. M. Trick and Z. W. Pylyshyn, ‘Why are small and large numbers enumerated differently? A limited capacity preattentive stage in vision’, *Psychological Review*, 100 (1994), 80–102; Peter Gordon *et al.*, ‘Numerical cognition without words: evidence from Amazonia’, *Science*, 306 (2004), 496–9.



Figure 8. Shijiafoshelita Pagoda. Liao dynasty, dated 1049. Baarin Right Banner, Inner Mongolia Autonomous Region. Photo courtesy of Sun Jianhua.

brick pagoda erected under the auspice of Empress Dowager Zhangsheng 章聖 at the fortified city of Qingzhou (in modern-day Baarin Right Banner, Inner Mongolia). The octagonal pagoda measures 73.27 metres high, and comprises seven storey-levels (Fig. 8). The exterior of the pagoda was plastered and decorated with alternating images of deities and architectural elements. It was further adorned by over a thousand pieces of bronze mirrors catching and reflecting bright sunlight. On a sunny day, the grand pagoda rising proudly in the middle of the vast grassland must have generated an enormous sense of awe in its time.

This pagoda was dedicated to enshrinement of Buddha Śākyamuni's relic, as explicitly explained by its name, *Shijiafo-shelita* 釋迦佛舍利塔 (Śākyamuni Buddha's Śarīra Pagoda).⁴⁵ A stone stele installed beneath a multichambered deposit inside the top structure of the pagoda tells the story about the building project: 'In Chongxi the sixteenth year (1047) the second month the fifteenth day, the ground was officially broken. Two months later, relics were buried in the underground palace beneath the pagoda for accumulation of good deeds. In Chongxi the eighteenth year (1049) the sixth month the fifteenth day, when construction work reached the seventh storey-level, more relics were interred into the body structure of the pagoda.' Exactly a month later, the *jin fa sheli* 金法舍利 (*dharma kāya* or spiritual relics made in metal) was enshrined inside and at the centre of the *chattrā* parasols on the pinnacle of the pagoda. Ninety-nine scrolls of *zhanggan tuoluoni* 帳竿陀羅尼 (*dhāraṇī* on sticks) and various altar vessels were added to the four sides of the deposit before completion of the pagoda.

Excavation of the pagoda in 1989 revealed a deposit comprising five interlinked pits (total 1.53 square metres) inside the top structure, around the *yaṣṭi* pole and near the *chattrā* parasols of the pagoda (Fig. 9). Approximately 800 objects, including 109 pagoda miniatures and 276 textile pieces, were excavated from these pits, confirming the inscribed description of the deposit content (Fig. 10). All but one of these pagoda miniatures contained Buddhist scriptures inside, among which 105 were carved similarly out of cypress wood and were elaborately decorated with the same design in gilding and painting (Fig. 11). Each miniature contained one copper sheet carved with a *dhāraṇī* extracted from the *Great Dhāraṇī Sutra of the Stainless Pure Light* (s: *Raśmivimalaviśuddhaprabhā-dhāraṇī*; c:

⁴⁵The pagoda is commonly referred to as White Pagoda in modern literature, because of the white wash on the exterior of the building. However, given that the pagoda was named 'Shijiafoshelita' during the Liao dynasty, I will refer to it as 'Shijiafoshelita Pagoda' instead of White Pagoda, to conform with the spirit of the period.

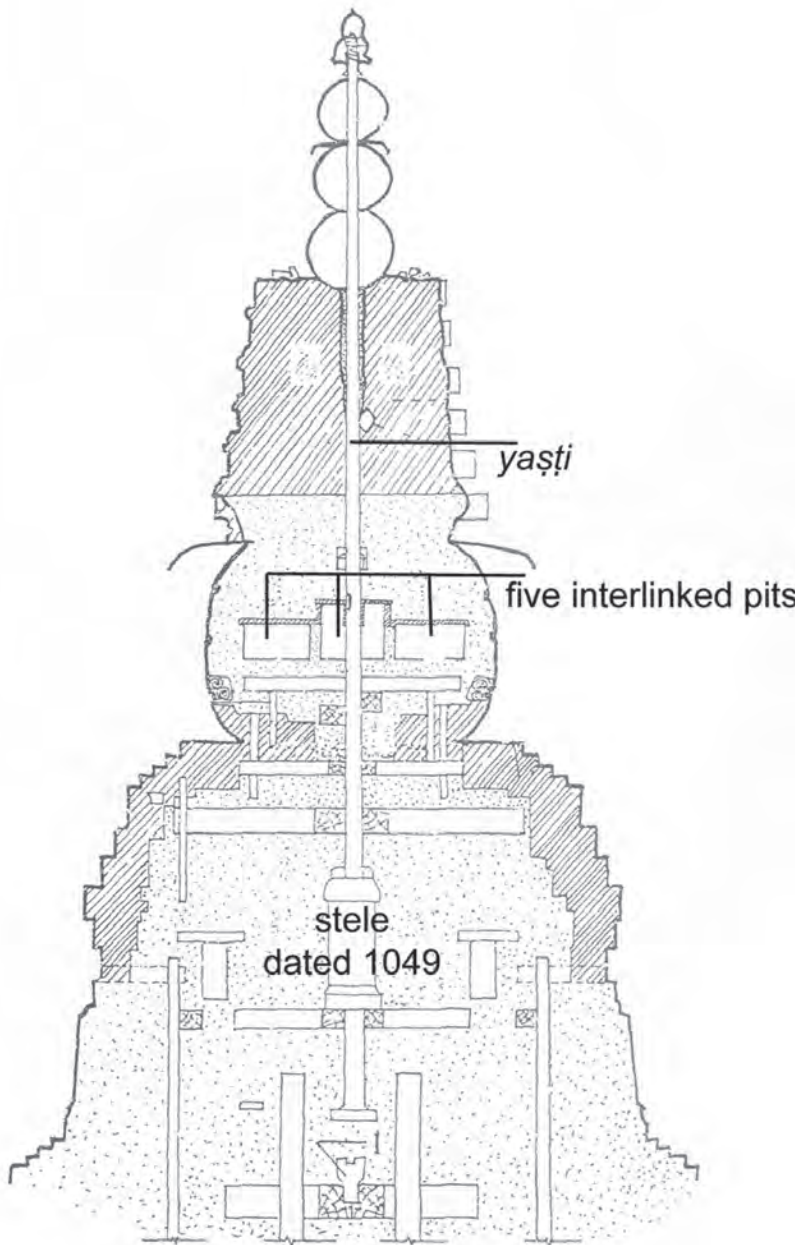


Figure 9. Cross-section of the top structure of the Shijiafoshelita Pagoda in Baarin Right Banner. Edited from De Xin *et al.*, 'Neimenggu Balinyou qi Qingzhou Baita', 9, figure 12.



Figure 10. Objects recovered from the south and the north rooms of the relic deposit built inside the top structure of the Shijiafoshelita Pagoda in Baarin Right Banner. After De Xin *et al.*, 'Neimenggu Balinyou qi Qingzhou Baita', 7, figures 7–8.



Figure 11. Miniature pagoda, layered streamer with attached fish. Liao dynasty, 1049 or earlier. Pagoda: painted cypress wood with gold leaf; H. 23 cm. Streamer: gauze, samite, amber; L. (excluding cord) approximately 23 cm. From the deposit inside the top structure of the Shijiafoshelita Pagoda in Baarin Right Banner. After Zhongguo lishi bowuguan and Neimenggu zizhiq wenhuating (eds.), *Qidan Wangchao: Neimenggu Liaodai wenwu jinghua* (Beijing, 2002), p. 326.

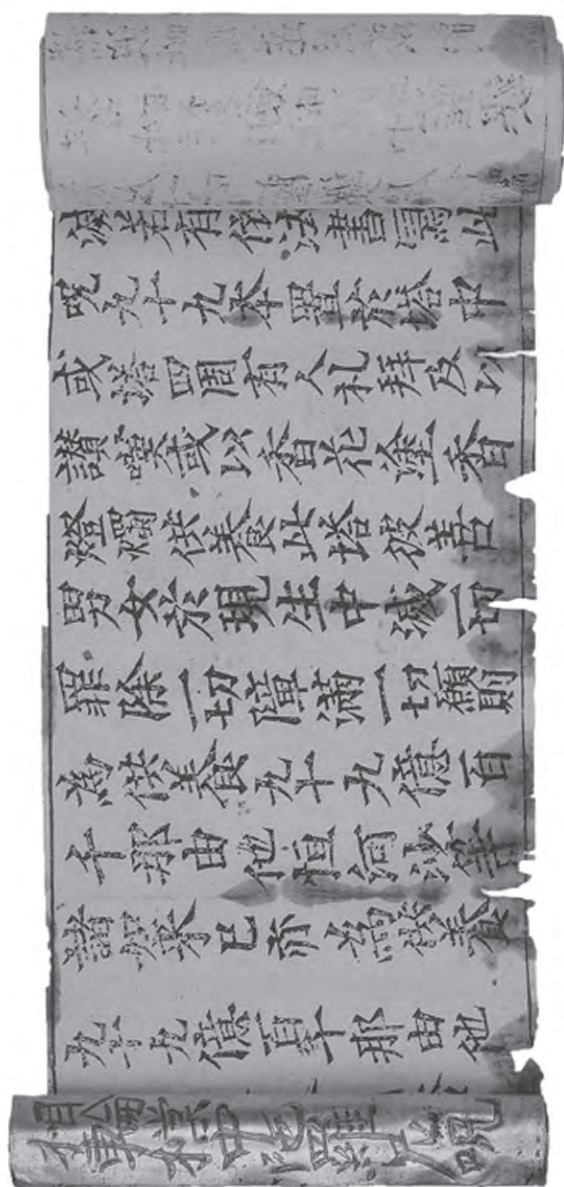


Figure 12. A *Dhāraṇī* scroll. Liao dynasty, 1049 or earlier. Ink on paper, gilded copper. From the deposit inside the top structure of the Shijiafohelita Pagoda in Baarin Right Banner. After Zhongguo lishi bowuguan and Neimenggu zizhiqu wenhuating *Qidan Wangchao*, p. 328.

Wugou jingguang da tuoluoni jing 無垢淨光大陀羅尼經), and two printed scrolls of miscellaneous *dhāraṇīs* on paper (Fig. 12).⁴⁶

Like the *Dhāraṇī Sutra of the Seal on the Casket*, the *Great Dhāraṇī Sutra of the Stainless Pure Light* celebrates the self-duplicative nature of the sutra. It prescribes reproduction of the sutra in either seventy-seven or ninety-nine copies, as well as their subsequent concealment inside the pagoda, and it grants protection to the states where such a pagoda is erected.⁴⁷ All wishes for longevity, elimination of sins, and salvation from hell will be fulfilled, too. As the sutra is expounded by all of the 990,000,000 buddhas present in the Buddhist universe, it is an embodiment of all buddhas. Moreover, the merits derived are multiplied 990,000,000 times. Based on examination of the content found, the burial inside the Liao pagoda in Qingzhou is clearly intended to realise the instructions of the sutra, even though they were not followed precisely.

I have argued elsewhere that the Liao people had a specific day in mind as to precisely when the *mofa* period would begin: the year equivalent to AD 1052. At the time deemed to be *mofa*, the Buddhist Law was thought to be at the point of extinction. In consequence, Buddhists felt a compelling need to preserve the Law in its physical forms. Aware of the empire's weakening position, the Liao ruling class felt especially anxious about the coming of the *mofa* period. They set about projects to preserve Buddhism in the event of a full catastrophe: Buddhist texts and canon were preserved by being carved in stone,⁴⁸ and pagodas enshrining the spiritual relics (i.e. scriptures) of the Buddha were erected at places of strategic significance. Completed three years prior to the anticipated onset of *mofa*, the Shijiafoshelita Pagoda in Qingzhou must have been the great white hope of the Liao rulers' salvation and deliverance from a total disaster.⁴⁹

The Shijiafoshelita Pagoda and its contents are preceded by comparable examples from both Japan and Korea. In neighbouring Korea, where there was a pre-existing tradition to celebrate the *Great Dhāraṇī Sutra of the Stainless Pure Light*, miniature pagodas were often deposited inside a real pagoda built with stone slabs. According to archaeologists, the number

⁴⁶ For the excavation report, see De Xin, Zhang Hanjun and Han Renxin, 'Neimenggu Balinyou qi Qingzhou Baita faxian Liaodai fojiao wenwu', *Wenwu*, 12 (1994), 4–33. See also Ji Liancheng, 'Liao Qingzhou Shijia fo sheli ta', *Neimenggu wenwu kaogu*, 2 (2000), 56–7.

⁴⁷ *Wugou jingguang da tuoluoni jing*, trans. Mitraśānta (704), T 1024.19.718c.

⁴⁸ See Lothar Ledderose, 'Carving sutras into stone before the catastrophe: the inscription of 1118 at Cloud Dwelling Monastery near Beijing', *Proceedings of the British Academy*, 125 (2004), 381–454.

⁴⁹ See Hsueh-man Shen, 'Realising the Buddha's *Dharma*-body during the *Mofa* period: a study of the Liao Buddhist relic deposits', *Artibus Asiae*, 61.2 (2001), 263–303.

of miniatures retrieved from these sites ranges from a dozen to about 150. Compared to their Liao counterparts, the Korean pagoda miniatures are often made of wood, clay, or soapstone, and they are significantly smaller in size—sometimes so small that there is no space for storage of anything.⁵⁰

Although these miniature pagodas are too small to function as containers, most are accompanied by scrolls of the *Great Dhāraṇī Sutra of the Stainless Pure Light*, or at least by inscriptions referring to the *dhāraṇī* sutra. Take the Kilsangtap 吉祥塔 Pagoda (dated 895) at the Haeinsa 海印寺 Temple as an example; 157 miniature pagodas made of clay (H. 6.5–7cm each.) were retrieved from inside the stone pagoda (Fig. 13). Additionally, one printed scroll of the *Great Dhāraṇī Sutra of the Stainless Pure Light* and four incised bricks were unearthed from the same site. One of the four

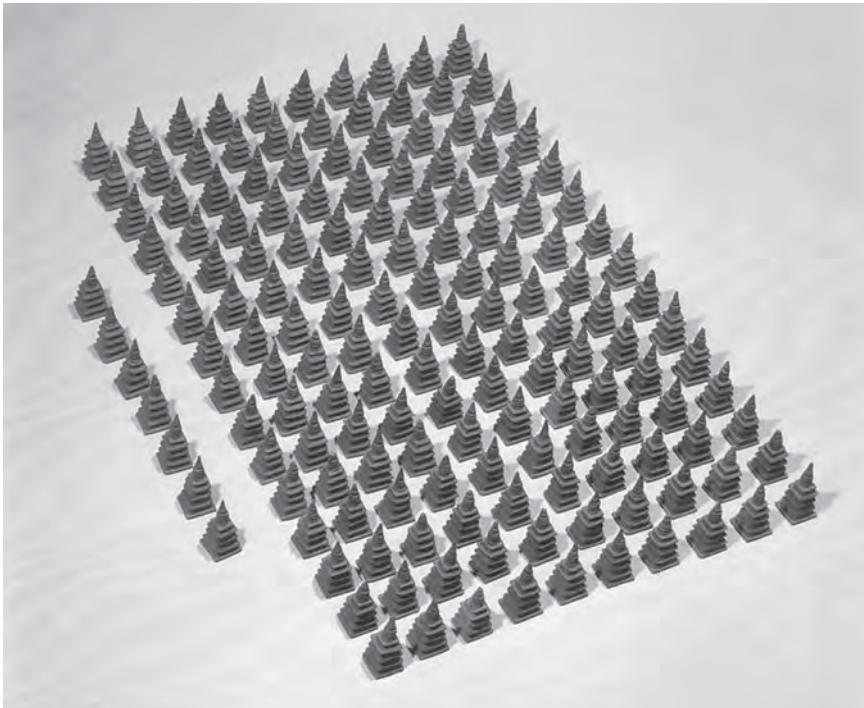


Figure 13. Miniature pagodas. Unified Silla, 895 or earlier. Clay; H. 6.5–7.0 cm (each). From the Kilsangtap Pagoda at Haeinsa Temple, South Gyeongsang Province, Republic of Korea. After Gukripjungang bakmulgwan, *Bulsarijangeom*, p. 58.

⁵⁰For a survey of reliquaries and pagoda miniatures in Korea, see Gukripjungang bakmulgwan (ed.), *Bulsarijangeom* (Seoul, 1991).

brick inscriptions is titled ‘On Enshrinement of the Spiritual Body [Dharma kāya] at Kilsangtap Pagoda’, and it lists the various types of spiritual relic enshrined inside the pagoda (Fig. 14), including several Buddhist sutras and commentaries, the names of the ‘Flower Garland Twin Buddha’ (that is, Vairocana and Śākyamuni), the names of the fifty-two historic buddhas, and the names of the ten disciples of the Buddha. The *Great Dhāraṇī Sutra of the Stainless Pure Light*, the *Lotus Sutra*, and the *Diamond Sutra* are also listed in the inventory. At the end of the inscription it is noted that ninety-nine pagoda miniatures made of lapis clay were joined by another seventy-seven inside the stone pagoda. It

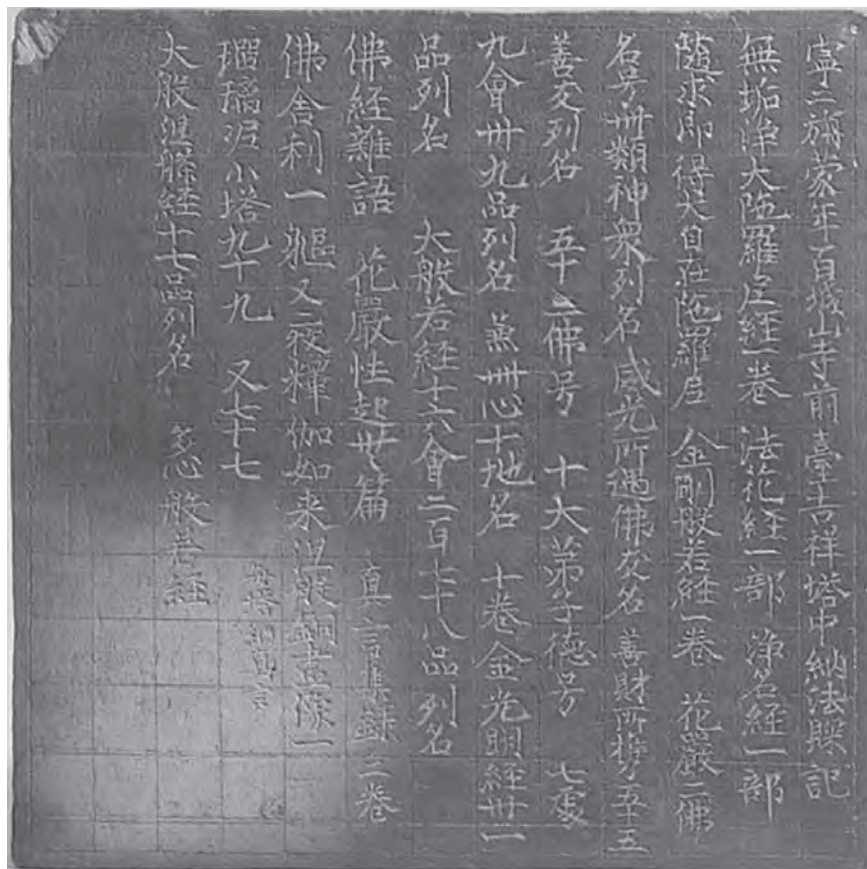


Figure 14. An inscribed brick. Unified Silla, 895 or earlier. Earthenware, L. 23.2, W. 23.2 cm. From the Kilsangtap Pagoda at Haeinsa Temple, South Gyeongsang Province, Republic of Korea. After Gukripjungang bakmulgwan, *Bulsarijangeom*, p. 59.

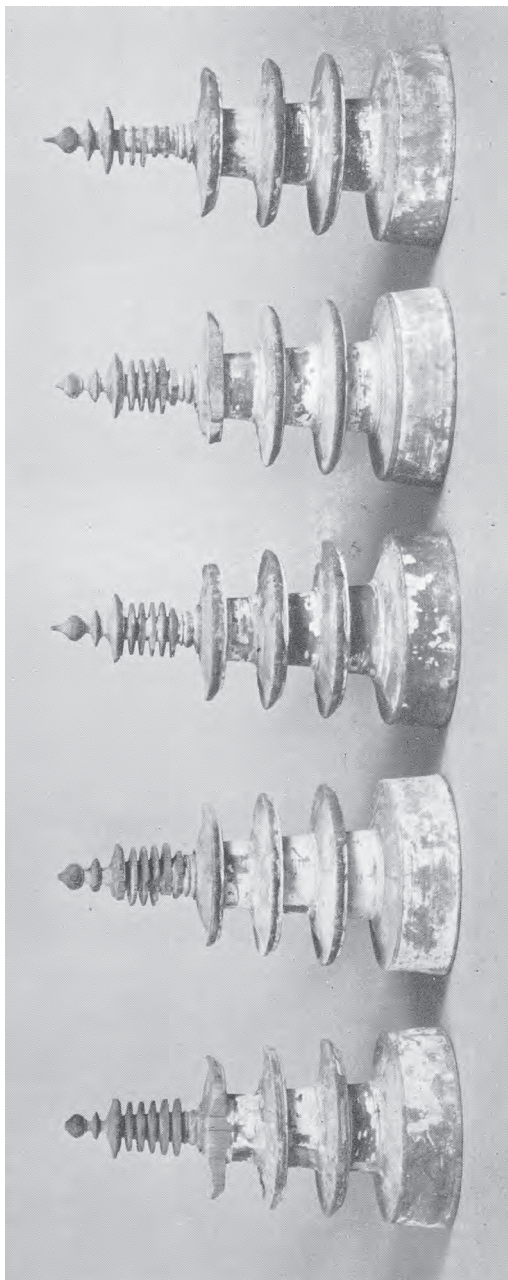


Figure 15. Miniature pagodas. Nara period, 770 or earlier. Pigments on wood, Diameter 8.5, H. 21.5 cm. Collection of Hōryūji Temple, Nara, Japan. After Tokyo National Museum (ed.), *Hōryūji kennō hōmotsu zuroku* (Tokyo, 1959), pl. 188.

reads, ‘Ninety-nine miniature pagodas made of lapis clay, supplemented by another seventy-seven. Each pagoda contains a *dhāraṇī* inside’ 瑠璃泥小塔九十九 又七十七 每塔納真言。⁵¹

Further east in Japan, a million pagoda miniatures (*j*: hyakumantō 百万塔) are said to have been made during Empress Kōken’s 孝謙 reign (r. 749–58 and 764–70), in each of which was enshrined a copy of the *dhāraṇīs* extracted from the *Great Dhāraṇī Sutra of the Stainless Pure Light*. Those prints and miniature pagodas were commissioned by the Empress to commemorate her victory over Emi no Oshikatsu’s 惠美押勝 (formerly Fujiwara no Nakamaro 藤原仲麻呂, 706–64) rebellion in 764. In 770 the project was finally realised, and the pagoda miniatures were distributed equally among ten monasteries in the country, including the Hōryūji 法隆寺 Temple in Nara, which still owns more than 45,000 pagodas (incomplete) and a hundred *dhāraṇīs* (Fig. 15).⁵² Similar to the Liao examples, these Japanese pagoda miniatures were carved out of wood, and they, too, contained sutra prints (typically 6 × 45 cm) inside.⁵³

VII. Reading the numbers

Scientific research on visual cognition as introduced earlier offers a fresh way to look at those sites in China, Korea and Japan and explain why it is possible to picture infinity through installation of multiple copies of a single design. At the Kilsangtap Pagoda in Korea, the *identical* form and shape of those pagoda miniatures contributed as well as their *quantity* to the visual effect of numerosity. The choice of numbers like seventy-seven and ninety-nine at the Kilsangtap Pagoda is particularly noteworthy.⁵⁴

⁵¹ Note that the phrase ‘Each pagoda contains a *dhāraṇī* inside’ was carved in characters of smaller size, as if it was provided as a footnote. For a description of the content of the Kilsangtap relic deposit, see Gukripjungang bakmulgwan, *Bulsarijangeom*, pp. 70, 116, 248–9.

⁵² See Sugano Mamichi (741–814), *Shoku Nihon gi*, reprint by (Kyoto, Kawabata shoeido, 1657), *kan* 30, pp. 280–1. These ten monasteries include: Daianji, Gangōji, Kōfukuji, Yakushiji, Tōdaiji, Saidaiji, Hōryūji, Gufukuji in Nara, Sūfukuji in Shiga, and Shitennoji in Ōsaka.

⁵³ Unfortunately most of the pagoda miniatures were lost or damaged during fires. Some *dhāraṇī* prints and pagoda miniatures have found their way into various private and museum collections throughout the world. See Nara rokudaiji taikan kankōkai (ed.), *Nara roku daiji taikan* (Tokyo, 1967–73), vol. 4, pp. 65–6, pls. 213–5; Mimi Hall Yiengpruksawan, ‘One millionth of a Buddha: the Hyakumantō Darani in the Scheide Library’, *Princeton University Library Chronicle*, 48:3 (1987), 224–38, esp. 235; Takada Ryōshin, ‘Hykumantō’, in *Kokushi daijiten*, 11 (Tokyo, 1990); Mori Ikuo, ‘Hykumantō’, in *Nihonshi daijiten*, 5 (Tokyo, 1993).

⁵⁴ Note that 157 instead of 176 miniature pagodas were found when the Kilsangtap Pagoda was opened.

Although the amount of merits derived from a single pagoda would and should theoretically be the same as from multiples, those numbers were preferred because they denote numerosity or infinity—a notion or an amount that otherwise is physically and technically impossible to represent. On the Kilsangtap inventory, two separate groups of pagodas—one group of ninety-nine and the other of seventy-seven—were listed at the end of the inscription. One may argue that, for the purpose of an inventory, it would be sensible simply to say that ‘a total of 176’ miniature pagodas went into the stone pagoda, instead of a lengthy and seemingly redundant description of ‘ninety-nine, supplemented by another seventy-seven’. It is important to know that the phrase ‘supplemented by seventy-seven’ is not a later addition to the inscription; the whole brick was inscribed and fired at one time. If it is how the inscription is supposed to be read, I would argue that these two numerical figures—‘seventy-seven’ and ‘ninety-nine’—were deliberately separated in order to make an explicit reference to the *Great Dhāraṇī Sutra of the Stainless Pure Light*, which prescribes duplication of the text in such numbers. These were deliberately retained, instead of being added up to 176, in order to preserve the connotation of numerosity that each bears. In other words, the reference to numerosity would be lost if one adds up seventy-seven and ninety-nine, and when the total reaches 176. The figure 176 does not index the notion of numerosity in the particular cultural context. Rather, it is the individual numbers ‘seventy-seven’ and ‘ninety-nine’ that denote numerosity. Although neither seventy-seven nor ninety-nine denotes an amount as large as 84,000 does (as in the case of King Qian Chu’s project), and they are minimal when compared to the number one million (as in the case of the Japanese *hyakumantō*), they are precisely the numbers of multiples prescribed by the *dāraṇī-sutra*, and the magic numbers that would yield numerous merits. The *presence* of these two numerical figures in the inscription immediately conjures up the illusion that numerous numbers of pagodas were enshrined at the sacred site. Therefore, by saying ‘ninety-nine, supplemented by another seventy-seven’ in the inscription, the numerous merits associated with each group are not only secured but added up or even multiplied by the magical properties of the text. In this case, a visual image of numerosity is created through two separate channels: one is through careful display of identical copies *in situ*, and the other through interpretation of texts—both the sutra text and the accompanying inscription.

In the case of the Shijiafoshelita Pagoda of Liao, the number of pagoda miniatures made (109, as actually found in the particular deposit)

was likely based on a literal reading of the *Great Dhāraṇī Sutra of the Stainless Pure Light*. Yet when those miniatures were spread out more or less evenly in the five interconnected chambers built on top of the pagoda, one forms the impression that there were probably more than 109 pagoda miniatures present. Moreover, the recursive device in the pagoda project allows the viewer to consider a single process, in which ninety-nine pagodas are inserted into a single, larger pagoda, and to imagine endless repetition of that process. In other words, the depiction of the miniature pagodas contains their own implied self-replication. This repetition can continue in both directions, as the single large pagoda in which the miniatures are housed could conceivably exist as one of another ninety-nine pagodas of equivalent size. Therefore, infinity reframes the large pagoda not as a single architectural structure but rather as a unit within a *recursive chain* that has no apparent end.

Incommensurability or infinity was achieved in the case of the Japanese *hyakumantō* by employing a different strategy, mainly through dissemination of the pagodas in space. The sheer number of one million may be stunning, but it would be hard to imagine that any one of the intended viewers would have had the chance to visit all of the sites and actually count all million pagoda miniatures. Simply spreading the word of the even distribution of the pagodas to ten monasteries in the country is sufficient for the audience to assume the existence of the remaining ones absent from the spot. In reality, it would hardly be possible for any one to see, to count, and to test the reliability of the alleged number of one million. Therefore, visiting only one or two of those monasteries one would be able to render a mental image of a total of one million pagoda miniatures existing in the country. The words—both spoken and written—contributed to complete the picture in which one million pagodas stood.

Division of the stupas into ten also implies a multiplication of powers of ten—from ten to 100, from 100 to 1,000, and so forth. That is, the recursive device creates a chain of thoughts, in which the number ‘ten’ multiplies itself. When the scripture is duplicated in a million copies, the merit promised in the sacred text is multiplied a million times. However, because of this recursive device accelerating the power of ten, when the million miniature pagodas are allegedly divided by ten, the merits and rewards are not divided by ten. Instead, they are multiplied by ten, because each of the ten groups forms part of the whole of the *hyakumantō*, and through the above-mentioned process of self-replication, the numerous merits derived collectively is multiplied ten times more.

The *hyakumantō* project was a public statement to celebrate the immeasurable power of the sacred word, as well as the power of the empress. It explored the self-duplicative nature of the *Great Dhāraṇī Sutra of the Stainless Pure Light* to the extreme. It also visualised the all-encompassing power of the sacred text, when the miniature pagodas were distributed to ten different monasteries. The end result created an enormous scale beyond reach. At a metaphorical level, the distribution of [duplicates of] the text throughout the country became analogous with manifestation of the single ultimate truth throughout the universe.

That the sacred text lends itself to the magical properties of self-multiplication is indeed a concept difficult to grasp. A certain form of explanation is needed, especially for the largely illiterate laity. Without previous knowledge of the philosophy behind the making of these pagoda miniatures, one would naturally be drawn to the visual impact created by the array of pagoda miniatures, as opposed to the individual one displayed. While a single miniature pagoda derives its meaning either from additional information provided by the object (for example, an inscription on the pagoda) or from the knowledge possessed by an educated viewer, the installation of multiple pagodas in identical form and shape functions in a more intuitive way to invoke thoughts into the meaning and intention of the grouping. Alternatively, the display of the 'one' alone would not work at all, unless external support, such as inscription or pre-existing knowledge, was provided. It is only through display of multiples that the message about 'the parts and the whole' can be conveyed. Both Qian Chu's grand project and that of the Liao demonstrate how *multiplicity* could overtake singularity in expressing ideas related to the Buddhist metaphysics, and those fulfilling the aspiration of a worldly ruler.

In the cases where each component arranges itself into the same form as the whole of which it is a part (and in which the whole can be taken to constitute a component for an even larger whole), it operates under a fractal presumption that an effective means of picturing infinity is not to depict the totality of the concept, but rather to imply a *formula* for self-replication that points both to a vast, cosmological scale and to its minute, interior counterpart.

Within the specific contexts, both the dichotomy of 'the one and the multiple' and the opposition between 'the copies/substitutes and the original' that have been so dear to the heart of many art historians becomes invalid. The issue of scale, too, becomes irrelevant, because the large, real pagoda and the small pagoda miniature are equally efficacious as long as there is faith in them.

VIII. Personified form of the formless truth

There is an alternative way to render the Huayan metaphysics of ‘one thing contains all things in existence, and that all things contain one’ in visual terms. That is to represent the one and only Buddhist truth in figural form. It embodies the formless truth and engages the beholders in a more instinctive way than the array of pagoda miniatures; and if it is executed on a monumental scale, it can be overwhelmingly powerful.

I have demonstrated elsewhere the connection between the Timber Pagoda (dated 1056) in Shanxi Yingxian and the *Brahma Net Sutra* (s. *Brahmajala Sutra*; c. *Fan wang jing* 梵網經), a text composed in China in around the mid fifth century.⁵⁵ The name of the sutra derives from the vast net that the god Brahma hangs in his palace, and how each jewel in the net reflects the light of every other jewel:

At that time, he [Śākyamuni Buddha] contemplated the wonderful Jewel Net hung in Lord Brahma’s palace and said: ‘the innumerable worlds in the cosmos are like the eyes of the net. Each and every world is different, its variety infinite. So too are the Dharma-Gates [paths to enlightenment] taught by the Buddhas.’

The sutra describes Vairocana Buddha as the personification of the *dharma-makāya* (the eternal indestructible true principle, the Buddha’s original body; c. *fashen* 法身), and explains the relations between Vairocana and Śākyamuni.

Now, I, Vairocana Buddha am sitting atop a lotus pedestal; on a thousand flowers surrounding me are a thousand Śākyamuni Buddhas. Each flower supports a hundred million worlds; in each world a Śākyamuni Buddha appears. All are seated beneath a Bodhi-tree, all simultaneously attain Buddhahood. All of these innumerable Buddhas have Vairocana as their original body.⁵⁶

At the Timber Pagoda, a statue of Vairocana is enshrined on the first floor; and on each petal of Vairocana’s lotus throne is depicted a seated Śākyamuni (Fig. 16). It appears that in facing the challenges of how to represent the formless truth of Buddhism, and how to depict the notion of mutual containment and interpenetration, the artists at the Timber Pagoda opted for the more intuitive choice, that is, to depict the personified form of the Buddhist truth, together with numerous generic images of Śākyamuni on the petals of Vairocana’s lotus throne. By combining the gigantic statue of Vairocana [representing the *one* all-encompassing truth] with the many tiny images of Śākyamuni [*all*] in one piece of work,

⁵⁵ Shen, ‘Realising the Buddha’s *Dharma*-body’, 291–4.

⁵⁶ *Fan wang jing*, trans. (attributed to) Kumārajīva, *juan 2*, T 1484. 24.1003c.



Figure 16. Detail of Vairocana's throne of lotus petals. First level of the Timber Pagoda. Liao dynasty. After Chen Mingda (ed.), *Yingxian Muta* (Beijing, 1980), pl. 62.

the Huayan philosophy of mutual containment between the one and all is embodied. The interpenetrating relationship between the one and all is reiterated by the overall layout of statues in the pagoda, with Vairocana sitting on the first floor, and echoing with Śākyamuni on the fourth floor of the same pagoda (Fig. 17).

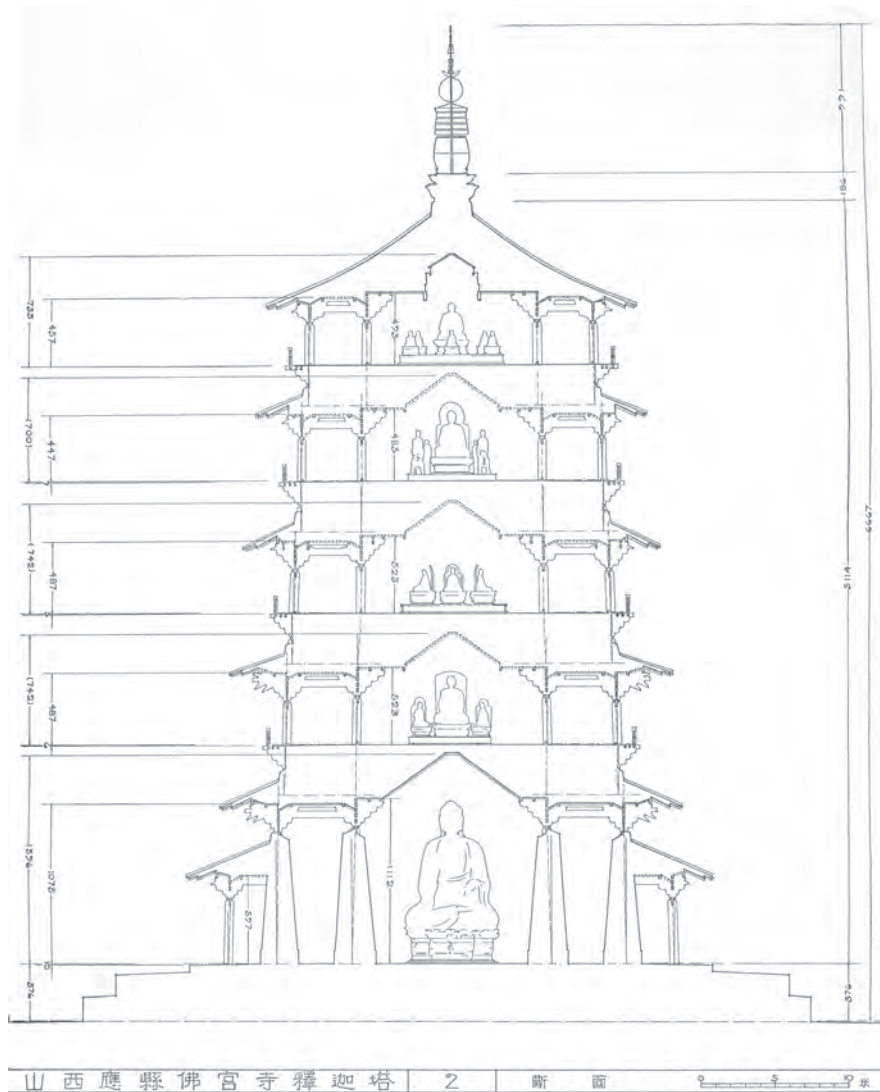


Figure 17. The five groups of sculptures in the Timber Pagoda. Liao dynasty. After Chen *Yingxian Muta*, drawing 2.

To carve or paint little Buddha images on the lotus pedestal of a giant Vairocana Buddha statue is probably not a Liao invention. The Fengxiansi 奉先寺 Grotto (carved in *c.*672–5) at Longmen in present-day Luoyang, Henan province, is an early example. Similarly, the lotus petals supporting the colossal bronze statue (completed in 752) of Vairocana at Tōdaiji

東大寺 Monastery in Nara, Japan, are carved with a map featuring the Huayan cosmology (Fig. 18). On each lotus petal forming the Buddha's lotus throne are incisions of the image of Śākyamuni and attendants.⁵⁷

That Vairocana is the all-encompassing *dharmakāya* (*dharma* body) of the Buddha also gave rise to the imagery of so-called 'Cosmological Buddha'. A stone sculpture in the collection of the Asian Art Museum of San Francisco, datable to the Liao dynasty, represents that type of Buddha images.⁵⁸ On the panel of the Buddha's robe hanging below the crossed legs is depicted a hell. Between the Buddha's legs and arms, the human world is represented. At the level of his lap is shown the end of the Buddha's earthly life. Rising from the Buddha's abdomen to his chest is Sumeru (world-mountain Meru), and on its upper part buildings belonging to the gods' realm. More heavens float on little clouds on the Buddha's shoulders. As evidenced by the San Francisco statue and other comparable examples (Fig. 19), a stratified structure was employed to depict in horizontal registers across the Buddha body the various realms and worlds coexisting in the Buddhist universe. The spatial cosmology of Buddhism, describing the arrangement of worlds in a vertical pattern, is therefore manifested on and contained within the Buddha body.

The identification of the Cosmological Buddha has long been debated. It was identified as Vairocana, the preacher of the *Flower Garland Sutra*, by Matsumoto Eiichi in 1936. Matsumoto's view has been upheld by Japanese scholars up till the present.⁵⁹ Angela Howard, however, proposes

⁵⁷ See Kobayashi Takeshi, *Nara Buddhist Art: Tōdai-ji* (New York, 1975); Mizuno Seiichi, *Buddhist Temples in Japan: Tōdai-ji* (Tokyo, 1960); Zauhō Kankōkai (ed.), *Nihon goji bijutsu zenshū, volume 4: Tōdaiji to Shi-Yakushiji, Hokkeiji* (Tokyo, 1980). For a discussion on the Vairocana statue at Tōdaiji Monastery, see Yoshimura Rei, 'Tōdaiji daibutsu no butsushin ron—renkazō shōgon sekai-gai no kōzō nitsuite', *Bukkyō geijutsu*, 246 (1999), 41–68. See also Maeda Yasutsugu, Watanabe Yoshio, Irie Yasukichi and Sonobe Sumi (eds.), *Tōdaiji: daibutsu to daibutsu-den* (Tokyo, 1974).

⁵⁸ Object ID. B61S66. The museum dates the sculpture to the Tang dynasty. However, on the ground of stylistic analysis, I am in the opinion that it dates to the Liao, rather than the Tang period. The following description of the statute is adapted from the text published at the museum's website, <[http://67.52.109.59:8080/emuseum/view/objects/asitem/search\\$0040/1/title-asc/designation-asc?t:state:flow=6a417175-9833-4336-82cf-6f48d164b54e](http://67.52.109.59:8080/emuseum/view/objects/asitem/search$0040/1/title-asc/designation-asc?t:state:flow=6a417175-9833-4336-82cf-6f48d164b54e)> accessed 10 February 2012.

⁵⁹ See Matsumoto Eiichi, *Tonkō ga no kenkyū*, 2 vols. (Tokyo, 1937); 'Seiki Kegonkyō bijutsu no tōzen', *Kokka*, 548 (1936): 195–200; 549 (1936): 243–7; 551 (1936): 279–83; Mizuno Seiichi, 'Iwayuru Kegonkyō-shū Roshana-butsu no ritsuzō nitsuite', in his *Chūgoku no Bukkyō bijutsu* (Tokyo, 1966), 135–55; Ishida Hisatoyo, 'Keigonkyō bijutsu no tenkai', *MUSEUM*, 350 (1980), 4–18. More recent discussions and debates published in Japanese and Chinese languages include those by Yoshimura Rei, Park Hyounggook, Li Jingjie, and Li Yumin. See Yoshimura Rei, 'Roshana hōkai jin chū zō no kenkyū', in his *Chūgoku bukkyō zuzō no kenkyū* (Tokyo, 1983), pp. 7–34; 'Roshana hōkai jin chū zō zairon—Keigonkyō-shū Roshana-butsu to wuchū-shū teki Shaka-butsu', *Bukkyō geijutsu*, 242 (1999), 27–49; Park Hyounggook, 'Iwayuru "jin chū zō"



Figure 18. Detail of Vairocana's throne of lotus petals. Buddha Hall, Tōdaiji Monastery, Nara. Nara period, completed in 752. After Zauhō kankōkai (ed.), *Nihon koji bijutsu zenshū*, vol. 4, Tōdaiji to Shiyakushiji, Hokkeji (Tokyo, 1980), pl. 5.



Figure 19. Cosmological Buddha. Tang dynasty, c.700. Wall mural, 156 × 86 cm. From Cave 13, Kizil Grottoes. Collection of the Museum of Asian Art, Berlin, III 8868. After Tokyo National Museum (ed.), *Shiruku rōdo dai bijutsu ten* (Tokyo, 1996), p. 146, pl. 159.

that the Cosmological Buddha is possibly the highest form of Buddha Śākyamuni.⁶⁰ In my view, the two theories are not mutually exclusive because, after all, all buddhas (including Śākyamuni) are manifestations of the *dharmakāya* (i.e. Vairocana). In this context, they are the *nirmaṇakāya* or the Buddha body manifested in response to the need to teach sentient beings. Therefore, all of those who manifest the *nirmaṇakāya* can either appear or be portrayed in the form of a Cosmological Buddha. The same can be said about Vairocana, who is fundamentally the personified form of the all-encompassing *dharmakāya*.

At the Yanchangsitā 延昌寺塔 Pagoda in Liaoning Chaoyang, the Cosmological Buddha image appears in incision on one of the stone slabs forming the reliquary (Liao dynasty, dated 1043) inside the top structure of the pagoda (Fig. 20). This buddha image bears on the front of his robe a vision of a Buddhist universe consisting of rings of mountains and the waters of the Great Ocean, atop of which rises Sumeru. Such an image of Cosmological Buddha interprets the notion of ‘one thing contains all things in existence’ in a rather explicit way, with the universe [all] contained inside the body of the Buddha [one]. This Buddha image is flanked by two others on the side, forming a triad representing the three Buddha bodies.⁶¹ The inscriptions next to each of the Buddha images read *Fashen[fo]* 法身[佛] (*Dharma-body Buddha*), *Bao[shen fo]* 報[身佛] (*Reward-body Buddha*), *Huashen fo* 化身佛 (*Transformation-Body Buddha*) confirming the identity of the three Buddha images. It is noteworthy that placed to the right of the Cosmological Buddha and associated with the name of *Fashen fo* (*Dharma-body Buddha*) is a crowned

toiwu meishō nitsuite’, *Mikkyō zuzō*, 16 (1997), 78–106; *Buairōchyana-butsu no zuzō-gaku teki kenkyū* (Kyoto, 2001); Li Jingjie, ‘Lushena fajie tuxiang yanjiu jianlun’, *Gugong bowuyuan yuankan*, 2 (2002), 57–69, and 3 (2000), 53–63; Li Yumin, ‘Fajie renzhong xiang’, *Gugong wenwu yuekan*, 11:1 (1993), 28–41; ‘Dunhuang sierba ku xin tuxiang yuanliu kao’, *Gugong xueshu jikan*, 10.4 (1993), 1–34.

⁶⁰ Angela F. Howard, ‘The Imagery of the Cosmological Buddha’, Ph.D. thesis, New York University, 1981; ‘The monumental “Cosmological Buddha” in the Freer Gallery of Art: Chronology and Style’, *Ars Orientalis*, 14 (1984), 53–73; *The Imagery of the Cosmological Buddha*, *Studies in South Asian Culture*, 13 (Leiden, 1986).

⁶¹ The theory of the ‘three bodies’ of a buddha explains the three major aspects of the presence of a buddha. The three bodies include: *dharmakāya* (*dharma-body*), *sambhogakāya* (*reward-body*), and *nirmaṇakāya* (*transformation-body*). As explained earlier, the *dharma-body* is the Buddha’s original body, and it refers to the eternal indestructible true principle. The reward-body is an ideal body possessed by those who have awakened to the true principle based on meritorious practice. It is the living form of the eternal principle that possesses individuality. The transformation-body is considered to be the Buddha’s manifest body, which has power to assume any shape to propagate the Truth or to save sentient beings.



Figure 20. The Buddha's Three Bodies carved on the east wall of relic deposit built inside the top structure of the Yanchangsitā Pagoda in Chaoyang, Liaoning province. After Chaoyang Beita kaogu kanchadui, 'Liaoning Chaoyang Beita tiangong digong qingli jianbao', *Wenwu*, 7 (1992), 5, figure 7.

Buddha whose hands meet at the level of his chest. The crown and the *mudra* hand gesture (though partially damaged, it is discernible to be the wisdom-fist *mudra*) identify this image as Vairocana. At the other side of the Cosmological Buddha is, again according to its *mudra*, Buddha Śākyamuni.⁶² It seems that an iconographic distinction was made during the Liao period among Vairocana, the Cosmological Buddha, and Śākyamuni, and a specific aspect of the nature of a buddha was assigned to each of them. In other words, while Vairocana was considered an embodiment of the very principle of enlightenment (*s. dharmakāya*), the Cosmological Buddha was associated with the body of bliss (*s. smabhogakāya*), and Śākyamuni a manifestation in time and space (*s. nirmanakāya*). The three types of Buddha image are differentiated in their iconography yet

⁶²The iconography is mirrored by that engraved on a relic container from the same site. See Liaoning sheng wenwu kaogu yanjiusuo and Chaoyang shi Beita bowuguan (eds.), *Chaoyang Beita: kaogu fajue yu weixiu gongcheng baogao* (Beijing, 2007), p. 73, figure 25.

interconnected for they together represent the Buddhist teaching on both the nature of reality and the nature of a buddha.

In the Buddhist philosophy, especially in Mahāyāna Buddhism, countlessness is *de facto* a metaphor for timelessness and omnipresence of the Buddha. Thus the artists may appear to tackle the question of how to represent the ‘number’ of infinity, but in effect they face the challenge of how to represent ‘timelessness’ and ‘omnipresence’ in visual terms. At the Shijiafoshelita Pagoda of Liao, surrounding the *yaṣṭi* pole and below the multichambered deposit where the above-mentioned 109 pagoda miniatures were found, is an additional square pit. At its four corners, four large pagoda miniatures were installed. These are larger in size than any other miniatures found in the Shijiafoshelita Pagoda and were similarly decorated with ten Buddha images that were carved in relief and arranged in two registers. A cartouche inscribed with *Shifang fo* 十方佛 (Buddhas of Ten Directions) at the lower register identifies these Buddha images as those of the Buddhas of Ten Directions (Fig. 21). The prominent size and the careful positioning of these four large pagoda miniatures indicate their status and significance. According to the excavation report, each miniature contained a wood-block printed scroll of the *Lotus Sutra*. The sutra was wrapped in a fine piece of white silk, which was inscribed in ink with thirteen characters reading ‘*Fahua jing yibu quanshen sheli zai ci ta zhong*’ 法華經一部全身舍利在此塔中 or ‘the entirety of the *Lotus Sutra* as the Buddha’s whole-body *śarīra* is present inside the pagoda.’⁶³ This group of pagoda miniatures offers a commentary on the Huayan doctrine of mutual containment and interpenetration of all phenomena, by employing the imagery of the Buddha of the Ten Directions and via references to the *Lotus Sutra*, which articulates the doctrine of the eternity of all buddhas. While the Huayan teaching was interpreted at the main deposit by an array of [seemingly] numerous number of pagoda miniatures, it was reiterated in the square pit mainly through iconography.

⁶³ See De Xin *et al.*, ‘Neimenggu Balinyou qi Qingzhou Baita’, 27, 24, figure 53. The passage was likely extracted from the *Lotus Sutra*, Section Ten, ‘The Teacher of the Law’. See T 262.9.31b. One additional scroll (printed in 1017) of the *Lotus Sutra* was enshrined inside a large wood-carved pagoda-miniature, which was, in turn, deposited in the central room of the multichambered complex structure. From the same room was discovered a pagoda miniature made of silver sheets. This pagoda miniature contained a long scroll of silver sheet engraved with the six *dhāraṇīs* extracted from the *Great Dhāraṇī Sutra of Stainless Pure Light*, and the ‘Verse on the *Dharma-body*’, followed by an inscription dedicating the merits to the imperial family and dated to 1049. That the two pagoda miniatures are isolated from the other 107 pagoda-shaped scripture containers in the deposit and were placed side by side signifies the significance of the *Lotus Sutra* and the *Great Dhāraṇī Sutra of Stainless Pure Light* in the religious life of the Liao. See De Xin *et al.*, ‘Neimenggu Balinyou qi Qingzhou Baita’, 22–3, 17, figure 38.



Figure 21. Miniature pagoda decorated with the Buddhas of the Ten Directions. Liao dynasty, 1049 or earlier. Ink, color and gold on wood; H. 45.5 cm. From the deposit inside the top structure of the Shijiafoshelita Pagoda in Baarin Right Banner. After *Zhongguo lishi bowuguan* and *Neimenggu zizhiqiu wenhuating*, *Qidan Wangchao*, p. 324.

IX. Illusory nature of the phenomenal world

In addition to statues and scriptures, some types of devotional objects found at Liao pagoda sites are also related to the Huanyan teachings. One particular type of object pertains to the topic: bronze mirrors. As described earlier, over a thousand mirrors adorned the exterior of the Shijiafoshelita Pagoda in Baarin Right Banner. These were installed presumably for their function to catch light as well as to add to the splendour of the pagoda. However, it is noteworthy that a number of them are decorated in incision on the reflective side rather than on the back. Filling the circular surface of a round mirror illustrated here (Fig. 22) is a frontal image of the Buddha seated on a lotus pedestal. An inscription above the horizontal lines across the centre of the mirror and to the Buddha's left identifies the figure as Śākyamuni Buddha. Another inscription, on the lower part of the mirror, provides a date equivalent to 1105.⁶⁴

Mirrors are charged with rich meanings in China, both in funerary and in religious contexts.⁶⁵ Those with incised Buddhist images bear additional connotation and are literally associated with the Buddhist metaphor 'image [reflected] in a mirror'. The reflection of images in a mirror represents a Buddhist analogy with the transient and is related to the notion of emptiness. In various Buddhist texts, the multitudes were instructed to view the phenomenal world as an image in a mirror and emptiness as the mirror itself.⁶⁶ In explaining the complex theory of the

⁶⁴ See Qinggele, 'Liao Qingzhou Baita tashen qianshi de liangjian jinian mingwen tongjing', *Wenwu*, 9 (1998), 67–8. Unfortunately only limited information about these mirrors has been published thus far. It is unclear how many other mirrors from the Shijiafoshelita Pagoda were also decorated with incised images, although some mirrors with comparable designs and dates have recently surfaced in private collections. For a fuller discussion about the Liao-period bronze mirrors incised with Buddhist images, see Hsueh-man Shen, 'Image in a mirror, moon in the water: Liao Period bronze mirrors incised with Buddhist images', *Orientalia*, 37.6 (2006), 58–64.

⁶⁵ Based on the smoothness and reflective properties of the mirror surface, mirrors were used as a metaphor for enlightenment and purity and were frequently mentioned in Buddhist literature. A great round mirror reflects all forms exactly as they are, as does the wisdom of the Buddha. The 'great perfect mirror wisdom', therefore, refers to the pure wisdom gained at Buddhahood by a qualitative transmutation of the eighth consciousness. Besides, the metaphor of mirror is often linked with that of moon, as they both embody the pure nature of the Buddhist wisdom. See T 848.18.40c.

⁶⁶ For example, see T 1509.25.104a–105a. The image in a mirror is listed as one of ten metaphors illustrating that everything in this world is empty in its true nature and without any real substance, because it is dependent on other causes. For instance, T 278. 9.770a; T 1596.31.290c; T 1698.33.84a. Soon the metaphor of 'flowers in the mirror, and moonlight on the water' was adopted for secular use, and appeared frequently in the literature of late imperial China. See Lene Bech, 'Flowers in the mirror, moonlight on the water: images of a deluded mind', *Chinese Literature: Essays, Articles, Reviews (CLEAR)*, 24 (2004), 99–128.



Figure 22. Mirror with incision on the reflective side. Liao dynasty, dated 1105. Bronze; diameter 50 cm. From the deposit inside the top structure of the Shijiafoshelita Pagoda in Baarin Right Banner. After Qinggele, 'Liao Qingzhou Baita tashen qianshi de liangjian jinian mingwen tongjing', *Wenwu*, 9 (1998), 68, figure 3.

Buddha's three bodies, various Buddhist texts use the image in a mirror as a metaphor for the *nirmānakāya*, and the mirror itself for the *dharmakāya*. While the *nirmānakāya* manifests according to the temperaments and abilities of sentient beings in order to save them, the *dharmakāya*—the only reality—remains the same. Similarly while the reflected image in a mirror changes as the object moves, the substance of the mirror remains unchanged.⁶⁷ Hence seeing a Buddha image in a mirror is analogous to discerning the Buddha.⁶⁸ Therefore a mirror incised with a Buddha image on the reflective side can be viewed as an embodiment of this idea; that is,

⁶⁷ T 1799.39.872b; T 1876.45.640b.

⁶⁸ T 1736.36.597a.

the bronze mirror stands for the Buddha's eternal *dharmakāya*, whereas the incised Buddha image on the mirror represents the Buddha's *nirmānakāya*, which reveals itself only in response to believers. While the incised images may vary, the Buddha-nature represented by the mirror itself remains the same.

By extension, the mirror refers to the ultimate Buddha nature, while the incised image corresponds to the mind of all creatures. Therefore incision of Buddhist images on a mirror symbolises the unification of Buddha nature and the nature of all creatures. An inscription (dated 1120) containing a comparable notion is recorded in the *Complete Collection of Liao-dynasty Essays* (c. *Quan Liao wen* 全遼文). It reads: 'The mind of the multitudes is not separate from that of an enlightened being; the body of the enlightened is no different from that of all creatures.'⁶⁹ This notion is articulated in the inscription on a Liao-dynasty mirror excavated from the reliquary deposit built on top of the Yanchangsitā Pagoda in Chaoyang, Liaoning Province. The inscription was engraved on the back of the lotus-shaped mirror, and it reads '[hereby] the two minds co-exist forever' (*liang xin tong changcun* 兩心同長存). The two minds in this case refer to the Buddha mind represented by the mirror itself, and the mind of the person who owned the mirror. Through the offering of this mirror to the Buddha relic, it was hoped that the mind of the donor would be enlightened.⁷⁰

The pagoda miniatures carved with images of the Buddhas of the Ten Directions and installed in the top structure of Shijiafoshelita pagoda summarised the omnipresence of all buddhas through the combination of figural images [of the Buddhas of the Ten Directions] and words [the name 'Shifang fo' carved in cartouche]. Likewise, the mirrors incised with Buddha images on the reflective side played with the intricate relation between medium and the picture plane of the object, and successfully translated the Huayan paradoxes into visual forms.

⁶⁹ See Chen Shu (ed.), *Quan Liao wen* (Beijing, 1982), p. 349.

⁷⁰ The two minds could also refer to the two kinds of 'zhen xin' (true mind) as elaborated by Dao Shen (Liao dynasty) in his *Xianmi yuantong chengfo xinyao ji* 顯密圓通成佛心要集. Dao Shen equated the true mind with the spiritual body of Buddhism, and explained that all is but a construct of the mind, hence the mutual containment and interpenetration of all phenomena. See T 1955.46.990b-991a.

X. Conclusion

This lecture brings together various types of imagery and objects, and uses the Huayan doctrine as a research framework to examine the ways in which perception—a notion central and fundamental to Huayan philosophers as well as to the beholders of those objects and images—might have been understood and incorporated into the design process. These objects have conventionally been dealt with separately, in accordance with the media in which they were made. Consequently mirrors, for example, would not be examined side by side with statues or sutra prints. Reliquaries and pagodas are often left out from discussion of Buddhist art in China, for they are considered a ‘minor’ form of art in comparison to painting and sculpture. This lecture proposes a framework to look at things cross-media and across the traditional boundary of genres.

In dealing with the relationship between copies and the original that is so often associated with multiples and multiplication, I have demonstrated that the emphasis on sets or groups rather than singletons downplays any notions of originals at the first place; the multiplicity of pagodas and their occurrence in sets made irrelevant the notion of originality in the sense of its relation to value. With respect to their creation, the maker of the pagoda miniatures draws from established motifs in such a manner that suggests a kind of reproduction, but the manner of arranging these elements does allow for a certain measure of creativity or, one might say, originality. As explained earlier, no two of the Qian Chu miniature pagodas are exactly alike. These works seem to operate within both registers at once and, as a result, they begin to destabilise the divide between the original and the copy. Moreover, these ‘cloned’ objects existed as copies *without* originals—an ontological status indicating that they are not copies at all. However they were valuable, precisely because they were copies (of the Aśoka stupas) and they would be worthless if they were originals or creations of Qian Chu’s time that had no association with events of historical significance.

The abundance and large numbers of those miniature pagodas raise general questions about whether each piece can or should be studied in and of itself. Contextualised study of the various projects conducted in Wuyue, Liao, Korea and Japan shows that those pagoda miniatures were both cosmological and narrative, and they worked in conjunction with one another to produce both timeless and omnipresent motifs. Techniques capable of creating optical illusion functioned to engage the viewers and further guided their attention to the cosmological aspect of the theme. It

comes to light that the requirement of verisimilitude is not necessarily circumscribed to the individual but to the set. For these miniatures to have efficacy, each miniature must resemble a real pagoda and the entire group must resemble a 'real' assemblage of countless pagodas.

It was truly an art to translate the philosophical or abstract ideas such as Huayan metaphysics into pictorial entities that made sense to viewers. It was also a challenge to transform finite numbers into conceptual infinity, as artisans were commissioned to do. Thanks to frequent use of numbers as metaphors for bigger ideas in Buddhism, we are provided with a most interesting opportunity to view Buddhist art in a new way, separate from the traditional devices of art history that privilege iconography and symbolism. Rather than isolating specific images for further investigation, I hope, in emphasising the unique relationship between a viewer and multiples of an original, future studies will take on a more holistic approach to Buddhist images as well as ritual objects, looking into their entire lineage in history and their use in space. Hopefully by so doing, we can then broaden our research horizon.

Note. I am grateful to the audience of my lecture on 1 November 2011, whose comments and questions have helped shape this revised version. Several cases explored in this lecture were discussed at a seminar course (titled 'Multiples, Replicas, and Mass-production in the Making of Chinese Art') I taught at the Institute of Fine Arts, New York University, in Fall 2011. Parts of this lecture were presented respectively at the conference 'Perspectives on the Liao' held at Yale University on 1 October 2010, and at the IFA-China Project Workshop held at my Institute on 10 February 2012. I would like to thank the attendees at these events for their feedback.