

THE UNIVERSITY OF CHICAGO

BETWEEN VIRTUAL AND REAL:

A NEW ARCHITECTURE OF THE MOGAO CAVES (DUNHUANG, CHINA), 781–1036 CE

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Abstract

Caves, cut into a cliff rather than built on the ground, provide an alternative approach to defining space. The most provocative of them provoke fundamental questions about the very nature of architecture—what it is and how it functions. This dissertation investigates how the architecture of the Mogao caves near Dunhuang—a major cave complex in northwest China built from the fourth to the fourteenth centuries—transformed a desert cliff site into a Pure Land, a Buddhist paradise on earth. Through analyzing five selected landmark caves, cave composites, and cave clusters at Mogao, this dissertation locates the architectural turn in new design and construction paradigms of the Tibetan (778–848) and the Guiyijun (848–1036) periods. The new architecture played critical roles in the history making and placemaking of Mogao by mediating between the past and present times and bridging actual and visionary places. Because it evolved from the particular site of Mogao and was paradigmatic in the Dunhuang-Anxi region, this mode of architecture is termed the Dunhuang style.

The dissertation begins by investigating a special cave composite as a microhistory that epitomizes the architectural transformation of the Mogao cave complex. Known as the three-story pavilion, this composite comprises three decorated caves arranged vertically plus the famous Dunhuang library cave, all covered by a three-level timber façade. Chapter 1 reconstructs the process of the pavilion's becoming, highlighting its continual redevelopment and reintegration throughout the ninth to eleventh century. The next four chapters contextualize the pavilion's complex form and the changes in the architectural developments of the Mogao cave complex during the Guiyijun period. It examines how four new paradigms—synthesis of pictorial and spatial arts, competition for verticality, externalization of Pure Land imagery, and cave grouping—made the cave architecture more comprehensive and the Mogao site more

wondrous. Chapter 2 investigates how a pagoda-themed cave could embrace multiple pagoda imageries that are conveyed through pictorial, plastic, and architectural mediums and that institute a ritual place endowed with miraculous forces. Chapter 3 demonstrates the leading role of the colossal-image caves and their multilevel porches in shaping the overall imagery of the Mogao complex as heavenly palaces of unparalleled height. Chapter 4 understands the sweeping refurbishments of the Mogao cliff of the tenth century as a new paradigm of Pure Land art, which integrated the interior and open-air murals and the timber-framed porches into a tangible image of the sacred realm. Chapter 5 discusses the key roles that the central-altar caves that were commissioned by the Guiyijun leaders played in shaping the old district of Mogao into an allusion to the future Buddha Maitreya's Pure Land, the only Pure Land prophesied to appear in the mundane world.

Abbreviations

- D* Dunhuang Academy's collection of Dunhuang manuscripts.
- DHSZ* *Dunhuang shi zhi* 敦煌市志 [Gazetteer of Dunhuang City], ed. Dunhuang shi zhi bianzhan weiyuan hui 敦煌市志編撰委員會 [Editing committee of the gazetteer of Dunhuang City]. Beijing: Xinhua chubanshe, 1994.
- P* Pelliot collection of Dunhuang manuscripts, Bibliothèque nationale de France, Paris.
- QSW* *Quan Song wen* 全宋文 [Complete collection of Song-dynasty literature], ed. Zeng Zaozhuang 曾棗莊 and Lin Liu 劉琳. 360 vols. Shanghai: Shanghai cishu chubanshe; Hefei: Anhui jiaoyu chubanshe, 2006.
- QTW* *Qingding quan Tang wen* 欽定全唐文 [Complete collection of Tang-dynasty literature], ed. Dong Hao 董誥 et al. Shanghai: Shanghai guji chubanshe, 2002.
- S* Stein collection of Dunhuang manuscripts, British Library, London.
- T* *Taishō shinshū Daizōkyō* 大正新修大藏經 [The Taishō Tripitaka], ed. by Takakusu Junjirō 高楠順次郎, Watanabe Kaigyoku 渡辺海旭, et al. 100 vols. Tokyo: Taishō issaikyō kankōkai, 1924–1932. Also in CBETA electronic database. Texts are abbreviated as *T* followed by the work number, volume number, page number, and the registry column (a, b, or c).

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Introduction

A Correlative Approach to Dunhuang Architecture

The mountain cliff was cut open and appeared lofty. The creation was extraordinary and the artifice was skillful. . . . Cloud hills and verdant willows were surpassed by the multileveled pavilions. Buddha halls and jeweled pagodas were caught by sight in all directions.

山岩開劈勢隆崇，造作非凡巧琳工。 雲巒翠柳層樓勝，佛屋寶塔四望中。¹

When local resident Zhao Ji 趙吉 visited the Buddhist cave temples near Dunhuang 敦煌 in the summer of 1813, he could not help admiring the architectural scenes the cave site evoked. As Zhao noted, the cave temples are indeed extraordinary works of architecture that take full advantage of the mountain cliff. While they are not ordinary buildings, the rock-cut caves are apparently—and profoundly—associated with architectural imagery. “Multileveled pavilions” screen the entrances to the caves. “Buddha halls” and “jeweled pagodas” are part of the built environment of an extra-large cave complex. Furthermore, cave temples may simulate the interior designs of the buddha halls or the spatial compositions of the Buddhist monasteries. Mural paintings of pagodas and pavilions often frame the visual environment in a cave. The actual works and visual representations of architecture are intertwined to form the architecture of

1. Excerpt from an inscription in Mogao Cave 14 on the first day of the sixth lunar month of 1813. *Dunhuang mogao ku gongyangren tiji* 敦煌莫高窟供養人題記 [The inscriptions of the donors at the Dunhuang Mogao caves], ed. Dunhuang yanjiu yuan (Beijing: Wenwu chubanshe, 1986), 8. Translation is by author unless otherwise noted.

Mogao ku 莫高窟—the Mogao caves—literally, “the caves of unparalleled height.” When Zhao visited, the Mogao caves had already undergone fourteen centuries of construction, renovation, decline, and revitalization. Yet as long as construction activities resume at the site, the cave architecture will continue to make a profound impression on all who behold it.

An intensive field of architectural imagery might not be uncommon for a metropolitan town, but it indeed seems extraordinary for a little oasis in a vast barren land. The Mogao cave complex is located in the Gobi Desert of northwest China, about twenty-five kilometers southeast of the oasis town of Dunhuang. The area marks the west border of Gansu Province and the Hexi Corridor, which was a frontier of Han and Tang China (map 1). Despite being established in a border land, the Mogao cave complex is unsurpassed in scale among major cave sites built near imperial capital cities, possessing the largest quantity of caves (735), statues (ca. 2,400), and murals (ca. 45,000 square meters) of all cave sites in China. The pebbled sandstone of the Gobi Desert is not an ideal material for fine carving, but this disadvantage stimulated the advancement of polychromic clay statues, mural painting, and timber-structured façades.² The caves are cut into the perpendicular cliff face below the meandering sand dunes of Mount Mingsha 鳴沙山 (the mountain of singing sand). Sitting west, they face Mount Sanwei 三危山 (the mountain of three precipices) across the Daquan 大泉 (a.k.a. Dangquan 宕泉, lit., the grand or expansive spring) River in the east (figure 0-1). The cave complex comprises two half-mile-long sections of complementary functions and distinct appearances. The south section is densely occupied by up to five levels of 492 decorated caves, which accommodated image

2. The Mogao cliff face is made of soft conglomerate, the Pleistocene-epoch alluvial and pluvial deposits composed of conglomerate, gravel, and sand. Lori Wong and Neville Agnew, eds., *The Conservation of Cave 85 at the Mogao Grottoes, Dunhuang: A Collaborative Project of the Getty Conservation Institute and the Dunhuang Academy* (Los Angeles: Getty Conservation Institute, 2013), 39–42.

worship, Buddhist rituals, and social display. The north section, with the exception of a handful of decorated caves, consists of five clusters of some two hundred unpainted caves that served pragmatic functions such as dwelling, meditation, and funeral burial. Traces of timber-structured porches, passageways, and open-air murals span the cliff of the entire south section. They are indicative of the grandeur of an architectural spectacle that rose from and contrasted with the desert.

Between the south and north sections lies a historical path that served as an entry to the Mogao complex. If Zhao walked or rode from the town of Dunhuang, he most likely took this path after passing through a vast area of sand dunes and graveyards. The sloping end of the path is terminated in front of a façaded cave composite at the northern end of the south section. Known as the “three-story pavilion” (*sanceng lou* 三層樓, hereafter “the pavilion”), the cave composite is the first landmark of Mogao a visitor encounters when descending into the Daquan valley from the cliff-top desert. It comprises three main caves arranged vertically and a cave-within-a-cave. All the caves are screened by a three-level timber-structured pavilion-like porch (figure 0-2), from which the name is derived. If the Mogao cave complex were a long scroll that had to be unrolled part by part, then the pavilion would be its frontispiece that gives the beholder a visual impression of what he or she can expect to encounter next as the complex reveals itself. The pavilion-like porch echoes two other façades of the colossal-image caves; they together constitute the backbones of the mile-long cave landscape. The multileveled composition, on the one hand, and the combination of main and auxiliary caves, on the other, reflect the apparent and subtle trends of grouping minor caves into a grander entity. The ground-level large cave with a grand ante-hall finds rhythmic repetition across the south section; this paradigm blurs the topological distinction between the cave and the freestanding hall.

It is not strange that Zhao inscribed his poem in the vicinity of the pavilion, where he came to confront the architectural imagery of Mogao and where he paused to reflect on his pilgrimage. But it is curious to see the Mogao site being described as anything but a collection of caves. From here arises the fundamental question of this dissertation: When and how did the Mogao caves become less like caves and more like pavilions, halls, and pagodas?

The Architectural Turn of the Mogao Caves

Buddhist caves have been constructed in China since the third century, and its golden age is generally accepted to be the fifth to the eighth centuries.³ Before the burgeoning of Buddhism in China, the ancient Chinese had already used natural caves as sites of introversive contemplation and carved-out cliff tombs.⁴ But the transmission of Buddhist caves from India by way of central Asia brought a new visual language and formal logics to cave construction in China. The Indian architectural prototypes, especially the *chaitya* (cave shrine including a stupa), introduced Buddhist imageries, visual space, and ritual programs into the Chinese caves while being adapted to the Chinese construction system.⁵ Thenceforth, various types of Buddhist caves have been

3. For general developments of Buddhist caves in China, see Su Bai 宿白, *Zhongguo shiku si yanjiu* 中國石窟寺研究 [Studies of Chinese caves] (Beijing: Wenwu chubanshe, 1996).

4. Lee Fong-Mao (Li Fengmiao) 李豐楙, “Dongtian yu neijing: Xiyuan er zhi si shiji Jiangnan Daojiao de neixiang youguan 洞天與內景：西元二至四世紀江南道教的內向游觀” [Grotto heavens and inner realms: The inner visualization meditations in Jiangnan Daoism from second to fourth century], *Dong Hua Han Hsueh* 東華漢學 [Dong Hwa journal of Chinese studies] 9 (June 2009): 157–97. Nancy S. Steinhardt, *Chinese Architecture in an Age of Turmoil, 200–600* (Honolulu: University of Hawai‘i Press, 2014), 72–77.

5. The three Indian Buddhist architectural prototypes are stupa (dome-shaped monument), vihara (monastery), and *chaitya*. The discussion of the transmission of Buddhist cave types, especially the *chaitya* cave, is numerous. See, for example, Li Chongfeng 李崇峰, *Zhongyin fojiao shiku si bijiao yanjiu: yi tamiao ku wei zhongxin* 中印佛教石窟寺比較研究：以塔廟窟為中心 [Indian and Chinese Buddhist chētiyagharas: A comparative study] (Xinzhu: Caituan fa ren Juefeng fojiao yishu wenhua jijinhui, 2002).

invented in China, serving as a favorable medium for visualizing sacred beings and realms. Yet after a few centuries of cave construction in north China, Buddhist monasteries and freestanding buildings gradually replaced the rock-cut caves. In the ninth and tenth centuries, cave construction in north China gradually declined, and the scale of Chinese cave sites built afterward is generally small.⁶ Furthermore, according to the mainstream view in cave archaeology, cave construction paradigms of this period exhibited a trend of imitating the freestanding buddha hall.⁷ Judging from the earliest extant examples, monumental timber-framed Buddha halls and pagodas, which date between the late eighth century and the eleventh century, began to dominate the religious landscape of China.⁸ The ascendancy of stand-alone architecture and the corresponding outmoding of the caves has been generally understood to be the final phase in the Sinicization process of Buddhist architecture.⁹

The Mogao cave complex participated in this architectural turn of the Chinese caves in a unique way. The construction and renovation of Mogao spanned the fifth to the fourteenth

6. After the eighth century, cave construction occurred at a few cave sites in Sichuan, Tibet, Gansu, Shaanxi, Inner Mongolia, and Zhejiang, but the sizes of the cave complexes are not comparable to the sites that were built between the fifth and eighth centuries.

7. Su Bai, “Zhongguo shiku si kaogu 中國石窟寺考古” [Chinese cave archaeology], in Zhongguo da baike quanshu zong bianji weiyuanhui 中國大百科全書總編輯委員會 [General Editing Committee of the Encyclopedia of China] ed., *Zhongguo da baike quanshu: Kaogu xue* 中國大百科全書·考古學 [The encyclopedia of China: Archaeology] (Beijing: Zhongguo da baike quanshu chubanshe, 1986), 698–99; Su, *Zhongguo shiku si yanjiu*, 16–20.

8. The east hall 東大殿 of Foguang Monastery 佛光寺 in Mount Wutai 五台山, dated 862 CE, and the Shijia pagoda 釋迦塔 of Fogong Monastery 佛宮寺 in Ying County 應縣, dated 1056 CE, are two representative examples of the Buddhist architectural monuments built between the Tang and Liao periods. For a recent overview of the Buddhist halls and pagodas of those periods, see Nancy S. Steinhardt, *Chinese Architecture: A History* (Princeton, NJ: Princeton University Press, 2019), 111–18, 126–49.

9. Xiao Mo 蕭默, *Dunhuang jianzhu yanjiu* 敦煌建築研究 [A study of Dunhuang architecture] (Beijing: Wenwu chubanshe, 1989), 56. Sha Wutian 沙武田, *Guiyijun shiqi Dunhuang shiku kaogu yanjiu* 歸義軍時期敦煌石窟考古研究 [Archaeological studies of the Dunhuang caves during the Guiyijun period] (Lanzhou: Gansu jiaoyu chubanshe, 2017), 13–18.

centuries, making it the most long-lived cave complex.¹⁰ That which most intrigues me about Mogao is the successful apparatus of its sustainability and especially the unusual proliferation of richly creative examples of cave construction in the ninth and tenth centuries. Those two centuries of design experimentation both reinforced architectural principles and catalyzed the development of cave architecture.

From the perspective of cave making, the Mogao cave complex does not seem to have been remarkable until the middle point of the Tang period (618–907 CE). Most cave temples of Mogao built between the fifth and eighth centuries comply with the general principles of contemporary cave construction in northwest China: (a) the preferable location of a cave was around mid-height on a vertical cliff face, likely for the sake of accessibility control; (b) caves, especially the early ones, were shallowly dug out on the cliff face to optimize the natural lighting condition; (c) vertical alignment of caves and thin walls and floors were generally avoided so as to maintain the structural integrity of the rock mass; (d) the rock-cut chambers were shaped to have square or rectangular plans and flat, gabled, or pyramidal ceilings; and (e) devices for vertical circulation, such as stairways and tunnels, were minimal and applied only when necessary. Admittedly, Dunhuang cave art exhibits distinct styles by incorporating visual elements from central China and the Silk Road. Nevertheless, quite a few cave sites elsewhere in China enjoyed more centralized planning and more prestigious patronage and comprise caves of

10. The early periods refer to the Sixteen Kingdoms (317–439 CE), Northern Wei (439–535), Western Wei (535–57), Northern Zhou (557–81), Sui (581–618), and the early-Tang and the high-Tang (618–781) periods. The later periods conventionally refer to the (Tubo-)Tibetan occupation period (781–848), the Zhang-Clan-led Guiyijun period (848–910), the Xihan Jinshan Kingdom (910–14), the Cao-Clan-led Guiyijun period (914–1036), the Tangut-led Xixia period (1036–1227), and the Mongol-led Yuan period (1271–1368). The Tibetan and Guiyijun periods are contemporaneous with the time span from the mid-Tang (781–848), the late-Tang (848–907), the Five Dynasties (907–60), and the beginning of the Northern Song (960–1127) in the Chinese chronicle.

more monumental size and more enduring materiality than Mogao.¹¹

A turning point in the construction history of Mogao was the Tubo 吐蕃-Tibetan occupation of Dunhuang in 781–848 CE, which saw the rise of local powers and localized circumstances for further customizing the borrowed art forms. Subsequently, when Dunhuang became the seat of the Guiyijun Circuit (歸義軍, lit. returning to righteousness army, 848–1036), a tributary state of the Tang empire and its successors, the Mogao site underwent dramatic development. The survival of Mogao from ancient times made it a special locale for revivalists to project their views of history. Since the cliff face had been generally occupied, cave makers had to plan and design new caves in relationship to the old ones. Although most of the cave types had been introduced to the site before the eighth century, many nuanced innovations of cave forms and compositions occurred in the ninth and tenth centuries. For instance, the spectrum of scale was broadened, compositions of vertically aligned caves emerged, and more devices for vertical and level circulation were added to the Mogao cliff. From the late-Guiyijun period to the Tangut-led Xixia period (1036–1227), extensive renovations of preexisting caves and their porches raised the uniformity of the cave complex to its peak. The earlier half of the construction history of the Mogao caves brought various visual ideas of Buddhist sanctuaries to the cliff site, whereas the latter half incorporated them into a spatial framework that was taller, deeper, and more interconnected.

The pavilion, which took shape in the ninth to eleventh centuries, witnessed a critical period in the architectural developments of the Mogao cave complex. Moreover, it is one of the localities in which design innovations of the second half of the Mogao history concentrate. In

11. Such examples include the Yungang caves and the Tianlongshan caves in Shanxi Province, the Longmen caves in Henan Province, the Xiangtangshan caves in Hebei Province, and the Maijishan caves in Gansu Province.

832–34 CE, Hongbian 洪辯 (b. 862), a monk who was chief monk preceptor (*dujiaoshou* 都教授) of the Tibetan regime in Dunhuang, commissioned a “Seven Buddhas Hall” (*qifotang* 七佛堂, Cave 365 in the current numbering system), which would become the middle level of the pavilion. The unique design of an oblong cave space and the seven-buddhas iconography introduced architectural principle and ritual function to the cave area that had served as a monastic living quarter.

Hongbian’s ascension to the position of first chief monk controller (*dusengtong* 都僧統) of the newly founded Guiyijun regime in 851–62 was a boon to the construction of other constituent caves of the pavilion. Under his supervision, and probably with Wuzhen 悟真 (ca. 810–895), a disciple of the former and the third chief monk controller, over the next several decades, the cave composite was completed. Above the seven buddhas cave, a small hall cave (Cave 366) was added; below it, the most monumental hall cave of Mogao (Cave 16), with a memorial cave chapel of Hongbian (Cave 17) cut out in its corridor, was constructed. The hall cave (*diantang ku* 殿堂窟)—a rectangular chamber with a truncated pyramidal ceiling—is the most common type of cave and was widely applied at Mogao in the Sui (581–618) and the Tang periods. The advent of Cave 16 introduced to Mogao a new and influential subtype of hall cave known as the “central-altar cave in the backscreen style” (*beipingshi zhognxinfotan ku* 背屏式中心佛壇窟). Such a cave contains a buddha altar in the rear center that is connected to the sloped ceiling by a short partition wall. The three levels of caves each have distinct architectural forms, and their combination produced yet another architectural imagery.

The cave composite underwent major renovation in the transitional time between the Guiyijun and the Xixia periods, to the extent that the interiors were repainted in a consistent

style, and the exteriors appeared like multileveled pavilion-style pagodas. The repainted murals render the atmosphere of Buddhist Pure Lands; despite being primarily figural, such images are reminiscent of the earlier Pure Land scenes at Mogao that promoted the visual representation of palatial complexes. Renovation as a means of reframing and integration was not unique to cave art. When many old caves at Mogao were being renovated, countless retired Buddhist manuscripts in Dunhuang were collected and repaired by local monks, including Daozhen 道真 (ca. 934–87), as an expression of respect for material things carrying sagely teachings. Many of the repaired manuscripts were even preserved in the former cave chapel of Hongbian, which was sealed during the renovation. The changing function and nature of Cave 17, as well as the dating and reason of its concealment, have been the focus of unsettled debates for more than a century.¹² In any case, the pavilion, having survived the dynamic of cave designs and constructions, is a testament to the architectural turn of Mogao.

The pavilion may provide insight into not just the historical developments of the Buddhist sacred landscape but also its modern transformation into a UNESCO World Heritage Site. About nine centuries after that renovation, the pavilion was renovated again, by its then-keeper, Wang Yuanlu 王圓籙 (1849–1931), a Daoist priest. Wang and his employee accidentally opened the sealed deposit cave during sand cleaning of Cave 16 around 1900. The discovery and subsequent dissemination of numerous medieval manuscripts and artifacts from Cave 17—which was consequently named the “Dunhuang library cave” (*Dunhuang cangjing*

12. For literature reviews of these debates, see, for example, Liu Jinbao 劉進寶, “20 shiji Dunhuang cangjingdong fengbi shijian ji yuanyin yanjiu de huigu 20世紀敦煌藏經洞封閉時間及原因研究的回顧” [A review of twentieth-century research on the date of and reasons for the sealing of the Dunhuang library cave], *Dunhuang Yanjiu* 敦煌研究 [Dunhuang research] 64, no. 2 (2000): 29–35; Imaeda Yoshiro, “The Provenance and Character of the Dunhuang Documents,” *Memoirs of the Toyo Bunko* 66 (2008): 81–102.

dong 敦煌藏經洞), put Mogao on the world stage. The Dunhuang documents and the visual contents of the caves of Dunhuang have been primary sources for many modern disciplines, including studies of Chinese art and architectural history. As the field of Dunhuang studies (*Dunhuang xue* 敦煌學) advanced, the Mogao site became a pilgrimage site for explorers, artists, scholars, and tourists from all over the world and a testing ground for modern conservation. Artistic rediscoveries of Cave 17 occurred both before and after the first modern research institute based at Mogao—the National Research Institute on Dunhuang Art (Guoli Dunhuang yishu yanjiu suo 國立敦煌藝術研究所)—took charge of the cave site in 1944. The discourses about the library cave’s past incarnations gradually shaped the surviving architecture of the pavilion into a monument of Hongbian, a masterpiece of Tang-dynasty art, and even a symbol of the cultural history of modern China.¹³

Seeing the Mogao caves as a living entity, this dissertation unfolds the accumulative layers of construction in time and reconstructs the lifecycles of its constituents such as the pavilion. By investigating the pavilion and other landmark caves or cave groups of Mogao, this dissertation pinpoints the hitherto unexamined historical circumstances that drove the architectural transformation of the cave complex, part by part. By inspecting the interplay between the cave and other types of architecture, it reconsiders the cave as a multivalent architecture mediating between real and virtual spaces.

13. For a detailed discussion, see Zhenru Zhou, “New Wine from the Old Bottle: Remaking the ‘Dunhuang Library Cave’ through the Long Twentieth Century,” in *On Continuity and Change in Asia*, ed. Filip Kraus, Renáta Sedláková, and Blanka Ferklová (Olomouc: Palacký University Olomouc, forthcoming).

Dunhuang Architecture Studies

This dissertation engages in the discourses of Dunhuang architecture to advance our understanding of the correlation between its contents. The studies of Dunhuang architecture constitute a subfield at the intersection of Dunhuang studies, studies of cave temples, and studies of Chinese architectural history. The term *Dunhuang architecture* was coined by Liang Sicheng 梁思成 (1901–72), a pioneering scholar of Chinese architecture, in his discussion of the timber-structured porches at the Mogao caves in 1932.¹⁴ Concurrently, Dunhuang mural paintings that contain images of architecture were studied as an important visual source of nonextant early Chinese architecture and by the mid-twentieth century became an independent object of study.¹⁵ The full connotation of the term was eventually stabilized when Xiao Mo 蕭默 (1938–2013), a Chinese architectural historian who was a disciple of Liang's, published a monograph titled *A Study of Dunhuang Architecture* (*Dunhuang jianzhu yanjiu* 敦煌建築研究) in 1989.¹⁶ *Dunhuang* mainly refers to the Dunhuang caves, as historical architectural remnants in the Dunhuang-Anxi 安西 region are concentrated at the cave sites. They comprise the Mogao caves and a few smaller caves sites, including the Yulin caves (Yulin ku 榆林窟), the West Thousand-

14. Liang Sicheng 梁思成, "Boxihe xiansheng guanyu Dunhuang jianzhu de yifeng xin 伯希和先生關於燉煌建築的一封信" [A letter from professor Paul Pelliot to Liang Ssu-ch'eng], *Zhongguo yingzao xueshe huikan* 中國營造學社彙刊 [Bulletin of the Society for Research in Chinese Architecture] 3, no. 4 (1932): 123–29.

15. Representative studies of the Dunhuang murals that contain images of architecture before 1955 include Liang Sicheng, "Women suo zhidao de tangdai fosi yu gongdian 我們所知道的唐代佛寺與宮殿" [Buddhist temples and palaces of the Tang dynasty that we know], *Zhongguo yingzao xueshe huikan* 3, no. 1 (1932): 75–114; Liang Sicheng, "Dunhuang bihua zhong suo jian zhongguo gudai jianzhu 敦煌壁畫中所見中國古代建築" [Chinese traditional architecture seen in the Dunhuang wall paintings], *Wewu Cankao Ziliao* 文物參考資料 [Cultural relics], no. 5 (1951): 1–48.

16. Xiao, *Dunhuang jianzhu yanjiu*.

Buddha caves (Xi qianfo dong 西千佛洞), and the East Thousand-Buddha caves (Dong qianfo dong 東千佛洞) (map 2).¹⁷ The term *architecture*, while including standalone buildings, mainly denotes the visual and material contents of the caves that represent architectural elements. Thus, the composite term *Dunhuang architecture* incorporates two main categories of materials: (1) the images of architecture (*jianzhu tuxiang* 建築圖像) represented in mural paintings and (2) the ancient architecture in Dunhuang (*Dunhuang gu jianzhu* 敦煌古建築) including the cave temples, their timber-framed porches and ante-halls, and ancient pagodas.¹⁸ The visual and archaeological sources provided by the Dunhuang caves were produced in the same historical space, but they have often been studied as separate categories.

The limited accessibility of the primary source is an apparent historical reason for the discrete studies of the two types of sources. Although Dunhuang is believed to have been a prosperous crossroad of the ancient Silk Road, only in the last decades of the twentieth century, when railways and airlines began to connect it to major cities, has it been generally accessible to modern visitors.¹⁹ Thus, in the first half of the twentieth century, those who explored the cave site were not specialists in architectural studies, whereas those who investigated the architecture-related sources from Dunhuang did not have a chance explore the complex in person. The visual source made available to early scholars of Chinese architectural history was mainly black-and-

17. For a complete list and brief introduction of the Dunhuang cave sites, see Fan Jinshi 樊錦詩, Zhao Shengliang 趙聲良, and Dunhuang yanjiu yuan 敦煌研究院 [Dunhuang Academy], eds., *Dunhuang yishu da cidian* 敦煌藝術大辭典 [Encyclopedia of Dunhuang art] (Shanghai: Shanghai cishu chubanshe, 2019), 9–20.

18. Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed. (Beijing: Zhongguo jianzhu gongye chubanshe, 2019), 47–55.

19. For road, railway, and air transportation in modern Dunhuang, see *Dunhuang shi zhi* 敦煌市志 [Gazetteer of Dunhuang City, abbreviated as DHSZ], ed. Dunhuang shi zhi bianzuan weiyuan hui 敦煌市志編撰委員會 [Editing committee of the gazetteer of Dunhuang City] (Beijing: Xinhua chubanshe, 1994), 262–68.

white photos of the Mogao caves taken by the early explorers—including archaeologists and Sinologists—for their own interests, which did not necessarily include architecture. The most cited source was the six-volume photo album titled *Les grottes de Touen-houang: Peintures et sculptures Boudhiques des epoques des Wei, des Tang et des Song* and published in Paris in 1914–24 by French Sinologist Paul Pelliot (1878–1945), who stayed at Mogao for three months in 1908.²⁰ In comparison, the visual documentation of the cave spaces was not exploited as efficiently as possible. The reports of the two most thorough archaeological surveys of the Mogao cave complex—one conducted by Russian archaeologist Sergei Feodorovitch Oldenburg’s (1863–1934) expedition team in 1914, the other by Chinese archaeologist Shi Zhangru (Shih Chang-ju) 石璋如 (1902–2004) in 1942—were not published until the 1990s.²¹ The lack of concrete information of the physical forms of the caves or any spatial experience of the cave site hindered early scholars from studying the cave architecture of Dunhuang.

Even if more information about the actual architecture had been made available early on, the persistent preference for the images of architecture might not have been changed.²²

Compared with the archaeological sources, the images of architecture represented in mural paintings are more massive and diverse, and therefore have raised more scholarly interests.

20. Paul Pelliot, *Les grottes de Touen-houang: Peintures et sculptures Boudhiques des epoques des Wei, des Tang et des Song*, 6 vols. (Paris: Paul Geithner, 1914–24).

21. Oldenburg’s report was published in Chinese as *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin* 俄羅斯國立艾爾米塔什博物館藏敦煌藝術品 [Dunhuang art collection in the State Hermitage Museum of Russia], 6 vols. in 1997–2005 with the collaboration of Gosudarstvennyĭ Ėrmitazh [Russia] 俄羅斯國立艾爾米塔什博物館, the Dunhuang Academy, and Shanghai Publishing House of Traditional Books [Shanghai guji chuban she 上海古籍出版社]. Shi’s report was published as *Mogao ku xing* 莫高窟形 [The shape of the Mogao caves], 3 vols., in 1996 by the Institute of History and Philology, Academia Sinica [Zhongyang yanjiu yuan lishi yuyan yanjiu suo 中央研究院歷史語言研究所].

22. The early explorers made plan drawings of a few representative caves (Aurel Stein) and diagrammed the panoramic view of the Mogao cliff (Pelliot). However, such information about the cave space and cave site was not utilized by early historians of art and architectural history.

About a third of the decorated caves bear mural paintings that contain architectural elements, and as many as three to four hundred transformation tableaux contain pictorial depths defined by the images of architecture. The Dunhuang images of architecture encompass a variety of building types, such as palaces and monasteries, gate towers, walled cities, pagodas and stupas, residential buildings, prisons, tombs, cottages, bridges, and so forth.²³ Because of the encyclopedic scope of the contents, the Dunhuang images of architecture offer points of investigation for the layouts of architectural complexes, the nonextant building types, the architectonic details, the construction process, and the precursors of architectural painting, historically known as ruler-lined painting (*jiehua* 界畫). As is widely accepted, the production of actual buildings was conditioned by local circumstances to a greater extent than were the images, whose templates might be more easily transmitted from elsewhere. Hence, an implicit consensus about Dunhuang architecture is that the knowledge of Chinese architecture that the building remnants in Dunhuang may provide is limited by the uncommon typologies and modest sizes, whereas the Dunhuang murals of architecture may illustrate universal principles of architectural design and even the appearance of Chinese buildings of the highest grades.²⁴

23. Most of the building types, except for some minor types of vernacular architecture, have been considered by Liang Sicheng and Anneliese Bulling in the 1930s and were systematically studied by Xiao Mo in the 1980s.

24. For instance, the timber-framed structures of the tenth-century porches and pagodas of the Mogao caves was studied as early as in the 1930s–80s, but in general this kind of study received much less scholarly response than those about the images of architecture. The early scholarship includes Liang, “Boxihe xiansheng guanyu Dunhuang jianzhu de yifeng xin;” Gu Qiyi 辜其一, “Dunhuang shiku songchu kuyan ji beiwei dong neidougong shulue 較煌石窟宋初窟簷及北魏洞內斗拱述略” [Brief discussion of the early-Song cave eaves and the Northern-Wei bracket-sets inside the caves at the Dunhuang caves], *Tumu Jianzhu Yu Huanjing Gongcheng* 土木建築與環境工程 [Journal of Chongqing Jianzhu University], no. 1 (1957): 51–75; Yu Mingqian 余鳴謙, “Mogao ku di 196 kuyan yanjiu 莫高窟第196窟簷研究” [A study of the timber-

Chinese architecture is characterized by the timber-framed construction system and the arrangement of individual buildings into courtyard complexes, but only very few timber-framed buildings from the first millennium CE are extant.²⁵ As it is believed that Chinese timber-framed architecture “matured into full glory and vigor” in the Tang dynasty, the architectural developments of that golden period and before were of primary interest to early studies of Chinese architecture.²⁶ However, only a handful Tang-period timber-framed halls are extant, and no building complexes from the Tang dynasty or before still stand in their original appearance.²⁷ Thus, the foremost and best-studied subject matter among all types of images of architecture are the images of palatial complexes in the scenes of Pure Lands (Buddhist paradises).²⁸ An irreplaceable historical value has been bestowed on the visual representation of

structured façade of Mogao Cave 196], in *Keji shi wenji 7: Jianzhu shi zhuanji* 科技史文集7：建築史專輯 [Essay collections about the history of science 7: Volume on architectural history], ed. Jianzhu shi zhuanji bianji weiyuan hui 建築史專輯編輯委員會 [Editing committee of the volume on architectural history] (Shanghai: Shagnhai kexue jishu chuban she, 1981), 92–97; Xiao Mo, “Dunhuang Mogao ku fujin de liangzuo Song ta 敦煌莫高窟附近的兩座宋塔” [Two Song-period pagodas near the Dunhuang Mogao caves], *Dunhuang Yanjiu* 3 (1983): 95–101.

25. For a recent summary of the general features of Chinese architecture, see Steinhardt, *Chinese Architecture*, 1–7.

26. Liang, *A Pictorial History*, 3.

27. A recent survey suggests that no more than nineteen timber-framed buildings dated before the end of the tenth century survive. Nancy S. Steinhardt, “Standard Architecture in a Multi-centered Multi-cultural Age,” in *Tenth-Century China and Beyond: Art and Visual Culture in a Multi-centered Age*, ed. Wu Hung (Chicago: the Center for the Art of East Asia, Department of Art History, University of Chicago, and Art Media Resources, 2012), 38–69.

28. A Pure Land (also known as a buddha land, or a Buddhist paradise) is a mystical realm where a buddha is said to dwell after having vowed to save all living beings, completed his own practice, and attained enlightenment. Mahayana Buddhism developed the concept of myriad buddhas and myriad buddha lands. A Pure Land is any visionary ideal realm where a Buddhist deity presents, as opposed to the actual, suffering-filled realm—the Saha World where the historical Buddha, Shakyamuni, manifested himself. Some of the most venerated Pure Lands are the Western Pure Land of Amitabha Buddha, the Eastern Pure Land of Bhaisajyaguru Buddha, and the Pure Land of Future Buddha Maitreya.

architecture.²⁹ As Liang unreservedly praises them, the Dunhuang architectural images are “the second best, most faithful, and most valuable materials that are only inferior to actual buildings.”³⁰

While studies of Dunhuang architecture have advanced in the past ninety years, problems of how to understand the correlation among the materials have gradually surfaced. In the early phase, the limited availability of Dunhuang visual materials confined the architectural studies to the image of architecture. Subsequently, when the problem of source was alleviated, the cave architecture still could not secure a decent position in the architecture family, as it was studied either as the imitation of stand-alone architecture or the embodiment of a concept of space fundamentally different from that of architecture. Thus, the image of architecture and the cave architecture became separate categories in a taxonomy oriented to the topological studies of stand-alone architecture. Recent studies have challenged the boundary by comparing and combining architectural information extracted from the two categories of materials. Concurrently, the abstraction of compositional principles hindered the perception of the total space a cave possesses. To anchor the architectural studies of the Dunhuang caves to historical realities, clues might be drawn from the paralleling methodological explorations in monastery studies, cave archaeology, Dunhuang studies, architectural conservation, art history, and digital humanities.

29. Liang, “Women suo zhidao de tangdai fosi yu gongdian,” 1; Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 60.

30. “.....次於實物的最好的、最忠實的、最可貴的資料。” Liang, “Dunhuang bihua zhong suo jian zhongguo gudai jianzhu,” 2. “Actual buildings” (*shiwu*) refer to freestanding architecture in China in general, as opposed to the archaeological materials of architecture in the Dunhuang Caves.

The First Phase (1926–1950): Early Exploration of Materials and Methods

Owing to the relatively high publicity of Pelliot’s photo album, pioneering scholars in Japan, China, and Germany began to incorporate the new materials from Dunhuang into their studies of timber-framed architecture as early as in the 1920s–30s. Western-trained scholars based in East Asia were sensitive of the new materials and competed to extract information about ancient architecture from them. Hamada Kōsaku 浜田耕作 (1881–1938), a Japanese archaeologist trained in England, was one of the first scholars to have consulted the Pelliot photos for architectural studies. In a 1926 article, Hamada brought in Dunhuang porches and murals of architecture as continental references for the early timber-framed architecture of Hōryūji 法隆寺 Temple in Nara, Japan.³¹

Stimulated by European and Japanese pioneers’ scholarship, research on ancient architecture in China by native scholars accelerated in the 1930s. A crucial step was the establishment in 1931 of the Society for Research in Chinese Architecture (Zhongguo Yingzao Xueshe 中國營造學社, hereafter SRCA), China’s first academic group specializing in traditional architecture.³² The scholar-members of SRCA not only conducted studies of architectural treatises and historical buildings but also actively introduced fresh studies from

31. Hamada Kōsaku 浜田耕作, “Hōryūji no kenchiku yōshiki to Shina Rikuchō no kenchiku yōshiki ni tsuite 法隆寺の建築様式と支那六朝の建築様式に就いて” [On the architectural style of Horyuji Temple and the architectural style of the Six Dynasties in China], in *Naitō Hakushi kanreki shukuga Shināgaku ronsō* 内藤博士還曆祝賀支那學論叢 [Dr. Naitō’s sixtieth birthday commemoration: Essay collections on China studies], ed. Naitō Torajirō and Tōru Haneda (Kyōto: Kōbundō Shobō, 1926), 93–116.

32. Fu Xinian, “Understanding Chinese Research Work on Architectural History,” *Journal of the Society of Architectural Historians* 73, no. 1 (2014): 12. Chinese scholarship on the history of SRCA is abundant; see, for example, *Jianzhu Shi Xuekan* 建築史學刊 [Journal of architectural history] 3, no. 3 (2022) and *Jianzhu Xuebao* 建築學報 [Architectural journal], no. 12 (2019).

overseas, including that article of Hamada's.³³ It is exactly for the reason of comparison and competition that the first article examining Dunhuang architecture and written by a Chinese author was published alongside a Chinese translation of and commentary on Hamada's article in the of SRCA's bulletin in 1932. That article, written by Liang Sicheng, a US-trained scholar and one of the founding members of the SRCA, aimed to reveal the general features of Buddhist monasteries and palaces of the Tang dynasty.³⁴

Despite not being the earliest scholarship to utilize the Dunhuang materials, Liang's article was the first to investigate the full-scale historical value of the materials. While Hamada focused on the style evolution of bracket sets represented by Dunhuang mural paintings, Liang used them to demonstrate the features of an architectural system that contains three scales (from large to small): the layout of building complexes, the prototype of individual buildings, and the architectonic details.³⁵ Both Hamada and Liang cited the cave porches at Mogao as reference for structure design before the advent of architectural treatises in China, yet Liang further attributed them to the Tang style by consulting Pelliot about the dated inscriptions.³⁶ It is the system based

33. Most of the work were published in *Zhongguo yingzao xueshe huikan* 中國營造學社彙刊 [Bulletin of the Society for Research in Chinese Architecture], 1930–45. For an English-language summary of the SRCA fieldwork before 1937, see Gustav Ecke, “The Institute for Research in Chinese Architecture 中國營造學社: A Short Summary of the Field Work Carried on from Spring 1932 to Spring 1937,” *Monumenta Serica* 2, no. 2 (1937): 448–74. Hamada's article was translated into Chinese and commented on by Liu Dunzhen 劉敦楨 (1897–1968), a scholar of Chinese architecture trained in Japan and a founding member of SRCA, as Hamada Kōsaku, “Falong si yu han liuchao jianzhu shiyang zhi guanxi 法隆寺與漢六朝建築式樣之關係” [Horyuji and the architecture of the Han and Six Dynasties in China], translated and annotated by Liu Dunzhen (Liu Tuen-tse), *Zhongguo yingzao Xueshe Huikan* 3, no. 1 (1932): 1–59.

34. Liang, “Women suo zhidao de tangdai fosi yu gongdian.”

35. Hamada, “Falong si yu han liuchao jianzhu shiyang zhi guanxi,” trans. Liu, 9; Liang, “Women suo zhidao de tangdai fosi yu gongdian.”

36. Hamada, “Falong si yu han liuchao jianzhu shiyang zhi guanxi,” trans. Liu, 27; Liang, “Boxihe xiansheng guanyu Dunhuang jianzhu de yifeng xin.”

on scale and typology, and the great interest in Tang-style architecture, that have had such a profound impact on subsequent studies of Dunhuang architecture.

Taking Pelliot's Dunhuang album and Liang's first article as reference, German-American art historian Anneliese Bulling (1900–2004) published a dissertation in 1936 on early Chinese architecture.³⁷ Bulling's work represents the first effort made by a non-Chinese scholar of Chinese art and architecture to examine the materials of Dunhuang architecture. The dissertation, titled "Die chinesische Architektur von der Han-Zeit bis zum Ende der T'ang-Zeit," analyzed the formal features of Chinese architecture in more than one hundred images of architecture, some fifty of which were from Dunhuang. Since there are discrepancies between the formal analysis and the scope of the dissertation, which was to explain the stylistic development and metaphysical characters of Chinese architecture from the second century BCE to the ninth century CE, the thesis of Bulling's dissertation has not been widely acknowledged in the field of Chinese architectural history.³⁸ In comparison, a better known work of Bulling's on Dunhuang architecture is a 1955 article titled "Buddhist Temples in T'ang Period," which adopts a more focused scope based on the core materials in her dissertation.³⁹ Bulling's 1955 article revisited the issue dealt with in Liang's 1932 article: what the Dunhuang murals of architecture can tell us about the Buddhist monastic architecture in Tang China. Whereas Liang focused on

37. Anneliese Bulling, "Die chinesische Architektur von der Han-Zeit bis zum Ende der T'ang-Zeit," PhD diss., Friedrich-Wilhelms-Universität zu Berlin, 1936.

38. For two not-so-positive reviews of Bulling's scholarship, see J. B., *Revue des arts asiatiques* 10, no. 4 (1936): 229; Liu Diyu 劉滌宇, "Cong lishi tuxiang dao jianzhu xinxi: yi 1930-1950 niandai liangwei xuezhe yi Dunhuang bihua wei sucail de jianzhu shi yanjiu chengguo wei li 從歷史圖像到建築資訊——以1930—1950年代兩位學者以敦煌壁畫為素材的建築史研究成果為例" [From historical images to architectural information research of architectural history on Dunhuang frescoes by two scholars from the 1930s to the 1950s], *Jianzhu Xuebao*, nos. 9-10 (2014): 151.

39. Anneliese Bulling, "Buddhist Temples in T'ang Period, I & II," *Oriental Art* 1, no. 2 (1955): 79–86, and no. 3 (1955): 115–22.

architecture per se, Bulling addressed the role of Buddhist culture in China in shaping monastic architecture and even Chinese architecture in general.⁴⁰

Bulling did not just engage with the burgeoning explorations of Dunhuang materials; the European discourses of Chinese Buddhist monasteries also shaped the line of inquiry. Two European scholars who had extensively traveled and worked as architects in China—Ernst Boerschmann (1873–1949) and Johannes Prip-Møller (1889–1943)—urged that close attention be paid to the intersection of architecture and religious cultures.⁴¹ Boerschmann and Prip-Møller had engaged deeply in surveying the still active monasteries, sacred mountains, and contemporary Buddhist practices in China, seeking ways to demonstrate the interconnections among architecture, landscape, and religious culture.

In the first decades of the twentieth century, German architect Boerschmann studied the contemporary Buddhist cult center Mount Putuo 普陀山 and the ancestral temples in China.⁴² As architectural historian Eduard Kögel aptly comments, Boerschmann followed “a holistic approach to cover a still living culture.”⁴³ For this reason, he did not attempt to find a systematic historical and stylistic order as most scholars of Chinese architecture would do in the next decades. This line of thought was echoed by Danish architect Prip-Møller’s *Chinese Buddhist Monasteries*, which was published in 1937. Prip-Møller presented a picture of “a monastery as

40. Bulling points out the active role of Buddhist vision of the paradises on earth in “Buddhist Temples in T’ang Period, II,” 121–22.

41. It is worth noting that Bulling earned a PhD degree from Friedrich-Wilhelms-Universität (today, Humboldt University) in Berlin in 1936, and Boerschmann had been teaching Chinese architecture in Berlin between 1924 and 1944 and lectured at the Institute of Art History at Friedrich-Wilhelms-Universität between 1938 and 1944.

42. Ernst Boerschmann, *P’u t’o shan: Die heilige Insel der Kuan yin, der Göttin der Barmherzigkeit* (Berlin: Druck und Verlag von Georg Reimer, 1911).

43. Eduard Kögel, “Early German Research in Ancient Chinese Architecture (1900–1930),” *Berliner Chinahefte/Chinese History and Society* 39 (2011): 81–91.

an organism living in the present but with its roots deep in the past.”⁴⁴ Thus he chose a monastery that had been substantively rebuilt and renovated between the seventeenth and the twentieth century but that reflected the architectural layout that could be traced back to the ideal monastery conceptualized by Chinese monks in the seventh century.⁴⁵ The common interest of Boerschmann and Prip-Møller lay not so much in the material remnants of ancient buildings as in the built environment through which the way of religious life and the cultural memory of ancient times has been handed down to the present day. Bulling’s Dunhuang studies, which dealt with art-historical materials rather than architectural and ethnographic surveys, added a new dimension to the holistic studies of architecture and religious culture. Although her discussion is brief and general, Bulling made at least one important contribution: reading the historical mentality—a Buddhist vision of paradises on earth—behind the pictorial and picturesque “monasteries” in the Pure Land scenes and associating it with the pursuit of beauty in actual architecture. The historical dimension is crucial especially because the lack of early works of architecture has been a main reason for the criticism of Boerschmann’s and Prip-Møller’s scholarship from contemporary art historians. Since their lines of inquiry were far from the mainstream of studies in the twentieth century, their impact on studies of Chinese architecture or Dunhuang architecture has been very limited.

Nevertheless, Bulling’s scholarship, especially her dissertation, represents the most systematic exploration of Dunhuang architecture prior to Xiao’s *A Study*. Bulling expanded the spectrum of architectural typologies to include city gates, homesteads, ceiling designs, and so

44. Johannes Prip-Møller, preface to *Chinese Buddhist Monasteries: Their Plan and Its Function as a Setting for Buddhist Monastic Life* (Copenhagen: G. E. C. Gad; Oxford University Press, 1937).

45. Zhenru Zhou, “Transcending History: (Re)Building Longchang Monastery of Mount Baohua in the Seventeenth Century,” *Religions* 13, no. 4 (2022): 285.

forth. She also offered more variants for each typology that Liang had mentioned. Furthermore, Bulling invented a new method to analyze the architectural design of the buildings represented in pictorial images. She made a series of plan and elevation drawings to diagram her conceptual construct of the architectural spaces represented in Dunhuang murals (e.g., figures 0-3 and 0-4). Modern architectural drawings of consistent scale and standard viewpoint are meant to translate the pictorial depth in an ancient painting into a three-dimensional space that is imaginary but retrievable. This method, known as plan reconstruction, plan deduction (*pingmian tuiyan* 平面推演), or spatial reconstruction (*kongjian huanyuan* 空間還原), is primarily applied to studies of the layouts of building complexes and has been widely utilized in scholarship of the current century.⁴⁶ This method has become a crucial first step to prepare a common ground for extracting visual information about historical architecture, but researchers who use the method often hesitate to address the true implications of manipulation, both its danger and its necessity. Because no two-dimensional painting can equate to a three-dimensional spatial construct no matter how realistic it seems, the success of its illusion relies on the viewer's mental construct of the pictorial images of architecture. Therefore, even the most credible reconstruction—for instance, one that refers to abundant actual examples of historical buildings—cannot be free from individual variation and spatial imagination. As an integral part of the unique methodology in the studies of Dunhuang architecture, the visualizing method foretells the irreconcilable paradox between authenticity and subjectivity in processing the visual sources.

46. The method is referred to as plan reconstruction in Bulling's work, plan deduction in Sun Ruxian's work, and spatial reconstruction in quite a few works since the 2010s. For discussion of the method, see Liu Diyu, "Cong lishi tuxiang dao jianzhu xinxi," 151–52; Zhang Yichi 張亦馳, "Dunhuang Mogao ku jingtu bian jianzhu tuxiang yanjiu 敦煌莫高窟淨土變建築圖像研究" [A Study of the architectural images in Pure Land illustrations of the Dunhuang Mogao caves], PhD diss., Tsinghua University, 2018, 15–16.

The Second Phase (1950–2000): Taxonomy versus Spatial Conception

Subsequent developments of the studies of Dunhuang architecture are grounded in the exploitation of new visual materials by Chinese scholars. Many impressive surveys were conducted by Chinese artists, historians, and archaeologists in the early 1940s, when state-funded wartime surveys favored the strategic western regions of China.⁴⁷ Two of the most substantial sets of documentation acquired then are the aforementioned survey of Mogao cave forms by Shi Zhangru and the photographic documentation of the Mogao and Yulin caves by journalist James C. M. Lo 羅寄梅 (1902–87) with his wife, Lucy, in 1943–44.⁴⁸ However, since the materials were transported to Taiwan and the United States shortly afterward, they were unavailable to most scholars in mainland China until the turn of the twenty-first century. Hence, they, as well as several critical studies by the document holders, have not had as great an impact on the studies of Dunhuang architecture as they should. For instance, Shi’s studies of cave forms successfully combined topological and quantitative analyses to determine the grades of caves and identified the late Tang as a critical period of development of the cave architecture of Mogao, but the innovative method remains little known.⁴⁹

47. For the general trend of surveying the west in this historical period, see Sarah E. Fraser, “Buddhist Archaeology in Republican China: A New Relationship to the Past,” *Proceedings of the British Academy*, 167: 155–70.

48. The James and Lucy Lo photograph archive has been preserved at Princeton University and digitized and made available in the online database of Artstor’s Mellon International Dunhuang Archive (MIDA) (<https://www.artstor.org/collection/mellon-international-dunhuang-archive/>). Selected photos were published as a nine-volume photograph album *Visualizing Dunhuang: Seeing, Studying, and Conserving the Caves*, ed. Dora C. Y. Ching (Princeton, NJ: Princeton University Press, 2021).

49. Shi Zhangru, “Huabei shiku de shidaixing yu diyu xing 華北石窟的時代性和地域性” [The epochal and the regional characteristics of cave-temples in northern China], *Zhongyang Yanjiu Yuan Lishi Yuyan Yanjiu Suo Jikan* 中央研究院歷史語言研究所集刊 [Bulletin of the

In comparison, fieldwork conducted by scholars of socialist China have had a more immediate effect on the research and management of the built environment at Mogao.⁵⁰ Since the Dunhuang Institute hired two architects, Sun Ruxian 孫儒儻 (b. 1925) and Xiao Mo, in 1947 and 1955, respectively, to conserve and study the Mogao caves, new materials of Dunhuang architecture have been gradually acquired and have stimulated the development of the field.⁵¹ Moreover, in 1951, a survey team from Beijing comprising archaeologist Su Bai 宿白 (1922–2018) and architectural scholars Zhao Zhenzhi 趙正之 (1906–62), Mo Zongjiang 莫宗江 (1916–99), and Yu Mingqian 余鳴謙 (1922–2021) examined the Mogao caves to establish guidelines for scientific conservation. The survey report, which was compiled by architectural historian Chen Mingda 陳明達 (1914–97) and published in 1955, for the first time provided a general view—brief but accurate—of the changing appearance of the Mogao cliff, a periodization of the Dunhuang cave types based on their architectural features, and architectural

Institute of History and Philology Academia Sinica] 29, no. 2 (1957): 545–612; Shi Zhangru, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu 敦煌莫高窟晚唐窟的分析與研究” [An analytical study of the late-Tang Dunhuang Mogao caves], *Hanxue Yanjiu* 漢學研究 [Chinese Studies] 11, no. 2 (1993): 259–323.

50. For the significance of this survey, see Fan Jinshi 樊錦詩, “Dunhuang shiku kaogu bainian huigu 敦煌石窟考古研究百年回望” [Review of the century of archaeological studies of the Dunhuang caves], in *Woxin guichu shi Dunhuang: Fan Jinshi zishu* 我心歸處是敦煌: 樊錦詩自述 [My heart takes home in Dunhuang: Oral autobiography of Fan Jinshi], by Fan Jinshi 樊錦詩 and Gu Chunfang 顧春芳 (Hong Kong: Xianggang zhonghe chuban youxian gongsi, 2020), 399–409.

51. For auto-biographies of Sun and Xiao, see Sun Ruxian, Qi Suangji 齊雙吉, Yang Xuemei 楊雪梅, *Puti shuxia* 菩提樹下 [Under the bodhi tree] (Beijing: Zhongguo qingnian chuban she, 2019); Xiao Mo, *Yi ye yi puti: Wo zai Dunhuang shiwu nian* 一葉一菩提: 我在敦煌十五年 [One leaf for a bodhi in a leaf: My fifteen years in Dunhuang] (Beijing: Xinxing chuban she, 2010). Although many Dunhuang-based scholars, including Sun and Xiao, began to publish their studies no earlier than the late 1970s and early 1980s, many of the materials in their studies were collected in the 1950–60s.

drawings of the Song-period timber-framed porches.⁵² By pointing out that the most magnificent appearance of Mogao occurred in the tenth century, the reporters presented a dynamic view of the growth of the cave complex.

The studies of Shi and those of Chen and others indicate that the spatial experience of the Mogao site makes one fully aware of the innovations of the late- and post-Tang caves by their unprecedented scales and magnificent appearance, if not by the visual contents. The time lag between the maturity of the image of architecture (the high Tang) and the peak of cave architecture (the Guiyijun period) seems curious, yet no comparisons have been attempted. The material forms of caves have often been studied as sources for cave archaeology, whereas the images of architecture have been studied as sources for architectural history, unless a way of relating the cave to stand-alone architecture is explored.

The task of articulating the relationship between the cave architecture and stand-alone architecture was first attempted by Xiao Mo, who studied architecture at Tsinghua in 1955–61, 1978–81, and 1987–90 and worked at the Dunhuang Cultural Relics Institute (Dunhuang wenwu yanjiu suo 敦煌文物研究所), which the Dunhuang Art Institute was reorganized to be in 1950, between 1963 and 1978. Xiao, as a rare figure who has systematic knowledge of both Chinese architecture and the Dunhuang materials and conducted both extensive fieldwork and academic reflection, brought the studies of Dunhuang architecture to a new level.

For one thing, Xiao established the conceptual framework and methodology for the study of Dunhuang architecture, which are still valid today. In his master's thesis, Xiao articulated

52. Chen Mingda 陳明達 et al., “Dunhuang shiku kancha baogao 敦煌石窟勘察報告” [Survey report about the Dunhuang caves], *Wenwu Cankao Ziliao* 2 (1955): 53–57. Zhao, Mo, and Chen were SRCA members and engaged with surveys of Chinese architectural heritage since the foundation of People's Republic of China in 1949.

three core objects of study of Dunhuang architecture: cave typology, images of monasteries in Dunhuang murals, and timber-framed porches of the Tang and Song.⁵³ In *A Study of Dunhuang Architecture*, a revised collection of essays that constituted his master's thesis and PhD dissertation, Xiao developed his studies of the images of architecture into encyclopedic and typological studies of ancient Chinese architecture (figure 0-5). The studies of cave, cave-front, and stand-alone architecture were not expanded as such, but since the publication of the second edition of *A Study* in 2002, they have been grouped together into “ancient architecture of Dunhuang” as the counterpart of the image of architecture. Furthermore, Xiao established a method to discern the faithful and fanciful aspects of the image of architecture and thereby made the study of the “realistic” aspects of Dunhuang architecture a valid academic inquiry in its own right.⁵⁴ Since Xiao, the approach to studying Dunhuang architectural materials has made a fundamental shift from the early scholarship. Liang and Bulling used Dunhuang materials to prove the general features of Chinese architecture as indicated by historical texts and

53. Xiao's master's thesis comprises three articles on the three subject matters: Xiao Mo, “Mogao ku bihua zhong de fosi 莫高窟壁畫中的佛寺” [Buddhist monasteries in Dunhuang mural paintings], in *Zhongguo shiku: Dunhuang mogao ku* 中國石窟：敦煌莫高窟 (Chinese caves series: Dunhuang Mogao caves), ed. Dunhuang yanjiu yuan (Beijing: Wenwu chubanshe; Tōkyō: Heibonsha, 1982), 4, 175–89; Xiao Mo, “Dunhuang Mogao ku de dongku xingzhi 敦煌莫高窟的洞窟形制” [The cave typology of the Mogao grottoes of Dunhuang], in *Dunhuang mogao ku*, 2:187–99; “Mogao ku de Tang Song kuyan 莫高窟的唐宋窟簷” [Cave porches of the Tang and Song periods at the Mogao Caves] (unpublished paper written before 1981), cited from Xiao Mo, “*Dunhuang jianzhu yanjiu yuanqi ji qi cuoyao* <敦煌建築研究>緣起及其撮要” [Origins and abstract of *A Study of Dunhuang Architecture*], *Gujian Yuanlin Jishu* 古建園林技術 [Traditional Chinese architecture and gardens] 2 (1991): 28.

54. As Xiao suggests in *Dunhuang jianzhu yanjiu*, 3rd ed., 62–63, the image or architecture containing content that is prescribed by Buddhist scriptures is more idealized than their prototypes in real life and are constrained by the traditional methods of representing three-dimensional forms in paintings. Therefore, Xiao would usually justify the validity of the image of architecture by comparing it with historical texts, archaeological findings, or comparative cases in East Asia.

comparative cases, whereas Xiao used historical texts and comparative cases to prove the features indicated by the Dunhuang materials. The shift of the object of study suggests the researchers' increased confidence in the Dunhuang architectural materials and in their capability of extracting valid historical data from them.

Xiao also associated the development of cave types with the evolution of Chinese monasteries. Based on architectural prototypes of the caves, he defined the major cave types in Dunhuang as (a) central-pagoda-pillar cave (*zhongxintazhu ku* 中心塔柱窟); (b) upturned-funnel cave (*fudoushi diantang ku* 覆斗式殿堂窟), alternatively known as truncated pyramidal ceiling cave in English literature; (c) backscreened (central-altar) cave (*beipinshi ku* 背屏式窟); (d) vihara cave (*piheluo ku* 毗訶羅窟); (e) nirvana cave (*niepan ku* 涅槃窟); and (f) colossal-buddha image cave (*dafo ku* 大佛窟) (figure 0-6).⁵⁵ Among them, the first three types are believed to be modeled, respectively, after the pagoda-centered cloister, the canopied shrine, and the buddha hall with a backscreened altar. Because these three types represent the paradigmatic cave designs of the pre-Sui, Sui and Tang, and post-Tang periods, the succession of cave types are treated as indirect evidence of the development of Chinese monasteries. Scholars' consensus about the latter is that because Buddhist architecture of Indian origin was adapted to Chinese building traditions, a pagoda-centered layout was gradually replaced by an image-hall-centered layout.⁵⁶ The evolution of cave types that Xiao proposed, especially the genealogy of the backscreened cave, has not satisfied all archaeologists.⁵⁷ They have proposed other ways of

55. Xiao, "Dunhuang Mogao ku de dongku xingzhi"; Xiao, *Dunhuang shiku yanjiu*, 33–60.

56. For a review of the consensus, see Lin, *Building a Sacred Mountain*, 21.

57. For instance, Xiao sees the central-altar cave without a backscreen as a variant of the upturned-funnel cave type, but most archaeologists and non-architectural specialists see the

categorization according to the formal elements (e.g., plan, ceiling, niche, altar) of a cave or the functions of caves (e.g., meditation, pagoda circumambulation, image hall).⁵⁸ But it is Xiao's categorization that best serves an analogy between the Sinicization of cave temples and that of Buddhist monasteries.

Xiao built a solid foundation for material-oriented encyclopedic studies of Dunhuang architecture and found a way to describe the architectural features of the cave. Nonetheless, he remained silent about the possible relationship between the image of architecture and the actual architecture of Dunhuang, although both are believed to represent the same types of stand-alone architecture, such as the monastery and the pagoda. An issue that was immediately addressed by contemporary scholarship is the dialectical relationship between artistic creativity and historical reality.

Xiao's methodology of extracting objective information from works of art was challenged by a PhD dissertation written by architectural historian Puay-Peng Ho at the University of London in 1992.⁵⁹ Incorporating the new materials of Dunhuang images of architecture published by Xiao, Ho's dissertation sought to understand the spatial conception that prevailed in actual Buddhist architecture and the textual and visual representations of them. For

backscreen-less cave and the backscreened cave as two variants of the central-altar cave type. Furthermore, Xiao negates the possible connection between central-altar cave and central-pillar cave whereas some other scholars found the architectural vocabularies of the central-altar cave in both the central-pillar cave and the upturned-funnel cave.

58. For instance, Shi, *Mogao ku xing*, 1:4–7; Fan Jinshi 樊錦詩, “Mogao ku qianqi shiku de dongku xingzhi he ticalai buju (zhaiyao) 莫高窟前期石窟的洞窟形制和題材佈局 (摘要)” [Cave typology and iconographical distribution in the Mogao caves of the former periods (abstract)], *Dunhuang Yanjiu* 15, no. 2 (1988): 1; Su, *Zhongguo shiku si yanjiu*, 16–17; Fan Jinshi, *The Caves of Dunhuang* (Hong Kong: Dunhuang Academy in collaboration with London Editions, 2010), 39–40.

59. Puay-Peng Ho, “Chinese Monastic Buddhist Architecture in the Sui and Tang Dynasties: A Study of the Spatial Conception,” PhD diss., University of London (SOAS), 1992.

Ho, the Dunhuang murals of architecture are not just faithful representations of historical buildings; he also valued them as “an expression of artistic creativity.”⁶⁰ Thus, although most scholars had regarded the palatial complexes in Pure Land scenes as representations of “Buddhist monasteries,” Ho and those more cautious about the nature of the images called them “architecture in the Pure Land scenes” or “the Pure Land architecture.”⁶¹ Despite the difference in opinion, Ho’s study still benefited from the visual information Xiao extracted from Dunhuang mural paintings. Unlike Bulling’s plan reconstruction, Xiao’s trace-copy line drawing of the Pure Land architecture preserves both the pictorial composition of the mural painting and architectonic details of the visionary architecture (figure 0-7).⁶² The choice of the latter method implies the notion that knowledge of architectural forms cannot replace the visual effect of the architectural imagery.

Ho’s recognition of the value of subjectivity in the visual representation of architecture led to two sets of conclusions. One concerns the notions of spatial conception, including the notions of centrality, duality, verticality, multiplicity, and unity.⁶³ By reinforcing these formal and aesthetic principles with supplementary textual and archaeological evidence, Ho generalized some of them as the spatial conceptions of Buddhist monasteries of Sui and Tang China.⁶⁴ The

60. Ibid, 167.

61. The former is represented by Liang, “Women suo zhidao de tangdai fosi yu gongdian”; Bulling, “Buddhist Temples in T’ang Period.” The latter is represented by Ho, “Chinese Monastic Buddhist Architecture in the Sui and Tang Dynasties.”

62. Earlier studies of Dunhuang murals of architecture, such as those by Liang Sicheng, Bulling, and Su Bai, also included trace-copy line drawings of visual details in a mural, such as pavilions, pagodas, bracket sets, railings, and so forth. But Xiao was the first one to trace-copy the architecture in an entire painting composition. Accordingly, the more ambitious way of trace-copying raised new issues of visual composition, spatial representation, and the relationship between architectural and figural elements in the painting.

63. Ibid., 167–76.

64. Ibid., 326–57.

other, briefly mentioned, considers the mediating effect of the Dunhuang images of Pure Land architecture. As he concludes, “It is precisely this paradoxical quality of the Dunhuang Pure Land paintings, the paradisiac atmosphere created with the not-so-unfamiliar earthly architectural elements, the remote paradise brought tangible to earth, which mediates and communicates to the viewers the indescribable heavenly bliss.”⁶⁵

The apparatus of such transformative imagery was further articulated in a 1995 article titled “Paradise on Earth.”⁶⁶ In this article focusing on Pure Land depictions in the high-Tang Dunhuang murals, Ho argued that the architectural imagery bridges the mundane and supermundane worlds by means of the convincing spatial representation, the notion of duality, and the iconology of magnificence and splendor. Ho’s studies sought ways to emancipate the image of Pure Land architecture from a position subordinate to actual Buddhist monasteries. Bulling had called for recognition of the Pure Land image’s stimulative effect to beauty in the actual built environments, and Ho furthered it by specifying the shared concepts of space among the visionary and real buildings.⁶⁷

In the meantime, Dunhuang scholars and art historians began to reformulate the humanistic values of Dunhuang art and to adopt a positive attitude toward the aspirations and visions of the cave makers. Shi Weixiang 史葦湘 (1924–2000), a researcher of the Dunhuang Academy (Dunhuang yanjiu yuan 敦煌研究院)—which the Dunhuang Institute was expanded to be in 1984—was one of the main advocates of the social art history of Dunhuang. Following several public discussions at international conferences of Dunhuang studies in the 1980s, Shi

65. Ibid., 180–81.

66. Puay-Peng Ho, “Paradise on Earth: Architectural Depictions in Pure Land Illustrations of High Tang Caves at Dunhuang,” *Oriental Art* 41, no. 3 (1995): 22–32.

67. Bulling, “Buddhist Temples in T'ang Period, II,” 121–22.

stated that Dunhuang art cannot be directly equated with historical facts and must be studied together with historical social conditions and cultural frameworks.⁶⁸ Like Ho, Shi believed that many visual images in Dunhuang murals are more than simple, straightforward reflections of the social lives of those who produced them; they were expressions of “the artistic and religious imaginations” of Chinese Buddhist artisans.⁶⁹ Marxist historical materialism, which had impacted the way in which first-generation scholars of socialist China criticized the limitation of Dunhuang Buddhist art, still lay in the root of the 1980s art criticism as exemplified by Shi.⁷⁰ But in the so-called Reform and Open-Door era (1978–), scholars adopted a more sympathetic view of the cave makers and were open-minded about learning about social realities and artistic expression from Dunhuang Buddhist art. Since the 1980s, Dunhuang Buddhist art of the later

68. Some of the discussions about the humanistic values of Dunhuang art were included in *1983 nian quanguo Dunhuang xueshu taolunhui wenji shiku yishubian* 一九八三年全國敦煌學術討論會文集：石窟藝術編 [Proceedings of the domestic conference on Dunhuang studies in 1983: Volume on cave art], ed. Dunhuang yanjiu yuan, especially Pan Jiezi’s “Jieshou Dunhuang yishu yichan 接受敦煌藝術遺產” [Receiving the heritage of Dunhuang art], 2:202–15. Shi Weixiang 史葦湘, “Zailun chansheng Dunhuang fojiao yishu de shehui yinsu 再論產生敦煌佛教藝術的社會因素” [A revisit of the social factors in the production of Dunhuang Buddhist art], *Dunhuang Yanjiu* 18, no. 1 (1989): 1–18.

69. Shi, “Zailun chansheng Dunhuang fojiao yishu de shehui yinsu,” 3; Shi, “Lun Dunhuang fojiao yishu de xiangxiangli 論敦煌佛教藝術的想像力” [On the Imagination of Dunhuang Buddhist art], *Dunhuang Yanjiu* 9, no. 4 (1986): 10–21. For Shi’s impact on Dunhuang-based scholars, see Ma De, “Yidai zunshi xuejie kaimo: Shi Weixiang xiansheng de xianshen jingshen yu xueshu chengjiu 一代尊師 學界楷模——史葦湘先生的獻身精神與學術成就” [Master of a generation, model of an academic field: Self-sacrifice and academic accomplishments of Shi Weixiang], *Dunhuang Yanjiu* 65, no. 3 (2000): 177–82.

70. In the 1950s–70s, religious art was generally accepted to be a kind of “spiritual opium” that the dominant class imposed on the subordinate class by the Chinese intellectuals. Although the role of the artisans—who represent the “working class” in premodern China—in the production of the Dunhuang Buddhist art received positive acknowledgment, the works of art were considered to be counterrevolutionary. For representative scholarship on Dunhuang art from this perspective, see *Wenwu cankao ziliao* 文物參考資料 1951 (1) and Chang Shuhong, *Dunhuang shiku yishu* 敦煌石窟藝術 [Art of the Dunhuang caves] (Hangzhou: Zhejiang daxue chubanshe, 2022).

periods, especially the Guiyijun period, has piqued scholarly interest and has been studied from the perspective of the humanist spirit and the local society of Dunhuang.⁷¹

In this light, the cave temples obtained another reason to be studied as real existence: their spaces were the production of human activities and social interactions.⁷² This approach was adopted by a series of scholarly works on the construction history of the Dunhuang caves, featuring Dunhuang scholar Ma De 馬德's *A Study of the History of the Dunhuang Mogao Caves* (Dunhuang Mogao ku shi yanjiu 敦煌莫高窟史研究).⁷³ By analyzing the changing cliff face, the studies introduced the notion of spatial interactions—despite being only at the scale of the cave complex—among cave construction of different periods. By reading the “merit records” (*gongde ji* 功德記) of the caves—commemorative texts praising the patrons’ merit in a construction project—the studies demonstrate how social interactions took place on a stage comprising the merit caves, caves constructed for the owner to accumulate religious merit.⁷⁴

71. For representative scholarship of the former thread, see Liang Weiyong 梁尉英, “Lue lun dunhuang wantang yishu de shisu hua 略論敦煌晚唐藝術的世俗化” [A brief discussion of the secularization of late-Tang Dunhuang art], in *Dunhuang shiku yishu : Mogao ku di 9, 12 ku* 敦煌石窟藝術：莫高窟第9、12窟 [Art of the Dunhuang caves: Mogao Caves 9 and 12], ed. Dunhuang Yanjiu Yuan (Nanjing: Jiangsu meishu chubanshe, 1999), 10–34. For that in the latter thread, see Jiang Boqin 姜伯勤, “Dunhuang de huahang yu huayuan 敦煌的畫行與畫院” [Painting profession and painting academy of Dunhuang], in *1983 nian quanguo Dunhuang xueshu taolunhui wenji shiku yishubian*, 2: 172–91; Ma De, “Caoshi sandaku yingjian de shehui beijing 曹氏三大窟營建的社會背景” [Social contexts of the construction of the three grand caves of the Cao clan], *Dunhuang Yanjiu* 26, no. 1 (1991): 18–24, 114.

72. My use of the term *production* here follows Henri Lefebvre's *The Production of Space* (Oxford: Blackwell, 1991).

73. Ma De, *Dunhuang Mogao ku shi yanjiu* 敦煌莫高窟史研究 [Study on the history of the Mogao grottoes of Dunhuang] (Lanzhou: Gansu jiaoyu chubanshe, 1996). In addition, Ma De wrote a series of articles on the construction history of individual caves of Dunhuang. Since the 2000s, a series of monographs on individual caves emerged; they also adopted the approach in discussions of the social and historical background of the cave constructions.

74. For a comprehensive collection and commentary of the merit records from Dunhuang

Based on ownership, the merit caves could be further categorized as “family cave” (*jia ku* 家窟) of the laity, “eminent monk’s cave” (*gaoseng ku* 高僧窟), “monastic communal cave” (*sengtuan ku* 僧團窟), “[Buddhist] society’s cave” (*Shetuan ku* 社團窟), “government’s cave” (*guan ku* 官窟), and so forth.⁷⁵ Due to the interest in social history and the available historical sources, these studies dove deeper into the family caves of the prosperous clans than in any other kind of merit cave. A fruitful outcome has been the nuanced reading of the renovation of preexisting caves, a prevailing mode of construction activity at Mogao since the tenth century. Because the cave temple of an ancestor was treated as part of the family’s foundational work, renovation was read as a necessary means of continuing the family tie.⁷⁶ Thus, prosperous clans in Dunhuang have been recognized as the major agents for the sustainability of cave construction at Mogao.⁷⁷ Nonetheless, a social art history can explain only part of the story of the Guiyijun-period caves; to better understand the changes in cave architecture, such as the significant moves in cave design that Shi observed, one must also consider the intrinsic factors of the religious work of

documents, see Zheng Binglin 鄭炳林 and Zheng Yinan 鄭怡楠, *Dunhuang bei ming zan jishi* 敦煌碑銘贊輯釋 [Annotated collection of the stelae, epitaphs, and eulogies of Dunhuang], 3 vols. (Shanghai: Shanghai guji chuban she, 2019). An earlier version was compiled by Zheng Binglin and published by Gansu jiaoyu chuban she in 1992.

75. Ma, *Dunhuang Mogao ku shi yanjiu*, 331–60.

76. Shi Wixiang, “Lun Dunhuang fojiao yishu de shisuxing: Jianlun ‘jingang jingbian’ zai Mogao ku de chuxian yu xiaoshi 論敦煌佛教藝術的世俗性——兼論〈金剛經變〉在莫高窟的出現與消失” [On the secular character of Dunhuang Buddhist Art: The appearance and disappearance of the Diamond Sūtra transformation tableaux in the Mogao caves], *Dunhuang Yanjiu* 5, no. 3 (1985): 26.

77. For representative studies of the family caves of Mogao, see Shi Weixiang, “Shizu yu shiku 氏族與石窟” [Clans and caves], in *Dunhuang yanjiu wenji* 敦煌研究文集 [Essay collections in Dunhuang studies], Dunhuang wenwu yanjiu suo ed. (Lanzhou: Gansu renmin chuban she, 1982): 151–63; Ma De, “Dunhuang de shizu yu Mogao ku 敦煌的世族與莫高窟” [Clans in Dunhuang and the Mogao caves], *Dunhuang Xue Jikan* 敦煌學輯刊 [Journal of Dunhuang studies] 28, no. 2 (1995):41–47; Ning Qiang, *Art, Religion, and Politics in Medieval China: The Dunhuang Cave of the Zhai Family* (Honolulu: University of Hawai‘i Press, 2004).

architecture.⁷⁸

To understand the cave temple from the perspective of architectural space is not easy, because many norms of architectural studies are not applicable. The cave temple has been well recognized as a kind of Buddhist architecture, but its spatial logic is believed to be inherently different from its stand-alone counterparts. For instance, while Ho attempted an exhaustive study of Buddhist monastic architecture of Sui and Tang China, he did not include the rock-cut cave temples. Ho's dissertation aimed to reveal the spatial conception of architecture, but a spatial conception foreign to that of the architecture that had been conceptualized to inhere in the cave. Ho's approach to spatial conception can be traced back to Swiss architectural historian Sigfried Giedion (1898–1968), who conceptualized the history of Western architecture as a succession of three concepts of space and saw in the cave a concept of space prior to the advent of architecture.⁷⁹ Subsequently, Japanese architectural historian Mitsuo Inoue 井上充夫 (1918–2002) applied the lens of spatial conception to inspect the developments of Japanese architecture, customizing a counterpart of Giedion's narrative in East Asian history.⁸⁰ While Giedion valorized the pre-architectural concept of space that the prehistoric cave displays to be a potential

78. Shi, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu.”

79. Sigfried Giedion, *Architecture and the Phenomena of Transition: The Three Space Conceptions in Architecture* (Cambridge, MA: Harvard University Press, 1971; 2nd ed. Cambridge, MA: Harvard University Press, 2013); Sigfried Giedion, *The Eternal Present: A Contribution on Constancy and Change* (New York: Bollingen Foundation; distributed by Pantheon Books, 1962).

80. Inoue Mitsuo 井上充夫, *Nihon kenchiku no kūkan* 日本建築の空間 [Space in Japanese architecture] (Tōkyō: Kajima Shuppankai, 1969); Mitsuo Inoue, *Space in Japanese Architecture*, trans. Hiroshi Watanabe (New York: Weatherhill, 1985). Giedion proposed a three-phased development of space in Western architecture: architecture as space-radiating volumes, as interior space, and as both volume and interior space. In comparison, Inoue proposed a four-stage development of space in Japanese architecture: preeminence of the material object, plastic composition and pictorial composition, interior space, and from geometric space to movement space.

alternative to architecture as a human habitat, he regarded the cave to be incomplete as an architectural space. The caves, in Giedion's eyes, "possess an interior . . . but they have no exterior," and Inoue similarly saw a cave dwelling to be "nothing but interior space."⁸¹

Although the Buddhist cave temple differs from the prehistoric cave dwelling by geometric form, visual decoration, and ritual function, the conception of them as essentially an "architecture of the interior" has remained intact.⁸² The long-standing conception is not based just on the fact that the main chamber of a Buddhist cave is physically an interior space but also on the fact that the form and decoration of the chamber, especially those built in the Tang or later periods, resembled the interior of a temple hall. Art historians have also alerted us that a cave temple would not fully adopt the functionality of Buddhist monastic architecture, because the former is usually darker and smaller than a stand-alone temple.⁸³ Scholars of Dunhuang have also pointed out that the Mogao caves did not function like a Buddhist monastery, which would be a courtyard complex comprising multiple halls, pavilions, and monastic dwellings.⁸⁴ But even if the space of a cave was originally pre-architectural and incomplete, would anything have been

81. Giedion, "The Space Concept of Prehistory," in *The Eternal Present*, 526. Inoue, *Space in Japanese Architecture*, 3.

82. For a critical review of this accepted idea and recent modifications, see Wei-Cheng Lin, "What Did Architecture Do in Visualizing Dunhuang?," in *Visualizing Dunhuang: The Lo Archive Photos of the Mogao and Yulin Caves*, ed. Dora C. Y. Ching (Princeton, NJ: Princeton University Press, 2021), 9:210.

83. An early notion of the visual quality in a Dunhuang cave was expressed in Li Yongning 李永甯 and Cai Weitang 蔡偉堂, "Xiangmo bianwen' yu unhuang bihua zhong de 'Laoducha doushengbian' 降魔變文與敦煌壁畫中的牢度叉鬥聖變" [The subjugation transformation text and the subjugation transformation tableau in Dunhuang murals], in *1983 nian quanguo Dunhuang xueshu taolunhui wenji shiku yishubian*, 1:187-88; Wu Hung, "What Is Bianxiang?—On the Relationship between Dunhuang Art and Dunhuang Literature," *Harvard Journal of Asiatic Studies* 52, no. 1 (1992): 133–34.

84. Ma, *Dunhuang Mogao ku shi yanjiu*, 203; Chen Dawei 陳大為, "Tang houqi Wudai Songchu Dunhuang sengsi yanjiu 唐後期五代宋初敦煌僧寺研究" [A Study of the Buddhist monasteries in Dunhuang of the late-Tang, Five Dynasties, and early-Song periods], PhD diss., Shanghai Normal University, 2008, esp. 136–66.

changed when the cave was adorned by the images of architecture that present a complete set of architectural concepts of space?

Inquiries have been raised about the mutual relationship between the *image* of architecture and the actual architecture, independent of the cave specifically. The best-known case of image-inspired architecture is the Japanese Pure Land garden, which is accepted as having been directly influenced by the architectural imagery in Pure Land paintings.⁸⁵ The image of Pure Land architecture borrows compositional principles and building types from earthly prototypes such as monasteries and palaces, whereas the Pure Land garden's compact composition, scale contrasts between the hall space and the decorative structures, and enriched skylines of the roofs are believed to be innovations that express the picturesque beauty of the visionary architecture. In contrast, the cave temple's physical juxtaposition with the visionary architecture paradoxically makes its conceptual correlation less apparent, owing to its distinctive material construction systems and varied ways of defining space. The aspiration to extract information about Buddhist monastic architecture from cave architecture has existed in the minds of architectural historians since Xiao, but the triangular relationship among the image of architecture, the cave architecture, and the stand-alone architecture they represent remained unstudied until more comprehensive approaches to Dunhuang cave art emerged in the twenty-first century.

85. Alexander C. Soper, "The Evolution of Buddhist Architecture in Japan," PhD diss., Princeton University, 1944, 134; Tanaka Tan 田中淡, "Chūgoku kenchiku teien to Hōōdō 中國建築庭園と鳳凰堂" [Chinese garden architecture and the Phoenix Hall], in *Byōdōin taikan 平等院大観* [Grand scenes of the Byōdōin Temple], ed. Akiyama Terukazu 秋山光和 et al. (Tokyo: Iwanami Shoten, 1988), 1:73; Shimizu Hiroshi 清水擴, *Heian jidai bukkyō kenchikushi no kenkyū: jōdokyō kenchiku o chūshin ni 平安時代仏教建築史の研究: 浄土教建築を中心に* [A study of the history of Buddhist architecture in the Heian period: Focusing on architecture of Pure Land Buddhism] (Tokyo: chūōkōron bijutsu shuppan, 1992), 79–82.

The Third Phase (since 2001): New Materials, Perspectives, and Technologies

Since the turn of the twenty-first century, the visibility of Dunhuang cave art has drastically increased in both traditional publications and digital databases.⁸⁶ Among them, the most comprehensive study of the cave architecture of Dunhuang was conducted by two Dunhuang Academy researchers, Sun Ruxian and his daughter Sun Yihua 孫毅華. Having deeply engaged with the architectural conservation of the Dunhuang caves for many decades, the Suns gained unparalleled first-hand knowledge of the cave architecture and the cliff site. Their knowledge was condensed into two volumes of a twenty-six-volume photo album of the Dunhuang caves produced by the Dunhuang Academy, one on the image of architecture and the other on cave architecture.⁸⁷ The bipartite division followed Xiao's theoretical framework, yet an enriched reading of the cave architecture surfaced in the Suns' work. First, their discussion of cave types took into consideration the broad spectrum of cave sizes and the constructive decoration that enhances the architectural imagery of a cave. This move added to the abstract concept of cave type certain spatial and visual features perceivable by a viewer. Second, they began the exploration of the possible relationship between the image of architecture and the

86. To name just a few, the series publications of Dunhuang cave art include *Dunhuang shiku quanji* 敦煌石窟全集 [Comprehensive collection of the Dunhuang grottoes], 26 vols., ed. Dunhuang yanjiu yuan (Hong Kong: Shangwu yinshu guan, 1999–2005); *Dunhuang shiku yishu* 敦煌石窟藝術 [Art of the Dunhuang caves], 22 vols., ed. Dunhuang yanjiu yuan (Nanjing: Jiangsu meishu chuban she, 1993–98). The digital databases include the Digital Dunhuang website (<https://www.e-dunhuang.com/>), Artstor's MIDA, International Dunhuang Project website (<http://idp.bl.uk/>), and "Dunhuang Mogao Caves" on the Digital Silk Road Project website (<http://dsr.nii.ac.jp/china-caves/dunhuang/>).

87. Sun Ruxian 孫儒憫 and Sun Yihua 孫毅華, *Dunhuang shiku quanji 21: jianzhu hua juan* 敦煌石窟全集 21: 建築畫卷 [Comprehensive collection of the Dunhuang grottoes: Volume 21 on architectural painting], ed. Dunhuang yanjiu yuan (Hong Kong: Shangwu yinshu guan, 2001); Sun Yihua and Sun Ruxian, *Dunhuang shiku quanji 22: shiku jianzhu juan* 敦煌石窟全集 22: 石窟建築卷 [Comprehensive collection of the Dunhuang grottoes: Volume 22 on cave architecture], ed. Dunhuang yanjiu yuan (Hong Kong: Shangwu yinshu guan, 2003).

historical architecture in Dunhuang. For instance, they first recognized the resemblance between a Song-period flower pagoda (*huata* 花塔) in the Daquan valley and the pagoda image in a Xixia-period mural painting of the Yulin caves (Figure 0-8).⁸⁸ In another instance, Sun Yihua combined the appearance of the temple hall in Dunhuang murals and the interior of the central-pillar cave to reconstruct a type of pagoda-centered temple that might have existed in northwest China around the Northern Wei period (386–535).⁸⁹ Third, as early as in the 1950s, Sun Ruxian invented a new way to document the total visual form of the cave interior, considering both the shape of the volume of void space and the decorative surfaces wrapping around it. His cave renderings integrate the cave type, polychromic statues, and mural paintings into a coherent representation of space (figure 0-9). Derived from preexisting templates of archaeological drawings of the cave form and trace-copy replication of the mural painting, this kind of rendering was revolutionary; it presented the visual contents of a cave *in its entirety* and *in place*, thus facilitating further investigation of the architectural and pictorial programs of the cave side by side. The principle continues to guide the digitization, digital conservation, and presentation of Dunhuang cave art in the present-day.⁹⁰ The Suns’ general approach aligned with Xiao’s, as their discussion of the built environment was subordinate to the topological studies of cave architecture, and their purpose of incorporating ancient architecture of Dunhuang was to prove

88. Sun and Sun, *Jianzhu hua juan*, 260, fig. 262; Sun and Sun, *Shiku jianzhu juan*, 230–31. Xiao first studied the flower pagoda and pointed out the similarity between the bracket set of the flower pagoda and those depicted in Tang-period Dunhuang murals, but the recognition of overall pagoda form, especially the distinctive lotus-flower-like finial, is a further step.

89. Sun Yihua and Zhou Zhenru 周真如, “Mogao ku di 254, 257 ku zhongxinzhu ku de fuyuan yanjiu yu mingcheng kao: tasi 莫高窟第254、257窟中心柱窟的復原研究與名稱考——塔寺” [A reconstruction study of the Mogao central-pillar Caves 254 and 257 and A study of the nomenclature “pagoda-temple”], *Zhongguo Jianzhu Shilun Huikan* 中國建築史論彙刊 [The journal of Chinese architectural history] 18 (2019): 161–76.

90. Pan Yunhe 潘雲鶴 and Fan Jinshi 樊錦詩, eds., *Dunhuang zhenshi yu xini* 敦煌·真實與虛擬 [Dunhuang: real and virtual] (Hangzhou: Zhejiang daxue chuban she, 2003), 99–270.

the realistic aspect of the image of architecture. Nevertheless, the Suns' studies in fact took the first step to blur the boundaries between the pictorial and the actual architecture of Dunhuang.

As published materials of archaeological sites significantly increased, architectural historians enlarged their visual sourcebooks of early Chinese architecture. The classical approach to the Dunhuang Pure Land paintings as pictorial representations of architectural space continued to flourish in the current century.⁹¹ But more and more architectural historians—Fu Xinian 傅熹年, Wang Guixiang 王貴祥, and Nancy S. Steinhardt prominent among them—adopted an inclusive approach to gain information about building styles and layouts from both the plastic and pictorial images of architecture from the Dunhuang caves and elsewhere, just as they did so with funerary artifacts and tomb murals.⁹²

91. For studies on Pure Land architecture in the current century, see, for example, Liu Yan 劉妍, “Dunhuang jingbian hua fosi nei shuiti yu lutai buju yanjiu 敦煌經變畫佛寺內水體與露臺佈局研究” [The water-platform layout of Buddhist temples in sūtra-illustration murals of the Dunhuang caves], *Jianzhu Shi* 建築史 [Architectural history], no. 2 (2009): 48–63; Zhang Yichi 張亦馳, “6–11 shiji Mogao ku jingtu bian jianzhu tuxiang sheji yu pingmian buju yanjiu 6–11世紀莫高窟淨土變建築圖像設計與平面佈局研究” [A study of the visual design and layout of the architectural images in the pure land transformation tableaux in the Mogao caves of the sixth to eleventh century], *Zhongguo Jianzhu Shilun Huikan* 中國建築史論叢刊 [Journal of Chinese architectural history] 18 (2019): 117–228; Sun Lei 孫蕾, “莫高窟148窟東方藥師經變中建築群佈局的推想” [Speculations on the architectural layout in the medicine buddha transformation tableau in Mogao Cave 148], *Jianzhu Yichan* 建築遺產 [Heritage architecture] 26, no. 2 (2022): 66–74. For recent studies focusing on the visual representation method of the Pure Land images, see Zhang Jianyu 張健宇, *Hantang meishu kongjian biao xian yanjiu: Yi dunhuang bihua wei zhongxin* 漢唐美術空間表現研究：以敦煌壁畫為中心 [Representations of space in Chinese art from the Han to the Tang Dynasty: A study based on Dunhuang murals] (Beijing: zhongguo renmin daxue chuban she, 2018); Wang Zhi 王治, *Dunhuang xifang bian kongjian jiegou yanjiu* 敦煌西方變空間結構研究 [A study of the spatial structure in the western pure land transformation tableaux of Dunhuang] (Beijing: Gugong chuban she, 2019).

92. Fu Xinian, Nancy Shatzman Steinhardt, and Alexandra Harrer, *Traditional Chinese Architecture: Twelve Essays* (Princeton, NJ: Princeton University Press, 2017), 31–139, 226–52; Wang Guixiang 王貴祥, *Zhongguo hanchuan fojiao jianzhu shi: Fosi de jianzao, fenbu yu*

This approach was exploited to an extreme in Zhao Nadong's 趙娜冬 recent studies of Dunhuang cave architecture, visual programs, and image of architecture.⁹³ Zhao integrated and reinterpreted the published materials in these categories to respond to a classical problem of Dunhuang architecture: how the caves could represent the spatial layouts of Chinese Buddhist monasteries. The basic strategy for processing information from the various kinds of visual sources has been an abstraction; like plan reconstruction for Pure Land images, the cave space with its main visual contents is translated into the layout of a cloister where main ritual buildings are arranged in the cardinal directions (figure 0-10). In this way, Zhao found information about spatial composition from a broader range of materials that had been unstudied from the architectural perspective, including the visual programs in a cave and the spatial layout of a cave group. She even claimed that a cave with a buddha niche and two Pure Land scenes carries the spatial imagery of a monastery complex comprising three rows of courtyards, one central and

siyuan geju, jianzhu leixing ji qi bianqian 中國漢傳佛教建築史：佛寺的建造，分佈與寺院格局，建築類型及其變遷 [The history of Chinese Buddhist architecture] (Beijing: Qinghua daxue chuban she, 2016), 1:215–24, 288–306; Nancy S. Steinhardt, “Early Chinese Buddhist Architecture and Its Indian Origins,” in *The Flowering of a Foreign Faith: New Studies in Chinese Buddhist Art*, ed. Janet Baker (New Delhi: Marg Publication, 1998), 38–53; Steinhardt, *Chinese Architecture in an Age of Turmoil*, 95–248. The examination of plastic representation of architecture in the Chinese caves began in the first decade of the twentieth century, as exemplified by Ito Chuta 伊東忠太, “Shina Sansei Unkō no sekkutsu ji 支那山西雲岡の石窟寺” [The cave temples of Yungang in Shanxi province, China], *Kokka* 國華 197 (October 1906): 431–35; and 198 (November 1906): 483–94. But the systematic studies of various kinds of representation occurred after these kinds of materials had been surveyed and studied.

93. Zhao Nadong 趙娜冬, “Dunhuang Mogao ku yu 6–11 shiji fosi kongjian buju yanjiu 敦煌莫高窟與6-11世紀佛寺空間佈局研究” [Research on Mogao grottoes in Dunhuang and spatial layout of Buddhist monasteries from the sixth to eleventh century], PhD diss., Tsinghua University, 2013; Zhao Nadong and Duan Zhijun 段智鈞, *Dunhuang Mogao ku yu 6 zhi 11 shiji fojiao kongjian buju yanjiu 敦煌莫高窟與6至11世紀佛教空間佈局研究* [Research on Mogao grottoes in Dunhuang and spatial layout of Buddhist monasteries from the sixth through eleventh century] (Beijing: Zhongguo jianzhu gongye chuban she, 2019).

two flanking.⁹⁴ Although Zhao might not have overstated the cave design of a “total space” comprising “real and virtual spaces,” her abstraction of both spaces ruled out the possibility of examining the embodied viewing experience of a total space.⁹⁵ The dilemma is that as long as one looks for the architectural concept of space, one sees no more than symbolic and virtual space in the cave.

A potential solution to the dilemma lies in a more comprehensive understanding of *space*, a critical term and analytic tool in the field of art history in the last three decades. In conjunction with the spatial turn in art history, many studies of Dunhuang Buddhist art became more conscious about visual programs, visibility, and religious function in the cave space.⁹⁶ The Buddhist sacred mountain, as a natural site that inspired cultural imagination and a historical place where building activities occurred, has also been examined from art-historical perspectives. For instance, Wei-Cheng Lin and Nachiket Chanchani studied the dialectical relationship between Buddhist sacred mountains and temple architecture in East and South Asia, giving a

94. Zhao and Duan, *Dunhuang Mogao ku yu 6 zhi 11 shiji fojiao kongjian buju yanjiu*, 183.

95. *Ibid.*, 184.

96. For two recent reviews of the spatial turn in art history, see Wu Hung, “*Kongjian*” *de meishu shi* “空間”的美術史 [Space in art history], trans. Qian Wenyi 錢文逸 (Shanghai: Shanghai renmin chubanshe, 2017), 1–12; Jutta Vinzent, *From Space in Modern Art to a Spatial Art History: Reassessing Constructivism Through the Publication “Circle” (1937)* (München: De Gruyter Oldenbourg, 2019), 13–38. For Dunhuang art studies, see, for example, Stanley K. Abe, “Art and Practice in a Fifth-Century Chinese Buddhist Cave Temple,” *Ars Orientalis* 20 (1990): 1–31; Eugene Y. Wang, *Shaping the Lotus Sūtra: Buddhist Visual Culture in Medieval China* (Seattle: University of Washington Press, 2005); Winston Kyan, “Family Space: Buddhist Materiality and Ancestral Fashioning in Mogao Cave 231,” *Art Bulletin* 92, no. 1/2 (March–June 2010): 61–82; Wei-Cheng Lin, “Relocating and Relocalizing Mount Wutai: Vision and Visuality in Mogao Cave 61,” *Artibus Asiae* 73, no. 1 (2013): 77–136; Anne Feng, “Water, Ice, Lapis Lazuli: The Metamorphosis of Pure Land Art in Tang China,” PhD diss., University of Chicago, 2018; Lin, “What Did Architecture Do in Visualizing Dunhuang?”

new impetus to the classical inquiry of architecture, landscape, and religious culture.⁹⁷ Cary Y. Liu also investigated the fundamental connection between Mount Sanwei and the Mogao caves that has underlain the latter's architectural principles.⁹⁸ Sonya S. Lee examined the cave sites in southwest China from the perspective of sustainability, an emerging issue for ecological art history.⁹⁹ By placing Buddhist art and architecture in their spatial and historical contexts, such scholarship demonstrated that the decorated cave temples could have facilitated a “dialectical transcendence in real space.”¹⁰⁰

Art historian Wu Hung, building on his studies of Dunhuang art over thirty years, articulated in a recent monograph, *Spatial Dunhuang: Approaching the Mogao Caves*, the most thorough discussion by far of space in the Mogao caves.¹⁰¹ Wu Hung's discussion provides three starting points to reconsider what space means for a cave site. First, the Mogao caves can be observed in spatial contexts of five levels, including (from large to small) the historical place of Dunhuang, the evolving entity of the Mogao cliff, the interior spaces of the caves, the sculptural

97. Wei-Cheng Lin, *Building a Sacred Mountain: The Buddhist Architecture of China's Mount Wutai* (Seattle: University of Washington Press, 2014); Nachiket Chanchani, *Mountain Temples & Temple Mountains: Architecture, Religion, and Nature in the Central Himalayas* (Seattle: University of Washington Press, 2019).

98. Cary Y. Liu, “Architecture and Land on the Dark Side of the Moon: The Mogao Caves and Mount Sanwei,” in *Visualizing Dunhuang*, 9:149–90.

99. For recent studies treating these issues, see Sonya S. Lee, *Temples in the Cliffside: Buddhist Art in Sichuan* (Seattle: University of Washington Press, 2021).

100. Prasenjit Duara, *The Crisis of Global Modernity: Asian Traditions and a Sustainable Future* (Cambridge: Cambridge University Press, 2015), 281–82; Lee, *Temples in the Cliffside*, 5–7.

101. Wu Hung, *Spatial Dunhuang: Experiencing the Mogao Caves* (Seattle: University of Washington Press, 2023); Wu Hung 巫鴻, *Kongjian de Dunhuang: Zhoujin Mogao ku 空間的敦煌：走近莫高窟* [Spatial Dunhuang: Approaching the Mogao caves] (Beijing: Sanlian chuban she, 2022). For a succinct discussion of his methodology, see Wu Hung, “Shiku yanji meishu shi fangfalun ti'an—yi Dunhuang Mogao ku wei li ‘石窟研究’美術史方法論提案——以敦煌莫高窟為例” [A proposal of an art historical methodology of “cave studies”—In the case of the Dunhuang Mogao caves], *Wenyi Yanjiu 文藝研究* [Literature art studies] 12 (2020): 137–46.

and pictorial programs inside a cave, and the pictorial space within a mural painting.¹⁰² While the spatial contexts of each level are discussed as a stand-alone topic in *Spatial Dunhuang*, the implied subject that made the spectrum of space continuous is the human experience of making, using, and contemplating the spaces. Second, a subjective-experience-based understanding of the visual space of a cave—the synthesis of architectural, sculptural, and pictorial spaces—can be analyzed in a scientific manner. Using the human body as a reference point, a researcher can investigate the scale of a cave relative to its visitors and the possible sequence of approaching the visual programs through their movements.¹⁰³ The spatial property of the cave, which structures the movements of the humans and their relationship to divinity, is thus examined. Third, to study the relationship among multiple caves, *Spatial Dunhuang* defines a series of “originary caves,” which could be subdivided into “unique caves” and “model caves” according to their legacy at Mogao.¹⁰⁴ From this perspective, instead of being read as an “authentic visual sequence” of Chinese art and architectural history, the successively emerged paradigms at Mogao could be read as a symphony of dialogs among caves, even those of distant construction times.¹⁰⁵ Although Wu’s investigation focuses on the individual cave, his strategy, an “analysis of the cave space,” provide a methodological foundation for understanding the comprehensive built environment of the Mogao cave complex in its own right. That is, the concept of space is not

102. Wu, *Spatial Dunhuang*, 291.

103. As examples of this method, many plan and sectional drawings—made in collaboration with Wu Hung—and perspectival renderings in this dissertation represent the architecture’s scale in relation to a human figure.

104. *Ibid.*, 293–94. The concept of “representative cave” had existed since the Dunhuang institute began to present selective works of art of Dunhuang in exhibitions and photo albums. But rather than focusing on the period style and artistic quality as the “representative cave” indicates, the term *originary cave* denotes the consideration of the degrees of convention and innovation occurred in a cave design.

105. Wen C. Fong, “The Han-Tang Miracle at Dunhuang,” in *Art as History: Calligraphy and Painting as One* (Princeton, NJ: Princeton University Press, 2014), 114.

limited to the formal logic of architecture but also considers human experience and historical sensibilities.

Some other areas of study that have displayed potential to redirect the discourse of real and virtual spaces are digital art history and art curation. In the last decade, computer-aided design technologies for processing architectural images in Dunhuang mural paintings have been significantly advanced,¹⁰⁶ as have virtual reality (VR), augmented reality (AR), and digital fabrication technologies for replicating and re-creating Dunhuang cave art.¹⁰⁷ With these tools, architects and computer scientists have designed and digitally constructed a few representative building complexes in Dunhuang Pure Land paintings.¹⁰⁸ For instance, the Pure Land

106. Researchers have been using the drawing and 3D modeling software that has been widely applied in architectural design such as AutoCAD, Sketchup, Rhinoceros, and Autodesk Revit Architecture for trace-copy and spatial reconstruction of the architectural images.

107. For a discussion of the technologies used at a Dunhuang art exhibition in Hong Kong in 2012, see Sarah Kenderdine, “‘Pure Land’: Inhabiting the Mogao Caves at Dunhuang,” *Curator: The Museum Journal* 56, no. 2 (2013): 199–218. For demonstrations of two more recent applications of VR and AR technologies in exhibiting the Dunhuang caves, see Getty Research Institute, “Cave 45 Virtual Immersive Experience (2-D Version),” YouTube video, <https://youtu.be/0uUIjgIH-5s> (accessed January 19, 2023); AR MR XR, “Huawei Cybaverse, AR Map App, Augmented Reality,” YouTube video 00:00–01:24, https://www.youtube.com/watch?v=YPbcNh_yN-o (accessed January 19, 2023). 3D printing has been applied to replicate polychromic statues of Dunhuang and to turn digital reconstructions of the images of architecture into physical models. For examples of the latter, see the exhibition *A Thousand Years of Construction: The Beauty of Dunhuang Architecture* [Qiannian yingzao: Dunhuang jianzhu zhi mei 千年營造——敦煌壁畫中的建築之美] at the Exhibition Center of Dunhuang Academy since May 2022.

108. Xu Lipeng 許麗鵬 et al., “Mogao ku di 172 ku beibi jianzhu tuxiang de sanwei shuzihua chengxian 莫高窟第172窟北壁建築圖像的三維數位化呈現 [3D digital rendering of architectural images in Mogao Cave 172], *Wenwu Baohu yu Kaogu Kexue* 文物保護與考古科學 [Sciences of conservation and archaeology] 34, no. 1 (2022): 79–86; Wang Qiaowen 王巧雯 and Zhang Jiawan 張加萬, “‘Shuzi bihua jianzhu’ Dunhuang bihua zhong de jianzhu shuzihua jiangou: yi Dunhuang Mogao ku di 361 ku nanbi xiqi diyi pu bihua tuxiang zhong fosi jianzhu weili ‘數字壁畫建築’敦煌壁畫中建築的數位化構建——以敦煌莫高窟第361窟南壁西起第一鋪壁畫圖像中佛寺建築為例” [Digital construction of the architecture in Dunhuang murals—

architecture in Mogao Cave 217, whose layout had been reconstructed by previous scholars, was re-created by digital artist Ning Yuhang 寧煜航 into a virtual experience of constructing it block by block (figure 0-11).¹⁰⁹

While new visual technologies have helped the visionary architecture in the pictorial space look real, they have also complicated the concept of *reality* associated with the material thing in the actual space. An art installation at the permanent exhibition *A Thousand Years of Construction: The Beauty of Dunhuang Architecture* at the Exhibition Center of the Dunhuang Academy since May 2022, which I helped curate and for which I produced display objects, suggests a dialog between the real and virtual spaces. In the installation, a walk-through video of a Pure Land building complex is projected on the rear wall of a cave-like showcase. The wall bearing the animated Pure Land scene stands as a backdrop of a physical model of another Pure Land building complex (figure 0-12). The juxtaposition of the two architectural images, one alluding to an enterable space behind the wall surface and the other making that kind of space present in a miniature scale, questions whether a line can be drawn between the virtual and the real. Technically speaking, a clear distinction of real and virtual can be made about the material thing and its digitized replication.¹¹⁰ Yet the mind's eye may willingly ignore that distinction when spatial imagination is stimulated. The two models' formal correspondence and complementary visuality enhance the viewer's illusion that the architectural image has been

With a case study of the Buddhist temple architecture in a painting in Mogao Cave 361], *Dunhuang Yanjiu* 192, no. 2 (2022): 125–35. In addition, my master's thesis at the School of Architecture, Princeton University, 2016 explored the architectural complex in a Pure Land transformation tableau in Mogao Cave 172.

109. The walk-through video showing the construction procedure of the building complex in the Pure Land transformation tableau of Mogao Cave 217 can be viewed at the online version of the exhibition “Thousand Years of Construction” website:

<https://www.youconf.cc/websites/dunhuang/index.html#video>.

110. Pan and Fan, *Dunhuang zhenshi yu xini*.

“enlivened” and that it has “jumped out” from the pictorial plane into the real life.¹¹¹

To take a step further, a visual object, even if it represents, imitates, or symbolizes other space, has its own place in this visual milieu. In this case, the physical and digital models are parallel existences modeled after the Pure Land images, but as long as they are placed in one space, they have visual resonance with each other. Echoing the conception of image (*xiang* 像) as analogue in ancient China, these parallel existences are as effective as their counterparts in recreating a spatial experience of the original, which might have existed only in the mind.¹¹² The nonextant ancient Chinese architecture, a phantom in studies of Dunhuang architecture, is one such idea of “the original.” Although it is always meaningful to trace that origin, its analogues—the image of architecture and the cave architecture—might not provide any straightforward path. Nonetheless, if their efficacy in space-making and placemaking is recognized, these Dunhuang materials can serve, as surrogates for actual buildings, as the “best, most faithful, and most valuable materials” for architectural studies.¹¹³

My Approach and Steps

Classical studies of Dunhuang architecture have sought to detect formal features of stand-alone architecture, especially Buddhist, from the images of architecture in mural paintings, the architectural typology of the cave chambers, and the timber-framed construction of the cave-

111. Zhang Yujie 張玉潔, “Dunhuang bihua zhong de jianzhu ‘huo’ le 敦煌壁畫中的建築‘活’了” [Architecture images in the Dunhuang murals have been “enlivened”], *Renmin Ribao (haiwai ban)* 人民日報(海外版) [China daily (overseas version)] June 7, 2022, http://paper.people.com.cn/rmrbhwb/html/2022-06/07/content_25921682.htm.

112. For discussion of the ancient Chinese idea of *xiang*, see Jessica Rawson, “The Power of Images: The Model Universe of the First Emperor and Its Legacy,” *Historical Research* 75, no. 188 (2002): 146–49.

113. Liang, “Dunhuang bihua zhong suo jian zhongguo gudai jianzhu,” 2.

front porches. Those studies have led to two accepted ideas about cave architecture and the way to study it. One idea is that the cave is an “architecture of the interior”; the other is that the main value of the cave for the studies of architectural history lies in its representation of something else. While both ideas have been reconsidered and modified in the recent years, they still underlie architectural studies of the cave temples. A new set of ideas of cave architecture must be established before new knowledge of them is acquired.

This dissertation challenges the two accepted ideas in Dunhuang architectural studies by revisiting the concepts of space and place. As art historians have already demonstrated, space is not just about the physical dimensions and shapes of a void volume. Furthermore, as humanist geographer Yi-Fu Tuan 段義孚 (1930–2022) has theorized, space can be approached as a multiplicity of mental constructs that all rely on the interaction between the human body and its environment, whereas place is space enriched with the experiences and knowledge of human beings and given social and geographical locations.¹¹⁴ From the perspective of human experience, the cave temple, as exemplified by those at Mogao, is a unique kind of architecture that encompasses four kinds of spaces: the natural, the social, the lived, and the symbolic.

These spaces coexist in two pairs. The first pair—the natural and social spaces—allows us to inspect the relationship between nature and artifice in the production of this unique type of architecture. The natural space, referring to the Mogao cliff and the Daquan valley between Mounts Sanwei and Mingsha, is an important factor that the cave constructions must have considered. The social space, meaning that any cave is a social production, denotes the decisions

114. Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1977). I thank Wei-Cheng Lin for providing the succinct summary of Tuan’s theory.

made by the cave makers during the construction, renovation, and maintenance of a cave.¹¹⁵

From this perspective, rather than treating the Mogao caves as representations of architecture, an architectural study can approach it as an actual locale subject to the need to deal with real architectural problems, including siting, arrangement of solid and void spaces, façade building, and maintenance and renewal of the built environment, among others.

Inseparable from the problems of real architecture is the religious imagination of architecture. The second pair—the lived and symbolic spaces—helps us understand the mutual relationship between actuality and virtuality in the spatial art of the cave. The lived space refers to the space that is perceivable, usually through ritual activities that require the worshiper to move through the space. The symbolic space refers to an idea of space of which the lived space is a sign, a representation, or an imitation.¹¹⁶ It is usually conveyed by the optical forms in a cave, and it relied on the viewer's contemplation. The mutual relationship might be understood in terms of two aspects. On the one hand, since a Buddhist sacred space is usually conceived as a dwelling place of a deity, often represented by a main icon in the space, the lived space has an imaginary aspect. The viewer normally conceives that the space is not designed for him or her, but for the deity, and a consecrated space must be enlivened from the point of view of the deity. On the other hand, it is a space's actuality that enables its imaginary aspect to exist in collective memory. It should not be ignored that more often than not, both modern and medieval beholders have been compelled to see the architectural imagery provided by the cave. In other words, the *virtuality* of a cave—"a certain force in having the effect of what they are not in fact," as defined

115. The cave makers include Buddhist priests and institutes, fundraisers, patrons, and artisans. Cave makers may adopt one or more identity.

116. For the symbolism of architectural space, see Dietrich Seckel, *Buddhist Art of East Asia* (Bellingham: Western Washington University, 1989), 74–78.

by art historian David Summers—is a sharable experience of its lived space.¹¹⁷

Furthermore, this dissertation sees sacrality, the attribute that makes a place sacred, as a constructed quality that can be introduced, enhanced, relocated, and expelled. The sacrality of Mount Sanwei is believed to have been the reason Yue Zun 樂尊, a wandering monk associated with the founding myth of the Mogao caves, chose the Mogao cliff as the site of his cave. As a ninth-century Dunhuang document reports, “Paying homage to the mountain [Sanwei] from afar, he [Yue Zun] saw a golden light that had the appearance of a thousand buddhas. He thereupon dug the cliff in midair, building a cave and likeness [of the buddhas].”¹¹⁸ But when Priest Wang came to Mogao and saw the ancient caves, his first impression was that “The Western [Pure] Land of Bliss must be here!”¹¹⁹ Then, after the religious landscape had become a cultural heritage site, the Dunhuang Academy stated that the Mogao site is “a cultural and art treasury that synthesizes architecture, statuary, and mural painting.”¹²⁰

117. David Summers, *Real Spaces: World Art History and the Rise of Western Modernism* (New York: Phaidon, 2003), 431.

118. 至此，遙禮其山，見金光如千佛之狀，遂架空鑿岩，大造龕像。 *Mogao ku ji* 莫高窟記 [Record of the Mogao caves], P.3720, 865 CE. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 695. Also see appendix B-1.

119. 西方極樂世界，其在斯乎! Excerpt from “Taiqing gong da fangzhang daohuisi wang shi fazhen muzhi 太清宮大方丈道會司王師法真墓誌” [Memorial texts of Priest Wang Fazhen (i.e., Wang Yuanlu), the great abbot of the Palace of Superior Purity, supervisor of religious affairs], *DHSZ* 660–61.

120. 集建築彩塑壁畫為一體的文化藝術寶庫。An excerpt from a succinct, official introduction of the Mogao caves by the Dunhuang Academy in 1994, as could be seen on the back side of the stele recording the official designation of Mogao as a major historical and cultural site protected at the national level. “Wenhua yishu baoku 文化藝術寶庫” was first proposed in the 1950s, as could be seen in Chang Shuhong, “Dafang guangcai de qianfo dong 大放光彩的千佛洞” [The brilliant thousand buddha caves], *Gansu Ribao* 甘肅日報 [Gansu daily], September 30, 1959, cited from Chang, *Dunhuang shiku yishu*, 35. An early expression of the conception that the Mogao caves are a unity of architecture, polychromic statuary, and mural painting is Duan Wenjie, “Dunhuang caisu yishu 敦煌彩塑藝術” [Polychromic statuary art of

The scientific management of Mogao, which aimed to replace religiosity with the rationalized appreciation of art and culture, is not the end of the story. In 1948, while standing in front of the Mogao cliff for the first time in her life, traveler and author Irene Vongehr Vincent (1919–97), an American expat living in China, felt “as though I had stepped into one of the paradise scenes of the wall-paintings.”¹²¹ For Vincent and probably many contemporary pilgrims to Mogao, the cave temples alone have been the sacred place for cultural, historical, and personal aspirations. Sacrality was not an inherent quality of the Mogao cliff, but it has been tightly connected with the production of a spectacular religious landscape. Therefore, this dissertation looks at how sacrality has been made to shift by architectural practices at Mogao during a critical period. Indeed, placemaking and history making at Mogao caves are highly intertwined. Space makes the passage of time visible by displaying a stratigraphy of construction or a symbol of the times, whereas time makes a space a place by adding to it liveliness and memory.

The situatedness of the Mogao cave landscape has provoked me to explore a new way of narrating the construction history of the Mogao caves: spatially rather than chronologically. This dissertation does not attempt to provide a coherent timeline of the Mogao site’s architectural developments from a single perspective, which quite a few studies of Dunhuang art have adopted.¹²² Instead, it dives into the construction history and the comprehensive built

Dunhuang], originally published in *Dunhuang caisu* 敦煌彩塑 (Beijing: Wenwu chubanshe, 1978), cited from *Dunhuang shiku yishu yanjiu* 敦煌石窟藝術研究 [Studies of the art of the Dunhuang caves] (Lanzhou: Gansu renmin chubanshe, 2007), 127.

121. Irene Vongehr Vincent, *The Sacred Oasis: Caves of the Thousand Buddhas, Tun Huang* (Chicago: University of Chicago Press, 1953), 63.

122. See, for example, Ma, *Dunhuang Mogao ku shi yanjiu*; Wang Huimin 王惠民, *Dunhuang fojiao yu shiku yingzao* 敦煌佛教與石窟營造 [Dunhuang Buddhism and cave construction] (Lanzhou: Gansu jiaoyu chubanshe, 2013): 205–318.

environment in search of moments when the cave makers coped with the problems of placemaking and history making.

Hence, whereas the current approach to cave architecture is mainly typological, my basis is the actual cliff site and the building history of the caves. Although the cave complex looks like an inseparable whole, some of the caves play a more critical role than others in shaping the overall architectural imagery of Mogao. Devices for vertical transportation, such as multistoried pavilions, tunnels, and stairways, were introduced at several spots, and such spots of accessibility control gradually developed into landmarks. These landmark caves and cave groups are usually larger, taller, or deeper than the background caves, which are evenly distributed in horizontal levels (figure 0-13). This dissertation takes the landmark caves as a key to understanding the spatial relationship among the caves in the dynamic process of the Mogao complex's expansion.

Because of their prominence, the landmark caves have a more complex building history than most other caves, and more historical records of them remain. Their construction and renovation reflect the major shifts in construction paradigms. Judging from the landmark caves, the most complex building practices occurred between the ninth and eleventh centuries. This period saw a mixed pattern of construction and renovation and the quantity was extensive. The landmarks that had been built in the Tang or before acquired new architectural appearances in the Tibetan and Guiyijun periods. And those that were created in these periods, represented by the three-story pavilion, explored more possibilities in cave composition and reintegration than earlier ones. Generally speaking, these building practices set up the fundamental framework of the Mogao cave landscape as it is.

This dissertation investigates those among the landmarks of Mogao that define the four most recognizable cave districts: the three-story pavilion, the north and the south colossal-image

caves, and the old district where the primary cave group and three prominent tenth-century caves concentrate. Furthermore, particular attention is paid to caves in these districts that represent new trends of composite images of architecture, including the syncretic caves centered around pagoda images and those whose timber-framed ante-halls should be viewed together with the open-air mural.

The dissertation begins with investigating the pavilion as a microhistory that demonstrates the architectural transformation of the Mogao cave complex. Tracing this history from modern times to the Tibetan and Guiyijun periods and even earlier, it reveals the collective efforts and dynamic visions behind the architectural monument. The next four chapters contextualize the pavilion's complex form and changes in the architectural developments of the Mogao cave complex during the Guiyijun period. They respectively examine how four new paradigms—synthesis of pictorial and spatial arts, competition for verticality, externalization of Pure Land imagery, and cave grouping—made the cave architecture more comprehensive and the Mogao site more wondrous.

Chapter 1, “Becoming the Pavilion,” reconstructs the process of the pavilion's becoming, highlighting its continual redevelopment and reintegration throughout the ninth to eleventh century. It reads the architectural conception of the pavilion as something that was shaped and sharpened during the long process of its construction and renovation and thereby unpacks the cave architecture's medium specificity. The case of the pavilion demonstrates that rather than mere imitation, the cave architecture has a mutual and profound relationship with the stand-alone architecture.

Chapter 2, “Enlivening Pagodas in Caves,” investigates how a pagoda-themed cave can embrace multiple pagoda imageries that are conveyed through pictorial, plastic, and architectural

mediums and institute a ritual place endowed with miraculous forces. In a case study of Mogao Cave 14, a late-Tang central-pillar cave built next to the pavilion, the chapter explores the visual, spatial, and temporal dimensions of conveying liveliness in cave architecture. The image of the pagoda or the pagoda-pillar in a cave temple can be integrated into one entity to encompass manifold imageries, which may not coexist in an actual pagoda.

Chapter 3, “Imaging the Unparalleled Height,” demonstrates the leading role of the colossal-image caves and their multilevel porches in shaping the overall imagery of the Mogao complex as heavenly palaces of unparalleled height. Cave-front architecture, featuring porched antechamber, ante-halls, and pavilions, shaped and reshaped the appearance of the Mogao cave complex. If the sixth-century imagery of Mogao was of a secluded monastic dwelling in mountains, then the Tang- and Guiyijun-period imagery is of soaring pagodas and heavenly palaces. The study also considers how the colossal-image pavilion led to the advent of vertical cave composites, the monumental ante-hall, and a philosophical view on the transiency of Buddhist architecture.

Chapter 4, “Constructing a Pure Land in Situ,” understands the sweeping refurbishments of the Mogao cliff of the tenth century as a new paradigm of Pure Land art. This paradigm integrated the interior and open-air murals and the timber-framed porches into a tangible image of the sacred realm. The study focuses on how the open-air murals—added during the extensive façade-building projects in the tenth century—externalized the Pure Land scenes and anchored it to the site. For instance, Cave 94, a monumental hall cave adjacent to the north colossal-image cave, conveyed the appearance of a celestial pavilion that was half built and half painted.

Chapter 5, “Renewing the Old District,” discusses the key roles the central-altar caves commissioned by Guiyijun leaders played in redeveloping the old district of Mogao into

an allusion to the future Buddha Maitreya's Pure Land, the only Pure Land prophesied to appear in the mundane world. The study looks at how these family caves of the Cao clan created correlations between ancient and contemporary caves (Caves 275, 55, and 454) and how the temporalities of past, present, and future were represented and incorporated into a system of religious space. It demonstrates their efficacy in the preservation of preexisting caves, articulating the specific identity of the cave cluster, and integrating the overall built environment at the Mogao complex.

This dissertation is built on a large amount of archaeological information. In the recent two decades, scholars at the Dunhuang Academy, Lanzhou University, and a few other universities have greatly promoted comprehensive case studies of representative caves at Mogao, especially those built in the ninth and tenth centuries. The massive amount of data of the individual caves makes an archaeological approach possible. Moreover, since the renovation and archaeological clearance of the pavilion around 2002, more material about the previous conditions of its constituent and neighboring caves has surfaced. At Dunhuang Academy, I was permitted to examine many caves, archives, and collections under its administration in 2015–22 and therefore collected primary sources, some of which had not been noticed or studied before. More than a thousand strolls in front of the Mogao cliff have brought me closer to the hermits who managed the site in the past. It is the archaeological traces, visual representations, and perceptual interpretations that have made possible my detective work of the scenarios of a cave's design, construction, modification, and reception.

The illustrations of this dissertation, many of which are composite images and involve reconstruction and speculation, are integral part of my argumentation. Some visual properties of the Mogao caves, such as their pictorial contents and physical forms, have often been analyzed

separately, so any attempt to understand the total space must integrate the seemingly discrete sources. Some other visual properties, especially the cave exteriors, have largely decayed or been altered, so any study of them could not get rid of logical deduction. To better illustrate the multivalent spaces—natural, social, lived, and symbolic—that the Mogao caves defined, I experimented with conjoining the extant, nonextant, and imagined architectural forms via digital modeling and imaging. My analyses of these complex or unapparent visual works have been facilitated by four types of my self-invented illustrations: (a) architectural drawings and renderings of caves and cave groups with my reconstruction designs of their porches, (b) diagrams that not only show the distribution of iconographical contents in a cave suite but also approximate the optical forms of the series chambers, (c) trace-copy line drawings of the interior and open-air murals that focus on the image of architecture and are supplemented by my theoretical reconstruction of the damaged or overlapped portions, and (d) drawings and renderings of my deductive designs of the pagodas and palatial complexes represented by the pictorial and/or plastic contents in a cave. The spatially coherent and visually detailed illustrations may persuade a reader to accept everything as concrete and precise, but it must be pointed out that any design of the nonextant works, especially the roof style and decorative patterns, remain hypothetical. Despite the risk of misleading, this visualizing method has been chosen because it best presents my findings of the lifecycle and total space of the caves.

In this way, this multimodal dissertation brings the separate investigations of cave art into a spatial context. It pays attention to the various scales with which the cave art engages, namely, the visual space in a single cave chamber, the series of spaces in a cave temple, the cave group comprising two to five caves, the cave cluster comprising a dozen caves and cave groups, the cave district comprising a few dozen caves, and the complex comprising a few cave districts.

This dynamic conceptual situating of the visual art in the cave space recapitulates the experience of a visitor to the cave, from distant glimpse, through anticipatory approach, to close-up and enlightening encounter.

Chapter 1

Becoming the Pavilion

When modern viewers confront a cave composite like the three-story pavilion, they tend to interpret it as an imitation, as little more than a replica of a building prototype such as a monastery or a pagoda. Such a perception, colored as it often is by the numbing distance of time, overlooks the remarkable originality of the cave architecture, which is more accurately read as a potent artform in its own right. This chapter proposes to read the architectural conception of the pavilion as something that was shaped and sharpened *during* the long process of its construction and renovation and thereby to unpack the cave architecture's medium specificity.

This chapter investigates the metamorphosis of the pavilion in spatial contexts of three scales, namely, the cave district, the single cave, and the cave composite. The first section contextualizes the gradual formation of the pavilion in the development of the northmost district. The construction and renovation of the pavilion played a leading role in the establishment of three architectural principles for the district. In turn, the other caves in the district help verify the construction sequence of the pavilion and the initial designs of its constituent caves. The second section focuses on Cave 365, which is the earliest built constituent of the pavilion and a unique cave in the history of the Mogao caves. Through a theoretical reconstruction of the initial cave design, the study demonstrates how the Tibetan-period cave makers appropriated preexisting cave designs for a novel construct of a field of dharma. The initial Cave 365 testifies to the emerging notions of siting, layering, and multiplicity that continued to present in subsequent developments of the pavilion. The third section sorts out the subsequent developments of the pavilion, which resulted in an unprecedented level of integrity in the eleventh century. The

formal integrity was achieved through the emphasis on the vertical order, the consistency of Pure Land imageries, and the unifying pavilion structure and decoration. Thus, the pavilion was integrated to encompass a series of architectural imageries, thereby bridging the lived and symbolic spaces.

Architectural Principles and Diversity

The vertical composition of Caves 366, 365, and 16 has been a key for modern viewers to understand the architectural developments of the Mogao caves. As early as the first half of the twentieth century, the unifying façade and the vertical alignment were recognized by Pelliot and Oldenburg.¹ The vertical structure was first visualized by Shi Zhangru's long-section drawing that cut through the central axes of the three caves (figure 1-1).² Since Hongbian's engagement with the initial construction of Caves 365 and 17 was confirmed after debates in the 1950s through the 1980s, historians have not just consolidated the connection between these two caves but also have sought to uncover the complete vision of Hongbian.³ As proposed by Dunhuang

1. Pelliot drew a façade and numbered Caves 16 and 365 under one single number “163.” Oldenburg followed Pelliot's numbering system and documented Cave 366 in textual records. Pelliot, *Les grottes de Touen-houang*; Pelliot and Geng, *Boxihe Dunhuang shiku biji*, 358–59; Pelliot, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 6:363–65.

2. Shi noticed the vertical composition of Caves 16 and 365 when he surveyed the cave on July 13, 1942, as the composition is reflected in the sectional drawing of the antechambers of the two caves. Then, a set of plan and sectional drawing of the four caves was first published in 1962. Later, the sectional drawing was included in *Mogao kuxing*, 2, fig. 125.

3. Caves 16 and 17 were first attributed to Hongbian based on the location and contents of the Dazhong stele—a stone stele originally placed in Cave 17 that bears Hongbian's appointment decree dated to the Dazhong era, whereas the attribution of Cave 365 took more time due to the varied names used to refer to the monk. In the 1950s–60s, scholars Jin Weinuo 金維諾 and Shi Zhangru identified the Wu Sengtong stele (P.4640) as the merit record of his construction of a “Seven Buddha Hall,” that is, Cave 365. Jin, Chikusa Massaki 竺沙雅章, and Fujieda Akira 藤枝晃 all identified Hongbian with Wu Sengtong 吳僧統, whereas Su Yinghui 蘇瑩輝 and

historian Ma De in the 1990s, the leading view about the founding of the pavilion is that Caves 366, 365, and 16 were built from top to bottom during Hongbian's lifetime.⁴ Thus, not only Cave 17 but also the pavilion has been conceptualized as an architectural monument made by and for Hongbian, or at least by the Wu family of which he was a member.⁵

Since then, the pavilion has gradually come to be treated as an architectural ensemble and even a type of cave architecture. Cave groups and composites were not initially taken as a type of cave architecture, but they gradually caught scholarly attention as the studies of Chinese caves advanced.⁶ The vertical composition was first recognized as a “composite type” by Sun Ruxian and Sun Yihua.⁷ Based on formal analyses, they tend to view the composite design as a

Ueyama Daishun 上山大峻 urged for different identifications of Hongbian, Wu Sengtong, and Wu Heshang 吳和尚, three names and titles appeared in Dunhuang documents. In the late 1970s to the late 1980s, Dunhuang scholars Ma Shichang 馬世長, Li Yongning 李永寧, and He Shizhe 賀世哲, based on the Tibetan and Chinese inscriptions in Cave 365, identified its cave owner to be Hongbian. Since then, the same identification of Wu Sengtong and Hongbian has generally been accepted in the field. For a review of the debates, see Zheng and Zheng, *Dunhuang bei ming zan jishi*, 278–79.

4. Ma, *Dunhuang Mogao ku shi yanjiu*, 98–99.

5. The view that that pavilion as an architectural monument made by and for Hongbian is uncritically adopted by almost all studies related to the pavilion. Fujieda Akira, based on the huge accumulation of manuscripts, which would have been an impossible mission for a single generation, believed that the pavilion had been built and maintained by the Wu family. Fujieda Akira, “The Tun-huang Manuscripts,” in *Essays on the Sources for Chinese History*, eds. Donald D. Leslie, Colin Mackerras, and Wang Gungwu (Canberra, 1973), 128.

6. The only type of composition considered as a cave type before the beginning of this century is the multi-chambered vihara cave. For earlier studies, see Xiao, “Dunhuang mogao ku de dongku xingzhi;” Xiao, *Dunhuang jianzhu yanjiu*, 33–60; Su, *Zhongguo shiku si yanjiu*, 16. For later studies that seriously investigate the construction of multi-cave compositions, see Giuseppe Vignato (Wei Zhongzheng 魏正中), *Qudian yu zuhe: Qiuci shikusi siyuan yizhi de kaogu xue tansuo* 區段與組合——龜茲石窟寺院遺址的考古學探索 [Districts and groups: An archaeological investigation of the rock monasteries of Kucha] (Shanghai: Shanghai guji chban she, 2013), 1–68, 90–105; Angela Falco Howard and Giuseppe Vignato, *Archaeological and Visual Sources of Meditation in the Ancient Monasteries of Kuca* (Leiden: Brill, 2015), 3–54.

7. Sun and Sun, *Shiku jianzhu juan*, 239–40.

monastery complex laid out vertically.⁸ Later, Dunhuang archaeologist and historian Sha Wutian 沙武田 proposed that this type was a “conscious [cave] configuration” specific to the Tibetan period in Dunhuang, which also witnessed the construction of three out of the four extant vertical cave groups.⁹ Building on this thesis, Tibetan cave art specialist Zhao Xiaoxing 趙曉星 argued that this composition was analogous to “a Chinese multilevel pavilion plus a stupa-shaped finial.” By associating this vertical configuration with the Grand Jewelry Tower-Pavilion mandala and early Tibetan temple-halls described in Buddhist texts, Zhao named it the “cave architecture of the jeweled pavilion style” (*baolouge shi shiku jianzhu* 寶樓閣式石窟建築).¹⁰ Current scholarship, which has demonstrated that a cave composite can convey more meaning than the sum of its constituent caves, focuses on the architectural form that the cave composite represents, such as that of a monastery and a pavilion-style pagoda.

However, the basis of these studies, which is the conceptualization of the three caves as a whole, deserves a reexamination. The vertical directionality, though prominent, cannot explain the overall architectural conception of the pavilion, which is a large-scaled, three-directional, and changing complex. There is inadequate evidence about the initial construction dates and

8. They see the configuration as “probably a different expression of central-pagoda-pillar cave” that “forms a monastery layout of the front hall, the rear hall, and the pagoda” in a vertical alignment.

9. Sha Wutian, “Dunhuang Tulufan yijing sanzang fashi facheng gongde ku kao 敦煌吐蕃譯經三藏法師法成功德窟考” [A study of the merit cave of Facheng, the sūtra translator triple tripaka dharma master of Tibetan Dunhuang], *Zhongguo Zangxue* 中國藏學 [China Tibetology], no. 3 (2008): 44–45.

10. Zhao Xiaoxing 趙曉星, “Dunhuang tubo shiqi ta, ku chuizhi zuhe xingshi fenxi tanxi—Tubo tongzhi dunhuang shiqi de mijiao yanjiu zhi wu 莫高窟吐蕃時期塔, 窟垂直組合形式探析——吐蕃統治敦煌時期的密教研究之五” [A preliminary study of the vertical configuration of cave and pagoda during the Tibetan period at the Mogao caves—the fifth in the series studies of esoteric Buddhism at Dunhuang during the Tibetan-Occupied period], *Zhongguo Zangxue*, no. 3 (2012): 94–98.

authorship of the main caves and almost none about the origins of their unification. The construction dates of Caves 365 and 17 are relatively certain as they bear dated inscriptions, but those of Caves 366 and 16 were based merely on convention and assumption. As Ma De states, his hypothesis about the sequential construction of Caves 366, 365 and 16 is “based on the general patterns of cave construction on the cliff face.”¹¹ But how could one determine whether the construction of the pavilion followed the general patterns of cliff-face use? The following analysis will critically unravel the applicable patterns of cliff-face use for the cave district by considering two hitherto unstudied factors: the context of the cliff face and the ways in which the caves of the pavilion intervened and appropriated it.

District Developments

This subsection investigates the general architectural developments of the cave district to which the pavilion belongs. Since this district is located at the northern end of the south section of the Mogao caves, it is referred to as “the northmost district” for convenience. It comprises some forty caves, which the Dunhuang Academy designates as Caves 1–20, 353–70, 476, and the auxiliary caves of some of them (figure 1-2). Pivoting on the pavilion, the northmost district consists of one to four levels of caves distributed along a sloped path connecting the top of the sand dunes and the Daquan valley (figure 1-3). The border between the northmost district and the adjacent district on its south is indicated by two formal features. One is a drastic shift from the honeycomb-like lump of three to four levels of caves to the regular distribution of two levels. The other is a protruding rock formation between Caves 20 and 351 on the lower level and between Caves 370 and 371 on the upper level (figure 1-4). The northmost district was accepted

11. 按照崖面上洞窟營造的一般規律。Ma, *Dunhuang Mogao ku shi yanjiu*, 98.

to have been developed no earlier than the Tibetan period,¹² yet recent archaeological discoveries of Sui-period monastic cell caves indicate a prehistory of the cliff site before the advent of Cave 365.¹³ A spatial analysis of the distribution of caves, especially the intersection and overlapping of caves, will reveal a more comprehensive stratigraphy of cave construction.

Seemingly disorderly, the distribution of caves in the northmost district mostly follows three principles of connection, namely, the horizontal, the diagonal, and the vertical (figure 1-5). The horizontal principle is applied to two relatively regular horizontal levels of caves. One comprises the top-level Caves 7 and 358–64 on the north side of the pavilion, which is about half a level lower than the upper level of caves on the south side of the pavilion starting from Cave 369 (figure 1-6). The top level of the district is 1.5 meters above the middle level of the pavilion. The other is the level below, comprising Caves 14 and 476 on the north side of the pavilion and Caves 356–53 on the south side. The north half is connected to the sloped path, whereas the south half is connected to the lower level of caves in the adjacent district (figure 1-7). Since a cave of this level—that is, Cave 476—is located between Caves 16 and 365, this study refers to the level as the mezzanine level. The diagonal principle means that Caves 1–6 and 8–20 are distributed along the sloped path (figure 1-8). Although the caves are not on the same level, they are accessible from the grounds outside, and therefore this study refers to it as the ground level.

12. Fan Jinshi 樊錦詩 and Zhao Qinglan 趙青蘭, “Tubo zhanling shiqi Mogao ku dongku de fenqi yanjiu 吐蕃佔領時期莫高窟洞窟的分期研究” [Dating on Tibetan caves of Dunhuang], *Dunhuang Yanjiu* 41, no. 4 (1994): 76–94; Sha Wutian, *Tubo tongzhi shiqi Dunhuang shiku yanjiu 吐蕃統治時期敦煌石窟研究* [Studies on the Buddhist cave-temples of Dunhuang during the Tibetan period] (Beijing: Zhongguo shehui kexue chubanshe, 2013), 6–7.

13. Zhang Xiaogang 張小剛 and Wang Jianjun 王建軍, “Dunhuang mogao ku di 476 ku kaogu baogao 莫高窟第476窟考古報告” [Archaeological report of Mogao Cave 476], *Dunhuang Yanjiu* 85, no. 3 (2004): 95; Fan Jinshi and Cai Weitang 蔡偉堂, “Guanyu Dunhuang Mogao ku nanqu dongku bubian kuhao de shuoming 關於敦煌莫高窟南區洞窟補編窟號的說明” [Notes about the newly added cave numbers of the southern section of the Dunhuang Mogao caves], *Dunhuang Yanjiu* 102, no. 2 (2007): 48, 50.

The sloped path facilitates the circulation between the caves on this level and that between the upper levels of caves. The vertical principle means that the pavilion interrupts the horizontal levels and provides vertical connection for four caves on four unique height levels. A vertical device presumably existed between Caves 366 and 365 on the north side and Caves 367 and 368 on the south side (figure 1-9). The top level of the northmost district and its adjacent district comprises the horizontally connected Caves 358–64 and 369–427, whereas Cave 366, the third-level cave of the pavilion, signifies an extra top level that is accessible only via the vertical device (figure 1-10). Therefore, the first and second levels of the pavilion roughly correspond with the top and ground levels of the surrounding caves, yet climbing up and down stairways is needed for traversing Cave 365. The top level of the pavilion occupies a level higher than the top level of the district. The mismatched heights within each level are the secret that makes the pavilion, the landmark cave group, stand out from the background caves.

The spatial arrangements in the district casts doubt on the application of the general principle of cliff use. Based on Ma De's keen observation of the developments of the Mogao cliff up until the eighth century, two general patterns of the cliff face use can be summarized as follows.¹⁴ The first pattern is to construct initially at the upper part of a cliff and subsequently develop the levels below. This is exemplified by the district on the south side of the northmost district. This two-level horizontal sprawl of caves comprises an upper level of Sui-period caves (376–427, 306–17) and a lower level of Tang-period caves (318–49).¹⁵ The second pattern is to construct initially at the middle-upper part of a tall cliff and subsequently develop the levels below and above. In a multileveled cave area such as the old district, the early caves, built

14. Ma, *Dunhuang Mogao ku shi yanjiu*, 50–90.

15. This district is one of the two major horizontal sprawls of the Mogao cliff. The other is the Tang-period caves between Caves 130 and 96, which will be discussed in chapter 3.

around the fifth century, are sandwiched between the latecomers.¹⁶

These two patterns are based on the principle of horizontal connection, but the northmost district, which displays three principles of connection, is more complex. The first pattern is contingent on the special topography of the northmost district, as the top and the ground level converge into one at the top section of the slope path. Moreover, the horizontal flow of the top, mezzanine, and ground levels are somewhat interrupted by the pavilion. The vertical and diagonal interruptions imposed certain restrictions on the further expansion of the south section of the Mogao caves, thereby defining the northern end of it. Compared to the first pattern, the second seems to better explain the existence of the extra top level. Economically speaking, the exploration of an additional level usually comes after the existing levels are occupied. Nonetheless, both of the two general patterns could lose efficacy in spots that have been redeveloped multiple times under varied principles. The exact procedure in which the initial construction and the subsequent redevelopments of the pavilion intervened with the preexisting conditions of the cliff face needs further investigation.

The three architectural principles of cave distribution are the results of the long-term interaction between the expanding cave complex and the cliff site. Generally speaking, the historical formation of the district went through four phases: initial development as a pragmatic, subordinate zone of the crescent Mogao complex; the northward expansion of the ritual spaces of the Mogao complex in the Tibetan period (787–848); the setting-up of the historical path and gateway in the Guiyijun period (851–1036); and the re-demarcation of the complex in the late-Guiyijun, the Xixia (1038–1227) to the Yuan periods (1271–1368). Judging from dated

16. For the construction sequence in the central area of the old district, see chapter 5 and appendix E.

inscriptions and mural painting styles, the northmost district took form as a district of decorated caves in the ninth and the tenth centuries and continued to be modified in the eleventh to the fourteenth centuries.¹⁷ The Tibetan-period construction of Cave 365 could be viewed as the beginning of the ritual art transformation of the district.

Prior to the construction of Cave 365, the northmost district was not a blank slate. Rather, the cliff face was occupied by a cluster of monastic cell caves. These small and undecorated caves could be categorized into two groups by locations and contents. The first group comprises Caves 365A, 365B, 365C, and 365D, and the second group comprises Caves 362, 364, 357, and 476. The first group intersects Cave 365 from south to north (figure 1-11-a), whereas the second group is located in the lower and north vicinity but does not intersect with Cave 365 (figure 1-11-b). When they were discovered, the caves in the first group bore no murals or statues, whereas those in the second group contained life-sized images of monks and/or their attendants. Their construction can be dated to the Sui period or even earlier.¹⁸ And the adaptive reuses of the second group are preliminarily dated to the Tibetan and Guiyijun periods.¹⁹ As a result of severe damage, modification, and concealment, the construction layers of these caves are rather complex. For instance, the spatial relationship between Caves 365D and 364 resembles that of the main chamber and antechamber of one cave suite, yet my study of their construction

17. Dating is mainly based on the Dunhuang Academy's dating in Dunhuang yanjiu yuan ed., *Dunhuang shiku neirong zonglu* 敦煌石窟內容總錄 [Catalogue of the Dunhuang caves] (Beijing: Wenwu chubanshe, 1996). When dealing with debatable dating, the study also refers to Shi, *Mogao ku xing*.

18. The Dunhuang Academy's dating of the caves is the Sui period. *Dunhuang yishu da cidian*, 14. Cave 365A displays a spatial design strategy similar to the Northern-period vihara caves at Mogao, such as Cave 268.

19. Zhang Jingfeng 張景峰, "Dunhuang mogao ku de yingku ji yingxiang—yixin faxian de 476 ku tanqi 敦煌莫高窟的影窟及影像——由新發現的第476窟談起" [The shadow caves and shadow images in Dunhuang Mogao caves—Beginning with the newly discovered Cave 476], *Dunhuang Xue Jikan* 3 (2006): 107–15.

sequence suggests that Cave 364 was a subsequent expansion of the corridor to Cave 365D (figure 1-12). Cave 476, a two-chamber cave located between the first and second levels of the pavilion, has also undergone adaptive reuse and concealment; it successively served as monastic cell, storage space and shadow cave, and craftsmen's living quarter and workshop (figure 1-13).²⁰

These extant caves were built as modest, undecorated caves with or without an antechamber, designed for pragmatic functions such as the living and meditation needs of Buddhist practitioners. The decorated caves added later to the district could have completely erased the traces of more plain caves as such, yet one can still discern the cliff area that had been occupied by these undecorated caves (figure 1-14-a)—a thirty-meter cliff area of two to three levels of small caves that would have been replaced by Caves 358–65, 355, and 356 in the Tibetan period or later. The undecorated caves do not exhibit any alignments or grouping but are simply laid near one another or spread in all directions. They represent a “pre-architectural” property of the early or pragmatic caves.²¹ This property is still preserved in the appearance of the north section of the Mogao caves, especially the early groups at the southern end (figure 1-15). Yet in the northmost district of the south section, the pre-architectural property was eventually replaced by the architectural principles of the horizontal, vertical, and diagonal dimensions. When the undecorated caves were constructed, they were not connected to any

20. Some of the functional changes have been discussed in Zhang and Wang, “Dunhuang mogao ku di 476 ku kaogu baogao”; Zhang, “Dunhuang mogao ku de yingku ji yingxiang.” But generally speaking, the location, forms, and dating of the seven caves have not been understood precisely or accurately. To keep with the scope of this chapter, I only include my main observations here.

21. For a philosophical reading of the “pre-architectural” concept of space in caves, see Giedion, *Architecture and the Phenomena of Transition*, 2–3. For an astute reading of the spatial features of the early caves at the Mogao caves and its difference from the decorated caves, see Liu, “Architecture and Land on the Dark Side of the Moon,” 154–57.

decorated caves, since the Sui-period decorative caves were constructed over fifty meters away.²² Nevertheless, decorated caves were constructed around the south edge of the district in the first half of the Tang period (618–907). Thus, it seemed necessary to develop further north onto this cliff face that had only been dotted by the pragmatic caves.

The earliest decorated caves in the district were constructed on the top levels during the Tibetan period (figure 1-14-b). A booming construction period is evident in the advent of Cave 365 in 832–34 and a row of small caves to its north. The insertion of the row(s) of decorative caves to the cliff face was significant; it overruled the preexisting orderlessness of the district and built the base points of the architectural principles on the pre-architectural caves. The pragmatic caves have been half destroyed and hidden behind or below Caves 365 and 361, which defines the earliest horizontally connected row of caves in the district. The oblong form of Cave 365, which is the largest among the Tibetan-period caves in the district, reinforced the horizontal directionality. Except for Cave 365, the other Tibetan-period caves are small hall caves and feature esoteric Buddhist imageries.²³ The fact that the esoteric caves were constructed to demarcate the northern border of the decorated cave section is comparable to the northern end of the north section of the Mogao caves. Cave 465, which was constructed in the Xixia or Yuan periods, was an esoteric Buddhist cave located among the monastic cell caves and funerary

22. The distance between the current south and the north sections of the Mogao caves is about fifty meters, too.

23. For a Tibetan-period construction bloom in the district featuring esoteric Buddhist art, see Zhao Xiaoxing, “Mogao ku di 361 ku yu zhoubian zhongtang dongku de guanxi: Mogao ku di 361 ku yanjiu zhi jiu 莫高窟第361窟與周邊中唐洞窟之關係——莫高窟第361窟研究之九” [The relationship between Mogao Cave 361 and its neighboring Middle Tang caves: A serial study on Mogao Cave 361: 9], *Dunhuang Yanjiu* 141, no. 5 (2013): 28.

caves.²⁴ The fact that the undecorated caves are interrupted by the decorated caves reconfirms that they had existed prior to the decorated caves. Judging from the horizontal flow of cave constructions between Cave 370 and Cave 7, it is possible that some of the caves on the south and the top of Cave 365 were excavated during this period, although the initial designs have been almost completely erased by refurbishments in subsequent periods. The vertical composition might have germinated, but it was still a subordinate tendency compared with the predominantly horizontal flow.

The caves of the ground level were mostly constructed during the Guiyijun period (figure 1-14-c). Since the advent of Cave Suite 16/17, the ground-level caves—many of which are cave suites, too—were constructed in the late-Tang (851–907) or the Five Dynasties periods (907–60). This chain of caves clearly demonstrates the sequential construction principle of the cliff use theory: the further north the caves, the later they were constructed. Judging from the construction dates of caves and cliff-top pagodas along it, the sloped path was formed at latest in the Guiyijun period.²⁵ According to the Dunhuang manuscript “List of Caves for Distributing Lanterns during

24. The construction date is debatable; the current leading view is the late Xixia period, yet some suggest the Tibetan period or the Yuan period. For studies of Cave 465, see Yang Xiong 楊雄, *Dunhuang shiku yishu: Mogao ku di 465 ku* 敦煌石窟藝術：莫高窟第465窟 [Art of the Dunhuang caves: Mogao Cave 465] (Nanjing, Jiangsu meishu chuban she, 1996), 11–30; Xie Jisheng 謝繼勝, “Guanyu Dunhuang di 465 ku duandai de jige wenti 關於敦煌第465窟斷代的幾個問題” [Several problems about the dating of Mogao Cave 465], *Zhongguo zangxue*, no. 3 (2000): 75–92; Huo Wei 霍巍, “Dunhuang Mogao ku di 465 ku jianku shiji zaitan 敦煌莫高窟第465窟建窟史跡再探” [A revisit of the historical traces of the construction of Mogao Cave 465 in Dunhuang], *Zhongguo zangxue* 87, no. 3 (2009): 187–94; Ruan Li 阮麗, “Mogao ku di 465 ku mantuoluo zaikao 莫高窟第 465 窟曼荼羅再考” [A revisit of the mandala images in Mogao Cave 465], *Gugong Bowu Yuan Yuankan* 故宮博物院院刊 [Palace Museum journal] 168, no.4 (2013): 61–85. For the function of the neighboring caves, see Peng and Wang, *Dunhuang Mogao ku beiqu shiku*, 153–268.

25. In addition to the caves, there are two extant pagodas on the cliff top, including a half-

the Light Up on the Eighth Day of the Twelve Month” (Laba randeng fenpei kukan mingshu 臘八燃燈分配窟龕名數, 951 CE, D0322), about thirty-six caves between the pavilion and a freestanding building on the cliff top were treated as one zone for lantern distribution in the mid-tenth century.²⁶ The zoning matches the historical path and the quantity of caves in the northmost district. This historical path was used until modern roadways and bridges were built in the mid-twentieth century.²⁷ Furthermore, the relatively high distribution of the early caves and the Tibetan-period caves implies a previous path that was higher than the Guiyijun-period path. Although early cave temples might be located at an elevated spot on the cliff face, the pragmatic

damaged octagonal earthen pagoda and the Pagoda of the Hall of Heavenly Kings (Tianwang tang ta 天王堂塔). The latter is dated to circa 980s in the late-Guiyijun period. It complies with the northward development along the path. For studies of the pagoda, see Sun and Sun, *Shiku jianzhu juan*, 228, 240–41; Guo Junye 郭俊葉, “Yutian huangshi yu Dunhuang Niepansi 於闐皇室與敦煌涅槃寺” [Khotan royal family and the nirvana temple in Dunhuang], *Dunhuang tulufan yanjiu* 敦煌吐魯番研究 [Journal of the Dunhuang and Turfan studies] 18 (2018): 399–424; Neil Schmid, “Dome of Heaven: The Role of Esoteric Buddhism in the Hall of Heavenly Kings at Mogao,” *Studies in Chinese Religions* 7, nos. 2–3 (2021): 245–66.

26. Jin Weinuo, “Dunhuang kukan mingshu kao 敦煌窟龕名數考” [Study of the list of caves of Dunhuang], *Wenwu*, no. 5 (1959): 50–54; Ma De, “10 shiji zhongqi de mogaoku yamian gaiguan—guanyu ‘laba randeng fenpei kukan mingshu de jige wenti 10世紀中期的莫高窟崖面概觀——關於〈臘八燃燈分配窟龕名數〉的幾個問題” [Overview of the Mogao cliff surface in the mid-tenth century—Several question about the manuscript titled “List of caves for distributing lanterns during the light up on the eighth day of the twelve month”], in *1987 nian dunhuang shiku yanjiu guoji yantao hui lunwen ji* 1987年敦煌石窟研究國際討論會文集 [Proceedings of the international conference on studies of the Dunhuang caves in 1987], “Shiku kaogu 石窟考古編” [Section on cave archeology], ed. Dunhuang Academy (Shenyang: Liaoning meishu chubanshe, 1990), 40–52. For translation, see appendix B-10, zone J.

27. For Oldenburg and Needham’s records of the historical path at Mogao site, see Irina Fedorovna Popova, “S. F. Oldenburg’s Second Russian Turkestan Expedition (1914–1915),” in *Russian Expeditions to Central Asia at the Turn of the 20th Century*, ed. Irina Fedorovna Popova (St Petersburg: Slavica, 2008), 160–1; Joseph Needham’s sketchbook from his visit to the Buddhist grottoes at Chienfodong 千佛洞 (Qianfodong), Dunhuang, Gansu Province, China [NRI2/5/12/4], recto 3, Online database, Cambridge University Digital Library, <https://cudl.lib.cam.ac.uk/view/MS-NRI-00002-00005-00012-00004/3> (accessed January 3, 2023). For discussion of the historical path, see Shi, “Guanyu cangjingdong de jige wenti,” 34.

caves did not necessarily follow this rule.²⁸ For instance, the pragmatic caves in Zone A of the north section were constructed near a sloped path cut out from the cliff face (figure 1-15-a). By inference, the level height of the prehistorical path could have been about five to eight meters above the Guiyijun-period path (figure 1-14-a). Furthermore, the location of the Tibetan-period caves corresponds to the area of the early caves, indicating that large-scaled exploitation of the cliff face had not yet occurred. By inference, the large and deep caves on the ground level, which are all dated to the Guiyijun and subsequent periods, could have been excavated after the path was lowered. As the area of exploitable cliff face increased, the vertical composite of Caves 365, 366, and 16 reached a height of over twenty meters. A monumental gateway of the Mogao complex was thus formed at the spot where the sloped path reached the ground level of the Daquan valley.

The northmost district underwent multiple periods of refurbishments and renovation in subsequent times. While adaptive reuse and partial refurbishments had already occurred in the tenth century, the most significant renovation took place around the eleventh century. This century of political turmoil in Dunhuang covers the late-Guiyijun or the early Song (960–1279), the Uighur (1036–68), and the early Xixia periods.²⁹ The exact time and reasons for a complex-wide renovation wave have not yet been determined, but it is clear that a distinctive style, which is often referred to as “the green-background mural style,” was applied in these anonymous

28. For instance, the primary cave group of Mogao Caves 268, 272, and 275 was constructed about thirteen meters above ground, but the vihara Cave 487 was near the ground level at the time they were constructed, likely in the fifth century.

29. The Uighur period is proposed by some scholars as an intervening period between the Guiyijun and the Xixia periods. Yang Fuxue 楊富學, *Huihu yu Dunhuang* 回鶻與敦煌 [The Huihu-Uighurs and Dunhuang] (Lanzhou: Gansu jiaoyu chubanshe, 2013), 272–99.

renovation projects.³⁰ During this wave of renovation, the pavilion and the neighboring caves on its south side (Caves 353–56, 367, and 368) were fully repainted in the dominant green-background style. In contrast, none of the caves on the north side of pavilion received such treatment (figure 1-14-d).³¹ Since practitioners endeavored to maintain the cave borders where ritual activities most likely occurred, we can discern the liveliness of the cave spaces from the distribution of refurbishment projects. By inference, the pavilion was likely a major threshold of the cave complex in the eleventh century. The caves beyond it no longer received much maintenance, whereas those within the border it defines were considered. Only three caves at the northern end were dated by painting style and inscription to the Yuan period, marking the end of the premodern construction history of the Mogao caves.³²

In brief, the changing cliff face of the northmost district reveals that the development of the pavilion is intertwined with that of the Mogao complex. The construction of Cave 365 in the

30. The green-background mural style is a distinctive painting style that is found only in the Dunhuang caves. It is generally accepted that the earliest examples of it were made at the beginning of the eleventh century, and the latest examples belong to the early phases of the Xixia period. But scholars have not reached a consensus about whether the style was widely applied during the Guiyijun or the Xixia period. For reviews of the problems, see Wang Huimin, “Dunhuang xixia dongku fenqi ji cunzai wenti 敦煌西夏洞窟分期及存在問題” [The periodization of Xixia-period caves in Dunhuang and the remaining problems], *Xixia Yanjiu* 西夏研究 [Tangut research], no. 1 (2011): 59–65; Sha Wutian, “Dunhuang Xixia dongku fenqi yanjiu zhi sikao 敦煌西夏洞窟分期研究之思考” [Deliberations on the periodization of Xixia caves in Dunhuang], *Xixia yanjiu*, no. 2 (2011): 23–34; Liu Yongzeng 劉永增, “Dunhuang xixia shiku de niandai wenti 敦煌“西夏石窟”的年代問題” [The dating problem of the “Xixia caves” of Dunhuang], *Gugong bowuyuan yuankan* 215, no. 3 (2020): 4–14.

31. Only Cave 363 was fully repainted around this time, but a slightly different style was applied. This style features chubbier faces, peach-shaped canopies, and a grayer color scheme due to discoloration and is often known as “Uighur style.” Liu Yuquan 劉玉權, “Guanyu Shazhou Huihu dongku de huafen 關於沙州回鶻洞窟的劃分” [On the categorization of caves of the Shazhou-Uighur period], in *1987 nian dunhuang shiku yanjiu guoji yantao hui lunwen ji*, “shiku kaogu bian,” 1–29.

32. *Dunhuang shiku neirong zonglu*, 5; *Dunhuang Mogao ku gongyangren tiji*, 3.

Tibetan period signified a new direction of the complex's expansion; the construction of Cave Suite 16/17 in the late-Tang period saw the full exploitation of the cliff face and the maturation of a threshold zone at the complex's northern end, and the refurbishment of the three main caves that constituted the pavilion in the eleventh century unified them into a visually coherent entity and reinforced its position as a landmark at the border. It is clear that the mid-, lower-, and upper-level caves of the pavilion were constructed or renovated in varied contexts to set up the horizontal, diagonal, and vertical principles of the district. Therefore, it would be an oversimplification to see only the vertical dimension of the pavilion and explain it with the pattern of downward construction sequence. That pattern might be applicable to colossal-image pavilions or uninterrupted low cliff areas, but a close-up investigation of the complexity of the cave spaces of the pavilion impels us to reconsider.

Complex Cave Spaces

The complex forms and spaces of the pavilion reflects the three architectural principles and even the pre-architectural orderlessness of the northmost district (figure 1-16). It consists of three vertically aligned and fully decorated caves, an auxiliary cave cut onto the ground-level corridor, and three half-timber/half-rock-cut antechambers that share a three-level façade (appendix A). Apart from the vertical alignment, the lower- and middle-level caves of the composite explore the dimensions that are parallel with and perpendicular to the cliff face, respectively. Although little known, this composite is intersected by five pragmatic caves at various heights. Being neither a true cave group, pagoda, temple-hall, or monastery, the pavilion is a hybrid of positive and negative forms, geometric and “organic” compositions, timber structure and living rock, and habitable and inhabitable spaces.

The top-level Cave 366 is a small truncated pyramidal-ceiling cave that has a canopy-

shaped niche (*zhangxing kan* 帳形龕) on the rear wall (figure 1-17). The main chamber is sized 4.5 m (l) x 4.1 m (w) x 3.6 m (h) and accounts for only 40 percent of the width of its antechamber, that is, the top-level porch of the pavilion.³³ Despite its small size and common cave type, the cave occupies the highest spot in the district and thereby achieves an esteemed position. While the initial design of the cave was no longer discernable, the esteemed position can be inferred from its modern renovation; Priest Wang remade Cave 366 into the Pavilion of the Jade Emperor (Yuhuang ge 玉皇閣), abode of the highest god of heaven (figure 1-18).³⁴ During the 2002 archaeological clearance and conservation of the pavilion, researchers of the Dunhuang Academy found some burned, timber-structured construction on the cliff top above Cave 366.³⁵ Sun Yihua suspects that a timber pillar among the remaining structures might have served as the post of a pagoda finial (Skt: *yasti*; Chn: *chagan* 刹桿).³⁶ Some scholars even suggest that the destroyed cliff-top structure was the Pagoda of the Undefined Lotus (Fahua wugou zhita 法華無垢之塔) that Hongbian reportedly constructed along with the Seven Buddhas Hall.³⁷ Because the pagoda has been damaged, this suspicion can no longer be verified, but the remaining traces are solid evidence for the thesis that the pavilion had at one time been a

33. The measurements are after Shi, *Mogao ku xing*.

34. For the Jade Emperor's position in the Chinese pantheon, see Stephen F. Teiser, "The Spirits of Chinese Religion," in *Religions of China in Practice*, ed. Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 1996): 27–28.

35. The structure has been reburied and no detailed reports have been published. Zhang and Wang, "Dunhuang mogao ku di 476 ku kaogu baogao," 101.

36. Sun Yihua, "Mogaoku nanqu kuyan jianzhu yiji diaocha yanjiu 莫高窟南區窟簷建築遺跡調查研究" [A survey of the traces of façade architecture in the southern section of the Mogao grottoes], *Dunhuang yanjiu* 178, no. 6 (2019): 23.

37. The Wu Sengtong stele (compiled in ca. 834 CE, copied in ca. 901 CE, P.4640). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 273; Sha, "Dunhuang Tulufan yijing sanzang fashi facheng gongde ku kao," 45.

cave-pagoda composite.³⁸ While the thesis is well grounded, a note should be added about the cliff-top structure: since it was almost entirely burned and there is no trace of masonry walls and foundations, it is unlikely that this structure was an earthen structure like the other six cliff-top pagodas and shrines at Mogao. Instead, it was more possibly a timber-structured pagoda or *chatra* (the finial of a pagoda) (figure 1-19).³⁹ This means that the pagoda-like appearance of the cliff-top structure and the timber-structured, three-level porch would have been more coherent than the appearances of the three other extant cave-pagoda composites at Mogao. The overall appearance would be the result of the advancement of the architectural ensemble, which, as will be discussed in the following section, might not have occurred immediately upon construction of the caves below it. Whatever the process was, Cave 366 and the structure above it were eventually made to embody the vertical principle.

The middle-level Cave 365 is an oblong cave with a backscreened central altar enshrining seven buddha statues (figure 1-20). The larger-than-life buddha statues seated in meditation are enshrined in an shallow oblong niche and fronted by a built-in offering altar (figure 1-21). The elongated buddha altar subdivides the cave into a fore space under a burial vault and a rear space comprising the side and rear corridors. The fore space is a bright and spacious hall sized 4.65 m (l) x 13.0 m (w) x 6.35 m (h), whereas the rear space is a narrow and dark corridor of 1.1–1.5 m (w) x 3.4 m (h) in section and 20 m in total length. Not only does Cave 365 have a unique cave

38. Zhao “Dunhuang tubo shiqi ta, ku chuzhi zuhe xingshi fenxi tanxi,” 95.

39. It is not impossible that the structure is a part of a standalone architecture. A pagoda image could be conveyed through multiple media since the beginning of the Guiyijun period. For the example of Cave 14, see chapter 4. The timber-structured roof of the colossal-image pavilion of Cave 96, despite a modern structure, is a good reference for the timber construction on top of the pavilion. For the former, see Li Jiang 李江 and Yang Jing 楊菁, “Dunhuang Mogao ku jiuceng lou wuding jiegou fenxi 敦煌莫高窟九層樓屋頂結構探析 [Research on the structure of the nine-storied temple at Dunhuang Mogao grottoes], *Dunhuang Yanjiu* 157, no. 3 (2016): 124–31.

shape; it also has a unique main iconography. According to the Wu Sengtong stele and inscriptions in the niche, the seven statues represented the seven medicine buddhas (Chn: *yaoshi qifo* 藥師七佛; Skt: *sapta-bhaiṣajyaguru*) in the Tibetan period, but they were adapted to represent the seven buddhas of the past (Chn: *guoqu qifo* 過去七佛; Skt: *sapta-tathāgata*) around the eleventh century.⁴⁰ Cave 365 was historically referred to as the Hall of the Seven Medicine Buddhas (Qifo yaoshi zhi tang 七佛藥師之堂) or the Seven Buddhas Hall (Qifo tang 七佛堂).⁴¹ Hence, this cave or the unique cave type it represents is often referred to as the “seven buddhas cave.” The oblong fore space and buddha niche of Cave 365 illustrate the horizontal principle.

In contrast to the oblong form of Cave 365, the ground-level Cave Suite 16/17 is a series of spaces deeply cut into the living rock (figure 1-22). Cave 16 is a gigantic central-altar cave in the backscreen style. A large double-tiered buddha altar (7.6 m [l] x 8.5 m [w] and 1.3 m [h]) is located in the rear center of the main chamber and is connected to the truncated pyramidal ceiling by a short partition wall known as the “backscreen.” On the long corridor leading to its main chamber is Cave 17, which was initially constructed as the shadow cave of Hongbian

40. For discussions of the Tibetan-period iconography, see Zhao, *Tubo tongzhi shiqi dunhuang mijiao yanjiu*, 230–31. For discussions of the adapted iconography see Zhao Yanlin 趙燕林 and Zhao Xiaoxing, “Mogaoku di 365 ku qifo bangti lushi 莫高窟第365窟七佛榜題錄釋” [Transcription and interpretation of the inscriptions regarding the seven buddhas in Mogao Cave 365], *Dunhuang Yanjiu* 184, no. 6 (2020): 39–47; Li Zhijun 李志軍, “Jiaozong huayan gui jingtu: Mogao ku di 365 ku xixia chongxiu sixiang chutan 教宗華嚴 行歸淨土——莫高窟第365窟西夏重修思想初探” [Teachings of Huayan, practices of Pure Land: Preliminary investigation of the thought for the Xixia renovation of Mogao Cave 365], *Xixia Xue* 西夏學 [Xixia studies] 22, no. 1 (2021): 302–16.

41. The former title is mentioned in the Wu Sengtong Stele (compiled in ca. 834 CE, copied in ca. 901 CE, P.4640) and the latter is mentioned in the *Lantern Distribution* manuscript (951 CE, D0322). Zheng and Zheng, *Dunhuang bei ming zan jishi*; 273; Jin, “Dunhuang kukan mingshu kao;” Ma, “10 shiji zhongqi de mogaoku yamian gaiguan,” 46.

(figure 1-23). While Cave 17 is modest in size (2.75 m [l] x 2.84 m [w] and 3 m [h]), the fact that it fits onto the corridor wall of Cave 16 is a function of the colossal size of the latter. The main chamber is sized 17.0 m (l) x 15.0 m (w) x 9.5 m (h); the corridor is 7.2 m (l) x 4.0 m (w) x 4.6 m (h); and the antechamber rebuilt in 1906 is 4.0 m (l) x 11.0 m (w) x 8.0 m (h). Cave 16 is dug about thirty-four meters into the cliff face, making the pavilion almost twice as deep as it is in height. Cave 16 has the largest floor plan among all caves at Mogao and could accommodate as many as 295 people.⁴² Although caves with a central square platform inside were built as early as the Sui and Tang periods, the paradigm of constructing gigantic central-altar caves on ground level throughout the Guiyijun period began with Cave 16.⁴³ A new architectural experience was brought to the historical beholders by the extra-large scale, the elongated path, the shifting light conditions, and the imposing altar. In this sense, Cave 16 is a “model cave.”⁴⁴ The larger-than-life-sized statue set on the altar was refurbished by Priest Wang in 1900–6. Despite the repainted color scheme and the remodeling of the upper bodies, the overall proportion, the draperies of the

42. Shi, “Guanyu Cangjing dong de jige wenti,” 35; Shi, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu,” 312–14.

43. Shi Zhangru defines the two types of caves respectively as the “central-platform cave” (*zhongtai ku* 中臺窟) and the “central-altar cave.” Yet by convention, both types are referred to as central-altar caves in present-day scholarship. The pre-Guiyijun-period caves that contain a square buddha altar include Caves 285, 305 and 205, but they do not have backscreen. They were not built on the ground level as most of the Guiyijun-period central-altar caves do. Moreover, their volume was not more than a fifth of Cave 16. For instance, the main chamber of Cave 16 is 1,907.3 cubic meters, whereas that of Cave 205 is only 225.93 cubic meters. Shi Zhangru, “Huabei shiku de shidaixing yu diyu xing 華北石窟的時代性和地域性” [The Epochal and the regional characteristics of cave-temples in northern China], *Zhongyang yanjiu yuan lishi yuyan yanjiu suo jikan* 中央研究院歷史語言研究所集刊 [Bulletin of the Institute of History and Philology Academia Sinica] 29, no. 2 (1957): 577, 582–83; Shi, *Mogao ku xing*, 1:287, 539; Zhang Jingfeng 張景峰, “Dunhuang shiku zhong de zhognxin fotan ku 敦煌石窟中的中心佛壇窟” [The central-altar caves in the Dunhuang caves], *Dunhuang Yanjiu* 117, no. 5 (2009): 31–39.

44. A model cave, or a trend-setting cave, is a cave that provides a template for other caves to imitate and emulate. Wu, *Spatial Dunhuang*, 293.

lower body, and the pedestals still preserve the Tang-period features. Hence, the thirteen-figured statue set, which comprised a seated buddha, two disciples, four attending bodhisattvas, two guardian kings, and four small kneeling bodhisattvas, possibly represent the composition of the initial design.⁴⁵ No matter what the buddha altar originally looked like or which buddha it represented, this kind of buddha altar became relatively common in the following century.⁴⁶ Therefore, in the mid-tenth century, the cave suite was identified not by the visual contents in the main cave but by the cave owner or the monk figure commemorated in the shadow cave. It was referred to as the Cave of Buddhist Master Wu (Wu heshang ku 吳和尚窟), after the honorific title and the surname of Hongbian.⁴⁷

The diversity of cave forms is an indicator of the rich “stratigraphy of cave construction.”⁴⁸ For instance, the old district of the Maijishan caves 麥積山石窟 (in present-

45. The complete set of statues was photographed respectively by Aurel Stein in 1907 and James Lo in 1943. For images, see *Visualizing Dunhuang*, 6:281–86.

46. About a dozen central-altar caves were constructed under the patronage of political or religious leaders in the Guiyijun period, including Caves 85, 94, 196, 138, 98, 108, 146, 61, 55, 256, 454, 152, and 4. Except for Caves 61 and 55, the buddha altars in these caves represent Śākyamuni Buddha as the main icon.

47. The term *wu heshang ku* is found in the *Lantern Distribution* manuscript (951 CE, D0322). *Heshang* (Skt: *upādhyāya*) refers to a Buddhist teacher who imparts the precepts to the practitioner and sometimes it is used as a general term for a monk. In medieval cults of legendary monks, these monks were often referred to as *heshang*, such as in the cases of “Sizhou heshang 泗州和尚” (a.k.a. Sengqie) and “Liu Sahe heshang 劉薩訶和尚.”

48. “Shidai cengci 時代層次” literally means “the layers of [construction] periods.” It refers to the archaeological traces of caves in an area that indicate their relative early and late construction dates. The idea of stratigraphy (*cengwei xue* 層位學) was implied in Chinese archaeologist Su Bai’s 1962 lectures on the archaeological studies of the Dunhuang caves and was articulated as an analytic tool for the study of the development of a cave site by Chu Shibin’s 1985 article. Su Bai 宿白, “Dunhuang qijiang 敦煌七講” [Seven lectures on Dunhuang] (Dunhuang: Dunhuang wenwu yanjiu suo, 1962); Chu Shibin 初師賓, “Shiku waimao yu shiku yanjiu zhi guanxi: Yi maijishan shiku weili luetanshiku si yishu duandai de yizhong fuzhu fangfa 石窟外貌與石窟研究之關係——以麥積山石窟為例略談石窟寺藝術斷代的一種輔助方法” [The relationship

day Tianshui 天水, Gansu Province), which is located in the lower part of the east and west cliffs, contains as many as nine cave types, some of which were unique to the area.⁴⁹ Likewise, the old district of the Mogao caves contains early caves of unique types whose sizes are much smaller than those constructed later.⁵⁰ In the case of the pavilion, the northmost district—which it belongs to—displays an exceptionally broad spectrum of cave types, sizes, and combinations. All the major types of caves are present, including (a) two central-pillar caves, (b) two central-altar caves in the backscreen style, over two dozen of truncated pyramidal ceiling caves equipped with (c) a rear niche, (d) three niches, or (e) a U-shaped altar set against three walls, and five shadow caves—some of which were adapted from meditation or storage caves (figure 1-24). The volume of space in a cave ranges from the one-cubic-meter miniature cave to the largest hall cave; the latter is more than a thousand times larger than the former.⁵¹ The ways of grouping and combining caves include the cave triad comprising three adjacent caves connected by a passageway (figure 1-25-a, b), the cave suite comprising a main and two ear chambers (figure 1-25-c, d), the composite of two caves that are aligned vertically (figure 1-25-e), and the cave suite comprising a main cave and an ear chamber aligned vertically (figure 1-25-f). It is grounded in the rich spectrum of cave design in the district that the intricate composite of the pavilion gradually took shape.

Just as the northmost district took centuries to evolve, it is hard to imagine that a

between cave appearance and cave studies: A brief discussion of a supplementary method of periodizing cave-temple art in the example of the Maijishan caves], *Xibei Shida Xue Bao (shehui kexue ban)* 西北師大學報(社會科學版) [Journal of Northwest Normal University (social sciences)], 4 (1983): 85.

49. Chu, “Shiku waimao yu shiku yanjiu zhi guanxi,” 88–90.

50. For an early discussion of the primary cave group at Mogao, see Chen et al., “Dunhuang shiku kancha baogao,” 57–59.

51. Cave 13 is 1.75 square meters, and the main chamber of Cave 16 is sized 1,907.3 square meters. Shi, *Mogao ku xing*, 1:293; 3:110, fig. 130.

composite as complex as the pavilion was fully planned and executed in a single unified effort. Except for the fact that the entrance corridors to the three main caves are vertically aligned, it is hard to find any shared formal feature of the three caves or cave suites. The main chambers are located at varied depths from the cliff face, employ different spatial types, and have diverse scales.⁵² Each appears to be not so much a level of a multilevel structure as a standalone unit of space. The oblong layout and vaulted ceiling of Cave 365 appear especially odd when sandwiched between the two truncated pyramidal-ceiling caves. None of the other three vertical cave-pagoda composites that emerged at Mogao in the Tibetan and the late-Tang periods has a set of architectural spaces as complex as the pavilion (figure 1-26). There are no more than two truncated pyramidal caves of small or medium size in the composite of Caves 161, 156, and a cliff-top pagoda or the composite of Caves 234, 237, and a cliff-top pagoda or shrine.⁵³ The composite of Cave 143 and a cliff-top pagoda contains only one cave, although it has a ground-level ante-hall.⁵⁴ These obvious discrepancies in the pavilion's constituent forms make the idea of "a total design" doubtful.⁵⁵ They indicate that the caves were constructed at separate times as independent projects, even if all the construction projects were somehow related to Hongbian.

52. Wu Hung acutely observes that the deep location of the main chamber of Cave 16 was an intentional design to avoid cutting into Cave 365. Yet this proves only that Cave 16 was designed to be placed under Cave 365 without harming the latter, and more evidence is required to prove that the two caves and Cave 366 were united into a three-level structure. Wu, *Spatial Dunhuang*, 154.

53. The archaeological remnants on the cliff top of Cave 234 has a square plan. This is similar to the cliff-top shrine above Cave 130, whereas both the earthen pagodas above Caves 161 and 143 have an octagonal plan.

54. For discussions of the spatial configuration of the other examples, see Sha, "Dunhuang Tulufan yijing sanzang fashi facheng gongde ku kao," 45; Zhao "Dunhuang tubo shiqi ta, ku chuizhi zuhe xingshi fenxi tanxi," 95.

55. Therefore, Zhao Xiaoxing evaluates the pavilion as an "imperfect" example of the vertical cave-pagoda composite at Mogao in *Tubo tongzhi shiqi Dunhuang mijiao yanjiu*, 183. But Zhao does not investigate further the reasons behind the imperfection.

Textual records about the constituent caves of the pavilion also imply the relatively loose relationship among them in the Tibetan and Guiyijun periods. The Wu Sengtong stele (834 CE) mentions the Hall of Seven Medicine Buddhas and the Pagoda of the Undefined Lotus as Hongbian's two projects.⁵⁶ But it means neither that the two projects constituted an architectural ensemble nor that the latter was built on top of the former. The *Lantern Distribution* manuscript (951 CE) mentions Cave 365 and Cave Suite 16/17 as major caves of the northmost district, but their titles—Seven Buddhas Hall and Buddhist Master Wu Cave—do not confirm any topological or thematic correspondences.⁵⁷ Furthermore, the manuscript text does not indicate that they were upper and lower levels of the same structure.⁵⁸ Admittedly, the scarcity of direct textual evidence may not lead to any definite reading of the historical look of the pavilion before the green-background repainting. It nonetheless makes room for skepticism about the making of the pavilion as a whole from the beginning.

After all, at the core of the diversity problem is a matter of design rather than a matter of periodization. For instance, the adjacent Caves 368 and 367, despite being dated respectively to the Tibetan and the Xixia periods, are vertically aligned and almost identical with each other regarding cave shape, size, and visual content (figure 1-9-b).⁵⁹ In contrast to the copyist's manner, the constituent caves of the pavilion exhibit an experimental spirit. Since Cave 365 has the earliest known date of construction and the most comprehensive information about its initial

56. 開七佛藥師之堂，建法華元（無）垢之塔者，其惟我和尚焉。Zheng and Zheng, *Dunhuang bei ming zan jishi*, 273. Appendix D, 3.2.

57. For the identification of the two titles with the two cave suites, see Jin, “Dunhuang kukan mingshu kao,” 53; Ma, “10 shiji zhongqi de mogaoku yamian gaiguan,” 46.

58. In contrast, references to the two known multilevel pavilions screening the colossal-image Caves 130 and 96 are explicit about the upper- and lower-level relationship.

59. This dating is after *Dunhuang shiku neirong zonglu*, 149. Nonetheless, it is debatable, as Shi Zhangru dates both caves to the Tibetan period in *Mogao ku xing*, 1:325–28.

and modified forms, the following analysis of its architectural and visual programs will demonstrate the design precedents and innovations.

All in One

This section reconstructs the initial design of Cave 365 through a close reading of textual records, material remnants, and traces of modification. At the scale of a single cave, it provides direct insight into how the architectural ordering of horizontality and verticality were introduced to the district. The first subsection, by introducing the primary and secondary literature about the cave, is a reminder of its collective and changing authorship. The second subsection investigates the innovations of the oblong cave form in the visual traditions of the nirvana caves and seven-buddha images. The third and fourth subsections further investigate the tripartite visual programs of the initial Cave 365. The former reconstructs the buddha niche and altar design and the mural circle of the bottom register, whereas the latter discloses the historical visibility of the ritual space and the architectural motifs that would have helped to define it. As the case study of Cave 365 will demonstrate, even a basic unit of the pavilion is a complex entity that encompasses the imageries of hall and stupas and the conceptions of repair and revival.

Authorship Problems

The rich historical records in and about Cave 365 testify to Hongbian's engagement in its initial construction and hints at its initial design. While most original murals have been defaced, Cave 365 bears two substantial inscriptions and is related to an important merit record stele of the Tibetan period. The inscriptions are inscribed on a plastered layer under the repainting of bodhisattva images in the center of the east-facing side of the buddha altar (figure 1-27). The main and lower cartouche on the front face of the altar bears a Chinese inscription of a Buddhist

sūtra text. The oblong and upper cartouche on the top edge of the altar bears a Tibetan inscription about the construction period, the consecration ritual, and participants (appendix C). The merit record stele of the Tibetan period is no longer extant, but most of its textual content has been preserved in a tenth-century manuscript copy found in Cave 17 and designated as P. 4640. The original title of the stele, which is copied in Dunhuang manuscript S.779v, was “Dabo Shazhou shimen jiaoshou heshang Hongbian xiu gongde bei 大蕃沙州釋門教授和尚洪晉修功德碑” (Merit record stele of Hongbian, the Buddhist instructor in Shazhou of the great Tibetan kingdom).⁶⁰ But the stele is often referred to by the abbreviated and adapted title in the manuscript as the Wu Sengtong stele (Wu sengtong bei 吳僧統碑) (appendix D). The material form of the stele is testified to by two fragments found in the vicinity of the pavilion (figures D-3 and D-4).⁶¹ It is the primary textual source about the construction of the Seven Buddhas Hall, its visual contents, and the career of its cave owner at the time of the construction project.

Since the Wu Sengtong stele was extensively studied in the 1960–70s, the Seven Buddhas Hall has been accepted to be Cave 365, but the identification of the cave owner, Wu Sengtong, remained under debate until the two inscriptions were studied.⁶² Tibetologist Huang Wenhuan 黃文煥 identified the Tibetan inscription in 1980, and the Dunhuang Academy published an initial transcription of the Chinese inscription in 1986.⁶³ Since then, scholars have

60. Fujieda Akira 藤枝晃, “Tonkō sembutsudō no chūkō: chōshi shokutsu o chūshin to shita kyūseiki no bukkutsu zōei 敦煌千佛洞の中興: 張氏諸窟を中心とした九世紀の佛窟造營” [Resurgence of the caves of the thousand buddhas at Dunhuang in the ninth century], *Tōhō Gakuhō* 東方學報 [Journal of Oriental studies] 35 (1964): 92–98.

61. *Ibid.*, 102–5.

62. For the historical debates, see chapter 1, note 22; Zheng and Zheng, *Dunhuang bei ming zan jishi*, 278–79.

63. Huang Wenhuan 黃文煥, “Ba Dunaghuang 365 ku zhangwen tiji 跋敦煌365窟藏文題記” [The Tibetan inscription in Dunhuang Mogao Cave 365], *Wenwu* 文物 7 (1980): 47–49. *Dunhuang mogao ku gongyagnren tiji*, 141–43.

had direct textual evidence to support the thesis that Hongbian was the owner of Cave 365.⁶⁴

The two inscriptions testify to Hongbian's engagement in the construction of Cave 365, since his name is mentioned as “hongbian 洪誓” and “hong-pen ཧོང་པེན” in the respective inscriptions.

The Tibetan inscription even records the specific construction period, which took place between the Water-Rat Year (832 CE) and the Wood-Tiger Year (834 CE) during the reign of Khri-Gtsug-Lde-Brtsan (a.k.a. Ralpacan, r. 815–38 CE). The Chinese inscription was initially taken to be a votive text by convention, yet the latest study by Mei Lin 梅林 specifies that it is Hongbian's customized version of the *Sūtra of the Transference Wheel* (Tbt: *Tongs su mya ngan las das pa*; Chn: *Foshuo huixiang lun jing* 佛說迴向輪經).⁶⁵ As the sūtra concerns repentance rituals for the holders of Mahayana Buddhist precepts, it hints at a direction for further investigation of the cave's ritual function as envisioned by Hongbian.⁶⁶

Although all the texts in sum are still insufficient for reconstructing the iconographical

64. He Shizhe 賀世哲, “Cong gongyangren tiji kan Mogao ku bufen dongku de yingjian niandai 從供養人題記看莫高窟部分洞窟的營建年代,” in *Dunhuang Mogao ku gongyangren tiji*, 207.

65. *The canonical version is foshuo huixiang lun jing* 佛說迴向輪經 [The sūtra of the transference wheel preached by the Buddha], trans. Śīladharma 屍羅達摩 (b. 785), *T* 998, vol. 19. The sūtra was translated into Chinese by Śīladharma in Longxing Monastery of Beiting (present-day Urumuqi, Xinjiang Autonomous Region). The sūtra was introduced to Dunhuang shortly before the construction of Cave 365. Mei's study suggests that the inscription was a “customized” version of the sūtra by replacing the generic reference to the sūtra chanter *dizi moujia* 弟子某甲 (disciple so-and-so) with the Hongbian's name. Mei Lin 梅林, “Mogao ku di 365 ku hanwen tiji chong lu bing ba 莫高窟第365窟漢文題記重錄並跋” [A rerecording of the Chinese inscription in Mogao Cave 365 with a preface], in Hu Suxin (Sarah Fraser), ed., *Fojiao wuzhi wenhua siyuan caifu yu shisu gongyang* 佛教物質文化寺院財富與世俗供養 [Merit, opulence and the Buddhist network of wealth: Essays on Buddhist material culture] (Shanghai: Shanghai shuhua chuban she, 2003): 349–62.

66. Ōno Hōdō 大野法道, *Daijō Kaikyō No Kenkyū* 大乘戒經の研究 [Study of the sūtras of Mahayana precepts] (Tōkyō: Sankibō Busshorin, 1963), 401; Mei, “Mogao ku di 365 ku hanwen tiji chong lu bing ba,” 352.

and ritual programs,⁶⁷ modern viewers can easily recognize the predominant visual presence of the seven medicine buddhas.⁶⁸ Furthermore, as has been recognized, Cave 365 is possibly the only cave at Mogao in which only the Eastern Pure Land of the medicine buddha was privileged over the more popular Western Pure Land of Amitābha Buddha.⁶⁹ The unique cave form and the unconventional textual and visual contents in the Seven Buddhas Hall are unlikely a coincidence. They seem to suggest the existence of an open-minded, courageous designer—most likely the erudite and potent cave owner, Hongbian. According to the stele text, Hongbian was born to a migrant Wu family in Dunhuang and became a Buddhist Vinaya master at a relatively young age.⁷⁰ After holding the position of chief preceptor (*du-falu* 都法律) for over a decade, he was promoted to the positions of chief instructor in 832–48 and chief monk controller in 851–62. Hongbian was the top-ranking Buddhist official in the Dunhuang area for thirty years at the turn of the Tibetan and the Guiyijun periods.⁷¹ One of his disciples, Wuzhen, even went to the court of Tang Emperor Xuanzong 宣宗 (r. 846–59) and brought back imperial appointments for

67. For an attempt to reconstruct the iconographical program, see Fujieda, “Tonkō sembutsudō no chūkō,” 102–5.

68. Oldenburg is one among the earliest modern visitors who commented on the visual predominance and aesthetic interests of the seven Buddha statues. He comments: “The seven buddha images are larger than human size. Although they have been painted multicolor, they are still very moving. If without them sitting there quietly, this cave would be quite flavorless.” See *Eluosi Guo Li Ai'ermitashi Bowuguan cang dunhuang yishupin*, 6:304.

69. Fujieda, “Tonkō sembutsudō no chūkō,” 102–5.

70. A Vinaya master (*lüshi* 律師 or *falü* 法律) is a master or teacher of the rules of the discipline. *A Dictionary of Chinese Buddhist Terms*, ed. William Edward Soothill and Lewis Hodous.

71. For studies of the career of Hongbian, see, for example, Chikusa, “Tonkō no sōkan seido,” 120–23; Li, “Dunhuang Mogao ku beiwen lu ji youguan wenti (1),” 78–79; Peng Jianbing 彭建兵, “Dunhuang shouren Hexi du sengtong Wu Hongbian shenping shiji pingshu 歸義軍首任河西都僧統吳洪辯生平事蹟述評” [Discussion of the career of Wu Hongbian the first chief monk controller of Hexi of the Guiyijun period], *Dunhuang Xue Jikan* 48, no. 2 (2005): 157–63.

Hongbian and himself.⁷² In brief, Hongbian was one of the most powerful Buddhist figures in the history of Dunhuang and one who critically engaged with cave construction at Mogao.

But one must not be too hasty in embracing the idea of a heroic historical figure and an architectural monument designed by and for him. The conception of Cave 365 as Hongbian's merit cave is complicated by two problems concerning authorship: Hongbian's actual role in the construction, and the continual modification that changed the original programs of the cave. As soon as the Tibetan inscription was studied, Huang Wenhuan urged us to see the cave project as a social activity among Hongbian, Tibetan elites in his circle, and some non-Tibetan, non-Han participants.⁷³ Huang's keen observation of the bilingual inscriptions in Cave 365 has inspired new studies of the multicultural input to Tibetan-period caves, but the case of Cave 365 has become less compelling as the idea of Hongbian's patronage has grown so strong.⁷⁴ Until recently, Tibetologists Gao Rui 高瑞 and Deji Droma 德吉卓瑪 have successively suggested relating Cave 365 to temple construction activities of the Tibetan royal family in the ninth

72. The official appointments are copied in Dunhuang Manuscript P.3720 and the Dazhong stele in Cave 17.

73. Huang, "Ba Dunhuang 365 ku zangwen tiji," 48–49.

74. This kind of Chinese-Tibetan bilingual inscription is often referred to as a "T-shaped cartouche." It is true in a few other examples at Dunhuang, but the Cave 365 inscriptions were not intended to be in a T-shaped cartouche—they are not even located on the same wall surface. In any case, the studies of these bilingual inscriptions shed light on the dynamics between Han-Chinese and Tibetan patrons and participants of cave constructions. See Imaeda, "T-shaped Inscription Frames in Mogao (Dunhuang) and Yulin Caves"; Sha Wutian, "Yulin ku di 25 ku T xing bangti zaitan 榆林窟第25窟T形榜子再探" [A study on the T-shaped cartouches in Yulin Cave 25], *Dunhuang Yanjiu* 129, no. 05 (2011): 28–34; Iwao Kazushi 岩尾一史, "Dunhuang shiku zhong T xing tijikuang zai lun 敦煌石窟中T型題記框再論" [Reflection on the T-shaped inscription cartouche in the Dunhuang caves], trans. Chai Jie 柴傑, *Tulufan yanjiu* 吐魯番學研究 [Research in Turfan studies], no. 2 (2020): 141–47, 156.

century.⁷⁵ Although their argument about Cave 365 as part of a Tibetan monastery named Lung Hung Si have not received much response from the academic field, the studies at least enrich our knowledge about Hongbian’s social network in the Tibetan period. One item that should be heeded is a group of some thirty damaged Tibetan letters in the inscription that precede Hongbian’s name. Since the clause before it is complete in meaning, these damaged letters might have been names of some other historical figures who participated or were honored in the cave project. Hence, even though Hongbian was the cave owner, the cave—at least its bilingual inscriptions—would not have taken its current form without other patrons and participants in the construction project.

The other problem is the transformed identification of the main buddha icons. Since the inscriptions beside the seven buddha images added during the renovation were identified in 2020, Dunhuang scholars have had to contend with the puzzling fact that the renovators saw the statues as the “seven buddhas of the past” (Chn: *guoqu qifo* 過去七佛; Skt: *sapta-tathāgata*) instead of the “seven medicine buddhas” as reported in the Wu Sengtong stele.⁷⁶ Zhao Yanlin 趙燕林 and Zhao Xiaoxing contextualized the iconographic change in the popular cult and

75. Gnya' gong dkon mchog tshe brtan mgon po 'tsho གཏཱ་གོང་དཀོན་མཚན་ཚུ་བརྟན་ མགོན་པོ་འཚོ (aka. Gao Rui 高瑞), “Tun hong gi phug pa ang 365 pa dang der 'brel gyi skor la cung tsam dpyad pa ཏུན་ཧོང་གི་ཕུག་པ་ཨང་365པ་དང་དེར་འབྲེལ་གྱི་སྐོར་ལ་སུང་ཚམ་དབྱེད་པ་” [Dunhuang Cave 365 and related studies], *Krung go'i bod rig pa* ལྷུང་གོའི་བོད་རིག་པ་ [Chinese Tibetology], 3 (2009): 41–49; Deji Droma 德吉卓瑪, “Dunhuang tubo fosi longfu si ji cangjing dong zhi tanjiu 敦煌吐蕃佛寺隆福寺及藏經洞之探究,” [Exploring a Tibetan-Period Dunhuang Buddhist monastery named “Longfu Monastery” and the library cave], *Xizang Yanjiu* 西藏研究 [Tibetan studies], 8 (2018): 47–55.

76. The inscriptions identify the Buddhas as, from north to south successively, (1) Vipasyin (Piposhi Fo 毗婆屍佛), (2) Śikhin 屍棄佛 (Shiqi Fo), (3) Viśvabhū (Pishefu Fo 毗舍浮佛), (4) Krakucchanda (Juliusun Fo 拘留孫佛), (5) Kanakamuni (Junahanmouni Fo 拘那含牟尼佛), (6) Kāśyapa (Jiaye Fo 迦葉佛), and (7) Śākyamuni (Shijiamouni Fo 釋迦牟尼佛).

repentance rituals of the seven buddhas of the past at the Mogao caves during the Song period.⁷⁷

Li Zhijun 李志軍 further relates this Buddhist cult to Huayan 華嚴 (Skt: *Avatamsaka*)

Buddhism in the Khitan-led Liao Empire (907–1125) and proposes that not just the seven buddha images but also the repainted visual program fit under the Huayan system.⁷⁸ To what extent the entire visual program of Cave 365 is transformed needs further investigation, but one principle has been well established: once the cave was built, its keepers and users could continuously add their voice and vision to it, to the extent that they themselves assume an identity change from an audience to a secondary author.⁷⁹

Reborn from Nirvana

While most studies of the construction history of Cave 365 have relied on the aforementioned textual evidence, this study seeks to incorporate the visual traces of modification. One curious detail is the edges of the upper-level altar on which the seven buddha images sit (figure 1-27-a). Unlike the flat-surfaced lower-level altar, the upper-level altar is decorated on the east-facing side with bas-relief of consecutive *kunmen* arches sandwiched between two rows of petal-shaped decorations. The altar, however, terminates at each of the two ends in a half *kunmen* arch and a lotus petal below (figure 1-28).⁸⁰ As far as I know, no other

77. Zhao and Zhao, “Mogaoku di 365 ku qifo bangti lushi.”

78. Li, “Jiaozong huayan gui jingtu: Mogao ku di 365ku xixia chongxiu sixiang chutan.”

79. As a parallel to the building cultures, collective authorship and textual instability are recognized phenomena in literature production of the Tang and Song China. Peter L. Shillingsburg, *Scholarly Editing in the Computer Age: Theory and Practice* (Athens: University of Georgia Press, 1986), 169; Susan Cherniack, “Book Culture and Textual Transmission in Sung China,” *Harvard Journal of Asiatic Studies* 54, no. 1 (1994): 21–29; Christopher M. B. Nugent, *Manifest in Words, Written on Paper: Producing and Circulating Poetry in Tang Dynasty China* (Cambridge, MA: Harvard University Press, 2010), 1–25.

80. The lotus petals of the upper border are complete, but they have been retouched and repainted.

dais or altar at Mogao is shaped in such an abrupt way. How was the altar originally designed? And what led to this unusual treatment? As the following analysis will demonstrate, this detail exposes an important design innovation of the initial cave form and the excavation of the circumambulatory space around the altar during the renovation.

Cave 365 is not the earliest Mogao cave to have explored an oblong cave form. On the eve of the Tibetan occupation of Dunhuang in the 770s, Cave 148 was built at the southern end of the Mogao complex as its first nirvana cave, marking the emergence of the spatial prototype (figure 1-29).⁸¹ In a nirvana cave, the oblong cave space is designed for its predominant visual content—a colossal image of a reclining buddha representing the moment when Shakyamuni was entering *parinirvana*, a buddha’s attainment of final release (figure 1-30).⁸² The reclining buddha image on a double-tiered altar spans the entire length of the room under a barrel-vaulted ceiling. Thus, the sculptural space and the architectural space are united in one “oblong, coffin-shaped” cave form.⁸³ In turn, the hall-like space emplaces various pictorial contents, including Pure Land transformation tableaux on the walls and esoteric imagery in the side niches, under the overarching theme of nirvana. Although about a dozen nirvana scenes are represented at Mogao, only Cave 148 and Tibetan-period Cave 158 technically meet the definition.

Constructed about fifty meters south of Cave 148, Cave 158 follows the design of its precedent in most aspects, except that the sculptural and pictorial contents are simplified and the ceiling adopts the caisson ceiling design (figure 1-31). The most significant innovation in its

81. For studies of this cave, see Gong Weizhang 公維章, *Niepan jingtu de diantang* 涅槃與淨土的殿堂: 敦煌莫高窟第148窟研究 [The hall of nirvana and Pure Land: A study of Dunhuang Mogao Cave 148] (Beijing: Minzu chubanshe, 2004); Lee, *Surviving Nirvana*, 139–202.

82. For definition of the cave type, see Xiao, *Dunhuang jianzhu yanjiu*, 50; Sun and Sun, *shiku jianzhu juan*, 127. For an overview of the nirvana image in medieval China, see Lee, *Surviving Nirvana*, 1–19.

83. Gong, *Niepan jingtu de diantang*, 5.

iconographical program is the incorporation of Buddha preaching scenes—nine on the ceiling slopes and one in a niche on the frontal face of the buddha altar. The ten scenes represent the Pure Lands of the Ten Directions and enriches the conceptual correspondence between nirvana and the Pure Land that had been explored in Cave 148.⁸⁴ This innovation comports fully the coffin-like space and the nirvana theme. The case of Cave 158 indicates the impact of Cave 148 on cave constructions in the subsequent periods.

In comparison to its contemporary Cave 158, Cave 365 exhibits a much higher degree of innovation regarding the choice of theme, the manipulation of architectural forms, and the conception of the whole. Mural paintings of the Eastern Pure Land of the medicine buddha flourished at Mogao since a mature visual template was introduced to Cave 148, but the seven-medicine-buddhas image was relatively scarce at Mogao.⁸⁵ It first appeared in a large scene on the north wall in Cave 220 in 642 CE. This mural painting depicts seven life-sized buddhas standing in a row on an oblong platform, surrounded by dancers and orchestra, lamp trees and pavilion (figure 1-32). As Ning Qing argues, this scene represents the healing ritual of the medicine buddha and was chosen by the cave patron to express their wishes to heal family members injured on battlefields.⁸⁶ The uncommon format of seven buddhas standing in a row is applied to the high-Tang Cave 46, in which they are represented in sculptural form for the first time. The ritual function of the seven-buddhas image is similarly emphasized, despite the fact that a different iconography might have been attributed to the same visual form. According to a study by Yu Xiangdong 于向東, Cave 46 features three niches with interconnected themes and

84. Shi, “Dunhuang jingbian hua lue lun,” 599; Gong, *Niepan jingtu de diantang*, 239–42.

85. Wang Huimin, *Dunhuang shiku quanji: Mile jing huajuan* 敦煌石窟全集: 彌勒經畫卷 [Comprehensive collection of the Dunhuang grottoes: Volume on Maitreya sūtra painting] (Hong Kong: Shangwu yinshu guan, 2002), 183–98.

86. Ning Qiang, *Art, Religion, and Politics in Medieval China*, 20–37.

scenes: two major Buddha preaching scenes of the *Lotus Sūtra* (Fahua jing 法華經) are represented in the central niche, or the “Fahua niche,”⁸⁷ the nirvana scene in the south niche, and the seven buddhas of the past in the north niche (figure 1-33).⁸⁸ Yu suggests two theological connections among the three niches: repentance in front of the seven buddhas would prepare a practitioner for holding Fahua-related ritual practices, and the nirvana scene further elaborates on the ideas of the ultimate truth in the *Lotus Sūtra*.⁸⁹ The seven buddhas of the past are typically depicted in the seated posture,⁹⁰ hence the seven-buddhas niche in Cave 46, if it indeed represents that iconography, adopts the typical posture of the medicine buddha represented in plural forms.⁹¹ The flux of iconography also happens to the seven-medicine-buddhas images of Cave 365. Their sitting posture might have misled worshipers to view them as the seven buddhas

87. *Fahua jing* is an abbreviated title of *Miaofa lianhua jing* 妙法蓮華經 [Subtle dharma lotus exalted sūtra], trans. Kumārajīva 鳩摩羅什, *T* 262, vol. 9. The two Buddha preaching scenes are the assembly at Vulture Peak (*Lingjiu hui* 靈鷲會) and the assembly in Void Space (*Xukong hui* 虛空會).

88. Yu Xiangdong 于向東, “Mogao ku di 46 ku foka zaoxiang de guanxi—jiantan gai ku fojiao zaixiang zhong de fahua sixiang 莫高窟第46窟佛龕造像的關係——兼談該窟佛教造像中的法華思想” [The relationship among the buddha niches in Mogao Cave 46: With a discussion on the thought of Fahua on the Buddhist figural art in the cave], *Dunhuang xue jikan*, no. 1 (2007): 71–81.

89. Yu, “Mogao ku di 46 ku foka zaoxiang de guanxi,” 79. A similar idea is expressed in Guo Youmeng, “Shengtang fojiao zaixiang suo yunhan de fahua sixiang—yi Mogao ku 45 ku wei zhongxin de tantao 盛唐佛教造像所蘊含的法華思想——以莫高窟第45窟為中心的探討” [The lotus philosophy implied in the image-making at the peak of the Tang dynasty: With focus on no. 45 of the Mogao caves in Dunhuang], *Yuanguang Foxue Xuebao* 圓光佛學學報 [Yuan Kuang journal of Buddhist studies] 9 (December 2004): 291. It should be noted that, as Yu admits, the Fahua samādhi ritual text does not specify what Buddha the practice should worship as a prerequisite of the ritual practice.

90. The seated posture is applied to almost all identifiable images of the seven buddhas of the past in Dunhuang art, such as the Northern Liang stone pagodas, and the mural paintings in Caves 278, 314, 390, 401, 215, 218, 196, 55, among others.

91. In addition to the Cave 220 mural, the standing posture is applied to images of the Medicine Buddha in such early- and high-Tang caves as 322, 166, and 199. Wang, *Mile jing huajuan*, 181, 199–20.

of the past, and the view was eventually authorized by the inscriptions. Regardless of the identification of the seven-buddha images of Cave 46 (one missing), one may well recognize the visual correspondence between the nirvana and seven-buddhas niches: the oblong niches sit opposite one another.

If the Cave 46 design pairs the nirvana niche and the seven-buddhas niche, then Hongbian's projects concerns the pairing at the complex's scale. At the time when Cave 365 was constructed, the nirvana cave (Cave 148) and the Seven Buddhas Hall respectively defined the southern and northern ends of the south section (figure 1-34). In addition, Hongbian reportedly commissioned the construction of not just the Seven Buddhas Hall but also a Pagoda of the Undefined Lotus at Mogao. Scholars have proposed identifying the pagoda as one of the three remaining earthen structures on the cliff top between the area flanked by Caves 148 and 365.⁹² No matter where Hongbian's Lotus Pagoda was located, it might have added a third component to bring about a reconciliation between the nirvana cave and the Seven Buddhas Hall as did Cave 46.⁹³ The choice of the medicine buddha theme was not without basis in real life; the wish for healing continued to exist among the Dunhuang residents, especially after surviving the decade-long siege and the turmoil in the first few decades of the Tibetan occupation.⁹⁴ Ever since its

92. Jin Weinuo proposes it to be the pagoda above Cave 143 in "Dunhuang kukan mingshu kao Dunhuang kukan mingshu kao," 53; Ma De proposes it to be the pagoda above Cave 161 in *Dunhuang Mogao ku shi yanjiu*, 149, and "10 shiji zhongqi de mogaoku yamian gaiguan," 46; and Guo Junye 郭俊葉 contends that it is the pagoda above Cave 234 in "Laba randeng fenpei kukan ming shu wenshu zhong de fahua ta kao 臘八燃燈分配窟龕名數 文書中的法華塔考" [A study of the Fahua Pagoda in the manuscript titled "List of caves for distributing lanterns during the light up on the eighth day of the twelve month"], *Dunhuang Yanjiu* 173, no. 1 (2019): 28–35.

93. For the overarching Fahua thought in the design of Cave 148, see Gong, *Niepan jingtu de diantang*, 222–39.

94. For Dunhuang history during the Tibetan occupation, see Rong, *Eighteen Lectures*, 38–40. For the popularity of the Medicine Buddha cult in Tibetan-period Dunhuang, see Zhao, *Tubo tongzhi shiqi dunhuang mijiao yanjiu*, 224–31.

creation, the seven-buddha cave exhibited a strong sense of ritual use, just like what the seven buddha images prior to it are believed to serve. This sense is not just felt in the Chinese inscription in front of the altar that concerns repentance rituals of Mahayana Buddhist precepts but is also indicated by the special niche/altar design.⁹⁵

Since each of the seven-buddha images is smaller than a colossal reclining buddha image, a sculptural space of suitable scale is needed to emplace them. Each reclining buddha image fits the couch-bed-like altar that occupies the rear half of the nirvana cave, but the seven buddha images are enshrined in an oblong and shallow niche-like space. Two rows of relief square panels—one perpendicular, the other tilting outward—marks the upper border. And the upper-level altar with relief *kunmen* arches defines the lower border of the niche-like space (figure 1-21). These architectonic borders are the necessary constructive components of a canopy-shaped niche, which was introduced to the Mogao caves in the Tibetan period. The rows of square panels simulates the eave of a canopy-shaped shrine, and the *kunmen*-arched altar represent a decorated dais in the shrine.⁹⁶ The thousand-buddha motifs and the camellia flower reliefs in the square panels, as well as the intricate shapes of the *kunmen* arches, display a style much closer to the niche decoration of the Tibetan period than those of the later periods.⁹⁷ The stylistic features suggest that the lintel and base of the niche-like space were part of the original design, despite the surfaces below the lintel having been repainted later. But technically speaking, this niche-like

95. Mei, “Ba di 365 ku hanwen tiji.”

96. For examples of canopied-shaped shrines, see Sun and Sun, *shiku jianzhu juan*, 122–25. For the sense of an independent space cell the interior of the canopied-shaped niche creates, see Lin, “What Did Architecture Do in Visualizing Dunhuang?,” 202–3.

97. The panel design particularly resembles the niche decoration in Caves 361 and 359 of the Tibetan period, which will be discussed in chapter 4. The only differences are that the Cave 365 design was sculpted rather than painted and that a row of flower-shaped decorative plaques that should have been placed above the protruded niche lintel is missing.

space is not a canopy-shaped niche, because the curved ceiling and wall inside the niche follow a different kind of niche design.⁹⁸ Known as “the wide-opening niche” (*changkou kan* 敞口龕) and as seen in Cave 46, this kind of design features a smooth transition between the walls and the tilted flat ceiling and had been popular at Mogao until it was outmoded by the canopy-shaped niche.⁹⁹ The current space cannot even be counted as a niche since it has no appropriate borders on the sides; its southern and northern ends are abruptly cut out by two narrow corridors. But still, the architectonic upper and lower borders emphasize the independently constructed niche-like space, whereas the curved surface inside it echoes the shape of the vaulted main chamber from which it is “blown up.” In this way, the hybrid design of the niche-like space allows the row of buddha icons to own their relatively independent space while being connected to from the main chamber. Furthermore, because the sculptural space is half pushed back from the architectural space, more room is made available for ritual activities in front of the buddha images.

The setting-back of the sculptural space beyond the west wall of the vaulted room is accompanied by the invitation of luminosity into the east entrance. The two square pilasters on the east wall of Cave 365 that flank the entrance corridor are another uncommon design (figure 1-35-c). This feature does not appear in any main chamber design at Mogao; instead, two pairs of pillars appear in the ante-hall of Cave 148 of the high-Tang period (figure 1-35-a) and that of Cave 138 of the late-Tang period (figure 1-35-b). Structural concerns exist in all three cases; to compensate for the unusually thin rock-cut east wall of the cave, the voluminous pillars were cut out to reinforce the structural strength of the wall, especially where large areas of openings are

98. The typical ceiling of a canopied niche is a caisson ceiling, which consists of a flat central panel and four narrow ceiling slopes.

99. For examples of the wide-opening shrines, see Sun and Sun, *shiku jianzhu juan*, 118–21.

desired. In the cases of the two ante-halls, each pair of pillars defines a three-bay façade onto which an entrance and two large windows are cut open, so that statues, a stele, or a shadow cave in them are better lit than without the openings. In the case of Cave 365, four preexisting caves—Caves 365A, B, C, and D—had occupied the cliff face that were later turned into the east wall of Cave 365.¹⁰⁰ Hence it was reasonable to add the two pilasters to buttress the wall, which is porous and no more than 1.3 m thick. In addition, the entrance corridor of Cave 365, which is sized 2.0 m (l) x 2.5 m (w) x 3.8 m (h), is proportionally larger and much shorter than the corridors of the nirvana caves.¹⁰¹ A motivation for these adjustments to the oblong cave prototype is not difficult to imagine; a more brightly lit interior would be gained at the minimal expense of structural defect. The continuous approval of the design is indicated by the fact that the large opening is preserved in the eleventh-century renovation. The maintained entrance size is not common, since wide corridors tended to be narrowed in renovations since the tenth century.¹⁰² The condition probably did not change until 1876, when a group of pilgrims added wooden panels and decreased the size of the entrance.¹⁰³

What purposes would the bright, hall-like space have served in late-medieval times? As the Wu Sengtong stele notes, various Buddhist activities were expected at the Seven Buddhas Hall: “The classics and the Buddhist cannon expect an effective circulation. The ever-heating candles and lamps hopefully brighten the dark paths. Fragrant ashes were stamped [into Buddhist

100. Zhang and Wang, “Dunhuang mogao ku di 476 ku kaogu baogao,” 95.

101. Although the area of the entrance (9.5 square meters) is slightly smaller than those of Caves 148 (11.9 square meters) and 158 (10.2 square meters), in terms of the ratio of the area of the entrance opening to the area of the long section of the main chamber, Cave 365 (11.5 percent) is higher than Caves 148 (9.5 percent) and 158 (10.0 percent). And Cave 365’s corridor is only slightly more than half the length of that of Cave 148 (3.5 m) or 158 (3.55 m).

102. For the normal conditions, see Chen et al., “Dunhuang shiku kancha baogao,” 55–56; Liu, “Architecture and Land on the Dark Side of the Moon,” 172.

103. *Mogao ku gongyangren tiji*, 143.

images], readily preparing boundless merits. Ceremonies and feasts were held frequently, transferring the accumulated spiritual resources to all perceptive beings.”¹⁰⁴ The four types of activities can be summarized as circulating Buddhist scriptures, making lamp offerings, copying Buddhist images, and holding Buddhist ceremonies. Except for lamp offering, a well-lit space is preferable for the other types of activities. These activities seem more extrovertive and communal than the kind of activities that occurred in early caves, such as meditation and visual contemplation.¹⁰⁵ In subsequent periods, ante-halls were extensively constructed for accommodating activities such as copying Buddhist sūtras.¹⁰⁶ Cave 365 of the Tibetan period could be viewed as a precedent of the illuminated ritual space.

The oblong space type, the three-bay east wall, and the bright illumination made Cave 365 appear more like an antechamber than a main chamber. More precisely speaking, they made Cave 365 appear more like a freestanding buddha hall than any other cave at Mogao. The historical concept of the architectural feature is revealed in the Tibetan term *gtsug lag khang* གཞུག་ལག་ཁང་ (temple hall) and the Chinese term *tang* 堂 (hall) for the cave.¹⁰⁷ Although no other cave at Mogao followed the design of Cave 365, it demonstrates how closely the cave architecture could approximate a freestanding hall. On a continuum with freestanding, timber-structured (i.e., architecturally informed) halls on one end and stereotypical, grotesque caves on the other, Cave 365 would be placed closer to the architecture end than any other cave at Mogao,

104. 經書龍藏，驥[冀]用流通。長熱魚燈，希明暗路。香泥印印，福備無垠。慶設頻頻，迴資有識。 Excerpt from the Wu Sengtong Stele. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 273.

105. For meditation activities in the early caves at Mogao, see Liu Huida 劉慧達, “Beiwei shiku yu chan 北魏石窟與禪” [Northern Wei dynasty caves and Chan], *Kaogu xuebao* 考古學報 [Acta archaeologica sinica], no. 3 (1978): 337–52; Abe, “Art and Practice in a Fifth-Century Chinese Buddhist Cave Temple.”

106. Sha, *Guiyijun shiqi*, 22.

107. For detailed discussion of the Tibetan term, see appendix D, line 2-1.

including the backscreen caves. The backscreen cave, as represented by Cave 16, is conventionally regarded as the type of cave that most resembles an image hall.¹⁰⁸ Certain formal features, such as the backscreened altar and the multipanel screens, are indeed found in freestanding halls, but the deeper-than-wider layout is not. Moreover, the large ante-hall and the long corridor, which are typically ten to twenty meters in total depth, prevents the main chamber from receiving natural light, which augments the grotesque quality. It is more accurate to say that the backscreen cave in its full spatial sequence resembles a *gong* 工-shaped combination of two halls connected by a corridor than to say its main chamber resembles a standalone buddha hall in the Chinese style.¹⁰⁹ In comparison, the Chinese hall ideal was initially presented by Mogao Cave 365, even though it exhibits a preference for vaulted forms.¹¹⁰ The unique case indicates that before the trend to explore the depth of the living rock and the combination of cave spaces, the width of the cliff face had been seriously explored. Through alliance with and adaptation of the nirvana cave, the Seven Buddhas Hall achieved a complex-wide positional significance and an unprecedented architectural quality.

108. Xiao, *Dunhuang jianzhu yanjiu*, 54–56.

109. The stereotypical Chinese hall is a timber-structured, pitched-roofed hall with a rectangular plan and is entered from the middle of the long (eave) side rather than the short (gable) side. For discussions of this classical image of Chinese hall, see Ernst Boerschmann, *Chinesische Architektur* (Berlin: Ernst Wasmuth, 1925), 1:19–28; Ssu-Ch'eng Liang, *A Pictorial History of Chinese Architecture: A Study of the Development of Its Structural System and the Evolution of Its Types* (Cambridge, MA: MIT Press, 1984), 8–13.

110. Interestingly, the Chinese hall ideal was not really developed in Chinese cave architecture until some two hundred years later. For the hall-like backscreened caves in northern Shaanxi Province of the Song and Jin periods, see Shi Jiangan 石建剛, *Yanan Song Jin shiku diaocha yu yanjiu* 延安宋金石窟調查與研究 [Survey and study of the caves of Song and Jin periods in Yan'an] (Lanzhou: Gansu jiaoyu chuban she, 2020).

Circumambulatory Path and Screen Paintings

That which is at odds with the overall architectural conception of Cave 365 is the grotesque corridors behind. While the fore space is fully decorated with paintings, the corridors are only roughly cut out and plastered. While the fore part of the cave expresses frontality of the sculptural space and luminosity of the architectural space, the rear part turns the niche-like space into an altar that is to be circumambulated in half darkness. Why are the fore and the rear so divided? The following visual and spatial analysis will demonstrate the distinct possibility that the corridors were not planned for in the initial design but were invented in the renovation.

First, the painting above the entrances of the south and the north corridors were evidently conducted *after* the curved wall behind the seven-buddha images were repainted (figure 1-36). The plaster of the areas above the entrances has a darker color than that above the buddha's halos and overlaps the latter. Some foliage patterns and cartouche above the buddha's halos extend into the darker plastered area, but a keen observer would notice that the images beyond the borders are retouched, whereas those within are not. These traces of plaster and paint indicate that the curved wall above the corridor was repainted concurrently with the south and north walls, which have the same dark plaster, rather than with the buddha niche. Because the four attending buddha images depicted above the entrances are undoubtedly part of the main icons' pictorial background, it is hard to explain the separate times of painting unless a design modification occurred around the corridor entrances.

Second, the strange endings of the buddha altar are another indicator of the design modification (figure 1-28). In the initial design, the *kunmen* arches should have been extended by at least half an arch's length at each end to complete the basic architectonic unit. In correspondence with this assumption, the untouched niche lintel, which comprises the two rows

of relief panels, spans the entire length of the vaulted ceiling. If the altar was indeed designed as a pair of niche borders with the lintel, as was suggested earlier, then it more likely spanned the same distance rather than stopping abruptly for two corridor entrances, which would have been inconsistent with the niche form. Three dated visitors' inscriptions are found on the sides of the altar, and none is earlier than 1058 CE.¹¹¹ They demonstrate that the side faces of the altar appeared no later than that date. And although the inscriptions cannot prove that the side faces of the altar and the corridors were not cut out before the eleventh century, neither does it contradict that hypothesis.

Third, the shortest distance between the rear corridor of Cave 365 and Cave 16 is only about 25 cm.¹¹² This counts as a “thin-wall” spot and is undesirable in cave design due to the high risk of breakage.¹¹³ Almost all the vertical cave composites at Mogao are designed to avoid the thin-wall problem, as placing a cave above another is already less stable than placing it above a more solid volume. The minimal distance of at least one meter is maintained between Caves 234 and 237 and between Caves 161 and 156 (figure 1-26). In the case of the pavilion, the minimal distance between Caves 365 and 366 is maintained at about 50 cm, twice the distance between Caves 365 and 16 (figure 1-9-a). Hence, it is very strange to see careless planning that put the two most specially designed caves in the cave composite at a high risk of breakage. Only if the rear and side corridors in Caves 365 were removed could the minimal distance between Caves 365 and 16 be about 2.25 meters, which would ensure that the integrity of the two caves

111. *Dunhuang Mogao ku gongyangren tiji*, 143. The other two are dated to the fourteenth century.

112. Data based on Shi, *Mogao ku xing*, 2:108.

113. A thin wall refers to a rock-cut wall of 10–30 cm in thickness. For “thin-wall caves,” see Chen et al., “Dunhuang shiku kancha baogao,” 44–47; Sun, *Dunhuang shiku jianzhu yu baohu*, 28–30.

would be maintained. Since the thin-wall problem does occur and has not caused damage, it seems not so much an intended placement as a clever modification that squeezed a corridor into the leftover solid volume between the two caves.

Last but not least, comparative examples of central-altar or central-pillar caves at Mogao indicate the relatively late occurrence of the particular corridor design as seen in Cave 365. There are twenty-nine central-pillar caves and ten backscreened caves at Mogao, but only six have circumambulatory corridors that share one or more formal features with those in Cave 365. The vaulted corridors in Cave 365 are only about half the height of the fore space, and four lighting tunnels pierce through the partition wall between the hips of the buddha images to light the rear corridor.¹¹⁴ The design of a rear corridor whose ceiling is lower than any other ceiling in the cave is found in four central-pillar caves made during or after the Guiyijun period—Caves 14, 9, 22 (figure 1-37), and 95—and two backscreened caves of the Song period—Caves 55 and 152. Judging from these six examples, the late ninth-century corridor design still features a flat ceiling and flattened wall surfaces, whereas designs of the tenth century or later begin to acquire a relaxed, tunnel-like form. Furthermore, the corridor height of the later caves, such as Caves 22 (Five Dynasties), 152 (Song period), and 95 (Yuan period), are significantly lower than the earlier ones, such as Caves 14 and 9 (late-Tang). The narrowed and lowered corridors were probably invented in accordance with the popularity of a circumlocutory ritual. This popular ritual is known as *zuanguan* 鑽關 (lit. drilling a barrier) and is still widely practiced at present-day Buddhist monasteries in Dunhuang.¹¹⁵ Admittedly, the circumambulatory corridors in Cave

114. The holes are located at the south lower corner of the nimbi of the second, third, fourth, and fifth buddha images counted from north to south.

115. *Zuanguan* is a kind of vernacular religious activity. The practitioner passes three times

365 is exceptional in length, and therefore some features, such as the U-shaped layout and the light tunnels, lack dateable parallels at Mogao.¹¹⁶ Yet one can still conclude with some confidence that the corridors in Cave 365 exhibit formal features that occurred at Mogao no earlier than the tenth century.

Having teased out the subsequent modification, the puzzle of the niche-like space can be resolved. The strange form of the seven-buddhas altar is likely the sum of an innovative design that hybridizes the canopy-shaped niche and the wide-opening niche *and* a subsequent modification that breaks the ends of the niche and turns it into a backscreened altar. The initial design of the niche has not been preserved as the cave continued to adapt itself to new ritual needs. Yet the only other set of seven seated buddha statues at Mogao gives us some clue of the possible form of the nonextant one. This statue set is enshrined in Cave 327, which is dated to the Xixia period based on the green-background murals.¹¹⁷ Located at ground level about eighty meters south of the pavilion, Cave 327 is the largest truncated-pyramidal-ceiling cave, with a gigantic canopied-shaped niche on the west wall (figure 1-38). In the niche, seven larger-than-life-sized buddha statues sit in meditation posture on the uppermost altar (figure 1-39). In each statue's upward-facing palms is placed an alms bowl, an iconographic feature of the medicine

through a narrow, U-shaped corridor known as a *guanshadong* 關煞洞 (tunnel for shutting out evil spirits). Mogao Caves 96, 95, 365, 22, and many freestanding buddha halls in Dunhuang, including the main buddha hall in Foye-miao Temple 佛爺廟 and the main buddha hall in Leiysin Monastery 雷音寺, preserve the device of *guanshadong*.

116. The colossal-image Cave 96 is the only other case at Mogao that has a rear corridor with two illumination tunnels cut out between the colossal feet of the buddha image. But the cave was renovated so many times between the Tang and the Qing periods that it is difficult to determine when the corridor was cut out. While some scholars insist that the corridor were part of the initial design of 695 CE, the author can only identify traces of the green-background style mural as the earliest extant evidence for dating. Because of the uncertainty of dating, Cave 96 is not included in this analysis.

117. *Dunhuang shiku neirong zonglu*, 134.

buddha. They would have been seated in a row if the niche were wide enough, but since it is a regularly proportioned niche, the two statues at the two ends of this row as well as the long altar they sit on are “folded” at right angles to fit the niche space. In addition to the similarities in iconography and size, many details of the buddha altar in Cave 327 are reminiscent of that in Cave 365 and are in a better condition than the latter.¹¹⁸ For instance, the statues share the unique ways in which the *kāṣāya* covers the shoulders across the chest and is draped on the upturned lotus petals of the altar, and the altars of the uppermost level have a similarly intricate shape of *kunmen* arches. Apparently, Cave 365 served as a prototype for the design of Cave 327, and the existence of the latter testifies to the continued prosperity of the former. In the better-preserved niche of Cave 327, the halos painted on the side walls indicate that the seven buddha statues were originally flanked by four pairs of attending figures, likely bodhisattvas. The attending figures would have stood on the lower set of altars whereas the seven buddhas are seated on the upper set of altars. This setting hints at the possible design of the seven-buddhas niche in Cave 365. Prior to the excavation of the corridors, the buddha niche might have spanned the entire width of the main chamber as does its lintel, and the seven buddha statues on the upper altar might have been flanked by a pair of bodhisattvas standing on the lower altar (figure 1-40).

Not only can the seven-buddhas niche be theoretically reconstructed; the offering altar in front of it can well. During site surveys in November 2021, I noticed some hitherto unstudied Tibetan-period painting on the front (east-facing) side of the lower altar (figure 1-41-a). Perhaps for the purpose of seeking more Tibetan-period inscriptions, a few small areas of the current

118. The statues in Cave 365 have been suggested to be renovated in the Qing period. As I have observed, the renovation most likely took place in 1904, and shortly afterward, the robes were repainted. But the statues in Cave 327 still preserve the modeling of the sturdy body, the delicate rendering of the draperies, and a golden glow. The year 1904 is inferred from a dated inscription in the same blue color on the east wall of Cave 365.

layer that bears bodhisattva images on green background have been removed. The recovered underlayer bears images of decorative borders of two multipaneled screens and the cartouche for the Chinese inscription. Within the borders of the pictorial screen adjacent to the cartouche for the Chinese inscription, identifiable images include a buddha with two attending bodhisattvas seated in front of an offering altar, streamers hung from a frame, and a freestanding banner in the upper center of the screen, as well as an attending bodhisattva on the lower right side (figure 1-41-b). Because the painting is on the same layer as the Chinese and Tibetan inscriptions, it undoubtedly belongs to the initial design.

As far as I know, this composition does not appear in any narrative paintings of any transformation tableaux in the multipaneled screen painting format. But rather, it most likely consists of two buddha triads with offerings. A similar design occurs in the late-Tang Cave 18, which is located on the north side of Cave 16. Under the canopy-shaped niche, a row of seven screen panels has been painted. Except for the middle one that bears an image of a Kunlun slave holding an incense burner, each of the other six panels bears images of two buddha triads with offering altars, banners, or clouds (figure 1-42). It has been suggested that these images represent “all buddhas attending the assembly” (*zhufo fuhui* 諸佛赴會).¹¹⁹ Among these panel paintings in Cave 18, the one at the southern end most resembles the composition in the Cave 365 panel (figure 1-43-a). It represents, in the middle of two buddha triads, six banners hung between two dragon-headed banner posts and two freestanding sets of canopies and long streamers (figure 1-43-b). This particular screen painting displays a strong sense of ritual offerings.

Based on the repetitive arrangement of the screen paintings in Cave 18, I arrived at a theoretical reconstruction of a seventeen-panel set of screen paintings for the lower-level altar in

119. *Dunhuang shiku neirong zonglu*, 12.

Cave 365 (figure 1-40). Eight panels are located on each side of the central panel for the Chinese inscription and, ideally, they would bear images of buddha triads and offerings as seen in the partly recovered panel. By inference, the buddha triads represent the attending buddhas from ten directions. The ritual context is evident in the Chinese inscription—a customized copy of the *Sūtra of the Transference Wheel*.¹²⁰ This text begins with the Buddha’s advice to those who have taken the bodhisattva precepts, urging them to give obedience and offerings to all buddhas and bodhisattvas. Then an adherent, who speaks in the voice of Hongbian, makes vows to repent any misconduct, to practice the upright ways, and, most elaborately, to make all kinds of offerings to all buddhas and bodhisattvas for their compassion for the sentient beings. From the long lists of offerings to all deities that take more than a third of the length of the text, one gets a sense of the corresponding theme between the screen paintings and the prayer uttered here. As the adherent invites all buddhas to come to the site of enlightenment (Chn: *puti daochang* 菩提道場, Skt: *bodhimaṇḍa*), the screen paintings display their presence directly in front of the worshipers. In scenarios of precept-giving rituals, all buddhas of the ten directions are often evoked to serve as “the masters testifying to the precepts” (*zhengjieshi* 證戒師).¹²¹ As the recovered screen painting presents banner offerings in front of a buddha triad, the prayer mentions many kinds of offerings, including “jewel banners” (*baochuang* 寶幢), “banner trees” (*chuangshu* 幢樹), and “streamer trees” (*fanshu* 幡樹). The banner offering scene especially suits Cave 365, since a ritual for the seven medicine buddhas is prescribed to involve the offering

120. Mei, “Mogao ku di 365 ku hanwen tiji chonglu bing ba.”

121. For instance, a certificate of the eight precepts Daozhen issued (Dunhuang manuscript S. 330) contains these words: “We respectfully invite all the buddhas of the ten directions to act as the masters testifying to the precepts (奉請十方諸佛為證戒師).” Sørensen, “The Life and Times of Daozhen,” 23.

of banners and long streamers.¹²² By fixing the verbal and visual evocations in front of the altar, all buddhas and bodhisattvas and appropriate offerings would have been incorporated into the ritual field of the seven medicine buddhas.

Thousand Buddhas and Hundred Stupas

While physically confined within an oblong cave space, the ritual field of the seven medicine buddhas would have been tripartite in the vertical direction. A further investigation of the reported visual program, although it cannot lead to a concrete reconstruction, confirms a tripartite structure and reveals its historical reception. Since no other underlayer painting in Cave 365 bears recognizable images, the only clue about the initial visual program comes from the Wu Sengtong stele. It lists ten visual items that are proposed to be the following:¹²³

1. “Ten thousand sages who are clear and cool” (*qingliang wansheng* 清涼萬聖), which refers to thousand-buddha or thousand-bodhisattva motif¹²⁴
2. “A thousand honored ones of the good eon” (*xianjie qianzun* 賢劫千尊), which refers to the motifs or tableau of thousand buddhas of the good eon
3. “The twelve great vows” (*shi'er dayuan* 十二大願) and “the nine kinds of irregular [death]” (*jiuheng[si]* 九橫[死]), which refer to the medicine buddha transformation

122. “欲供養彼七如來者。應先敬造七佛形像。安在清淨上妙之座散花燒香以諸幢幡莊嚴其處。……造雜綵幡四十九首並一長幡四十九尺。” Excerpt from *Yaoshi liuli guang qifo benyuan gongde jing* 藥師琉璃光七佛本願功德經 [Sūtra of the seven medicine buddhas of lapis lazuli radiance], trans. 義淨 (635–713), *T* 451, 14:415, a. 11, c. 22–23.

123. The identification of these contents has been discussed in Fujieda, “Tonkō sembutsudō no chūkō,” 103–4; Zhao, *Tubo tongzhi shiqi Dunhuang mijiao yanjiu*, 230.

124. Fujieda identifies this as the Avatamsaka Sūtra transformation tableau. However, the tableau does not bear such visual contents, and its most characteristic visual feature is the “nine assemblies” (*jiuhui* 九會) in a three-by-three grid. Therefore, I take the literal meaning of the text to be the thousand-buddha or -bodhisattva motifs.

tableau and includes an Eastern Pure Land scene

4. “A hundred and eight stupas” (*baiba futu* 百八浮圖), which is an unconventional iconography to be discussed later
5. “The *Lotus [Sūtra]*” (*fahua* 法華), which refers to the *Lotus Sūtra* transformation tableau
6. “Paying back kindness” (*bao'en* 報恩), which refers to the transformation tableau of the *Sūtra on Paying Back Kindness*
7. “Mañjuśrī” (*Wenshu* 文殊), which refers to a tableau of Mañjuśrī Bodhisattva
8. “Samantabhadra” (*Puxian* 普賢), which refers to tableau of Samantabhadra Bodhisattva
9. “The boy Sudhana” (*Shancai tongzi* 善財童子), which might refer to either an attending figure in (7) or the pilgrimage of Sudhana as appended to the *Avataṃsaka Sūtra* transformation tableau¹²⁵
10. “The heavenly beings and immortals who have attained the way” (*dedao tianxian* 得道天仙), which seems to be a generic term and could refer to flying *apsaras* or other minor deities.

The textual structure deserves close examination. This list of ten items consists of three categories of images. They are, as in the order of the list, thousand-buddha motifs, transformation tableaux and tableaux of major bodhisattvas, and images of minor Buddhist figures. It is not difficult to deduce the most possible placements for the three categories of images in the cave, since the oblong and vaulted cave shape has certain constraints and the conventional arrangements have been well established. The vaulted ceiling, which has been

125. Fujieda identifies this as part of the Mañjuśrī Bodhisattva tableau.

repainted with a grid of floral patterns, is an ideal canvas for the thousand-buddha and/or -bodhisattva motifs or repetitive icons in grids. The ceilings of the two nirvana caves are fully or mainly decorated with these motifs. The uncovered screen paintings confirm a typical cave design of the Tibetan period. In that design, multipaneled screen paintings encircle a cave or a niche space to express its material presence.¹²⁶ By inference, the bottom register of the mural circle in Cave 365 would have originally comprised multipaneled screen paintings. Judging from the proportion of the panels for the reconstructed altar, the estimated total number of screens on the east, north, and north walls range between thirty and forty. The screens might accommodate narrative paintings appended to the transformation tableaux like other contemporary hall caves.¹²⁷ Alternatively, due to the considerable quantity, they might bear images of attending bodhisattvas.¹²⁸ The main register below the vaulted ceiling and above the multipaneled screens undoubtedly contains the main visual attractions, including the buddha niche and several large transformation tableaux. In brief, the three parts of the list respectively correspond to the top, middle, and bottom registers of the visual program in Cave 365. This kind of hierarchical arrangements in three registers became a spatial paradigm in the ninth century and has been suggested to symbolize the path toward spiritual transcendence.¹²⁹ It might be suggested that the stele text not only lists the visual contents in the cave but also suggests a certain way of seeing

126. Sun and Sun, *shiku jianzhu juan*, 114; Ping Foong, “Multipanel Landscape Screens as Spatial Simulacra at the Mogao caves, Dunhuang,” in Jerome Silbergeld ed., *Bridges to Heaven: Essays on East Asian Art in Honor of Professor Wen C. Fong* (Princeton, N.J.: Princeton University Press, 2011), 533–56.

127. This composition is applied to, for instances, Cave 231, which is a truncated pyramidal ceiling cave dated to 839 CE, and the east wall of Cave 158.

128. For instance, late-Tang Cave 14, which is near Cave 365, contains fifty-one screen paintings of attending bodhisattvas.

129. Michelle C. Wang, *Maṇḍalas in the Making: The Visual Culture of Esoteric Buddhism at Dunhuang* (Leiden: Brill, 2018), 260.

them.

Indeed, the stele text does not include a plain list of the visual contents in the cave as some of the contemporary merit records would do; rather, it provides a graphic and imaginary description of the ritual field (appendix D, 3.7.2).¹³⁰ Through the text, the writer guides his reader to imagine looking at the cave from top to bottom. Furthermore, one is invited to contemplate the holy assembly gathered there, the sermons given by the buddha(s), and the bodhisattva path that would lead to spiritual attainments. The compiler of the Wu Sengtong stele, Dou Liangji 竇良驥 (act. 822–62), was a literatus-scholar in the Tibetan-occupation court and a man in Hongbian's circle.¹³¹ It is not unimaginable that Dou would have paid a visit to the cave and that he was guided by Hongbian, for whom he wrote the merit record. This kind of monk-

130. In comparison, the merit records of Caves 148 and 231 were much more straightforward about the visual contents. “Datang Longxi Li shi Mogao ku xiu gongde ji 大唐隴西李氏莫高窟修功德記 [Merit record for the Li family of Longxi in the great Tang] (P.3608V, 776 CE): “They sculpted a nirvana buddha statue, then one each for Cintāmanicakra and Amoghapāśa. They painted the Western Pure Land, the Eastern Pure Land, the Tusita Heaven of Maitreya and His Descent, Devatā, Nirvana, Paying Back Kindness, Cintāmanicakra, Amoghapāśa, Thousand-armed and Thousand-eyed Avalokiteśvara and so forth. There are also one thousand figures of buddhas from the good eon, and one each for Mañjuśrī and Samantabhadra. (素涅槃像一鋪，如意輪菩薩、不空羅索菩薩各一鋪；畫西方淨土、東方藥師、彌勒上生下生、天請問、涅槃、報恩、如意輪、不空羅索、千眼千手觀世音菩薩等變各一鋪，賢劫千佛一千軀，文殊師利菩薩、普賢菩薩各一軀)” “Dabo gu Dunhuang jun Mogao ku Yin chushi gong xiu gongde ji 大番故敦煌郡莫高窟陰處士公修功德記” [Merit record of Yin Jiazheng the hermit-gentleman constructing a cave at the Mogao caves of the old Dunhuang County of the great Tibet, P.4638, 839 CE]: “龕內素釋迦像並聲聞菩薩神等共七軀。帳門兩面畫文殊、普賢菩薩並侍從。南牆畫西方淨土、法花（華）、天請問、寶（報）恩變各一鋪；北牆[畫]藥師、淨土、花（華）嚴、彌勒、維摩變各一鋪。門外護法善神。” Translation adapted from Sonya Lee's. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 43, 623; Lee, *Surviving Nirvana*, 182–87, 282–84.

131. For the biography of Dou, see Zhu Lihua 朱利華 and Fu Junlian 伏俊璉, “Dunhuang wenren Dou Liangji shengping kaoshu 敦煌文人竇良驥生平考述” [Study of the career of Dunhuang literatus Dou Liangji], *Dunhuang xue jikan* 1, no. 3 (2015): 80–87.

accompanied visits evidently occurred in late-medieval Dunhuang.¹³² Moreover, Dou included personal anecdotes of cave patrons in this and other merit records, displaying his knowledge of their deeds and thoughts. Hence, Dou could be viewed as a primary viewer of the Seven Medicine Buddhas Hall, through whose eyes Hongbian's vision of it was mediated and through whose words this mediated vision has reached secondary viewers like us.

As I would suggest, the way of seeing the cave implied by Dou's words is seeing it through the eyes of the buddhas. The stele text describes everything but the most important contents—the seven buddha statues.¹³³ This is uncommon in merit records, including that of the nirvana cave.¹³⁴ The best way to understand the neglect of the buddha statues is that the vision is imagined to be that of the buddha statues, since one does not see oneself. In the minds of the primary viewers, the buddha statues' vision became the essence of the sanctuary as soon as the cave was consecrated in the mid-autumn of 834 CE. As the Tibetan inscription reports, the consecration ceremony means having the buddha statues' "eyes opened/dazzled" (*sbyan physis*) and "faces warmed" (*zhal bsros*) (appendix C, lines 2-5-6). In other words, the consecrated statues embody the vision of the buddhas, and the ritual activation of the sanctuary entails the witness of this holy vision. The Tibetan inscription bears witness to the consecration ritual,

132. For example, Daozhen accompanied Cao Yuanzhong and entourage on a tour of the Mogao caves in 950 CE, and some visitors left inscriptions. *Dunhuang Mogao ku gongyangren tiji*, 51–55; Shi, "Sanjiesi," 208; Sørensen, "The Life and Times of Daozhen," 7.

133. The twelve great vows and the nine kinds of irregular death, despite being relevant, are not a substitute for the iconic representation of the seven medicine buddhas.

134. For instance, the reclining buddha in Cave 148 received a very detailed and graphic description: "The initial [stone] core was plastered and then painted with multiple colors. Since the rock cliff was cut open, His golden appearance solemnly manifested. Although he was not subject to the procreation of life, [the Buddha] was born to demonstrate life to myriad worlds. Although [his life] entailed no annihilation, he gave the appearance of annihilation between the Two Trees to show [its meaning]. [初坯土塗，旋布錯彩。豁開石壁，儼現金容。本自不生，示生於千界；今則無滅，示滅于雙林。]" Excerpt from "Datang Longxi Li shi Mogao ku xiu gongde ji" (P.3608V, 776 CE). Translation adapted from Sonya Lee, *Surviving Nirvana*, 184.

whereas the stele text bears witness to the consecrated ritual field.

Nevertheless, anyone who attempts to reconstruct the nonextant visual program merely from the textual records is faced with two problems. The foremost problem is that the list is not necessarily exclusive or complete. Referring to the list of ten items enumerated above, both (1) and (2) likely refer to some kind of thousand-buddha motifs, whereas the transformation tableaux that are almost certainly paired with (3), (5), and (6) are not mentioned or not mentioned in order. Like the Wu Sengtong stele, the merit record of the Cave of Preceptor Suo (Suo falü ku 索法律窟) puts the transformation tableaux of the *Lotus Sūtra* and the *Sūtra of Paying Back Kindness* in a pair.¹³⁵ But in actuality, the cave with which this merit record is identified, the late-Tang Cave 12, bears a pair of transformation tableaux of the *Lotus Sūtra* and the *Avataṃsaka Sūtra* on opposite locations of the south and north walls and another pair of transformation tableaux of the *Sūtra of Paying Back Kindness* and the *Vimalakīrti Sūtra* on the east wall.¹³⁶ In cave designs, the *Lotus Sūtra* transformation tableau and the *Avataṃsaka Sūtra* transformation tableau have since the Tibetan period almost always been paired. Mismatched textual records and visual programs as such are not uncommon at Mogao.

By inference, the Wu Sengtong stele's neglect of a transformation tableau related to Amitābha—which always comes in a pair whenever a medicine buddha transformation tableau is represented—is uncommon but not unaccountable. While the probability of an unpaired medicine buddha transformation tableau cannot be excluded, this problem might be viewed as that of rhetoric more than visual contents. Even if a tableau is not mentioned in the merit record,

135. “恩報則報四恩之至德，法乘贊一乘之正真。” Shazhou shimen suo falu ku ming 沙州釋門索法律窟銘 [Record of the cave of Preceptor Suo, a monk of Shazhou], P.4640. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 293.

136. *Dunhuang shiku neirong zonglu*, 9.

it could still be represented in the cave. But if one half of a well-established pair is mentioned without the other half, it perhaps means that the represented half is privileged over the unrepresented half in the compiler's mind. For instance, the merit record of the early-Tang Cave 332, which is a central-pillar cave with a nirvana niche in the rear, emphasizes the inclusion of a nirvana transformation tableau and gives only a brief account of other kinds of images in the cave.¹³⁷ In the case of Cave 365, it is reasonable to emphasize the importance of the medicine buddha transformation tableau, as the main icons represent the seven medicine buddhas. If Ning Qiang's distinction of the separate visual traditions of the healing ritual and the Pure Land of the medicine buddha holds true, then the separate visual traditions converged in the initial design of Cave 365 for the first time. Like the nirvana and nirvana-themed caves that combine the reclining buddha statue and the nirvana transformation tableau, the designer of Cave 365 made the medicine buddha an overarching theme of the cave's pictorial and sculptural contents.

The other problem is the uncertain identification of "a hundred and eight stupas." This term is mentioned neither in any other merit records of the Dunhuang caves nor in historical and canonical Buddhist texts in Chinese, leaving us little clue about its form and meaning. Not only the picture's format but also its placement in the cave is difficult to imagine. As Fujieda wondered, if the picture of "a hundred and eight stupas" was a transformation tableau, then the transformation tableaux mentioned in the Wu Sengtong stele would have been five in total and hence could not have perfectly filled the wall surface areas that the four repainted Pure Land

137. "In a distance the joy of annihilation was registered; in the back arose a transformation of nirvana. . . . To the sides were arranged golden countenances, with solemn-looking heavenly beings guarding them [遠扣寂滅之樂，後起涅槃之變。...旁列金姿，嚴千靈而侍衛]." Excerpt from the Shengli stele (698 CE). Translation after Sonya Lee, *Surviving Nirvana*, 157, 281.

scenes occupy.¹³⁸ Our current knowledge of the subject matter concentrates on numerology, ritual, and architectural practices of Tibetan Buddhism. The number 108 is a sacred in Buddhism and Shaivism, and its relationship with astrology has been recognized.¹³⁹ Buddhist ritual texts about how to build 108 stupas are preserved in the Tengyur (*bstan 'gyur*), the Tibetan collection of commentaries to the Buddhist teachings.¹⁴⁰ Architectural examples are found near the old Buddhist centers in West Tibet,¹⁴¹ near the Qingtongxia 青銅峽 Reservoir in Ningxia Province (figure 1-44),¹⁴² and on the cliff top of the west thousand buddhas caves near Dunhuang (figure 1-45).¹⁴³ Every known case consists of a grid of identical small stupas: the Dunhuang and the Tibetan cases arrange the stupas in two or three rows, whereas the Ningxia case arranges them in twelve rows of increasing numbers from top to bottom along the mountain slope. Since all the cases are actual buildings and could hardly be dated prior to the second dissemination of Buddhism in Tibet (tenth–twelfth centuries) and the Xixia period, the compositional principle

138. The other four are tableaux of the Medicine Buddha, the *Sūtra of Paying back Kindness*, the *Lotus Sūtra*, and the *Avataṃsaka Sūtra*. Fujieda, “Tonkō sembutsudō no chūkō,” 104.

139. Giuseppe Tucci, *Indo-tibetica* (Roma: Reale accademia d'Italia, 1932), 1:49–50.

140. For instances, *Phags pa kun nas ssgor 'jug pa'i 'od zer gtsug tor dri ma med par snang ba'i gzungs bklag cing mchod rten brgya rtza brgyad dam mchod rten lnga gdab pa'i cho ga mdo sde las btus pa* [Methods of building a hundred and eight stupas and five stupas as collected in the dhāraṇī and sūtras of the Buddha's uṣṇīṣa-emitted undefiled light entering the universal dharma door]; and *Mchod rten brgya rtza brgyad bya ba* [Method of building a hundred and eight stupas], *bstan 'gyur, rgyud 'grel, tu*. Palmyr Cordier and Bibliothèque nationale, Département des manuscrits, *Catalogue du fonds tibétain de la bibliothèque nationale* (Paris: Imprimerie nationale, E. Leroux, 1909), 358n129, 130; 359n136.

141. Tucci, *Indo-tibetica*, 1:50.

142. Lei Ruize 雷潤澤 and Yu Cunhai 於存海, “Ningxia Qingtongxia shi yibailingba ta qingli weixiu jianbao 寧夏青銅峽市一百零八塔清理維修簡報” [Brief report about the cleaning and repair of the hundred and eight stupas in Qingtongxia, Ningxia], *Wenwu*, 8 (1991): 27–35, 40.

143. In July to October 2013, archaeologists of the Dunhuang Academy excavated 179 bases of earthen pagodas on the cliff top of the west thousand-buddha caves. They consist of 64 hollowed ones, 108 solid ones, and 7 smaller hollowed ones. An informal report of the excavation and a photo is published in Dunhuang Academy, ed., *Dunhuang yanjiu yuan nianjian 2013 敦煌研究院年鑒 2013* [Dunhuang Academy yearbook 2013] (Lanzhou: Gansu renmin chubanshe, 2015), 123, 368.

could serve only as a remote parallel for our search for the pictorial representation of 108 stupas in ninth-century Dunhuang.

Since Mogao is such a site of artistic multiplication and emulation, it is hard to imagine that any mural painting has not shared any elements with the other paintings.¹⁴⁴ The closest approximation of the 108-stupas motif that this study could find, after having examined all kinds of mural paintings that include images of multiple stupas and pagodas, is a grid of miniature stupa images depicted on cave ceilings. Derived from the thousand-buddha motifs, a grid of domed stupas, each enshrining a small buddha icon, appears on the ceiling slopes of the early-Tang Cave 205 (figure 1-46).¹⁴⁵ In the ninth century, the thousand-buddhas-in-stupa motifs began to be incorporated into a kind of transformation tableau that has a grid-based composition. The basic template of the tableau is a grid of lesser buddha icons connected by lotus vines converging at a grand lotus flower, from which a main buddha icon may rise (figure 1-47-a). Dunhuang scholar Liang Weiyong 梁尉英, who has investigated all extant examples in Dunhuang, convincingly identifies the scriptural bases of the tableau, sorts its gradual simplification from the late-Tang to the Xixia periods, and names it the “transformation tableau of the thousand buddhas of the good eon” (*xianjie qianfo bianxiang* 賢劫千佛變相).¹⁴⁶

144. For the continuity and dynamics of artistic practices in the Dunhuang caves, see Sarah E. Fraser, *Performing the Visual: The Practice of Buddhist Wall Painting in China and Central Asia, 618–960* (Stanford, CA: Stanford University Press, 2004), 48–108; Sonya S. Lee, “Repository of Ingenuity: Cave 61 and Artistic Appropriation in Tenth-Century Dunhuang,” *Art Bulletin* 94, no. 2 (2012): 199–225; Hsueh-man Shen, *Authentic Replicas: Buddhist Art in Medieval China* (Honolulu: University of Hawai‘i Press, 2019), 73–105.

145. Liang Xiaopeng identifies the motifs as the “thousand-buddhas of the past eons” but gives no further explanation than associating the stupa with Nirvana. Liang Xiaopeng 梁曉鵬, *Dunhuang mogao ku qianfo tuxiang yanjiu* 敦煌莫高窟千佛圖像研究 [A study of the thousand-buddha images at Dunhuang Mogao caves] (Beijing: Minzu chubanshe, 2006), 126–27.

146. Liang Weiyong 梁尉英, “Dunhuang shiku xianjie qianfo bianxiang 敦煌石窟賢劫千佛變

Stupa images constitute a significant and meaningful part of the earliest extant tableaux of this kind. In the central-pillar Cave 9 of the late-Tang period, two almost identical sets of lotus-born buddhas are depicted on the flat ceiling on the south and north sides of the central pillar. The thousand buddhas of the good eon are represented by an alternating pattern of small buddha icons with or without a stupa (figure 1-47-b). The stupa motifs enrich the picture by overlaying the orthogonal grid with a diagonal grid. Moreover, they are suggestive of the successive occurrence and nirvana of the thousand buddhas of the good eon.¹⁴⁷ According to Liang, the transformation tableau of the thousand buddhas of the good eon expresses the pious Buddhists' aspiration to "be mindful of the past and aim for revival" (*sigu tuxing* 思古圖興) even during a period when Buddhist teachings were in decline.¹⁴⁸ Such aspirations are evident in the Cave 365 project. The Wu Sengtong stele text conceives this project as "a sincere addition" (*kenken zengxiu* 懇懇增修) to the historically famed Mogao site that would bring merit to present and future generations.¹⁴⁹ Furthermore, it presents the "thousand buddhas of the good eon" as one of foremost items in the cave's visual program.

In this visual tradition and historical context, "108 stupas" of Cave 365 possibly refers to the stupa motifs in the transformation tableau of the thousand buddhas of the good eon depicted

相” [Transformation tableaux of the thousand buddhas of the good eon from the Dunhuang Caves], in *1994 nian Dunhuangxue guoji yantao hui lunwen ji* 1994年敦煌學國際研討會文集 [1994 proceedings of the international conference of Dunhuang studies], *shilu kaogu juan* 石窟考古卷 [Volume on cave archeology] (Lanzhou: Gansu minzu chuban she, 2000), 26–38; Liang, "Lue lun dunhuang wantang yishu de shisu hua," 19–25.

147. One of the scriptural bases for the image states, "All the śramaṇa, like those Buddhas [the thousand buddhas of the good eon], would be in the state of remnantless nirvāṇa and successively enter parinirvāṇa. No one is left alone [彼諸沙門如是佛所，於無餘涅槃境界次第當入般涅槃，無有遺餘]," *Dabei jing* 大悲經 [Sūtra of great compassion], trans. Narendrayāśas 那連提耶舍 (489–589), *T* 380, 12:958, a. 26–28.

148. Liang, "Dunhuang shiku xianjie qianfo bianxiang," 51.

149. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 272.

on the vault. An alternative though less likely possibility, an independent picture that includes a grid of stupa images, is depicted on one of the walls. In either case, the 108-stupa imagery would have reminded a keen observer of the many large and small additions that the design of Cave 365 contributed to the Mogao site. The architectural motifs are part of the novel cave design, which replaced the nirvana theme, for which the oblong cave prototype was invented, with a new theme of healing and repair. The grid of stupa images and the mural circle of multipaneled screens defined the interior surfaces in an architectural way and helped to construct a tripartite space in the vertical direction. Thus, the single cave space can arrange a multitude of architectural and figural imageries into a field of dharma. At a larger scale, the transformation of the northmost district started with Cave 365's intervention of the non-ritual field. The cave challenged the old pattern of cave construction by literally deconstructing five preexisting caves and interrupting the horizontal sprawls of the Sui and Tang caves. It also established a new architectural principle by introducing a ritual architecture, a monumental scale, and a complex-level symmetry to the site.

One for All

This section investigates the subsequent modifications of the pavilion that culminated in the sweeping renovation in around the eleventh century. If the initial phase could be understood as the replacement of pragmatic spaces by a liturgical space, then the subsequent modification indicates a gradual development of the total architecture. The first subsection, through reconstructing the initial design of Cave 366 and the cave group it belonged to, discusses the tendency of emphasizing the vertical order over the horizontal order. The second subsection investigates the visual programs of the renovation of the eleventh century. It discusses how the new visual templates of Pure Land scenes and myriad figural images unified the three caves' interiors. The third subsection inspects when and how a unifying porch for the pavilion came into

existence. Based on repetition of patterned tiles and phoenix-centered ceiling panels, it suggests that the eleventh-century renovation brought forth a unified architectural appearance of the cave composite. The fourth subsection summarizes the metamorphosis of the pavilion and its vicinity from the ninth to the twentieth century. The fifth and last subsection reflects on the architectural conceptions of the pavilion after the comprehensive renovation. As I would suggest, the renovated pavilion encompasses three layers of spaces and represents a kind of multivalent architecture.

Modified Caves 366 and 366A

Since the cave type and size of Cave 366 are common, it has not received as much scholarly attention as Caves 365, 16, and 17. But two special formal features of Cave 366 indicate that it is not as simple as expected: its lack of underpainting, and the intersection by an unfinished image cave—designated as “Cave 366A”—at its southwest corner (figure 1-48). The following analysis of the two features and relevant archaeological findings will reveal the possibility that Cave 366 was enlarged during the eleventh-century renovation. It also indicates the possibility that the initial cave from which Cave 366 was remade—referred to as Cave 366 ‘in this study—was the main cave of an unfinished cave triad.

The main chamber of Cave 366 bears no underpainting below the green-background style murals. This is most clearly revealed at the “entrance” to Cave 366A, a broken-through hole at the east end of the south wall of Cave 366 (figure 1-49). It is the only place in the cave that bears two layers of murals. Judging from the remnants around the section, the underlayer bears the green-background style mural of life-sized bodhisattvas standing in a row, whereas the upper

layer bears the image of a stele, two poems, and visitors' graffiti.¹⁵⁰ The underlayer is directly attached to a masonry wall that once initially sealed the broken area (figure 1-50). It indicates that this area was broken as soon as Cave 366 was made into what it is and that the broken area was sealed and painted with the bodhisattva images. Afterward, it was broken again and subsequently resealed and repainted. The single-layer painting is also evident in the broken spots on the walls and the mural remnants on the ceiling slopes. For instance, a deeply dug hole around the center of the south wall of Cave 366 shows, from outside to inside, a layer of pigments, a thin layer of fine mud, a thicker layer of mud mixed with vegetal fiber, and lastly the rock form (figure 1-51). The broken areas of the ceiling slopes, such as a small fragment around the northwest corner, display only the green-background style mural (figure 1-52). Unlike Caves 365 and 16, Cave 366 bears no painting made earlier than the eleventh-century renovation.¹⁵¹ Therefore, no direct evidence could support the hypothesis that Cave 366 was built in the Tibetan period. Instead, the single-level mural paintings indicate two possibilities: either Cave 366 was built during the eleventh-century refurbishment, or it was enlarged from the preexisting Cave 366', whose mural was completely destroyed.

150. For the poems and graffiti, see Gao Qi'an 高啟安, "Yizhang jushuo shi 'mogao ku cangjing dong' zhaopian de kaosuo 一張據說是“莫高窟藏經洞”照片的考索” [A study of a photo identified as “the sūtra deposit cave of the mogao grottoes”], in *Qinghe Rao Zongyi xiansheng jiushiwu huadan Dunhuang xue guoji xueshu yantaohui lunwen ji* 慶賀饒宗頤先生九十五華誕敦煌學 國際學術研討會論文集 [Proceedings of the international conference of Dunhuang studies in honor of the ninety-fifth birthday of Mr. Rao Zongyi], Central Research Institute of Culture and History, Dunhuang Research Academy, Jao Tsung-I Petite Ecole of the University of Hong Kong, eds. (Hong Kong: Zhonghua shuju, 2012), 598–600.

151. There is much evidence about the repainting of Caves 16 and 365, where traces of the underlayer painting are found. In Cave 16, a renovation in 1981 revealed the existence of a layer of mural under the thousand-buddha motifs. For a brief report of the findings, see *Dunhuang yishu da cidian*, 114. In Cave 365, a damaged spot on the north wall reveals the underpainting, which bears blue and black pigments. The image is unidentifiable, but it proves that the north wall was originally excavated to that position, as opposed to being enlarged later.

Judging from the existence of Cave 366A, the second hypothesis is more credible than the first. Since a masonry wall was added to seal the broken area and seamlessly became part of the south wall of Cave 366, Cave 366A had undoubtedly existed before Cave 366 was cut out. Unlike the caves intersected by Cave 365, the architectural form of Cave 366A resembles a decorated cave rather than a pragmatic cave. This truncated pyramidal ceiling cave is sized 1.8 m (l) x 1.8 m (w) x 2.25 m (h) and is about 12 cm above the ground level of Cave 366. A plan area of 120 cm (l) x 25 cm (w) at the northwest corner of the cave was broken by Cave 366 (figure 1-53-a).¹⁵² Although Cave 366A has a plan area smaller than the plan areas of pragmatic Caves 365A, 365D, and 362, it is significantly taller. The upturned funnel ceiling with an indented sunken well is yet another architectural feature of decorated caves, whereas most pragmatic caves in the district adopt the gable ceiling. Moreover, Cave 366A was only cut from the living rock and not yet plastered, whereas the pragmatic caves in the area were plastered although undecorated. It is clear that the construction of Cave 366A ceased right after cutting out the cave space and that Cave 366A was made to be a decorated cave rather than a pragmatic cave, even though the design was unrealized. Furthermore, the ceiling slopes of Cave 366A, which are tilted at nearly forty-five degrees, are very steep. As I observed, steep ceilings are more likely to be found in small caves of the ninth century than those of the earlier periods. Last but not the least, because it is located on an extra-top level, Cave 366A would have been cut out no earlier than those on the top level, including Cave 365. The formal and locational features of this unfinished cave indicate that it was likely cut out at some point in the Tang period, especially the second half of it.¹⁵³ In other words, Cave 366A was designed in accordance with the architectural

152. I measured the cave in June 2022 with Shi Nan, a staff member of the Dunhuang Academy.

153. This cave has been dated to the “Tang and the Song” in *Dunhuang yishu da cidian*, 14. The two periods seem to be the times for the construction and the breakage, respectively.

principles that are prevalent in the ritual caves in the district.

Nonetheless, apart from the physical closeness, Cave 366A appears to have little connection with Cave 366 as it is. First, Cave 366A sits west and faces east, and it has no entrance to Cave 366 except the broken area. Second, the level-height difference between the two caves is too small for the former to be an ear chamber of the latter. If Cave 366A was designed under the notion of architectural principles, then why was it located at such a scattered spot? Compared with the possibility that a minor cave was randomly cut at an insignificant position above Cave 365, it is more possible that it belonged to a cave group of which the main cave—Cave 366'—was vertically aligned with Cave 365.

Based on the principle of symmetry, I propose that the cave group Caves 366A and 366' constituted would have been designed to be a cave triad. In the triad design, the niched main cave is flanked by Cave 366A on the south side and another identical minor cave on the north side, which is referred to as Cave 366B (figure 1-53-b). In actuality, the designs of minor caves have not been executed, as the construction of Cave 366A ceased after the cave chamber was cut out, and Cave 366B was not even cut. But the incomplete work has a high potential of becoming a cave triad, especially if the tradition of constructing cave groups and composites is considered. This kind of cave triad is not unique to the northmost district. According to Guo Youmeng 郭祐孟 and Zhao Xiaoxing, three Tibetan-period caves next to Cave 365—Caves 361, 360, and 359—constitute a cave triad, in which the major cave is flanked by two minor caves (figure 1-25-a).¹⁵⁴ Another cave group in the district whose cave forms follow the A-B-A pattern is that

154. Zhao, “Mogao ku di 361 ku yu zhoubian zhongtang dongku de guanxi,” 28. Guo Youmeng, “Dunhuang tubo shiqi dongku de tuxiang jiegou: yi mogao ku 360 he 361 ku wei ti 敦煌吐蕃時期洞窟的圖像結構——以莫高窟360和361窟為題” [The pictorial structure of Dunhuang caves

comprising Caves 1, 2, and 3 of the Yuan period (figure 1-25-b). When space allowed, an oblong ante-hall or antechamber would be built to unify the cave triad. For example, Caves 27, 29, and 30, which are not far from the district, were grouped together by a shared ante-hall, which is thought to have been commissioned by three brothers in the tenth century (figure 1-54).¹⁵⁵ In the district, Cave Suites 11/12/13 and 8/9/10 are each united by a shared antechamber (figure 1-25-c, d). Although the ear caves in them do not sit west and face east, these cave suites could be viewed as close parallels to the cave triad. The relatively frequent application of cave grouping in the northmost district is supportive of the hypothesis that a cave triad was planned for the upper level of the pavilion.

What would Cave 366' have looked like? No definite reconstruction could be made, since its cave space (if it had existed) has been completely subsumed under that of Cave 366. Nonetheless, the location of Cave 366A and the archaeological remnants in Cave 476 give hints about the size range of Cave 366'. Because the widths (in the north-south direction) of Caves 366 and 366A are overlapped by 25 cm, Cave 366' must be smaller than Cave 366. If we take the rock-cut wall between Caves 366' and 366A to be 25 cm thick, which is about the thin-wall threshold, then the maximum width of Cave 366' would be about one meter less than that of Cave 366. Thus the estimated maximum size of the main chamber of Cave 366', in the case that it adopts the same cave type as Cave 366 and the typical proportion of a small cave, would be 3.5 m (w) x 3.5 m (l) x 3.6 (h).¹⁵⁶ The minimum size of Cave 366', as well as its completed

of the Tibetan period: A study of Mogao Caves 360 and 361], in *Dunhuang tubo wenhua xueshu yantao hui lunwen ji* 敦煌吐蕃文化學術研討會論文集 [Proceedings of the conference on Dunhuang Tibetan cultures], ed. Dunhuang Academy (Lanzhou: Gansu minzu chubanshe), 13.

155. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 66–69. Sun and Sun, *shiku jianzhu juan*, 198; Ma, *Dunhuang Mogao ku shi yanjiu*, 119–21.

156. The maximum size is indicated by the thick dashed lines in figure 1-50-b.

construction, is indicated by two wooden components in the shape of dragon's head and flying *apsaras* found in Cave 476 (figure 1-55-a). As discussed in chapter 2, the antechamber of Cave 476 likely served as a temporary storage area for architectural waste during the eleventh-century renovation of the pavilion and its vicinity.¹⁵⁷ By inference, the two wooden components were likely removed from the caves above Cave 476, including Cave 366'. Judging from a miniature panel found somewhere else at Mogao,¹⁵⁸ the two wooden components were decorations at the top edges of a backscreen (figure 1-55-b).¹⁵⁹ The backscreen consists of an elongated rectangular panel, whose upper corners are adorned with two dragon's-head-shaped ornaments, and a decorative triangular top, whose curvy sloped sides are decorated with a row of flying *apsaras*. This kind of backscreen was applied to main buddha statues in canopy-shaped niches in the ninth century (figure 1-56).¹⁶⁰ In a typical design, the backscreen is placed on a pedestal designed for the main buddha icon and set against the multipaneled screen paintings. Moreover, contemporary pictorial representations of the backscreen include two tableaux in late-Tang Cave 14.¹⁶¹ The backscreened throne highlights the supreme status of the cosmic buddha Vairocana, the main deity in the Maṇḍala of Eight Great Bodhisattvas, and Vajrasattva, a principal

157. For the findings of architectural wastes in Cave 476, see Zhang and Wang, "Dunhuang mogao ku di 476 ku kaogu baogao," 102.

158. The understudied panel is in the collection of Dunhuang Academy. It presumably arrived at the current storage site (i.e., Mogao Cave 4) after archaeological clearance of the Mogao caves in the second half of the twentieth century. The author examined it during a storage visit in April 2022 but found no record about it or relevant studies.

159. Since iron nails were attached to the dragon's-head-shaped ornament, it must have been removed from a backscreen rather than a component to be assembled into a backscreen.

160. Apart from the Tibetan-period caves, this kind of backscreen also exists or existed in late-Tang Caves 156 and 164 as well as high-Tang Cave 42, which was renovated in the Tibetan period. I thank Sun Lei, postdoctoral fellow of the Dunhuang Academy, for informing me about some of the backscreens.

161. A prototype of the backscreen could be found in a buddha preaching scene in the Sui-period Cave 405, but it was decorated only with elephant's-head-shaped ornaments.

bodhisattva in the Vajradhātu Maṇḍala (figure 1-57).¹⁶² Therefore, the backscreen to which the two wooden components belonged must have been originally placed in a ninth-century cave that enshrined a major deity.

The size of the backscreen ornaments is crucial for identifying the cave to which it belonged. Based on the length of the dragon's-head-shaped ornament (8.3 cm) and the ratio of the ornament's length to the backscreen's total height as exhibited in the miniature example (1:10), the backscreen to which the two fragments from Cave 476 belonged is estimated to be about 85 cm in height. Since the estimated size is close to the backscreen in Tibetan-period Cave 112 (figure 1-56-b), which measures 85 cm in height, the cave with the 85 cm backscreen would be similar to Cave 112 as well. As for Cave 112, the niche is sized 1.1 m (l) x 1.35 m (w) x 1.55 m (h), and the main chamber is sized 2.1 m (l) x 2.45 m (w) x 3.15 m (h).¹⁶³ The cave is smaller than most of the Tibetan and late-Tang period caves in the vicinity. For instance, the nonextant backscreen for Cave 361 would have been at least 105 cm in height to fit the blank area on the west wall of the niche (figure 1-56-a). Cave 361—which is a smaller one among the caves—is significantly larger than the estimated size: the niche is 1.95 m in height, and the main chamber is around 3.1 m (l) by 2.9 m (w) x 3.5 m (h).¹⁶⁴ In brief, none of the extant caves is small enough to emplace the backscreen to which the two wooden components belonged. However, Cave 366' could possibly have been an exception; the upper limit of its size has been discussed, but the lower limit has not yet been determined. If the size of Cave 112 is taken as the minimum size of Cave 366', then the dimensions of the latter would still be 25 percent larger than those of Cave

162. For the two mandalas, see Wang, *Maṇḍalas in the making*, 156–68.

163. The backscreen panels mentioned in this study were all measured by Sun Lei in September and October, 2022. Cave measurements are after Shi, *Mogao ku xing*.

164. Tibetan-period Caves 358–363 on the top level are about three to four meters in width and length.

366A and thereby maintain the hierarchy between the main cave and the minor one. Through a process of elimination, it could be inferred that Cave 366' was likely a niched cave and that the size of its main chamber ranged between 2.1 m (l) x 2.45 m (w) x 3.15 m (h) and 3.5 m (w) x 3.5 m (l) x 3.6 (h), or about 50–75 percent of Cave 366.

The last problem to be discussed is the incomplete status of the cave triad, which indicates the abandonment of the design during its execution. To understand this problem, one needs to situate the cave triad within the development of the pavilion. If Caves 365 and 366' were planned and constructed prior to Cave 16, then the initial phase of the cave composite that later expanded into the pavilion would have placed considerably less emphasis on the vertical dimension than it ultimately did. For one thing, the vertical axis formed by the aligned antechambers of Caves 365 and 366' (ca. 10.6 m) was shorter than the horizontal dimension of Cave 365 (12.7 m). For another, the arrangement of two or three small caves in a row is more of parallel to the oblong cave form of Cave 365 than perpendicular to it. It was the addition of a third level to the cave composite that broke the balance between the horizontal and vertical dimensions. Since the construction of Cave 16, verticality has outweighed horizontality in terms of the general form of the cave composite. The abandonment of the cave triad design implies a moment when the conception of the pavilion evolved. While the design of Cave 366' was executed, the design of the flanking Caves 366A and B appeared not to be necessary for the completion of a cave composite that features verticality. By inference, during the construction of Cave 366', the cave makers probably began to envision a more monumental work of architecture than the two levels of caves. Admittedly, the author's proposal of the modifications to Caves 366 and 366A is based on no textual records, scant material remnants, and mostly logical inference. However, if the vision of the whole had existed from the very outset, the constituent caves of the

pavilion would not have followed the varied and even contradictory compositional principles that they clearly did. And without the emergence of this vision at that point in the process, the subsequent design and execution of Cave 16 could not have been realized.

Thousand Images under One Appearance

If the vision of the whole emerged halfway through the construction of the pavilion, then how was it eventually made into an architectural ensemble? The effort to make the diverse cave spaces look as coherent as possible is felt in the renovations made subsequent to the construction of the three main caves. As discussed, their initial designs followed varied architectural principles and contrasted drastically with one another in scale. Moreover, their initial antechambers would have been constructed a few decades apart and not necessarily conjoined. The adaptation of the preexisting pragmatic caves into shadow caves and monastic storage in the tenth century disclosed local monks' efforts to reinforce the functional connections of the vicinity. And that which changed the total appearance of the pavilion was the comprehensive renovation that occurred in around the eleventh century. Except for the statues and sculptural spaces that were refurbished at the beginning of the twentieth century, almost all interior surfaces are covered by the green-background style murals. The cave interiors would have been further united by the advent of a three-level pavilion-like façade. The following analysis discusses the interior and exterior design shifts and then considers the functional and visual ideas of the thousand-buddha pavilion they together simulated.

The highly formulaic interior designs transform the diverse cave spaces into interiors of temple shrines. Interiority is expressed by the application of floral patterns on the ceilings, and patterns of draperies and *kunmen* arches at the top and bottom registers of the four walls, respectively. Based on the promise of optical uniformity, the iconographic content in the three

caves reflects a certain degree of diversity. The murals in Cave 366 depict the arrival of Mañjuśrī and Samantabhadra Bodhisattvas with entourage, as well as a ritual parade of twenty life-sized bodhisattvas in two rows toward the buddha niche on the rear wall (figure 1-58). Cave 365 presents two pairs of large transformation tableaux on the three walls enclosing the buddha altar, in conjunction with bodhisattva images that fill the lesser surfaces (figure 1-59). The corridor of Cave 16, with the opening to Cave 17 sealed, represents eighteen larger-than-life-sized bodhisattvas in two rows parading toward the main chamber. And the main chamber is suffused by thousand-buddha motifs against a green-background on the four walls, simulating a boundless pond from which myriad buddhas rise on stemmed lotuses (figure 1-60). Murals in the three caves represent three major types of green-background style murals: the bodhisattvas standing in a row, the simplified Pure Land transformation tableaux with little architectural backdrop, and the thousand-buddha motifs or tableaux.¹⁶⁵ From this perspective, the pavilion's repainted interiors, if viewed as one entity, are uniquely rich in visual content among its contemporaries.

Apparently, an ensemble grounded in adaption and modification could hardly be as perfect as one might expect from a centralized planning process of a one-off construction project. Whether the renovation imposed coherent iconographical programs to the cave composite is still unknown to us. Evidence seems more negative than positive to the question. The object of worship in Cave 16 has even been adapted to Amitābha, the buddha of the Western Pure Land. The main buddha icon's identification is indicated by the bodhisattva images painted at the lower parts of the north- and south-facing sides of the backscreen (figure 1-61). The inscriptions in the cartouches beside the bodhisattva images identify them as Avalokiteśvara Bodhisattva

165. For the four major types of green-background murals, see Zhao, "Guanyu Dunhuang Mogao ku xixia qianqi dongku de taolun," 2–3.

(Guanshiyin pusa 觀世音菩薩) and Mahāsthāmaprāpta Bodhisattva (Dashizhi pusa 大勢至菩薩), respectively. As the two bodhisattvas in the Amitābha triad, their presence is believed to bless the Western Pure Land.¹⁶⁶ By inference, the main icon must have been conceived as Amitābha after the renovation.¹⁶⁷ If Cave 16 was remade to enshrine Amitābha, it could be easily paired with the medicine buddhas of Cave 365, as they are respectively associated with the Western and the Eastern Pure Lands. But the seven buddha statues were redefined as the seven buddhas of the past by the inscriptions added during the renovation.¹⁶⁸ The dual change makes the possible relationship between the main icons in Caves 16 and 365 less direct.

What further complicates the situation is the main buddha icon in Cave 366. At least after the renovation, the buddha icon would have represented Shakyamuni or Vairocana, with whom the tableaux of Mañjuśrī and Samantabhadra Bodhisattvas on the east wall are most often associated (figure 1-62).¹⁶⁹ The iconography of the main statue in Cave 366 might have either retained or altered that of Cave 366', and since both are no longer extant, all theories must remain speculative. If one chooses to build on the speculation, one might argue for a combination of Vairocana and the seven buddhas of the past, which is evident in some pagodas

166. Luis O. Gómez, "Amitābha," in *Encyclopedia of Buddhism*, ed. Robert Buswell (New York: Macmillan, 2003), 14–15.

167. Since most central-altar caves at Mogao represent Śākyamuni Buddha as the main icon and no other is known to represent Amitābha, the initial main iconography of the trend-setting Cave 16 was more likely Śākyamuni than Amitābha. Moreover, the bodhisattvas' painting style is consistent with the green-background murals, suggesting the adaptation of the altar occurred during the eleventh-century renovation.

168. Zhao and Zhao, "Mogaoku di 365 ku qifo bangti lushi"; Li, Jiaozong Huayan."

169. For the triad of Vairocana, Manjusri, and Samantabhadra in Dunhuang art, see Leslie S. Kawamura, "Bodhisattva(s)," in *Encyclopedia of Buddhism*, 60.

of the Liao dynasty.¹⁷⁰ But how this combination is related to Amitābha is not apparent.¹⁷¹

Simply put, any correlation between the main icons of the three levels would have seemed discursive, if not just a modern construct. After all, any complex iconographical correlation or philosophical construct does not seem to have bothered average Buddhists in late-medieval Dunhuang, who most likely held syncretic beliefs for utilitarian purposes.¹⁷² Compared with the not-so-direct iconographical correlations, the optical form and the architectural structure would have played more critical roles in integrating the three caves.

First, the repainted mural circles stress visual unity if not coherent iconographical programs across the three levels. Anyone entering any of the three caves would first encounter

170. For the theoretical bases and examples of the iconographical combination, see Gu Yun 穀贇, “Liao ta yanjiu 遼塔研究” [Study of the Liao Pagodas], PhD diss., Central Academy of Fine Art, 2013, 67–70. Based on the combination’s application in Liao pagodas, Li Zhijun argues that this combination was the overall conception of the renovated Cave 365 in “Jiaozong Huayan,” 310.

171. The combination of Amitābha, seven buddhas of the past, and Śākyamuni or Vairocana does not match any known types of three-buddha combinations in Tang to Song period China. In some circumstances, a cave may include the common set of three Buddhas—Śākyamuni, Amitābha, and Maitreya—plus the seven buddhas, but that case would be a four-buddha system, and the seven buddhas occupies a less important position than the other three buddhas. For the known types of three-buddha combinations, see He Shizhe, “Guanyu Dunhuang Mogao ku de sanshifo yu sanfo zaixiang 關於敦煌莫高窟的三世佛與三佛造像” [The buddhas of past, present and future and their images in the Dunhuang Mogao caves], *Dunhuang Yanjiu* 39, no. 2 (1994): 67–88; Sha Wutian and Li Zhijun, “Dunhuang Mogao ku di 353 ku xixia chongxiu xinyang sanshifo de sixiang neihan 敦煌莫高窟第353窟西夏重修新樣三世佛的思想內含” [The conception of the new-style buddhas of the three periods in Mogao Cave 353 renovated in the Xixia period], *Dunhuang Xue Jikan*, 4 (2020): 67–73.

172. For the general conditions of secularized Buddhism in Dunhuang of the eighth–eleventh centuries, see Li Zhengyu 李正宇, “Dunhuang fojiao yanjiu de deshī 敦煌佛教研究的得失” [The gain and loss of Dunhuang Buddhist studies], *Nanjing shida xuebao (shehui kexue ban)* 南京師大學報(社會科學版) [Journal of Nanjing Normal University (social science edition)] 5 (2008): 51–54; Li Zhengyu, “Tang Song shiqi Dunhuang fojing xingzhi gongneng de bianhua 唐宋時期敦煌佛經性質功能的變化” [Changes in the nature and function of the Buddhist sūtras in Dunhuang of the Tang and the Song periods], in *Jiechuang foxue 戒幢佛學* [Jiechuang Buddhist studies], vol. 2, ed. Jiechuang Buddhist Studies Institute (Changsha: yuelu shushe, 2002), 11–29.

two rows of bodhisattva images depicted on the side walls of the entrance corridor (figure 1-63). The symmetrical composition and over-life-sized images absorb the worshiper into the realms of Buddhist deities floating on lotus ponds. Flanked and guided by the parading bodhisattvas, worshipers would have felt as if they were being led into “the sagely palaces” of the Western Pure Land (Chn: *xifang jingtu* 西方淨土; skt: *sukhāvātī*).¹⁷³ The generic bodhisattva images substitute the specific donor figure image, which had pervaded cave designs of the ninth and tenth centuries. The factors that might have led to the paradigm shift are still speculative.¹⁷⁴ Moreover, the bodhisattva images have been suggested to be “offering bodhisattvas” (*gongyang pusa* 供養菩薩), “Pure Land bodhisattvas” (*jingtu pusa* 淨土菩薩), and “conduct-and-vow

173. Historical records of the Mogao caves in the Xixia period are scarce, but a visitor’s inscription (dated 1085) in Cave 65 refers to this green-background mural cave and those alike as “sagely palace” (*shenggong* 聖宮) and “palaces of the assembly” (*zhonggong* 眾宮). The scribe also vows that all sentient beings of the dharma realm should happily gather and migrate to the Western Pure Land. A Chinese translation of the Xixia-language inscription is “甲醜年五月一日日稅全涼州中多石搜尋治，沙州地界經來，我城聖宮沙滿，為得福還利，已棄二座眾宮沙，我法界一切有情，當皆共歡聚，遷於西方淨土。” My English translation is, “On the first day of the fifth month of the jiachou [yichou] year, I searched material to the city of Shazhou. The sagely palace of our city was fully filled with sand. In order to achieve merit, I therefore discarded the sand in two of the palaces of assembly. [I vowed that] all the sentient beings in the dharma realm would gather in the depth of the Western Pure Land.” Liu Yuquan 劉玉權, “Dunhuang mogao ku anxi yulin ku de xixia dongku fenqi 敦煌莫高窟、安西榆林窟的西夏洞窟分期” [Periodization of the Xixia-period caves of the Dunhuang Mogao caves and the Anxi Yulin caves], in *Dunhuang yanjiu wenji* 敦煌研究文集 [Collected papers in Dunhuang studies], ed. Dunhuang wenwu yanjiu suo (Lanzhou: Gansu renmin chubanshe, 1982), 300.

174. Some factors that have been speculated include the end-of-dharma thought, the Uighur forces, the decline of Buddhist activities in Dunhuang, and the distinction between the Tibetan and the Chinese Buddhist art traditions. For a most recent review of the factors, see Sha Wutian, “Xixia shiqi Mogao ku de yingjian 西夏時期莫高窟的營建——以供養人畫像缺席現象為中心” [The Construction of the Mogao caves during the Xixia period: Focusing on the absence of donor images], *Xixia xue* 西夏學 [Xixia studies] 15, no. 2 (2017): 101–28.

bodhisattvas” (*xingyuan pusa* 行願菩薩).¹⁷⁵ No matter what they symbolize in the specific cases, the bodhisattva images display an unprecedented degree of uniformity. The visual uniformity is not inappropriate for a threshold to a sanctuary; once entering the Buddhist realm, a worshiper must be mindful of but a single shared identity—the awakened sentient being.¹⁷⁶ All other specific attributes are irrelevant.

The predominant flavor of the Pure Land is further enhanced by various kinds of imagery in the main chambers. In Cave 16, the Amitābha triad on the buddha altar is set amid the thousand-buddha motifs connected by lotus stems on the four green walls (figure 1-64). The thousand-buddha motifs, which are accompanied by a large lotus flower image on the east wall, have been accepted to represent the thousand buddhas of the good eon.¹⁷⁷ Nonetheless, the boundless lotus pond implied by the motifs corresponds with the imaginary topography of the

175. “Offering bodhisattva (in a row)” is used in *Dunhuang Mogao ku neirong zonglu*, *Dunhuang shiku neirong zonglu*, and Liu, “Dunhuang Mogao ku, Anxi Yulin ku Xixia dongku fenqi,” 279; Sha Wutian, “Mogao ku di 55 ku chonghui jingtu pusa dui Dunhuang wanqi shiku duandai de yiyi 莫高窟第55窟重繪淨土菩薩對敦煌晚期石窟斷代的意義” [The significance of the repainted Pure Land bodhisattva in Mogao Cave 55 to the periodization of the Mogao caves of the later periods], in *Dunhuang xixia shiku yanjiu qingnian gongzuo fang lunwen ji* 敦煌西夏石窟研究青年工作坊論文集 [Proceedings of the young scholars’ workshop about the studies of the Xixia-period Dunhuang caves] (Guazhou: Yulin Caves, 2021), 6–11; Li Zhijun, “Puxian xingyuan pin zai Dunhuang shiku zhong de fanying—Dunhuang Xixia shiku xingyuan pusa zaoliang yanjiu 普賢行願品在敦煌石窟中的反映——敦煌西夏石窟行願菩薩造像研究” [The representation of “the chapter of the conducts and vows of Samantabhadra Bodhisattva” in Dunhuang caves: A study of the conduct-and-vow bodhisattva image in the Xixia-period Dunhuang caves], unpublished paper, cited from Sha, “Mogao ku di 55 ku,” 10.

176. *Bodhi* 菩提 (translated into Chinese as 覺) means “enlightenment,” and *sattva* 薩埵 means “living being.” Thus, *bodhisattva* refers to a living being seeking enlightenment, or an enlightening sentient being. In the Mahāyāna Buddhism, the bodhisattva is the model practitioner who dedicates his or her efforts to the salvation of other beings. *Digital Dictionary of Buddhism*, <http://www.buddhism-dict.net/ddb/>.

177. Liang, “Dunhuang shiku xianjie qianfo bianxiang,” 26–38; Sha, *Guiyijun shiqi*, 238–45. In addition, Xie Zhiliu refers to the thousand-buddha motifs in Cave 16 as “thousand buddhas of the good eon” in *Dunhuang yishu xulu*, 191–92.

Western Pure Land. As a merit record from the Dunhuang documents describes the imagery evoked by a temple's decoration, "The rippling Water of Virtue appears like the Pure Realm of Amitābha."¹⁷⁸

The thousand-buddha tableau adopted a visual program completely different from the initial design of Cave 16. Judging from the design paradigm of backscreened central-altar caves, the late-Tang Cave 16 would have born about a dozen transformation tableaux and multipaneled screen paintings on the four walls and even additional tableaux on the four ceiling slopes.¹⁷⁹ Cave 94 (the cave of Zhang Huaishen), whose design keenly followed Cave 16, is reported to have born sixteen tableaux and together represent the Buddhist cosmos in miniature: "In the *zhang*-square chamber, the ten directions are completely manifested; the interior of one cave appears like the three realms."¹⁸⁰ A renovation of Cave 16 in 1981 uncovered a late-Tang mural beneath the green-background style mural. Since it bears images of pavilions and terraces, the underlayer of the mural must have been part of a transformation tableau, especially one that contains a Pure Land scene.¹⁸¹ It reaffirms that the initial design of Cave 16 would not be far from the design paradigm that the later backscreened caves followed. Two changes made as a result of the repainting of Cave 16 are recognizable. First, any images of architecture were

178. 德水漣漪，若彌陀之淨域。Excerpt from *Tubo jianjun lun Dong Bozang xiu qielan gongde ji* 吐蕃監軍論董勃藏修伽藍功德記 [Merit record of Dong Bozang, an inspector in the Tibetan army, building a temple], Yu 689). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 100.

179. For the design paradigm of backscreened central-altar caves, see Wu, *Spatial Dunhuang*, 152–66.

180. 方丈室內，化盡十方；一窟之中，宛然三界。Excerpt from "Chi Hexi jiedu bingbu shangshu Zhang gong dezheng zhi bei" (S.6161+S.3329+S.6973+P.2762+S.11564, ca. 882 CE). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 158.

181. *Dunhuang yishu da cidian*, 114.

removed, since space cells for representing narrative scenes were no longer needed.¹⁸² Second, none of the four walls were subdivided by tableaux or screen paintings, and therefore, the degree of visual uniformity of the cave space was increased. If the idea of the Buddhist realms of the ten directions is still present in the repainted Cave 16, then it is pictured not by multiple tableaux but by a basic imagery that pervades all Buddhist realms.¹⁸³

That basic imagery is myriad buddha or bodhisattva images, and its application to the Dunhuang caves has a long tradition. As early as the Northern periods, the thousand-buddha motifs already decorated the cave walls. The buddha icons are not connected, but the alternation in colors of the buddhas' robes and mandorla gives the discrete icons a sense of rhythm, as if they were bathed in multicolored light. In Tang-period caves, the motif often "retreated" from the walls to the ceiling panels, and their size shrank. In this way, the main pictorial interest is preserved for the large transformation tableaux. Around the Tibetan period, the thousand-buddha motifs adopted new visual templates. In addition to the inclusion of bodhisattva icons, a new feature is the representation of lotus stems that connect the myriad icons.¹⁸⁴ For instance, the ceilings of Caves 148 and 44 are adorned with relatively large thousand-buddha icons linked by lotus stems that not only tie the Buddhist figures to a Pure Land environment but are also woven into a net that wraps around the interior space.

The visual idea of enwrapping an architectural space purely with the lotus stems and

182. For "space cells" in Chinese pictorial art, see Ludwig Bachhofer, *A Short History of Chinese Art* (London: Batsford, 1947), 95–96; Alexander C. Soper, "Life-Motion and the Sense of Space in Early Chinese Representational Art," *Art Bulletin* 30, no. 3 (1948): 180.

183. It is suggested that the Buddha preaching scenes above the bodhisattvas in a row represent the buddhas of the ten directions. Sha, "Mogao ku di 55 ku," 9.

184. In the late-Tibetan-period Caves 158 and 161, the west wall of a late-Tang Cave 138, the east wall of a late-Tang Cave 196, and the antechamber of a late-Tang Cave 12, the matrix template is filled with tiny bodhisattva icons.

figural images is evident in a rare drawing-on-paper found in the library cave (figure 1-65). Known as the *Picture of Many Sons Pagoda* (Chn: Duozita 多子塔, Jpn: Toshita), this line drawing depicts forty-seven bodhisattvas stacked in the shape of a towering pagoda on a hexagonal base.¹⁸⁵ The ten levels of bodhisattva images are connected by lotus stems that substitute for architectonic components. The drawing could be stylistically dated to the Guiyijun period, especially the late-ninth century. While this structure is imaginary only and outside the realm of earthly possibility, the imagery testifies to the design conception of an architectural space wrapped in a net of Buddhist figures. As I discussed elsewhere, the drawing experiments with two systems of lotus stems—the right side vertical and the left side radial—to frame a three-dimensional architectural space.¹⁸⁶ Due to the hybrid and three-dimensional characteristics, the pagoda image may be associated with more than one iconography, although none is represented in a standard way.¹⁸⁷ The multivalent pagoda image, like the thousand-buddha tableau in Cave 16, conveys meanings not through any single icon but through their totality, which frames a three-dimensional space. They illustrate how the architectural space is not just a carrier but also an embodiment of the myriad buddha or bodhisattva images. As the notion of the total space

185. Stein, *Serindia*, 999; Arthur Waley, *A Catalogue of Paintings Recovered From Tun-huang By Sir Aurel Stein, K.C.I.E.: Preserved in the Sub-department of Oriental Prints and Drawings in the British Museum, and in the Museum of Central Asian Antiquities, Delhi* (London: British Museum, 1931): 247-48; Matsumoto Eiichi 松本榮一, *Tonkōga no kenkyū 燉煌畫の研究* [A study of Dunhuang painting] (Tōkyō: Tōhō bunka gakuin tōkyō kenkyūjo, hatsubaijo bunkyūdō shoten, 1937), 489–90, plate 126a.

186. Zhou Zhenru 周真如, “Dunhuang zhihua duozita tu zailun 敦煌紙畫多子塔圖再論” [Revisit of Dunhuang paper-based painting the “Picture of Many Sons Pagoda”], *Dongya hanxue yanjiu 東亞漢學研究* [Sinological research of East Asia] 11 (September 2021): 174–88.

187. According to Matsumoto’s study, the pagoda may represent “the miraculous image of Amitābha and fifty(-two) bodhisattvas” (*amituofo wushi(er) pusa ruixiang 阿彌陀佛五十(二)菩薩瑞像*) or an ancient Indian pagoda known as the Thousand Sons Pagoda (Chn: Qianzi Ta 千子塔, Skt: Bahuputraka-Caitya).

emerged in the designs of the thousand-buddha motifs, the motifs reoccupy the four walls in caves of the eleventh century. The stem-connected icons rising from a mural circle of *kunmen* arches transform the rock-cut cave chambers into simulacra of Pure Land palaces made of lotuses.

In the mid-level Cave 365, a beholder is presented with multiple Pure Land scenes in environments similar to those seen in Cave 16. If Cave 16 simulates the scene by means of the interior space in its entirety, then Cave 365 presents a collection of them on two-dimensional surfaces. In such scenes, a buddha triad in the center is surrounded by a large group of bodhisattvas, monks, and lotus-born babies seated on lotuses sprouting from a pond (figure 1-66). Our current knowledge of these simple-looking scenes is surprisingly inadequate for understanding their genre or subject; scholars find it hard to define what kind of painting they are, as the names given to them alternate between “Buddha preaching scenes” and “[simplified] Pure Land transformation tableaux”,¹⁸⁸ others propose identifying the two scenes on the north and south walls of Cave 365 as the Pure Lands of Maitreya and Amitābha but find very little iconographical features such as the buddha’s sitting posture.¹⁸⁹ Nonetheless, these unsettled

188. The term *Pure Land transformation tableaux* (*jingtu bian*) is applied to all four scenes in Cave 365 in *Dunhuang shiku neirong zonglu*, 148; but four similar scenes in its neighboring Cave 367 are called respectively “Buddha preaching scenes” and “Pure Land transformation tableaux” (*ibid.*, 149). Shi Pingting names the painting as “simplified Pure Land transformation tableau” (*jianlue zhi jingtu bian* 簡略之淨土變) in “Dunhuang jingbian hua lue lun 敦煌經變畫略論” [A brief discussion of transformation tableaux in Dunhuang], in *Dunhuang yanjiu wenji: Dunhuang shiku jingbian pian* 敦煌研究文集-敦煌石窟經變篇, ed. Dunhuang yanjiu yuan (Lanzhou: Gansu minzu chuban she, 2000), 7; republished in Shi Pingting, *Dunhuang xuexi ji* 敦煌學習集 [Collection of learnings from Dunhuang] (Lanzhou: Gansu minzu chuban she, 2004), 2:604. Zhao Xiaoxing even calls this kind of painting “simplified Pure Land transformation tableaux in the style of Buddha preaching scenes” (說法圖式的簡化淨土變) in “Guanyu Dunhuang Mogao ku Xixia qianqi dongku de taolun,” 2. Li Zhijun calls the two paintings on the east wall “Buddha preaching scenes” whereas those on the north and south walls are “Pure Land transformation tableaux,” in “Jiaozong Huayan.”

189. Li Zhijun, “Jiaozong Huayan,” 308–9.

problems make us aware of the unique visual qualities of the Pure Land scenes in the green-background style. They nullify the illusion of pictorial depth by omitting architectural images. And they eliminate the particularity of various Pure Lands by plainly laying out only the most generic figural images.

Such a visual representation is revolutionary amid the Pure Land transformation tableaux of the past four hundred years. Since the early-Tang period, a vivid architectural setting became necessary for conveying the three-dimensionality of a Pure Land scene to worshipers who longed to enter it.¹⁹⁰ The long-term development of the architectural backdrops throughout the Tang, the Tibetan, and the Guiyijun periods was not without their notable achievements.¹⁹¹ But perhaps because cave makers were simply running out of tricks, these backdrops eventually became a highly formulaic device for almost all kinds of transformation tableaux. The only type of green-background style mural that is not represented in the pavilion is the Pure Land tableau with a simplified architectural backdrop (figure 1-67).¹⁹² In such a tableau, the simplified and mannerist depiction of the architectural setting discloses a rising indifference toward the image of architecture. Rather than “further simplification” of that type as some scholars conceive it, the architecture-less Pure Land scene challenges the fundamental template of the former and its predecessors. By removing all visual hints of spatial layering, the design infuses the Pure Land scenes with an unprecedented sense of *flatness*¹⁹³—just as the self-critical modernist painting

190. For the developments of pictorial depth in Chinese Buddhist paintings between the Han and the Tang periods as indicated by Dunhuang mural paintings, see Fong, “The Han-Tang Miracle.”

191. For achievements in architectural paintings in these periods, see Sun and Sun, *Jianzhu hua juan*, 69–273.

192. Zhao, “Guanyu Dunhuang Mogao ku xixia qianqi dongku de taolun,” 2.

193. Xiao Mo notices a type of sense of flatness (*pingmian gan* 平面感) in the architectural paintings of Dunhuang, but his concept is essentially different from the concept in this study.

acknowledges two-dimensionality.¹⁹⁴

The sense of flatness was not uncommon to Dunhuang murals, as it pervaded thousand-buddha motifs and was perceptible in Buddha preaching scenes from the early periods of mural production. However, when flatness began to permeate the Pure Land scenes, which had been invented as illusionistic stages, a fundamental conception of the Pure Land painting was about to collapse. That conception was to make the canvas transparent to unveil images that are believed to exist beyond it. In the new template, the grid-like composition fixes the imaginary realm onto the image-bearing surface, making what was intended to be invisible visible again. The imagery of intertwined lotus stems makes the interior surfaces appear as if wrapped in a net. Extensive application of gold foil and lines and shapes protruding from the figural and decorative images enhance the surfaces' reappearance as a material thing. Furthermore, as a recovered mural fragment of Cave 365 demonstrates, the original look of the green-background murals has a brilliant color palette and delicate, fine lines (figure 1-68). The plainly applied colors and the clearly defined botanical and geometric shapes emphasize the optical effect of the painted

Xiao's flatness refers to the representation of visual depth that appears shorter than actual distance, but I use the term *flatness* to refer to the representation of no visual depth. Xiao, *Dunhuang jianzhu yanjiu*, 261–62.

194. This idea is inspired by a discussion between Wu Hung and Wei Jianpeng in the graduate seminar “Research on Dunhuang Caves” at the University of Chicago, Winter 2018 quarter. For the course, see Wu Hung, *Di yi tang ke: Zai Hafo he Zhida jiao Zhongguo meishu shi* 第一堂課：在哈佛和芝大教中國美術史 [First class: Teaching Chinese art history at Harvard University and the University of Chicago] (Changsha: Hunan meishu chubanshe, 2020), 159–67. For how the idea of flatness was developed as a specialty of the painting medium and an aesthetics of the modernist paintings, see Clement Greenberg, “Modernist Painting” (1960), in *Greenberg, The Collected Essays and Criticisms*, ed. John O’Brian (Chicago: University of Chicago Press, 1986–93), 86–87; Charles Harrison, “Modernism,” in *Critical Terms for Art History*, ed. Robert S. Nelson and Richard Shiff, 2nd ed. (Chicago: University of Chicago Press, 2003), <http://proxy.uchicago.edu/login?url=https://search.credoreference.com/content/entry/uchicagoah/modernism/0?institutionId=170>.

surface rather than the volume of the represented forms. In these ways, flatness causes the Pure Land scenes to be reintegrated into a cave's interior surfaces, a majority of which bear images of less visual depth, such as Buddha preaching scenes, thousand-buddha motifs, and decorative patterns.

Myriad small icons and large Pure Land scenes had been two mutually exclusive components of a cave's visual program before the end of the tenth century, yet beyond that point, they found a way to assimilate each other. Just as the vertical and radial systems of lotus stems become two inseparable halves of the Many Sons Pagoda, the visual programs of the repainted Caves 365 and 16 appear as two coherent levels of one building. An excerpt from the reported initial visual program of the Seven Buddhas Hall seems a mysteriously appropriate description of the general atmosphere in the repainted Caves 365 and 16 of some three hundred years afterward: "Ten thousand sages who are clear and cool soar with purple clouds and emerge in the air; a thousand honored ones of the good eon bloom the jade-like lotus and disclose themselves."¹⁹⁵ In brief, the Pure Land atmosphere and the haptic visual quality tie the repainted caves into—to coin art historian Johnathan Hay's term—one coherent "surfacescape."¹⁹⁶

The Phoenix Pavilion

Architectural appearance is another important factor that suggests the uniformity of the pavilion. Without the three-level timber-structured porch, which was reconstructed by Priest

195. 清涼萬聖，搖紫氣而浮空。賢劫千尊，開碧蓮而化現。 Excerpt from the Wu Sengtong stele. Zheng Binglin admits that the stele text well matches the visual contents of the Cave 365, to the extent that he does not recognize the temporal distance between writing of the stele text and the repainting. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 274.

196. According to Hay, a "surfacescape" is a topography of sensuous surface and, as the interior decoration, it creates an enveloping environment. Jonathan Hay, *Sensuous Surfaces: The Decorative Object in Early Modern China* (Honolulu: University of Hawai'i Press, 2010), 67–68.

Wang in 1900–6, then Caves 16, 365, and 366 could not be accessed like three levels of one building (figure 1-69). Flanked by two shared gable walls, the antechambers of Caves 16, 365, and 366 adopt a uniform width of about twelve meters and are connected by a rock-cut stairway and a wooden ladder. However, one should not take for granted that the pavilion-like porch conforms to the design in Hongbian’s time. The flush-gable roof (*yingshan ding* 硬山頂) of the pavilion-like porch does not appear in any extant timber-structured porches at Mogao from the Guiyijun period.¹⁹⁷ Moreover, the application of floral boards in substitution for bracket sets (*huaban daigong* 花板代栱) is consistent with the stylistic features of Qing-period timber-structure constructions rather than the Song-period ones.¹⁹⁸ The general proportion of the façade would not have changed much, since the locations of the three caves are fixed. But as discussed in chapter 2, the continued use of Caves 364 and 476 during the tenth century implies that a unifying façade was not constructed until later.

Archaeological findings of patterned tiles also indicate that the unifying façade came into existence no later than the sweeping renovation. Although no formal excavation has been conducted in front of Cave 16, it is evident that at least an ante-hall existed in premodern times. On July 19, 1951, an archaeological excavation in front of Cave 16 found patterned tiles at 90 cm below the ground level of Cave 16. These tiles, each sized about 28.5 cm (l) x 28.5 cm (w) x 6 cm (h), were reported to be “Tang-period tiles.”¹⁹⁹ Due to the limited samples, this provisional dating might not be exact; pattern tiles of similar sizes that were later uncovered at Mogao have

197. For roof types of the extant porches at Mogao from the ninth and tenth centuries, see Xiao, *Dunhuang jianzhu yanjiu*, 408–47.

198. For the application of floral boards in timber-structured architecture of the fifteenth to nineteenth century Gansu, see Li Jiang 李江, Wu Xiaodong 吳曉冬, and Yang Jing 楊菁, *Zhangye Dafosi jianzhu yanjiu* 張掖大佛寺建築研究 [Architectural research of Zhangye Great Buddha Temple] (Tianjin: Tianjin daxue chuban she, 2016), 52–59.

199. Chen et al., “Dunhuang shiku kancha baogao,” 49–50.

been dated to the Five Dynasties to the Yuan periods.²⁰⁰ It is not impossible that an ante-hall was built as soon as Cave 16 was constructed in the late-Tang period.²⁰¹ But the 28.5 cm² tiles more likely belong to renovation later than the late-Tang version. That renovation leaves more traces than in the ante-hall of Cave 16; the premodern tiles that have been preserved in situ inside the pavilion are mostly located in Cave 366. The tiles, sized about 28.5 cm (l) x 28.5 cm (w), bear an identical design of eleven-petaled lotus flower with four heart shapes at its center (figure 1-70-a). The corridor of Cave 16 was also paved by tiles that bear designs identical to those in Cave 366 (figure 1-70-b). The design most resembles the V-type tiles used in ante-halls and antechambers at Mogao (figures 1-70-c, 1-70-d, and 1-70-e).²⁰² Since the V-type tiles appeared in the Song, the Xixia, and the Yuan periods, they were likely applied to Caves 16 and 366 when the pavilion underwent a major renovation in around the eleventh century.²⁰³ Since the interior

200. For tile sizes, see Pan and Ma, *Mogao ku kuqian diantang yizhi*, 79, table 26.

201. As testified by several monumental central-altar caves built on the ground level, the ante-hall was built concurrently with the rock-cut cave spaces in the tenth century. This trend would be initiated by Cave 16, which is the first cave of this kind. In 1999, conservators of the Dunhuang Academy discovered some real Tang-period tiles under the building bases of the lower cloister. Since Priest Wang had the cloister built right after the renovation of the pavilion, these tiles reused as architectural materials were likely removed from a constituent cave of the pavilion, especially Cave 16. The large size (32 cm [w] x 32 cm [l]) of the tile (item no. Z1416 in the collection of the Dunhuang Academy) indicates a relatively early date and a different construction from the one the 28.5 cm square tiles belong to. The tile design represents a quarter of a double-layered, thirty-two-petaled lotus flower with four small peony lowers at its center. Since the complete floral design is sized 64 cm square and four times larger than regular tile designs, that tile was more possibly used to pave the ground of a grand space than a modest one. By inference, that tile most possibly belonged to the ante-hall of Cave 16 that was built in the late-Tang period. I thank Sun Yihua for informing me about the tile she discovered.

202. The tiles in Cave 366 resemble the flower-heart design of the V-1 subtype, the quantity of petals of the V-4 type, and the petal style of the V-2 subtype. For the six main types and eighteen subtypes of patterned tiles, see Pan and Ma, *Mogao ku kuqian diantang yizhi*, 76–80.

203. Sha Wutian mentions another possibility that the tiles were added to Cave 366 during a refurbishment in the Yuan period in which the partition wall between Caves 366 and 366A were broken and reconcealed. However, the consistent distribution of worn tiles indicates they were

murals of the three caves were repainted in a consistent style, the porches that were concurrently renovated were more likely conjoined than disjunct. Due to the lack of material remnants, no definite reconstruction design of the premodern porch could be made. However, based on the construction traditions of timber-structured ante-halls and pavilion-like porches at Mogao during the tenth–thirteenth centuries, that porch probably had a larger floor plan, a more tapered façade, and a more pronounced use of bracket sets than the current version (figure 1-71).²⁰⁴ Taking the cliff-top structure into account, the cave composite probably adopted the appearance of a pavilion-style pagoda in the renovation.

Despite the lack of remnants of any timber structures, the totality of the pavilion's architecture is felt in the phoenix designs on the central ceiling panels of Caves 16, 366, and 367 (figure 1-72). An almost identical design of the curled phoenix is represented in the center of the top panel of the sunken well (*zaojin* 藻井), marking the highest point of each truncated pyramidal ceiling. Despite the severe discoloration of the panels in Caves 366 and 367, the bas-relief shapes indicate that the two phoenix images there were conducted in the same technique as that in Cave 16 and once had a shimmering golden appearance.²⁰⁵ The design in Cave 16 contains four dragons encircling a lotus flower in whose center the phoenix is represented, and the phoenix in Cave 365 is rotated ninety degrees counterclockwise from the other two. These variations hardly discredit the idea that the three belong to a series of designs. In fact, the

not interrupted for a long time since they were paved. Any partial repair of the ground paving could interrupt the pattern. Hence, a more possible scenario is that the tiles were added during a systematic refurbishment of the cave. Sha, *Guiyijun shiqi*, 258.

204. The construction traditions of cave-front architecture and cliff-top structures will be discussed in chapter 4.

205. The technique, known as *lifan duijin* 瀝粉堆金, has two steps: first, a paste that is a mixture of animal glue and hydrated lime is applied with a tube-like tool to the wall surface to create a bas relief of the designs; then, gold foil is glued to cover the bas-relief. Ji Xianlin, ed., *Dunhuang xue da cidian* (Shanghai: Shanghai cishu chubanshe, 1998), 224.

phoenix-centered panel design appears only in these three caves at Mogao; it is less likely a coincidence than an intended composition.²⁰⁶ Caves 16 and 366 are, respectively, the lower and upper-level caves of the vertical cave composite, and Cave 367, which is adjacent to the mid-level Cave 365 on the south side, seems a substitute for the latter, whose vaulted ceiling has no sunken well. With the repetition of the special panel images, the three levels of caves acquire a stronger correspondence than without.

These phoenix images have been studied in regard of their political symbolism and Pure Land connotation.²⁰⁷ From the perspective of architectural decoration, one could further understand their positional significance in the expanded vertical composite. In Dunhuang documents, phoenix is often associated with the idea of magnificent architecture. For instance, a soaring pavilion-like façade screening a cave is praised as “the phoenix pavilion” (*fenglou* 鳳樓).²⁰⁸ More specifically, the rich decoration on the timber structures are evocative of “dragon’s

206. Guan Youhui 關友惠, “Dunhuang song xixia shiku bihua zhuangshi fengge ji qi xiangguan de wenti 敦煌宋西夏石窟壁畫裝飾風格及其相關的問題” [The styles of the decorative mural paintings in the Dunhuang caves of the Song and Xixia periods and relevant issues], in *2004 nian Dunhuang xue guoji yanjiu taolun hui lunwen ji* 2004年敦煌學國際研討會論文集 [Proceedings of the international conference on Dunhuang studies in 2004] (Shanghai: Shanghai guji chubanshe, 2006), 1117–21; Shi Jinbo 史金波, “Xixia huangshi he Dunhuang Mogao ku zouyi 西夏皇室和敦煌莫高窟芻議” [Discussion of the Xixia royal family and the Dunhuang Mogao caves], *Xixia xue* 西夏學, no. 4 (2009):169–70.

207. Shi Jinbo suggests its relationship with the esteemed status of three empress dowagers during the early-Xixia period in “Xixia huangshi he Dunhuang Mogao ku zouyi,” 171; Sha Wutian suggests that the miraculous bird-like creatures in the sunken well expressed the wishes of rebirth in Pure Land in “Juyou dongku kongjian hanyi de tuxiang—Mogao ku di 400 ku zaojin fengshou longshen tu’an tanwei 具有洞窟空間含義的圖像——莫高窟第400窟西夏藻井鳳首龍身圖案探微” [Image that has a connotation of cave space: An investigation of the phoenix-headed dragon design in the Xixia-period sunken well of Mogao Cave 400], *Guoxue Xuekan* 國學學刊 [Research in the traditions of Chinese culture], no. 1 (2022): 65–79, 2, 143, 140.

208. This term appears in “Zhang Huaishen zaoku gongde bei 張淮深造窟功德碑” [a stele recording the merits of cave construction by Zhang Huaishen, P.3720, S.5630, ca. 882 CE] and

scales and phoenix's feathers;"²⁰⁹ the overhanging eave is imagined as "open wings of the eagle" and "the dancing phoenix;"²¹⁰ and the ridge-top roof ornaments picture miraculous birds as well.²¹¹ A golden image of an open-winged phoenix standing atop a pointed roof makes the building look taller and livelier and constitutes an auspicious sign.²¹² The wide application of such design to esteemed pavilions in East Asia are attested by Dunhuang paintings of architecture (figure 1-73) and historical buildings in Japan (figure 1-74).²¹³ The well-established

"Hexi Dusengtong Dangquan jiankan shangliang wen 河西都僧統宏泉建龕上樑文" [The beam raising text of a cave constructed at Mogao by a chief monk controller of Hexi, P.3302v, 933 CE]. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 686, 1492.

209. "Carved patterns and openwork designs, which resemble the scales (of dragon) and (feathers of) phoenix, contend in brilliance. (彫文刻鏤，似鱗鳳而爭鮮)" Excerpt from "Guiyijun shiqi mou shijun zaoku gongdeji 歸義軍時期某使君造窟功德記" [Merit record of a certain lord in the Guiyijun Circuit Building a Cave, P.3542], Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1370.

210. "As beautiful as the curled dragon, and soaring as the dancing phoenix . . . the extraordinary vermilion pavilion roams with the open wings of the eagle" (盤龍秀出，舞鳳揚翔；...崢嶸翠閣，張鷹翅而騰飛). Excerpt from "Zhai jia bei 翟家碑" [Stele of the Zhai family, P.4640, ca. 867 CE]. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 258. For similar literary descriptions of the cave front architecture in the Dunhuang Documents, see Ma, *Dunhuang Mogao ku shi yanjiu*, 107–31, 302–31; Sha, *Guiyijun shiqi*, 4–7.

211. "The twin *chi*-owls that bond the roof ridges contend for height with the precipitous mountain peaks" (結脊雙鷄，對危峰而爭聳). Excerpt from "Chi Hexi jiedu bingbu shangshu Zhang gong dezhen zhi bei 敕河西節度兵部尚書張公德政之碑" [Stele of Zhang Lord Huaishen the military governor of the Hexi region, S.6161+S.3329+S.6973+P.2762+S.11564, ca. 882 CE]. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 157.

212. According to Sturman, the phoenix was an iconographical prototype for the famous theme of "Auspicious Cranes" at the court of Song Emperor Huizong's (r. 1100–25). Peter C. Sturman, "Cranes above Kaifeng: The Auspicious Image at the Court of Huizong," *Ars Orientalis* 20 (1990): 58.

213. For instance, two phoenix-shaped ornaments were applied to the top roof ridge of the Phoenix Pavilion of Byōdō-in 平等院 (Uji, Kyoto Prefecture) when it was constructed in 1052. In addition, phoenix images were applied to the pyramidal roofs of the Golden Pavilion of Kinkaku-ji 金閣寺 of Rokuon-ji 鹿苑寺 and the Silver Pavilion of Jishō-ji (慈照寺, a.k.a. Ginkaku-ji 銀閣寺) in Kyoto, Japan, both of which were constructed in the fifteenth century. For the reconstruction of the phoenix-shaped ridge ornament at Byōdō-in, see *Shikoku News*, "Byōdō-in hōōzō no atama ni go shoku no kazari: konryū ji no sugata o fukugen 平等院、鳳凰

association between phoenix image and pavilion architecture prompts us to ponder the architectural implication of the phoenix-centered ceiling panels in and near the pavilion. The top ceiling panel is the topmost spot for a truncated pyramidal ceiling cave, just like the tip of a pyramidal or conical ceiling for a freestanding hall. By inference, despite the phoenix image being represented on the top ceiling panel rather than beyond it, it preserves the idea of “crowning” the architectural entity below. The actual “phoenix pavilion”—the timber-structured façade screening the three levels of caves—built concurrently with the repainting of the caves is no longer extant. Nonetheless, the three phoenix panels indicate a systematic renovation that was to a large extent fueled by an architectural vision. Only when that vision is verified will it be safe to treat the vertical cave composite with its exterior structure as an architectural ensemble. And this ensemble could be distinguished from other caves in its vicinity.

Metamorphosis of the Pavilion

Having inspected the metamorphosis of its constituents, I have reconstructed the procedure in which the pavilion emerged and evolved along with its vicinity in seven distinct phases as follows:

Phase 0 (figure 1-75): Before the advent of Cave 365, the cliff site was occupied by the pragmatic Caves 365A, 365B, 365C, 365D, and 476 and served as living quarters for Buddhist practitioners.

Phase 1 (figure 1-76): In 832–34, Hongbian commissioned the construction of the Hall of the Seven Medicine Buddhas (Cave 365), which led to the destruction and sealing of

像の頭に 5 色の飾り: 建立時の姿を復元” [The five-color decoration on the head of the phoenix statue of Byodo-in Temple: Restoration to its original appearance], published on July 4, 2014, http://www.shikoku-np.co.jp/national/culture_entertainment/20140704000367.

Caves 365A, 365B, 365C, and 365D. Meanwhile, an oblong porch was built in front of Cave 365 to connect caves on the same level in the district and to display the Wu Sengtong stele. The stele was placed in a niche that was enlarged from the corridor of Cave 365D (i.e., Cave 364).

Phase 2 (figure 1-77): The extra-top level above Cave 365 was likely planned as a cave triad, but only the central cave (Cave 366') was finished, and the south cave (Cave 366A) was just excavated when the construction ceased. Caves 366' and 366A were built no earlier than Cave 365 and no later than the time when Cave 16 was conceived. Since it is possible that the initial design of Cave 365 did not have a circumambulatory space behind the seven-buddhas niche and the minor caves above it were laid out along the width of the cliff, the decorated caves introduced the spatial conception of frontality and the horizontal dimension to the district.

Phase 3 (figure 1-78): Cave Suite 16/17, known as the Cave of Buddhist Master Wu, was constructed with the patronage of top-ranking political and religious leaders in the late-Tang period. The construction likely occurred after the death of Hongbian in 862 and even after Wuzhen rose to the position of chief monk controller in 869.²¹⁴ The monumental cave completed the vertical composition, made the vertical dimension outweigh the horizontal one, and explored the depth of the cliff. Yet the three levels of ante-hall and antechambers, which were built at separate times and concerned varied

214. It is conventionally believed that Cave 16 was built around 851 and that Cave 17 was adapted to a shadow cave in 862. But as discussed in chapter 2, Cave 17 was designed as a shadow cave from the very beginning, and Cave 16 did not have to be completed in Hongbian's time for it to be the "Cave of Buddhist Master Wu." Furthermore, the most prestigious patrons' merit caves built in the 850–60s are relatively humble compared to those built in the 880s and afterward.

architectural principles, were not necessarily connected.

Phase 4 (figure 1-79): At some point in the tenth century, the stele in Cave 364 was removed, and the stele niche was transformed into a meditating monk's image niche. The remaking of Cave 364 was approximately contemporary to the modification of Cave 476 and the functional change of Cave 17. Cave 476, a two-chamber cave, was adapted into a monastic repository in the rear and a shadow cave in the front. Cave 17 still served as the shadow cave of Hongbian, yet it appeared to have also served as a temporary repository of ritual offerings.²¹⁵ Hence, before the union of the three main caves of the pavilion, the three subordinate caves were related by theme—commemoration of eminent monks—and by space—dual spaces for visual representation and material deposit.

Phase 5 (figure 1-80): At some point in the eleventh century, a sweeping renovation of the three major caves took place. Cave 366' was enlarged into Cave 366, whereas Cave 366A was broken and sealed. Cave 365 was refurbished to feature the seven buddhas of the past, and a circumambulatory tunnel was cut out. Meanwhile, the statue in Cave 364 was removed, and the niche-shrine was sealed. The main visual contents in the refurbished Cave 16 were the Amitābha triad and the thousand buddhas of the good eon. Cave 17 was sealed with numerous manuscripts and ritual artifacts, as if turned into an “underground crypt” of the cave composite. All the caves that intersect with or are appended to the main caves—including Caves 366A, 364, and 17—were sealed so that the interior surfaces and cliff face became uninterrupted canvases for depicting large figural images. Likewise, the accessibility of Cave 476 was probably hindered by the

215. For a discussion of two newly identified Tibetan inscriptions in Cave 17 and their implication of the cave's functions in the tenth century, see Zhou, “New Wine from the Old Bottle.”

construction of a three-storied porch. The cliff-top timber structure seems to have been added during the renovation, thereby disguising the cave composite under the appearance of a pavilion-style pagoda. The patron of the renovation is unknown, but the vision of a total work of architecture bearing myriad Buddhist images is apparent. A consistent architectural structure was achieved at the expense of the intricate cave spaces accumulated in a long duration. Nonetheless, the remnant memory of the ancient Buddhist monks who hold a place in the history of the Mogao caves has been preserved by a picture of the Liangzhou Miraculous Image in the deepest part of Cave 16.

Phase 6 (figure 1-81): In 1900–6, the second renovation of the pavilion (from-top-to-bottom) was commissioned by Priest Wang after he reopened Cave 17 or more caves. In around 1904, the buddha altar of Cave 365 was refurbished; the statues' robes were first painted with patchwork patterns but soon repainted in the maroon color.²¹⁶ Around the same time, the Buddhist statues in Cave 366 were replaced by a triad of the Jade Emperor and those in Cave 16 were refurbished. Cave 17 was reopened by Priest Wang and worker Yang in 1900. Although the circumstances in which the other subordinate caves were reopened have not been reported, archaeological remnants and early visual documentation give clues to the following speculation. Long before 1911, Cave 366A had been broken into from Cave 366, sealed, and broken into again. Before 1914, Cave 365A was broken into from Cave 365, Cave 365D was broken into from Cave 363, whereas Cave 364 was reopened, leaving no remnants of deposited items if there were

216. The underpainting of the statues is still visible on the back sides. The vivid blue and orange colors applied to the underpainting is consistent with the other statues Wang refurbished in the district.

any.²¹⁷ When the three-story timber-structured porch was under construction, the antechamber of Cave 476 was used as a carpentry workshop, and the rear chamber would have been emptied if there were any deposit. When the porch was about to be completed, Cave 476 was sealed behind the west wall of the ante-hall of Cave 16. The dissemination of deposited items from the library cave(s) and the renovation of the pavilion are the two sides of one coin.

Phase 7 (figure 1-16): Since the Dunhuang Academy (a.k.a. the Dunhuang Art Institute, the Dunhuang Cultural Relics Institute) took charge of the Mogao site in 1944, the pavilion has been conserved as a national cultural relic. The most significant changes were the restoration of the shadow cave of Hongbian by Chang Shuhong and fellow workers in 1965 and the remaking of the lower cloister into a gallery of the Dunhuang library cave. Moreover, several minor changes took place: the north corridor to Cave 476 was concealed during the cliff reinforcement projects in the 1960s, and the broken areas in the caves for traversing have been sealed. During the conservations, some underpainting in Cave 16, the hidden Caves 365B and C, and the remnants of the cliff-top structure were discovered. Modern conservators aim at an unprecedented goal—to freeze the pavilion in a historical stage. Yet always, remaking the pavilion has been a way for contemporary beholders to comment on the varied past incarnations of the Mogao caves.

A tendency in the construction history of the pavilion in premodern times is observable: the architectural principles gradually replaced the non-architectural ones. The hall-like Cave 365

217. A further breakage of Cave 365D took place between 1914 and 1942. It was further broken on the south side, so that the rock-cut tunnels on the top level of the district were connected. In addition, the rear part of its floor was expanded downward by about 60 cm to match the ground level of Cave 365D (figure 1-13-f). Afterward, the broken areas on the rear wall of Cave 364 and the north wall of Cave 365D were fixed.

replaced the meditation caves that had existed at the site, then Caves 16 and 366 emphasized the vertical extension over the horizontal stretch. Meanwhile, the pragmatic caves were adapted into auxiliary caves of the decorated cave temples. They represent the historical time and interweave the cultural memory of the site with the redeveloped ritual district. Eventually, these auxiliary caves were all concealed behind the sweeping surfaces of the architectural ensemble. The order of architectural space was established at the expense of the order of historical time.

A Multivalent Architecture

The long timeline reaffirms that the pavilion in its current iteration is an agglomeration of spaces and structures that resulted from multiple historical stages. During the long period of the structure's evolution, the architectural principles that dominated the cave composite evolved, and the cave makers, known and unknown, held diverse visions for the constituents as well as the whole. Even in phase 5, when the cave composite was most integrated, there remains a question about what the cave interiors and the exterior structures added up to. Unlike freestanding buildings, the façade is not necessarily a faithful reflection of the interior space. For instance, the uniform width of the current porch could not indicate the scale contrasts among the three main caves of the pavilion. Moreover, the extra depth and the auxiliary spaces may not be reflected by the architectural appearance. Hence, the hypothesis that the pavilion represents a certain type of standalone architecture, such as a monastery, a pavilion, or a pagoda, oversimplifies the cave architecture and underestimates its potential of spatial expression. The pavilion resembles no architectural prototype; rather, the long-term agglomeration of cave constructions eventually resulted in an imaginary building complex that could not possibly stand on earth. While the vision of the whole likely exists, the pavilion in phase 5 appears not so much like a seamless whole as a spatial arrangement of multiple architectural imageries—from an entrance pavilion to

a lotus-surrounded terrace for ritual gatherings, then to a multileveled pagoda in a cloister.

The pavilion as integrated by the eleventh-century refurbishments featured compact spatial arrangements and consistent visual implication of Pure Lands. Therefore, to understand the religious experience it could have evoked, it is necessary to consider the imaginary architecture of the Pure Lands as pictured in the Dunhuang caves. A representative Tibetan-period image of Pure Land architecture is a pagoda-centered cloister in the medicine buddha transformation tableau in Cave 361 (figure 1-82). The tableau depicts a series of railed terraces and two-storied buildings along the central axis of a courtyard complex. The lower, middle, and upper registers of the tableau are respectively centered at (a) the entrance pavilion in the foreground, (b) the holy assembly in the courtyard of the middle ground, and (c) the pavilion-style pagoda in the background (figure 1-80).²¹⁸ Thus, contemplating the tripartite composition along the vertical axis is analogous to the spatial experience of entering the cloister through the horizontal path.

If the painting medium can convey the Pure Land imagery through a vertical arrangement of virtual spaces, then the cave architecture can do so through a vertical arrangement of real spaces.²¹⁹ Taking the perpendicular cliff face as canvas, the architecture of the pavilion presents three spatial layers: (a) the three-storied porch gives the impression of an entrance pavilion to the complex behind; (b) Cave 16 on the ground level produces voluminous space for a large-scaled assembly centered at the deities of the Western Pure Land; (c) Caves 365 and 366 and the cliff-top structure as a whole approximate the typical composition of “the jeweled pavilion style.”²²⁰

218. Xiao, *Dunhuang jianzhu yanjiu*, 72; Sun and Sun, *jianzhu hua juan*, 190–91.

219. For the distinction between the virtual space and the real space, see David Summers, *Real Spaces: World Art History and the Rise of Western Modernism* (London: Phaidon, 2003), 43–45.

220. Zhao, “Dunhuang tubo shiqi ta, ku chuizhi zuhe xingshi fenxi tanxi.”

and the iconographical combination of the two caves resembled the eight-buddhas combination of the Liao-period pagodas (figure 1-83).²²¹ Since the accessibility to the three layers of spaces decreases in order, the sequence in which they would have been experienced during one's visit are relatively stable: prior to accessing the caves behind, one sees and enters the porch first; and if one has the privilege of visiting the upper levels, one normally would have toured the more public spaces on the ground level and ascended from a stairway outside the porch. As any visual depth in the green-background-style murals is "flattened" and the auxiliary caves are concealed, the imaginary Pure Lands is simulated by actual architecture and habitable spaces as well as myriad Buddhist images.

The religious experience associated with the figural images corresponds with the spatial experience evoked by the cave architecture. The green-background style mural is particular to the Dunhuang Caves, but adorning a multilevel architecture with myriad Buddhist icons is not a unique design for cave architecture. Freestanding buildings that bear myriad buddha icons, historically known as the ten-thousand-buddha pagoda (*wanfota* 萬佛塔) and the thousand-buddha pavilion (*qianfoge* 千佛閣), blossomed in middle-period China.²²² The historical reception of the figural images in such buildings provides an additional lens for us to see those in the pavilion. The most philosophical reflection on the thousand-buddha pavilion in the Northern

221. Gu, "Liao ta yanjiu," 67–70.

222. For examples of thousand-buddha halls, pavilions, and pagodas of the Song dynasty (960–1227), see Wang Guixiang 王貴祥, *Zhongguo hanchuan fojiao jianzhu shi: fosi de jianzao, fenbu yu siyuan geju, jianzhu leixing ji qi bianqian* 中國漢傳佛教建築史: 佛寺的建造, 分佈與寺院格局, 建築類型及其變遷 [The history of Chinese Buddhist architecture] (Beijing: Qinghua da xue chu ban she, 2016), 2: 1298–1301, 1586, 1590.

Song dynasty (960–1127) was written by scholar-monk Qisong 契嵩 (1007–72) in 1059 CE.²²³ Titled *Record of the Thousand-Buddha Pavilion of the Chongfu Chan Cloister of Zhangzhou* (Zhangzhou Congfu chanyuan qianfoge ji 漳州崇福禪院千佛閣記), this commemorative text justifies the expensive construction of a thousand-buddha pavilion at Chongfu Monastery in Zhangzhou (in present-day Fujian Province) by the abbot Xianwei 顯微.²²⁴ According to the text, the Chongfu pavilion consisted of an upper level enshrining a triad of Shakyamuni, Maitreya, and Medicine Buddha and a lower level enshrining a triad of Shakyamuni, Mañjuśrī, and Samantabhadra. Funded by Buddhists in the local community, images of the thousand buddhas of the good eon and five hundred arhats were made to respectively adorn the upper and lower levels.²²⁵ The complex visual content and collective sponsorship of the Chongfu pavilion are not unlike the Mogao pavilion. Since the kind of thousand-buddha pavilion was costly and seemed to serve nothing but iconic worship, it is not difficult to imagine dissenting voices against such construction projects.²²⁶ To dispel any doubts, Qisong theorizes the religious experiences and merits that the thousand-buddha images in the Chongfu pavilion are potential to bring forth:

223. For Qisong's career and thoughts, see Liou Guei-jie (Liu Guijie) 劉貴傑, "Qisong sixiang yanjiu: Fojiao sixiang yu rujia xueshuo zhi jiaoshe 契嵩思想研究——佛教思想與儒家學說之交涉" [A study on the thought of Chi-sung], *Zhonghua Foxue Xuebao* 中華佛學學報 [Chung-Hwa Buddhist journal], no. 2 (1988): 213–40.

224. *Quan Song wen* 全宋文 [Complete collection of Song-dynasty literature], ed. Zeng Zaozhuang 曾棗莊 and Lin Liu 劉琳 (Shanghai: Shanghai cishu chubanshe; Hefei: Anhui jiaoyu chubanshe, 2006), vol. 36, no. 780, 365–66. Hereafter cited as *QSW*.

225. *QSW*, vol. 36, no. 780, 366.

226. For an explicit expression of the concerns by a contemporaneous literatus, see "Record of the Thousand-Buddha Pavilion of Kaiyuan Monastery of Wenzhou" (Wenzhou Kaiyuan si qifoge ji 溫州開元寺千佛閣記), compiled by Ye Shi 葉適 (1150–1223), in *QSW* vol. 286, no. 6493, 83–84.

Thus, the sagely ones manifest their images for all under the heaven and the future generations. Primarily, it is meant for humans and heavenly beings to *contemplate* the image to know the nature of non-image. Secondly, it is meant for them to *see* the image to awake the benevolent mind. In the next place, it is meant for them to *look up to* the image to predict the extraordinary conditions. Knowing the nature of non-image, one is close to the supreme. Awakening the benevolent mind, one turns toward the way. Predicting the extraordinary conditions, one gradually ascends to bliss. The three things function in slightly different ways, but the merit they accomplish in the present and the future is one and the same.

然聖人垂像與於天下後世，固欲其人天者觀像以性乎無像，其次欲其睹像以發其善心，其次欲其瞻像以預其勝緣。性乎無像，近至也；發乎善心，響[向]道也；預乎勝緣，漸上喜也。是三者雖其功小差，及其當世後代成德則一也。²²⁷

Qisong defines three ways of engaging with the Buddhist images, namely, “contemplating” (*guan* 觀), “seeing” (in the sense of witnessing, *du* 睹), and “looking up to with adoration” (*zhan* 瞻).²²⁸ The three ways are indicative of the steps by which one learns to engage with Buddhist beliefs. At the beginner’s level, the primary form of iconic worship means looking up to the buddha images with adoration and believing in the extraordinary connections. At the intermediate level, one not only sees the buddha images in front of one’s eyes but also recognizes the cause of what is being seen, that is, the evocation of the bodhi mind (Skt:

227. *QSW*, vol. 36, no. 780, 366.

228. As will be discussed in chapter 5, “contemplating” (*guan*) and “seeing” (*du*) are also two modes of seeing the Dunhuang caves as described in the Dunhuang documents.

bodhicitta; Chn: *puti xin* 菩提心). At the advanced level, one can look through the phenomenal image at its nature and contemplate the ultimate truths of Buddhism. The three ways of engaging with the buddha images not only symbolize the procedure of penetrating into the Buddhist teachings but also imply a series of spatial experience in the thousand-buddha pavilion. Before entering the pavilion, one looks up at the magnificent appearance; after having presented oneself in front of the myriad Buddhist icons, one sees the holy assembly assembled in a ritual field; eventually, having seen the spaces and icons, one might be able to mentally construct a total image of the pavilion, which equals neither the spaces nor the icons. The process of approaching the total image is analogous to the recognition of oneness in multiple phenomena. That is what Qisong regards as the most profound merit of constructing a thousand-buddha pavilion.

While it was unlikely that average Buddhists in late-medieval Dunhuang dived deep into such philosophical waters, there were eminent monks who took the pavilion as a means of engaging with the Buddhist teachings. According to the Wu Sengtong stele, Hongbian was clearly aware of the relationship between the material forms of the caves he built and the higher truths they held. He even took the cave construction as a chance of giving the following sermon to his disciples: “Clay niches are not substantial, but they may exert themselves to hold [the Buddha’s teachings]. Bamboo and silk[-based artifacts] are not real, but they have the function of circulating [the teachings].”²²⁹ Hongbian’s words indicate that Buddhist thinkers in ninth-century Dunhuang began to accept the cave art as an expedient means. By inference, the design of cave architecture may enjoy more freedom than that of freestanding buildings, as long as it can provide worshipers with spiritual inspiration. The emergence of various cave composites in

229. 泥龕不實，而能作住持之功；竹素非真，而有流通之用。Excerpt from the Wu Sengtong stele. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 274–75.

the Tibetan and the Guiyijun periods confirms that the design freedom had been well explored at the architectural scale. The eleventh-century reintegration of the pavilion was the culmination of that procedure; a new architecture emerged from the collage of multiple architectural imageries and myriad figural images. The pavilion is at once a picturesque scene that invites worshipers to enter, an actual architectural space that conveys messages through the embodied viewing experience, and an exercise of mind and spiritual consciousness. It is this multivalent character that endows the pavilion with the potential to bridge the real and the virtual spaces, the phenomenal and the ideal realms.

Conclusion

The formation of the pavilion results from the interplay between the cave and the architecture. Rather than mere imitation, the cave architecture has a mutual and profound relationship with the stand-alone architecture: the cave carries the images of architecture as its visual contents; the architecture screens the cave as its appearance and framework; the cave anchors the architectural imagery to the cliff site onto which it is built; and the cave realizes an ideal of the architecture—emancipating the space from the law of gravity. Specifically, the pavilion illustrates three new paradigms of cave construction that shaped the architectural landscape of the Mogao caves between the ninth and the eleventh centuries. The first paradigm is the grouping of caves, including cave suites, composites, clusters, and districts. However subtle the compositional principles might be felt, the attempt to integrate and reintegrate neighboring caves indicates the notion of a larger picture than the construction work per se. It also testifies to the existence of construction management and site maintenance. The second paradigm concerns the more comprehensive impact the architectural images have on the visual form of the cave that bears them. While the architectural images all serve some function in the pictorial scenes in which they

are depicted, some also play a role in the visual structure and architectural programs of the cave. The third paradigm is the prolongation of the spatial and religious experience in the cave by means of architecture. The porch screening the cave provides the latter with an architectural appearance for the otherwise interior architecture. Sometimes, the exterior structures echo the interior murals and complement the built environment of the sacred landscape. These paradigms will be further discussed in the following chapters.

Chapter 2

Enlivening Pagodas in Caves

A reason that architecture was neglected by art critics in premodern China is that it seemed irrelevant to the artistic attribute *liveliness* (*shengdong* 生動), one of the criteria for the art of painting.¹ As many historians of religious art would agree, divine presence was conveyed through visual depictions of the vivid motion and miraculous manifestation of figural images.² Yet many textual and visual representations of pagodas in medieval China indicate the historical imagination of an animated architecture. One often finds in Tang-period literature sacred religious architecture described “as if manifesting out from groves” or “flying from outside the space.”³ In actuality, animation found dynamic artistic expression in the architectural form of

1. For instance, Zhang Yanyuan 張彥遠, a Tang-period Chinese scholar, in *Lidai minghua ji* 歷代名畫記 [Famous paintings of successive dynasties] comments on the six methods of painting, of which the foremost principle is “liveliness of artistic conception” (*qiyun shengdong* 氣韻生動). But he then comments: “至於台閣……，無生動之可擬，無氣韻之可侔，直要位置向背而已” (As for terraces and pavilions, . . . there is no liveliness to depict, no artistic conception to match. The key is merely position and orientation). *Lidai minghua ji*, 10 vols., Ming Jin dai mi shu ben 明津逮秘書本 1:53–54.

2. For animated images in Western contexts, see, for example, Stijn Bussels, *The Animated Image: Roman Theory on Naturalism, Vividness and Divine Power* (Studien aus dem Warburg-Haus; Berlin: Akademie Verlag, 2012); Beate Fricke, “A Liquid History: Blood and Animation in Late Medieval Art,” *RES: Anthropology and Aesthetics*, no. 63/64 (Spring/Autumn 2013): 53–69; and Noa Turel, *Living Pictures: Jan Van Eyck and Painting's First Century* (New Haven, CT: Yale University Press, 2020). For those in Chinese contexts, see, for example, Sun-Ah Choi, “*Zhenrong to Ruixiang*: The Medieval Chinese Reception of the Mahābodhi Buddha Statue,” *Art Bulletin*, 97, no. 4 (2015): 364–87. Most recently, a graduate seminar instructed by Wu Hung at the University of Chicago in the 2018 fall titled “Miraculous Images, Animated Objects, and Enchanted Places in Chinese Art” proposes a comprehensive framework of understanding how imagination and fantasy are connected to visual and architectural forms.

3. Li Yong 李邕's (674–746) “*Donglin si bei bingxu* 東林寺碑並序” [Stele of Donglin Monastery with preface] reads: “如來之室，宛化出於林眩。壞窗橢幢，忽飛來於空外。”

the pagoda, especially as it was imagined in the pagoda-centered cave temples in Dunhuang. This chapter investigates the ways in which the visual representations of pagodas transform the cave temples they decorate into ritual places endowed with miraculous forces.

Mogao Cave 14 is an exceptional case of a central-pillar cave of the Guiyinjun period featuring a truncated pyramidal ceiling and a single-niche pillar. The key to decoding the architectural concept, pictorial programs, and religious practices of the cave lies in the west ceiling slope. Yet because of the damage in the image that the slope bears, no consensus has been reached about the architectural form of the visual focus in the cave. Based on newly identified details, I have theoretically reconstructed the image of the pagoda *chatra* (pagoda finial) and ceiling that were originally depicted on the west slope, and I suggest three design possibilities. The contextualized analysis demonstrates that the mural and the niched pillar constitute a complete frontal image of a jeweled pagoda, which is rendered as “coming flying” and “leaping forth.” The chapter considers the original design as well as the modifications made in the tenth century. It reveals a dynamic relationship between the five pagoda images in the cave, namely, from the altar of the five-buddha mandala to the integration of the Lotus Pagoda and Vairocana’s Lotus Repository World. In this way, the chapter explores the visual, spatial, and temporal dimensions of conveying liveliness in pagoda-centered cave architecture.

Mogao Cave 14: A Pagoda-Centered Cave

The central-pillar cave offers an ideal site for investigating the ideas of representing a pagoda. Dunhuang cave temples that have been determined to belong to the central-pillar cave type were

(The Tathagata’s chamber seems as if manifesting out from groves; the broken hole and elongated pillars appear as if suddenly flying from outside the space.)” *Qingding quan Tang wen* 欽定全唐文 [Complete collection of Tang dynasty literature], eds. Dong, Hao 董誥 et al. (Shanghai: shanghai guji chuban she, 2002), vol. 264. Hereafter cited as *QTW*.

constructed throughout the fifth to fourteenth centuries.⁴ While a primary formal feature—a four-sided rock-cut pillar in the center or rear center of the cave—is retained, the cave designs vary by spatial configuration, architectural prototypes, and elements incorporated (figure 2-1). The large “gene pool” of the central-pillar cave not only informs us of the developments of pictorial programs and ritual functions of cave temples but also reflects the evolution of architectural forms.⁵ As is often acknowledged, the central-pillar caves of the Northern Dynasties are the Chinese adaptation of the *chaitya* cave (Skt: *chētiyagharas*) that originated in India, which imitates the typical pagoda-centered layout of contemporary Buddhist monasteries. In addition, because the hall-centered layout surpassed the pagoda-centered layout in the Sui and Tang periods, the central-pillar cave gradually lost its popularity to the truncated pyramidal ceiling caves that simulate buddha halls and shrines.⁶ Although the central-pillar cave of the Guiyijun period is not a mainstream cave type, it synthesizes many common architectural

4. According to the author’s surveys, there are forty-six central-pillar pagodas among the Dunhuang caves in total. Among them, twenty-nine are from Mogao, five from the West Thousand-Buddha caves, two from the Yulin caves, three from the East Thousand-Buddha caves, and two from the Changma caves.

5. For representative studies of the central-pillar cave from art and archaeological perspectives, see Mizuno Seiichi 水野清一, Nagahiro Toshio 長廣敏雄, *Kyōdōzan Sekkutsu: Kahoku Kanan Shōkyō Ni Okeru Hokusei Jidai No Sekkutsu Jiin* 響堂山石窟: 河北河南省境における北齊時代の石窟寺院 [Xiangtangshan Caves: The Buddhist cave temples of the Northern Qi dynasty on the frontier of Henan and Hebei] (Kyōto: Tōhō Bunka Gakuin Kyōto Kenkyōjo, 1937); Li, *Zhongyin fojiao shiku si bijiao yanji*; and Abe, “Art and Practice in a Fifth-Century Chinese Buddhist Cave Temple.” For representative studies of the central-pillar cave from the perspective of architectural history, see Xiao, “Dunhuang Mogao ku de dongku xingzhi”; Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 367–82, 295–394; and Sun and Sun, *Shiku jianzhu juan*, 51–62, 83–105.

6. The design conception of the central-pillar caves of certain regions are still debated, but it is generally accepted that the early central-pillar caves are related in certain ways to freestanding pagodas and pagoda-centered monasteries. For instance, Stanley Abe, in “Art and Practice in a Fifth-Century Chinese Buddhist Cave Temple,” considers that the central pillar in fifth century Dunhuang caves simulates the central pillar in a pagoda instead of the pagoda itself. And Xiao Mo, in “Dunhuang Mogao ku de dongku xingzhi” (190), points out the significant difference between the central-pillar caves in Xinjiang and the freestanding pagodas but admits that the cave space still allows the practice of circumambulation.

vocabularies, such as the central pillar, the upturned-funnel ceiling, the canopy-shaped niche, the central altar, and the auxiliary cave.⁷ Eventually, the central-pillar cave became a syncretic form that consolidated the typological spectrum of the Mogao caves.⁸ Eclecticism is not limited to the cave design; it is also felt in the interplay among its various constituents that have architectural connotation, such as the pillar, the niche, the painting of architecture, and the constructive decoration. Therefore, the central-pillar cave in late medieval Dunhuang is a representative of the “total space” that commands architectural, plastic, and pictorial arts.⁹ Taking Mogao Cave 14 as the major example, this chapter focuses on the ways in which the syncretic caves appropriate early prototypes, construct visual images, and represent miraculous scenes.

Central Pillar and Pagoda Image

Mogao Cave 14 is such a “composite” central-pillar cave of the Guiyijun period.¹⁰ It is located at the northern end of the south section of the Mogao caves. Located on the second level, Cave 14 is adjacent to the landmark cave group—the three-story pavilion—on the north side (figure 2-2).¹¹ In this three-level vicinity, caves on the top level were mostly constructed in the Tibetan period; Cave 14 and those on the first and second levels were constructed during the early Guiyijun period in the second half of the ninth century, alternatively referred to as the late

7. Shi, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu,” 285.

8. Ma, *Dunhuang shiku yingzao shi daolu*, 53–54.

9. For “total space” in Chinese Buddhist caves, see Wu, “Shiku yanji meishu shi fangfalun ti’an,” 144–45. For a recent discussion of total space in ancient Chinese architecture, see issue no. 2 (2022) of *Jianzhu Shi Xuekan*, especially the preface.

10. The cave is numbered 14 in the Dunhuang Academy’s numbering system, and it was numbered 165 by Paul Pelliot, 153 by Zhang Daqian, and 403 by Shi Yan. Unless otherwise noted, the present study follows the Dunhuang Academy’s numbering system, which is most widely used in current scholarship.

11. For the earliest photograph of the exterior view of Cave 14, see *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 3:73.

Tang period. Cutting into the west-facing cliff, Cave 14 sits west and faces east. Along the central axis, the cave consists of an antechamber, a main chamber containing a single-niched rectangular pillar, and a corridor connecting the two chambers (figure 2-3). The main chamber is 7.2–7.3 meters deep and 4.85–5.3 meters wide, forming an elongated layout that is wider in the front and narrower in the rear.¹² The central pillar, sized 3.5 m (l) x 2.3 m (w) x 3.1 m (h), is in the rear center, about 4.1 meters from the east wall. Because the side walls of the canopy-shaped niche fold inward at the top, the central pillar, from a frontal view, resembles a freestanding canopied shrine placed atop a square altar. The main chamber is subdivided into a larger fore section and a smaller rear section by the east-facing face of the central pillar. The front part is a relatively voluminous square room under a truncated pyramidal ceiling. The rear section comprises narrow and low corridors under a flat ceiling that surround three sides of the central pillar. The late-Tang design has been well preserved with a few exceptions. In the tenth century, the corridor and the antechamber were completely refurbished, and the central pillar and the east wall of the main chamber was partly repainted; the statues were remade in the Qing period. The beam holes on the west wall of the antechamber indicate the existence of a three-bay timber-structured porch. The antechamber was screened, the corridor is narrow, and the elongated main chamber is subdivided by the central pillar; therefore, this mid-sized cave contains multiple layers of space and appears deeper than the neighboring caves. The transition of wide and narrow spaces, bright and dark environments, culminates in the frontal view of the niched pillar. Facing the entrance, it is connected to the west ceiling slope of the fore space and indicative of the circumambulatory path half-hidden behind (figure 2-4).

In the main chamber, esoteric and exoteric Buddhist images are carefully laid out to

12. Shi, *Mogao ku xing*, vol. 2, fig. 129.

reinforce the axial symmetry of the main chamber and the biaxial symmetry of its fore section (figure 2-5). The four walls of the main chamber are divided into an upper major register and a lower minor register. The upper register of the south and north walls bears eight tableaux of esoteric Buddhist deities or mandalas. The south wall bears, from east to west, the images of the thousand-armed Avalokiteśvara, Amoghapāśa, an eleven-headed Avalokiteśvara tableau, and the mandala of eight great bodhisattvas. The north wall bears, from east to west, the images of thousand-armed Mañjuśrī, Cintāmaṇicakra, Avalokiteśvara, and Vajrasattva.¹³ The tableaux represent four pairs of deities, each of which is painted at the same position on the opposite walls. In addition, four tableaux of exoteric Buddhist subjects occupy the less predominant locations on the walls. The south- and north-facing sides of the central pillar bear the transformation tableaux of the *Maitreya Sūtra* and the *Sūtra of Paying back Kindness*, respectively. The east wall bears the tableaux of the bodhisattvas Samantabhadra and Mañjuśrī on the south and north sides of the entrance. The east wall area above the entrance bears a pagoda that enshrines two buddhas and hovers in the air. The lower mural circle consists of fifty-one panel paintings of bodhisattvas, which are about two-thirds life size. As an exception, the upper register of the west wall is filled with small thousand-buddha motifs that are consistent with those on the south, north, and east ceiling slopes. Each of the three ceiling slopes is centered

13. The identification of the west-end images on the south and north walls has been debated. For different opinions, see Liang Weiyong 梁尉英, “Xianmi zachen youxuan wenjian—Mogao ku di 14 ku tangmi neirong he yishu tese 顯密雜陳幽玄穩健——莫高窟第一四窟唐密內容和藝術特色” [Esoteric and exoteric, profound and robust: Tang-period esoteric contents and artistic characteristics of Mogao Cave 14]. *Dunhuang shiku yishu: Mogao ku shisi ku (wantang)* 敦煌石窟藝術. 莫高窟一四窟 (晚唐) [Art of the Dunhuang caves: Mogao Cave 14 (late Tang)], ed. Dunhuang Academy (Nanjing: Jiangsu meishu chubanshe, 1996): 24. Peng Jinzhang 彭金章, *Dunhuang shiku quanji 10: mijiao huajuan* 敦煌石窟全集 10: 密教畫卷 [Comprehensive collection of the Dunhuang grottoes 10: Volume on esoteric Buddhist paintings], ed. Dunhuang yanjiu yuan (Hong Kong: Shangwu yinshu guan, 2003), 122. Wang, *Maṇḍalas in the Making*, 156–58.

around a pagoda that enshrines a seated buddha. The somewhat flat patterns on the three ceiling slopes are drastically contrasted by the pictorial representation on the west ceiling slope, which will be further discussed. Yet all four slopes feature pagoda images, whose pointed finials index out the central axis of each slope panel. The south-north and east-west axes point toward the central panel of the truncated pyramidal ceiling and intersect in the imaginary tip of the latter. The large square panel is centered at a cross-shaped *vajra* pestle image in a smaller square. The rest of the panel is subdivided by decorative borders into four trapezoidal shapes on the four sides, and each bears a scene of the Buddha preaching. The pictorial composition turns the flat panel into an illusionistic upper-level truncated pyramidal ceiling. While the mural circle is characterized by the figural images of numerous Buddhist deities, the pictorial representation of architecture, including four pagoda images on the ceiling slopes and one other at the upper center of the east wall, play key roles in highlighting the axes of pictorial and cave spaces. Furthermore, the pagoda images facilitate visual transitions between the pictorial, plastic, and architectural spaces in the cave.

The central pillar is the focal point of the cave space, whereas the ceiling panel is the compositional center of the space under the ceiling. The two visual focuses are connected by the architectural image on the west ceiling slope. The lower central area of the slope is damaged, and the extant mural meticulously renders a pagoda finial (figure 2-6). Often referred to as *chatra* in Sanskrit or *tacha* 塔刹 in Chinese, the pagoda finial is a symbol of Buddhist architecture. The architectonic details are carefully depicted; a post, erected on a square base, connects four layers of discs, above which are arranged a set of ornaments, including (from bottom to top) a round halo (*yuanguang* 圓光), a jeweled canopy, a crescent moon, and a flaming orb. The *chatra* is thoroughly decorated; three guardians (two of which are extant) bear the *sumeru*-type base

(*xumizuo* 須彌座, a tripartite, waisted type of base), at the four corners of which are placed petal-shaped ornaments (*shouhua* 受花). Jewels and floral patterns are embedded into the faces of the base, and flaming jewels decorate the discs and the jeweled canopy. Golden tulip-shaped bells (*duo* 鐸) hang from the canopy and from the four chains that are tied to the canopy on one end and the four corners of a nonextant roof. The round halo, which appears as a piece of metal with elaborate openwork, is composed of an inner circle of five clustered camellia motifs and an outer circle of fourteen cloud's-head motifs. The crescent moon symbol and the flaming orb were likely decorated with gold foil, which has been scratched off. Considering the deteriorated colors and the loss of shimmering golden texture, the *chatra* image must have appeared even more magnificent at its completion than the current condition. The *chatra* is set against pillow trees and large foliage on the sides and surrounded by two buddhas-in-attendance with their entourage, twelve flying *apsaras* (heavenly beings) offering flowers and music, and musical instruments in the air. The multisensory imagery makes the represented architecture into a ritual space, traditionally known as a “dharma field” (Skt: *bodhimanda*; Chn: *daochang* 道場).¹⁴ In short, the west ceiling slope mural is carefully composed under a design conception of the cave space. This conception emphasizes the frontal visage of the central pillar, and thereby placing most design innovation in the east-facing side of the central pillar—the object of viewing—and the fore space under the truncated pyramidal ceiling—the place for viewing.

Manifold correspondences are created between the central pillar and the west ceiling slope mural. Composition-wise, the west ceiling slope is consistent with the bi-axial design of

14. For a concise overview of “dharma fields” of Chinese religions, see Wei-Cheng Lin, “Religious Place/Space in Premodern China,” *Oxford Handbooks of Religious Space*, ed. Jeanne Halgren Kilde (Oxford: Oxford University Press, 2022), 154–56.

the ceiling, yet the pagoda image expands and extrudes as if being magnetized and assimilated by the central pillar. Axis-wise, the *chatra* image not only points toward the ceiling panel but also indexes the central vertical axis of the central pillar. Scale-wise, the *chatra* image is significantly larger than all other pagoda images in the cave, distinguishing it from the pure pictorial space to which the other pagodas belong; the large, patterned foliage with jeweled pendants indicates a near life-size image that is consistent with the canopy-shaped niche below. The atmospheric rendering is consistent with the painterly quality of the Buddha preaching scene represented in the buddha niche; in addition, the vivid depiction of figures and plants in foreground and background indicates a visual depth like what the plastic form of the niche offers. Therefore, a pagoda image composed of the central pillar and the west ceiling slope mural is a key to the design conceptions of Cave 14. However, because a significant portion is damaged, current scholarship has not reached at any consensus about what it looked like, let alone how it impacted the architectural and iconographical programs of the cave.

Current Scholarship

The central lower part of the west ceiling slope seems to have been damaged before any modern visitors examined Cave 14. In the first half of the twentieth century, the cave was documented by early explorers Paul Pelliot and S. F. Oldenburg in verbal description and by James Lo (figure 2-7) and Shi Zhangru in photography.¹⁵ But none sheds light on pictorial contents of the now nonextant mural. And judging from the edges of the damaged area represented in two Lo photos, the mural has been in its current damaged condition since at least

15. Originally published in Pelliot, *Grottes de Touen-houang* and cited from Pelliot, *Boxihe xiyu tanxian riji*, 360; *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 6:365–66; Ching, *Visualizing Dunhuang*, 6:265–66; and Shi, *Mogao Kuxing*, 3, fig. 198.

the 1940s.

Scholars agree that the west ceiling slope mural is crucial to understanding the religious tenets and function of the cave. Early explorers did not pay as much attention to the pagoda image as to the unique design of the cave chamber, the central pillar, and the niche.¹⁶ Oldenburg especially noticed the images on the west ceiling slope: “*Rather huge foliage, jeweled canopy and a pagoda*” carried by “three *yaksas* [nature-spirits].”¹⁷ To explain the unique design, he assumed that these images were not painted at the same time. Later scholars all agreed that the mural was originally a work of the ninth century yet proposed very different interpretations of the content. Researchers of the Dunhuang Academy described the images as “lamp tower and bodhi trees” but did not make iconographic suggestion.¹⁸ Liang Weiying, the first scholar to attempt to unpack the pictorial programs of the cave, proposed that the west ceiling slope image is the key to the design conception.¹⁹ He considered the architectural image in the remaining mural to be a pagoda in its entirety. And because he placed much weight on the esoteric Buddhist content in the cave, Liang identified the pagoda as the Iron Pagoda of the Southern Heavens (Nantian Tieta 南天鐵塔), described in an esoteric Buddhist text of the Tang dynasty.²⁰

16. Early discussions of the unique cave shapes are found in Pelliot and Geng, *Boxihe xiyu tanxian riji*, 360; and Shi, *Mogao ku xing*, 1:289–91. Other early documentation of Cave 14 that did not pay attention to either the pagoda image or the cave shape include Shi Yan 史岩, *Dunhuang shishi huaxiang tishi* 敦煌石室畫象題識 [Inscriptions in paintings of the Dunhuang caves] (Dunhuang: State Dunhuang Art Research Institute, 1947), 90; Xie, *Dunhuang yishu xulu*, 193–95; and Wang et al., “Dunhuang Mogaoku xiancun foku gaikuang zhi diaocha,” 183.

17. Italic added by author. *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 6: 365–66.

18. *Dunhuang Mogao ku neirong zonglu*, 5–6.

19. Liang, “Xianmi zachen youxuan wenjian.”

20. The esoteric Buddhist imagery is one of the earliest research topics about Cave 14. Many scholars have discussed individual works of esoteric Buddhist art of the cave prior to and after Liang’s study. The research is extensive and beyond the scope of this study. An early publication

Although both claims later proved to be inaccurate, Liang's notion of a total work of art emplaced in the cave space is inspiring for recent studies of this and other Dunhuang caves.²¹

In the current century, art and architectural historians have offered various interpretations of the west ceiling slope image from the perspectives of architectonics, pictorial programs, Buddhist thought, and ritual practice. Architectural specialists Sun Ruxian and Sun Yihua convincingly point out that it is a *chatra* rather than an entire pagoda that the remaining mural represents by describing its architectonic components, which all correspond with the typical design of a Chinese *chatra*.²² Several historians of Buddhist art later recognized that what the guardians bear is “the *chatra* base.” They found that the entire west ceiling slope mural represented the top part of a pagoda, although the pagoda roof image has been lost along with the damaged mural. As Guo Youmeng astutely states, the central pillar exercises the strategy of integrating plastic and pictorial forms. The pictorial image of the pagoda top and the plastic representation of the pagoda body and base compose an extra-two-dimensional image. This image, according to Guo, represents “the Vulture Peak assembly (according to the *Lotus Sūtra*) in the Pagoda of the True Body [*dharmakaya*]” (清淨法身塔中的法華靈山會) and “reinvents”

in this genre is Peng Jinzhang 彭金章, “Mogao ku di 14 ku shiyi mian guanyin jingbian 莫高窟第14窟十一面觀音經變” [Transformation tableau of the eleven-headed Avalokiteśvara in Mogao Cave 14], *Dunhuang Yanjiu* 39, no. 2 (1994): 89–97. Liang, “Xianmi zachen youxuan wenjian,” 22.

21. Liang's notion could be viewed as a parallel to or precedent of the “architectural and pictorial programs” in cave studies. This term is proposed by Wu Hung in “Dunhuang 323 ku yu Daoxuan 敦煌323窟與道宣” (Dunhuang Cave 323 and Daoxuan), in *Tang Song de fojiao yu shehui: Siyuan caifu yu shisu gongyang* 唐宋的佛教與社會：寺院財富與世俗供養 [Merit, opulence, and the Buddhist network of wealth], ed. Sarah E. Fraser (Shanghai: Shanghai chuhua chubanshe, 2003), 333–48. As analytical tools for studies of Dunhuang art, it concerns the total work of art of a cave temple comprising architectural space and sculptural and pictorial arts.

22. Sun and Sun, *shiku jianzhu juan*, p. 214, fig. 209.

the pagoda images on the other ceiling slopes.²³ Zhao Xiaoxing, while accepting Guo's point that the cave design emphasizes the pagoda image, cites Tibetan-period cave design conventions to argue that the union of the slope and the pillar may or may not exist.²⁴ Most recently, Michelle C. Wang interprets the cave as a ritual space of the diamond realm (Skt: *vajradhatu*; Chn: *jingang jie* 金剛界) mandala. She takes the central pillar and the west ceiling slope as respectively representing the “altar of five buddhas and eight bodhisattvas” and the “jeweled pavilion rising from the altar” in ritual contemplation.²⁵ Although not all her iconographic studies are flawless, Wang aptly point out that the imagery of “a pagoda rising from an altar” could be a combination of space and image, the subjective construct and the objective existence. While different opinions exist, the current leading view tends see the architectural image on the west ceiling slope together with the niched central pillar.

In sum, Cave 14 is accepted to be a unique cave that is representative of the artistic achievements and architectural innovations of the late-Tang caves, and relevant studies are abundant. But no consensus has been reached about several problems about the architectural image on the west ceiling slope. What exactly would the pagoda in its complete form have looked like? And how can we understand this hybrid visuality of pictorial image and plastic form and the in-between-ness of round and frontal representations of the pagoda? Two obstacles challenge the resolution of these problems about form and visuality. For one thing, because the

23. Guo Youmeng, “Dunhuang mijiao shiku tiyong guan chutan—Yi Mogao ku 14 ku wei li kan fahua mijiao de kaizhan 敦煌密教石窟體用觀初探—以莫高窟14窟為例看法華密教的開展” [A preliminary study of the view of body and function in the esoteric Buddhist caves of Dunhuang—Unfolding the Fahua-Esoteric Buddhism in Mogao Cave 14], *Yuanguang foxue xuebao* 圓光佛學學報 10 (2006): 139–67.

24. Zhao Xiaoxing, *Tubo tongzhi shiqi dunhuang mijiao yanjiu* 吐蕃統治時期敦煌密教研究 [Esoteric Buddhism at Dunhuang during the Tibetan-occupied period] (Lanzhou: Gansu jiaoyu chubanshe, 2017), 543.

25. Wang, *Maṇḍalas in the Making*, 198–214.

mural is half damaged, one can hardly conduct an accurate iconographic study of the image without a precise theoretical reconstruction of it. For another, because the tenth-century renovation has altered the design of the central pillar, its dynamic relationship with other images in the cave, especially the pagoda images, are not thoroughly explored. In response to these obstacles, the next section offers a theoretical reconstruction of the image on the west ceiling slope by investigating the roof decoration, the foliage, and the base bearers and reflects on the cross-media niche design. The third section contextualizes my three design proposals of the pagoda image in the art and architectural traditions of the Mogao caves in ninth and tenth centuries.

Deciphering the Mural Problem

To decipher the original appearance of the west ceiling slope, a reconstruction study follows two steps: first reconstructing the damaged part based on visual clues in the extant mural and painting conventions; then determining the type, proportion, scale, and details of the architectural forms represented.

Lintel/Roof Decoration

Two crucial visual clues surfaced during my in situ examination of Cave 14 between 2021 and 2022; as clues to the nonextant roof decoration, they are the direct evidence for my theoretical reconstruction. The hitherto unnoticed mural details are located at the two ends of the damaged area (figure 2-8). Detail 1, located on the south side, depicted a curious object against a background of foliage patterns. The represented object has a green, peach shape filled with ink line patterns and bordered by a red band on the upper edge. Immediately below the peach shape are traces of dark gray, green, and red shapes that belong to the nonextant parts of the

represented object (figure 2-9-a). What is the object and why is it depicted in this location? Compared with the niche decoration in an adjacent late-Tang Cave 12 (figure 2-10), the peach shape of Cave 14 appears to be the top part of a beast's-head-shaped ornament in a side view (figure 2-9-b). This kind of ornament often appears at two upper corners of a canopy-shaped niche of the Guiyijun period. Because this type of niche imitates a canopied shrine, the pictorial patterns above the niche opening accordingly represent the richly decorated roof of the shrine in a frontal view. Paintings of the shallow truncated pyramidal roof often depict one or two rows of square panels at the lintel's level. Atop the panels is a row of roof ornaments in the shape of clustered flowers, flaming triple jewels, and peacock feathers, bordered by the beast's-head-shaped ornaments at the corners. The paneled board is historically known as a *yangyang* board (*yangyang ban* 仰陽版), whereas the roof ornaments developed into a more regulated pattern known as “mountain flowers and palm leaves” (*shanhua jiaoye* 山花蕉葉). They are constructive decoration of “small carpentry” (*xiao muzuo* 小木作) such as canopied shrines of Buddhism and Daoism (*fodaozhang* 佛道帳) prescribed as early as in the Song dynasty architecture treatise *Yingzao fashi* 營造法式 (Building manuals, 1103 CE).²⁶ The beast's-head design was common for roof ornamentation; glazed ceramic tiles with the design in high relief have been found in remnants of Tang-dynasty palaces (figure 2-11).²⁷ Dunhuang paintings of the beast's-head-shaped ornament exhibit a higher degree of artistic manipulation than the

26. Li Jie 李誡, *Yingzao fashi (gugong cang chaoben)* 營造法式 (故宮藏鈔本) [The building manuals, version in the collection of the Forbidden City] (Beijing: zijingcheng chuban she, 2009).

27. Shi Ruoyu 石若瑀 and Wen Rui 溫睿, “Shilun liangjing diqu chutu de tangdai jianzhu liuli 試論兩京地區出土的唐代建築琉璃” [Discussion about the Tang-dynasty architectural glass excavated in Xi'an and Luoyang areas], *Luoyang kaogu* 洛陽考古 [Archaeology of Luoyang] 1 (2020): 78–86.

historical prototype. The beast's mane is represented as petals, corresponding with the flower-shaped ornaments above the lintel. The beast's-head-shaped ornament in Cave 14 pinpoints the left upper corner of some decoration that is an integral part of the niche design.

Mural detail 2 is located on the north side of the damaged area and above the north side wall of the buddha niche. It represents another architectonic component in front of the patterned foliage and jeweled net. The remaining part of the component is bipartite: the right-side half represents a red frame that is placed perpendicularly, decorated with a flower and a leaf, and partly overlapped by a jeweled pendant; the left-side half, parted by a narrow green border from the right-side half, represents the lower right corner of a clustered camellia flower motif against an orange-colored background (figure 2-12-a). The fragment closely resembles the chessboard-like, framed square panels with floral designs depicted on the niche ceiling (figure 2-13).

Although only a tiny portion remains, the geometric shape of the decorated panel is easily distinguishable from the curvilinear and organic forms of the foliage, pendants, and jeweled net. Because such panels are often applied to ceilings and roofs of canopied shrines, one can conclude with confidence that this mural detail indicates the northern end of a *yangyang* board comprising a row of flower-filled square panels (figure 2-12-b). A close look at the mural reveals that the missing part of the panel image on the lower portion is not the result of the removal of mural; the original condition, as it is preserved, shows that the plastered surface bears no images. It can be inferred that the edge where the west ceiling slope and the niche ceiling intersect might have been battened with a wooden board that bore decorative patterns to complete the pictorial panel on the west ceiling slope. The batten might have had fixed draperies that complemented the pictorial draperies on the upper register of the three walls of the buddha niche, whose

truncated pyramidal ceiling unusually omits a narrow slope on the east side.²⁸ Although the batten is no longer extant, its former existence can be inferred from the fact that the mural and plaster layer right above the niche on the west ceiling slope is most severely damaged; the collapse likely resulted from the additional weight of the batten.

The two mural details not only suggest that the damaged area on the west ceiling slope bore the image of roof decoration but also indicate the specific design of it. Because their positions nearly mirror each other along the central vertical axis of the slope and the images belong to the same set of constructive decoration for canopied shrines, one can determine with confidence the visual content of the damaged area they border. The area would have been mainly occupied by a decorated *yangyang* board that spanned the entire width of the niche. The board would have been topped by *shanhua* decoration in the shape of flaming jewels, clustered flowers, and peacock feathers. At the two ends are the beast's-head-shaped ornaments, the mouths of which hold jewel pendants. A batten at the bottom of the pictorial board would have had fixed draperies that completed a truncated-pyramidal-shaped canopy that the niche ceiling imitates. In this way, the damaged mural of Cave 14 complied with the paradigmatic design of the canopy-shaped niche of the late Tang. The pictorial decoration of such a niche that simulates the canopied roof is composed of three registers. From top to bottom, these are roof ornaments as prototypes of "mountain flowers and palm leaves," *yangyang* board, and draperies (figure 2-10). If we were to take the west ceiling slope of Cave 14 to be a tableau of self-sustaining contents, we might be tempted to interpret the damaged area as representing scenes or figures in the

28. The author discovered traces of a similar device in Cave 231 of the Tibetan period. Small nail holes are regularly distributed along the bottom edge of the east ceiling slope of the truncated pyramidal ceiling of the canopied shaped niche. The nail holes seem to have been used for fixing draperies of the niche.

Buddhist canon.²⁹ But current scholarship has proven that such a conclusion would be unverifiable. Moreover, this study has demonstrated that the west ceiling slope is not just a canvas for pictorial representation but also a constructive part of the niched pillar. Only when one realizes the dual functions of the slope would one recognize that the mural details are remnants of the trompe l'oeil painting of a canopied roof ornament.

***Chatra* Base Bearers**

Having identified the depiction of a roof, the issue to be further investigated is whether and how the roof and the *chatra* are connected. The key to these questions comes from the guardian figures bearing the *chatra* base, of which only the upper part remains above the damaged area (figure 2-6). The most recent study, by Michelle C. Wang, identifies the central figure as a specific wrathful demigod, Trailokyavijaya (Chn: Jiangsanshi Mingwang 降三世明王), whom the beholder visualizes him- or herself to be.³⁰ Based on this identification and a repentance-ritual text, Wang infers that the *chatra* image is “a jeweled pavilion rising from the altar” that the beholder would further envision.³¹ While Wang attempts to justify the discrepancy in the iconographic features of the central figure, she does not explain the existence of the other guardian figure on the left side of the base. In comparison, most previous researchers have recognized the two remaining guardian figures, although of the left figure, only the face,

29. Liang Weiyang, based on the common composition of transformation tableaux, assumes that the missing part is a Buddha preaching scene. Liang, “Xianmi zachen youxuan wenjian,” 12–13.

30. Wang, *Maṇḍalas in the Making*, 198–214.

31. According to Wang’s study, the ritual text prescribes that a practitioner visualize him or herself as Trailokyavijaya, purify karmic obstructions, and envision a jeweled pavilion rising from the altar (“當觀自身相變成降三世，次應淨業障，上想寶樓閣,” P.3920d, 169v2-170v2.). Then he envisions the Buddha realms gathering like clouds. In this way, the practitioner attains a *vajra* body like Vajrasattva and imagines himself bathing the assembled *tathāgatas* at the consecration site.

left arm, and left knee are extant. Oldenburg and Liang, who refer to the figures as “yakṣa” (*yaocha* 藥叉) and “vajra guardian” (*jingang lishi* 金剛力士), respectively, consider that they represent generic guardians who bear architectural bases.³² Moreover, based on the principle of symmetry, they infer that a third figure was depicted on the right side of the base. Leaning toward the classical opinion, this analysis further investigates the form and the positional significance of the *chatra* base bearers of Cave 14. A comparative study of base bearers in pagodas and pagoda images in Dunhuang and northwest China will lead to my theoretical reconstruction of the nonextant part of the guardian-surrounded base, whose total height provides an important clue to the *chatra*/roof connection.

The remaining mural preserves the upper part of the frontally shown central figure, who puts his hands on his hips and wears only a flower-adorned headdress, bracelet, and armlets. Yet it is not difficult to identify the gesture and costume, because such guardian figures are often represented on the faces of buddha altars in Guiyijun-period Dunhuang caves. A close comparison is a half-naked figure in the late-Tang mural painting in a *kunmen* arch of Mogao Cave 16, who supports the arch with two hands, wears a short skirt, and squats in bare feet (figure 2-14). Images of base bearers appear not just in caves but also in pagodas. A wooden statuette of a kneeling guardian now in the collection of the Dunhuang Academy used to be part of the timber structure of the Maitreya Pagoda (Cishi Ta 慈氏塔) (figure 2-15). The octagonal pavilion-style pagoda comprises a niched earthen core and a timber-structured gallery. It was constructed in the late tenth century on Mount Sanwei and relocated to the ground in front of the Mogao cave complex in 1981. As witnessed by investigators in the 1950s, the statuette was one

32. Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin* 6:365–66; Liang, “Xianmi zachen youxuan wenjian,” 13.

of the weight-bearing components placed between the architraves and the lower-level purlins.³³ Like the Cave 14 mural, this statuette represents a muscular guardian kneeling on the floor and wearing only armbands and skirts. Despite the small size (ca. 20 cm in height), the guardian figure overlooks visitors on the architrave, which is about two meters above ground level, endowing the pagoda with solemnity and liveliness. Because the *chatra* has undergone premodern and modern reconstructions, we no longer know if guardian images were similarly attached to the *chatra* base in the tenth century.³⁴ But a more well-preserved pagoda of the succeeding period testifies to the application of *chatra* base bearers. The West Pagoda of Baisikou 拜寺口 in present-day Helan county, Ningxia Province, is a densely piled eaves-style (*miyan* 密簷) brick pagoda built in the Tangut-led Xixia period. The octagonal, waisted *chatra* base is decorated with eight guardian figures at the corners (figure 2-16). The muscular, half-naked guardian figure supports the petaled upper edge of the base on his shoulders, places his hands astride his hips, and kneels. The placement, costume, and posture of this Xixia period guardian figure is consistent with the base-bearer images of Guiyijun period Dunhuang. These examples, including the Cave 14 guardian figure, testify to the common application of base-bearer images in pagodas of late medieval China. Therefore, rather than the portrait of a specific deity, they more likely represent the heavenly protectors of Buddhism such as “generals who protect the dharma and guards of the

33. Anonymous author, “Mogao ku fujin de gujianzhu—chengcheng wan tuta ji laojuntang cishi zhi ta 莫高窟附近的古建築——成城灣土塔及老君堂慈氏之塔” [Ancient architecture near the Mogao caves: An earthen pagoda of Chengchengwan and a pagoda of Maitreya], *Wenwu cankao ziliao* 文物參考資料 2 (1955):109–10, plates 1–4.

34. The roof and *chatra* of the pagoda had been replaced before the twentieth century, and all current components above the eaves are modern reconstruction of the Song-period appearance and result from the 1981 relocation and conservation.

heavens.”³⁵

If the base-bearer images could have decorated the altar, the pagoda base, the eave structure, and the *chatra* base, how can one determine if the Cave 14 base is the base of a *chatra*? It happens that there is a similar case. The kind of guardian-born *chatra* base also occurs in a pagoda image of Mogao Cave 454 (figure 2-17). Constructed more than a century after Cave 14, Cave 454 features a large image of the Many Treasures Pagoda completely preserved on the west ceiling slope. The design continuity is felt in the prominent location of the pagoda image in the truncated pyramidal ceiling and the architectonics of the *chatra* image.³⁶ The *chatra* consists of, from bottom to top, two levels of *sumeru*-type base, seven discs along a post, a jeweled canopy, a crescent moon symbol, and a flaming orb (figure 2-18). Around the narrowed waist of the *chatra* base stand three armored guardians, the middle of which is represented in a frontal view and the two others in profile. The guardian figures similarly support the corbeled upper edge of the base by their shoulders and arms. While the guardians’ costumes are tailored in period style, the Cave 454 pagoda image confirms the architectonics of the Cave 14 *chatra* and the position of the *chatra* base bearers.³⁷

Based on the gestures and proportions of the guardian figures in these cases, I have

35. 護法大將，侍衛諸天。Excerpt from “Tang shazhou longxing si shangzuo Ma Desheng heshang dangquan chuangxiu gongde ji 唐沙州龍興寺上座馬德勝和尚宕泉創修功德記” [A record of the merit of the construction activities of Preceptor Ma Shengde, who is an upper seat of the Lonxing Monastery of Shazhou of the Tang dynasty], 896 CE, S.2113v. Ma, *Dunhuang Mogao ku shi yanjiu*, 104–6. Zheng and Zheng, *Dunhuang Bei ming zan*, 772.

36. The main difference between the mural on the west ceiling slope in Cave 14 and that in Cave 454 is that the former represents only the *chatra* whereas the latter represents the entire pagoda. The difference is highly relevant to the redesign of Cave 454, which will be discussed in chapter 5. However, like Cave 14, Cave 454 displays a correspondence between the pagoda image on the west ceiling slope and the central altar below in terms of form and meaning. This will be discussed later in the chapter.

37. The Song-period armored costume of the guardians is exemplified by a base-bearer statuette in Mogao Cave 55. See Liu, *Suxiang juan*, 243, fig. 211.

reconstructed the complete image of three guardians and the *chatra* base they bear (figure 2-19). The three guardians squat or step on the lower edge of the *sumeru*-type square base and support the upper edge with their shoulders or hands. The height of the figures, which are proportionally reconstructed, is a valid parameter of the height of the base. A calculated base size gives us more confidence to approach the formal question whose answer is not found in the extant mural: how the *chatra* and the rest of the pagoda are connected.

Optical Form, Schema, and Modification

Following the reconstruction of the *chatra* image, a critical step to restoring the complete image on the west ceiling slope is to examine the structural form between the *chatra* and the *yangyang* board with *shanhua* decoration. The remaining mural and relevant design guidelines in the *Yingzao fashi* provide most evidence for my theoretical reconstruction of the pagoda roof.³⁸ Judging from the location of the two mural details (figure 2-8), the overall size of the pictorial boards and decorations is approximately 245 cm (w) x 48 cm (h). According to the common proportion of *yangyang* board and *shanhua* decoration, a reasonable design of the *yangyang* board would consist of eleven panels, each of which would be about twenty-five square centimeters.³⁹ Because the height of the guardian figures can be calculated, the location of the bottom of the *chatra* base image can be determined (figure 2-6). It is about fifty-six centimeters from the bottom of the west ceiling slope, about twenty-five centimeters from the top of the *yangyang* board, and eight to twelve centimeters from the top of the *shanhua* decoration. The

38. The detailed measurements of the west ceiling slope mural are all measured from the trace-copy drawings and digital 3D models of the cave by the author.

39. According to the *Yingzao fashi*, the *shanhua* decoration and the *yangyang* board are similar in size. Liang Sicheng 梁思成, *Liang Sicheng quanji* 梁思成全集 [Complete collection of Liang Sicheng] (Beijing: Zhongguo jianzhu gongye chubanshe, 2001), 7:238.

close distance and axial alignment indicate that the *chatra* is most likely placed atop the roof in some way. Hence, the uncertainty of reconstruction design is mainly attributable to the lack of information about the area below the *chatra* base and above the *shanhua* decoration. Judging from a spectrum of pagoda roof types represented in Dunhuang mural paintings, I propose three possible reconstruction designs regarding the way in which the *chatra* and the roof are joined. In reconstruction proposal 1, the *chatra* is placed atop a dome, and a decorative eave exists between the dome and the pagoda body, which is represented by the central pillar (figure 2-20-a). In reconstruction proposal 2, the *chatra* is placed atop a pyramidal roof, and the decorative eave (as in reconstruction proposal 1) is represented by *yangyang* board and *shanhua* decoration (figure 2-20-b). In reconstruction proposal 3, the *chatra* is placed atop a truncated pyramidal roof, and two layers of decorative eaves exist between the roof and the pagoda body (figure 2-20-c). The evidence for and feasibility of these proposed reconstruction designs will be analyzed in the next section. Here it should be pointed out that whatever the roof type and the number of eaves, the fundamental visual composition is shared: the *chatra* and the *yangyang* board with *shanhua* decoration compose an inverted-T shape and become the main objects the west ceiling slope painting represents; the inverted-T shape is also aligned with the central vertical axis of the frontal face of the central pillar.

In the previous discussion of the roof decoration in relationship to the buddha niche, I referred to the *yangyang* board with *shanhua* decoration as niche roof/lintel decoration. But now, having holistically considered the relationship between the *chatra* image and the pagoda body, the decoration is an integral part of the pagoda image. It serves to complete the niche, crown the pagoda body, and support the *chatra* in the visual structure; in other words, it is not only the roof decoration of a canopied shrine but also represents the pagoda eave. By connecting the

architectural images above and below, the pagoda eave complements the optical form of a jeweled pagoda. This form does not exist independently in the pictorial space (west ceiling slope mural) but is part of a complete image of a pagoda, which is conveyed through both pictorial and plastic mediums. This complete image is synthesized in the mind of the viewer, who is familiar with the three-dimensional forms and the images on their surfaces. To borrow Paul Frankl's words, the extra-two-dimensional image of the jeweled pagoda is an "optical form."⁴⁰ It is essentially a mental image, but in the case of the cave temple—which is small in scale, simple in spatial composition, and compact in image distribution—the optical form can be conveyed through a perspectival rendering or a photograph that captures as many visual features as possible. This study conveys the author's understanding of the optical form through image-annotating techniques such as line-drawings whose lines are represented or omitted and photographs whose colors are untouched or turned monochromic.

It is not uncommon to find in Dunhuang caves optical forms that are synthesized from images in non-flat, multiple mediums. One obvious kind is the optical form of a canopied shrine, which is composed of a roof image painted on a ceiling slope and a niche cut onto the wall below. Since the canopy-shaped niche became popular in the Tibetan period, the representative imageries of the buddha shrine with a truncated pyramidal ceiling occurred in a few small image caves on the upper level of Cave 14. Take, for example, the niche of Cave 359 (figure 2-21) and

40. Architectural historian Paul Frankl (1878–1962) defines three forms of architecture: first is the "spatial form" (or spatial composition), the organization of the space we move in, the space that extends around the us; second is the "mechanical form" (or mechanical forces) in the structural elements that support, transmit, and express or counter-express the physical forces; third is the "optical form" (or visible form), the observer's mental image synthesizing his or her memory of the building's purely optical qualities (e.g., light, color, surface effect, with the articulation of the architectural forms). Paul Frankl, *Die Entwicklungsphasen Der Neueren Baukunst* (Leipzig: B. G. Teubner, 1914), 48–50. Also see Paul Frankl, *Gothic Architecture* (New Haven, CT: Yale University Press, 2000).

the double-layered variant of Cave 361 (figure 2-22). Not only are multipaneled screens, draperies, and chessboard-like panels depicted on the niche walls and ceilings; doors of the shrine are also depicted on the west wall besides the niche. Notably, the image of canopied roof decoration extends from the west wall to the ceiling slope above. The intersecting edge of the wall and the slope serves perfectly as the folding line of the *yangyang* board and the double-layered *shanhua* decoration. Thus, the pictorial image is matched to the architectural form, more vividly presenting the architectonics of the imitation canopied shrine. Although the pictorial decorations are scattered on the surfaces inside the niche, on the wall, and on the ceiling slope, beholders of the past and the present can recognize the architectural imageries synthesized from them; medieval Dunhuang manuscripts refer to some niche decoration as “two door panels of the canopied shrine” (*zhangmen langmian* 帳門兩面), and modern scholars have invented the term “canopy-shaped niche” (*zhangxing kan* 帳形龕) for the niche type and “pagoda-niche” (*takan* 塔龕) for the Cave 361 niche.⁴¹ Researchers have also recognized the continuity of design strategy between these Tibetan-period niches and that of Cave 14.⁴²

If the niche synthesizing pictorial and plastic forms implies a pagoda, then the Cave 14 niche—which is unprecedentedly topped by a *chatra* image—makes a genuine “pagoda-niche.” To borrow the language of classical visual art theory, the recognition of an optical form is based on the recognition of the schema, which diagrams the basic features of a visual object.⁴³ In the

41. Guo, “Dunhuang mijiao shiku tiyong guan chutan.”

42. Zhao, *Tubo tongzhi shiqi dunhuang mijiao yaniju*, 540–45.

43. English art theorist Ernst Hans Gombrich (1909–2001) proposes two types of images in his classical *Art and Illusion: A Study in the Psychology of Pictorial Representation* (New York: Pantheon, 1960). The first type, “schema,” refers to the structural recognition of external things in a beholder’s memory. It is often represented as a frontal image without background. The other type is a visually enriched image after “modification” of the schema. Modification gives the image an illusionistic visual effect, yet it complies with certain visual conversions and hence has a certain degree of subjectivity.

case of religious architecture, a roof decoration is one of the indispensable components of the schema, such as the crescent moon symbol for a mosque, the cross for a cathedral, and the *chatra* for a pagoda. Because of the highly recognizable form of the *chatra*, Buddhist monasteries in Tang China were recorded as having had *chatras* applied to a variety of building types not limited to the pagoda. The monasteries, especially those that had been converted from residential building complexes, sometimes had *chatra*-adorned towers and pavilions, to highlight the Buddhist functionality of the complex. As recorded in a late-Tang book *Youyang zaju* 酉陽雜俎 (Miscellaneous morsels from Youyang) by Duan Chengshi 段成式 (d. 863), a Baoshou monastery 保壽寺 (Monastery of Maintaining Longevity) of Yishan Ward 翊善坊 in Chengdu (in present-day Sichuan Province) had two tall structures adorned by *chatras*.⁴⁴ The monastery was originally a residence of Gao Lishi 高力士 (690–762), a Chinese eunuch and politician who was especially powerful during the reign of Emperor Xuanzong of Tang (712–56). Gao had the residential complex repurposed into a Buddhist monastery in 750 CE. A public event was held for the conversion; a newly cast bell was rung during an enormous vegetarian fest. All attendees were impressed by the magnificent bell tower and its paired building, the Sūtra Pavilion. Praise for the two tall buildings was immediately followed by the clause “the flaming jewels of two pagodas had a volume of over a dozen *hu* [either 720 or 240 liters].⁴⁵” This record implies that the bell tower and the sūtra pavilion were adorned by large *chatras* and appeared like “two pagodas.” A Western Pure Land scene in Mogao Cave 217 of the high-Tang period

44. Duan Chengshi 段成式, *Youyang zaju* 酉陽雜俎 [Miscellaneous morsels from Youyang], ed. Fang Nansheng 方南生 (Beijing: Zhonghua shuju, 1991), 257.

45. *Hu* 斛 is a unit of measurement in ancient China. In the Tang dynasty, a grand *hu* equaled sixty liters whereas a small *hu* equaled twenty liters. “Guoxue gongju 國學工具” 2002.8.16. <http://www.guoxue.com/history/dulianghen/liang.htm> (accessed August 8, 2022).

also represents the bell tower and its paired building as two terraced timber-structured pavilions whose pyramidal roofs are topped by *chatras* (figure 2-23). The building form conforms to what is known as the “pavilion-style pagoda” in modern scholarship. Admittedly, the Cave 14 niche is not a thorough imitation of the small carpentry of a canopied shrine. The inner walls bear images of the so-called ten great disciples rather than multipaneled screen paintings, and the east-facing sides of the niche walls do not represent any posts. However, representation of the *chatra* completes the primary composition of a pagoda’s schema.

Some painting details confirm that the west ceiling slope mural originally represented the *chatra* and roof of a pagoda rather than a pagoda in its entirety. The foliage, consisting of patterns of pomegranate-like flowers encircled by pointy leaves, usually flanks the protruding eaves of a temple or a pagoda in Dunhuang murals since the Tang and Tibetan periods (figure 2-24). Such foliage decorates plastic images as well; they appear in large scale on top of the short partition wall known as a “backscreen” in central-altar caves throughout the Guiyijun period. Two trees with such foliage flank the jeweled canopy of the main buddha statue on the altar of late-Tang Cave 196 (figure 2-25). If schema is at the core of an optical form, then the manifestation of the optical form also requires *modification* of the schema—in this case, articulation and framing of a pagoda’s façade.⁴⁶ The painting and sculptural examples from contemporary caves confirm that the foliage is placed in the middle section of a complete architectural scene, highlighting a highly decorated structure in-between as the visual focus. The visual paradigm of foliage-framed scenes explains the existence of large foliage images on both sides of the damage area of the west ceiling slope of Cave 14 (figure 2-26). The foliage images have a dual function: they serve as a backdrop for the pictorial image of the pagoda roof and as

46. Gombrich, *Art and Illusion*.

an extension of the tangible representation of the pagoda body. Backed with the foliage images, the meticulously painted *chatra* emerges from the west ceiling slope. Thus, the *chatra* image and the central pillar, which is physically connected and scale-wise consistent with the former, constitute a meaningful optical form—the main pagoda image.

Canopied Shrine and Pagoda Niche

This reading of the pagoda image needs to be examined in the traditions of pagoda image-making at the Mogao caves. When canopy-shaped niches pervaded the Mogao caves in the ninth century, the designer of Cave 359 reinvented the design convention in which the wall surface was used to convey a complete image of a canopied shrine (figure 2-10). The design of the Cave 359 niche increases the levels and height of the *shanhua* decoration on the pictorial roof and places a miraculous bird with opened wings in the center of the truncated pyramidal roof. While complying with the canopied shrine's basic composition, the niche expresses a novel sense of upward momentum (figure 2-21). The designer of Cave 361 went further on the path of making the canopied shrine image more three-dimensional. The design “pushes” the doors of the shrine—each represented by perpendicularly placed two-paneled screens—into the wall to form subsidiary niches, and “pulls” the base of the shrine—represented by five *kunmen* arches sandwiched between two corbeled edges—without from the wall. Furthermore, the forty-five-degree corner cuts of the subsidiary niches' ceilings and two corresponding indentations on the bottom face of the niche indicate that the composite niche was equipped with two octagonal posts (figure 2-22). The shrine posts exhibit a strategy of space layering and a pursuit of tangible representation. Although the niche is embedded into the wall, the expression of three-dimensionality is so strong that architectural historian Wei-Cheng Lin even feels that “the niche could be conceptually carried into center of the [cave] chamber” and visualized as a

circumambulate-able shrine.⁴⁷

If Cave 361 conveys the optical form of a canopied shrine by the strategy of high relief, then Cave 9 achieves the same goal by the strategy of round sculpture. Cave 9 is another central-pillar cave of the late-Tang period. It is located near Cave 14 on the north side and has a similar yet larger cave space in comparison to Cave 14. The variations include a double-layered indentation for the central panel of the truncated pyramidal ceiling, a complete form of truncated pyramidal ceiling for the niche on the central pillar, and plastic representation of a canopied shrine. Breakage of the overhanging edge of the niche ceiling and two holes on the top face of the altar below are evidence for my theoretical reconstruction of the lintel and posts for the simulated canopied shrine (figure 2-27). Topologically speaking, Caves 361 and 9 are categorized as two mutually exclusive cave types, namely, the truncated pyramidal ceiling cave with a niche and the central-pillar cave. However, despite the difference in cave type, both caves make a spatialized imagery of the canopied shrine as the respective cave's visual center.⁴⁸ In both cases, the simulated shrine is mainly designed for the frontal view and has a relatively complete representation of the architectonic forms. Compared with Cave 361, the design of Cave 9 "pulls" the simulated shrine farther away from the rear wall and closer to the geometric center of the cave chamber, thereby allowing the practitioner to circumambulate the shrine in real space. Like Cave 14, the corridor behind the central pillar in Cave 9 is about a meter lower than the corridors on the lateral sides. Due to the increased volume of solids connecting the two, the central pillar feels as though it were being just "pulled" out from the wall. The shared goal and

47. Lin, "What Did Architecture Do in Visualizing Dunhuang?," 205, fig. 16.

48. My use of the term *imagery* follows the definition provided by the *Oxford English Dictionary*: "mental images collectively or generally." *Oxford English Dictionary Online*, s.v. "imagery," <https://www-oed-com.proxy.uchicago.edu/view/Entry/91628?redirectedFrom=imagery>.

varied design strategies exhibited in these caves of the ninth century seem to be not so much a teleological evolution as a synchronic phenomenon, since no causal relationship is evident. Instead of being obsessed with the genealogical problems about cave type, it seems more productive to see the architectural forms of cave—the so-called cave shape (*kuxing* 窟形)—as a spectrum for experimenting with visual design.⁴⁹ The spectrum demonstrates that the visual paradigm of the canopy-shaped niche was well established among the primary beholders and could be achieved through a combination of pictorial and tangible forms. In this context, it is reasonable to suggest that the Cave 14 pillar and associated murals were designed and recognized as one optical form.

The Cave 14 design does more than just manipulate the ninth-century paradigm of representing the shrine outlook with decorative painting on the niche lintel; it also reappropriates the long-standing visual tradition of the central-pillar cave. Since the introduction of the central-pillar cave to the Hexi region in the fourth to fifth centuries, the central “pagoda” pillar has almost never been a faithful representation of the pagoda in its entirety. Three observations support this contention. First, the prototype of central-pillar caves in China—the central-pillar cave of the Liangzhou style—features a central-pillar design as such; atop a square base are two or three tiers of square frustums, each of which tapers concavely from a larger top to a smaller

49. *Kuxing* 窟形 emerged as a perceptual recognition of a cave space’s formal features in cave archaeology of the 1930s–40s and was defined and applied as an analytic tool in cave studies in the 1990s. In the 1930s, Japanese archaeologist Nagahiro Toshio astutely observed two kinds of cave space when surveying the Yungang and the Xiangtangshan caves, one favoring curved forms and the other favoring octagonal forms. In *Kyōdōzan Sekkutsu*, Nagahiro considers the two types, from an artistic point of view, as expressive of the period styles. In the 1940s, Chinese archaeologist Shi Zhangru systematically surveyed the Mogao caves and made a thorough documentation of the architectural forms of the caves. In the 1990s, Shi demonstrated the late-Tang cave’s characteristics by analyzing the nuanced differences between the architectural forms in “Dunhuang mogaoku wantang ku de fenxi yu yanjiu.” Shi also titled the publication of his earlier archaeological work “Mogao Kuxing 莫高窟形” (Shapes of the Mogao caves).

bottom.⁵⁰ Buddha niches are opened onto all four walls of each frustum, and no overhanging eaves exist between the levels (figure 2-28).⁵¹ The pillar appears different from contemporary miniature models of the stone stupa with a circle of niches or the multi-eaved timber-structured pagoda, which all taper from a larger bottom to a smaller top.⁵² Although such a central pillar is intended to represent the pagoda, the representation has made significant changes to the represented form.

Second, the central pillars in Dunhuang caves of the Sui and early-Tang periods display a design shift from the Northern Dynasties caves; they either represent Mount Sumeru, the cosmic mountain in Buddhist cosmology, or serve as a backscreen for large standing buddha statues (figure 2-1).⁵³

Third, with the exception of Mogao Cave 14, almost all the central-pillar caves at Mogao merely represent the pagoda base and niched body but omit the pagoda roof and *chatra*. Nonetheless, the partial representation still allowed the primary beholder of these caves to view them as “[a cave with] a jeweled pagoda emerged from the center” (*zhong fu baocha* 中浮寶刹), “a niche that has a pagoda core inside” (*neikan chaxin* 內龕刹心), “a pagoda-cored [cave of the]

50. Su Bai 宿白, “Liangzhou shiku yiji he ‘liangzhou moshi’ 涼州石窟遺跡和‘涼州模式’” [Remains of the Liangzhou caves and “the Liangzhou Style”], *Kaogu xuebao* 考古學報 4 (1986): 435–46.

51. For an archaeological report of Tiantishan Cave 1, see Dunhuang Research Academy and Gansu Provincial Museum, *Wuwei tantishan shiku* 武威天梯山石窟 [The Tiantishan grottoes in Wuwei], Di 1 ban (Beijing: Wen wu chu ban she, 2000), 63–73.

52. For studies of the domed stupas, see Yin Guangming 殷光明, *Beiliang shita yanjiu* 北涼石塔研究 [Studies of the stone stupas of northern Liang] (Xinzhru: Caituan fa ren Juefeng fojiao yishu wenhua jijinhui, 2000). For studies of the pavilion-style pagodas, see Shi Shuqing 史樹青, “Beiwei Cao Tiandu zao qianfo shita 北魏曹天度造千佛石塔” [A stone pagoda of thousand Buddhas made by Cao Tiandu of the Northern Wei], *Wenwu* 文物 1 (1980): 68–71.

53. For the cave shapes of the two variants of central-pillar caves, see Dunhuang Wenwu Yanjiu Suo ed., *Zhongguo shiku: Dunhuang Mogao ku*, 2:226, 228; 3:238.

Trinity” (*sansheng chaxin* 三聖刹心), and “a pagoda-cored buddha hall” (*chaxin fotang* 刹心佛堂).⁵⁴ The terms suggest that the historical makers and viewers in the visual tradition would have mentally completed the optical form of pagoda. Medieval Buddhists were not the only ones accustomed to contemplating the pagoda image from the central pillar; modern researchers, too, often interpret the design conception of the central-pillar cave as a pagoda-centered monastery or temple. Dunhuang architectural specialist Sun Yihua and I recently conducted a reconstruction study of the stupa-centered temple in fifth-century northwest China. As the study indicates, the central-pillar cave represents only the pagoda body and base because the stupa-centered temple—the freestanding prototype of the former—has a stupa dome and *chatra* exposed above the roof (figure 2-29).⁵⁵ The design of Cave 14 engages with the visual tradition of seeing the central-pillar cave as a pagoda-centered buddha hall. Furthermore, it utilizes the truncated pyramidal ceiling of the enlarged fore space to represent the hitherto omitted *chatra*. In the construction history of the Mogao caves, Cave 14 reveals one of the earliest attempts, if not the earliest, to represent a pagoda in its entirety.

The Animated Pagoda Image

As the previous section demonstrates, the pagoda image of Cave 14 concerns not just picture but also space. In recent decades, studies of spatial issues in cave temples tend to examine the form

54. The dictionary definition of the Chinese character *cha* 刹 in *Foguang da cidian* include the *chatra*, the central post of pagoda, or the Buddhist monastery. In this case, *cha* most likely refers to the pagoda, which is signified by the central post. These terms are excerpts from the *Lantern Distribution* manuscript, written in 951 CE. According to studies of the manuscript, these terms refer to some of the standard and non-standard central-pillar caves and central-altar caves. Ma, “10 shiji zhongqi de mogaoku yamian gaiguan.”

55. Sun and Zhou, “Mogao ku di 254, 257 ku zhongxinzhu ku de fuyuan yanjiu yu mingcheng kao.”

and function of visual objects in context and interpret their formation and transformation through the lens of historical materiality.⁵⁶ To better understand the form, function, and meaning of the pagoda image, one is faced with the two questions: What kinds of visual traditions and cultural contexts led to the formation of the pagoda roof? And what is the relationship between the main pagoda and the other four pagoda images in the cave? This section discusses the evidence for the three reconstruction design proposals—that is, the spectrum of design in historical contexts.

Reconstruction Proposal 1: Interchange between the Tang and the Tubo-Tibetans

If we reconstruct the pagoda image according to the roof design in proposal 1, then the west ceiling slope and the central pillar would constitute a single-eaved, domed pagoda form (figure 2-30).⁵⁷ This kind of square pagoda with a domed roof and overhanging eaves has been included in Dunhuang murals since the Tang period (figure 2-31). Apart from the dome, the upper part of the pagoda body also displays obvious curvature as the side walls of the niche bend inwardly. The domed roof and bent walls are reminiscent of the stupa, which is the Indian prototype of Chinese pagoda. Architectural historians Xiao Mo and Sun Ruxian have surveyed

56. Wu, “Shiku yanji meishu shi fangfalun tian;” and Sha Wutian, “‘Youxi shentong’ shi de sikao yu xiezuo: Wu Hung xiansheng fojiao meishushi yanjiu shiyao ‘遊戲神通’式的思考與寫作：巫鴻先生佛教美術史研究識要” [Thinking and writing in the style of “Roaming with Spiritual Correspondence”: A reading of Wu Hung’s Buddhist art historical studies], *Shijie zongjiao yanjiu* 世界宗教研究 12 (2021): 28–40.

57. In the rendering, the statue set is after the current condition (the Qing-period remade version), because the original late-Tang design is no longer known to us. The five *kunmen* arches on the frontal face of the offering altar are the author’s reconstruction design of the late-Tang version. The current condition results from the tenth-century renovation. The reconstruction design is based on designs on the north and south sides (figure 2-35) and the comparative example of Cave 361 (figure 2-22). The explanations are applicable to the renderings of proposals 2 and 3.

the domed pagoda images in Dunhuang murals and discussed their topological origins.⁵⁸ Based on their studies, I observed that the pagoda images in Dunhuang murals of the seventh and eighth centuries relatively faithfully represent the masonry construction of the stupa, including corbeled eaves, blocky bases, and orb- and petal-shaped eave decorations. In the ninth to tenth centuries, a highly decorative variant was developed. The variant seems to be timber-structured yet hybridizes the forms of curved pillars, petal-shaped overhanging eaves, and even canopied shrines.⁵⁹

The variant occurred in Dunhuang murals of the Tibetan period, which coincides with the mid-Tang period in the Chinese dynastic chronology. During this time, Dunhuang was seized by the Tubo-Tibetans, and its connection with the Tang empire was somewhat reduced. To what extent the Tibetans themselves directed cave construction in Dunhuang is debated, but the fact is that this period saw the blossoming of new art styles, iconography, and architectural images. The so-called Tibetan-Pala style that was introduced to Dunhuang interacted with the other traditions, from either the Tang empire and its predecessors or the western regions, that had been introduced

58. Xiao, *Dunhuang jianzhu yanjiu*, 200–5; and Sun Ruxian, “Dunhuang bihua zhong ta de xingxiang 敦煌壁畫中塔的形象” [Imagery of pagodas in Dunhuang murals]. *Dunhuang yanjiu* 2, (1996): 1–16.

59. Because the curve-pillared building images do not correspond to any actual architecture known to us, it is a special case in the study of Dunhuang architecture. This case prompts modern scholars to reconsider the theoretical bases of realism and materialism for studying the architectural images and to investigate the origins of the strange form in religious ideology and non-Han Chinese architectural traditions. For discussions of the curved-pillared timber-structured architecture represented in Dunhuang murals, see Xiao, *Dunhuang jianzhu yanjiu*, 211–17; Sun Yihua, *Zhong shiji jianzhu hua* 中世紀建築畫 [Architectural paintings of the Middle Ages] (Shanghai: Huadong shifan daxue chuban she, 2010), 62, 82; Sun Yihua and Zhou Zhenru, “Dunhuang bihua zhong de daxiao zhao si 敦煌壁畫中的大小昭寺” [Tibetan art in Dunhuang: Jokhang Temple and Ramoche Temple as represented in Dunhuang murals], *Xizang renwen dili* 西藏人文地理 [Tibet geographic] 2 (2022): 118–23.

to Dunhuang and took root there.⁶⁰ One can infer that the eclectic architectural forms must have emerged from the context of cultural confrontation and interchange. An early example of the timber-structured and dome-pagoda image is a mandala painting on paper preserved in three fragments in the collection of the Indian National Museum in New Delhi (CH. 00383 c), dated by style to the Tibetan period.⁶¹ The painting fragments represent a polygonal timber-structured pagoda, and two bodhisattvas flanking a now-lost central deity sit between the four curved pillars. The pagoda is flanked by other esoteric bodhisattvas (six of which are visible) in the immediate surroundings and smaller bodhisattvas in the outer circle (three of which are visible). The fragments suggest the basic composition of the painting; the pagoda is the central icon of the mandala, and it is surrounded by an inner court and an outer court (figure 2-32).⁶² Although only the pagoda body is visible, the highly ornate style is evident in the curved pillars decorated with multicolored bands and embedded jewels. Moreover, feather-shaped pendants below the

60. The origins and transmission of the style has been understood from various aspects. For instance, Xie Jisheng 謝繼勝 and Qi Ming 戚明 discuss the incorporation of artistic styles of the Tang and the western regions in “Zangchuan fojiao yishu dongjian yu hanzang yishu fengge de xingcheng 藏傳佛教藝術東漸與漢藏藝術風格的形成” [Eastward transmission of Tibetan Buddhist art and the formation of the Sino-Tibetan art style], *Meishu 美術* [Fine art] 04 (2011): 95; Michelle C. Wang discusses the impact of the Nepalese and Kashmiri artistic styles on early esoteric Buddhist art in Dunhuang in *Manḍalas in the Making*, 74–83, 95–100; and Yury Khokhlov argues that the “Tibetan style” was in fact transmitted through China from the Pallava Kingdom of South India in “In the Footsteps of Amoghavajra (705–774): Southern Indian Artistic Mode in Tang China and Its Transmission to Tibet,” in *The Creative South: Buddhist and Hindu Art in Mediaeval Maritime Asia*, vol. 1, ed. Andrea Acri and Peter D. Sharrock (Singapore: ISEAS-Yusof Ishak Institute, 2022), 66–125. In any case, the style is characteristic of the integrated and borrowed elements from elsewhere.

61. Deborah E. Klimburg-Salter et al., eds., *The Silk Route and the Diamond Path: Esoteric Buddhist Art on the Trans-Himalayan Trade Routes* (Los Angeles: UCLA Art Council, 1982), plate 63.

62. Japanese art historian Matsumoto Eiichi 松本榮一 identifies the six bodhisattvas as six of the Sixteen Honored Ones of the Good Eon (賢劫十六尊) in a kind of diamond real (Vajradhatu) mandala yet concludes that a determined identification of the mandala cannot be made. Matsumoto, *Tonkōga no Kenkyū*, 616.

architrave and flower-and-leaf decoration that hang to the right side of the rightmost pillar appear to decorate a now-lost overhanging eave. The style is applied to a domed buddha hall image in an Avatamsaka transformation tableau in Mogao Cave 231 of the Tibetan period. This domed hall is similarly decorated with jeweled pendants and draperies hanging from arched architrave (figure 2-33). In addition, the image combines architectonic components that are found in Dunhuang murals of the Tang and subsequent periods; beams and overhanging eaves are covered by square panels, and the dome and eave edges are decorated with flaming jewels.

This kind of curved-pillared, domed-pagoda image, popular during the Tibetan period, was later revived circa 914–1036 during the latter half of the Guiyijun period under the reign of the Cao clan. In this period, the Cao clan actively maintained a relationship with the Uighurs and the Khotanese in their neighboring regions, as well as with the successors of the Tang empire in Central China. The social and cultural interchanges paved the way for the revival of eclecticism in architecture. The form of such a pagoda is standardized and applied to various pictorial contexts. For instance, the pagoda image is found in a mural painting, on the corridor ceiling panel of Cave 454, of Buddhist miraculous correspondence.⁶³ Against a backdrop of winged buildings, a curved-pillared domed pagoda is joined from below with a ladder that passes through a beast's-head-shaped peak (figure 2-34). The pagoda-centered complex represents a temple on Ox Head Mountain (Niutoushan 牛頭山) of the Khotan kingdom, a miraculous site for the come-flying image.

Cave 14 was produced in this multicultural, multiethnic context. The collective patronage of Han Chinese and other minority groups explains the design preference for the eclectic pagoda

63. For the naming history of this types of paintings, see Zhang, *Dunhuang fojiao gantonghua yanjiu*, 1–8. For a study of the picture of Ox Head Mountain Miraculous Image, see pages 199–208.

form. No direct textual record about the cave patronage has been found, but archaeological information gives us a clue. For one thing, the northern end of the south section of the Mogao cave complex, in which Cave 14 is located, is an area in which quite a few merit caves of Buddhist officials of the Guiyijun period are concentrated. The area is even believed to be “a district of monk officials” (*sengtong qu* 僧統區) of the cave complex. Based on the construction dates and patronage of neighboring caves, archaeologist Shi Zhangru asserts that Cave 14 was commissioned by a monk official between 851 and 870 CE.⁶⁴ Specifically, he suggests the possibility of the Han Chinese monk Wuzhen, who was the third chief monk controller (*du-sengtong*) of the Guiyijun Circuit in 865–92. Shi’s suggestion has not been well accepted, because the other merit caves of first-rank officials like Hongbian, Farong, and Haiyan are central-altar caves of gigantic size. Wuzhen, who was one of the most influential monk-officials in Guiyijun history, would have been unlikely to have commissioned a cave of modest size and the central-pillar type like Cave 14. Nonetheless, it is still quite possible that Buddhist priests from a local monastery led the construction of Cave 14, especially if we consider the monastic storage function of its neighboring cave (Cave 476) in the tenth century.⁶⁵ Comparable examples include Cave 12, the merit cave of Suo Yibian 索義辯, who was a Vinaya master. Moreover, the pictorial programs of Cave 14 must have been supervised by a master of Buddhist thought and esoteric Buddhist practices. This person would be more likely to have been a member of the clergy than a layperson.

In addition, images of monk and lay donor figures are depicted on the lateral walls of the central pillar in Cave 14. On the north-facing side, eight seated monks are depicted on the outer

64. Shi, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu,” 285.

65. For a discussion of Cave 476, see chapter 3.

faces of the U-shaped dais of the buddha niche, whereas two standing female figures are depicted in a *kunmen* arch of the altar (figure 2-35). The cartouches besides the monk figures, despite being without legible inscriptions, indicate that each figure represents a certain monk in the local Buddhist community. The visual template of monk donor figures making offerings toward the buddha altar appear in Caves 361 (figure 2-36) and 231 of the Tibetan period. Such representation renders a proper atmosphere for the ritual space and the monk donors' vow to be eternally close to the Buddha. A legible cartouche beside a small monk figure depicted near the dais in the Cave 231 niche identifies him as a Wuyin 悟因, a priest at the Baolin Monastery 報林寺 in Ganzhou and an “uncle monk” (*boseng* 伯僧).⁶⁶ The represented monk was presumably a relative of the main patron of Cave 231, who has been identified as Yin Jiazheng 陰嘉政. By inference, the group of monk figures represented in Cave 14, which are repainted in small size in a less visible location, likely represent some minor donors to the refurbishment of the cave. And it is not impossible that these minor donors had some familial or institutional tie to the primary cave patron, since disciples and relatives renovating a deceased monk's cave is not an uncommon phenomenon in late medieval Dunhuang.⁶⁷

66. “伯僧甘州報林寺上座兼/法師□□悟因一心供養。” *Dunhuang mogao ku gongyangren tiji*, 105. For trace-copy line-drawings and discussions of the donor figures, see respectively Ouyang Lin 歐陽琳, Shi Weixiang 史葦湘, Shi Dunyu 史敦玉, *Dunhuang bihua xianmiao ji* 敦煌壁畫線描集 [Collection of line drawings of Dunhuang mural paintings] (Shanghai: Shanghai shudian chuban she, 1995), plate 193; Wang Zhongxu 王中旭, “Yin Jiazheng ku—Lisu, fashi yu jiaku yishu 陰嘉政窟——禮俗、法事與家窟藝術” [Cave of Yin Jiazheng—Rituals, Buddhist affairs, and art of the family cave], PhD diss., Central Academy of Fine Art, 2009, 17.

67. For instance, Zhang Yingrun 張盈潤 (ca. 927–50), a Dunhuang layman, and his cousin Derong 德榮 (ca. 937–54), a Vinaya master of Jingtū Monastery (Pure Land monastery), completed an unfinished stupa construction initiated by his deceased uncle, who was a Buddhist priest. “Jiedu yaya Zhang Yingrun mengshouzu zhuang futu gongde ji bingxu 節度押衙張盈潤孟授祖莊浮圖功德記並序” [Merit record of Zhang Yingrun, clerk of the inspections general, completing a pagoda in Mengshouzu Village], P.3390. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 383–84.

The female figures wear narrow-sleeved dresses patterned with red grids and are identified by inscription as “the girl A-dun-xi-li” (*nizi Adunxili* 妮子阿敦悉力) and “the girl Yan-mei” (*nizi Yanmei* 妮子延美).⁶⁸ The custom style and names betray their non-Han ethnicity; they probably came from Sogdian families in China. It is generally accepted that the female figure paintings have existed since the construction of the cave, although some scholars suspect that they were added later, during the tenth-century refurbishment.⁶⁹ Despite the uncertainty in dating the specific painting, merit caves of monks often engaged with collaborative patronage since the Tibetan period. The mode of collaboration between Han Chinese monks and non-Han patrons and artisans can be traced to the generation before Wuzhen. Monk Hongbian, who was the Buddhist master of Wuzhen and the first chief monk controller of the Guiyijun Circuit in 851–62, led a cave construction project in which Tibetan aristocrats and other ethnic minorities also participated.⁷⁰ Hongbian commissioned the Seven Buddha Hall—Cave 365—in 832–34, when he held the position of chief Buddhist instructor in the Tibetan occupation government. Cave 365, which is located adjacent to Cave 14 in the upper-south direction, has a special cave design that masters curved forms (figure 2-37). A barrel-vaulted ceiling is placed on the wide and narrow cave chamber, the upper part of the east wall is “bent” for a smooth joint with the vaulted ceiling, and the U-shaped corridor that encircles the buddha altar has slightly concaved walls and ceilings. The excessive use of curvature in Cave 365 could be viewed as a building practice informed by a preference for domed building forms, which is

68. Pelliot and Geng, *Boxihe xiyu tanxian riji*, 360; Shi, *Dunhuang shishi huaxiang tishi*, 90; *Dunhuang mogao ku gongyangren tiji*, 8.

69. Cheng Bo, associate researcher of the Dunhuang Academy, told the author that the decorative borders on the altar were unfinished and by convention, the donor figures would have been less likely to have appeared in *kunmen* arches. Private conversation, March 2022.

70. For ethnicities of the inscribers of the Tibetan inscription, see Huang Wenhuan, “Ba Dunaghuang 365 ku zhangwen tiji.”

also evident in contemporary pagoda images. It is based on such an architectural taste for curved form in multicultural Dunhuang that I made reconstruction proposal 1, in which a domed roof is applied.

Reconstruction Proposal 2: Pagodas Come Flying

The eclectic style is, of course, not limited to the fusion of dome and timber structure. Proposal 2 explores the possibility of conjoining the curved-pillared pagoda body with a pyramidal roof (figure 2-38). Like the dome, the pyramidal roof is one of the most common types of pagoda roofs featured in Dunhuang murals. Moreover, the latter type is applied to most pagoda images depicted at the center of four ceiling slopes in truncated pyramidal ceiling caves. The south, north, and east ceiling slopes in Cave 14 are no exception. Depicted in the middle of thousand-buddha motifs, the timber-structured, pyramidal-roofed pagoda image with a seated buddha inside is conventionally referred to as “the Buddha preaching scene,” “the scene of Buddha preaching in a pagoda,” and “the scene of Buddha preaching a jeweled pavilion.” While the buddha image is the central icon, the pagoda image is also well proportioned and articulated. The three-bay by two-bay timber-structured pagoda is set on a *sumeru*-type base with railings and frontal stairs and is flanked by two jeweled cylindrical banners. Between the architrave and the *chatra* is depicted a timber-structured pyramidal roof comprising concaved slopes (figure 2-39). The positional significance of the pagoda images and their relationship with the main pagoda image should be investigated in the spatial context of Cave 14.

Mandalic Space of the Four Pagodas

The pagoda images on the ceiling slopes play key roles in guiding the view and forming a mandalic space. Regarding the individual slope, the pagoda image, which is represented in a

frontal perspectival view, stands out from the flat patterns of thousand-buddha motifs. It concurrently provides a picture frame for the buddha image inside and distinguishes the latter from the background images. If without the pagoda image, the visual hierarchy would be flattened, and the vertical directionality of each slope would be weakened. Regarding the truncated pyramidal ceiling as a whole, the small pagodas to the east, south, and north and the main pagoda to the west represent the four cardinal directions in a mandalic field (figure 2-5). In the ceiling panel, the cross-shaped *vajra* pestle and the four Buddha preaching scenes respectively represent the cosmic buddha Vairocana in the center and the buddhas of the four directions. Thus, the ceiling panel is often understood as a picture of the five-buddhas mandala. Recently, Guo Youmeng has suggested that the buddha-in-pagoda scenes on the ceiling slopes are manifestations of the respective directional buddha to which the pagoda top points.⁷¹ The visual alignment and iconographic correspondence suggest that the central panel and the slopes constitute a representation of the inner and outer courts of a mandalic field. The layout that symbolizes the cosmological structure is consistent with the layouts of Tang and Tibetan palaces or temple halls. For instance, the ancient Potala Palace in Tibet reportedly had “four quarters, four gates, and four pavilions,” according to *A History of Tibet by the Fifth Dalai Lama of Tibet* (Tbt: Bod kyi deb ther dpyid kyi rgyal mo'i glu dbyangs; Chn: Xizang wangchen ji 西藏王臣記).⁷² Based on the description, it is most likely that the palace had a walled square layout and

71. Guo considers that the Buddhas-in-pagoda are three of the four Buddhas of the Four Directions. They correspond with the respective Buddha preaching scenes in the central panel. If the five-buddhas mandala in the central panel is the “true and perfect wisdom body,” then the four buddhas-in-pagoda scenes represent “the expedient and convenient use.” Guo, “Dunhuang mijiao shiku tiyong guan chutan,” 151.

72. Ngawang Lobsang Gyatso (1617–82), *Xizang wangchen ji* 西藏王臣記 [A history of Tibet by the fifth Dalai Lama of Tibet], tran. Liu Liqian 劉立千 (Beijing: minzu chuban she, 2000), 20.

that the gates and palaces were located in the four quarters to form a biaxial symmetry. This layout is reflected in the main hall of Samye Monastery, one of the earliest extant buildings in Tibet. Built around 779 CE, the main hall of Samye was conceptualized as a mandalic field centered around Vairocana and laid out as concentric squares with gates and porticoes in the four directions (figure 2-40).⁷³ The biaxial symmetry becomes a basic compositional principle of various mandala pictures among Dunhuang portable paintings and drawings of the Guiyijun period and the standardized mandala paintings of subsequent periods. For instance, an altar diagram in Dunhuang manuscript S.848v represents the symbols of the five buddhas in the inner cross and four pairs of flaming vajra pestles—symbolizing the four gateways—in the four cardinal directions outside the altar (figure 2-41). Certain altar and mandala diagrams in Dunhuang manuscripts like this one are also believed to be sketches for cave ceiling design, for they share the biaxial composition and the five-buddhas iconography.⁷⁴

Compared with an ideational image of the mandala, the ceiling mandala is adjusted according to the visual focus in the cave space. Therefore, the pagodas of the four directions are not identical, but the one to the west is highlighted and marks the direction of iconic worship (figure 2-42). Thus, the center of the mandalic field—represented by the buddha niche—is collapsed into the pagoda to the west. The mandalic field endowed with directionality brings two architectural innovations to Cave 14.

First, the pagoda niche appears to be an organic expansion “bubbled” from the fore part

73. For discussions of the famous hall in English-language scholarship, see Amy Heller, *Tibetan Art: Tracing the Development of Spiritual Ideals and Art in Tibet 600–2000 A.D.* (Milan: Editoriale Jaca Book SpA, 1999), 35–37; Matthew T. Kapstein, *The Tibetan Assimilation of Buddhism: Conversion, Contestation, and Memory* (New York: Oxford University Press, 2000), 60–61; Wang, *Maṇḍalas in the Making*, 50–51.

74. Sha Wutian, *Dunhuang huagao yanjiu* 敦煌畫稿研究 [Painters' sketches from Dunhuang] (Beijing: Minzu chubanshe, 2006), 244–48.

of the main chamber. The fore space under the truncated pyramidal ceiling is approximately tangent to an imaginary sphere of 4.5 meters in diameter, and the niche is approximately tangent to the rear half of another imaginary sphere of 2.8 meters in diameter (figure 2-43). The unusual roundness of the fore space is achieved through the large and flat central panel and similar dimensions along the x, y, and z axes (4.8 m [l] x 4.1 m [w] x 4.3 m [h]). The niche opening onto the east-facing face of the central pillar is wide and tall (2.8 m [l] x 2.4 m [h]) but shallow (1.1 m [w]). Because the half-truncated pyramidal ceiling of the niche has no east ceiling slope, the niche is wide open to the fore space. Moreover, the central panel of the niche is physically joined to the bottom edge of the west ceiling slope of the fore space. The center of the niche sphere is approximately at the same height as the center of the fore-space sphere. More than half of the former's volume is subsumed by the latter. It is at the upper part of the intersection circle that the pictorial pagoda roof is depicted. Thus, the pictorial roof and *chatra* serve as a visual liaison between the mandalic field and the "blown-up" extension. At the lower part of the intersection circle, the ruck-cut base of the central pillar is extended by about eighty centimeters into the fore space, forming a "built-in" offering altar in front of the buddha niche. In this way, the upper and lower borders of the shallow niche are "pulled" back into the fore space. Meanwhile, the void volume of the fore space, which approximates a sphere, is horizontally "blown" into the niche. The spatial quality is unique; in comparison to Cave 14, central-pillar caves of the first half of the Tang period are designed to have a smaller and higher niche sphere in proportion to the fore-space sphere; contemporary niched truncated pyramidal ceiling caves—such as Cave 12—are designed to have a niche sphere and a fore space sphere of little intersection, thereby feeling like more of two independent spaces than an organic whole.

Second, in comparison to the symmetry exhibited in the east, south, and north slopes, the

pagoda image partly represented by the west ceiling slope mural in Cave 14 displays a momentum of amplification. Filling the whole slope and the pillar below, the pagoda image seems as if it were being called out from the pictorial space to the actual place. Medieval Chinese viewers would not have been unfamiliar with the imagery of an animated pagoda. Tang dynasty writers attest to seeing miraculous scenes that appeared to move before their very eyes after seeing pagodas, which were surely immovable. Sometimes a pagoda is imagined to be moving in multiple directions, first “coming flying” (*feilai* 飛來) and then “leaping forth” (*yongchu* 踴出).⁷⁵ Other poets associate these moving architectures with the heavenly and miraculous places of origin, such as the Thirty-Three Heavens and the Magic City described in the *Lotus Sūtra*.⁷⁶ They marvel at the animated quality of architecture by posing a rhetorical question: “How could the inconceivable thing [happen] without the power of the supreme beings?”⁷⁷

A scene about god-aided construction of a magnificent building is represented in Mogao Cave 9 of the late-Tang period. The painting occupies the entire rear (west-facing) face of the central pillar. The key image in the narrative painting is a two-storied pavilion in the lower center (figure 2-44). According to Zhao Xiaoxing’s study, the picture depicts a miraculous scene during the construction of Bright Hall (*Mingtang* 明堂), an imperial ritual building

75. Lu Zangyong’s 盧藏用 “Jingxing si bei ming 景星寺碑銘” [Stele inscription of Jingxing Monastery]: “雁塔分身，初疑踴出；蜂台合勢，更自飛來。” *QTW*, vol. 238.

76. Zhang Zhuo’s 張鷟 “Cangzhou gonggao xian shixing si shijia xiang bei 滄州弓高縣實性寺釋迦像碑” [Shakyamuni image stele of Shixing Monastery, Gonggao County, Cangzhou]: “寶階星動，似忉利之飛來；紺殿浮，同化城之湧出。” *QTW*, vol. 174.

77. Zhang Zhuo’s “Cangzhou gonggao xian shixing si shijia xiang bei”: “豈非威神自在，不可思議者哉？” *QTW*, vol. 174.

commissioned by the female emperor Wu Zhao 武曩 (r. 690–705).⁷⁸ In this scene, (a) the God of Mount Song (Songshan Shen 嵩山神) and entourage are sending an enormous pillar to (b) Bright Hall, and (c) human viewers standing in front of the imperial palace all marvel at the auspicious sign sent down from heaven. The construction of Cave 9 was concurrent with the power transition among the Zhang, Li, and Cao clans around the 900s. As Zhao points out, the cave-maker used the painting of a past event as a visual metaphor for the present condition: a heavenly mandate legitimating the establishment of a new regime and its architecture. A visual interest for us is the particular form of Bright Hall. The image represents a two-storied pavilion, but the historical Bright Hall at its completion reportedly had three stories.⁷⁹ The historical Bright Hall was reduced to a two-storied version after Emperor Xuan of Tang (r. 685–762) issued an order “to remove the core pillar of wood” (*qu zhuxinmu* 去柱心木).⁸⁰ Presumably, the roof finial and the original uppermost level were removed. That the architectural form in the Cave 9 painting follows the two-story version is probably indicative of the dating of the painting’s prototype.⁸¹ More importantly, it implies an “unfinished” Bright Hall that needed to be completed by a supernatural power. From this point of view, the painting represents the key moment before the completion of the hall: the core pillar is sent down from heaven and supernatural power is involved in the consecration of the Bright Hall. The ink-line painting

78. Zhao Xiaoxing, “Mogaoku di 9 ku ‘songshanshen song mingtang dianying tu’ kao 莫高窟第9窟‘嵩山神送明堂殿應圖’考” [Study of the “Picture of Gods of Mount Song Sending Bright Hall” in Mogao Cave 9], *Dunhuang Yanjiu* 127, no. 3 (2011): 37–42.

79. “有三層：下層象四時，各隨方色；中層法十二辰，圓蓋，蓋上盤九龍捧之；上層法二十四氣，亦圓蓋。亭中有巨木十圍，上下通貫。” “*Liyi zhi* 禮儀志” [Record of Rites] in *Jiu tang shu* 舊唐書 [Old book of Tang], vol. 22, ed. Li Xu 劉昫 et al. (Beijing: zhonghua shuju, 1975), 862.

80. *Jiu tang shu*, 876.

81. Zhao, “Mogaoku di 9 ku ‘songshanshen song mingtang dianying tu’ kao,” 41.

format, which gives a sense of unfinished-ness, fits the content, which is about the process of building construction and consecration. The picture is a visual commentary on an actual central pillar; it reminds us how in medieval China, the architectural forms could have been conceived as animated.

In addition, the heavenly protectors carrying the pillar in the Cave 9 painting shed lights on the implication of guardians bearing *chatra* bases in the pagoda images of Caves 14 and 454. In both pagoda images, the guardians encircle the base, which serves to fix the *chatra* post and core pillar of the pagoda. The existence of the base bearers not only expresses the firmness of the structural components but also indicates that the “inconceivable” formation of the pagoda “[cannot happen] without the power of the supreme beings.”⁸² Furthermore, the Cave 14 *chatra* image appears right above the central pillar, connecting the visionary scene and the concrete object, and turning the intangible into the tangible. If the *chatra* image could be contemplated as “rising” from the altar of repentance rituals, then the pagoda image as a whole may be conceived to be “descending” from the mandala field of five buddhas.⁸³

An Ornate Style

The ritual function in Cave 14 explains the meticulous articulation of the architectonic forms of the main pagoda image. Generally speaking, the undifferentiated decoration of all surfaces makes a kind of “surfacescape” that encompasses the interior and exterior architectures.⁸⁴ In Cave 14, the multiplication of decorative panel patterns onto the niche ceiling

82. *QTW*, vol. 174.

83. Wang, *Maṇḍalas in the Making*, 203.

84. The notion of “surfacescape” in another context of Chinese art is discussed in Jonathan Hay, *Sensuous Surfaces: The Decorative Object in Early Modern China* (Honolulu: University of Hawai‘i Press, 2010).

and the pictorial eave facilitates visual correspondence between the inner space and the outer appearance of pagoda. Decorative panels added to the eave edges of a pyramidal roof are applied to curved-pillar pagoda images of Dunhuang mural paintings of the Tibetan and Guiyijun periods.⁸⁵ For instance, Cave 72, a truncated pyramidal ceiling cave built and renovated between the 850s and the 960s, bears in the center of the four ceiling slopes four identical scenes of a Buddha preaching in a pagoda. The pyramidal roof in the pagoda image is decorated with a *yangyang* board placed on the corbeled eave (figure 2-45). The most extravagantly decorated eave is the main pagoda image in Cave 454 (figures 2-17 and 2-18). The composite eave combines the bracket sets—an element of the large carpentry for freestanding halls—and the *yangyang* board with *shanhua* decoration—an element of the small carpentry for interior shrines. The form is consistent with the design of “canopied shrine of Buddhism and Daoism in the *shanhua-jiaoye* style” (*shanhua jiaoye fodaozhang* 山花蕉葉佛道帳) described in the *Yingzao fashi*.⁸⁶ Like the two images of composite forms, the Cave 14 main pagoda image combines an architectural roof and the typical eave decoration for a canopied shrine. The combination bridges the architectural and the furniture scales and relates the inside and outside spaces of the pagoda-shrine representation. Thus, the canopied shrine could be turned into a pagoda, and the pagoda could be approached from the opening of the shrine.

Among the five pagoda images in Cave 14, the meticulous articulation culminates in the *chatra* image on the west ceiling slope. The *chatra* is adorned by flaming orbs on all levels of discs and on the canopy, shining like a tree of lamps. This way of decorating a vertical structure

85. For Tibetan-period examples, see Sun Yihua, “Yi(ye)xinggong mingcheng kao: Dunhuang tubo jianzhu hua yanjiu 翼(葉)形栱名稱考——敦煌吐蕃建築畫研究” [Study of the name of the wing/leaf-shaped bracket arm: Architectural images in Tibetan-period Dunhuang], *Zhongguo jianzhu shilun huikan* 中國建築史論彙刊 16 (2018): 116, figs. 3, 4.

86. Li Jie, *Yingzao fashi*, vol. 32.

is uncommon but not without precedent. Lamp trees and lamp pavilion images are depicted in a Bhaiṣajyaguru transformation tableau in Mogao Cave 220 of the early Tang (figure 2-46). This case can be viewed as the beginning of using architectural ornaments as Buddhist offerings in Dunhuang visual traditions. In the ninth century, praising and contemplating a well-adorned dharma field became an indispensable part of repentance rituals. The emphasis on a jewel-adorned built environment is felt in ritual texts as well as in imagery.

Two inscriptions in Cave 365, dated 834 CE, provide crucial clues to the favored use of light and jewels on architecture during consecration and repentance rituals. The two inscriptions, one in Tibetan and the other in Chinese, are inscribed on the recovered underlayer in the center of the front (east-facing) face of the offering altar. The Tibetan inscription records the year and date and the patrons of the cave construction; the Chinese inscription is a copy of the *Sūtra of the Transference Wheel*.⁸⁷ According to a study by Dunhuang scholar Mei Lin, the sūtra is about Mahayana Buddhist ordination precepts and was probably used by the cave owner, Hongbian, in practices related to repentance rituals.⁸⁸ The language of the two inscriptions displays a preference for luminosity. The Tibetan inscription describes the consecration ritual of the cave temple with two phrases that indicate light sources. The first, *sbyan phyis* “the eyes were dazzled,” indicates a brilliant light that could dazzle the eyes. The second, *zhal bsros* “the face was warmed,” implies fire or light that could warm the face. In comparison, the Chinese inscription also emphasizes the brilliance in the dharma field by elaborating on the jeweled radiance. It repetitively uses *bao* 寶, “jewel,” for almost every kind of offerings and describes

87. *Foshuo huixiang lun jing* [Sūtra of the transference wheel], trans. Śīladharma, *T* 998, vol. 19.

88. The Chinese inscription was firstly transcribed in *Dunhuang Mogao ku gongyangren tiji* and is considered to be a votive text. It was again transcribed and identified to be the sūtra by Mei Lin based on the inscription and the sūtra in the Taisho canon. Mei, “Dunhuang Mogaoku di 365 ku hanwen tiji chonglu bing ba.”

the accumulative effects as “accumulated flames” and “dazzling lights.” Many jewels adorn the architectural forms, and the latter themselves serve as ornaments of the place. After stating that the practitioner—Hongbian—respectfully offers to all buddhas and bodhisattvas his own body and all kinds of “grand ornaments” (*da zhuangyan ju* 大莊嚴具), the inscription continues to explain as follows:

What is called all kinds [of grand ornaments] are jeweled palaces, all the adorned jewels, jeweled trees, jeweled mountains, jeweled thrones, jeweled altars, treasures and jewels in lines and rows, jeweled canopies, jeweled banners, jeweled accessories, rosaries, pearl nets, jeweled vessels, jewels accumulated, and jewels of flames, grand Moni Jewels from all the jeweled continents. On pure and clear lamp trees, jeweled bells resonate. the Moni ([Jewel] emits dazzling lights, and pure gold pendants dangle.

所謂種種寶宮。諸寶莊嚴寶樹寶山。寶座寶壇珍寶行列。寶蓋寶幢寶飾瓔珞真珠羅網寶器寶聚積寶光焰。諸寶洲中大末尼寶。清淨燈樹寶鈴和鳴。摩尼光曜真金纓⁸⁹

The literary description covers all the types of ornaments that can possibly adorn a ritual space: jeweled palaces as a general category, jeweled thrones and jeweled altars as ornaments placed on the ground, and jeweled canopies and jewels as ornaments suspended in the air. Similar description is applied to the ritual offerings used for bodhisattva precepts in the *Dhāraṇīs for Safeguarding the Nation, the Realm and the Chief of State* (Shouhu guojie zhu tuoluoni jing

89. Mei, “Dunhuang Mogaoku di 365 ku hanwen tiji chonglu bing ba,” 257. For the canonical text, see T 998, 19:577, c 07–10.

守護國界主陀羅尼經).⁹⁰ Long offering lists similarly indicate that the foremost ornaments are the jeweled pavilions and palaces.

The literary imagery of “lamp trees” with “jeweled bells” resonates with the images of the jewel-adorned *chatra* and the four chains of bells hanging from its canopy. In addition, the back-screened altar of Cave 365 shares a few formal features with the central pillar of Cave 14; fronted by a large built-in offering altar, the buddha niche is shallow and closely tied to the fore space. The top surface of the Cave 365 offering altar even preserves a few post holes, which were probably used to fix grand ornaments such as lamp trees. The graphic description in the *Sūtra of the Transference Wheel* echoes the spectacular ritual settings in the cave and helps the offering-maker feel connected with the offering-receiver. Likewise, the west ceiling slope mural in Cave 14 is meticulously articulated to convey a vivid scene of ritual gathering. Ornamental details such as flaming orbs and embedded jewels do more than convey a sense of three-dimensionality; they also indicate that the architecture itself is a source of Buddhist offerings. Minor heavenly beings, musical instruments, scattered flowers, and clouds in the air render an atmosphere apt for a dharma field. The scenic rendering modifies the ideational image of a

90. As the Buddha tells the Sovereign of All Dharmas Bodhisattva (一切法自在王菩薩), when receiving the bodhisattva precepts, one should repent and prepare the offerings as follows: “願令供具積集圓滿。及與我身充遍十方一切世界。及攝十方無有主宰。廣大莊嚴無量供具。現前供養諸佛菩薩。所謂種種妙寶諸天宮殿。各以妙寶而為莊嚴。眾寶欄楯分佈行列。寶樹寶山以為映帶。寶座寶蓋寶幢寶幡。寶器寶珠寶鈴寶網。寶光寶焰及寶功德。一一無量無數寶洲。摩尼寶聚充滿其中。諸寶燈樹種種妙寶。間錯莊嚴。金焰發輝寶網羅覆。復有無數妙寶蓮華。閻浮檀金以為其臺。真金為葉菡萏敷榮。興天寶雲雨天寶雨。降天寶樹散天寶花。發眾寶光開眾寶藏。復有無數閻浮檀金。諸天宮殿眾寶莊嚴。妙寶廊宇金剛為牆。眾寶欄楯周匝圍遶。種種天仙眾妙園苑。花林香草芬敷布濩。無數龍宮阿脩羅宮。各有種種林木殿堂香花寶器。以如是等無量無邊。曾未受用眾寶供具。悉將迴向供養十方諸佛菩薩。” *Shouhu guojie zhu tuoluoni jing* 守護國界主陀羅尼經 [Dhāraṇīs for safeguarding the nation, the realm and the chief of state], trans. Prajñā 般若 and Muniśrī 牟尼室利. *T* 997, 19:528, c 20–p. 529, a 07.

pagoda (figure 2-39) and expresses a strong sense of motion-in-space.

In correspondence to the heavenly offering scene above, the lower part of the central pillar bear rows of monastic and lay donor figures making offerings (figure 2-35). As previously discussed, the donor figures were likely painted at different occasions in the ninth and tenth centuries, yet they are all directed toward the east-facing side of the central pillar as if parading toward the front of the buddha niche. The visual paradigm of donor figures in rows parading toward the buddha altar continued to be found on walls and altar faces in central-altar caves of the tenth century.⁹¹ Representations of the offering scenes and the architecture as offerings complement each other.

Reconstruction Proposal 3: Tiers Leaping Forth

Another issue to be considered is the unusual proportion of the Cave 14 main pagoda image. Most pagoda images in Dunhuang murals have a wider overhanging roof and a narrower pagoda body, but the Cave 14 pagoda has a narrower roof and a wider body.⁹² This strange proportion perhaps hints at an unsuccessful effect that the unique cave design had to experiment with, and maybe it is one of the factors behind the design's infrequent application in other Dunhuang caves in subsequent times. The following section discusses the third proposal that modifies the disproportionated roof design and the continued modifications of Cave 14 in the rest of the Guiyijun period.

Proposal 3 explores the possibility of a “heavier” roof form coherent with the known

91. Guo Junye 郭俊葉, *Dunhuang Mogao ku di 454 ku yanjiu* 敦煌莫高窟第454窟研究 [Study of Mogao Cave 454] (Lanzhou: Gansu jiaoyu chubanshe, 2016), 297–99.

92. Although examples are rare, it does not mean that the pagoda form with a narrower roof and a wider body is impossible. Such a pagoda image is depicted on the niche ceiling of early-Tang Cave 374. In the painting, two flowery pillars support two levels of eaves with *shanhua* decoration. The upper one is smaller than the lower level, and the eaves are not overhung.

visual program in Cave 14 and within the spectrum of canopy-shaped niche design at Mogao. In this proposal, the west ceiling slope image and the central pagoda pillar constitute the optical form of a double-eaved, truncated pyramidal ceiling pagoda (figure 2-47). Both eaves are represented as a *yangyang* board with *shanhua* decoration. The upper-level board is slightly set back from the lower level, forming a tiered, truncated pyramidal volume of mass. The tiered volume conveys “the pagoda’s momentum of leaping forth” (*tashi ru yongchu* 塔勢如湧出) in Tang poems.⁹³ Among my three proposals, this one most resembles the prototypical design of a canopy-shaped niche. As previously discussed, the blurring of the topological differences between pagoda and canopied shrine is felt in pagoda niches of the Tibetan period, such as those in Caves 361 (figure 2-22) and 359 (figures 2-21). This section takes into consideration the Many Treasures Pagoda image on the east wall and the tenth century renovation. It discusses the historical process in which the “leaping-forth” pagoda image was formed and paired with the opposite “coming flying” pagoda image.

A series of visual reconstructions and spatial analyses reveals the answer to the problem about the west ceiling slope of Cave 14: the west ceiling slope mural and the central pillar compose an extra-two-dimensional image of a curved-pillared pagoda. The pagoda image is not only visual but also spatial, as it is partly conveyed through cave architecture. The pagoda image transcends the border between the pictorial space and the actual space, thereby acquiring animated qualities. It “comes flying” from the mandala of five buddhas represented on the ceilings to define a dharma field on the ground. Concurrently, it “leaps forth” from an actual base

93. Cen Shen’s 岑參 “Yu Gao Shi Xue Ju deng Ci’en si futu 與高適薛據登慈恩寺浮屠” [Ascending the pagoda of Ci’en Monastery with Gao Shi and Xue Ju], in *Quan Tang shi* 全唐詩 [Complete collection of Tang poetry], comp. Peng Dingqiu 彭定求 et al. (Beijing: Zhonghua shuju, 1960), 2037.

and further extends into the visionary realm to guide a spiritual return to the dharma realm. The three proposals explore the expressive potentials of the roof form, and until new evidence surfaces, no conclusive decision can be made. It is the ascertainable parts of the pagoda image that implicate the various yet reconcilable associations: the multicultural character of the cave maker holds true in either of the eclectic designs, the mandalic layout is compatible with various types of architectonic details, and the *chatra* image indicates the Buddhist property of an architecture regardless of the roof type. At the time of its completion, the west ceiling slope mural was a still picture with determined visual contents. Yet it still evoked religious imagination, presented animated effects, and pictured something incredible. The imagination was conveyed not only through an iconic representation of architecture but also through the visual context and program in which the architecture is situated. It was the beholder's recognition of the composite materiality and spatiality that enacted the animated quality of the pagoda image. Historical reception, like the image itself, has evolved with the passage of time. The evolving reception is reflected in the design conception of the tenth-century refurbishment that selectively retouched and amplified the original design.

Dynamics in the Redesign

What changes did the tenth-century refurbishment make to the pagoda image? This section reveals the manifold spatial imageries of Cave 14, in addition to the five-buddhas mandala. It discusses the ways in which the retouched main pagoda image took part in the construct of the Fahua and Huayan imageries.

Compatible Imageries of Fahua and Huayan

Previous studies have illuminated how the Cave 14 design takes the practices of Fahua

and the teachings of Huayan as overarching principles of esoteric Buddhist images.⁹⁴ This study looks at the issue from the perspective of spatial and architectural art. It discusses how the visual templates of certain Huayan and Fahua images interact with each other and are subsequently modified to fit the visual program.

A good example of the images that might fit into both the Huayan and the Fahua system is the imagery of bodhisattvas encircling the cave chamber. As part of the late-Tang visual program, the depictions of fifty-one images of bodhisattvas presenting offerings (some manifest in a monk's appearance) seem without any obvious overall directionality. Each is contained within a pictorial frame of multipaneled screens on the lower register of the four walls (figures 2-3 and 2-48) and appear less as though moving toward a spiritual destination than as encircling the ritual space. The spatial imagery prompted Guo Youmeng to interpret the images as “a circle of bodhisattvas leaping forward from underground to attend a Fahua assembly” (i.e., a holy gathering in the Fahua jing 法華經 or *Lotus Sūtra*).⁹⁵ Meanwhile, other scholars have suggested the images' Huayan association based on the legible inscriptions in some cartouches beside the bodhisattva images. Zhao Xiaoxing argues that they represent virtuous friends who always accompanied the Buddha in his many lives.⁹⁶ Michelle C. Wang more specifically identifies them and Mañjuśrī and Samantabhadra images as the fifty-three spiritual friends (Skt: *kalyāṇamitras*; Chn: *shanzhishi* 善知識).⁹⁷ According to the Gaṇḍhavyūha chapter of the *Huayan jing* 華嚴經 or *Avataṃsaka Sūtra*, the spiritual friends' role is to guide the boy pilgrim

94. Guo, “Dunhuang mijiao shiku tiyong guan chutan.”

95. Guo, “Dunhuang mijiao shiku tiyong guan chutan,” 157. *Miaofa lianhua jing* 妙法蓮華經 [Subtle Dharma Lotus Exalted Sūtra], trans. Kumārajīva 鳩摩羅什 (344–413), T 262, vol. 9.

96. Zhao, *Tubo tongzhi shiqi dunhuang mijiao yaniju*, 561.

97. Wang, *Maṇḍalas in the Making*, 252–55.

Sudhana (Shancai tongzi 善才童子) to enter the bodhisattva path.⁹⁸

A subtle retouch is felt in the bodhisattva circle. The tenth-century refurbishment of the corridor combines the two ways of representing collective figural images. On the side walls of the narrowed corridor are painted two rows of bodhisattvas parading toward the main chamber. Whether or not it follows the ninth-century design, the imagery of parading bodhisattvas echoes and adds directionality to the bodhisattva circle in the main chamber.⁹⁹ The directionality could be viewed as a visual hint of entering the bodhisattva's path. To take a step further from Wang's argument, while the bodhisattva circle in the main chamber was certainly meant to guide a practitioner to ascend to the Avatamsaka dharma realm, so too were the added bodhisattva rows in the corridor.¹⁰⁰ Following the visual guide, one sees the core of the spatial imageries of Huayan and Fahua: the jeweled pagoda in the center of the mandalic field and surrounded by all the figural images.

Twin Buddhas and Paired Pagodas

The area on the east wall above the entrance corridor depicts a scene that centered on a pagoda in the air. Inside the pagoda, two seated buddhas are facing each other and delivering a sermon. On the left and right sides, two triads of standing buddhas with flanking bodhisattvas are traveling on clouds toward the pagoda, and two flying *apsaras* are attending the *chatra* from

98. *Da fangguang fo huayan jing* 大方廣佛華嚴經 [Flower garland sūtra], trans. Buddhahadra 佛馱跋陀羅 (359–429), *T* 278, vol. 10.

99. The rectangular-shaped corridor of the ninth century design is partly revealed. Two jeweled canopies are visible on the south wall. They are very likely part of frontal images of bodhisattvas, which is typical for this period (e.g., images on the corridor walls of Caves 220, 467). But this hypothesis cannot be verified due to the concealment of the corridor walls of Cave 14.

100. Wang, *Maṇḍalas in the Making*, 260, 269–70.

opposite directions (figure 2-49-a). The twin buddhas inside the pagoda image indicate that the scene represents the Many Jewels Buddha (Skt: Prabhūtaratna; Chn: Duobafo 多寶佛), one of the buddhas of the past, who shares seat with the historical Buddha, Shakyamuni, in his stupa to hear the latter preach the *Lotus Sūtra*. The picture of this iconic moment represents the “Chapter of Seeing the Jeweled Pagoda” (Jian baota pin 見寶塔品) of the *Lotus Sūtra*.¹⁰¹ Hence the pagoda image is identified as the Many Treasures Pagoda (Duobao Ta 多寶塔), alternatively known as the Lotus Pagoda (Fahua Ta 法華塔). The Many Treasures Pagoda is depicted as a timber-structured, curved pillared square pagoda on a *sumeru*-type railed base. The severe deterioration of the mural’s colors makes the architectonic forms difficult to see, but some details are still traceable (figure 2-49-b). The overhanging roof is represented as two rows of square panels topped by flower- and leaf-shaped ornaments. The *chatra* image is cut off at the top by a decorative border at the upper edge of the wall, and only four discs and two chains of bells are visible. Based on the compositional principles displayed in other pagoda images in the cave or other Mogao caves, the complete pagoda form should include at least a canopy, a crescent moon symbol, and a flaming jewel atop the four discs. Notably, the major formal features of the pagoda image—including the curved pillars, the flat roof top, and the proportions of roof, body, and base—are consistent with those of the main pagoda image. It feels as if the latter were faced with a mirroring image in smaller size.

The Many Treasures Pagoda image possesses positional significance. The area on the east wall above the entrance is opposite to the central pillar—the visual center of the cave—and both are aligned along the central axis of the cave temple (figure 2-50). A mural in this location

101. *Miaofa lianhua jing*, T 262, 9:32, b, l.16 – p. 34, b, l.22.

would be the last image a visitor would see before leaving the main chamber and is the picture that the main buddha icon is designed to face. Since the early Tang, the Many Treasures Pagoda has mostly been represented in locations along the central axis of a cave, including this location.¹⁰² The twin-buddhas-in-pagoda painting and the niched buddha statue set form an opposition of “counter images” despite the asymmetrical size, mediums, and visual predominance.¹⁰³ In several Tibetan-period caves, the mural on the east wall above entrance even becomes a key image for understanding the nature and function of the cave as a whole. For instance, this area in a family cave bears the portraits of the cave owner’s parents.¹⁰⁴ And this area in Cave 361, which displays a strong and coherent imagery of mandala, bears a Many Treasures Pagoda picture (figure 2-31-c). In the picture, a domed pagoda is erected on a base that has a multi-petal, flower-shaped plan. As Guo Youmeng suggests, the special architectural form was likely designed to signify the lotus mandala.¹⁰⁵

Before accepting the tempting idea that the Many Treasures Pagoda image in Cave 14 is also a key to the pictorial programs of the cave, one must first examine the painting’s dating.

While the picture looks coherent within the composition on the east wall, two visual clues exist

102. The Many Treasures Pagoda image is often placed at three locations: on the ceiling panel of the niche on the west wall (twelve examples), in the middle of the west ceiling slope (four examples), and on the east wall above entrance (three examples). *Dunhuang Mogao ku neirong zonglu*, 231.

103. The term is coined by Wu Hung in a study of the subjugation transformation tableaux in “What Is Bianxiang?—On the Relationship between Dunhuang Art and Dunhuang Literature,” *Harvard Journal of Asiatic Studies* 52, no. 1 (1992): 164.

104. Winston Kyan, “Family Space: Buddhist Materiality and Ancestral Fashioning in Mogao Cave 231,” *Art Bulletin* 92, no. 1/2 (March–June 2010): 77.

105. Guo Youmeng, *Faxiang shizhen: Shiku tuxiangxue de yanjiu yu zhongguo wuda pusa shengdi chaosheng jishi* 法相拾珍：石窟圖像學的研究與中國五大菩薩聖地朝聖紀實 [Collecting the pearls of dharma images: Studies of cave iconography and records of pilgrimages to the five great bodhisattvas’ sacred sites] (Taoyuan: Yuanguang foxue yanjiu suo, 2017), 90–93.

for the thesis of its repainting. One clue is that the pagoda base overlaps on the decorative border around the narrowed corridor, and the top of the *chatra* is not represented. The other clue lies in the dependency of painting and architectural styles. The three pagoda images on the ceiling slopes are painted with neatly ruled lines, and their eaves are completely flat (figure 2-39). In contrast, the pagoda image on the east wall has a hand-drawn eave that is tilted upward at the sides. The former has multi-jumped bracket sets with inverted V-shaped braces, whereas the latter has one-jumped bracket sets and Ω -shaped braces. Moreover, the columns of the former are straight, whereas those of the latter are curved inward at the top. The latter kind of architectonic components are often found in tenth-century Dunhuang murals. Examples include, as will be discussed in chapter 4, an open-air mural outside Mogao Cave 94 and an interior mural in the antechamber of Yulin Cave 21. Therefore, one can conclude that the current mural of the Many Treasures Pagoda picture on the east wall was painted in the tenth century.

The next question is if the tenth century painting is just a change of style or involves a change of content.¹⁰⁶ The underpainting, if any, is traceless, and hence no direct evidence exists for any hypothesis of the original visual contents. Like previous studies, this analysis mainly relies on the known patterns of cave design. Two precedents of painting the Many Treasures Pagoda image on the east wall above the entrance are Cave 331 of the early Tang and Cave 361 of the Tibetan period.¹⁰⁷ Compared with other possible images for this position, such as Buddha preaching scenes, the seven buddhas, and Maitreya Buddha, the Many Treasures Pagoda image might not have the highest statistical probability. However, if we hold true to the point that

106. Most current scholarship did not suspect the repainting of this area, such as *Dunhuang Mogao ku neirong zonglu*, 6. As an exception, Guo Youmeng mentions that the painting seems to be a Song-period repainting in “Dunhuang mijiao shiku tiyong guan chutan,” 144, yet he does not investigate this question.

107. *Dunhuang shiku neirong zonglu*, 290.

design continuity exists between Cave 361 and Cave 14, then there is a high possibility that the underpainting in Cave 14 was a Many Treasures Pagoda image.¹⁰⁸ This means that the tenth-century repainting has possibly preserved the subject matter of the painting. Even if the refurbishment is consistent with the original design of content, the previous paragraph has demonstrated the slippage in architectural forms. Another piece of circumstantial evidence for the changed-form hypothesis is the fact that curved-pillared pagoda images were relatively popular in the Tibetan period and the tenth century but hardly ever appeared in the late-Tang period.¹⁰⁹ Therefore, the choice of a curved-pillared pagoda form is not without self-consciousness; it represents either a unique case in the late Tang or, more possibly, a change in the tenth century.

The special pagoda image on the east wall shares formal features with the main pagoda image comprising the central pillar and the *chatra* image on the west ceiling slope. Because the niche's side walls are bent inward at the top, the main pagoda image preserves a curved-pillared form. Moreover, the buddha niche and the central pillar were evidently retouched during the tenth-century refurbishment.¹¹⁰ A ninth-century design of the canopy-shaped niche usually applies the trompe l'oeil techniques to every aspect. One of the major strategies is depicting multipaneled screens on the niche walls.¹¹¹ But the mural on the niche walls of Cave 14

108. Zhao, *Tubo tongzhi shiqi dunhuang mijiao yaniju*, 545–49.

109. Sun, *Zhong shiji jianzhu hua*, 82–86.

110. Some assert that the painting reflects the late-Tang original design, but no evidence has been discussed. *Dunhuang Mogao ku neirong zonglu*, 5–6; Zhao, *Tubo tongzhi shiqi dunhuang mijiao yaniju*, 550.

111. Many scholars have discussed the multipaneled screen paintings' impact on cave interiors and the artistic conception. See, for example, Zhao Qinglan 趙青蘭, "Mogao ku tubo shiqi dong ku kan nei pingfeng hua yanjiu 莫高窟吐蕃時期洞窟龕內屏風畫研究" [A study of screen paintings inside niches in the Mogao caves of the Tibetan occupation], *Dunhuang Yanjiu* 3

represents the “ten great disciples” of the Buddha in a grove. The repainting is conventionally accepted as a copy of the original design, but the slippage in design strategy suggests that the grove image is more likely a new design. The Buddhist historian Guo Youmeng identifies the subject matter of the buddha niche as Shakyamuni Buddha preaching on Vulture Peak.¹¹² The current statue set of a buddha and six monk disciples was made in the Qing period; according to Guo’s study, the statue set that accompanied the repainted disciple images were probably a buddha, four bodhisattvas, and two heavenly kings. While the refurbishment seems to be guided by a minimal intervention principle, the key imageries along the central axis were altered. The phenomenon directs us to ponder the question of whether a new design conception of the cave emerged during the refurbishment and what it was.

The redesign highlighting the two pagoda images along the central axis should be understood in the visual traditions of representing the *Lotus Sūtra* in the Dunhuang caves. An oppositional composition took form in the high-Tang period. Caves 23 and 31 represent the Many Treasures Pagoda picture and the scene of Shakyamuni preaching on Vulture Peak on two opposite walls or ceiling slopes (figure 2-51).¹¹³ The two pictures respectively represent the “assembly in Void Space” (Xukong hui 虛空會) and the “assembly on Vulture Peak” (Lingjiu

(1994): 49–61; Neil Schmid, “The Material Culture of Exegesis and Liturgy and a Change in the Artistic Representations in Dunhuang Caves, ca. 700–1000,” *Asia Major*, 3rd ser., 2006, 19, plate 1/2: 171–210; Kyan, “Family Space”; Ping Foong, “Multipanel Landscape Screens as Spatial Simulacra at the Mogao Caves, Dunhuang,” in *Bridges to Heaven: Essays on East Asian Art in Honor of Professor Wen C. Fong*, ed. Jerome Silbergeld (Princeton, NJ: Princeton University Press, 2011), 533–56; and Wei-Cheng Lin, “Screening the Chinese Interior: Architectonic and Architecturesque,” in *The Multivalent Screen: Materiality and Representation in East Asian Visual Culture*, ed. Foong Ping and Chelsea Foxwell (Chicago: Art Media Resources, 2019), 84.

112. Guo, “Dunhuang mijiao shiku tiyong guan chutan,” 146.

113. He Shizhe 賀世哲, *Dunhuang shiku quanji 7: fahua jing juan* 敦煌石窟全集 7: 法華經卷 [Comprehensive collection of the Dunhuang grottoes 7: Volume on Lotus Sūtra], ed. Dunhuang yanjiu yuan (Hong Kong: Shangwu yinshu guan, 2001), 74, 84.

hui 靈鷲會)—the two major sermon scenes in the *Lotus Sūtra*. The “counter-images” in space constitute a primary spatial representation of a dharma field associated with the *Lotus Sūtra*. Art historian Eugene Y. Wang, who has dived deep into the visual cultures of the *Lotus Sūtra* in medieval China, proposes that such cave temples were modeled on the “mirror hall.” In an interior as such, the main icon conceptually projects mirror reflections in all directions and fills the entire dharma realm the cave space symbolizes.¹¹⁴ The Tibetan period saw the formation of a visual template of *Lotus Sūtra* transformation tableaux. The typical pictorial composition features the pagoda scene in the upper center and the Vulture Peak scene in the lower center (figure 2-52). In the Guiyijun period, the visual template of a dual center along the vertical central axis was conveyed three-dimensionally in caves that have a Fahua theme. According to Guo Junye’s study, the central altar of Cave 454 was originally designed to represent the Vulture Peak scene.¹¹⁵ Thus the pagoda scene painted on the west ceiling slope and the Vulture Peak scene sculpted on the altar would have been vertically aligned. The spatialized central imagery turned the cave into a ritual space for “repentance rites of Fahua samādhi” (*Fahua sanmei* 法華三昧).¹¹⁶ In this context, the significance of the Cave 14 redesign can be understood in two aspects. In terms of spatial imagery, the Many Treasures Pagoda picture on the east wall above the entrance is meant to be a mirror reflection of the central icon in the cave, that is, the main pagoda image. The former is the latter’s projection and extension in space. In terms of visual program, the pagoda scene and the buddha niche, which was modified to represent the Vulture

114. Wang, *Shaping the Lotus Sūtra*, 256–77.

115. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 292–304.

116. The Fahua samādhi refers to concentration of the mind (i.e., samādhi) that sees into the three truths of the noumenal, phenomenal, and the absolute that unites them. It is derived from the “sixteen” samādhis in chapter 24 of the *Lotus Sūtra*, in *Digital Dictionary of Buddhism*, s.v. “法華三昧,” <http://www.buddhism-dict.net>.

Peak scene, constitute the dual centers of the Fahua visual template. They outline the axis of a Fahua dharma field.

Understood in the two aspects, the animated quality of the main pagoda image in Cave 14 expresses the miraculous nature of the two Fahua scenes: the pagoda image “comes flying” from the ceiling above, suggesting the miraculous descent of the assembly in Void Space; and the grove image “leaps forth” from the altar below, suggesting the wondrous arrival of the assembly on Vulture Peak. As previously discussed, the redesign includes the Vulture Peak scene in the niche at the expense of a holistic simulation of a canopied shrine. If the original design was meant to represent a pagoda of a mandalic field, then the adaptive reuse creates a composite image of, as Guo summarizes, “the Vulture Peak assembly in the Pagoda of the True Body.”¹¹⁷ The Pagoda of the True Body is not described in any Buddhist scriptures; rather, it is a reinterpretation of the Fahua imageries based on the visual materials in Cave 14. More specifically, it is a unique representation of the iconic moment in the “Chapter of Seeing the Jeweled Pagoda,” namely, inviting the Buddha into the pagoda.

A special feature of the west ceiling slope image is the two buddhas with entourage beside the *chatra*. Because they appear as arriving flying on clouds, this kind of small buddha image is often referred to as the “Buddha attending an assembly” (*fuhufu* 赴會佛) by modern scholars.¹¹⁸ However, a typical set of buddhas attending an assembly in ninth-century Dunhuang murals includes ten groups, each comprising a buddha and two bodhisattvas. By means of the number ten and relatively simple depiction, the set of images represents all buddhas of the ten quarters (figures 2-21 and 2-22). The buddhas-attending-an-assembly image in Cave 14 contrasts

117. Guo, “Dunhuang mijiao shiku tiyong guan chutan,” 146.

118. *Dunhuang Mogao ku neirong zonglu*, 5–6.

with the conventional imagery by violating its two means of signification. Rather than ten, two buddhas are represented as flying toward the center from opposite directions, and they are articulated as carefully as the *chatra* image. The hands of each buddha form a preaching mudrā, a hand sign with the fingertip of the ring finger and the thumb touching and the other fingers extended (figure 2-53). Except that they are outside the pagoda, the two buddha images do not appear inferior to the two buddha images inside the Many Treasures Pagoda on the east wall in terms of the size, the detailed articulation, or the oppositional composition.

In Dunhuang murals, the “Chapter of Seeing the Jeweled Pagoda” is not always represented by the scene of two buddhas *inside* a pagoda. An alternative representation is accomplished by symbolically juxtaposing a pagoda icon and two buddhas *outside* of it. This picture template is applied to several paintings at Mogao, including Caves 303 and 276 of the Sui period (figure 2-54-a) and Cave 431 of the early Tang (figure 2-54-b).¹¹⁹ In the center of the picture, a small domed pagoda with a buddha niche on the front face represents the Many Treasures Pagoda leaping forth in front of Shakyamuni. The two buddhas sitting beside the pagoda represent the scene in which the Many Treasures Buddha shares a seat with Shakyamuni Buddha. The bodhisattvas-in-attendance stand outside the pagoda beside the buddhas, representing the assembly. Although this template was surpassed by the other, which represents the two buddhas inside the pagoda, after the eighth century, late-medieval viewers were not unfamiliar with the outmoded template. Both Caves 276 and 431 were refurbished in the tenth century, and the Many Treasures Pagodas pictures in them have been carefully preserved. Those

119. Cave 431 was constructed in the Western Wei period and renovated during the early Tang and Five Dynasties. The early-Tang renovation includes the lowering of the ground level in the cave and the addition of many Tang-period popular images on the lower register of the mural circles. The added images include the Many Treasures Pagodas on the rear (east-facing) side of the central pillar’s base.

who refurbished Cave 276 endeavored to redraw the damaged part of the buddha and bodhisattva images on the left side and to complete the pictorial frame in the shape of an arched niche. They even added a rising cloud to the area above the pagoda, as if highlighting its leaping-forth tendency. Hence, it is not impossible that the assembly in Void Space could be signified by two buddhas outside a pagoda, especially if the image-making was constrained by canvas size or imbued with a revivalist mentality.

The large size of the entourage is another indicator of the special status of the two buddha figures. Each is accompanied by two disciples, two major and four minor bodhisattvas in attendance, two heavenly kings, and a demonic guardian. Moreover, each buddha is fronted by an offering altar and a kneeling bodhisattva presenting offerings. Despite being small in scale, the twelve-figure entourage qualifies as a main buddha icon in contemporary Dunhuang murals or niches.¹²⁰ Specifically, they highly resemble the assembly in Void Space on the west ceiling slope of Cave 454. The latter depicts two buddhas with ten disciples inside the pagoda, and beside each buddha in the outdoor space is an entourage comprising two to four bodhisattvas and heavenly beings in attendance, four heavenly kings, and a demonic guardian (figure 2-55). If the Cave 454 image pictures the climactic moment in the “Chapter of Seeing the Jeweled Pagoda” when the buddhas were already seated in the pagoda, then the Cave 14 image implies a moment prior to the climax, when the Buddha is about to enter the pagoda.

But as some may ask, why are two buddhas represented in the picture whereas only one buddha—Shakyamuni—is invited to enter the pagoda, as told in the chapter? Two factors should be considered in addressing this question: the restriction of the preexisting design, and the visual

120. For instance, the Buddha niche in Cave 14 would have contained a Buddha accompanied by six sculpted figures and ten painted figures.

means of conveying a narrative. First, the refurbishment in the tenth century was not so much a drastic remodeling as a subtle retouch of the late-Tang visual program. The spatial imagery of the five-buddhas mandala and of the Fahua dharma field seem to have coexisted since the original state. The manner of repainting indicates that the redesign focused on bringing forth a stronger visual correspondence between the east-wall pagoda image and the main pagoda image. Yet the reinforced Fahua imagery is still compatible with the mandalic field. There is no evidence that the main pagoda image was originally designed to contain the assembly on Vulture Peak or that the two buddha images were originally designed to imply the assembly in Void Space. It is more proper to think that the two buddha images as being compatible with multiple meanings and thus capable of being integrated into the redesign. In the visual context of the five-buddhas mandala, the two buddha images are visual hints to the collapsed image of the central west pagodas. In the context of the Fahua dharma field, the two buddha images imply the iconic moment of twin buddhas meeting at the site of a pagoda. The manifold spatial imageries underlie a flux of iconography for certain images in the visual program.

Second, Cave 14 is not unique in terms of depicting the same figure in a narrative as a pair of mirroring images in a painting. Cave 72, a cave constructed contemporaneously with or a few decades later than Cave 14, illustrates how different moments in a narrative could be illustrated by visual symmetry. Cave 72 is a truncated pyramidal ceiling cave with a canopy-shaped niche on the west wall. Comparable to the fore space in Cave 14, it bears four pagoda images on the ceiling slopes, and the west one is vertically aligned with the niche. Two small scenes of a heavenly king with entourage are depicted at the two upper corners outside the niche (figure 2-56). As identified by the inscriptions in respective cartouches, the scene on the south side represents “Vaiśravaṇa [*pishamen* 毗沙門], the Heavenly King of the North Quarter,

Invites Amitābha Buddha of the Western Land of Bliss to Enter the Pagoda to Attend a Nazha 那吒[哪吒] Assembly,” whereas the scene on the north side represents “Amitābha Enters the Pagoda to Attend the Assembly.”¹²¹ The scenes mirror each other in almost every aspect, suggesting the same invoker, Vaiśravaṇa, and the same protagonist, Amitābha, in the narrative.¹²² The inscriptions demonstrate that the mirroring scenes are meant to illustrate two key moments in the process of a buddha entering the pagoda. The first moment, represented on the south side, is an invocation being sent to Buddha. The second moment, represented on the north side, is the invoked Buddha’s arrival. Although the buddha in the case of Cave 72 is not the same buddha as in Cave 14, they partake of the same pictorial convention.

The Lotus Repository World

In addition to augmenting the imagery of the Fahua dharma field, the retouching of the central pillar has also evoked the imagery of the Huayan world. By means of adding lotus-flower patterns to the pillar and altar, the redesign reminds the viewer of the Lotus Repository World (Huazang Shijie 華藏世界), the cosmological conception in the *Avataṃsaka Sūtra* and one of the two main visual signs of it. Because the *Avataṃsaka Sūtra* is far more abstract and conceptually complicated than the *Lotus Sūtra*, the visual art of the former is not so much narrative oriented as iconic-representation intensive. As scholars have already summarized, a typical Huayan transformation tableau since the Tibetan period consists of two major parts

121. Pelliot and Geng, *Boxihe xiyu tanxian riji*, 179.

122. It is not determined why Amitābha was invited in the picture. It is possible that Amitābha, who is the Buddha of the West, corresponds with the Four Directional Buddhas system represented by the ceiling panels. Alternatively, it is possibly due to the popularity of the Western Pure Land cult. In any case, the picture of Vaiśravaṇa inviting Amitābha became a formula in the Guiyijun period and was often represented in pairs. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 121–63.

(figure 2-57).¹²³ One is a three-by-three grid of Buddha preaching scenes, which represents “seven locations and nine assemblies” (*qichu jiuhui* 七處九會); the other is a large lotus flower with numerous stems growing out from the center of the flower, some of which are connected to myriad miniature lotus flowers in the surroundings. This image represents Vairocana’s Lotus Repository World. Basic geometrical forms of square and circle are involved in the pictorial template. Prior to being standardized, the visual template had been creatively applied to central-pillar Cave 44. The construction and painting process of the cave spanned the entire Tang period, and the central pillar was completed before the end of the high Tang.¹²⁴ The central pillar and a stand-alone altar in the front could be conceived as a spatialized imagery of the Huayan dharma realm (figure 2-58).¹²⁵ The ceiling of the niche on the square pillar bears eight Buddha preaching scenes in a four-by-two grid. They can be paired either with an additional Buddha preaching scene painted on the inside of the north wall of the niche or with the now lost statue set enshrined in the niche, which presumably represented a Buddha preaching scene. In either case, the central pillar contains an image—be it purely pictorial or pictorial-and-plastic composite—of the “seven locations and nine assemblies.” The altar in front of it was probably used for placing incense offerings and has been exceptionally well preserved. The round altar is shaped as a lotus flower standing on its stem. The thesis that the altar was designed to symbolize the Lotus Repository World image is confirmed by the fact that the niche walls, which appear

123. Dorothy C. Wong, “The Huayan/Koegon/Hwaõm Paintings in East Asia,” in *Reflecting Mirrors: Perspectives on Huayan Buddhism*, ed. Imre Hamar (Weisbaden:Harrassowitz Verlag, 2007), 338–44.

124. *Dunhuang Mogao ku neirong zonglu*, 15; Sun and Sun, *Shiku jianzhu juan*, 116.

125. For a brief discussion of the Huayan art in Cave 44, see Dorothy C. Wong, “The Art of Avataṃsaka Buddhism at the Courts of Empress Wu and Emperor Shōmu/Empress Kōmyō,” in *Avataṃsaka Buddhism in East Asia: Huayan, Kegon, Flower Ornament Buddhism Origins and Adaptations of a Visual Culture*, ed. Robert Gimello, Frédéric Girard, and Imre Hamar (Weisbaden:Harrassowitz Verlag, 2012), 255.

above the altar from a frontal view, are painted with myriad miniature lotus flowers—an integral part of the image. In brief, the pictorial and spatial representations in Dunhuang indicate the basic visual features of the Huayan dharma realm, namely, multiplied assemblies in grids, a combination of square and circle, and a lotus-filled field. The latter two, especially the last one, continue to present in Cave 14's tenth-century refurbishment.

The formal features of and painting traces on the built-in offering altar in front of the central pillar in Cave 14 reveal special treatments of it in the original design and the redesign. The altar was cut out together with the central pillar and designed as a whole. The large altar, sized 330 cm (l) x 80 cm (w) x 80 cm (h), has the same length and height as the pillar's base. Therefore, the front and rear parts constitute a rectangular base of around 330 centimeters in a north-south direction and 230 centimeters in an east-west direction. At the two ends of the top surface of the altar remain paintings of two large lotus flowers on stems.¹²⁶ The flowers are represented from a top view, as the basic composition consists of two concentric circles with radiating lines between (figure 2-59). The thick ink lines and the blue and green colors of the lotus patterns differ from the delicate lines and red-based rich color palette of the late-Tang murals in the cave. But four lotus-bud images on the vines, each of which is depicted as an elongated peach-shaped core in a circle of petals, is consistent in style with the long-stemmed lotuses depicted on the east-facing face of the niche's side walls (figure 2-60). The lotus flowers on the altar and the borders of the niche were probably added to previously unpainted surfaces, judging from the uninterrupted continuity of the plaster layer and the rarity of these motifs in late-Tang designs. The lotus images would have been rendered much more vividly when the

126. I thank Wang Huimin, a researcher of the Dunhuang Academy, for pointing me to the painting during a survey in October 2021.

painting had just been completed, likely during the tenth-century refurbishment. A less deteriorated version than the one we see now was observed by Russian archaeologist S. F. Oldenburg, who led an expedition team to the Mogao caves in 1914–15. As he recalls, “The ground of the niche and the protruded altar are all plastered and painted with lotus flowers; there are many round patterns and lotus flowers on stems (many have flaked off yet still visible).”¹²⁷ The motifs of lotuses on vines are often found in Pure Land scenes with simplified environmental representations in tenth- to eleventh-century Dunhuang caves.¹²⁸ But when situated in the visual program of Cave 14, the motif would produce specific meaning in response to the preexisting images.

Prior to the redesign of the offering altar, the image of lotus-on-offering-altar had been represented in the mandala of eight great bodhisattvas on the western end of the south wall. Located right below the central icon of Vairocana Buddha, the altar is depicted as a rectangular lotus pond from a top view. Three lotus flowers rise from the blue pond, and the flower in the middle front supports a cross-shaped *vajra* pestle (figure 2-61). Despite being preserved in one of the deepest locations in the cave, the mandala of eight great bodhisattvas is believed to convey the same diamond realm (*vajradhatu*) mandala as do the central pillar and fore space collectively.¹²⁹ In addition to the iconographic and conceptual connections, this study further reveals two visual correspondences. First, the plan of the central pillar with altar and the painting

127. Contents in brackets are quoted from the original source. “龕的地面和凸台皆抹石膏，畫蓮花：很多圓形和蓮莖蓮花(多數剝落，勉強可見)” *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 6:365–66.

128. For a recent literature review and response to the dating problem, see Zhao, “Guanyu Dunhuang xixia qianqi dongku de taolun.” For a discussion of the simplified and extremely simplified pure land images, see Sha, “Mogao ku di 55 ku chonghui jingtu pusa dui Dunhuang wanqi shiku duandai de yiyi.”

129. Wang, *Maṇḍalas in the Making*, 159–64; and Guo, “Dunhuang mijiao shiku tiyong guan chutan,” 156–57.

of a lotus pond have similar proportions. As the pillar is quite shallow in width (the east-west direction), only by adding the offering altar to it could the entire base have reached a length-to-width ratio of approximately 7:5. For comparison, the lotus pond image has a length-to-width ratio of 6.5:5. The similar layout and the same spatial relationship between the lotus altar and the main icon in the two cases indicate that the pictorial altar already served as a kind of schema for the actual altar in the late-Tang visual program. Second, the refurbishment of the actual altar augments the spatial imagery of the lotus pond as offerings to Vairocana. The cross-shaped *vajra* pestle image, a visual sign of Vairocana in Dunhuang art, appears in two places in Cave 14: the mandala of eight great bodhisattvas on the south wall and the central panel of the truncated pyramidal ceiling.¹³⁰ According to the schema-like painting, the late-Tang cave design possibly envisioned a vertical alignment between the offering altar and the pestle image on the ceiling panel. The alignment defined the pivot of the spatialized mandala of the five buddhas and eight bodhisattvas. Then, by means of painting decoration, the redesign amplifies the graphic imagery of lotuses rising from the pond-like altar (figure 2-62).

After all, the mandalic space is meant to signify the dharma realm. Vairocana, conceptually speaking, embodies the true body (*dharmakāya*) of the Buddha in the three-body (Skt: *trikāya*; Chn: *sanshen* 三身) system and pervades all space and time like an interconnected jeweled net. Visual art of the Buddha, however, requires a specific form and emplacement. Dunhuang paintings and pagodas approximate the conception of Vairocana by representing a buddha figure at the center of a large lotus flower, which symbolizes the Lotus Repository

130. In a standardized esoteric Buddhist iconography, Vairocana, the central Buddha, is represented by a stupa, whereas Amoghasiddhi, the Buddha of the north, is represented by the cross-shaped Vajra pestle. However, in Dunhuang art, the central position in a diamond realm mandala is always occupied by the cross-shaped Vajra pestle. Wang, *Maṇḍalas in the Making*, 192–93.

World.¹³¹ It is perhaps because of the visual imagination of “emerging from the lotus” that the refurbishment projects the lotus pond imagery onto the altar in front of the True-Body Pagoda, which the central pillar represents. As discussed previously, the niche represents the historical Buddha, Shakyamuni, preaching on Vulture Peak; hence, it manifests the character of Shakyamuni, who represents the transformation body (Skt: *nirmāṇakāya*; Chn: *huashen* 化身, or *yingshen* 應身) of the Buddha.¹³² To recontextualize the niche in the mandalic space of the five buddhas, the redesign of the altar artfully balances the visual art of Shakyamuni with that of Vairocana, which are compatible but differentiable. The painting decoration transmutes the altar—an extension of the pagoda base—into a lotus pond. Correspondingly, the long-stemmed lotus images endow the pagoda body with a vibrant potential of emerging from the lotus pond. In comparison to Cave 44, which represents the *Avataṃsaka Sūtra* by the central pillar niche and a lotus-shaped lamp altar in front of it, Cave 14 displays a higher level of artistic integration.¹³³ In the latter, the altar, the assembly, and the central pillar are unified under an overarching pagoda image and become an interdependent field. The refurbishment reconfirms the pivotal role of the Huayan imagery in anchoring the Fahua dharma field and the five-buddhas mandala imageries in the cave. Through re-creating the True-Body Pagoda/Buddha emerging from the lotus, a threefold design conception of the cave has been upgraded and rebalanced.

Because the many historical factors that led to the creation and re-creation of Cave 14 cannot be reproduced, the cave is a unique case in the art of Dunhuang. In this unique cave, the Tang-Chinese and the Tubo-Tibetan architectural styles, the esoteric and the exoteric imageries,

131. Xiao, *Dunhuang jianzhu yanjiu*, 182–83, 473–83.

132. The three bodies of the Buddha are the true body (*dharmakāya*), the enjoyment body (*sambhogakāya*), and the transformation body (*nirmāṇakāya*). Wong, “The Huayan/Koegon/Hwaōm Paintings in East Asia,” 341.

133. Sun and Sun, *shiku jianzhu juan*, 116.

the geometric and the biological forms are integrated into an organic whole. Nevertheless, a modern visitor may still find environmental representations in the eleventh-century Mogao caves that are reminiscent of the pagoda-rising-from-a-lotus-pond imagery.¹³⁴ In that century, which spanned the end of the Guiyijun period and the beginning of the Tangut-led Xixia period, many caves at Mogao were fully repainted with seemingly monotonous scenes and icons against a green background. Some of the repainted caves, including Cave 367 and 368 located to the immediate south of the three-story pavilion, display a novel design of the lotus-born niche. The canopy-shaped niche is bordered at the bottom by a large lotus flower image in profile view, as if a canopied shrine were rising from a lotus pond (figure 2-63).

Conclusion

Because it continuously stimulated the renewal of design conception and reception, the pagoda image in Cave 14 can be viewed as the epitome of interactive architecture of the Mogao caves.¹³⁵ This pagoda image, as a highly synthesized spatial art, encompasses manifold imageries: the pagoda-shrine is compatible with the Vulture Peak, the *chatra* “comes flying” from the void of space, and the base concurrently represents an altar and a pond. Tendencies of stillness and movement coexist in one form. As Cave 14 demonstrates, the pagoda image presented by a cave temple is never just an imitation of a pagoda.

134. I thank Sha Wutian, professor at Shaanxi Normal University, for pointing out the phenomenon to me during a site visit in September 2021.

135. Recently, the notion of “interactive architecture” was proposed by Li Luke 李路珂 in “Buneng zhuandong de zhuanlun zangjing 不能轉動的轉輪經藏: Yizhong “hudong shi” jianzhu de bianqian 一種“互動式建築”的變遷” [The unrevolvable revolvable sūtra cabinet: Evolution of an “interactive architecture”], in *2019 nian zhongguo jianzhu xuehui jianzhushi fenhui nianhui ji xueshu yantao hui lunwen ji* 2019 年中國建築學會建築史學分會年會暨學術研討會論文集（上） [Conference proceedings of the 2019 annual conference of the Architectural History Forum of the Architectural Society of China, vol. 1), 2019, 143–48.

Not only is the pagoda image engaged with transition and transformation; the very architecture of Cave 14 is as well. The cave space combines key features of the central-pillar cave and the truncated pyramidal ceiling cave with a niche. As a central-pillar cave, Cave 14 has a stronger sense of frontality while maintaining the prolonged and layered visual experience. In comparison to the earlier designs, the fore space of the central pillar is expanded into a square room, and the rear space is compressed. Regarding the truncated pyramidal ceiling cave tradition, Cave 14 inherits the five-buddhas mandala ceiling and the spatialized shrine image of the neighboring Cave 361. Compared with its Tibetan period predecessor, Cave 14 actualizes the contemplation of circumambulating the Vairocana altar by adding the side and rear corridors. The cave design abbreviates certain structural forms, such as the indentation of the central panel of the fore-space ceiling and the east slope of the niche ceiling. In compensation, the trompe l'oeil paintings of the ceiling panel and the pagoda roof complement the optical forms. If without these subtle treatments, even the contemporary cave of the same cave type—Cave 9—could not produce the same kind of pagoda image as does Cave 14. Many of the images and image sets in Cave 14 are adopted from preexisting traditions, such as the Many Jewels Pagoda picture and four pagoda images on four ceiling slopes. But the cave design rearranges the five pagoda images into a spatial structure with religious significance to structure the visual program of the cave. Furthermore, by means of depiction and rendering, iconic or narrative representations, the hierarchy and grouping are represented. Because the visual effects of transition and transformation require deconstruction and rearrangement of preexisting paradigms, the art of Cave 14 is nonreproducible. For instance, although the Cave 454 design takes the large pagoda image as its visual focus, it could merely be painted on the west ceiling slope because of the lack of a central pillar that connects the ceiling and the central altar.

Deciphering and understanding the pagoda images in Cave 14 requires not just image studies but also spatial studies. The Dunhuang caves have been important sources for the study of Chinese architectural history; the paintings of architecture and the decorative painting on architecture represent ancient building types, groups, and details, whereas the rock-cut caves and the cave-front porches reflect formal features of monasteries and shrines and material construction systems.¹³⁶ Source-oriented studies are aimed at demonstrating the development of Chinese architecture by including both visual and material evidence, but in practice, a cave and its visual contents are often dealt with as separate categories of materials.¹³⁷ This study, which chose a unique case that is incomplete in painting and hybrid in cave form, has sought to explore an approach for studying the pictorial architecture *and* the actual cave architecture integrally. The design conception of Cave 14 was gradually unpacked by the analyses of pictorial image, composite image, and spatial imagery. The analysis of redesign further reveals the historical process in which the design conception was gradually spatialized and through which the manifold imageries interacted. The composite image of the main pagoda has been studied from as many aspects as possible, because it is a bridge between the pictorial image and the spatial imagery.

136. For early studies that demonstrate the importance of the Dunhuang materials and lie at the basis and the framework of the field, see Liang, “Women suo zhidao de tangdai fosi yu gongdian”; and Liang, “Dunhuang bihua zhong suo jian zhongguo gudai jianzhu.”

137. The segregation in practice is reflected in the framework of Xiao, *Dunhuang jianzhu yanjiu*; Sun and Sun, *shiku jianzhu juan*; Sun and Sun, *jianzhu huajuan*.

Chapter 3

Imaging the Unparalleled Height

Transforming a mountain cliff into a spectacular façade was a phenomenon common to cave architecture of the ancient world. But the processes of such construction projects were subject to regional traditions, site conditions, and the taste of the cave makers. The relationship between interior and exterior architecture was not fixed; whereas the monumental rock-cut façade of an Indian cave temple might screen the tall, deep nave of a *chaitya* cave, the timber-framed multilevel façade at a cave site in China such as the Mogao caves might screen the vertical shaft of a colossal-image cave. A more complex case is the three-story pavilion, which screens a group of three vertically aligned caves of varied types and scales (figure 3-1).

This chapter investigates how the cave-front architecture shaped and reshaped the appearance of the Mogao cave complex between the seventh and the eleventh centuries. In addition to the multilevel pavilions, the cave-front architecture includes timber-framed porches that cover the caves' antechambers excavated from the vertical cliff, overhanging passageways that connected the porches, ante-halls on the ground, and earthen shrines and pagodas on the cliff top. These structures, albeit mostly no longer extant, were crucial for understanding the evolving historical visibility of the cave landscape.

The chapter first discusses the procedure by which the visual concept of verticality was introduced to the cave site by colossal-image caves and their pavilion-like façades. It then analyzes the dynamic relationship between the colossal-image pavilions, the vertical cave composites, and the magnificent ante-halls during a period of extensive construction and renovation. Through reconstructing the visual forms, building histories, and spatial contexts of

the colossal-image pavilions, the study outlines critical moments of the architectural turn of the cave complex. As I would argue, the cave-front architecture indicates a collective and accumulative attempt to transform the cave landscape into a palatial complex amid mountains that was motivated by a longing to connect the earthly and the heavenly realms.

Cave-Front Architecture: Problems of Visuality, Totality, and Dynamism

A Buddhist cave temple is more than its rock-cut cave chamber(s); the entrances of the decorated caves are often screened by porches, halls, and pavilions, known collectively as “cave-front architecture” (*kuqian jianzhu* 窟前建築).¹ Some of the oldest and most complete timber-framed porches are preserved at the Mogao caves. At the mile-long cave complex, four modest-sized porches of Mogao Caves 427, 431 (figure 3-2), 437, and 444, and timber members of Caves 196 and 428 are rare examples of Chinese timber-framed architecture from the first millennium.² Moreover, the typology of the prostyle ante-hall and the multilevel pavilion-like porch is preserved in about two dozen modern reconstructions (figure 3-3). Liang Sicheng, while thrilled by the architectural historical value of the medieval porches, was dismissive of them for their small size and structural incompleteness, opining that “they hardly deserve the name of real buildings.”³

Despite the scarcity of extant porches, medieval Dunhuang literature often renders the

1. For a recent review of the studies of cave-front architecture in China, see Peng Minghao 彭明浩, “Zhongguo shikusi kuqian jianzhu de faxian yu yanjiu 中國石窟寺窟前建築的發現與研究,” *Zhongguo wenhua yichan* 中國文化遺產 5 (2018): 4–13.

2. Steinhardt, *Chinese Architecture*, 132.

3. Liang, *A Pictorial History of Chinese Architecture*, 44. Nonetheless, Liang carefully investigated the dating of the porches in “Boxihe xiansheng guanyu Dunhuang jianzhu de yifeng xin.” Nineteen years later, he further discussed the structural features and painting decoration of the porches in “Dunhuang bihua zhong suojian de Zhongguo gudai jianzhu.”

Mogao complex as an architectural spectacle comprising cave-front architecture of expansive scales and various types.⁴ As an early-Tang stele at Mogao records, “The levels [of caves] above and below appear as soaring clouds, wherein flying pavilions were built. To the north and south are linked [caves] in a long stretch. . . . Reflected on the river are [the images of] multilevel pavilions.”⁵ Without seeing “the multilevel pavilions” that connected the levels of caves and the porches “linked in a long stretch,” how can modern viewers understand the cave temples in their totality? What did the Mogao caves look like at the height of monumental cave-front architecture? What distinguishes cave-front architecture from “real buildings” for this spectacle? And how were the new types of cave-front architecture invented? At the core of these questions is the historical visuality of the cave landscape.

The Mogao caves have undergone drastic transformations since the site became a world cultural heritage designee in the twentieth century. Generally speaking, modern-day observers focus on the contents rather than the contexts of the caves. When responding to the first renovation plan of the Mogao caves during the PRC era in 1963, Liang Sicheng suggested minimal decoration for exterior infrastructure (mostly masonry walls), whose sole purpose was to preserve the murals and statues inside the caves. His basis was that the appearance of the Mogao cave complex during its entire construction history was hardly neat and complete.⁶

4. For more literary descriptions of the appearance of the Mogao Caves from the seventh to the tenth centuries, see Ma De, *Dunhuang shiku yingzao shi daolun* 敦煌石窟營造史導論 [A Guide to the construction history of the Dunhuang caves] (Taipei: Xinwenfeng chuban gufen youxian gongsi, 2003), 97–99; Sha, *Guiyijun shiqi*, 4–7.

5. 上下雲矗，構以飛閣，南北遐連……波映重閣. Excerpt from “Li Kerang xiu Mogaoku foka bei 李君莫高窟佛龕碑” [Stele of a Buddhist cave at Mogao by the gentleman surnamed Li], P.3608, 698 CE. Translation after Lin, “What Did Architecture Do in Visualizing Dunhuang?,” 191.

6. Liang Sicheng, “guanyu dunhuang weihu gongcheng fangan de yijian 關於敦煌維護工程方

Despite the fact that Liang never visited Dunhuang, he was correct about the preservation status of the timber structures overhanging from the precipitous cliff and the necessity of constant repair.⁷ Through photographic reproductions of the ruined site and a few old timber façades in hazardous condition, one gains the impression that the cave site must have appeared to bear a few complete structures among exposed cave openings and beam holes.⁸

By contrast, those who have conducted multiyear fieldwork at the Mogao caves see them as traces of a now-lost architectural spectacle for this sacred landscape. Sun Yihua and Sun Ruxian, architectural specialists and cave conservators of the Dunhuang Academy, point to the vast span and polychromic decoration of the exterior structures. In somewhat impressionistic language, they suggest that “the splendid scene shone between Mount Mingsha and Mount Sanwei for centuries and even a millennium, brightly and vividly decorated the holy site, where the Buddhists looked for tranquility and thereby integrating the sacred and the mundane.”⁹ In their view, the mountain site, despite having been greatly altered, is still the base for any contemplation of architectural scenes that once emerged from there.

Although Sun Yihua and Sun Ruxian take the scene to be “not difficult to imagine,” an inexperienced viewer would hardly be equipped to visualize the architectural appearance of the cave site at its most complete stage. Modern visitors to the Mogao caves thus often regret that the caves’ architectural splendor has disappeared. Yet the profound impression made by the caves on

案的意見” [Opinions on the proposal of the renovation project of the Dunhuang (Mogao caves)], in Liang Sicheng, *Liang Sicheng quanji* 梁思成全集 [Complete collection of Liang Sicheng] (Beijing: Zhongguo jianzhu gongye chubanshe, 2001), 5:413. The letter was written on August 9, 1963.

7. Even in the last two decades, the two multilevel timber façades rebuilt in the first half of the twentieth century, the nine-story pavilion and the three-story pavilion, were refurbished.

8. Liang, “guanyu dunhuang weihu gongcheng fangan de yijian.”

9. Sun and Sun, *Shiku jianzhu juan*, 172.

the two Suns, which so contrasts with the modern disappointment, illuminates the dynamism and flexibility of the cave landscape. Thus, a crucial task for art historians, especially architectural specialists, is to investigate the historical formation and receptions of the cave complex's appearance.

An early observer of the evolving architectural appearance of the Mogao caves was Samuil Martynovich Dudin (1863–1929), a Russian photographer and painter, who surveyed it in 1914 as a member of the expeditions to Central Asia led by S. F. Oldenburg.¹⁰ Having keenly observed the distribution and dynamism of the cave complex, Dudin stated that the numerous caves had once formed several “architectural ensembles” in different periods, some of which extended horizontally and others vertically. He also pointed out that a mural was painted over the cliff surfaces twice or three times for the sake of further integrating the entire complex.¹¹ His acute observation of the dynamism in the complex was echoed in later studies. In 1951, a team of Chinese archaeologists and architectural historians surveyed the traces of the historical appearance of the Mogao cliff site. The survey report, which was compiled by architectural historian Chen Mingda 陳明達 (1914–97) in 1955, concluded that the gradually agglomerated complex had undergone a “planned unification” during the Song period.¹² Later, Dunhuang

10. International Dunhuang Project, “Russian Explorations in Chinese Central Asia,” page updated on November 12, 2010, http://idp.bl.uk/pages/collections_ru.a4d, accessed July 1, 2022.

11. Samuil M. Dudin, “Monuments of Architecture in Western Turkestan,” *Arhitektruno-hudozectchennyi ezeniedielnik*, nos. 6, 10, 12, 19, 22, 28, and 31 (1916). Chinese translation published in *Zhongguo Xinjiang de jianzhu yizhi* 中國新疆的建築遺址 [Architectural remnants in Xinjiang, China], trans. He Wenjin 何文津 and Fang Jiuzhong 方久忠 (Beijing: Zhonghua shuju, 2006), 84–85. I have not been able to examine the original Russian articles, and my grasp of “architectural ensembles” is based on a phrase used in the Chinese translation: *jianzhu zhengti* 建築整體.

12. Chen Mingda 陳明達 et al., “Dunhuang shiku kancha baogao 敦煌石窟勘察報告” [Survey report about the Dunhuang caves], *Wenwu cankao ziliao* 2 (1955): 53–57.

historian Ma De 馬德 and art historian Sonya S. Lee investigated cave siting during the early and later periods, revealing the patterns of the “changing cliff face” and the importance of location.¹³ Recently, art historian Wu Hung has further conceptualized the “total space” (*zhengti kongjian* 整體空間) of the Mogao complex as an ever-changing, living entity.¹⁴

Nonetheless, Dudin did not seriously investigate how the “architectural ensembles” developed, because he believed that they did not lead to any new cave types. This belief deserves to be revisited because our knowledge of cave typology has evolved in the last decades. While early studies focused on types of the main chamber as spatial representations of stand-alone building typology, recent studies have also investigated the typology of cave composites and cave groups.¹⁵ Both kinds of studies seek to explain cave types in their relationship to stand-alone buildings in China, but the architecturally enhanced connectivity among caves can be considered a prerequisite of the composite cave types, too. Cave-front architecture and open-air murals deserve serious attention because they provide crucial evidence of the composition and connectivity among caves.

Archaeological and textual evidence of cave-front architecture has been discovered since the mid-twentieth century.¹⁶ Current scholarship focuses mainly on the technological-stylistic

13. Ma, *Dunhuang Mogao ku shi yanjiu*, 50–90; Lee, “Repository of Ingenuity,” 201–5. The term *yamian shiyong* 崖面使用 (the use of the cliff face) was proposed by archaeologist Chu Shibin in “Shiku waimao yu shiku yanjiu zhi guanxi,” 84–98.

14. Wu, *Kongjian de Dunhuang*, 57–66.

15. Xiao, *Dunhuang jianzhu yanjiu*; Sun and Sun, *shiku jianzhu juan*. For instance, architectural historians Zhao Nadong and Duan Zhijun recently discussed the various types of cave groupings in *Dunhuang Mogao ku yu 6 zhi 11 shiji fojiao kongjian buju yanjiu*.

16. For major outcomes of the archaeological excavations of the Mogao caves conducted by Dunhuang Academy, see Pan Yushan 潘玉閔 and Ma Shichang, *Mogaoku kuqian diantang yizhi* 莫高窟窟前殿堂遺址 [Ruins of frontal buildings added to Mogao grottoes] (Beijing: Wenwu chubanshe, 1985); Sha Wutian, “Dunhuang Mogao ku di 72–76 ku kuqian diantang

features and the layout. One approach investigates the timber-framed construction system through extant porches and the theoretical reconstructions of several.¹⁷ Another approach surveys the overall distribution of caves on the cliff surface and the historical contexts at play

yizhi qingli fajue baogao 敦煌莫高窟第72–76窟窟前殿堂遺址清理發掘報告” [Report of the archaeological excavation of the front-hall remnants of Dunhuang Mogao Cave 72–76], *Kaogu xuebao* 4 (2002): 493–513; and Peng Jinzhang, Wang Jianjun, and Guo Junye, “Dunhuang mogao ku jiucenglou laogu xin faxian 敦煌莫高窟‘九層樓’考古新發現” [New archaeological discoveries of the “nine-story pavilion” of Dunhuang Mogao caves], in *2000 nian Dunhuang xue guoji xueshu taolun hui lunwen tiyao ji* 2000年敦煌學國際學術討論會論文提要集 [Collections of the paper abstracts of the International Conference on Dunhuang Studies in 2000] (Dunhuang: Dunhuang Academy, 2000), 68–69. For a recent review of the discoveries, see Sha, *Guiyijun shiqi*, 7–14. For discoveries of Dunhuang manuscripts about cave distribution and timber-façade construction, see Wu Mangong 吳曼公, “Dunhuang shiku laba randeng fenpei kukan mingshu 敦煌石窟臘八燃燈分配窟龕名數” [List of caves for distributing lanterns during the light up on the eighth day of the twelve month], *Wenwu* 5 (1959): 49; Ma De, “Jiuzhou daxue wenxue bu cang Dunhuang wenshu ‘xin dade zao kuyan jiliao’ tanwei 九州大學文學部藏敦煌文書《新大德造窟簷計料》探微” [A preliminary study of records about building materials used by the new Bhadanta in rebuilding the eaves of a cave of Dunhuang manuscript kept in the Literary Department of Kyūshū University], *Dunhuang yanjiu* 3 (1993): 59–63.

17. For studies of the extant porches, see Chen et al., “Dunhuang shiku kancha baogao”; Gu Qiyi 辜其一, “Dunhuang shiku songchu kuyan ji beiwei dong neidougong shulue 較煌石窟宋初窟簷及北魏洞內斗拱述略” [Brief discussion of the early-Song cave eaves and the Northern Wei bracket sets inside the caves at the Dunhuang caves], *Tumu jianzhu yu huanjing gongcheng* 1 (1957): 51–75; Yu Mingqian, “Mogao ku di 196 kuyan yanjiu 莫高窟第196窟簷研究” [A study of the timber-structured façade of Mogao Cave 196], in *Keji shi wenji 7: Jianzhu shi zhuanji* 科技史文集7: 建築史專輯 [Essay Collections about the history of science 7: Volume on architectural history], ed. Jianzhu shi zhuanji bianji weiyuan hui 建築史專輯編輯委員會 [Editing committee of the volume on architectural history] (Shanghai: Shanghai kexue jishu chubanshe, 1981): 92–97; and Xiao, *Dunhuang jianzhu yanjiu*, 269–302. For theoretical reconstruction based on archaeological discoveries of ante-halls, see Xiao Mo, “Dunhuang Mogaoku di 53 ku kuqian Song dai jianzhu fuyuan 敦煌莫高窟第53窟窟前宋代建築復原” [Theoretical reconstruction of a Song-period building in front of Mogao Cave 53 of Dunhuang], *Kaog* 6 (1977); republished in *Dunhuang jianzhu yanjiu*: 313–24; Wu Xiao, “Mogao ku 55 ku kuqian jianzhu fuyuan yanjiu 莫高窟55窟窟前建築復原研究” [Reconstructional study of the frontal architecture of Mogao Cave 55], *Jianzhu shi* 02 (2018): 29–46. For reconstruction based on a cave-eave construction memo, see Feng Jiren, “Ribei Jiuzhou daxue cang Dunhuang wenshu suoji kuyan de fenxi yu fuyuan 日本九州大學藏敦煌文書所記窟簷的分析與復原” [A reconstruction and analysis of the grotto wood eaves recorded in the Dunhuang document collected at Kyūshū University, Japan], *Wenwu* 12 (1993): 54–68.

during their construction and use.¹⁸ These studies elucidate the historical appearance of the Mogao caves at the micro and macro scales, but a vast middle ground remains under studied.¹⁹

In the seventh and eighth centuries, the horizontal and vertical dimensions of the Mogao cliff were largely explored, as rows of porched caves were linked like a long chain, and the advent of two colossal-image caves introduced verticality and monumentality to the complex. In the tenth century, the height, depth, and variety of this architectural landscape were significantly upgraded through the reconstruction of the multilevel pavilions screening the colossal-image caves and the prevalence of porticoed ante-halls. The advent of special types of ante-halls enriched the “skyline” (contours of cave-front architecture against the cliff face), complemented the hubs defining the colossal-image pavilions, and eventually surpassed the latter in reshaping the appearance of the cave complex. By investigating the typological spectrum of cave-front

18. For discussions of general cave distribution based on a mid-tenth century lantern distribution record, see Jin Weinuo, “Dunhuang kukan mingshu kao 敦煌窟龕名數考” [Study of the list of caves of Dunhuang], *Wenwu* 5 (1959): 50–54; Ma De, “10 shiji zhongqi de mogaoku yamian gaiguan—guanyu ‘laba randeng fenpei kukan mingshu de jige wenti 10 世紀中期的莫高窟崖面概觀——關於〈臘八燃燈分配窟龕名數〉的幾個問題” [Overview of the Mogao cliff surface in the mid-tenth century—Several question about the manuscript titled “List of Caves for Distributing Lanterns during the Light up on the Eighth Day of the Twelve Month”], in *1987 nian dunhuang shiku yanjiu guoji taolunhui wen ji : Shiku kaogu bian* 1987年敦煌石窟研究國際討論會文集·石窟考古編 [Proceedings of the international conference on Dunhuang cave studies in 1987], ed. Dunhuang Academy (Shenyang: Liaoning meishu chubanshe, 1990): 40–52. For discussions on the general appearance based on archaeological materials, see Ma, *Dunhuang shiku yingzao shi daolun*, 118–50; Pan Yushan, “Mogao ku waimao bianqian de jige wenti 莫高窟外貌變遷的幾個問題” [Several problems about the changes of the appearance of the Mogao caves], in *1987 nian dunhuang shiku yanjiu guoji taolunhui wen ji*: 53–66.

19. Two exceptions are Sha Wutian, “Guanyu dunhuang mogaoku kuqian diantang yu kuyan jianzhu de shidai wenti 關於莫高窟窟前殿堂與窟簷建築的時代問題” [On the date of the hall in front of caves and cave eaves in Mogao grottoes], *Kaogu yu wenwu* 1 (2003): 56–61; and Sun Yihua, “Mogaoku nanqu kuyan jianzhu yiji diaocha yanjiu 莫高窟南區窟簷建築遺跡調查研究” [A survey of the traces of façade architecture in the south section of the Mogao grottoes], *Dunhuang yanjiu* 6 (2019): 17–23. Both studies were conducted using the quantitative method based on massive data about archaeological materials. A further step of explaining the visual quality and historical reception has not yet been explored.

architecture, this study reveals an accumulative intervention in the *longue durée* to transform the imagery of the Mogao caves from a mountain monastery into heavenly palaces. A major agent for accelerating the transformation was the colossal-image pavilion. Furthermore, the building procedure of the multiple façades in the large cave complex display the power dynamics among the various caves and their makers; indeed, the large-scale gatherings that accompanied construction of the caves and their constant renovations were sociopolitical spectacles, and the spectacular architecture itself provoked individual reflection on the higher Buddhist truths that undergirded the phenomenon.

Space and Architecture

Recognizing cave-front architecture is a crucial step toward understanding the integrity of a cave temple. Cave temples in Dunhuang from the seventh century onward typically consisted of four architecturally defined spaces along the transversal axis (from outermost to innermost): an antechamber that provides room for a transition from the cliff outside to the cave space inside; a corridor that functions as the threshold to the main chamber; a main chamber where viewers can perform image-involved activities such as image worship, contemplation, and circumambulation; and a niche, a niched pillar, or an altar that enshrines images of Buddhist deities (figure 3-4).

While the antechamber and the corridor are transitional and liminal spaces, the main chamber and the niche, pillar, or altar are spaces for the worshiper and the worshiped.

The spatial imagery of an image cave is further shaped by the pictorial images it bears.²⁰

20. For discussions of the spatial imagination as result of the interplay between architectural forms and pictorial images in Chinese Buddhist and funerary architecture, see Lin, “What Did Architecture Do in Visualizing Dunhuang?,” 191–211; and Lin, “Shilun ‘mushi jianzhu kongjian’: Cong shijue xing dao shuzhi xing de lishi fazhan 試論“墓室建築空間”——從視覺

In the tenth century, the open-air mural (*lutian bihua* 露天壁畫) was extensively applied at Mogao to decorate the surrounding cliff surfaces of the cave temples. A visual dialogue between the cave exterior and interior was facilitated by the open-air mural, the interior murals that decorate the rock-cut chambers, and the polychromic painting on architecture (*jianzhu caihua* 建築彩畫) that decorates the timber-framed façades.²¹ If the cave was located above ground level, an overhanging passageway was built in front of the timber-framed porch to link the cave with caves on the same level. The visual link was augmented by a stripe of open-air mural above the façades.²²

As the frontmost part of a cave temple, cave-front architecture served to prevent sand and wind from damaging the interiors, to facilitate circulation between caves, and to provide more room for religious activities such as copying Buddhist scriptures.²³ As architectural historian Xiao Mo aptly points out, the antechamber serves two main aesthetic functions: it allows an observer to “mentally transit” from “the world of humans” to “the world of deities,” and its architectural orderliness eliminates the grotesque quality of a cave opening and thereby provides visual pleasure.²⁴ In other words, cave-front architecture is a device for spatial and aesthetical enhancement.

Due to features related to its lifecycle of construction, use, and repair, cave-front

性到物質性的歷史發展” [On “Architectural Space of the Funerary Chamber: A Historical Development From Visuality to Materiality”], *Gudai muzang meishu yanjiu* 古代墓葬美術研究 [Research in the ancient funerary art], eds. Wu Hung 巫鴻, Zhu Qingsheng 朱青生, and Zheng Yan 鄭岩 (Changsha: Hunan meishu chuban she, 2017), 4:34–52.

21. For discussion of the polychromic painting on architecture in Dunhuang caves, see Sun and Sun, *shiku jianzhu juan*, 169–97. For the mentioning of the open-air mural, see Mo et al., “Dunhuang shiku kancha baogao”; Pan, “Mogao ku waimao bianqian.”

22. Sha, *Guiyijun shiqi*, 103–6.

23. Chen et al., “kancha baogao,” 61–62; Sha, *Guiyijun shiqi*, 22.

24. Xiao, *Dunhuang jianzhu yanjiu*, 35.

architecture has a variety of forms.²⁵ Because an antechamber is excavated at the beginning but refurbished at the end during the construction of a cave temple, its design cannot be decided by a single person. Moreover, because the timber structures decay faster than the rock-cut chamber they protect, it might have been rebuilt multiple times. Furthermore, due to their relative accessibility and transitional nature, antechambers are well suited to accommodate cave patrons' merit records and later visitors' inscriptions.²⁶ These factors made the appearance of the antechamber particularly adjustable and accumulative. The varied cave types and historical circumstances resulted in a wide range of cave-front architecture, from exposed and porched antechambers to porticoed ante-halls, colossal-image pavilions, and multilevel pavilions screening a group of caves.

Not all caves have antechambers. The notion of space was introduced to cave-front architecture prior to that of "architecture," which in the Chinese context often means timber-framed buildings and the imitation of it by masonry or metal buildings.²⁷ The earliest image caves of the Mogao complex were cut directly into the perpendicular cliff, revealing only the entrance corridor, occasionally accompanied by a rock-cut window atop it. It was not until the second quarter of the sixth century that the larger caves began to acquire rock-cut, exposed antechambers, known in medieval Dunhuang manuscripts as *kuchang* 窟敞(廠) (lit. cave opening).²⁸ The appearance of the antechamber-less caves and those with rock-cut, exposed

25. Xiao viewed the antechambers to be less varied than the main chambers. Xiao, *Dunhuang jianzhu yanjiu*, 35.

26. For instance, the ante-hall of Cave 108 bore poems in correspondence with each other and a long prose piece, and the ante-chamber of Cave 444 bears numerous inscriptions written by medieval pilgrims from Mount Wutai and elsewhere in China. *Dunhuang mogao ku gongyangren tiji*, 53–55, 168–69.

27. Liang, *A Pictorial History*, 1–13. Steinhardt, *Chinese Architecture*, 1–7.

28. Xiao, *Dunhuang jianzhu yanjiu*, 53–59; Ma, *Mogao ku shi yanjiu*, 39–40; Ma, *Yingzao shi daolun*, 54–59; Ma, "Yingzao shiliao qianlun," 150–51.

antechambers are preserved in the north section of the Mogao caves (figure 3-5), which consists of about two hundred undecorated caves whose use was pragmatic (for dwelling, meditation, storage, funerary burial, etc.) rather than religious and ceremonial.²⁹ Traces of timber-framed balconies and roofs are found at only a few image caves.

In contrast, the south section, comprising some five hundred image caves from the fifth to fourteenth centuries, exhibits prevalent traces of timber structures. They gave early surveyors the impression that “every cave seems to have once had a timber-framed porch.”³⁰ Thirty-three extant façades, including the six aforementioned medieval porches, spread along the entire south section and extended the total height of the cliff.³¹ According to a quantitative study recently conducted by Sun Yihua, 345 of the 487 caves of the south section had once been covered by 271 timber-framed porches, whose construction time ranges from the sixth to the twentieth century.³² This means that over 70 percent of the image caves had an architectural appearance. The drastic contrast between Mogao’s north and the south sections testifies to the close connection between the architectural appearance and the ritual function of a cave temple. To better understand how the composite pavilion and the architectural spectacle came into being, the following sections analyze three basic types that compose it—the porch, the colossal-image pavilion, and the ante-hall—in two peak construction periods of the Mogao caves.

29. Apart from a few image caves, most of the caves in the north section served as meditation caves, vihara caves (monastic living quarters), funerary caves, and storage areas. Peng and Wang, *Dunhuang Mogao ku beiqu shiku*, 1:338–51.

30. Chen et al., “Kancha baogao,” 62.

31. Chen et al., “Kancha baogao,” 63. For the elevation drawings of the complete set of façades, some of which were removed during the past century, see *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 4 (drawings).

32. Sun, “Kuyan jianzhu yiji.”

Overhanging Porches in the Sui-Tang Period

The first construction peak occurred during the Sui (581–618) and the first half of the Tang, before Dunhuang was seized by the Tibetans in 787. At Mogao, about 110 caves were constructed during each of the two periods, significantly outdoing the pace of construction of the two preceding centuries, during which some forty caves were excavated.³³ As the connections between Dunhuang and the metropolitan areas of the unified Sui and Tang empires were established, new cave designs were introduced and popularized at Dunhuang. Two colossal-image caves (*daxiang ku* 大像窟)—each enshrining a colossal-buddha image 35.5 or 26 m tall—were constructed in 695 and 721–25 to the south of the preexisting cave clusters on the west-facing cliff. A multilevel pavilion was built in front of the larger of the two caves (Cave 96) and became the landmark of the cave complex.³⁴ The minor caves—most of which are hall caves (*diantang ku* 殿堂窟) with niches—were mostly distributed north of the preexisting caves and between the two colossal-image caves.³⁵ As cave construction regularly sprawled over two levels in the middle of the cliffs, the horizontally linked porches would have secured necessary circulation and formed an architectural backdrop for the pavilion-like tall structure(s) (figure 3-6).

The porched antechamber, the most common type of cave-front architecture, is historically known as a *kuyan* 窟簷 (lit. cave eave), after the overhanging eaves of the pitched roofs.³⁶ Most porched antechambers have a rectangular plan one or three bays wide and one bay

33. Wang, *Dunhuang fojiao yu shiku yingzao*, 205–318.

34. Peng, Wang, and Guo, “Jiucenglou laogu xin faxian.” Pan and Ma, *Kuqian diantang*, 68–60.

35. For cave types, see Xiao, *Dunhuang jianzhu yanjiu*, 35–60; Rong Xinjiang, *Eighteen Lectures On Dunhuang* (Leiden: Brill, 2013), 427–37.

36. Ma, *yingzao shi daolun*, 57; Ma, “Xin dage zao kuyan jiliao.”

deep and bears representational and decorative paintings. The earliest *kuyan* were applied to four or five central-pillar caves (*zhongxinzhu ku* 中心柱窟) made between the late Northern Wei (386–535) and the Northern Zhou periods (557–81). These caves—428, 431, 432, 437, and probably 442—were laid out in a row and were presumably connected by overhanging passageways (figure 3-7).³⁷ Compared with the small, square-chambered caves nearby, these central-pillar caves were larger spaces of ritual function and therefore needed a proper transitional space.³⁸ Unfortunately, the antechambers either collapsed or were refurbished in later periods; one can find images of rafters and thousand-buddha motifs that decorated the early antechambers at only a few places where the over-painting is removed (figure 3-8). Judging from an extant porched antechamber refurbished in 970 CE, the top ridge and the long eaves of its roof—hipped or gabled—are parallel to the cliff surface (figure 3-9). An interior space is defined by the rock-cut floor, the rear half of rock-cut walls and ceiling, and the front half of timber-framed walls and roof. The interiorized antechamber provides additional space for murals and statues. And because the threshold has been moved to the antechamber, the corridor walls and ceilings are fully available for mural painting. This spatial adjustment had a lasting impact on the

37. For dating of the caves, see *Dunhuang Mogaoku neirong zonglu*, 174–82; Fan Jinshi 樊錦詩, Ma Shichang 馬世長, and Guan Youhui 關友惠, “Dunhuang Mogaoku beichao dongku de fenqi 敦煌莫高窟北朝洞窟的分期” [Periodization of the Northern Dynasties caves of the Dunhuang Mogao caves], in *Tonko Bakukokutsu/Dunhuang Mogao ku* 敦煌莫高窟 [Dunhuang Mogao caves], vol. 1, ed. Dunhuang Wenwu Yanjiu Suo 敦煌文物研究所 [Dunhuang Cultural Relics Research Institute] (Tokyo, Beijing: Heibonsha; Wenwu chuban she, 1980): 197; Li Chongfeng 李崇峰, “Dunhuang Mogao ku beichao wanqi dongku de fenlei yu yanjiu 敦煌莫高窟北朝晚期洞窟的分類與研究” [Categorization and study of the Dunhuang Mogao caves of the later Northern (Dynasty) periods], *Dunhuang yanjiu wenji: Dunhuang shiku kaogu pian* 敦煌研究文集:敦煌石窟考古篇 [Collection of Dunhuang research: Volume on archaeology of the Dunhuang caves], ed. Dunhuang yanjiu yuan (Lanzhou: Gansu minzu chubanshe, 2000), 74–75.

38. For visual contemplation and circumambulation practices related to the central-pillar cave in Dunhuang, see Abe, “Art and Practice in a Fifth-Century Chinese Buddhist Cave Temple.”

pictorial programs of the Dunhuang caves, namely through the incorporation into the transitional spaces of protective deities, donor portraits, offering figures, preaching scenes, and miraculous images.

While most extant examples and traces result from renovations in the ninth and tenth centuries, the porched antechamber was integrated into cave design no later than the Sui period and pervaded the cliff site in the following period.³⁹ As Tang-period Dunhuang manuscripts report, “carved eaves emerged” (*diao yan huachu* 雕簷化出) and formed the scenic view of “opened thresholds connected for pilgrimage tours” (*xukan tonglian, xunli youlan* 虛檻通連, 巡禮遊覽).⁴⁰ In particular, two rows of Tang caves connected by linked antechambers were constructed into the hundred-meter-long cliff between the two colossal-image caves, evoking the imagery of “overhanging pavilions and doubled passageways” (*xuange chongxuan* 懸閣重軒).⁴¹

Such imagery is represented by a refurbished mural in Mogao Cave 275. Completed at some point before the late seventh century, the repainting on the east wall of the fifth-century cave depicts a gathering scene in a mountain monastery.⁴² Despite being severely defaced, the

39. Sun, “kuyan jianzhu yiji,” 21.

40. Excerpts from “Datang zongzi longxi lishi zaixiu gongde bei 大唐宗子隴西李氏再修功德記碑” [Stele recording the merit of cave renovation by the Li family from Longxi], P.4640; and “Dunhuang lu 敦煌錄” [Records of Dunhuang], S.5448. Zheng Binglin 鄭炳林 and Zheng Yinan 鄭怡楠, *Dunhuang bei ming zan jishi* 敦煌碑銘贊輯釋 [Collection and annotation of the stele inscriptions and eulogies in Dunhuang], 3 vols. (Shanghai: Shanghai guji chuban she, 2019), 229; Zheng Binlin, *Dunhuang dili wenshu huiji jiaozhu* 敦煌地理文書匯輯校注 (Lanzhou: Gansu jiaoyu chuban she, 1989), 86.

41. Su Bai 宿白, “Mogao ku ji ba ‘莫高窟記’跋” [Preface to “Record of the Mogao Caves”], *Wenwu cankao ziliao* 2 (1955): 119. “Datang zongzi longxi lishi zaixiu gongde bei” (P.4640). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 229.

42. Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 211–13, fig. 154. Zhao Rong 趙蓉, “Dunhuang Mogaoku di 275ku dongbi canhua neirong shixi 敦煌莫高窟第275窟東壁殘

picture clearly shows a two-story-tall, seven-bay-wide building amid mountains and streams as the spatial setting of the gathering (figure 3-10). Sandwiched between two narrow registers of triangular mountain peaks above and a wavy stream below, the frontally shown building is articulated in detail and in approximate proportion to the monk figures. The two-story building appears to be a timber-and-masonry hybrid structure of large width. At least six bays of the upper level and five bays of the lower level are represented, and no gable wall is depicted to indicate where the long façade terminates. The one-step bracket sets atop the columns, the rafters represented by two rows of small circles, and the railings articulate a two-storied, timber-framed porch, whereas the wooden door frames embedded in the edge-beveled wall indicate that the wall from which the porch protrudes is thick and solid.

The relatively simple types of bracket sets, doors, and rafters in the painting are echoed in the actual wooden members in a few early caves and the pictorial rafters painted in the ceilings of their antechambers. For instance, two fifth-century central-pillar caves, 254 and 251, preserve the design of one-step proto-bracket sets known as *yidou sansheng* 一斗三升 in the gable-roofed front part of their main-chambers (figure 3-11).⁴³ And the Northern Zhou period wooden doorframe of Cave 430 likewise consists of three thick timber members embedded into the edge-beveled rock-cut wall (figure 3-12).⁴⁴ As a study of archaeologist Giuseppe Vignato shows, the early timber façades and passageways of the Kizil caves in Xinjiang share this kind of simplicity

畫內容試析” [Analysis of the remaining painting on the east wall of Dunhuang Mogao Cave 275]. *Sichou zhilu yanjiu jikan* 絲綢之路研究輯刊 [Bulletin of Silk Road studies], vol. 5, 2020 (Shangwu yinshu guan), 376–94.

43. Sun and Sun, *Shiku jianzhu juan*, 71–81.

44. Sun Yihua and Sun Ruxian, “Mogao ku beizhou di 430 ku kumen kaozheng 莫高窟北周第430窟窟門考證” [Investigation of the door of Mogao Cave 430 of the Northern Zhou period], *Dunhuang Yanjiu* 2 (2019): 71–75; Sun, “kuyan jianzhu yiji,” 22.

and practicality.⁴⁵

The painting may represent either the cave-front or the stand-alone architecture, yet it sheds light on the impression of the Mogao cave site before the late seventh century, especially regarding the built environment and the attendant activities. The landscape in the painting, a wide building sandwiched between a stream and mountain peaks, is not different from that of the Mogao site, which is fronted by the Daquan River and backed by the sand dunes of Mount Mingsha. The long porch matches the main feature of the cave site before the advent of the colossal-image caves, namely, a horizontal spawl of caves above ground level. In front of the building, fourteen (originally twenty-one) monks in two rows are depicted. The legible words in the cartouches beside the figures, such as “Bikkhu Dao [name] . . .” (比丘道. . .) and “the image of Bikkhu . . .” (比丘. . .像), associate the figures with particular monks likely from the local Buddhist society.⁴⁶ Most are seated facing the monk priest in the center of the upper row, toward whom three small figures in the lower register are bowing. The gathering represents a moment in a Buddhist sermon or an ordination ceremony.⁴⁷ While combining architectural and environmental elements in accord with the actual cave site, the painting renders an ideal seclusion in mountains for concentrated meditation and study that would lead to spiritual accomplishment.

The Colossal-Image Pavilion in the Tang

The horizontal and relatively even distribution has always been a basic pattern in the

45. Giuseppe Vignato, “The Wooden Architecture of the Kizil Caves,” *Journal of Inner Asian Art and Archaeology* 1 (2006): 11–14.

46. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 212. *Bikkhu* is a Sanskrit word meaning “a fully ordained monk.”

47. Zhao, “Dunhuang Mogaoku di 275ku dongbi canhua neirong shixi.”

architectural appearance of the Mogao caves, but they soon became dwarfed by the multilevel pavilion screening the colossal-image cave. This kind of structure was historically known as a *daxiang tangdian* 大像堂殿 (colossal-image hall) and is now commonly referred to as a “colossal-image pavilion.”⁴⁸ It is grand in scale, composite in structure, and complex in lifecycle.⁴⁹ The early-Tang version of the colossal-image pavilion at Mogao has left little trace, just like the fact that the most frequently refurbished colossal image exhibits few traces of the Tang style. In addition to at least two reconstructions in the ninth and tenth centuries, the pavilion of Cave 96 was rebuilt twice in the first half of twentieth century. A preexisting pavilion of unknown form was burned to ash during the Dungan Revolt (1862–1975). The colossal buddha head was exposed to the open air until a five-level porch was commissioned by local Dunhuang gentry and clergy around 1898.⁵⁰ The second period of exposure (figure 3-13) occurred following the destruction of the five-level porch. This was followed by intermittent periods of construction of a nine-level pavilion between 1928 and 1935 by rivals of the patrons

48. “Dunhuang lu 敦煌录” [Record of Dunhuang], S.5448. Zheng, *Dunhuang dili wenshu huiji jiaozhu*, 86.

49. For chronology of the colossal-image caves, see appendix E.

50. For damage of the cave-front architecture during the Dungan Revolt, see Jia Jinxia 賈俊霞, “Mingqing shiqi de Dunhuang 明清時期的敦煌” [Dunhuang during the Ming and Qing periods], *Shixue jikan* 史學集刊 1 (1994): 61; Sun, “Kuyan jianzhu,” 23. For primary textual record, see “Chongxiu qianfo dong baobei fodian gongde beiji 重修千佛洞寶貝佛殿功德碑記” [Stele recording the merit of renovating the Treasury Buddha Hall of the Thousand Buddha Caves] erected in 1916 in Cave 146; transcription in Li Yongning 李永寧, “Dunhuang Mogaoku beiwen lu ji youguan wenti (er) 敦煌莫高窟碑文錄及有關問題(二),” *Dunhuang Yanjiu*, no. 2 (1982): 119–21. For the reconstruction of the colossal-image pavilion, see “Chongxiu qianfo dong jiuceng lou beiji 重修千佛洞九層樓碑記” [Stele recording the renovation of the nine story pavilion of the Thousand Buddha Caves] erected in 1936 in Cave 96; transcription in Li, “Dunhuang Mogaoku beiwen lu (er),” 123–25.

of the previous construction.⁵¹ Nonetheless, the pavilions' basic layout and composition are recognizable based on the rock-cut parts, platform remnants, current structure, and textual descriptions. The large platform remnants in front of the two colossal-image caves indicate that their front halls were five bays wide and two or three bays deep. The platform fronting Cave 96 is about 21.4 m (l) by 9.2 m (w), and that of Cave 130 is 21.6 m (l) by 16.3 m (w) (figure 3-14).⁵² Rising from the large platforms, two multilevel pavilions, tapered by levels, would have extended to or beyond the total height of the cliff face, which measures some thirty to forty meters.

The modern pavilions screening the grander Cave 96 vary in the number of levels and the roof types, and the floor plan of the ground-level porch is less than half the size of the medieval versions.⁵³ Despite all the variations, a sectional drawing of the current pavilion clearly illustrates the spatial elements of its medieval predecessor (figure 3-15): the carving of a rock-core image of the future Buddha, Maitreya, seated with pendent legs produced a rock-cut shaft as the main chamber and two corridors, one above another; the 40-plus m tall architectural enclosure consists of a thick masonry wall built onto the rock-cut front wall that supports the cantilevered roof and façade structures, a timber-framed pitched roof, and a multilevel pavilion-like porch that screens the corridors cutting into the masonry and rock-cut walls. The ground level of the façade would have been expanded into a spacious entrance hall on a large platform,

51. Li, "Dunhuang Mogaoku beiwen lu (er)," 125. The first construction was commissioned by Dai Zhenyu and assisted by Priest Wang, neither of whom participated in the second construction. The second façade was commissioned by local gentry Liu Jide and Zhang Panming and monk Lai Changshu, among others.

52. Peng, Wang, and Guo, "Jiucenglou kaogu xin faxian"; Pan and Ma, *kuqian diantang*, 49.

53. The current floor area beyond the rock-cut opening is only 15.45 m (l) by 4.75m (w). Shi, *Mogao ku xing*, 2, fig. 42.

enshrining gigantic images of Buddhist guardians.⁵⁴

The Dunhuang colossal-image pavilion corresponds with the making of colossal-image caves in Tang China. Around the fifth century, many major cave sites in Central Asia and China were centered around one or two colossal-image caves.⁵⁵ Traces of the earliest colossal images in China are found at the Tiantishan 天梯山 caves in Liangzhou (present-day Wuwei, Gansu Province), which are located on the east side of the Hexi Corridor.⁵⁶ A second wave of colossal-image construction, during which the Mogao colossi were constructed, occurred in the seventh and eighth centuries, when the so-called Tang international style was transmitted east and westward.⁵⁷ The construction of the first Mogao colossus, a 35.5 m tall image in Cave 96, is widely accepted as a crucial link between the local powers of Dunhuang and the Tang imperial

54. Remains of four gigantic statues of the four heavenly kings over six meter tall were excavated in Cave 130. They are dated to the Guiyijun period, but the tradition of refurbishing the antechamber with guardians' statues can trace back to the Sui period, as seen in Cave 427 (Figure 5-5). Pan and Ma, *Kuqian diantang*, 53–54.

55. Such cave sites include the Kanheri caves in India, the Bamiyan caves and the Kizil caves in Central Asia, the Tiantishan caves along the Hexi Corridor, and the Yungang caves in China's central plain. For major cases and historical records, see, for example, Sherman E. Lee, *A History of Far Eastern Art*, 5th ed., ed. Naomi Noble Richard (New York: Abrams, 1994), 151–88; Ken Parry, "The Buddha as Colossus in Central Asia and China," *Art, Architecture and Religion along the Silk Roads* (2009): 179–98.

56. For the historical significance of the Tiantishan caves, see Su, "Liangzhou shiku yiji he liangzhou moshi." For remnants of colossal images in Tiantishan Cave 17, see Dunhuang Research Academy and Gansu Provincial Museum, *Wuwei tiantishan shiku 武威天梯山石窟* [The Tiantishan grottoes in Wuwei], Di 1 ban (Beijing: Wen wu chu ban she, 2000): 118–22.

57. Examples include the Longmen caves in the second half of the seventh century, in the west, in Gansu and Sichuan in the early-eighth century, and in the east, in Shandong in the eighth century and in the Korea Peninsula in the late-eighth centuries. This neat pattern illustrates what US art historian Sherman E. Lee calls the "second international style" or the "Tang international style." For a recent reflection on this term and pilgrim monks across East Asia as the historical agents of the style, see Dorothy C. Wong, *Buddhist Pilgrim-monks as Agents of Cultural and Artistic Transmission: The International Buddhist Art Style in East Asia, Ca. 645–770* (Singapore: NUS Press, 2018).

court.⁵⁸ The empire promoted a statewide cult of Maitreya Buddha as a Buddhist ideal monarch in support of the female Emperor Wu Zhao's 武曩 reign (r. 690–705) in 690.⁵⁹ The Dunhuang locals promptly responded to it by constructing a Maitreya colossus. According to the *Record of the Mogao Caves* (*Mogao ku ji* 莫高窟記, appendix B-1), compiled in 850, Cave 96 was commissioned by a Chan monk, Lingyin 靈隱, and a layman, Yin Zu 陰祖, in 695. The Yin clan, of which Yin Zu was a member, was a distinguished clan in Dunhuang sensitive to political moves. Before the colossus's construction, members of the Yin family even claimed to have witnessed auspicious omens as indications of good governance.⁶⁰ As a symbol of divine kingship and future salvation, the colossal images linked the secluded Mogao site to the religious landscape of the empire.

58. Wang, *Dunhuang fojiao yu shiku yingjian*, 275–80; Ning Qiang 甯強, “Tonkō daibutsu no seimei — kontekusuto no henka to kinō no henka 敦煌大仏の生命—コンテクストの変化と機能の変化” [The life of the Dunhuang colossal Buddha: Changes in context and changes in function], *Ugoku mono : Jikan kuukan kontekusuto : Bunkazai no hozon ni kansuru kokusai kenkyū shūkai* うごくモノ : 時間・空間・コンテクスト : 文化財の保存に関する国際研究集會 [Moving objects: Time, space, and context: International symposium on the preservation of cultural property], ed. Tōkyō Bunkazai Kenkyū-jo (Tokyo: Tokyo National Research Institute for Cultural Properties, 2004); Ning Qiang, *Dunhuang shiku yishu: Shehuishi yu fengge shi de yanjiu*, 250–51.

59. Discussions of Buddhist art and politics during Wu Zhao's reign are numerous. See, for example, Antonino Forte, *Political Propaganda and Ideology in China at the End of the Seventh Century: Inquiry into the Nature, Authors and Function of the Tunhuang Document S.6502, Followed by an Annotated Translation* (Napoli: Istituto universitario orientale, Seminario di studi asiatici, 1976).

60. In the first lunar month of 691 CE, a Dunhuang resident, Yin Sijian 陰嗣鑾, saw an auspicious omen—a bird of five colors—at the Resort of Wu Xiaotong 武孝通園 in Pingkang Xiang 平康鄉. This bird is said to have a crown on its head, five-colored feathers on its wings and tail, a cinnabar-colored beak, and red feet. Another Dunhuang resident, Yin Shouzhong 陰守忠, claimed to have seen another auspicious omen—a white wolf—wandering around Shouzhong Zhuang 守忠莊. The wolf is said not to harm children or domestic animals, and its fur was the color of snow. See “Shazhou dudu fu tujing 沙洲都督府圖經” [Pictorial scripture about the governor's prefecture of Shazhou], P. 2005.

While colossal images pervaded the Silk Road, it is at the Chinese cave sites that the colossal-image cave was known to have a terraced building in front of it. The colossal-image cave of Shicheng-si 石城寺 in Shanxi 剡溪 (Zhejiang Province) is an early example reported to have “structured three levels of terraces in front of the niche, and built an entrance-pavilion and hall” in 513–16 CE.⁶¹ If the sixth-century building still largely relied on terraces, then the construction of a colossal-image cave under the Tang imperial patronage—the Fengxian Temple 奉先寺 of the Longmen grottoes 龍門石窟 (Henan Province)—marked the maturation of the timber-framed pavilion. Commissioned by the Tang Emperor Gaozong 高宗 (r. 649–83) and Empress Wu in 675 CE, the colossal open-air cave enshrines a nine-figure group centered at a 17 m tall statue of the cosmic Buddha Vairocana. The high visibility of the colossal images was soon intervened by a set of timber-framed façades and roofs (figure 3-16). According to archaeologist Peng Minghao, the modification was made during the reign of Emperor Xuanzong 玄宗 (r. 712–56), the successor and opponent of Wu Zhao.⁶² The implication for Dunhuang is not only the transmission of the architecturally screened colossal-image cave at the northwest frontier of the Tang empire but also the architectural practice as a means of visual control of a cave landscape.

Compared with the single-level façade of the Longmen colossal image, the Dunhuang colossal-image pavilion featured a multitiered verticality. The Tang-period pavilion of Mogao Cave 96 seemed to have four levels, as a ninth-century record reports that “the old pavilion again

61. 龕前架三層台，又造門閣殿堂。 *Gaoseng zhuan* 高僧傳 [Biographies of eminent monks], compiled by Huijiao 慧皎 (497–554), *T* 2059, vol. 50, p. 412, b, ll.12–13.

62. Peng Minghao 彭明浩 and Li Ruoshui 李若水, “Longmen fengxian si da lushena xiangkan tangdai de buzao yu jiajian 龍門奉先寺大盧舍那像龕唐代的補鑿與加建” [Supplementary construction of the Vairocana Buddha niche of the Fengxian Temple of the Longmen grottoes in the Tang dynasty], *Kaogu* 2, 233 (2020), 112–20.

had four levels of flying [eaves].”⁶³ The *Lantern Distribution* manuscript, another Dunhuang manuscript, dated 951 CE, mentions three parts of the colossal-image pavilion: “*daxiang tianwang* 大像天王 ([hall of] the heavenly kings of the colossal image), *daxiang xiaceng* 大像下層 (the lower level of the colossal image), and *daxiang shangceng* 大像上層 (the upper level(s) of the colossal image).”⁶⁴ The phrases correspond to the entrance-hall, the second-level porch overhanging from the cliff surface, and the porch of the upper levels standing above the rock-cut terrace and overhanging from the masonry wall. They give a sense of the multitiered composition of structures screening the vertical shaft. Corridors, dug for the purpose of removing rocks during the image carving, become the tunnels connecting the cave space and the outdoor landscape at multiple levels.⁶⁵ By the strategy of subdivision, the colossal-image pavilion not only provides various ground levels for viewing the colossal image’s feet, hand, chest, and head, but each level of it also serves as an intermediate-sized liaison between the colossal cave and the caves surrounding it.

Visuality, Height, and Vision

The colossal-image pavilion became an effective means of guiding a personal viewing experience that entails looking up and climbing up. This kind of visual and physical control is

63. 舊閣乃重飛四級. Excerpt from “Zhang huai shen bei 張淮深碑” [Stele of Zhang Huaishen], S. 3329+S. 6973+S. 6161+S. 11564+P. 2762, appendix B-3. Ma De, “Dunhuang yishu Mogao ku suishou randeng wen ji shi 敦煌遺書莫高窟歲首燃燈文輯識” [Collection and identification of the lantern lighting texts at the Mogao caves from the Dunhuang documents], *Dunhuang yanjiu* 3 (1997): 65–66. For an annotated transcription of the complete merit record comprising S. 3329, S. 6973, S. 6161, S. 11564, and P. 2762, see Zheng and Zheng, *Dunhuang bei ming zan jishi*, 154–213.

64. The manuscript, dated 951 CE, is in the collection of the Dunhuang Academy (no. 0322). For transcription and analysis, see Jin, “Dunhuang kukan mingshu kao”; Ma, *Mogao ku shi yanjiu*, 146–50.

65. Liu, *Suxiang juan*, 112.

best expressed by the recorded impressions of modern visitors to the Mogao site in the late nineteenth and the early twentieth centuries. As outsiders of the Buddhist culture who were not constrained by the ritualistic norms of temple visit, these visitors' perception of the colossal images was mediated by the cave-front architecture per se. When a façade was absent, viewers would be able to see the head of the colossal image of Cave 96 from afar. When the façade was present, it determined not only the standing points and viewing angles but also the way in which they could be accessed.

One of the first foreign visitors, a Hungarian geographer named Gustav Kreitner (1847–93), described how his eyes were drawn to the site-altering effect of the Mogao colossi: “The heads of two huge seated-buddha statues tower above the cliff wall, as if they had forced their way through the façade constructed above them; without any doubt these are the most interesting sights in the huge temple complex.”⁶⁶ When Kreitner visited the site in April–May 1879, the Cave 96 colossus was temporarily exposed after a fire had destroyed the timber-framed roof and façade. Kreitner's impression, however, suggests that the colossus was not a passive, vulnerable object in the deserted environment; he was clearly affected by the extraordinary, shifting sense of perspective that it provoked. Interestingly, although his fellow traveler, geologist Lóczy Lajos (1849–1920), took a relatively accurate measurement of the image heights (20 m and 35–40 m), Kreitner estimated that the height of the buddha image was “over 50 meters.”⁶⁷ Based on

66. In his description, Kreitner pointed out two colossal Buddhas and used plural form in this description. However, the other colossal Buddha, that in Cave 130, is contained in a rock-cut cave, and it is this colossal buddha that the description corresponds to. Gustav Kreitner, *Im fernen Osten. Reisen des Grafen Bela Széchenyi in Indien, Japan, China, Tibet und Birma in den Jahren 1877–1880* (Wien 1881), 668. Translation after Lilla Russell-Smith, “Hungarian Explorers in Dunhuang,” *Journal of the Royal Asiatic Society* 10, no. 3 (2000): 341–62, 358.

67. Lóczy Lóczy Lajos, *A khinai birodalom természeti viszonyainak és országainak leírása*

sketches by Lajos, Kreitner made illustrations of their journey, including the first modern visual representation of the Mogao caves (figure 3-17). It depicts a monk in the foreground and the exposed colossal-buddha image—presumably that in Cave 96—and numerous caves cut onto the rock cliff across a stream. This slippage between reality and perception clearly demonstrates the imposing visuality of the image, enhanced by the slender cave space and effected through the embodied viewing.⁶⁸

The dominant visual presence of the enclosed colossus was captured by another expedition team, led by the Russian imperial geographer and explorer Nikolay Przhevalsky (1839–88), that explored Dunhuang in June 1879.⁶⁹ One of the team members drew a wide-angle sketch of the 26 m tall colossus in Cave 130 (figure 3-18), contrasting the colossal statue with two small human figures standing between the two gigantic feet. The exaggeration expresses the visual impressiveness of the colossus perceivable even to those alien to the culture. Although viewers see the image as being “beautifully proportioned,” the head is, in fact, actually disproportionally large; at more than seven meters tall, it accounts for nearly one-third of the

(Budapest: K. M. Természettudományi Társulat, 1886), 462. For a Chinese translation of Lajos’s description of the Mogao caves and specifically the two colossal images, see Wang Jiqing, *Sitanyin Dunhuang kaogu dangan yanjiu* 斯坦因敦煌考古檔案研究 [An archival study of Stein’s Dunhuang archaeology] (Lanzhou: Gansu wenyi chubanshe, 2020), 25. Also see Kreitner, *Im fernen Osten*, 668.

68. The imposing effect of image over cave type has been observed by art historians. See Ning Qiang, *Dunhuang shiku si yanjiu* 敦煌石窟寺研究 [Studies in the cave shrines of Dunhuang] (Lanzhou: Gansu renmin meishu chubanshe, 2012), 25–26.

69. For the biography of Przhevalsky and the colonist nature of the expedition, see Kyrill Kunakhovich, “Nikolai Mikhailovich Przhevalsky and the Politics of Russian Imperialism,” in *IDP News*, no. 27. http://idp.bl.uk/archives/news27/idpnews_27.a4d#2 (accessed December 22, 2021). Nikolai Karataev, *Nikolai Mikhailovich Przhevalskii: Perviy Issledovatel’ Prirody Tsentral’noi Azii* [Przhevalsky: The first naturalist of Central Asia] (Moscow: Izdatel’stvo Akademii Nauk SSSR, 1948). Donald Rayfield, *The Dream of Lhasa: The Life of Nikolay Przhevalsky (1839–88), Explorer of Central Asia* (Athens: Ohio University Press, 1976).

total height of the statue.⁷⁰ This proportion violates the prescription in Buddhist scriptures, but it is a successful response to the slender cave space via optical correction.⁷¹ When looked up at from an almost vertical angle, the head seems less big than its actual size. On the other hand, no still image, including the Przhevalsky sketch, can capture the prolonged viewing. Constrained within a vertical shaft, one gains close-up views of the image bit by bit. As illustrated by photos of the Cave 96 colossus taken by James Lo in 1943–44 (figure 3-19), a multiangled understanding of the colossal can only be achieved after having ascended to all levels of the colossal-image pavilion.

A modern conception of the cave concerns how the viewer sees the image, whereas the medieval conception concerns how the buddha image looks out at the world it is supposed to bless. The colossal-image cave is more of a space reserved for the colossal image than a space designed for its beholders. To borrow architectural historian Mitsuo Inoue's term, it represents the spatial logics of "plastic composition."⁷² The colossal-image pavilion, by fitting with the cave space, becomes an architectural aura of the buddha image. Thus, the buddha's gaze is a key to understanding the colossal-image pavilion. No matter how many levels such a pavilion has, there is always an opening at the eye level of the image (figure 3-20). This kind of high window allows the image to "look out." For instance, the colossal Buddha Hall at the Todai-ji 東大寺 temple complex (Nara, Kyoto Prefecture, Japan) has a dormer window above the entrance open

70. Kreitner, *Im fernen Osten*, 668; Liu, *Suxiang juan*, 143.

71. According to *Foshuo zaixiang duliang jing jie* 佛說造像量度經解 [Interpretation of the Sūtra of the Measurements of Images preached by the Buddha], *T* 1419, vol. 21, the height of the head (comprising *ushinisha*, forehead, and face) is 20 finger-lengths, and the total height of the body is 120 finger-lengths. In other words, the head:body ratio is 1:6. By reducing the length of the thigh (25 finger-lengths), one can determine that the head should be about one fifth of the total height of a pendent-legged sitting Buddha image.

72. Mitsuo Inoue, *Space in Japanese Architecture*, trans. Hiroshi Watanabe (New York: John Weatherhill, 1985): 18–32.

for the buddha to “hear the visitors’ prayers” even if they were unable to cross the threshold and enter (figure 3-21).⁷³ The eye-opening ritual happens only once at the beginning of the lifecycle of a consecrated image, whereas opening the eye-level window of a colossal-image pavilion reenacts the image-related rituals during annual festivals such as New Year’s day and Buddha’s birthday.⁷⁴

The Mogao colossus was also believed to have vision. The merit record of Ma Desheng 馬德勝 (act. 896), the monk patron of a cave built near Cave 96, states, “The great golden image gazes at the borderless landscape.”⁷⁵ This boundless gaze is paralleled by the panoramic landscape scene photographed by British historian Joseph Needham (1900–95) at an upper level of the nine-story pavilion of Cave 96 (figure 3-22). Gazing at the landscape at this level, the grove and monasteries below appear small, whereas Mount Sanwei is revealed in its entirety at eye level. The higher the level one climbs to, the broader the angle of view one achieves. In other words, by ascending the pavilion, one’s vision becomes closer to the Buddha’s. If the cave space is reserved for the Buddha, then the transformative experience of the beholder is projected to the architectural aura of it. Ma Desheng chose to build near Cave 96 so that he could “reside in a purified place and withdraw from noise.” Furthermore, “at the three sermons under the dragon-

73. Yusuke Kato, “Nara’s Todaiji Temple Closed, but Keeps Great Buddha Window Open for Pandemic Prayers,” *Mainichi Japan*, April 27, 2020, <https://mainichi.jp/english/articles/20200425/p2a/00m/0na/019000c> (Accessed June 26, 2022).

74. For a discussion of the eye-opening ceremony of the Todai-ji colossal, see Michelle C. Wang, “Early Chinese Buddhist Sculptures as Animated Bodies and Living Presence,” *Art Orientalis* 46 (2006): 14–16.

75. 大身金像，疑（凝）見無邊。“Tang shazhou longxing si shangzuo Ma Desheng heshang dangquan chuangxiu gongde ji 唐沙州龍興寺上座馬德勝和尚宏泉創修功德記” [A record of the merit of the construction activities of preceptor Ma Shengde, who was an upper seat of the Lonxing Monastery of Shazhou of the Tang dynasty], 896 CE, S.2113v. Ma De identifies the cave to be Cave 97—a cave located in-between Caves 96 and 98. Ma, *Dunhuang Mogao ku shi yanjiu*, 104–6. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 772.

flower trees, [Maitreya Buddha] will assure him to be an immortal.”⁷⁶ The colossal-image pavilion provided those who had accessed to it a chance for spiritual transformation through changes in vision.

By the end of the high Tang, the colossal-image pavilion of Cave 96 was the singular architectural monument of unparalleled height amid a horizontal sprawl of some three hundred caves. The lesser colossal-image Cave 130 has a rock-cut ceiling and front wall onto which three levels of corridors were cut out. The features suggest that its frontal structure would have had a similar multitiered composition but would have been less tall, less covered by timber-framed enclosure, and had fewer levels. In addition, according to archaeologists Pan Yushan 潘玉閃 and Ma Shichang 馬世長, Cave 130 was excavated at least three meters above ground level at the time of its construction, and therefore its pavilion was added later, no earlier than the late ninth century.⁷⁷ Even in the following centuries, the visual predominance of the two colossal-image pavilions remained unsurpassed by any other gigantic entrance halls or multilevel pavilions. As Wu Hung insightfully points out, the colossal-image cave architecture introduced monumental scale, vertical space, and platformed architecture at ground level, which henceforth became the symbolic language of power and the crest of a hierarchical spectacle.⁷⁸ One remarkable feature of the colossal-image pavilion (to be discussed further in the next section) is the constant renovation that counteracted the material ephemerality and reenacted the architectural and social spectacle, especially during the second construction peak.

76. 竭力功畢，處淨離喧。龍花（華）三會，必子於仙。“Tang shazhou longxing si shangzuo Ma Desheng heshang dangquan chuangxiu gongde ji.” Zheng and Zheng, *Dunhuang bei ming zan jishi*, 772.

77. Pan and Ma, *Kuqian diantang*, 59.

78. Wu, *Kongjian de Dunhuang*, 87–91.

Making the Pavilions Taller

Following the intensive cave construction in the Sui and Tang periods, the climax of cave-front architecture occurred in the tenth century.⁷⁹ Intensive construction activities took place at the Mogao caves when Dunhuang was the seat of the Guiyijun Circuit in 851–1036 CE.⁸⁰ The earlier period of the Guiyijun was under the Zhang 張 family's regime and was concurrent with the late Tang. The latter part was under the Cao 曹 clan's regime and was concurrent with the Five Dynasties (907–60) and the beginning of the Northern Song (960–1115). The Cao regime saw the construction of about a dozen gigantic hall caves and an unprecedented scale of construction and reconstruction of ante-halls and porches, all unified under a half-mile-long stripe of open-air mural.⁸¹ Meanwhile, the colossal-image caves and their pavilions were systematically renovated. Two major renovations of the Cave 96 pavilion were commissioned by political leaders from the Zhang and the Cao clans.⁸² Renovations of the colossal-image caves reenacted its association with divine kingship and reinforced the architectural pattern of the cave complex. The vicinities of the two colossal-image caves became the loci for spectacle making.

Renovation provided opportunities for redesigning the colossal-image pavilion;

79. Ma, *Mogao ku shi yanjiu*, 113; Sun, "Kuyan jianzhu yiji," 21–22; and Lee, "Repository of Ingenuity."

80. For Dunhuang history of the Guiyijun period, see Rong, *Eighteen Lectures*, 40–46; Rong, *Guiyijun shi yanjiu*.

81. Sun and Sun, *Shiku jianzhu juan*, 127–40; Chen et al., "Kancha baogao," 56; Pan, "Mogao ku waimao bianqian."

82. Sun, "Kuyan jianzhu yiji," 20; Ma, "Suishou randeng wen," 65–66; Ma De, "Song qiande simian chongxiu Dunhuang bei daxiang de erqi gongcheng 宋乾德四年重修敦煌北大像的‘二期工程’" [Second phase of renovation project for the northern colossal image in the fourth year of Qiande of the Song Dynasty], *Dunhuang yanjiu* 5, no. 81 (200): 1–2. Archaeological records testify to the historical records. Four layers of platforms were excavated in front of Cave 96, and the second lower level is dated to the Xixia period in Peng, Wang, and Guo, *Jiucenglou kaogu xin faxian*.

additional levels and height were intended for extended verticality. The first major renovation of the Cave 96 pavilion was patronized by Zhang Huaishen 張淮深 (831–90), the second military governor (*jiedu shi* 節度使) of the Guiyijun Circuit, around the 880s. Shortly afterward, Zhang had his merit cave (Cave 94) constructed to the north of Cave 96.⁸³ According to the merit record of the renovation (appendix B-3), the pavilion was adapted from a four-level to a five-level porch: “The new addition has five levels widely opened.”⁸⁴ The process by which the fifth level was added is not illuminated by any textual or visual evidence; it is possible that an eave was added to the upper part of the façade. The heights of the upper levels were probably adjusted, and the total height increased. This is the strategy of the redesign in 1928–35 that turned an early twentieth-century version of the five-level pavilion into a nine-level pavilion, by which name the cave is known.⁸⁵ Similar to the naming method, the pavilion was referred to as a “five-story *ge*-pavilion of the immortal” (*wuceng xiang* 五層仙閣) in a mid-tenth century Dunhuang manuscript.⁸⁶ The rhetoric of *immortal* (*xian* 仙) emphasizes the high spirituality of

83. Based on biographies of Zhang, scholars have proposed three periods during which the two construction projects occurred: 867–72, 876–88, 888 to a few years later, and 885–88. The three latter views are more accepted than the first one. For a review of the debates, see Zheng and Zheng, *Dunhuang bei ming zan jishi*, 705–6.

84. 新增則橫敞五層. “Zhang huashen bei” [Stele of Zhang Huaishen], S. 3329+S. 6973+S. 6161+S. 11564+P. 2762, appendix B-3. Ma, “Dunhuang yishu mogao ku suishou randeng wen ji shi,” 65–66.

85. For the architectural design of the nine-story pavilion, see Li Jiang 李江 and Yang Jing 楊菁, “Dunhuang Mogaoku jiuceng lou wuding jiegou tanxi 敦煌莫高窟九層樓屋頂結構探析” [Research on the structure of the nine-story pavilion of the Dunhuang Mogao caves], *Dunhuang yanjiu*, no. 3 (2016):124–31. Due to the change of the roof from a gable roof to a pointed roof, the height of the pavilion was increased by about five meters.

86. “Hexi jiedushi linggong lingyan randeng wen 河西節度使令公靈岩燃燈文” [Hexi Military Governor Master Ling lighting lanterns at Lingyan [the Numinous Cliff], S. 4625, 945–50 CE. The manuscript writes “wugexianceng 五閣仙層,” which is likely meant to be “wucengxiange 五層仙閣.” For the transcription, dating, and identification of the five-story *ge*-pavilion, see Ma, “Suishou randeng wen,” 63–66.

the level-increased structure. By inference, one can view the redesign as an architectural means of crowning the colossal image of Maitreya. Zhang's merit record also implies the need of an order for the architectural spectacle, especially during a period of intensive cave construction. The visual effect of adding the fifth level was that "the high and the low were all in place" (*gaodi desuo* 高低得所).⁸⁷

What exactly had to be put in a right order? I found hints in the vertical expansion of the Cave 130 pavilion as a response to the heightened cave-front architecture in its surroundings. During a renovation of the upper-level porch in 2004, the remnants of a small shrine standing on the cliff top above Cave 130 was excavated (figure 3-23).⁸⁸ These types of cliff-top shrines were not constructed at the Mogao site before the Tibetan period. It was the advent of a cliff-top pagoda above Cave 161—a top-level cave to the immediate north of Cave 130—that reshaped the skyline of cave-front architecture in the vicinity (figure 3-24). The earthen pagoda and Caves 161 and 156 beneath it, all of which were constructed in the ninth century, constitute a vertical cave-pagoda composite.

Scholars have recognized the totality of this composite through investigation of its construction history, pictorial programs, and ritual function. Cave 156 is accepted as the merit cave of Zhang Yichao 張議潮 (799–872), the first military governor and uncle of Huaishen.⁸⁹ According to Sha Wutian's study, Cave 161 is the merit cave of Facheng 法成 (Tbt: Chos Grub, d. 869), an eminent Tibetan monk in Dunhuang and dharma teacher of Yichao. Based on the close relationship of the cave patrons and formal analysis, Sha and Zhao Xiaoxing have

87. "Zhang Huaishen bei" (S. 3329+S. 6973+S. 6161+S. 11564+P. 2762, appendix B-3). Ma, "Suishou randeng wen," 65–66.

88. Sun, "Kuyan jianzhu yiji," 23.

89. *Dunhuang shiku neirong zonglu*, 63–64.

demonstrated a new paradigm of constructing vertical cave-pagoda groups at Mogao in the Tibetan and the late-Tang periods.⁹⁰ Two of the four examples were located in the vicinities of the two colossal-image caves, and the other two marked the south and north end of the south section (figure 3-25). Guo Youmeng, by studying the shared esoteric iconography and rituals of Avalokiteśvara (Chn: Guanyin 觀音, the bodhisattva of great compassion), has pointed out the intrinsic connection between Caves 156 and Cave 161.⁹¹ Most recently, Xu Juanhui (Hsu Chuan-hui) 許絹惠 has proposed that the cave-pagoda composite was designed as a three-dimensional mandala of Avalokiteśvara Bodhisattva and the pagoda as the culmination of this total design.⁹²

Building on current scholarship, this study demonstrates the coherency in the cave-front architecture design and its visual impact on the cliff site. The pagoda remnant in the early twentieth century was about eight meters tall.⁹³ If adding my theoretical reconstruction of the

90. Sha, “Dunhuang Tulufan yijing sanzang fashi facheng gongde ku kao”; Zhao, “Dunhuang tubo shiqi ta ku chuzhi zuhe xingshi fenxi tanxi.”

91. Guo Youmeng, “Wantang Guanyin famen de zhankai—yi mogaoku 161ku wei zhongxin 晚唐觀音法門的展開——以敦煌莫高窟161窟為中心” [An expansive study of the dharma door of Guanyin in late Tang—centered at Mogao Cave 161], *Quanguang foxue xuebao* 圓光佛學學報 8: 103–44.

92. Hsu Chuan-hui 許絹惠, “Lun Zhang Yichao gongde ku de taku zuhe 論張議潮功德窟的塔窟組合” [On the combination of pagoda and grotto in the cave constructed in honor of Zhang Yichao], *Dunhuang Xue* 敦煌學 34 (August 2018): 101–30. While the study is well grounded on previous studies and a synthetic study of the pictorial programs of the two caves, it should be pointed out that Hsu’s description of the iconographical contents in the pagoda is inaccurate. The scarce published information tells only that the pagoda enshrines a seated Buddha image with pendant legs. But no information indicates that the pagoda bears “a myriad of bodhisattva images,” which Hsu seems to project an impression of the iconography in Cave 161. A further investigation of the pagoda, which might or might not complicate Hsu’s thesis, is needed.

93. The author measured a proportional representation of the pagoda in the cliff drawing of the Mogao caves made by Dudin of the Oldenburg Expedition team in 1914–15.

damaged part to it, the total height would have reached eleven meters (figure 3-26).⁹⁴ The beam holes in the antechambers of Caves 161 and 156 indicate that the nonextant porches were three bays wide and aligned vertically. The antechambers of Caves 161 and 156 are sized, respectively, 5.45 m (w) x 2.8m (h), and 7.5 m (w) x 4.0 m (h), and their floor levels are 6.2 meters apart.⁹⁵ The former was less wide and tall than that the latter, thereby forming a tapered, two-level pavilion about ten meters tall.⁹⁶ By adding the pagoda to it, the composite architecture would have been as tall as twenty-four meters. The configuration of an earthen pagoda atop a multilevel pavilion is topologically similar to the image of the Pavilion of Great Compassion in the *Picture of Mount Wutai* in Cave 61 of 947 CE (figure 3-27).⁹⁷ This image of a pavilion-style pagoda represents a type of colossal-image pavilion that enshrines Avalokiteśvara.⁹⁸ In

94. My reconstruction design adopts the form of the large flower pagoda (Dahuata 大花塔, 950–1000 CE) at Chengchengwan 城城湾, a bend of the Daquan river one kilometer south of the Mogao caves. The formal features of the half-damaged pagoda on the cliff top of Cave 161—octagonal pagoda body with four gates in the cardinal directions (three of which are fake), the cantilever eave in the shape of lotus flower petals—indicate that it belonged to the type of flower pagoda. For the Chengchengwan pagoda, see Xiao, “Dunhuang Mogao ku fujin de liangzuo Song ta”; Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 473–83.

95. Data after Shi, *Mogao ku xing*, 2, figs. 254, 257.

96. The distance between the ground level of the Cave 156 antechamber and the ceiling level of the Cave 161 antechamber is 9 m. Judging from the extant porches, the roof and ridge ornaments extend beyond the ceiling level of a rock-cut antechamber by 0.5–1.0 m.

97. For discussion of the architectural image as a case of the pavilion-style pagoda, see Su Bai, “Dunhuang Mogao ku zhong de wutai shan tu 敦煌莫高窟中的五臺山圖” [Picture of Mount Wutai in the Dunhuang Mogao caves], *Wenwu cankao ziliao* 5 (1951): 67–69; Xiao, *Dunhuang jianzhu yanjiu*, 154–55; Sun Ruxian, “Dunhuang bihua zhong ta de xingxiang 敦煌壁畫中塔的形象” [Imagery of pagodas in Dunhuang murals], *Dunhuang Yanjiu* 2 (1996): 4–5.

98. For a comparison of the architectural image and a Tang dynasty Dabeixiang-si 大悲像寺 (Temple of the Image of the Great Compassion) in Zhengding 正定 County, Hebei Province, which was a predecessor of the famous Pavilion of Great Compassion in Longchang Monastery of Zhengding, see Gong Junlu 貢俊錄, “Dunhuang bihua wutaishan tu zhong zhengding gu jianzhu xiangguan wenti zouyi 敦煌壁畫《五臺山圖》中正定古建築相關問題芻議” [Discussion about the issues of the historical architecture in Zhengding seen in the picture of Mount Wutai in the Dunhuang murals], *Wenwu chunqiu* 文物春秋 6 (2005): 55–60.

comparison to the colossal-image pavilion, the vertical cave-pagoda composite experiments with an architectural way of representing a Buddhist deity. In this case, the mandalic spatial configuration and the pavilion-style-pagoda appearance constitute a meta-picture of Avalokiteśvara, unifying myriad images of the bodhisattva inside the caves. Simply put, the architectural aura was developed into an architectural body, which was substitutable for the colossal image.⁹⁹ The composite architecture was not just nearly as tall as the colossal image of Cave 130, but it also became a kind of overhanging pavilion that was suspended about fifteen meters above the ground level of the Cave 130 pavilion. A three-tiered structure hovering in midair and protruding from the cliff top was both supplementary to the visual center and a challenge to the monumental scale of Cave 130.

The cliff-top shrine above Cave 130 exhibits additions of contemporary and later stylistic features to the cave-pagoda composite. For one thing, in the rectangular-shaped central-altar and the modest-sized square room, the layout of the shrine much resembles Caves 161 and 234 (figure 3-28). Both caves are the upper-level cave of a cave-pagoda vertical composite and were built during the Tibetan and the late Tang periods.¹⁰⁰ For another, the constructive decoration in the cliff-top shrine combines two period styles. The earthen altar in the rear center of the shrine is façaded with wooden panels carved into *kunmen* 壺門 arches of intricate shapes (figure 3-29). The intricate *kunmen* arch is characteristic of Tibetan period caves such as Caves 365 (figure

99. A comparable example is the wooden pagoda in Ying County, Hebei, Liao dynasty. For a discussion of it as a conceptual emanation of the cosmic Buddha Vairocana, see Wei-Cheng Lin, “Performing Center in a Vertical Rise: Multilevel Pagodas in China's Middle Period,” *Ars Orientalis* 46 (2016): 121–25.

100. Cave 234 belongs a composite comprising Caves 234, 237, and a square-planned stupa or shrine above Cave 234. For discussion of this composite, see Sha, “Facheng gongde ku kao”; Zhao, “Dunhuang tubo shiqi ta ku chuizhi zuhe”; Guo, “Laba randeng fenpei kukan ming shu wenshu zhong de fahua ta kao.”

3-30), 231, and 237. But its pictorial contents—a heavenly guardian and two attending figures—and the pictorial *kunmen* arch on the walls are typical of altar decoration of the late tenth to early eleventh centuries (figure 3-31). The motifs of *kunmen* arches and jewel offerings (*kunmen gongbao* 壺門供寶) depicted at the bottom register of the four walls support a dating based on style (figure 3-32). In brief, the shrine was likely constructed during the Zhang reign and refurbished during the Cao reign.

The construction and the subsequent refurbishment of the cliff-top shrine seem concurrent with those of the Cave 130 pavilion. Two layers of platforms have been excavated in front of Cave 130, and the lower-level platform is dated to the late medieval period.¹⁰¹ The specific dating, although archaeologists initially suggested the Xixia period, is more accepted to be the end of the Guiyijun period, specifically during the reign of Cao Zongshou 曹宗壽 in 1002–14.¹⁰² I would further consider the possibility that the lower-level ante-hall is a refurbishment of a late Tang version. First, an underlayer of painting exists below the layer of the late Guiyijun period mural on the west wall and is dated by style to the late Tang.¹⁰³ Second, the *Lantern Distribution* manuscript dated 951 mentions two “[Halls of] Heavenly Kings of the Colossal Images” (Daxiang Tianwang), one of which refers to the ante-hall of Cave 130.¹⁰⁴ The ante-hall, in which remnants of the colossal images of four heavenly kings exist, had been

101. Pan and Ma, *Kuqian diantang*, 48–60.

102. Ma, *Mogao ku shi yanjiu*, 152; He Shizhe, “Cong yitiao xin ziliao tan cangjingdong de fengbi 從一條新資料談藏經洞的封閉” [New material about the concealment of the library cave], *Xibei Shidi* 3 (1984), 83–86; *Dunhuang Mogao ku gongyangren tiji*, 231; and Sha, *Guiyijun shiqi*, 31–49. Crucial evidence is an inscription in the corridor that identifies one of the donor figures to have been a military governor.

103. Pan and Ma, *Kuqian diantang*, 53.

104. This term was mentioned two times. The manuscript orders that one to be lightened by Tian Sheli and the other by Xi Cheng Langjun. Jin, “Dunhuang kukan mingshu kao”; Ma, *Mogao ku shi yanjiu*, 146–50.

erected prior to the mid-tenth century. Third, the earth gods at the feet of the heavenly king statues display a naturalistic modeling of musculature, resembling more the Tang style than the Song style.¹⁰⁵ The archaeological evidence leads to a tentative reconstruction of the following time line: following the advent of the vertical cave-pagoda composite in the vicinity, the cliff-top shrine and the pavilion of Cave 130, or at least its ground-level ante-hall, were constructed during the Zhang reign; over a century later, the late Cao reign saw a systematic refurbishment of the colossal-image cave, the multilevel pavilion, and the cliff-top shrine.¹⁰⁶ We can conclude that the cliff-top shrine and the colossal-image pavilion were built as a total cave-front architecture of Cave 130 in the Guiyijun period; this conscious configuration may have emerged as early the Zhang reign and no later than the end of the Cao reign.

New evidence for the Guiyijun-period dating comes to us in the form of several bracket-set components we recently found in storage at Dunhuang Academy (figure 3-33). A modern inscription on a bracket arm identifies it as having been found “on the stairs of Cave 130 in 1955.”¹⁰⁷ Because no extant timber members of the colossal-image pavilion were known prior to

105. Sha suggests that the statues were likely made before the Song in *Guiyijun shiqi*, 42. For early photos of the statues, see Pan and Ma, *Kuqian diantang*, plates 25, 26.

106. Admittedly, I have not found any merit records about the construction and renovation of the Cave 130 pavilion and cliff top shrine. The interior of Cave 130 was refurbished in the late-Guiyijun and early-Xixia style. The stratigraphy of this refurbishment is consistent in the ante-hall, corridor, and main chamber. The periodization of the style is under debate because it continued over two periods, yet a widely accepted view is that the refurbishment of Cave 130 happened in the late Guiyijun period. For a recent discussion and literature review of the periodization problem of the style, see Zhao Xiaoxing, “Guanyu Dunhuang xixia qianqi dongku de taolun: xixia shiku kaogu yu yishu yanjiu zhi wu 關於敦煌莫高窟西夏前期洞窟的討論——西夏石窟考古與藝術研究之五” [Discussion about the Dunhuang Mogao caves of the early Xixia period: Fifth in the series studies of art and archaeology of the Xixia caves], *Dunhuang Yanjiu* 190, no. 6 (2021): 1–18.

107. The author and a few researchers of the Exhibition Center of the Dunhuang Academy noticed the items in a storage cave in winter 2022. I thank Sha Meizhen, associate researcher in the Collection Department, for identifying the content in the inscription.

this point, the minor discovery is particularly revealing of the architectural style and modularity of the architecture. They were probably taken from timber structures around Cave 130 or were left-over materials from the construction. Three arms seem to have served as stair paving in a rock-cut tunnel of Cave 130 for a long period of time, during which one side of the arms was worn down. Each arm measures 88 cm (l) x 12 cm (w) x 17 cm (h); the blocks measure 18 cm (l) x 18 cm (w) x 8 cm (h). The measurement unit (*caifen* 材分) of the timber members roughly complies with the seventh grade (17.3 x 11.5 cm) as prescribed in *Yingzao fashi*.¹⁰⁸ The module is applied to most extant Mogao timber-framed porches dated between 970 and 980. The Cave 130 arm's section size (17 x 12 cm) is close to that of Caves 431 (18.5 x 12 cm) and Caves 427 and 196 (both 18 x 12.5 cm).¹⁰⁹ While all other known examples are concentrated in the central-north part of the south section, the bracket-set components of Cave 130 demonstrate that the similar timber-façade construction extended to the southern part, where Cave 130 is located. By inference, the modularity and the timber-construction system applied to large and small cave-front architecture of the Mogao complex during the late Guiyijun period were remarkably consistent. The extraordinary construction management in the Guiyijun period paved the way for a systematic remaking of the architectural pattern of the cave landscape.

Based on the building module, the cliff's topography, and archaeological remnants, I made a theoretical reconstruction of the composite architecture (figure 3-34) consisting of three structures: a pitched-roofed shrine standing on the cliff top, a three-bay porch on an elevated rock-cut terrace that screens the top-level corridor, and a two-story pavilion comprising a five-

108. This earliest extant Chinese architectural treatise was compiled by Li Jie 李誠 (1065–1110), a construction supervisor in the Northern Song court, in 1103. For the measurement unit in *Yingzao fashi*, see Liang, *A Pictorial History*, 14–18; Steinhardt, *Chinese Architecture*, 150–61.

109. Xiao, *Dunhuang jianzhu yanjiu*, 280–81.

bay lower level and a three-bay upper level that screens the two lower levels of corridors. The cliff-top shrine, although structurally independent from the colossal-image pavilion, turned a three-level structure into a four-level one. The size of the four levels drastically shrank from bottom to top, forming a pyramidal volume of mass. The reconstruction design illustrates the effect of the additional level of a colossal-image pavilion; it helps the pavilion re seize its visual prominence in the cave complex. The pavilion was carefully redesigned to reflect an updated architectural pattern of the cave landscape.

The changing appearance and surroundings of the colossal-image pavilions prompt us to reflect on the perception of the architectural spectacle of the Mogao complex. As soon as three years after the construction of Cave 96, observers were able to recognize the vertical visual focus and the conceptual transition of the site: “Cutting the mountain into a pagoda, constructing the heavens from layers of terraces.”¹¹⁰ A pagoda—a type of Buddhist architecture that enjoyed unparalleled height in premodern China—symbolizes the axis mundi in Buddhist cosmology.¹¹¹ The topographical axis mundi is Mount Sumeru (Xumi Shan 須彌山), which bears thirty-three vertically aligned realms.¹¹² Verticality with an ascending tendency is a major formal feature of both the Chinese pagoda and Mount Sumeru. Since the introduction of colossal-image caves and pavilions, verticality has pervaded the imagination of the Mogao caves, which literally means

110. 礪(砍)山為塔，構層台以造天。Excerpt from “Shazhou xiaogu fu jiaowei lijun mogao ku foka bei bingxu 沙州效谷府校尉李君莫高窟佛龕碑並序” [The stele and preface of a Buddhist niche at the Mogao caves of Li Jun, who is a military official at Xiaogu Fu of Shazhou], P.2250 and P.2551V, 698 CE. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 21.

111. Lin, “Performing Center in a Vertical Rise.”

112. In Buddhist cosmology, twenty-eight realms consisting of four, eighteen, and six levels in, respectively, the Formless Realm, the Realm of Form, and the Realm of Desire, and the top-level realm in the Formless Realm is further divided into six heavens. For a comprehensive overview of Buddhist cosmology, see Akira Sadakata, *Buddhist Cosmology: Philosophy and Origins*, trans. Gaynor Sekimori (Tokyo: Kosei, 1997).

“caves of unparalleled height.”

Despite the differences in construction process and visual logic between cave temples and pagodas, cave-front architecture does its best to re-create a “real building.” For one thing, the colossal-image pavilion evokes the image of a pagoda through the elongated pyramidal mass of volume, the vertically aligned porches (from a frontal view), and the multiple levels of overhanging eaves. For another, the pavilion has evolved to take full advantage of the multitiered topography of the cliff site, placing timber-framed halls and porches on the layers of terraces. The multitiered construction grants the pavilion some design freedom, as the total height of the building compound is not constrained by a single structural framework. Thus, the pagoda-like appearance could be composed of multiple halls, one stacked on another.

This compositional principle is shared with the evocation of the Buddhist heavens. The diagram of Mount Sumeru found in several medieval Dunhuang manuscripts represents this cosmological mountain as an elongated terrace-building compound.¹¹³ In the diagram of Mount Sumeru in manuscript P.2012v (figure 3-35), three tiers of waisted rock platforms are stacked to support three sets of heavenly palaces.¹¹⁴ The total height is further extended by thirty vertically aligned small icons of hipped-roof halls. The large and small halls form a thirty-three-leveled structure, visualizing the thirty-three heavens on Mount Sumeru. Cave architecture cannot convey the image of the heavens as literally as the painting medium can, but it evokes the image of unearthly dimensions. Such an image is sometimes so strong that it can distort the perception of the actual topography. A widely circulated rumor about the Mogao caves in medieval China

113. A similar example other than the one introduced here is the *Picture of Three Realms and Nine Lands* in Dunhuang manuscript Pelliot chinois 2824.

114. For a discussion of P.2012v, see Kuo Liying, “Maṇḍala et Rituel de Confession à Dunhuang,” *Bulletin de l'École Française d'Extrême-Orient* 85 (1998): 230–31.

was that “its cliff was as tall as two *li*” (*ya gao erli* 崖高二里), which equals nine hundred meters.¹¹⁵ Perhaps because of the vertical landmarks, the Mogao caves as a whole was perceived as a tall structure despite its being much wider than tall. Cave constructions were constrained within the 30–40 m tall cliff area, but the image of heavens could transform the width of horizontal sprawl into the height of vertical growth.

Ante-Halls in the Guiyijun Period

The trend toward architectural spectacle that continued during the Guiyijun period was expressed not just in height but also in scale. Along with the construction of monumentally scaled caves, an enlarged version of the porched antechamber emerged—that is, a porticoed entrance hall standing on a platform or an elevated terrace. While modern scholars refer to them as *kuqian diantang* 窟前殿堂 (ante-hall), medieval cave makers rendered them as *fenglou* 鳳樓 (phoenix *lou* pavilion), which gives a sense of the overhanging roof, the polychromic painting, and the sheering height.¹¹⁶ An ante-hall is usually three bays wide and two bays deep, and the extra-

115. *Ji Shenzhou sanbao gantong lu* 集神州三寶感通錄 [Records of the three treasures throughout the successive dynasties], compiled by Daoxuan 道宣, *T* 2106, 52:418, a, 1.26; *Fayuan zhulin* 法苑珠林 [Forest of gems in the garden of the dharma], compiled by Daoshi 道世, *T* 2122, 53:387, b, 1.25. One *li* in Tang China was approximately 454 meters.

116. Pan and Ma, *Kuqian diantang*. The term *fenglou* appears in, for example, “Zhang Huaishen zaoku gongde bei 張淮深造窟功德碑” [Stele recording the merits of cave construction by Zhang Huaishen], P.3720, S.5630, ca. 882 CE, appendix B-4; and “Hexi dusengtong dangquan jiankan shangliang wen 河西都僧統宕泉建龕上樑文” [Text on a general Buddhist commander completing the construction of a cave temple at Daquan (i.e., the Mogao caves)], P.3302v, 933 CE. *Lou* 樓 and *ge* 閣 are storied buildings. In Tang-period nomenclature, a *lou* pavilion refers to a multilevel pavilion with waist-eaves on every level, whereas a *ge* pavilion refers to one without any waist-eaves. But the names have been used interchangeably since the middle period in China. Sun and Sun, *Jianzhuhua juan*, 136.

large ones reach five bays wide and three bays deep.¹¹⁷ Fifteen Guiyijun-period ante-halls, of which the foundations remain, have been measured. They account for 65 percent in average of the floor area of the main chamber (appendix F); in a few large hall caves, such as Caves 53 and 72, the ratio reaches as high as 80–100 percent.¹¹⁸ Almost every gigantic central-altar cave has a sizable ante-hall of fifty to one hundred square meters, reaching a quarter to a half of the floor area of the colossal-image pavilion. The former was less a drastic contrast than a secondary companion to the latter. The advent of the ante-hall turned the polarized architectural landscape into a spectrum comprising three scales or even more.

In comparison to porched antechambers of earlier periods, the ante-hall is significantly more accessible and spacious, thereby elongating the central axis of a cave temple (figure 3-36). As the aforementioned Zhang Huishen stele describes, “The purple hall of the dragon confronted the verdant pavilion of the phoenix.”¹¹⁹ The main cave chamber, referred to as “the dragon’s niche” (*longdian* 龍殿), and the ant-hall, “the phoenix pavilion,” were recognized as paired architectural spaces. By expanding the antechamber, the hall caves explored another dimension—the transversal axis deep into the mountain cliff. What superseded the niched-hall cave type in Guiyijun-period construction were the central-altar cave (*zhongxintan ku* 中心壇窟) and their backscreened variant (*beiping ku* 背屏窟) of unprecedented grandeur. These caves created a new sense of space, featuring an extended path through four layers of spaces: worship and circumambulatory spaces around a set of elevated, over-sized images, and a massive volume

117. For a complete list of ante-halls, see appendix F. The five-bay ante-halls include that of Cave 148 and the group of Caves 27–30 and 490.

118. Data after Pan and Ma, *Kuqian diantang*; Shi, *Mogao ku xing*; Sha, “72–76 kuqian diantang.”

119. 紫殿龍軒，對鳳樓而青翠。“Zhang huashen zaoku gongde bei 張淮深造窟功德碑” [Stele recording the merit of Zhang Huaishen’s cave construction], P.3720, appendix B-4.

of space. For instance, the largest cave at Mogao is neither Cave 96 nor 130 but the late-Tang Caves 16 (figure 3-37) and 94 (figure 3-38) of the backscreened central-altar cave type. Each cave has a central axis over 27.5 meters long, from the front of the modern antechamber to the rear wall of the main chamber, and a main chamber over 230 square meters, which can accommodate as many as 285 people at one time.¹²⁰ The gigantic central-altar cave complements the colossal-image cave in the expression of monumentality; the latter explores the dimensions of the plastic forms, whereas the former masters the volume of space.

The ante-hall's impact on the architectural spectacle was significant. Archaeological excavations have uncovered at least twenty-six ante-halls in the south section.¹²¹ Judging from the platform remnants, the ante-halls covered about two-thirds of the south section (figure 3-39). The central-altar cave is accepted as imitating the stand-alone image hall and as representing the Sinicization of Buddhist architecture.¹²² Recognizing the integrated construction of gigantic caves and ante-halls in the Guiyijun period, Sha Wutian further suggests that the bipartite paradigm represents a mature form of Sinicized Buddhist cave architecture.¹²³ While this statement is reasonable, we should not ignore the site conditions that accelerated the maturation of this building type and subsequently benefited from its wide application.

It is difficult to deny the possibility that the spacious ground level of the colossal-image pavilion set a model for the subsequent ante-hall design. It was following the renovation of the

120. Shi, *Mogao ku xing*, 1:81, 286; Shi Zhangru, "Guanyu cangjing dong de jige wenti," 35.

121. Eighteen ante-halls (Caves 108, 110, 98, 85, 61, 55, 467, 53, 46, 45, 44, 39, 38, 35, 30–27, 25, 22, 21) were discovered during the 1963–66 excavations, three (Caves 130, 152, 146), two (Caves 72, 76), and two ante-halls (Caves 96 and 94) were found in three later excavations in 1979–80, June–July, and October–November 1999. Also, the 1951 survey indicates that Cave 16 has a layer of tile paving a meter below the ground level of the current ante-hall.

122. Xiao, *Dunhuang jianzhu yanjiu* (2019), 399–403.

123. Sha, *Guiyijun shiqi*, 13–14, 19–20.

colossal-image pavilions that cave patrons commissioned some of the early ante-halls, including that of Cave 94.¹²⁴ The grandest ante-halls, commissioned by the Guiyijun leaders and high-ranking officials, were clustered around the “five-story *ge* pavilion” of Cave 96, and their platforms connected (figure 3-40).¹²⁵ Rising from the center of a row of monumental ante-halls was the multilevel pavilion that even protruded beyond the top of the cliff. The ante-hall of Cave 16, which is located at the northern end of the south section, is farthest from the colossal-image pavilions. But this cave, just like its “twin” Cave 94 that was added in the vicinity of Cave 96, contributes to the vertical composite of Caves 366 and 365 and a cliff-top structure. The composite was no longer an overhanging pavilion but could serve as “an entrance pavilion” (*meng* 門閣) to the cave complex.¹²⁶ A visual correspondence at the complex’s scale was established between the upgraded vertical composite and the colossal-image pavilion.

The roof design of special ante-halls echoed the rising tendency of the colossal-image pavilion. The common roof types for the Guiyijun period porches were hipped and hipped-and-gabled. The hipped roof (*wudian ding* 廡殿頂) was applied to the extant porches of Caves 427, 431, and 437 (figure 3-2), whereas the hipped-and-gabled roof (*xieshan ding* 歇山頂) was applied to the theoretical reconstruction of the Cave 53 ante-hall (figure 3-36). The common roof

124. As documented in the Zhang Huaishen Stele (P.3720, S.5630, ca. 882 CE), immediately after renovating the pavilion of Cave 96, Zhang decided to construct a gigantic cave (Cave 94) to the north of it.

125. For an astute analysis of the siting of caves commissioned by Guiyijun leaders, see Lee, “Repository of Ingenuity,” 201–5.

126. The entrance pavilion is a type of magnificent building and a symbolic form. A prototypical entrance pavilion is described in Daoxuan’s *Zhong Tianzhu shewei guo qihuan si tujing* 中天竺捨衛國祇洹寺圖經 [Illustrated scripture of Jetavana Vihara of Sravasti in central India]. According to the scripture, the main entrance to the ideal monastery (*jetavana*) is a three-storied great south gate. The three stories symbolize the three-fold emptiness, which is necessary to achieve before entering the dharma door of Buddhism. Ho Puay-peng, “The Ideal Monastery: Daoxuan’s Description of the Central Indian Jetavana Vihāra,” *East Asian History* 10, 1995: 16.

types feature a top ridge parallel to the cliff surface, thereby forming flattened-top contours. Meanwhile, some special types of roofs were applied to the largest ante-halls and refurbished antechambers. Judging from the beam holes on the cliff face, about a dozen timber-framed ante-halls or porches had a gable element and hence pointed contours. These special façades are distributed either near the multilevel pavilions or the densest area of ante-hall construction in the middle-north zone (figure 3-41). These hitherto unstudied traces indicate that the architectural appearance of several visual focuses and functional hubs along the Mogao cliff were enriched by upward-pointing roofs.

A preliminary study of roof typology uncovers a spectrum of picturesque forms. For instance, gable-front hipped-and-gabled roofs probably crowned the porches of Cave 94 and 231 (figure 3-42-a); a double-eaved roof gave Cave 454 a heightened façade (figure 3-42-b); an elongated pyramidal-shaped solid form might have decorated the eave-front roofs of Caves 152 and 209 (figure 3-42-c); and composite roofs with gable-front elements, probably in the style of disconnected cross-shaped ridge roof (*jiaoji wugai* 交脊屋蓋), made Caves 138, 148, and 428 stand out among the horizontally linked caves (figure 3-42-d). The double-eaved variant, although found in high-rank buildings, is uncommon for cave-front architecture. The pointed roofs are rarely found in extant standalone buildings; more commonly, they are seen in pictorial representations. Pioneering Chinese architectural historian Le Jiazao 樂佳藻 (1868–1944) first noticed the rare types of roofs in paintings of architecture since the Song dynasty and discussed their early prototypes.¹²⁷ Li Yunhe further points out the underlying reasons for the

127. Le Jiazao 樂佳藻, *Zhongguo jianzhu shi* 中國建築史 [History of Chinese architecture] (Beijing: Tuanjie chubanshe, 2005), 105–6, first published in 1930.

innovations—that is, the preference of variation in visual effects.¹²⁸ In a recent study of architectural paintings (*jiehua* 界畫) in ancient China, Wang Guixiang and Li Jing acknowledge that such paintings were more often made for visual appreciation than for building construction purposes.¹²⁹ If the opulent buildings with composite roofs were depicted on scroll paintings for the pleasure of viewing, then the opulent façades built onto the cliff face added a picturesque dimension to the cave landscape. The composite roofs at Mogao displayed a shared feature: they increased the height of the façade and suggested a vertical central axis. For one thing, the special façade was a visual index of a magnificent cave interior that would otherwise be invisible from outside the cave. And both displayed the prestige of the cave’s patrons. For another, the special roofs enriched the skylines and the visual rhythm of the architectural complex. In the Tang and Guiyijun periods, Buddhist Pure Lands were often envisioned as palaces adorned by opulent pavilions with a variety of roofs (figure 3-43). Echoing this pictorial idea, the architectural symphony projected on the cliff faces a real-sized, three-dimensional palatial complex.

A Spectacle in the Making

The historical transformation of a large architectural complex is marked by both the *longue durée* process and special moments.¹³⁰ In addition to stimulating the construction of site-

128. Li Yunhe 李允鈺, *Huaxia yijiang: Zhongguo gudian jianzhu sheji yuanli fenxi* 華夏意匠-中國古典建築設計原理分析 [Chinese conception of design: Analysis of the design principles in Chinese classical architecture] (Tianjin: Tianjin daxue chuban she, 2005), 186–87.

129. Wang Guixiang 王貴祥 and Li Jing 李菁, *Zhongguo gudai jiehua yanjiu* 中國古代界畫研究 [Study of the ruler-lined painting in ancient China] (Beijing: China City Press, China Architectural Industry Press, 2021), 105, 363.

130. For discussions of the two scales of temporalities in Renaissance architecture and urban space, see Manfredo Tafuri, *Ricerca Del Rinascimento: Principi, Città, Architetti* (Torino: Giulio Einaudi editore, 1992), 23–24, 89–90, and 223–24; Fabrizio Nevola, “Introduction,” in *Siena: Constructing the Renaissance City* (New Haven, CT: Yale University Press, 2008), accessed July 11, 2022, https://www-aaeportal-com.proxy.uchicago.edu/?id=-19420#A-19420_57.

changing vertical compounds and ante-halls, the colossal-image pavilions were backdrops to various activities at the caves.¹³¹ Renovation of the colossal-image pavilions provided a stage to display construction and social managements, an index of good governance. The second major renovation of the Cave 96 pavilion was framed as a collective project under the leadership of military governor Cao Yuanzhong 曹元忠 (d. 974) and his wife, Lady Zhai 翟氏.¹³²

According to “Merit Record of Cao Yuanzhong, Military Governor of the Guiyijun Circuit, and Wife Repairing the Northern Colossal-Image [Cave]” (Guiyijun jiedushi Cao Yuanzhong fufu xiu beidaxiang gongde ji 歸義軍節度使曹元忠夫婦修北大像功德記, Ch.00207V, appendix B-5), the project took place in the fifth lunar month of 966 CE, right after Cao adopted the most prestigious epithet of his life, the Great King (Dawang 大王).¹³³ The intervention comprised a replacement of worn columns of the lower levels and a reconstruction of the upper levels. The renovation project might or might not have changed the pavilion’s form, but it represents a new mode of appreciating the making process of the magnificent structure. The spectacular scene was even conducted under the eyes of Yuanzhong and Lady Zhai.

Renovation of the colossal-image caves prior to the Guiyijun period seems to have focused more on the interior than the exterior. The earliest recorded renovation is found in a Dunhuang manuscript titled “Official Document about Monk Cheng’en and Others Renovating a Maitreya Image of the Mogao Caves” (Cheng’en deng chongxiu mogaoku mile xiang tie 乘恩等

131. For festive, ritual, diplomatic activities at the caves in medieval times, see Ma, *Dunhuang Mogao ku shi yanjiu*, 194–201.

132. Ma, “Song qiande sinian.”

133. Cao has used the title since 964. For an annotated transcription of the merit record, see Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1341–69. For Cao’s titles, see Rong, *Guiyijun shi yanjiu*, 121–22.

重修莫高窟彌勒像帖, DX.06056, appendix B-6).¹³⁴ The text indicates how material and labor were organized for a restoration project of a colossal Buddha image at the Mogao caves. The renovation took place around 817 CE and was led by one Cheng'en 承恩, a Buddhist priest, and was conducted by monks from many local monasteries. According to Ma De's study, the renovation was of one of the two colossal-image caves and most likely Cave 130.¹³⁵ The writer, probably Cheng'en himself, reports that the Buddhist priests of all monasteries in Dunhuang gathered at Lingtu Monastery 靈圖寺 to negotiate every party's role in the restoration. The consensus reached by the Buddhist priests was that the construction materials would be provided by "the host of the cave" (*kujia* 窟家), the labor would rely on "disciples of Chan and Vinaya priests of all the monasteries," and the restoration would be supervised by the local Buddhist priests. The thirty priests were subdivided into six groups to check daily progress in turns. This project was foremost a refurbishment of the polychromic clay statue, as the material supplies included pigments, linen, and glue. It seems to have included a renovation of the timber-framed façade, as wood and earth were supplied, too. This mode of renovation, interior mainly, sharply contrasts with the 966 renovation of Cave 96, in which only the exterior was refurbished.

The 817 renovation sheds light on the good construction management of the Buddhist institution in Dunhuang. Management became a more complex task in the Guiyijun period; the 966 renovation entailed patrons of almost all social strata and three hundred builders. The 966 renovation was carried out by three tiers of collaborators. The first tier—the initiator and leader of the construction—were Yuanzhong and Lady Zhai, who represented the office of the Guiyijun Circuit. The second tier was the project manager and the supervisors; it included the chief

134. The manuscript is transcribed and analyzed in Ma, *Dunhuang Mogao ku shi yanjiu*, 96–98.

135. Ma, *Dunhuang Mogao ku shi yanjiu*, 97–98.

Buddhist controller, Ganghui 鋼惠, the directors of monks, Yuanqi 願啟 and Xinli 信力, the disciples of general masters Yu Hou 虞候 and Li Xingsi 李幸思, and the head of twelve local monasteries. This second tier collectively represented the Buddhist institution in Dunhuang. In addition, the secondary donors among clergy and laity belonged to this tier. The third tier was monastic labor and professional artisans who executed the project; they comprised twenty monks from each of the twelve local monasteries in Dunhuang, fifty-six carpenters, and ten masons. While the government and the monastic institutions offered food, the executors offered their labor. The project also created many occasions for the three tiers to mingle. For instance, Lady Zhai herself prepared food for all workers, and the fundraising process presumably involved frequent and broad interaction among the monastic representatives and the residents. If the 817 renovation was a preparation for a spectacular outcome, then the 966 project was a spectacle in its own right.

That a colossal-image pavilion alone was made a landmark project is because cave-front architecture entails a mode of construction very different from cave excavation.¹³⁶ Compared with the multiyear duration of excavating a colossal-image cave, repairing the colossal-image pavilion took only ten days of preparation and twelve days of construction.¹³⁷ A short period in which a large number of builders and artisans gathered in an open-air site was a great occasion for displaying skills and organization. The scenic construction process and the artisans'

136. For the procedure of excavating a cave, see Sun and Sun, *Shiku jianzhu juan*, 157–59.

137. Timeline (lunar calendar):

5.9: Ruler and wife went to the Mogao caves, initiated the project, and persuaded Buddhist officials.

5.21–22: Workers replaced columns of the lower levels.

5.23–24: Workers dismantled the upper levels.

5.25–6.2: Workers made scaffoldings and rebuilt the upper levels.

6.4: Cao and Lady Zhai returned to the Dunhuang town.

specialization are illustrated by the praise of a contemporary ante-hall construction:

Project Manager Li's measurements and planning are peerless. . . . The beams and columns are extremely many. He made them into structures in the air. Even Lu Ban was not superior to him. Master Kang was good at cutting wood with axe. . . . Master Zhang diligently polished and refined the work. Just after half a month of construction, the pavilion took form as if connecting to the Milky Way above.

李都料繩墨難過. . . .攢梁用柱極多；直向空裡架鏤. . . .康博士能行斫斧. . . .張博士不曾道病，到來便如琢磨。施工才經半月，樓成上接天河。¹³⁸

The two carpenters and one mason in the text represent the distribution of skilled labor in timber-framed porch construction: a project manager (*duliao* 都料), who was often a master carpenter, planned and designed the timber structure and directed the construction, whereas skilled artisans (*boshi* 博士) were responsible for carpentry, masonry, and so forth.¹³⁹

Meanwhile, the earthly phenomenon evoked an unearthly imagination. Just as the pavilion was “reflected on the river” in the actual site, it also seemed to be “connected to the Milky Way above.”¹⁴⁰

The climactic moment of the renovation, like other construction projects, was the

138. “Hexi dusengtong dangquan jianku shangliang wen 河西都僧統宕泉建龕上樑文” [The beam-raising text on a general Buddhist controller completing the construction of a cave temple at Daquan (i.e., the Mogao Caves)], P.3302v, 933 CE. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1492–95. Lu Ban was a legendary carpenter in ancient China.

139. Ma De, *Dunhuang gudai gongjiang yanjiu* 敦煌古代工匠研究 [A Study of artisans in ancient Dunhuang], 2nd ed. (Beijing: Wenshu chuban she, 2018), 144–45.

140. “Li Kerang xiu Mogaoku fokaan bei” (P.3608). “Hexi dusengtong dangquan jianku shangliang wen” (P.3302v).

ceremony of “raising the top-ridge beam” (*shangliang* 上樑) at the completion of construction. The aforementioned eulogy of artisans is excerpted from a “beam-raising text” (*shangliang wen* 上樑文) of a construction project commissioned by a chief Buddhist controller surnamed Wang 王 in 933 CE. The described event has been identified as the renovation of the vertical cave-pagoda composite comprising the late-Tang Cave 143 and a cliff-top pagoda above.¹⁴¹ The text renders the beam-raising ceremony as a gathering scene more spectacular than the construction process: “On the auspicious day, the ceremony of raising the top-ridge beam was held. Magistrates of the five counties all arrived. Ladies and gentlemen of the circuit gathered at Daquan [Mogao caves]. Thousands of baskets of steamed bread were thrown into the air. Even gold and silver coins were offered.”¹⁴²

The beam-raising ceremony of the over 40 m tall colossal-image pavilion must have been even more spectacular than that of the 15 m tall composite of Cave 143 and cliff-top pagoda. A higher pavilion made a great stage for performance and viewing, and a larger ground in front of the cliff could accommodate more audience at once. Although the beam-raising ceremony of the colossal-image pavilion is not recorded, such imagery is still felt at the site and reenacted by our

141. In the 1990s, Ma De associated the text with the construction of the cave-pagoda composite in *Dunhuang Mogao ku shi yanjiu*, 123–24. Yet the cave is dated to “late-Tang” in *Dunhuang shiku neirong zonglu*, 55; and a recent study of the cliff-top pagoda above Cave 143 by Guo Junye suggests that the pagoda was constructed in the late Tang and renovated in the Five Dynasties. Guo Junye, “Dunhuang Mogao ku di 143 ku shangfang ta diaoyan yu yanjiu 莫高窟第143窟上方塔調查與研究” [Survey and study of the pagoda above Mogao Cave 143], in *Dunhuang luntan: Yidai yilu shiye xia de dunhuangxue yanjiu xueshu yantao hui lunwen ji* 敦煌論壇：“一帶一路視野下的敦煌學研究”學術研討會論文集 [Dunhuang forum: Conference proceedings of the academic conference on “Dunhuang Studies under the Perspective of One Belt One Road”] (Dunhuang: Dunhuang Academy, September 2021): 112–25.

142. 今因良時吉日，上樑雅合周旋。五郡英豪並在，一州士女妍闐。蒸餅千盤萬擔，一時雲集宕泉，盡向空中亂撒，次有金錢銀錢。“Hexi dusengtong dangquan jianku shangliang wen” (P.3302v).

own experience. Having climbed up and down the cliff to survey and clean the caves, Chinese artist Chang Shuhong 常書鴻 (1904–94) painted a festive gathering in front of the nine-story pavilion in 1945 (figure 3-44). Judging from the headdress and costumes of the ladies and the carriages driven by the men, the scene represented an event in the Tang or the Guiyijun periods. The pavilion in the painting is less of a reliable reconstruction of the medieval version than an impressionistic collage of the current version and architectural ornaments depicted in the caves.¹⁴³ But the pavilion and three soaring façades in the surroundings serve as a perfect backdrop for the great assembly of “magistrates of the five counties” and “ladies and gentlemen of the circuit.” Such a gathering would have been an ideal occasion for displaying a model social apparatus under the leadership of a competent lord. As the merit record of Yuanzhong indicates, “The time was peaceful and the path was safe, folks were rich, and people were settled. All is in debt to the brilliant leader who cultivated them and the benevolent lord who created them.”¹⁴⁴ The 966 renovation testified to the good governance of the lord and served as a visual eulogy of his regime.

Unlike earlier Guiyijun leaders, Yuanzhong did not have a chance to build a merit cave in the vicinity of the colossal images. The surroundings of Cave 96 had been saturated by the merit caves of prestigious patrons, featuring Caves 231, 94, 98, and 100.¹⁴⁵ These caves were commissioned, respectively, by members of the Yin, Zhang, and Cao clans, the latter of which included Yuanzhong’s father, Cao Yijing, and mother, the Uighur princess. As compensation,

143. For instance, the gridded panels as substitution of bracket sets are a typical architectural ornament for a canopy-shaped niche, including those in the adjacent Tibetan-period Caves 231 and 237.

144. “Guiyijun jiedushi Cao Yuanzhong fufu xiu beidaxiang gongde ji” (Ch.00207V).

145. Therefore, Yuanzhong’s merit caves (Caves 61 and 55) are located in an area of about two hundred meters farther north from the Cave 94 vicinity.

the temporary construction provided Yuanzhong a chance to perform in a social spectacle.

The renovation of a colossal-image pavilion might have provoked in some beholders' minds the higher truths of Buddhism. The collision between ephemerality and grandeur reminds us of the event that caused Maitreya to embark on the Buddhist path: the destruction of a jeweled structure. While the jeweled structure is referred to in scripture as "a terrace" (*tai* 臺) or "a pillar" (*chuang* 幢),¹⁴⁶ the Maitreya transformation tableaux (*Mile jingbian* 彌勒經變) in Dunhuang sometimes represents the structure as an incomplete multilevel pavilion in front of the central icon of Maitreya (figure 3-45).¹⁴⁷ The scene depicts the moment when Maitreya Bodhisattva, witnessing the precious gift from the sagely King Śaṅkha (Rangqu 儻佉) being dismantled by the Brahmans right before his eyes, realizes the impermanent nature of all things and thus acquires the state of mind to leave home and enter the Buddhist path. During every renovation of the colossal-image pavilion, the participants must have seen a dismantlement of the pavilion's damaged members.¹⁴⁸

Would the actual and imagined scenes have had an impact on their understanding of the caves and their pavilion-like façades? Hongbian, one of the Buddhist priests who participated in the 817 renovation, recalled the idea of impermanence when building the seven-buddhas cave

146. According to *Foshuo mile xiasheng cheng fo jing* 佛說彌勒下生成佛經 translated by Kumārajīva (344–413), a sagely king Śaṅkha offered "a seven jeweled terrace" (七寶臺) to Maitreya, who gave it to the Brahmans (*T* 454, 14:424, b, ll.21–25). A variation of the story is told in *Foshuo mile xiasheng chengfo jing* 佛說彌勒下生成佛經, translated by Yijing 義淨 (635–713). According to it, the king directly gave "a seven jeweled pillar" (七寶幢) to the Brahmans under the eyes of Maitreya (*T* 455, 14:427, a, l.24–b, l.3).

147. Li Yongning 李永甯 and Cai Weitang 蔡偉堂, "Dunhuang bihua zhong de mile jingbian (zhaiyao) 敦煌壁畫中的彌勒經變 (摘要)" [Maitreya transformation tableaux in Dunhuang murals (abstract)], *Dunhuang Yanjiu* 2 (1988): 34–36; Wang, *Mile jing huajuan*, 101.

148. The 966 renovation, for example, involved "replacing the timber members of the columns" and "dismantling the structure."

(Cave 365) in 832–34. The merit record of this construction narrates an occasion in which Hongbian informed his disciples about his rationale for constructing the cave, which is part of the vertical composite later known as the pavilion. Hongbian calmly admitted the ephemerality of material things: “Clay niches are not substantial” (*nikan bushi* 泥龕不實), and “bamboo and silk[-based artifacts] are not real” (*zhusu feizhen* 竹素非真). Meanwhile, he elucidated that the ephemeral things are capable of holding and transmitting the higher truths of Buddhism.¹⁴⁹ Having witnessed the lifecycles of the Mogao colossi and their pavilions, religious thinkers in Guiyijun Dunhuang began to see the dual nature of devotional art and architecture: impermanence can coexist with the force of suggesting a higher reality.¹⁵⁰ In this light, the destruction of a magnificent pavilion can itself lead to spiritual awakening—that is, understanding the circle of life of all things and all beings, one is led to pursue the noble teachings of Buddhism.

Conclusion

This chapter has examined the dynamic relationship between the multilevel pavilions and the Mogao cave landscape on two levels. At the level of caves and cave groups, it discusses three aspects in which the colossal-image pavilions participated in the formation of the three-story pavilion. First, the Tang dynasty colossal-image caves and their pavilion-like façades introduced the visual idea of verticality to the cave complex, thereby stimulating the advent of the vertical cave-pagoda composites in the Tibetan period. In turn, the composites that protruded beyond the

149. Excerpt from the Wu Sengtong stele. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 274–75. See chapter 3.

150. This force is defined as “virtuality” by David Summers in *Real Spaces: World Art History and the Rise of Western Modernism* (New York: Phaidon, 2003), 431.

top of the cliff stimulated the colossal-image pavilions to “grow taller” and to redefine the architectural pattern. Second, the colossal-image pavilions introduced monumental scale, which was subsequently brought into the Guiyijun-period paradigm of gigantic-hall cave with a ground-level ante-hall; one such cave was added to the bottom of a vertical cave-pagoda composite, transforming it into a monument comparable to the two colossal-image pavilions. Third, the renovations of the two colossal-image pavilions engaged political and religious leaders and prepared them for making their own merit caves at Mogao. Cave patrons not only learned necessary skills of managing large construction projects but also became aware of the link between the magnificent but ephemeral architecture and the higher truths in Buddhism. The two types of multilevel pavilions at Mogao exemplify the interplay among caves and cave groups in visual, spatial, and conceptual terms.

At the level of the complex, the study applied three methods to uncover the historical visibility of the architectural landscape. One method is a theoretical reconstruction of the typological spectrum of cave-front architecture. It reveals the building-up process of a picturesque megastructure; a horizontal landscape made of porches linked by overhanging passageways became interspersed with vertical and then deep structures, such as multilevel pavilion-like porches equipped with stairs, large ante-halls with gable-sided roofs, eave-sided roofs with a pointed element, and double-eaved roofs. Another method is an analysis of the embodied viewing experience of the human beholders and the colossal images. The correspondence between medieval textual records and modern visual representations indicates the trans-temporal and cross-cultural power of the site. And it is through cave-front architecture, which explored all dimensions and scales of the site, that this power has been felt. The third method is seeing the historical conceptions of the architectural landscape through visual

representations. It reveals the changing imageries of the Mogao caves as a whole; the sixth-century imagery is of a secluded monastic dwelling in mountains, whereas the Tang- and Guiyijun-period imagery is of soaring mountain pagodas and heavenly palaces of unparalleled height.

Chapter 4

Constructing a Pure Land in Situ

Utopian vision characterizes the art of Pure Land, a major genre of East Asian Buddhist art. The Pure Land (Chn: Jingtū 淨土, Jpn: Jodo), a Buddhist paradise, denotes the set of ideas and practices based on world-systems other than our own embodied earthly realms.¹ For Pure Land adherents, Pure Land art is a visual aid for perceiving the possibility of rebirth in the supremely blissful buddha-fields, among which the Western Pure Land of Amitābha, the buddha of limitless life, is one of the most desirable.² Palatial buildings rising from lotus ponds distinguish the topography of the Western Pure Land. This imagery has been conveyed through sculptural and pictorial mediums and spatial installations and circulated across regions of varied climates and topographies in East Asia (figures 4-1 and 4-2). The visual paradigm is hardly constrained by locale and time; contemporary patrons in Hong Kong, for example, who aimed to “integrate the ideal Buddhist world with the actual humane landscape” referenced Pure Land paintings in medieval Dunhuang and Pure Land gardens in Kyoto as sources for their architectural design ideas.³ The pictorial mediums and the embodied viewing of the Pure Land are, however, conditioned by the actual space and place. For instance, mural paintings that decorate the rock-

1. Vincent Eltschinger, “Pure Land Sūtras,” in *Encyclopedia of Buddhism Online*, edited by Jonathan A. Silk, Oskar von Hinüber, and Vincent Eltschinger, doi:http://dx.doi.org/10.1163/2467-9666_enbo_COM_0018.

2. As Mahayana Buddhism, the form of Buddhism in East Asia, embraces the concept of myriad Buddhas, it also develops the Buddha lands of ten directions and three times. In addition to the Western Pure Land, the popular Pure Lands include the Eastern Pure Land of Bhaiṣajyaguru, the medicine Buddha, and the Pure Land of Maitreya, the future Buddha. Eugene Y. Wang, “Pure Land Art,” in *Encyclopedia of Buddhism*, ed. Robert Buswell (New York: Macmillan, 2003), 693–98.

3. Chi Lin Nunnery, “Tangsi zaixian 唐寺再現” [Representing the monastery of Tang China], <http://www.chilinhk.cn/buddhism/tang/index.html> (accessed April 25, 2022).

cut chambers, timber façades, and surrounding cliff surfaces of the cave temples facilitate a visual dialogue between the interior and the exterior. This chapter reveals how the open-air murals on the cliff face helped to integrate the utopian topography and the locale site.

The paintings of the Western Pure Land inside the Dunhuang cave temples are known to exemplify a visual paradigm for contemplating the Buddhist sacred realms during the Tang dynasty. However, open-air murals with similar paradisiacal elements—such as ornate timber-framed halls, various offerings, heavenly musicians, and fantastic creatures—received little scholarly attention.⁴ By surveying the configuration of the open-air murals and timber-framed façades, this chapter contextualizes open-air murals in a new paradigm of cave design developed during the Guiyijun period. The chapter's first two sections examine the visual paradigm of Pure Land painting and Pure Land cave temples of the high-Tang period. A case study of Mogao Cave 172 and neighboring caves illustrates how Pure Land imagery can be integrated with the architectural space of cave and cave suite. After a methodological discussion in the third section, three following sections examine the open-air murals that were atmospheric extensions of the cave architecture, thereby bringing the Pure Land image from inside out. Two case studies demonstrate how the exterior murals gave rise to an interwoven architectural imagination of the Buddhist sacred realms with the actual cliff landscape. In the vicinity of Cave 94, the exterior mural depicts a Buddhist gathering in a hall vertically aligned with the ground-level ante-hall, creating a visual echo between the virtual and the actual places. In the area centered around Cave 428, the exterior mural horizontally connects the multiple timber façades, visualizing a

4. Due to the bad condition of preservation, the visual contents of most open-air murals are difficult to see unless examined in situ. Current studies are mostly empirical surveys, and discussions have been concentrated on the preservation condition of the remaining murals and the subject matters of the images. For a detailed discussion, see the subsection “methodological challenges and solutions” of this chapter.

symmetrically designed palatial complex on the cliff. Finally, a close reading of a visitor's inscription reveals the transformative power of the comprehensive built environment. By exploring the trans-media practice of constructing a Pure Land at Mogao, this study aspires to shed light on the situated-ness of the utopian vision.

Pictorial Image of the Pure Land

The Mogao cave complex is known for the contents inside the caves, such as Buddhist statues and mural paintings. One of the most frequently cited pictures of the Pure Land is a sūtra painting in Mogao Cave 172 of the high-Tang period (figure 4-1).⁵ The sūtra painting, or what specialists would call a “transformation tableau” (*bianxiang* 變相),⁶ is a visual rendition related to a Pure Land Buddhist scripture titled *Sūtra of the Meditation on the Buddha of Immeasurable Life* (Foshuo guan wuliangshou fo jing 佛說觀無量壽佛經, hereafter the *Meditation Sūtra*).⁷

The tripartite picture comprises a central panel depicting Amitābha's paradise, two side panels of the Ajātaśatru narrative on the left and the sixteen meditations on the right. Due to the visual preeminence and the confrontational representation, the central scene absorbs the beholder's

5. Discussions of the Pure Land transformation tableaux are numerous; for a recent literature review, see Anne Feng, “Water, Ice, Lapis Lazuli: The Metamorphosis of Pure Land Art in Tang China,” PhD diss., University of Chicago, 2018, 2–29. Architectural historian Xiao Mo considers this painting to be a quintessential example of architectural painting in ancient China. Xiao, Sun Ruxian, and Sun Yihua, among others, have proposed various layouts of the courtyard complex it depicts. Art historian Wu Hung instead examines the visual modes of the tripartite picture. See Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 76–79, 293–97; Sun and Sun, *Jianzhu huajian*, 116–17, 125–27; Wu Hung, “Reborn in Paradise: A Case Study of Dunhuang Sūtra Painting and its Religious, Ritual, and Artistic Contexts,” *Orientalism* 23, no. 5 (1992): 52–60.

6. There is much scholarship on *bianxiang*. See, for example, Wu Hung, “What is Bianxiang?—On the Relationship between Dunhuang Art and Dunhuang Literature,” *Harvard Journal of Asiatic Studies* 52, no. 1 (1992): 111–92.

7. *Foshuo guan wuliangshou fo jing* 佛說觀無量壽佛經 [Sūtra of the meditation on the buddha of immeasurable life], trans. Kālayaśas 罽良耶舍 (383–442), *T* 365, vol. 12.

attention.

Amitābha Buddha (also known as Amitayus), depicted as the central icon in the scene, is holding an assembly of buddhas, bodhisattvas, and heavenly musicians on railed platforms that are raised above lotus ponds and surrounded by halls, pavilions, colonnades, and corner towers—a Chinese-style palatial complex that visualizes the medieval East Asian imagination of the Western Pure Land. Transformed buddhas, attending bodhisattvas, flying apsaras, and self-playing musical instruments hovering in the air, along with babies reborn via lotus flowers blooming in the ponds, are all in the process of joining the assembly. The infant-like aspirants are interlocutors for us, mortals of the actual world and beholders of the pictorial paradise.⁸ According to the scriptures, the way in which one enters the Pure Land is via a rebirth fueled by a persistent practice of contemplating the step-by-step manifestation of the Pure Land—the sixteen meditations.⁹ It can take an extremely long time for one’s lotus flower to blossom, depending on one’s karmic debt. The *Meditation Sūtra* introduces a rebirth system called the nine grades of rebirth (*jiupin wangsheng* 九品往生).¹⁰ While the rebirth system promises an all-inclusive salvation, only the lotus flowers for the aspirants of the upper four grades open immediately; aspirants of the other five grades must wait inside their lotuses for various durations. Those who belong to the lower level, lower grade, for example, must wait until twelve

8. An *aspirant* refers to a sentient being who is born in the blissful land of Amitābha by transformation. The age of an aspirants at the moment of the transformational rebirth is not specified in Buddhist scriptures, but medieval Chinese painters usually depict them as babies.

9. While the most general practice is “being mindful of the (Amitabha) Buddha,” a specific meditation process called the “sixteen meditations” is introduced in the *Meditation Sūtra*. A historical discussion is included in a work of the eminent Tang monk Shandao 善導’s (613–81), *Guannian Amitofo xianghai sanmei gongde famen* 觀念阿彌陀佛相海三昧功德法門 [Methods for the merit of samadhi by visualizing the sea-like Image of Amitayus-Amitabha], *T* 1959, vol. 47.

10. Wang, “Pure Land Art,” 693.

great kalpas have passed.¹¹ How could one endure the pain of not being able to reach the Pure Land while constantly contemplating one's being there, often with the visual assistance of similar imageries?¹² What roles did the Dunhuang cave art play in alleviating the pain of being so distanced?

The painters of Tang China pulled out all the stops to make the Pure Land look real. They applied a proto-linear perspective to suggest a visual depth; they meticulously rendered the building structures to define the coordinate axes of a pictorial space; they carefully arranged the figures and atmospheric elements to indicate the foreground, the mid-ground, and the fields of water and air. Most strikingly, by lining up three bridges and two terraces alternatively, the painters created a central path that guides one, or one's gaze, to meet with the Buddha (figure 4-3). By means of a layered composition and a structured access, the image turns the temporal distance between the defiled world of ours and the Pure Land of Amitabha's into a spatial distance. In other words, the artists invented an *architectural* approach to the Pure Land.

The architectural approach was grounded on the notion of environment, which is crucial to the Pure Land meditation practice. Prior to visualizing the holy figures, one must evoke a vivid image of the Pure Land topography. As the *Meditation Sūtra* prescribes, the sixteen topics for meditation are, successively, the sun, the water, the ground, the trees, the pound of eight virtues, the jeweled buildings, the flower throne, the image, the body and light of Amitayus Buddha, Bodhisattva Avalokiteśvara, Bodhisattva Mahasthamaprapta, comprehensive

11. *T* 365, vol. 12, p. 346, a 20–23. A kalpa (*jie* 劫) or aeon is the immensely long period of time defining the cycle of creation and re-creation of the universe in Buddhist and Hindu cosmology.

12. For the ways in which such imageries aid a practitioner to visualize the Buddhist paradise in his or her mind, see Alexander C. Soper, *Literary Evidence for Early Buddhist Art in China* (Ascona: Artibus Asiae supplementum XIX, 1959), 144; and Wu Hung, "Reborn in Paradise," 57.

meditations related to rebirth assured, miscellaneous meditations related to rebirth assured, the upper levels of rebirth, middle level of rebirth, and lower levels of rebirth.¹³ According to Shandao's 善導 (613–81) commentary, the first seven topics are “dependent” reward (*yibao* 依報) that helps the meditator build up the Pure Land environment in the mind, the following five topics are “main” reward (*zhengbao* 正報) that helps the meditator envision the holy presence of the Amitābha triad, and the last three topics elaborate on the rebirth system.¹⁴ The Pure Land topography not only anchors the holy assembly but also invents a visual target of rebirth.

To better understand the historical visuality of this invention, it is necessary to provide an explanatory note about the use of perspective in premodern Chinese contexts. Perspective is broadly defined as a method of representing three-dimensional forms and spaces on a pictorial plane. Formally speaking, the overall perspective of a Pure Land painting consists of two halves of isometric, oblique projection that mirror one another along a central vertical axis. At a local level, building forms are depicted from multiple viewing angles: roofs and façades seen from a frontal view (figure 4-4-a), eaves from below (figure 4-4-b), and grounds from above (figure 4-4-c). Because of the complexity of pictorial composition and architectural forms, no agreement has been reached about the terminology and visual logics of the hybrid manner of suggesting visual depths.¹⁵ The conception of a painting as “a window on the world”—for which perspectival

13. T12, 0365.

14. Chinese monks Huiyuan of the Jingying Temple 淨影慧遠 (523–92), Zhiyi 智顛 (538–79), Jizang 吉藏 (549–623), and Shandao offered four kinds of categorization of the sixteen meditations. This study follows Shandao's categorization. Feng, “Water, Ice, Lapis Lazuli,” 257–60.

15. The perspective is sometimes referred to as “the herring-bone perspective,” because the vantage points are aligned along the central axis. Scholars of Chinese paintings have also proposed calling it “parallel perspective” or “parallelogram perspective.” Others call it

techniques were invented—pervades Western art history, but it is less common in the premodern Chinese contexts.¹⁶ Many paintings, such as the two side panels of the painting, are self-contained pictures that address the viewer as a witness rather than an active participant.

According to art historian Wu Hung, the uncommon design of an iconic representation enforced by the proto-linear perspective suggests a direct relationship between the viewing subject and object. And the completion of the picture requires both that the Buddha exist within the pictorial space and that the viewer exist outside it.¹⁷ Hence, the occasional use of perspective would have been more visually striking for medieval Chinese viewers than for us.

An experiment of changing the architectural backdrop of the painting demonstrates specific effects of this proto-linear perspective. By replacing it with the “standard” modern perspective of the same building complex, one can see a more coherent spatial construct, but the pictorial space could no longer emplace the well-composed assembly. For instance, a bird’s-eye view (figure 4-5) shows the overall layout at the expense of the canopy-like effect of the triply

“perspective from point to point” because of the represented buildings. For discussions of the perspectives in Chinese landscape and architectural paintings, see Zhang Jianyu 張健宇, *Hantang meishu kongjian biao xian yanjiu: Yi Dunhuang bihua wei zhongxin* 漢唐美術空間表現研究: 以敦煌壁畫為中心 [Representations of space in Chinese art from the Han to the Tang Dynasty: A Study Based on Dunhuang Murals] (Beijing: Zhongguo renmin daxue chuban she, 2018), 320–22; Zhao Shengliang 趙聲良, *Dunhuang bihua fengjing yanjiu* 敦煌壁畫風景研究 [A Study of the landscapes in Dunhuang murals] (Beijing: Zhonghua shuju, 2005), 114–66; Fu Xinian 傅熹年, “Zhongguo gudai de jianzhu hua 中國古代的建築畫” [Architectural painting in ancient China], *Wenwu* 3 (1998): 75–94; Xiao Mo, *Dunhuang jianzhu yanjiu*, 3rd ed., 321–47; Anita Chung, “The Jiehua Tradition,” *Drawing Boundaries: Architectural Images in Qing China* (University of Hawai‘i Press, 2004), 27; Puay-peng Ho, “Constructing Paradise: Heavenly Buildings in the Silk Paintings of Dunhuang,” paper delivered at the Department of Fine Arts, University of Hong Kong, June 1996; Wang Guixiang 王貴祥 and Li Jing 李菁, *Zhongguo gudai jiehua yanjiu* 中國古代界畫研究 [Study of ruler-lined painting in ancient China] (Beijing: China City Press, China Architectural Industry Press, 2021).

16. Michael Bird, “Window on the World,” in *100 Ideas that Changed Art* (London: Laurence King, 2012), no. 29.

17. Wu Hung, “Reborn in Paradise,” 54.

stacked roofs of the central halls. A one-point perspective at eye level conveys a sense of an architecturally encircled space but fails to include the assembly in the foreground (figure 4-6). Because all parallel lines point to a single vanishing point, the adapted still images can comfort the eye but can never address all features in the mentally constructed environment of the Pure Land. By comparison, the herringbone perspective construct of the mural (figure 4-7) allows almost all desired features of the Pure Land environment to be visualized.

Furthermore, as I would suggest, this perspective construct implies the procedure of approaching the Pure Land (figure 4-8, appendix G). Because the painting is too big to be grasped all at once by a worshiper in the cave, the worshiper is compelled to examine it part by part. Because multiple vanishing points exist along the vertical axis of the painting, the viewing is accompanied by movements of an implied traveler whose steps the beholder travels to experience the visionary built environment. Looking at the painting at eye level or a bit downward (from a point 1–1.5 m above ground level), the worshiper naturally sees the lotus pond and terraces, from which the imaginary journey begins. To visualize the pictorial space, the worshiper first contemplates an imaginary traveler arriving at the Land of Bliss through the central-front bridge (scene 1). Then the worshiper continuously contemplates the aspirant's getting closer to the Buddha, passing through terraces and bridges one after another (scenes 2 through 5). This imaginary pilgrimage comes to a climax when the imaginary traveler arrives at the main terrace (scene 6). As soon as the Amitābha triad manifest in front of the imaginary traveler, a transformation occurs in the worshiper's vision. Previously, the worshiper was looking down at someone else's movements, which was inferred from the high view angles in scenes 1 through 6. Hereafter, the representation of the halls and pavilions is closer to the view at eye level, suggesting the worshiper's presence in front of the holy assembly. In addition to the

direct relationship established between the viewer and the Buddha icon, the main hall behind the holy assembly looks just like what one might see when standing in front of a Buddhist temple (scenes 7 and 8). At that moment, the worshiper might even self-identify as the imaginary traveler in the pictorial space, because he or she sees what the latter would see. The worshiper has now become a witness of the Pure Land in the painting. The subsequent scenes correspond to the worshiper's free roaming through the main hall and the hall(s) behind (scenes 9 and 10), gazing at the distanced land from the corner pavilions (scenes 11 through 13), or being suspended in midair and overlooking the entire assembly in the side halls and pavilions, on the terraces, and in the lotus ponds (scenes 14 through 16). While oblique parallel projection is the main technique applied in the construct, the overall effect is similar to multiple-point perspective, which suggests the viewer's constant shift of position. This viewing mode is analogous to an imaginary journey in the pictorial space.

My theoretical reconstruction of the viewing procedure corresponds with the medieval Chinese monks' contemplation. A dreamy journey to the Pure Land is recorded in *Song gaoseng zhuan* 宋高僧傳 (Biographies of eminent monks compiled during the Song period).¹⁸ As the author, Zanning 贊寧 (919–1001), reports, two seventh-century monks, Qifang 啟芳 and Yuanguo 圓果, dreamed of visiting the Western Pure Land during a summer retreat at Wuzhen Monastery 悟真寺 in Lantian County. In their dream, Qifang and Yuanguo saw a great lotus pond and flew into a jeweled tent that was located on the east side of the pond. In the tent, they

18. For basic information of the *Biographies*, see Li Xueqin 李學勤 and Lü Wenyu 呂文鬱, eds., *Siku da cidian* 四庫大辭典 (Changchun: Jilin daxue chubanshe, 1996), 2:2257; Ulrich Theobald, “*Song gaosengzhuan* 宋高僧傳,” in ChinaKnowledge.de, published March 17, 2012, <http://www.chinaknowledge.de/Literature/Religion/songgaosengzhuan.html> (accessed July 23, 2022).

encountered monks who had been reborn there, Bodhisattva Avalokiteśvara, and Amitābha Buddha himself. After Amitābha assured them of a rebirth into his land, the jeweled tent carrying the holy beings departed toward the west. Then, moving westward, the two monks passed through three jeweled terraces that carried laymen, laymen and monks, and monks.¹⁹ The anecdote reconfirms the Chinese imagination of the Pure Land environment, such as a ground as flat as mirror, a great lotus pond in which multiple terraces are erected, and jeweled canopies. More importantly, it illustrates the bodily movements of the imaginary visitors, who are spirits of the worshipers, through the terraces above in order to follow the trajectory of Amitābha. Should such a dreamy experience be pictured, the Pure Land transformation tableau offers a visual template.

The visual paradigm of the Pure Land transformation tableaux is by no means fixed; in fact, none of the hundred and more Pure Land paintings from the Mogao caves are identical. The lotus pond is a basic topographical element in Pure Land paintings throughout, whereas the courtyard complexes have been gradually developed since the Tang. An early painting of the Western Pure Land in Mogao Cave 393 from the Sui period depicts minimal environmental elements, namely, a pond of irregular shape below the lotus thrones of the Amitabha triad (figure 4-9-a).²⁰ The early-Tang period (618–705) saw the emergence of large platforms and rectangular ponds. At the turn of the seventh and eighth century, while the single buildings began to acquire as much architectonic details as the later paintings do, the foreground was still designed relatively simply—usually a platform separated from the main platform by a stripe of lotus pond

19. *T* 2061, 50:863, b21-c14.

20. Shi Pingting 施萍婷, *Dunhuang shiku quanji 5: Amituojing huajuan* 敦煌石窟全集 5: 阿彌陀經畫卷 [Comprehensive collection of the Dunhuang grottoes 5: Volume on Amitabha sūtra painting], ed. Dunhuang Yanjiu Yuan 敦煌研究院 [Dunhuang Academy] (Honk Kong: Shangwu yinshu guan, 1999), 20.

(figure 4-9-b). From the high-Tang period, the Pure Land paintings began to acquire a composition of multiple terraces and bridges in the foreground. The established composition was also applied to visual representations of other buddha lands such as the Eastern Pure Land of Medicine Buddha (Skt: *Bhaiṣajyaguru*). The mid-Tang (781–848), alternatively known as the Tibetan period, saw a sharp increase in architectural elements along the central axis (figure 4-9-c). Sometimes, the entrance hall, colonnade, and corner towers are represented in the foreground, completing the layout of the courtyard complex. The imagery continued to flourish at the Mogao caves in the Guiyijun period (figure 4-9-d). Among all the Dunhuang examples, scholars generally accept that the painting in Cave 172 represents the Pure Land topography in its maturity. The pictorial composition is subject to change, but the visual logic of a transformative journey laid out in an architectural space continued to thrive after the Tang period.

Just as the aforementioned anecdote uses three terraces to symbolize three levels of rebirth, the Cave 172 painting positions the holy beings in a built environment analogous to themselves. An analysis of the pictorial composition will demonstrate the correspondence between the architectural topography and the figural images. Three circles of deities and aspirants are implied in the figures' composition (figure 4-10); another three loops are revealed by the diagram of architecture relationship (figure 4-11). First, the *shan* 山-shaped configuration of the Amitābha triad and two attending buddhas with entourage (nos. 1–5, connected by orange lines in figure 4-10-b) is echoed in the pictorial composition of the main halls, the corner pavilions, and the two sets of “a hall and two pavilions” (*yidian shuanglou* 一殿雙樓) on the sides (connected by yellow lines in figure 4-11). Both mountain-shaped configurations pivot around the central icon and stabilize the core combination. Second, the large circle of aspirants who encircle the buddhas and bodhisattvas (connected by green lines in figure 4-10-b)

is parallel to the corridors that encircle the courtyard complex (marked by green lines in figure 4-11). Both configurations form an outer circle of the multilayered complex. Third, a small loop formed by the Buddhist figures and deities (marked by green lines in figure 4-10-b) is topologically identical with that which is composed of the terraces in the foreground (marked by green lines, in figure 4-11). The overlapped inner circles highlight a joyful assembly in the presence of the superior host, Amitābha Buddha. The double configurations of triple circles visualize the multilayered topography of the Pure Land. As described in the Pure Land scriptures, the Land of Bliss has “seven layers” (*qichong* 七重) of trees, jeweled nets, railings, and jewels, in addition to countless palatial halls.²¹ In other words, a visual paradigm of Pure Land architecture has been developed to symbolize the hierarchy and emplacement of an ideal meeting with the Buddha.

Vivid as the painting is, any art medium has its limitations. While the pictorial “window” seduces a worshiper to look out into the space of a Buddhist paradise, the image-bearing surface—in this case, the wall of a rock-cut chamber—mercilessly denies any actual entrance to it. The next section investigates spatial mediums that Dunhuang cave makers applied to resolve the problem of physical inaccessibility.

Spatial Imageries of the Pure Land Cave

Regarding the developments of architectural imageries, a scholarly consensus is that Dunhuang mural painting reflects a visual paradigm that was initiated at the cultural centers of Tang China

21. 極樂國土。七重欄楯七重羅網七重行樹。皆是四寶周匝圍繞。是故彼國名曰極樂。*Foshuo amituo jing* 佛說阿彌陀經 (Skt. Sukhāvātī-vyūha), trans. Kumarajiva 鳩摩羅什(344–413). *T* 366, 12:346, c 14–16. Also in the *Meditation Sūtra*: “一一觀之作七重行樹想。……一一樹上有七重網。一一網間有五百億妙華宮殿。” *T* 365, 12:342, b 02–09.

such as Chang'an in the seventh century and then circulated to peripheral areas such as Dunhuang. As architectural historians Xiao Mo and Puay-peng Ho suggest, the idealized palatial complex in the Pure Land image was modeled after prototypes in real life, such as urban Buddhist monasteries and imperial palaces in Tang capital cities.²² In addition, numerous studies have acknowledged the Tang Empire's influence in Dunhuang art.²³ A recent study by art historian Anne N. Feng takes the Pure Land image as "a symbolic form of Tang opulence and prosperity."²⁴

While these theses collectively explain the historical prototypes of the pictorial paradise, I contend that the architectural art of visualizing the Pure Land continued to evolve in situ at the Mogao caves and reached an unprecedented degree of comprehensiveness by the end of the tenth century. The Pure Land image was not necessarily invented by the local artists and artisans of Dunhuang, but the painting medium is inseparable from the site—in this case, the cave temples cut into the living rocks. The shared interest of residents and Buddhist societies of Dunhuang to synchronize the actual locale with the Buddhist paradise conspired to magnify the appearance of the mile-long cave site and penetrated the Pure Land image.

In analogy to the layered spaces of a pictorial paradise, the cave temple consists of a few architecturally defined spaces along the transversal axis (figure 4-12). The spaces, from outermost to innermost, are an antechamber, a corridor leading to the main chamber, a main chamber under a truncated pyramidal ceiling, and, cut on its rear (west) wall, a wide-open

22. Xiao Mo, *Dunhuang jianzhu yanjiu*, 61–63. Puay-peng Ho, "The Ideal Monastery: Daoxuan's Description of the Central Indian Jetavana Vihara," *East Asian History* 10 (1995): 1–18.

23. See, for example, Roderick Whitfield, Susan Whitfield, and Neville Agnew, *Cave Temples of Mogao at Dunhuang: Art and History on the Silk Road*, 2nd ed. (Los Angeles: Getty Conservation Institute, 2015), 73.

24. Feng, "Water, Ice, Lapis Lazuli," 1–2.

buddha niche. A series of cave spaces indicates a sequential viewing through which the mural paintings of the Pure Land are eventually reached. Prior to entering the antechamber, a historical visitor would have confronted the cave's exterior glorified by a timber-structured façade and an open-air mural above the pitched roof (figure 3-2). The composite materiality allows the cave to be an extraordinarily plastic medium; it not only allows one to enter but also conveys the image in a continuously flowing manner.²⁵ A visual analysis of Cave 172 with its auxiliary cave and the neighboring caves will reveal the plasticity of the cave medium.

Above all, the main cave chamber, which is often smaller and more compact than the interior of a free-standing temple, intensifies a worshiper's confrontation with the Pure Land transformation tableaux on the north and south walls. The two paintings cover the entire width and extend from the top to about sixty centimeters above ground of the two opposite walls, which are 3.55 m tall, 4.85–4.95 m wide, and 5.1 m separated from each other (figure 4-13).²⁶ For a worshiper who stands in the center of the main chamber, the painting takes up a field of view of about 87 degrees lateral by 59 degrees vertical.²⁷ This means that only a small portion of it can be grasped by the vision of central fixation (thirty degrees), whereas much is grasped by the peripheral vision.²⁸ It is the immersive visual environment that awakens the haptic longing

25. While *plastic* denotes "sculptural or pliable," my use of the term follows the American architect Frank Lloyd Wright's use: "light and continuously flowing instead of the heavy 'cut and butt' of the usual carpenter work." Frank Lloyd Wright, "The Cardboard House," in *Wright, Modern Architecture: Being the Kahn Lectures for 1930* (Princeton, NJ: Princeton University Press, 1930; repr. 2008), 72–73.

26. Shi Zhangru, *Mogao ku xing*, 2, fig. 247.

27. For a discussion of the visuality of such design and a potential context of artistic competition, see Wu Hung, "Reborn in Paradise," 59–60.

28. Robert H. Spector, "Visual Fields," in *Clinical Methods: The History, Physical, and Laboratory Examinations*, 3rd ed., ed. Walker H. Kenneth Walker, W. Dallas Hall, and J. Willis Hurst (Boston: Butterworths, 1990), 565–72.

for the Pure Land palaces.²⁹

The buddha niche and the entrance corridor of a Pure Land cave temple are often part of the simulated palaces-on-water. In another high-Tang cave, Cave 171, which is next to Cave 172 on the south side, an immersive environment for the worshiper to meet with Amitābha Buddha is enhanced by a “lotus pond and portal” simulated by the image niche, entrance, and ground pavement (figure 4-14). As Anne Feng acutely observes, the imageries of Pure Land are not only painted on the three walls and sculpted in the niche but also “colonize” the cave space in the case of Cave 171.³⁰ This example reveals a mutual development of the pictorial space and the actual cave space.

Furthermore, the function of a miniature cave (173), which was added to the corridor of Cave 172 during a renovation in the late-Tang period (figure 4-15), parallels that of a side hall in the Pure Land building complex.³¹ The practice of excavating an auxiliary cave shrine onto the corridor or antechamber of a preexisting cave temple was an effective way for the cave makers to add a new “showcase” and to show respect for their forebears while maintaining the integrity of the cave temple.³² This practice occurred at Mogao as early as in the Northern Dynasties and became popular during the Guiyijun period. My surveys of the Mogao caves have identified forty-three cave suites consisting of over a hundred caves (figure 4-16, appendix H). They account for about one-fifth of the total number of image caves at Mogao, testifying to the

29. For a discussion of the visual and bodily experience of architecture, see Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: Wiley-Academy, 2005), 6–80.

30. Anne N. Feng, “Water, Ice, Lapis Lazuli,” 222–27.

31. The dating of the ear-chamber Cave 173, as well as other caves in this study, is after *Dunhuang Mogao ku neirong zonglu*, 60.

32. Ning, *Art, Religion, and Politics in Medieval China*, 65–75.

common practice of building up a composite cave space.³³ What is special in this case is that Cave 173 looks almost like a miniaturized replica of Cave 172; within a truncated pyramidal-ceiling cave no larger than 1.5 cubic meters, the rear wall is equipped with a buddha niche, and each of the side walls bears a Pure Land transformation tableau. In comparison to two other kinds of auxiliary caves—a niche enshrining small buddha images and a shadow cave enshrining a life-size monk statue—the miniature Pure Land cave displays a stronger manipulation of space construct. Through self-similarity and scaling, the cave suite encompasses two time-spaces that are concurrently independent from and resonant with each other. Although the patrons of Caves 172 and 173 have not been identified, the prolonged visual excitement is evident to a worshiper entering the cave suite; the visual encounter with the miniature cave prepares the worshiper to confront the main cave chamber along the central axis, in a similar way in which the subsidiary halls in a palatial complex prepare a visitor before entering the main hall.

Indeed, the compositional principle of self-similarity has been coded into the mural paintings inside the main chamber. All halls and pavilions represented in the Pure Land transformation tableau on the north wall share the same five-by-three-bay plan and have only two types of roofs, hipped and hipped-and-gabled. It is through multiplication, scaling, rotation, and stacking the basic units that the palatial complex is composed (figure 4-17). As a mid-tenth century visitor to the Mogao caves recalls, “Doubly opening the rock chambers, I worshiped the thousand honored ones as if in the immortals’ realm [*chongkai shishi, li qianzun si dao Penglai*

33. Among them, there are two types of miniature shrines. The first type, comprising of six cases, are memorial cave chapels of eminent monks. The second type, accounting for the rest, are caves or niches enshrining images of Buddhist deities. Neil Schmid, researcher at the Dunhuang Academy, is one of very few scholars currently investigating these types of caves. Scholarship on the topic is otherwise scarce.

重開石室，禮千尊似到蓬萊]。”³⁴ The composite cave space which could be “doubly open[ed]” alludes to the multilayered environment of the Pure Land.

Lastly, the open-air murals and the timber structures allow the image to emerge from the cliff surface. Remains of the mural on the cliff above a neighboring cave (170) depict a hipped roof with flaming jewels above its side-pitch and a cinnabar-colored orb encircled by a green and red ring (figure 4-18). Judging from the two rectangular holes on the antechamber wall, which were made to hold beams, this pictorial roof painted in around the tenth century formed a backdrop for an actual roof that was placed atop the timber beams. In other words, the composition would have closely resembled the double or triple layers of roofs above the main buddha icon in Pure Land paintings commonly seen after the eighth century. The image of overlaid roofs may represent a set of halls arranged either one in front of another (figure 4-1) or one above another (figure 4-19). Unlike a mural painting or a silk painting, the composite image that emerges from the combined media of cliff mural and timber architecture is physically accessible. Just as the miniature cave on the corridor of Cave 172 refers to the main chamber, the double-roofed façade of Cave 170 is a prelude to the pictorial palace one expects to see inside the chamber.

Through visual alignment, liminal location, and nearly life-size images, the open-air mural mediates between the natural cliff and the built environment and between the pictorial and the actual topographies. As chapter 3 discussed, the cave complex was connected by timber-structured porches and pavilions by the end of the tenth century. In addition, a consensus is that

34. Excerpt from Zhang Yingrun's inscription on the antechamber wall of Cave 108 dated 939 CE. *Dunhuang mogao ku gongyangren tiji*, 53–54.

the megastructure was decorated by a long stripe of open-air murals.³⁵ Although scarce traces of the stripe is preserved near Caves 170 to 173, a longer section of the stripe, which is located just about twenty meters north from them, gives us a sense of the close relationship between the exterior mural and the façades (figure 4-20).³⁶ The remaining murals were painted on a horizontal cliff area of about 1.5 m tall right above the nonextant overhanging roofs of the second-level Caves 181 to 185, on which the beam holes are visible. The lateral connection of caves on the same level was visually augmented by the open-air mural stripe. Such a spectacular scene must have evoked a wondrous feeling in the aforementioned visitor's mind. This feeling is recorded in his inscription outside an ante-hall: "Connected with the passageways of pavilions on both sides, I visited the ten thousand images as if in the Buddhlands [*pangtong gedao, xun wanxiang rutong foguo* 傍通閣道, 巡萬像如同佛國]."³⁷

Methodological Challenges and Solutions

Despite being highly visible and important indicators of the comprehensive built environment, the murals and structures on the Mogao cliff have received much less scholarly attention than the interiors. Compared to cave-front architecture, the open-air murals are less studied. A decisive factor is that few researchers have been able to recognize their pictorial contents. A few traces of open-air murals were included in early photographs by Paul Pelliot, Joseph Needham, and John

35. Many Dunhuang scholars believe that the Cao-family Guiyijun period saw a massive construction of timber façades, ante-halls, and open-air murals, although a visual analysis has seldom been attempted. See, for example, Ma, *Dunhuang mogaoku shi yanjiu*, 113.

36. Unfortunately, the pictorial contents of the mural cannot be discerned from the monochromic photo or from the little that remains of the mural today.

37. Excerpt from Zhang Yingrun's inscription on the antechamber wall of Cave 108 dated 939 CE. *Dunhuang mogao ku gongyangren tiji*, 53–54.

Benjamin Vincent, among others.³⁸ The most thorough documentation in the early-twentieth century was conducted in 1914 by Samuil Dudin, who not only photographed a few examples but also marked the areas of all remaining open-air murals on a panoramic drawing of the cliff surface.³⁹ The early documentation barely captures the images that the murals bore; their contribution is thus less about content information than about position. In addition, because the open-air mural was not a subject of study for these explorers, almost no discussion of them had existed before the mid-twentieth century. It was a team of Chinese archaeologists and architectural scholars, including Su Bai, Zhao Zhengzhi, Yu Mingqian, Mo Zongjiang, and Chen Mingda, who first concluded, after a site survey in 1951, that “a stripe of large murals” were made during the Song period.⁴⁰ Their suggestion that the open-air murals were made along with the systematic renovations of cave-front architecture has been well accepted, yet most of the pictorial contents are not mentioned.⁴¹ Thus far, the only researcher who has attempted to list all identifiable images in the open-air murals was Pan Yushan, an archaeologist at the Dunhuang Cultural Relics Institute, who excavated the cave site prior to the cliff reinforcement projects in

38. Paul Pelliot, *Les grottes de Touen-houang: Peintures et sculptures Bouddhiques des epoques des Wei, des Tang et des Song*, 6 vols. (Paris: Paul Geithner, 1914–24). Joseph Needham’s photographs of the Mogao Caves are in the collection of Needham Research Institute (NRI2/10/1/1/3), digitized and made available online at Cambridge University Digital Library, at https://www.nri.cam.ac.uk/JN_wartime_photos/cft.htm. Following in his wife, Iris Vincent’s, footsteps, John B. Vincent visited the Mogao caves and took some of the earliest color photos of the exterior murals in 1948. The materials are held by his family and are available through the International Dunhuang Project, under “Photo 1231,” at <http://idp.bl.uk>. For a brief overview of Needham’s and the Vincents’ Dunhuang visits, see Whitfield, “Foreign Travellers to Dunhuang,” 108–10.

39. Samuil Martynovich Dudin (1863–1929) was the painter and photographer of the Russian expedition team led by Russian Archaeologist Sergei Oldenburg (1863–1934) to Dunhuang in 1914–15. The materials have been published in *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vols. 3 (exterior and interior photos) and 5 (drawings).

40. Chen et al., “Dunhuang shiku kancha baogao,” 56.

41. One exception is a description of the mural above Cave 94. Chen et al., “Dunhuang shiku kancha baogao,” 56.

the 1960s.⁴² Pan named this type of mural an “open-air mural” (*lutian bihua* 露天壁畫) and contextualized their production in the Cao clan’s construction activities during the Guiyijun period. Pan’s work is valuable, especially in light of the cliff’s appearance having been subsequently significantly changed. Nevertheless, his identification of the pictorial content is not always accurate, and many minor areas were neglected.⁴³ The latest survey of the cliff’s appearance was conducted by the Research Institute of Architectural History, China Architecture Design and Research Group (Zhongguo Jianzhu Sheji Yanjiu Yuan 中國建築設計研究院, Jianzhu Lishi Yanjiu Suo 建築歷史研究所) in the first decade of the current century. For the sake of conservation planning, the researchers measured all pieces of currently extant murals visible from outside and evaluated the quality of preservation of each piece.⁴⁴ In addition to revealing the significant decaying of the open-air mural in the past century, their survey also exposed the problem that modern viewers might not be able of easily discerning the open-air murals on cliff from the murals that decorate the antechambers and porches.

The subsequent challenge is how to make sense of the open-air murals. First, because the

42. See Pan Yushan 潘玉閃, “Mogao ku waimao bianqian de jige wenti 莫高窟外貌變遷的幾個問題” [Several problems about the changes of the appearance of the Mogao caves], *1987 nian dunhuang shiku yanjiu guoji taolunhui wen ji: Shiku kaogu bian* 1987年敦煌石窟研究國際討論會文集·石窟考古編 [Proceedings of the international conference on Dunhuang cave studies in 1987], (Shenyang: Liaoning meishu chubanshe, 1990), 53–66.

43. Pan identifies eighteen pieces of murals of around three hundred square meters. For example, Pan notes that the mural of Cave 170 bore the image of “a seated buddha,” which seemed to be a misidentification of the roof ornament. Pan Yushan, “Mogao ku waimao bianqian de jige wenti,” 64, table 4.

44. Gansu sheng renmin zhengfu [Gansu provincial government] and Zhongguo jianzhu sheji yanjiu yuan [Research institute of architectural history, China architecture design & research group], “Quanguo zhongdian baohu danwei Dunhuang Mogao ku baohu zongti guihua 全國重點文物保護單位莫高窟保護總體規劃” [Master conservation plan of the Dunhuang Mogao caves, a major historical and cultural site protected at the national level], Appendix of Gansu Provincial Government’s executive order No. [2010]111 (甘政發[2010]111號文件), 2010.

Mogao cave complex is a rare case of extensive application of open-air murals, it is difficult to sort out a transmission path of the practice. Although large-scaled polychromic base-relief on cliff are not uncommon for early Buddhist traces in China, as far as the author knows, very few cave sites preserve open-air murals.⁴⁵ The Beishansi Caves (Beishansi shiku 北山寺石窟) near Xining, Qinghai Province, bear a large piece of open-air mural, yet the subject matter, which is two Buddhist guardian figures, is incomparable to those of the Mogao murals in regard of richness.⁴⁶ Hence, our study of the open-air mural should seriously consider the site-specific conditions of Mogao.

Second, the images in the open-air murals of Mogao appear to be gigantic versions derived from the interior murals, except that the former is reductive—they exclude buddha and bodhisattva images and sūtra paintings. Although the open-air murals are usually not as delicate in painterly quality or diverse in style as their counterparts inside the caves, the large size of the former give them a unique visual quality. While some might take the major function of the open-air murals to be the filling of the leftover space—the cliff area left intact after cave construction—we should also notice that they transformed the appearance of the cliff. Hence, our study of the open-air mural must take it not as an independent image but as part of a larger picture.

Third, a fundamental difficulty lies in the severe deterioration of the exterior murals, over

45. The most renowned example of bas-relief Buddhist images is the colossal buddha triad of Lashaosi 拉梢寺, Wushan 武山 County, Gansu Province, of the Northern Zhou period. The technique of the bas-relief image is based less on mural painting than on stone-cored clay statuary, therefore this type of image is not included in this study.

46. Zhao Xin 趙信, “Beishansi shiku: Beishan yanyu zhong de qiannian foxiang 北山寺石窟：北山烟雨中的千年佛像” [The Beishan si Caves: Thousand-year buddha images in the mist and rain of Beishan], *Qinghai ribao* 青海日報 [Qinghai daily], October 18, 2013, cited from IFeng: https://fo.ifeng.com/fojiaolvyou/detail_2013_10/18/30439687_0.shtml (accessed Jan 9, 2023).

60 percent of which have been designated “badly preserved.”⁴⁷ One has to have “restorative eyes” to detect what the murals (and sometimes the lost or reconstructed timber façades) would have looked like in a more complete condition. In addition, one needs a contemplative mind that compares and connects the pictorial image and the physical structure, as well as the interior and exterior murals. In short, as a result of bad preservation, the images of the open-air murals have been largely overlooked, let alone the composite imageries they and the physical structures together conveyed. Therefore, a study of the open-air murals requires both technical and art-historical intervention.

This chapter responds to these problems in three steps. The first step is a revisit of the exterior murals’ distribution and contents. I will include all pieces of remaining murals, which either currently exist or existed in the twentieth century, into my discussion. Based on the aforementioned scattered publications and multiple surveys of the site between 2019 and 2022, I have identified fifty-two places of exterior murals of over four hundred square meters that stretch along the entire length of the south section of the Mogao caves (appendix I). With only a few exceptions, most open-air murals are painted on horizontal stripes above the top-level caves’ roofs or between two levels of caves. In addition to two pieces that picture a timber hall or an ornate roof, many of the murals bear images of flying *apsaras*, heavenly kings and guardians, monk disciples making offerings, auspicious creatures, flaming jewels, and musical instruments, as well as scattered flowers and flowing clouds. Simply put, they are enlarged visual elements of the Pure Land one can find in the interior murals.

The next step is to analyze the visual features of the open-air mural. After photographing

47. In comparison, only 1 percent of the interior murals have been badly preserved, and 78 percent have been preserved well or very well. Ibid, fig. 32.

the extant images of the mural, I have applied the analytic tools of tracing copy and theoretical restoration to some representative examples (appendix J). The interior murals have been studied through tracing or loose free-hand copying, known as *linmo* 臨摹 in Chinese. The replication of mural paintings is a systematic work for the preservation and research of mural paintings. The artist-scholars of the Dunhuang Academy have pointed out the importance of line-drawing as the first step in the close reading of images.⁴⁸ They also summarized three ways of conducting the replication work: restoration replication (*fuyuan xing linmo* 復原性臨摹), complete replication (*zhengli xing linmo* 整理性臨摹), and current status replication (*xianzhuang xing linmo* 現狀性臨摹).⁴⁹ Complete replication selectively restores damaged portions of the mural paintings for the sake of retrieving fuller information about visual composition. Line-drawing is also the method architectural historians often apply to selectively reveal visual information about the

48. Duan Wenjie 段文傑, “Tan linmo Dunhuang bihua de yidian tihui 談臨摹敦煌壁畫的一點體會” [Reflection on the replication of Dunhuang mural painting]. *Wenwu* [Cultural relics] 9 (1956): 44-46. Duan Wenjie 段文傑, “Linmo shi yimen xuwen 臨摹是一門學問” [Linmo is a field of study]. *Dunhuang Yanjiu* [Dunhuang studies] 4 (1993): 11–18. Shi Weixiang 史葦湘, “Linmo shi yanjiu Dunhuang shishu de zhongyao fangfa 臨摹是研究敦煌藝術的重要方法” [Linmo is a critical method of studying the art of Dunhuang], First published in *Duan Wenjie Dunhuang yanjiu wushi nian jinian wenji* 段文傑敦煌研究五十年紀念文集 [Essay collections in honor of the fiftieth anniversary of Duan Wenjie], ed. Dunhuang Academy (Beijing: Shijie tushu chuban gongsi, 1996). Republished in *Long shang xueren wencun: Shi Weixiang juan* 隴上學人文存：史葦湘卷 [Essay collections of scholars in Gansu: Volume of Shi Weixiang] (Lanzhou: Gansu renmin chuban she, 2012), 363–77.

49. Lou Jie, “Wall Painting Replication at Dunhuang: A personal account of its history and technique,” trans. Michelle McCoy, in *Cave Temples of Dunhuang: Buddhist Art on China's Silk Road*, eds. Neville Agnew, Marcia Reed, Tevvy Ball, Getty Conservation Institute, Getty Research Institute, and Dunhuang Academy (Los Angeles: Getty Conservation Institute, 2016), 115. Hou Liming 侯黎明, “Dunhuang bihua linmo yao shu: jian tan Riben bihua linmo fa 敦煌壁畫臨摹法要述——兼談日本壁畫臨摹法” [Key points in the linmo of Dunhuang mural painting: And on the linmo of mural paintings in Japan], *Dunhuang Yanjiu* 5 (2005): 16.

architectural form.⁵⁰ In the age of digital art history, I have line-traced the mural in its current condition and prepared a complete replication in Photoshop.

The third step is to analyze the historical visuality of the open-air mural. Instead of solely examining the murals, the study conceptualizes the composition at two levels: the façade area of an individual cave and that of a cluster of caves. Particular attention is paid to the dimensions and scales of the open-air mural. By comparing them with the architectural framework and the interior murals, I hope to discover how the principles of scaling worked in the transition between interior and exterior spaces. Moreover, based on relevant merit records from Dunhuang documents, the study discusses the visual manifestation of the buddha field evoked by the open-air murals and the cave-front architecture. In this way, I reveal the efficacy of the cave art and architecture for medieval Buddhists who longed to enter the Buddhist paradises. While the physical spaces of a cave temple could be defined as the space of emplacement—that is, a hierarchic ensemble of sacred and profane places—the interior and open-air murals that connect them offered an alternative mode for perceiving the Pure Land.⁵¹ This mode emancipates an embodied viewer from the temporal-spatial confinements of the Utopian vision. In the following, the first case study examines the original appearance of the largest open-air mural among the caves at Mogao and its historical reception. The second examines the compositional principles of the best-preserved area of mural stripe and the making of it.

50. For an early application of this method in the study of Dunhuang architecture, see Liang, “Women suo zhidao de tangdai fosi yu gongdian.”

51. Michel Foucault and Jay Miskowiec, “Of Other Spaces,” *diacritics* 16, no. 1 (1986): 22–27. Michel Foucault, “Texts/Contexts: Of Other Spaces,” in *Grasping the World* (New York: Routledge, 2019), 22.

Cave 94: Pavilion Image from Inside Out

This section discusses the development of the integration of cave architecture and mural painting post-Tang. Among the extant cliff murals, the largest piece deserves close examination. This piece bears a composition of architecture and figures and occupies a prestigious spot. It once occupied a flattened and plastered cliff area of 150 square meters above a gigantic back-screened Cave 94 (figure 4-21). The remaining area above the modernly reconstructed ante-hall is as large as 98.5 square meters (figure 4-22). The mural, approximately seven meters in height and twenty-two meters in width, extends from right above the ground-level ante-hall to the top of the cliff surface, and from the northern colossal buddha cave—cave 96—to a smaller adjacent Cave 231.⁵² The construction and renovation of Cave 94 was under aristocratic patronage during the Guiyijun period. Cave 94 was commissioned by one Zhang Huaishen 張淮深 (831–90), a military governor, and the construction was completed in the 880s. The renovation during which this mural was painted arguably happened in the late tenth century.⁵³ According to textual records, Cao Yuanzhong 曹元忠 and his wife, Lady Zhai 翟氏, conducted a renovation of the colossal-image pavilion of Cave 96 in 966 CE.⁵⁴ It is likely that around this time, the open-air murals in the vicinity were painted. Although the murals bear no dated inscription, the architectural style of the image the mural bears (which will be discussed in detail) is

52. Dimensions measured by author on a scaled cliff drawing.

53. Zheng Binglin, “Zhang huaishen gaijian bei daxiang he kaizao 94 ku niandao zaitan 張淮深改建北大像和開鑿94窟年代再探” [Revisiting the dates of Zhang Huaishen’s renovation of the northern colossal cave and construction of Cave 94], *Dunhuang yanjiu* 3 (1994): 37–41, 16. *Dunhuang mogaoku eirong zonglu*, 30.

54. Ma De, “Song qiande simian chongxiu Dunhuang bei daxiang de erqi gongcheng 宋乾德四年重修敦煌北大像的‘二期工程’” [Second phase of renovation project for the northern colossal image in the fourth year of Qiande of the Song Dynasty], *Dunhuang yanjiu* 81, no. 5 (2003): 1–2.

characteristic of the Guiyijun period. A few scholars, who have noticed the predominant scale, the figural and architectural imagery of the mural, have agreed to date it to the second half of the tenth century.⁵⁵ Building on current scholarship, this study aims at a contextualized visual analysis of the mural. As I would suggest, the complex image and gigantic size makes the mural a crucial clue about how Pure Land imagery was projected onto the actual topography of the cave site.

Despite its poor state of preservation, the image of a three-bay-wide timber edifice of impressive size and ornamentation is recognizable (figures 2-23 and 2-24). An ornament on the top register indicates the height and central axis of the pictorial edifice. Two flying *apsaras*, probably followed by more, approach each other from opposite sides; between them is a jewel-like object comprising two circular shapes, one on top of the other, and a cinnabar triangular shape on the top that seems to be an offering or the visible part of the pictorial edifice's finial. Two visible columns illustrate the widths of the edifice and its bays. The right one is a corner column, as it supports the eaves of the front and side, whereas the left one is a center column, as a heavenly king can be recognized on its left. Both columns are connected to architraves that have distinctive cinnabar outlines and interval lines.⁵⁶ The major timber members are rendered in a cinnabar color that makes them stand out from the beige background and the polychromic

55. Chen et al., “Dunhuang shiku kancha baogao,” 66; Pan, “Mogao ku waimao bianqian de jige wenti,” 64; Sha, *Guiyijun shiqi*, 105–6; Zhao Yanlin 趙燕林, “Mogao ku shiku Zhong de shulian jianzhu caihua tu’an—jianyi mogao ku song xixia bufen dongku de shidai wenti 莫高窟石窟中的束蓮彩畫建築圖案——兼議莫高窟宋、西夏部分洞窟的時代問題” [The architectural polychromic painting of bundled lotus in Mogao Caves—With discussion of the periodization of some caves of the Song and Xixia periods], in *Dunhuang xixia shiku yanjiu qingnian gongzuo fang lunwen ji*, 17–18, 23.

56. This decorative pattern of the purlin is called *qizhu babai* 七朱八百, or “seven cinnabar and eight white.” For an explanation of the painting decoration of the grand carpentry, see Sun and Sun, *Shiku jianzhu juan*, 192.

ornaments. The remaining mural offers a basic idea of the dimensions of this three-bay-wide building, as well as its frontality and spatiality.

I have reconstructed the timber structure based on the existing traces, the principle of symmetry, and similar pictorial structures depicted in contemporary Dunhuang caves (figure 4-25). The columns are decorated with pedal patterns on top and in the middle. The style is consistent with the pictorial structures in the antechamber of Yulin Cave 21 (figure 4-26).⁵⁷ Atop the columns would have been column-top bracket sets with leaf-shaped arms (*yexing gong* 葉形栱).⁵⁸ Between the column-top bracket sets are Ω-shaped braces and floral motives, which echo floral patterns in the central bay and the flowers scattered by flying *apsaras* outside the edifice. Above the bracket sets, the perspectival rendering of two levels of parallel rafters evokes an illusion in which the eave protrudes from the pictorial plane. Although they are unconventional for interior murals, this representation corresponds to the steep viewing angle one must take when confronting a tall building.

It is clear that two oversized heavenly kings in three-quarter view stand in the side bays of the building. They guard the central bay, where two other heavenly kings of slightly smaller size are standing. Images in the central bay are severely defaced, yet one still finds part of a halo bordered by flaming patterns and a ritual baton decorated with floral patterns (figure 4-27). Both fragmented images resemble those in the heavenly king image in the north bay (figure 4-28). The

57. Examples of the latter category include the antechamber of Yulin Cave 14. Sun and Sun, *Shiku jianzhu juan*, 196–97, figs. 156 and 157.

58. None of the brackets are discernible, but judging from the limited height between the architrave and the eave as well as the convention of architectural decoration in the post-Tang periods, I propose that the bracket set is single-step and ornamented, and the leaf-shaped bracket is the best option. For the use of leaf-shaped brackets at Dunhuang, see Sun Yihua, “Yi(ye)xinggong mingcheng kao: Dunhuang tubo jianzhu hua yanjiu 翼（葉）形栱名稱考：敦煌吐蕃畫研究” [A study of the bracket sets with leaf-shaped arms in Dunhuang mural paintings of the Tibetan period], *Jianzhu shilun huikan* 建築史論彙刊 16 (2018): 113–21.

four heavenly king images give the pictorial hall a formal and solemn impression. Oversized images of the heavenly kings are often painted or sculpted for protecting the threshold to the ritual spaces of the cave temples. This practice is exemplified by the two colossal-image pavilions and many other magnificent antechambers at Mogao.⁵⁹ While reminding the visitor of the antechamber-making tradition, the open-air mural above Cave 94 defamiliarizes the imagery by flattening it and raising it up high.

Admittedly, an uncertainty in my reconstruction is the non-figural images in the central bay; only a long-stemmed flowering plant right next to the south-side column can be discerned with confidence. To the plant's north side remains a vertical, cinnabar-colored stripe about one-third the width of the column, decorated with a band of unrecognizable, light-color patterns. It might represent part of either an ornate frame of multipaneled screens or a pillar of a jeweled canopy, but the available trace is too small for a definite answer.⁶⁰

My reconstruction suggests that the painting's composition was designed to integrate with the surrounding mural and architecture. Demonic guardians and heavenly beings are seen arriving from the north side outside the hall to join the assembly (one each is discernible), creating a visual connection between the two individually constructed Caves 94 and 231. The frontal, iconic representation of the building contrasts the fluid profiles of the figures-in-motion, but the inside and outside spaces are harmonized by the profusion of scattered flowers. And the four beam holes forming an isosceles triangular composition above the modern reconstruction

59. The ground-level portico of Caves 96 and 130 were known as the "Halls of Heavenly Kings of the Colossal Images" in the *Lantern Distribution* manuscript. Traces of four 6 m tall statues of heavenly kings were found in the ante-hall of Cave 130. An early example is the Sui-period statues of heavenly kings and guardians in the antechamber of Cave 427. Among the many large antechambers that bear pictorial images of the heavenly kings are Caves 12, 428, and 454.

60. Given the fact that no Buddhas or bodhisattvas have been identified on the open-air mural, it is unlikely that any central icons have been represented in the central bay.

ante-hall indicate that the late-medieval ante-hall likely had a gable-front hip-and-gable roof, which was supported by a nine-purlin timber structure (figure 4-29). The highest hole is about nine meters above the ground, revealing the monumental scale of the timber-structured hall.⁶¹ The set of holes illustrates the vertical alignment between the timber-structured ante-hall and the pictorial hall. The pictorial hall is about two-thirds the size of the actual hall yet corresponds to the proportion of the latter and probably surpasses it in degree of ornamentation (figure 4-30).⁶²

One may wonder what kind of architectural imagery the two halls suggest. Do they together suggest a two-story pavilion? This kind of tapered, two-story pavilion is often depicted in Mogao mural paintings of the ninth and tenth centuries, serving as a main ritual building or an entrance pavilion in the Pure Land environment (figures 4-9-c and -d). In actuality, the multileveled pavilion is the most iconic cave-front architecture at the Mogao site built since the Tang period. Three extant structures are two colossal-image pavilions, one of which is adjacent to Cave 94, and the so-called three-story pavilion that screens the vertically aligned Caves 16, 365, and 366 and their auxiliary caves (figure 1-66). In parallel with the Pure Land visual template, the three monumental structures served as the main ritual buildings and the entrance pavilion of the sacred landscape at Mogao.⁶³ Reconstructed in 1906, the three-story pavilion's porch nonetheless preserves features of the late-medieval tradition. For instance, the higher the

61. Although none of the timber façades at Mogao preserve this roof type and scale, one finds contemporary examples in Song free-standing and tomb structures, such as the Moni hall in the Longxing Monastery, Zhengding, Hebei, and timber-imitation architecture in the tomb of Dong Ming, Houma, Shanxi. Steinhardt, *Chinese Architecture*, 165–66, 189.

62. The current version of the ante-hall is a modern reconstruction. It is different from the medieval versions in terms of style, ornamentation, and roof type, but because of the relatively fixed positions of the earthen structure for the columns and beams to be placed, we can say that the current façade's size preserves the medieval versions. For a theoretical reconstruction of an ante-hall like this, see Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 448–60.

63. For discussion of the colossal-image pavilions, see chapter 5.

level, the smaller the porch. Moreover, a grouping of four and a grouping of two large heavenly kings are painted on the west walls of, respectively, the second- and third-level porches. Strictly speaking, the images of heavenly kings belong to antechamber decoration rather than open-air mural. But because it is not enclosed by walls on the east side, the three-story pavilion produces a similar imagery of four heavenly kings guarding the second-level porch as depicted in the open-air mural above Cave 94. The three-story pavilion undoubtedly exists as a habitable structure, whereas the “two-story pavilion” of Cave 94 seems to stand partly in a visionary space and partly in an actual space. The composite imagery conveyed through pictorial and architectural mediums prompts a viewer to wonder if it creates a liaison between two mutually exclusive time-spaces.

Through investigating historical texts about Caves 94 and 98, I suggest that the aristocratic patrons of its construction and refurbishment intended a miraculous emergence of heavenly architecture. In his merit record, Zhang Huaishen, the patron of Cave 94 and second military governor of the Guiyijun Circuit, was described as being particularly interested in choosing and preparing a cliff area as the site of Cave 94 (appendix B-4). The siting and cliff-cleaning work enjoys a lengthy literary description:

Therefore, he [Zhang Huaishen] desired to build the dragon niche to the north of the Northern Colossal Image. Because the mountain was lofty and rocky, and it was difficult to engrave and chisel, though [Zhang] asked all his men, no one dared to prevaricate. The lord sighed: “Isn’t he a sage who moves mountains and inverts seas! I will follow Geshu who breached the sea and Eshi who hacked the mountain.” On this very day, the construction job was started; the cliff face was widely opened. Because of his sincerity and concentration, the lord moved the celestial deities above, whose vanguards were the

dragons of the deep blue sea and whose rear guards were the soldiers of the rain master. Yellow clouds gathered from four directions, hovering in the middle of the empty valley; lightning emitted blazing lights; soaring above the azure rocks. Right at midnight, the earth howled like a huge sea turtle's roaring; before cocks' singing at dawn, the mountain had already been broken on one side. The wind in the valley strongly blew; shaking the rocks and dispersing the sands. The beasts fled to the hills, the birds hit the sky and folded their wings. For a moment, the falling rocks were as big as mountains; they piled up into a mound at the east end and cut off the streams of the west islets. After flattening the lofty mountain, labor works were applied.

遂於北大像之北，欲建龍龕。以山峻崔嵬，有妨鑄鑿，遍問諸下，無敢枝梧。公乃喟然歎曰：“移山覆海，其非聖人乎！哥舒決海，貳師劈山，吾當效焉。”即日興工，橫開山面。公以虔誠注意，上感天神，前驅滄海之龍，後擁雨師之卒。黃雲四合，盤旋岩穀之中。掣電明光，直上碧岩之上。才當夜半，地吼鼉聲，未及晨雞，山摧一面。谷風凜烈，蕩石吹沙。猛獸奔竄于參岑，飛鳥搏空而戢翼。須臾隕石，大若盤陀；積壘堆阜於東終，截斷澗流於西渚。既平巒嶽，然後施工。⁶⁴

This literary record renders the cliff-preparing process as a miraculous correspondence between natural and supernatural forces. In contrast to the manageable labor work of cave construction, the cliff site seems beyond human control and human scale. Historically, a rapid change of the site was most likely a cliff collapse or a burning out of timber-structured façades.

64. A Stele Recording the Merits of Cave Construction by Zhang Huaishen (Zhang Huaishen zaoku gongde bei 張淮深造窟功德碑) (P.3720, S.5630, ca. 882 CE).

The flattening of the enormous cliff face between Caves 96 and 231 also entailed removing rock forms “as big as mountains.” The cliff preparation very likely erased some preexisting caves, of which only the rear half of a Tang-period cave (mistaken as two caves and numbered 228 and 229) is traceable (figure 4-21).⁶⁵ While the cliff site was refreshed by natural or human forces, the historical imagination associated the change with the supernatural powers of celestial deities who were moved by the religious piety of the cave patron. It would not be strange to see this miraculous scene later pictured on the flattened cliff face—that is, the heavenly kings and flying *apsaras* in the open-air mural. The mural above the damaged cave shows a muscular right elbow, sashes, pendants, a pedal-like sleeve, and part of a halo with flaming border decoration (figure 4-31). These features indicate that a gigantic heavenly king was painted on the flattened cliff on the north side of the northern colossal-image cave. The colossal image of a heavenly king, which is 2–2.5 times larger than those above Caves 94 and 231, reminds the visitor of the miraculous power through which the cliff site was prepared (figure 4-32).

The merit record continues to describe the cave appearance when the construction was just completed: “The doorway confronted the precipitous cliff and was carved into the Palace of Fragrant Accumulation . . . and a roof of Penglai [an immortal isle] manifested itself [門當崑嶸，鑿成香積之宮。再換星霜，化出蓬萊之頂].”⁶⁶ Although we do not know if any open-air mural was made in conjunction with the cave construction, the prose suggests that the ante-hall acquired, or hoped to acquire, a palatial appearance that simulates those from the Buddha lands.

65. This cave is a truncated pyramidal ceiling cave with a west niche. Due to the Qing renovation and the existence of only a small portion, modern scholars did not recognize the cave structure and mistook it to be two caves. The drawing shows the structure of the truncated pyramidal ceiling of the cave.

66. A stele recording the merits of cave construction by Zhang Huaishen (P.3720, S.5630, ca. 882 CE).

Half a century later, Cao Yijin 曹議金 (d. 935 CE) followed Zhang's model and commissioned the gigantic Cave 98 on the other side of the northern colossal-buddha cave. Yijin was the first Guiyijun military governor from the Cao clan and father of Yuanzhong, who commissioned the refurbishment of the colossal-image pavilion of Cave 96 and probably the open-air mural in the surroundings. The painting institute for the Cao regime was accountable for both the construction of Cave 98 and presumably the renovation of Cave 96 area several decades later.⁶⁷ The desire to turn a cave into a Pure Land palace was strongly expressed in another merit record. Before the cave was finished, Cao formally commemorated the completion of painting the "upper level(s)" and described the merit that ensued (appendix B-7):

Before a whole year has elapsed, a jeweled palace manifested. The upper level[s] had been ornamented with paintings, in the likeness of the Trayastrimsa heaven.⁶⁸ The four heavenly kings hold their vajra-pestles and pacify the demons. The nāgas and heavenly beings in attendance, as well radiate vigorous illumination. Of brilliant and golden color, they seem to just descend from . . . [the heavens], . . . as if a jeweled mountain under a flourishing sun. Buddhist sound fills the air; flying birds hover in the sky. . . . All the sad souls and dimmed consciousness shall abandon the ties caused by hatred, and speedily dwell on the lotus platform. Four kinds of sentient beings of the six paths, because of this, shall eventually return to the Pure Land.

67. For a discussion of the painting institute and the similarities between aristocratic caves during the Guiyijun period, see Lee, "Repository of Ingenuity."

68. This is one of the thirty-three heavens and the six heavens of desire in Buddhist cosmology. Maitreya Buddha abides in this heavenly realm before he attains Buddhahood and descends to the earth. It refers to the idea of Buddhist heavens in general.

不延期歲，化成寶宮。裝畫上層，如同忉利。十方諸佛，摸儀以毫相真□；賢劫千尊，披蓮齊臻百葉。四王護法，執寶杵而摧魔。侍從龍天，亦威光而怛赫。燦然金色，疑從初下□□（如盛日之寶山）。梵響凌空，布翔鸞於碧落。... 所有傷魂幽識，舍怨結速住蓮台。六道四生，因茲總歸淨土。⁶⁹

This passage evokes an image of the Pure Land to manifest through the open-air mural on the “upper level[s],” in addition to the ceiling painting in the cave.⁷⁰ While the cliff area above Cave 98 is much constrained, and any exterior painting would have been damaged, this description elucidates the reception of the two-level pavilion, which Cave 94 appears to be. As the passage describes, the pavilion of hybrid medium appears to be in a process of becoming. A palatial architecture manifests as the upper-level mural is completed; the heavenly kings and their attendants are gathering. The pavilion seems to be half-way projecting out from the pictorial world; as a result, anyone who enters this liminal space would be on their way to “returning to the Pure Land.”

Cave 428 Area: A Landscape Art

As many contemporaneous visitors described, the Mogao complex would have appeared like

69. Hexi jiedushi shagnshu Cao Yijin xiu daku gongde ji 河西節度使尚書曹議金修大窟功德記 [The merit record of Cao Yijin, the military governor and minister of the Hexi Circuit, in building a grand cave], P.3781, ca. 920 CE.

70. Scholars have identified some images in the merit record with the ceiling painting in Cave 98, but the many words that refer to architectural imagery remain unidentified. Liu Yongzeng 劉永增 and Chen Juxia 陳菊霞, “Mogao ku di 98 ku shi yi chanfa dao chang 莫高窟第 98 窟是一懺法道場” [Mogao Cave 98 is a dharma-field for repentance rituals], *Dunhuang yanjiu* 6 (2012): 32.

images of connected pavilions reflected on water.⁷¹ In their eyes, the sacred site encompassed not just image caves and their façades but also the flowers and trees of the oasis, the smell of incense, and the sound of bells, all evocative of a multisensory imagining of the Pure Land. Prior to entering any particular cave temples, a visit to the Mogao site was “just like a pilgrimage to the buddha lands.”⁷² Although a general view of the splendidly decorated cliff face cannot be retrieved, the longest discernible stripe of exterior mural offers us a key to this perception. Located on the third (top) level around the middle part of the south section of the Mogao caves, the hundred-meter-long stripe is centered around two large caves, Cave 428 on the north side and Cave 454 on the south side (figure 4-33). This area underwent a severe cliff collapse around 966 CE and subsequent systematic renovations in the 970–80s.⁷³ This subsequently well-preserved area demonstrates the ways in which open-air mural, painting on architecture, and timber structures together evoked the visionary topography of Buddhist paradises.

Cave 428 of the Northern Zhou period was the largest cave built prior to the Tang dynasty at Mogao. This central-pillar cave bears more than a thousand images of donor figures, some of whom are identified by inscription as local monks in Dunhuang active around 569 CE. Based on the visual predominance, dating, and broad social engagement, the cave is identified as the large cave commissioned by Yuyi 於義 (534–83), Duke Jianping 建平公, and the prefectural governor of Guazhou (also known as Dunhuang), as recorded in *Mogao ku ji* 莫高窟

71. Literary records of such imagery are numerous, and they appear in merit records, stelaes, poems, and visitor’s inscriptions, among other media and literary genres. An often quoted sentence is from “Li Kerang xiu Mogaoku foka bei 李君莫高窟佛龕碑” [Stele of a Buddhist cave at Mogao by the Gentleman Surenamed Li], 698 CE, dedicated to Cave 332.

72. Excerpt from Zhang Yingrun’s inscription on the antechamber wall of Cave 108 dated 939 CE. *Dunhuang mogao ku gongyangren tiji*, 53–54.

73. Ma, “10 shiji zhongqi de mogaoku yamian gaiguan,” 45.

記 (Record of the Mogao caves, 856 CE).⁷⁴ The corridor and antechamber were fully refurbished during the reign of military governor Cao Yijin (914–35), because the corridor walls bear portraits of Cao Yijin, his wife the Uighur princess, and their sons.⁷⁵ Some scholars believe that the refurbished Cave 428 was known as Taibao's Cave 太保窟 in the mid-tenth century, although different opinions exist.⁷⁶ In any case, Cave 428 enjoyed continued prosperity in medieval times and witnessed the continued construction and renovations in the area.

The area centered around Cave 428 has the best-preserved timber structures and open-air murals at the Mogao caves. The timber structures include pillars and beams of Cave 428 and four timber façades of Caves 427, 431, 437, and 444. The exterior mural bears images of Buddhist offering and guardian figures, flowers, and clouds. They fill the cliff face between three levels of densely cut caves. Caves 424 to 432, which are on the upper level, and Caves 292 to 308, which are on the middle-level, preserve painting traces. Regarding cave distribution in the area, the upper level features the three biggest caves equipped with three-bay-wide antechambers; the middle ones are smallest and very densely connected by timber corridors; and the ground-level caves are relatively modest in size.⁷⁷ The caves were built between the sixth and the eighth

74. Shi Pingting, “Jianping gong yu Mogao ku 建平公與莫高窟” [Duke Jianping and the Mogao caves]. *Dunhuang yanjiu wenji* 敦煌研究文集 [Essay collection of research on Dunhuang], ed. Dunhuang Wenwu Yanjiu Suo 敦煌文物研究所 [Dunhuang Cultural Relics Research Institute] (Lanzhou: Gansu renmin chubanshe, 1982), 144–50. Wang, *Dunhuang fojiao yu shiku yingjian*, 194–95.

75. *Dunhuang shiku neirong zonglu*, 174–75.

76. *Taibao* was a title of Yijin. The cave name appears in the Lantern Distribution manuscript (951 CE), and scholars have attributed it to a few caves, including Cave 428, 454, 61, and 261. For a review of the debates, see Sha, *Guizijun shiqi*, 98–99.

77. In his study of the “usage of the cliff surface” of the Mogao Caves during the Northern Dynasties and the Sui period, Ma De states that most of the second-level caves of this section and Cave 428 were constructed during the Northern Zhou period (557–81 CE). According to Ma De, the third-level Cave 427 and those farther north, as well as the second-level Cave 306 and

centuries, whereas a systematic refurbishment of the area, including the timber structures and the open-air murals, were conducted during the reigns of Yijin and his successors. The timber structures bear dated inscriptions: Cave 427 is dated 970 CE in the reign of Cao Yuanzhong 曹元忠 (944–74); Cave 444 is dated 976 CE in the reign of Cao Yangong 曹延恭 (974–76); and Cave 431 is dated 980 CE in the reign of Cao Yanlu 曹延祿 (976–1002).⁷⁸ The timber structures' datings help Dunhuang scholars date the refurbishment of this area to the 970s–80s. The subsequent periods saw construction of a few ground-level ante-halls, yet the overall appearance at the end of the tenth century has been preserved.⁷⁹

The top-level façades and mural translate a characteristic composition of the Pure Land pictures into a work of landscape art. One can find the classical composition of a main hall connected by bridges to two side halls (figure 4-9-b) in the case of the largest porch of Cave 428 connected to two smaller ones of Caves 431 and 427 by overhanging passageways (figure 4-34). The symmetrical composition is augmented by the large stripe of open-air mural with a gable shape above Cave 428. Cave 428's tenth-century porch was carefully designed to pinpoint the center of the composition.⁸⁰ The extant façades are eave-sided and have either a hipped roof or a

those farther north, were constructed during the Sui period (581–618 CE). The ground level caves did not exist until the Tang period. Ma, *Dunhuang shiku yingzao shi daolun*, 123–24, 136; 133, fig 7; 137–39, fig. 8. Also see Ma De, *Dunhuang mogaoku shi yanjiu*.

78. For a detailed discussion of the timber architecture, see Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 413–18. For the lineage of the Cao clan Guiyijun leaders, see Rong, *Guiyijun shi yanjiu*, 95–126.

79. The ante-halls of the biggest two, Cave 39 and Cave 35, were not constructed until the Xixia period. For the form and dating of the ante-halls of Caves 39 and 35, see Sha Wutian, “Dunhuang mogaoku di 72–76ku kuqian diantang qingli fajue baogao 敦煌莫高窟第72–76窟窟前殿堂遺址清理發掘報告” [Archaeological report of the ante-halls of Dunhuang Mogao Caves 72–76], *Kaogu Xuebao* 4 (2002): 512.

80. According to architectural historian Xiao Mo, the current antechamber combines traces of

gable roof, but Cave 428's porch roof had a gable-shaped element shown frontally. Judging from the beam hole and the composition of the exterior mural above the three-bay-wide antechamber, the central bay has a gable shape, whereas the side bays are confined under a horizontally laid ridge purlin (figure 4-35). It was most likely made as a disconnected cross-shaped ridge roof (*jiaoji wuding* 交脊屋頂). This composite roof consists of a normal eave-sided roof and, above it, a gable-sided roof. The large size and composite roof make Cave 428 a visual focus along the long stretch of eave-sided façades.

In accordance with the roof's contours, the open-air mural above it depicts a flowering plant or cloud that occupies the tip of the gable-shaped canvas and a flying *apsaras* playing a flute (figures 4-36 and N-14). This figure was paired with another flying *apsaras*, only a small portion of whose sash is extant. The gable-shaped open-air mural increases the height of the building and emphasizes the vertical central axis. A close comparison of this composition can be made with other large-size caves on the third level. The best preserved example of gable-shaped murals is Cave 454 (figure N-8), another Cao-clan cave at Mogao.⁸¹ The open-air mural displays the privileged status of the caves owned by aristocratic patrons.⁸² Filling the gable-shaped canvas are scattered clouds and flowers and what seems to be a *qin*-lute with long sashes. In this scene, the senses of movement, smell, and hearing are activated. The mural visualizes a

three periods: the timber components below the lowest transversal beams are similar to those of Cave 196 and can thus be stylistically dated to late Tang; the brackets and beams are similar in style to the Song-period antechambers and seem to reuse beams from different antechambers; the upper windows and roof were added much later. Xiao Mo, *Dunhuang jianzhu yanjiu*, 3rd ed., 410–11.

81. The case of Cave 454 is discussed in chapter 4. Another example is Cave 202. The gable shape is clearly discernible in the Oldenburg cliff rendering, but unfortunately the mural was badly preserved.

82. Scholars believe that Cave 454 is the merit cave of Cao Yangong or Cao Yuanshen. For a review of the studies of the cave's patronage, see Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 19–76.

holy gathering and preserves the transient moment for over a thousand years.

The stripe of open-air mural extends on both sides of Cave 428. They cover the areas above Cave 427 to the north and Cave 431 to the south, suggesting a non-interrupted festive atmosphere. Above the roof of Cave 431 is depicted a scene of six flying *apsaras* attending a mythical bird standing in frontal view on a lotus throne (figure 4-37).⁸³ The pictorial composition of a mythical bird flanked by offering figures first occurred inside mid-Tang Caves 361, 359 (figure 4-38), and 358, above the pictorial roof of the canopy-shaped niche.⁸⁴ The mythical bird is also found to decorate the buddha hall on a ceiling slope of late-Tang Cave 85 (figure 4-39). The mythical birds highlight the sacred buildings that enshrine buddhas in their respective realms. By depicting it on the cliff surface, the cave temple it decorates is marked as special. The mythical bird image would have been a backdrop of the jeweled-vase-shaped ornament that would have been placed in the center of top ridge, augmenting the latter's visual prominence in the manner of an aura. The *apsaras*, two of which are visible on each side, kneel in three-quarter view, presenting flower or musical offerings. Their gestures and costumes correspond with those depicted between the bracket sets below, although the former is about four times larger than the latter.⁸⁵ The scaled images concurrently connect the cliff face and the porch

83. Four figures are visible; the one on the left end can be identified from the remaining sashes, and the one adjacent to the bird on the right side can be identified by an arm, the thighs, and sashes.

84. The mythical bird may be identified as a phoenix or Garuda. The former has been depicted standing above pictorial halls or tomb entrances in China as early as the Han dynasty, whereas the latter is a protective demigod in Hinduism and Buddhism whose image is found in temples in South, Southeast, and East Asia.

85. The latter measures 30 cm wide based on Xiao Mo's measured drawing, but the former is measured from the counter-perspective edited photograph instead of from the site. Also, the four figures depicted on the exterior mural have uneven heights, and two of them are more damaged than the others. Therefore, a precise ratio cannot be calculated from the current dataset. Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 418, fig. 12-7.

façade and distinguish them from each other. The image above Cave 427 is similar in theme, except that only one *apsaras* on the left side and two on the right side are identifiable. In addition, a figure on the left side of the left-side *apsaras*, which seems like a winged demigod, faces the direction of Cave 428 instead of Cave 427 (Figure J-16). The irregular composition can be viewed as a visual design to connect Cave 427 to Cave 428, just like the case of Caves 231 and 94.

How do the scaled motifs of *apsaras* contribute to the embodied viewing experience? In a reconstructed sectional view (figure 4-40), a visitor who arrives in front of the cliff might notice the large-sized *apsaras*. Their large and brilliantly colored appearance helped to define the “skylines” of the cave cluster. As the visitor ascends to the top-level passageway to visit each individual cave, he or she would no longer see the large figures, as the view would be blocked by the overhanging roofs of the porches. Instead, the smaller figures appear in front of the visitor’s eyes in a similar viewing angle and at a more intimate distance. The open-air mural and the timber façade together assist one in transferring from the cluster to the constituent caves of it, from the distant view to a closer view, from a visual experience to a haptic experience, eventually guiding one to pass through the liminal space it defines. Thus, one is physically and psychologically prepared to enter Cave 431, where one will encounter one of the earliest Pure Land images at Dunhuang.⁸⁶ While the interior environment was recreated in the early Tang, the exterior structure and mural, which were refurbished some three hundred years later, re-created and augmented that ideal. They bridge the art of visual contemplation with the bodily experience of the site.

86. For a discussion of the Meditation sūtra paintings in Cave 431, see Feng, “Water, Ice, Lapis Lazuli,” 59–60, 116–19.

The mural stripe extends. One finds contingent traces of the mural between Cave 458 to the south and Cave 418 to the north above the third-level caves. Centered at 428, a shorter stripe of mural covers the second-level caves between Caves 288 to the south and Cave 310 to the north (figure 4-33). The two stripes measure as long as approximately 140 and 70 meters, respectively. The mural stripes in these areas exhibit many traces of centralized planning, such as repetition of the aforementioned pictorial composition, correspondence between the two levels of stripes, and the consistent painting style. Admittedly, some areas seem painted by different hands. For instance, the mural above Cave 454 (figure J-9) and that above Cave 458 (figure J-10) seem to be painted by the hands of master and apprentice, respectively. And some other areas have been repainted. For example, two near life-sized monk figures depicted between the façades of Caves 427 and 428—the one on the left facing Cave 428, the one on the right facing Cave 427—were designed as visual elements of the respective cave's appearance, demarcating a ritual space.⁸⁷ The figures were not painted at the same time (figure 4-41); judging from the overlapped plaster layers, the Cave 428 monk figure was likely painted when Cave 428 was refurbished during Yijin's reign, and then the Cave 427 monk figure was added to its right when Cave 427 was refurbished during the reign of Yuanzhong in 970 CE.⁸⁸ While painted a few decades apart, the composition is remarkably coherent. The open-air mural seems to have been a

87. The monk figures in the open-air mural find correspondence in several small images of monk disciples depicted on the timber-structured façades of Caves 444, 427, 437, and 431. The inscriptions beside the latter identify them as the ten great disciples of the Buddha, who are often represented in a Buddha preaching scene. Another monk figure in the open-air mural is located to the south of Cave 7 (figure N-21). It indicates the commonness of the motif and its wide distribution at the Mogao caves.

88. The dating is based on the inscription on the bottom surface of the ridge purlin of Cave 427. It reads: “維大宋乾德八年歲次庚午正月癸卯朔二十六日戊辰勅推誠奉國保塞功臣歸義軍節度使特進檢校太師兼中書令西平王曹元忠之世勛建此窟簷紀。” The inscription is written in two vertical lines from south to north and from west to east on an area of 120 cm (h) by 14 cm (w). *Dunhuang Mogao ku gongyangren tiji*, 175.

collective and continued project during the Cao-family Guiyijun period.

Because Cave 428 had been renovated, the nearby caves were subsequently renovated by local officials, families, and societies. During the renovation, a variety of donor figures were represented in Cave 427, including men and women, clergy and lay people, living and deceased. The inscriptions beside the donor figures identify a large figure, 147 centimeters tall, that occupies the corridor walls as the military governor, Yuanzhong; two small donor figure, twelve to fifteen centimeters tall, in the antechamber as “sons” (*nan* 男) of a Qian 千 family; and many figures ranging from twenty to sixty centimeters tall inside the cave as “deceased uncles” (*gushu* 故叔), “deceased brothers” (*guxiong* 故兄), and their living relatives “younger brothers” (*di* 弟) and “sons” (*nan* 男). Some others, who may or may not be relatives, include a monk of a Xiande monastery (顯德寺), a lay woman who was a “sincere disciple,” and two “savants of Mahayana Buddhism” (大乘賢者). Many of them belong to a Wang 王 family, while a few surnames include Qian 千, Ma 馬, and Wan 萬.⁸⁹ All figures parade toward the cave, presenting a condensed image of the Dunhuang families and Buddhist society at the time.

What this social image represents is the inclusiveness in the production of Buddhist spaces. During the Cao clan’s reign, quite a few cave façade projects were recorded as having been initiated or advocated by the military governors and subsequently completed under the collaboration of his understrapper and the Buddhist societies.⁹⁰ Some societies were established for a one-time project to build a buddha hall or to renovate a cave, whereas others were made to

89. *Dunhuang Mogao ku gongyangren tiji*, 155–59.

90. For instance, P.3276V “Jieshe xiuku gongde ji 結社修窟功德記” (Merit record of founding a society and renovating a cave) records a renovation project of a timber-structured porch that was initiated by Cao Yijin and, after his death, continued by a Buddhist society (*she* 社). Another instance, the renovation of the Cave 96 pavilion, was discussed in chapter 5.

periodically hold festive activities at the cave site.⁹¹ These societies were often managed by two or three administrators and were regulated by a set of rules to which all society members gave consent.⁹² They provided an effective way of managing large-scale renovations of the cliff face, which is exemplified by the Cave 428 area.

Cave 431, whose multiple renovations were under family-based patronage, displays an extra-familial network for merit-making.⁹³ The inscription on the ridge purlin dates the construction to the reign of Yanlu in 980 CE, whereas the other inscription on the lower purlin to the west identifies the actual patron of cave renovation as Yan Yuanqing 閻員清, a mid-rank magistrate in the former's court.⁹⁴ A green cartouche above the entrance on the east wall of the antechamber bears a merit record of Yan (appendix B-8). The legible part of the merit record

91. For instance, Dunhuang documents P.2991, P.4960 and S.3540 record the “contracts” of societies established for a one-time construction project. The Lantern Distribution manuscript, for example, records an annual ritual of lightening up all the caves at Mogao by members of a Buddhist society.

92. The three officials—*sheguan* 社官 (official of the society), *shezhang* 社長 (head of the society), and *lushi* 錄事 (secretary)—are chosen by a society and charged with making decisions together. Dunhuang documents P.4960 “Kutou xiu fotang she tiao 窟頭修佛堂社條” (Regulations of the society of building a Buddha hall in front of the caves) describes some income of the society and how the three officials’ collective supervision should be conducted. For records of societies renovating caves, see Zheng and Zheng, *Dunhuang bei ming zan jishi, 808-813, 1401-09*. For the society-involved contemporary construction of caves at Yulin, see Ma De, *Dunhuang shiku yingzao shi daolun*, 203–06.

93. Caves 431 and 432 were renovated at least three times, one of which was conducted by a Yin 陰 family, as evidenced by the early Tang inscription in the antechamber of Cave 432. Sun, “Kuyan diaoyan,” 19.

94. The texts are “[維大]宋太平興國伍年歲次[庚]辰二月甲辰朔廿二日乙丑勅歸義軍節度瓜沙等州觀察處置管內當押蕃落等使/[特進]檢校太傅同中書門下平章事譙郡開國公食邑一阡伍伯戶食實封七伯戶曹延祿之世勅建此窟籙紀,” and “窟主節度內親從知紫亭縣令兼衙前都押衙銀青光祿大夫檢校刑部尚書兼御史大夫上柱國閻員清.” Both inscriptions are written from south to north on an area of 116 cm (h) by 12 cm (w). The former is written in two lines from west to east, and the latter has one line only. Dunhuang Yanjiu Yuan 敦煌研究院 [Dunhuang Academy], *Dunhuang Mogao ku gongyangren tiji*, 164–65; and Sun and Sun, *Shiku jianzhu juan*, 182.

describes the auspicious Mogao site (lines 1–4), the benevolent character of the cave patron (lines 5–12) and his wife (lines 13–15), and the renovation project (lines 16–19). A prayer is made at the end (at least six lines starting from line 20): May the merit of cave renovation be transferred to the military governor and all beings so that they “together enter the Buddha’s path” (*tong deng foda* 同登佛道).⁹⁵ This common expression reminds us of Yijin’s merit record, which vows that “four kinds of sentient beings of the six paths . . . shall eventually return to the Pure Land.”⁹⁶ Whether the product of each project was magnificent or modest, these cliff beautifying projects, one after another, accumulated into a landscape art of unprecedented continuity.

Capturing the Transient and the Transformative

Medieval pilgrims arriving at the Mogao caves after traveling across the Gobi Desert must have wondered if they had come to a Buddhist paradise. The landscape scale of the exterior decoration and the transformative environment that they would have encountered is well articulated by one Zhang Yingrun 張盈潤 (act. 927–50), a tenth-century Dunhuang literatus-official, who inscribed on the antechamber wall of Cave 108 a prose poem during an “occasional business trip” to Mogao. Yingrun’s preface to the poem reads as follows (figure 4-42, appendix B-9):

Run, who shamefully works for the local government in both secretary and military affairs, ascended the steep mountains and suddenly visited the numinous cliff; descended the deep valley and sincerely paid homage to the sacred traces. . . . Then I heard music

95. *Dunhuang Mogao ku gongyangren tiji*, 164.

96. Hexi jiedushi shangshu Cao Yijin xiu daku gongde ji 河西節度使尚書曹議金修大窟功德記 [The merit record of Cao Yijin, the military governor and minister of Hexi circuit, building a grand cave], P.3781, ca. 920 CE.

and monastic sounds, whose clear and elegant sound resounded through the blue sky. My nose was filled with the fragrance of incense, which eliminated the sins and sufferings of the netherworld. Then I further wandered. [Seeing] the flowers, who would not give up the boisterous afflictions? Contemplating the precious fruit, who would feel for the worldly romance? Rui, because of the previous causes, had the result of this flesh body of the normal kind; Should not be attempted by the form, out of no reason migrating in the firing houses. Today I saw my buddha of inconceivable [merits, longevity, light, etc.]; I intended to [devote to him until] my organs spread on the ground. Although I might not be able to smash my body, I vow to take refuge in Buddhism. Because of this occasional business trip, I [only had a little time to] inscribe a few lines [as following]:

I had served the office and been ordered to run for long;

Received the grand kindness even though I contributed little.

Yesterday I ascended the big mountain through the long ramps;

I walked down the deep valley and saw the flowery ponds;

Widely connected and doubly opened were the thousand niches and caves;

This valley used to bear the brilliance of the then thousand buddhas;

The miraculous herbs was fragrant and embroidered-brocade-liked.

The auspicious birds always hovering around the trees.

The foolish and sentient being (i.e. I) takes refuge in the true teachings from now on,

And vows to not return to the impurity of the mundane world.⁹⁷

Yingrun was a clerk of the inspections general (*jiedu yaya* 節度押衙) in the Guiyijun government and a layman with familial ties to Buddhism. Several Dunhuang manuscripts and inscriptions that he signed indicate that he studied at the Tulin Monastery of Dunhuang in 927 and acted as a scribe and judge in 934.⁹⁸ Like Yan Yuanqing, Yingrun participated in Buddhist affairs and construction projects. He and a monk cousin completed a pagoda construction initiated by his deceased uncle, who was a Buddhist priest.⁹⁹ In addition, Yingrun participated in the Mogao site's maintenance and supervision led by the Guiyijun leaders and monk officials such as Daozhen.¹⁰⁰ It was in this context that Yingrun paid his visit to Mogao.

Yingrun's inscription points to a variety of ephemeral things that were crucial to his conversion. It starts with the journey from the Dunhuang town to the cave site, which required climbing up and down sand dunes in the Gobi Desert filled with graveyards. Having walked down "the deep valley," Yingrun saw the refreshing scenery of the oasis. While the numerous cave temples and myriad religious images gave the site a look of "the buddha land" and "the immortal's realm," it is the ephemeral and living things that he paid most attention to.

"Miraculous herbs," "auspicious birds," "flowery ponds," "music and monastic sounds," and

97. *Dunhuang Mogao ku gongyangren tiji*, 53–54.

98. These include P.5011, P.3257, P.2660P1V, P.3390, and a visitor's inscription in Mogao Cave 108's antechamber. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 385n3.

99. P.3390 "Jiedu yaya zhang yingrun shouzu zhuang futu gongde ji bing xu 節度押衙張盈潤孟授祖莊浮圖功德記並序." Zheng and Zheng, *Dunhuang bei ming zan jishi*, 383–84, 385n8.

100. For Daozhen's activities at Mogao, see Shi Pingting, "Sanjiesi Daozhen Dunhuang cangjingdong" 三界寺·道真·敦煌藏經洞 [The Monastery of Three Realms, Daozhen, the Dunhuang library cave], in *1990 nian Dunhuangxue guoji xueshu taolunhui wenji* 1990 年敦煌學國際學術研討會文集 [Proceedings of the international symposium on Dunhuang studies in 1990] (Shenyang: Liaoning meishu chuban she, 1995), 178–210. For Daozhen's and companions' inscriptions during a similar "official trip" to Cave 108, see *Dunhuang Mogao ku gongyangren tiji*, 54–55.

“fragrance of incense”—whether actual scenes of the site or visionary scenes in murals—gave Yingrun a special touch. The flower especially penetrated his mind as it simultaneously enhances the Pure Land–like environment and signifies impermanence and attachment to form (*se 色*). The multiple associations accelerated Yingrun’s inner transformation. As art historian Wei-Cheng Lin reminds us, a dialectical relationship between materiality and immateriality exists in the construct of ritual space. As he observed, “Because the ritual invocation of the divine presence was imminent and transitory, much of the ritual’s spatial concept was conveyed immaterially—through the fragrance of the incense, the light of the lamp, or the movement of the ritual master.”¹⁰¹ Although the impermanent things have all perished in the long passage of time, the visual representation of them are partly preserved in the open-air mural. The imagery of scattered flowers, flowing clouds, musical instruments, plants, monk figures, and flying *apsaras* making offerings represent the environmental elements that touched the most receptive part in the mind of medieval visitors and relocated them to the buddha lands.

Reflection on Situatedness in Pure Land Art

This chapter has discussed the transition of the palatial architectural imagery from the pictorial scenes of Pure Lands to the transformation of the cliff site. It concerned the trajectory of the integration of virtual and actual architectures at the Mogao site and outlined the rapid development of architectural backgrounds in Pure Land scenes around the eighth century, the spatial intricacy of cave architecture introduced by the cave suites since the ninth century, and the systematic refurbishments of the cliff face that turned it into a canvas of visionary

101. Wei-Cheng Lin, “Religious Place/Space in Premodern China,” *Oxford Handbooks of Religious Space*, ed. Jeanne Halgren Kilde (Oxford: Oxford University Press, 2022), 155.

topography in the tenth century. The Mogao caves not only testify to the suggestive power of the Pure Land caves but also gives the best clue to the sequential formulation of the paradisiacal image in pictorial, plastic, and architecture mediums.

Inspired by a similar ambition to materialize an architectural image of the Pure Land, an installation was erected in the Gobi Desert of Dunhuang (figure 4-43) by Chinese sculptor Dong Shubin 董書兵 (b. 1968) in October 2018. Titled *Wujie* (無界, borderless) or *Haishi Shenlou* 海市蜃樓, mirage), the architectural-scale installation consists of a central pavilion and four corner towers, all of which are made of steel tubes and joints and painted white. The Pure Land architecture in the Dunhuang murals seems to emerge from the sand, and when the hot desert air blows, one almost feels it flowing as “a mirage.” This contemporary installation sharply contrasts with its medieval counterpart, the open-air mural above Mogao Cave 94. *Wujie* is designed to be borderless and translucent, revealing everything to a beholder from afar, whereas Cave 94 was designed to mediate with borders, seducing people into passing through the threshold and exploring the hidden half of the miraculous landscape. The surreal quality of the contemporary installation lies in its pure image made of steel, whereas that of the ancient mural lies in a composite image made of the exterior and interior murals, rock-cut chambers, timber façades, and the cliff. As opposed to an installation standing against the ground, the open-air mural dissolves in the visionary topography of buddha lands and the actual cliff site.

Chapter 5

Renewing the Old District

Collective design and multigenerational construction have shaped not just some of the major caves and cave groups at Mogao but also a cave cluster that is no less complex than the pavilion. By investigating the renewal of the oldest cave district of the Mogao cave complex between the 950s and 980s CE, this chapter reveals the broad and profound interconnectivity among a cluster of caves at the center of the district. This district is the densest area in the middle south of the current south section, occupied by as many as five levels of caves. After the construction of a primary group of Caves 268, 272, and 275 in around the fifth century, levels of caves were gradually added to expand the cave complex horizontally and then vertically. A drastic transformation occurred when the Cao clan of the Guiyijun Circuit built or rebuilt four gigantic family caves in the district.

Accompanying the construction of Caves 61, 55, 256, and 454, old caves were deconstructed, renovated, or concealed, and the connectivity between the levels was altered. As this chapter will demonstrate, the result of this intensive construction and renovation is not just a rearrangement of the architectural patterns of the cliff area but also an interrelation of the visual programs inside the cave spaces. By analyzing the thematic, visual, and spatial connections between Cave 55 and the renovated Cave 275, the first section investigates how the historical and religious values of the primary cave group were recognized and reenacted. By theoretically reconstructing the initial and finalized designs of Cave 454, the second section reveals how manifold pagoda images emerged from within and without the cave and reshaped the cave's vicinity. The renewal of the old district testifies to the final integration of a previously unplanned

cave complex, renovation as a precursor of cultural heritage conservation, and the cave temple's gradual transition from a meditative to an immersive visual environment.

From Cave 275 to Cave 55

This section explores the question of how a cave temple of the tenth century was designed in relation to preexisting caves at Mogao. This mile-long cave complex was the result not of a one-time construction project but of continual construction and reconstruction between the fourth to fourteenth centuries. At the height of the complex's scale in the tenth century, it consisted of around six hundred caves built over five centuries.¹ But how the caves were nested, grouped, clustered, lumped together, or simply juxtaposed is not entirely clear to us. Current studies of the cave architecture at Mogao in the Guiyijun period have addressed the evolution of the central-altar cave typology,² the construction history of representative caves commissioned by political leaders,³ and the patterns of siting and the paradigm of pictorial programs.⁴ However, apart from some general principles about cliff usage, how exactly the architecture of the Mogao complex was formed in the *longue durée* is not yet clear. An entry point to the issue is the

1. The quantity of tenth-century Mogao caves is indicated by the *Lantern Distribution* manuscript (951 CE). Ma, “10 shiji zhongqi de mogaoku yamian gaiguan.”

2. Zhang, “Dunhuang shiku de zhongxin fotan ku.”

3. This has become one of the most popular ways of studying the art of the Dunhuang Buddhist caves, apart from iconographic studies and periodical style analysis. For recent studies on an individual cave of the Guiyijun period, see Zou Qingquan 鄒清泉, *Wenshu tang: Cao yuanzhong shidai fojiao wenhua yu shijue xingxiang ge'an yanjiu* 文殊堂：曹元忠時代佛教文化與視覺形象個案研究 [The Manjusri Hall: A case study of Buddhist culture and visual art in the reign of Cao Yuanzhong] (Lanzhou: Gansu jiaoyu chubanshe, 2015); Gao Xiujun 高秀軍, “Dunhuang mogao ku di 55 ku yanjiu 敦煌莫高窟第55窟研究” [Research on Mogao Cave 55 of Dunhuang], PhD diss., Lanzhou University, 2016; Guo, *Dunhuang Mogaoku di 454 ku yanjiu*; and Shao Qiangjun 邵強軍, “Dunhuang cao yijing di 98 ku yanjiu 敦煌曹議金第98窟研究” [Research on Cao Yijin's Cave 98 of Dunhuang], PhD diss., Lanzhou University, 2017.

4. Lee, “Repository of Ingenuity,” 201–3.

interaction among caves, especially those that were constructed at separate times. The lack of studies in cave groups, clusters, and districts is not driven by a lack of interest but by problems of evidence. With a few exceptions, the Mogao caves do not seem to have been grouped according to an obvious logic, in contrast to Buddhist cave sites elsewhere, such as the Yungang grottoes and the Kizil caves.⁵ While an initial cave group of the Mogao complex is accepted to be a group of vihara (meditation or monastic cell) caves and hall caves from the Northern Liang or Northern Wei periods, the border would soon be blurred by caves added later to the vicinity.⁶ The architectural means of structuring the cliff site was explored during the first half of the Tang

5. For example, in central China, the site of Yungang Grottoes is centered at the group project of the Five Caves of Tanyan” (Tanyao Wuku 曇曜五窟, i.e., Caves 17–20) from 460–65 CE in the first phase, and the group composition was further explored in the “twin cave” format. Each of the three pairs of twin caves (Caves 5 and 6, 7 and 8, and 9 and 10) had very similar layouts and a shared antechamber. In Kucha, Kumtura Caves also has a cave group known as Five Connecting Caves (Wulian Dong 五連洞, Caves 68–72). The five caves not only shared an elongated antechamber that faced a splendid riverscape but also constituted a function-wise complex with different cave types, such as vihara caves and central-pillar caves. Studies of cave groups and sectioning include Giuseppe Vignato, “Archaeological Survey of Kizil: Its Groups of Caves, Districts, Chronology and Buddhist Schools,” *East and West* 56, no. 4 (2006): 359–416; Angela Falco Howard and Giuseppe Vignato, *Archaeological and Visual Sources of Meditation in the Ancient Monasteries of Kuca* (Boston: Brill, 2015), 3–55; and Xia Lidong 夏立棟, “Tuyugou shiku de zhanshan yamian quduan yu yizhi kaogu fenqi 吐峪溝石窟的斬山崖面區段與遺址考古分期” [Cliff section and periodization of the rock-cut cliff at the Tuyog Caves], *Kaogu* 11 (2021): 100–12.

6. Discussions on the primary cave group are numerous. For archaeological surveys, see, for example, Chen, Mingda 陳明達, et al. “Dunhuang shiku kancha baogao 敦煌石窟勘察報告” [Survey report about the Dunhuang caves], *Wenwu cankao ziliao* 2 (1955): 58–59; Fan Jinshi 樊錦詩, Ma Shichang 馬世長, and Guan Youhui 關友惠, “Dunhuang Mogao ku beichao dongku de fenqi 敦煌莫高窟北朝洞窟的分期” [Periodization of the Dunhuang Mogao caves of the Northern Dynasties], in *Zhongguo shiku: Dunhuang Mogao ku* 中國石窟：敦煌莫高窟 [Chinese caves series: Dunhuang Mogao Caves], vol. 1, Dunhuang Wenwu Yanjiu Suo 敦煌文物研究所 [Dunhuang Cultural Relics Research Institute], ed. (Beijing: Wenwu chubanshe; Tōkyō: Heibonsha, 1980–4), 185–197; Fan Jinshi 樊錦詩, and Cai Weitang 蔡偉堂, and Huang Wenkun 黃文昆, *Mogao ku di 266–275 ku kaogu baogao 莫高窟第266–275窟考古報告* [The Archaeological report of Mogao Caves 266–275] (Beijing: Wenwu chubanshe, 2011).

(618–907) in the cases of two colossal-image caves and the pavilions screening them.⁷ This matured further during the Tibetan period (767–848), when three vertical composites of caves and cliff-top pagodas were built.⁸ But curiously, neither the singular landmark nor the cave pagoda composites seemed to be further pursued at the height of cave construction during the Guiyijun period (848–1036).⁹ Instead, certain areas of the Mogao complex were altered in subtler ways of pairing, grouping, and contrasting the new with the old.¹⁰

The best case of extensive modification that changed the appearance of a district of caves

7. The two colossal-image Caves 96 and 130 still serve as landmarks of the cliff site today, and the Dunhuang Academy uses their location to define the subsections of the south section of the Mogao caves.

8. These compounds are the group of Caves 156 and 161 and an octagonal mud pagoda, that of Caves 237 and 234 and a destroyed pagoda on cliff top, that of Caves 16, 365, and 366, and a destroyed pagoda on the cliff top. In the late Tang period, a similar but simpler compound, that of Cave 143 and a pagoda on the cliff top, was built, too. See Sha, “Dunhuang tubo yijing sanzang fashi facheng gongde ku kao”; Zhao, *Tubo tongzhi shiqi dunhuang mijiao yanjiu*, 179–96; Zhao “Mogao ku tubo shiqi ta, ku chuizhi zuhe xingshi fenxi.”

9. Instead of a single landmark, probably a pair of large hall caves were favored in practice in the tenth century, like Caves 98 and 100, Caves 61 and 55, but they were not comparable to the colossal-buddha caves in volume, and it is still debatable whether they were designed as a group because there were usually a couple of decades between the constructions of the two caves, and because they were not constructed adjoining each other but were intertwined by several other caves. Probably the only confirmed case of physically grouped caves since the tenth century is the Xixia-period renovation of Caves 27–30 based on their shared antechamber, but no more sophisticated form has been recognized. Sun and Sun, *shiku jianzhu juan*, 198.

10. Cave designers refer to patrons, monastic users, artisans, and other groups who might have been involved in the multistep decision-making process of building a cave. Sonya Lee points out several possible planning concerns from the tenth century, including building a new cave paired with an existing cave, like Cave 94 in pair with late eighth-century Cave 96; building the caves in pair, like Caves 61 and 55, and Cave 98 and a west-niched Cave 100; and building in the vicinities of the colossal-buddha caves, like Caves 98 and 94 flanking the northern colossal-buddha Cave 96, and Cave 156 adjacent to the southern colossal-buddha Cave 130. Moreover, she suggests that the pairing of Caves 61 and 55 was meant to form the third center apart from the two colossal-buddha caves, as the three (sets) had the same interval distance (500 ft). However, disappointingly, Lee does not distinguish between a pair of caves of the same type and those of the different types, nor does she offer any further explanation of why the pair of Caves 61 and 55 were built, apart from the geometrical balance. See Lee, “Repository of Ingenuity,” 201–3.

is what I call the “old district.” This district is centered at the initial group of Caves 268, 272, and 275, on the sides of which the Northern Wei period caves sprawled within this district (figure 5-1).¹¹ The initial group is cut out in the center of a slight bend on the south-north-running cliff face, sitting west and facing east (figure 5-2). This district, after the complex’s expansion over the following five centuries, has shifted from the center to the middle south. They occupy the middle section of about thirteen meters above the initial ground level, which is indicated by the level height of an early Cave 489 right below Cave 272 (figure 5-3). Even when the ground level was elevated by about five meters since the tenth century, these early caves were still about eight meters above ground. In the following times, the district was gradually saturated with four levels of caves, one added above and two below the level of the initial group. Cave 55 is one of the newest caves inserted into the old district in circa 962 CE. The thematic correspondence and spatial connection between Caves 55 and 275, as will be discussed, indicates a renewal and revival of the earliest caves at the geographical center of the Mogao complex. In a case study of the tenth-century renovation of Cave 275 and construction of Cave 55, the study will reveal the thematic, spatial, and strategic correlations between this typologically and temporally distant pair.

Cave 275 Renovated during the Cao Reign

Cave 275 is the largest of the caves that constitute the initial group and enshrines a Maitreya Bodhisattva that was the largest at Mogao during the Northern Dynasties (figure 5-4). The group is widely accepted as having been constructed in the fourth or fifth century, although

11. The extant caves were discontinued on the north side of the initial group between Caves 275 and 285. However, judging from the existence of Caves 487 and 488 below the current ground level, the cliff area should have been filled with early caves, collapsed, and refilled by caves in subsequent periods.

the exact dating is still debated.¹² Architecturally, Cave 275 is the only transversally elongated hall cave in Dunhuang (figure 5-5).¹³ The rectangular room is covered by a central ceiling panel with reliefs of superimposed quadrilaterals and two narrow slopes with reliefs of rafters on the long sides. This may be viewed as an abbreviated adaptation of the caisson ceiling (*luding* 盪頂), which had been applied to funerary caves in southwest China since Han dynasty. The ceiling approximates a barrel-vaulted ceiling of the central-Asian prototype with a traditional Chinese timber-structured construction system. The raised ceiling gives a proper emplacement to a 3.25-meter-tall bodhisattva statue at the west end of the cave chamber. Based on the cross-legged

12. Scholars have proposed various datings of the initial cave group, ranging from the Western Liang (400–21 CE) and the Northern Liang (397–439) to the Northern Wei periods (386–535). Shi Weixiang dates the group to the Western Liang and the Northern Liang in *Dunhuang Mogao ku neirong zonglu*, 228. Fan Jinshi, Ma Shichang, and Guan Youhui date the caves to the Northern Wei period in “Dunhuang Mogao ku beichao dongku de fenqi,” 186–88. This view has become the leading opinion. Chinese archaeologist Su Bai dates the primary group to the Northern Wei in “Mogao ku xiancun zaoqi dongku de niandai wenti 莫高窟現存早期洞窟的年代問題”(Dating issues about the early extant caves at the Mogao caves), in *Zhongguo shiku si yanjiu* 中國石窟寺研究 [Studies of the cave temples in China] (Beijing: Wenwu chubanshe, 1996), 270–78, and argues that they were influenced by the Yungang caves in central China. Wang Long and Jin Weinuo date the group to the Western Wei based on literary records. See Wang Long 王隴, “Gansu zaoqi shiku de liangge wenti 甘肅早期石窟的兩個問題” [Two problems of early caves in Gansu], in *1983 quanguo dunhuang xue taolun hui wenji: shiku yishu bian* 1983年全國敦煌學術討論會論文集·石窟藝術編 [Proceedings of Dunhuang studies symposium in 1983] (Lanzhou: Gansu renmin chubanshe, 1985), 323; and Jin Weinuo 金維諾, “Dunhuang kukan mingshu kao bu (zhaiyao) 敦煌窟龕名數考補(摘要)” [Complementary study of the list of caves of Dunhuang (abstract)], *Dunhuang Yanjiu* 3 (1988): 5.

13. Xiao, *Dunhuang jianzhu yanjiu*, 57.

position and Gandharan-style ornaments,¹⁴ the bodhisattva is often identified as Maitreya.¹⁵ Maitreya is prophesied to be the future buddha, succeeding the historical buddha, Shakyamuni. In addition, six seated bodhisattva statues, each a meter tall, are placed in high niches on the north and south walls, encircling the viewer in the cave space (figure 5-6).¹⁶ Based on the visual context and the *Sūtra on Visualizing Maitreya Ascending into Tuṣita Heaven* (Foshuo guan Mile shangsheng Doushuatian jing 佛說觀彌勒上生兜率天經), the four *que*-tower-shaped niches (*quexing kan* 闕形龕) equipped with smaller cross-legged bodhisattvas symbolize the celestial palaces of Maitreya's Tuṣita Heaven.¹⁷ The identification of the bodhisattva-in-meditation (*siwei pusa* 思維菩薩) statues enshrined in the two twin-tree niches (*shuangshu kan* 雙樹龕) on the east end of the walls is undetermined. Proposed identifications include Prince Siddhartha—Shakyamuni before his renouncement of the world—and Maitreya Bodhisattva.¹⁸ As for the

14. It is usually considered that this cave displays Gandhara-style sculpture. On the other hand, the architectural space is somehow comparable to the vaulted front part of the typical central-pillar cave at the Kizil Caves (e.g., Cave 38). For example, see Koetsuka Takashi, 肥塚隆 “Mogao ku 275 ku jiaojiao pusa xiang yu jiantuoluo de xianli 莫高窟 275 窟交腳菩薩像與犍陀羅的先例” [The cross-ankled bodhisattva in Cave 275 of the Mogao caves and iconographic source in Gandhara], *Dunhuang Yanjiu*, 1 (1990): 16–24.

15. Apart from this leading view, some scholars identify the statue as Shakyamuni Buddha. See He Shizhe 賀世哲, “Guanyu Dunhuang Mogao ku de sanshi fo yu sanfo zaoxiang 關於敦煌莫高窟的三世佛與三佛造像” [Three buddhas of the three epochs and the images of the three buddhas in Dunhuang Mogao caves], *Dunhuang Yanjiu* 2 (1994): 70.

16. For the most detailed illustrations and stylish analysis of the statues, see Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 155–59, 166–75, figs. 108–11, 117–21.

17. *Foshuo guan Mile shangsheng Doushuatian jing* 佛說彌勒上生兜率天經 [Sūtra on visualizing Maitreya ascending into Tuṣita heaven], trans. Juqu Jingsheng 沮渠京聲 (d. 464), *T* 452, vol. 14.

18. Ning Qiang, “Patrons of the Earliest Dunhuang Caves: A Historical Investigation,” in *Between Han and Tang: Religious Art and Archeology in a Transformative Period*, ed. Wu Hung (Beijing: Wenwu chubanshe, 2000), 503; and Liu Yongzeng 劉永增, “Mogao ku beichao qi de shiku zaoxiang yu wailai yingxiang: yi di 275 ku wei zhongxin (shang) 莫高窟北朝期的石窟造像與外來影響—以第275窟為中心(上)” [The sculpture in caves at Dunhuang during the Northern dynasties: Centered at Cave 275, Part I] *Dunhuang Yanjiu*, 3 (2004): 85.

pictorial contents in the primary design, Cave 275 bears mural paintings of six *jātaka* stories (tales of the Buddha's incarnations), and the narrative paintings are concentrated in horizontal band in the middle register of the north and south walls (figure 5-7-a).¹⁹ While different interpretations of the cave's visual program exist, the theme of Maitreya Bodhisattva and his Tuṣita Heaven is pronounced.²⁰

The well-studied grouping of Caves 275 and Caves 268 and 272 is a basis for our investigation of the ongoing practices of relating new caves to them. Cave 268 is a multi-chamber meditation cave with a niche enshrining a cross-legged buddha image and four axillary caves designated as Caves 267 and 269–271. Cave 272 is a truncated pyramidal ceiling cave with a west niche enshrining the image of a Buddha seated with pendant legs and its entrance flanked by two niches enshrining meditating monks. Since the three caves enshrine Maitreya as the main icon and represent meditation cells and niches (figure 5-8),²¹ many believe that they convey the Pure Land of Maitreya and emphasize the Chan (Zen) meditation practices Maitreya advises.²² Recently, art historian Wu Hung pointed out the individual beholder's scale of all three cave

19. Ning, "Patrons of the Earliest Dunhuang Caves," 503–6.

20. The Maitreya theme is most often interpreted as being for *dyana* (meditation) practice or for contemplating Maitreya's Pure Land in Tuṣita Heaven. Yet recently, Zhang Nannan 張南南 proposed that Cave 275 was used for ordination rituals of bodhisattva precepts; see "Yi jie wei zun, shifang tong zheng: Mogao ku di 275 ku yu jiefa guanxi tuice 以戒為尊，十方同證——莫高窟第275窟與戒法關係推測" [Precepts and testimony: Inspection of Mogao Cave 275 and its relationship with Buddhist ordination], in *Lilun, fangfa, qianjing: Dunhuang shiliu guo beichao shiku yanjiu* "huiyi lunwen ji 2022 理論·方法·前景——敦煌十六國北朝石窟研究"會議論文集 [Proceedings of the conference "Theory, method, vision: Studies of the Dunhuang caves of the Sixteen Kingdoms and Northern Dynasties"], ed. Dunhuang yanjiu yuan (Dunhuang: Dunhuang Academy, 2022), 140–44.

21. Fan, Ma, and Guan, "Dunhuang Mogao ku beichao dongku de fenqi," 186.

22. Yang Mingfen 楊明芬, "Mogao ku zaoqi jingtu sixiang biaoqian—yi beiliang sanku wei zhongxin 莫高窟早期淨土思想表現——以北涼三窟為中心" [Representation of early Pure Land thought at the Mogao caves, exemplified by the three caves of Northern Liang], *Dunhuang Xue Jikan* 4 (2006): 33–41; and Liu, "Beiwei shiku yu chan," 343–45.

spaces and the typological correspondence between Cave 268 and 275. He argued that the two caves represent the beginning and end points of meditation—seclusion in caves and transcendence to heavenly palaces.²³

Since the advancement of archaeological examination of the initial group, the caves in this group were not formed at one time but underwent much modification and refurbishment in the subsequent centuries. According to archaeologist Zhao Rong, the front part of Cave 268 was first created, then Cave 275 and the rear part of cave 268, and finally cave 272.²⁴ The sequence confirms the thesis about the correlation between Caves 268 and Cave 275 yet complicates it by the temporal dimension. In subsequent interventions of the area, two niches enshrining meditating monk statues (Caves 272A and 273) were added to the cliff face besides the entrance corridor to Cave 272 in the Northern Wei. One other miniature cave shrine (Cave 274) was added to the cliff face on the south side of the entrance to Cave 275 in the Sui period.²⁵ The Sui period, which marked the first peak of construction of this district, witnessed the renovation of Caves 267–271 and 275 and the construction of Caves 266, 274, 455, 456, and 457.²⁶ The now collapsed north side very likely used to bear a similar cave, judging from the pattern of paired meditation cave cells in Cave 268 and the paired niches outside Cave 272. The initial group, which comprises three main caves and eight auxiliary caves (seven of which are extant), underwent substantial refurbishment in the Northern Dynasties and Sui periods. However, the entire group was not refurbished afterward; only Caves 272 and 275 were refurbished when

23. Wu, *kongjian de Dunhuang*, 105–18; Wu, *Spatial Dunhuang*, 109.

24. Zhao Rong 趙蓉, "Dunhuang Mogao ku beiliang sanku kaizao cidi lunshu 敦煌莫高窟北涼三窟開鑿次第述論" [On the excavation sequence of the three Northern Liang caves at Mogao in Dunhuang], *Dunhuang Yanjiu* 192, no. 2 (2022): 67–80.

25. Dating after *Dunhuang Mogao ku neirong zonglu*. The dating is based on painting and statue style.

26. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 150.

members of the Cao clan were military governors of the Guiyijun Circuit in 914–1036.²⁷ The tenth-century refurbishment of Cave 272 was limited to repainting of the bottom register of the main chamber and the corridor. The added pictorial contents were rows of donor figures for the main chamber and images of buddhas and bodhisattvas for the corridor. The minimal retouching of Cave 272 served to maintain rather than to alter.

In comparison, the renovation of Cave 275 altered the spatial setting and visual program at the minimal expense of the initial design. More importantly, it displays a humble attitude toward the original design. A partition wall was added to subdivide the original single-chambered Cave 275 into a larger main chamber and a smaller antechamber (figure 5-5). This partition wall, removed in 1991, must have served to protect the major statues and murals from the extreme environment of the Gobi Desert. In the remade main chamber, repainting was applied to the ceiling, the main statue, and the niches (figure 5-7-b). The painting of the tenth-century images, despite being different from the fifth-century painting in color scheme and style, is consistent with the latter's composition and design. For instance, the superimposed quadrilaterals were substituted by ceiling draperies, and the images of attendants scattering flowers was repainted in the Guiyijun-period style. In contrast to the arbitrarily added donor figures that overlap the original paintings in Cave 272, the cloud and drapery patterns were only applied to the already worn areas in the main chamber in Cave 275. Likewise, the new iconographic motifs added to the resized main chamber, including a variety of imageries, tableaux, and donor images, was confined within the west-facing side of the partition wall.²⁸

27. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 141, 237.

28. The motifs include the images of Cintamani-cakra and Amoghapasha Avalokiteśvara Bodhisattvas, three Buddha preaching scenes, seven buddhas, and bodhisattvas. After the partition wall was removed, these images were pasted on the east wall of the restored main chamber.

Those added to the antechamber include a Maitreya transformation tableau and a Devatā transformation tableau (*tianqingwen jingbian* 天請問經變) below the two niches (figure 5-9).²⁹ The disciplined intervention and complementary pictorial motifs suggest an intention to preserve the original design of Cave 275 with improvements. This manner of renovating Cave 275 contrasts the common modes of destruction, simple maintenance, and total alternation.³⁰ It gives us crucial hints to how the cave-makers in subsequent periods understood the importance of Cave 275.

The renovation project seems to have been part of the intervention in the old district under the leadership of the Cao clan. The bottom register of the west-facing side of the partition wall bears a row of female donor figures (figure 5-7-b). In contrast to the generic and ordinarily dressed donor figures in the refurbished Cave 272, two female donor figures depicted in the bottom register of the east wall of the remade main chamber of Cave 275 on the north side of the entrance wear phoenix-shaped headdresses, jewels, and Uighur-style costumes with narrow sleeves and wide collars (figure 5-10-a).³¹ Despite the fact that no inscriptions in the capped cartouches beside them are legible, the dresses and ornaments of the donor figures indicate that this project involved aristocratic patrons, such as the Uighur princess who was the first wife of the father of Cao Yuanzhong.³² Portraits of the Uighur princess are found in the Cao family

29. *Dunhuang Mogao ku neirong zonglu*, 99. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 215–235.

30. The destruction mode is exemplified by the lower level of Caves 60, 62, 63, 64, 66, 478, 484, and 485 damaged by the construction of Caves 61 and 55. The maintainable mode is evident in the refurbishment of Cave 272. The total alternation mode is represented by the full repainting of Caves 263 and 265 in the late Guiyijun or the Xixia periods, which will be discussed in the next section.

31. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 225–26, figs. 164–65, plates 237, 238, 240.

32. For the Cao clan history and patronage of Cave 55, see Gao, “Dunhuang mogao ku di 55 ku yanjiu,” 9–50.

caves such as Caves 98 and 61 (figure 5-10-b) and others patronized by minor members of the Cao clan or government officials in Cao's regime.³³ Given that the renovation design was particularly well attended, the patrons would have had access to abundant sources for the project. By inference, they likely belonged to the dominant class, as the donor figures indicate. In addition, the renovation of Caves 275 and 272 was roughly concurrent with the construction of two Cao family Caves 61 and 55, which flank the initial group from below.³⁴ Traces of the west wall of the latter's ante-hall leave just enough space for the beam holes below Cave 275 (figure 5-3), suggesting a design that integrated the ground-level Caves 55 and 61 and the overhanging corridor in front of the initial group. The close spatial relationship prompted some modern observers to treat Cave 55 and 275 as belonging to the same cave cluster.³⁵ Compared with Cave 61, Cave 55 is not just spatially closer to Cave 275 but also shares the same theme with the initial group, namely, Maitreya Buddha/Bodhisattva. The following analysis will reveal the hitherto overlooked relationship between Caves 275 and 55.

33. Zhang Xiantang 張先堂, "Wantang zhi songchu Dunhuang difang zhangguan zai shiku gongyanren huaxiang zhong de diwei 晚唐至宋初敦煌地方長官在石窟供養人畫像中的地位" [The position of local government officials during the late Tang and early Song periods among donor images in the Dunhuang caves], in *Dunhuang wenxian, haogu, yishu zonghe yanjiu: jinian Xiang Da xiansheng dancheng 110 zhounian guoji xueshu yantao hui lunwen ji* 敦煌文獻·考古·藝術綜合研究：紀念向達先生誕辰110周年國際學術研討會論文集 [Comprehensive studies of Dunhuang documents, archaeology, and art: Proceedings of the international conference in memory of the 110th birthday of Xiang Da], eds. Fan Jinshi 樊錦詩, Rong Xinjiang 榮新江, and Lin Shitian 林世田 (Beijing: Zhonghua shuju, 2011), 455–66; and Sha, *Guiyijun shiqi*, 100–2.

34. Zhao Rong mentions that Caves 61 and 55 present a tendency of flanking the initial group, but he does not discuss their relationship further. Zhao, "Dunhuang Mogao ku beiliang sanku kaizao cidilunshu," 69.

35. The grouping is reflected in the numbers that Paul Pelliot designated to the caves. Pelliot's practice was to designate one number to a vertical segment of the Mogao complex and the number with alphabetical suffix to the caves in this vertical segment. He put sixteen caves near Cave 55 under the number 118 and numbered Caves 275 and 55 as Caves 118m and 118f, respectively.

Theme: From the Descent to the Ascent Scenes

The uncommon respect paid to the original contents of Cave 275 urges us to rethink the value that tenth-century viewers recognized in it. The revival of the Maitreya-themed caves, especially Cave 275, finds thematic echo in the Cave 55. As the Cao family caves and recovered inscriptions indicate, Cave 55 was commissioned by Cao Yuanzhong, the fourth military governor from the Cao clan.³⁶ Cave 55 was built about half a millennium later than 275 on the ground level that had been elevated by about five meters since the fifth century. Exemplary of the backscreen central-altar cave type, Cave 55's main chamber has a roughly square plan (sized 11.22 x 12.15 m) and a truncated pyramidal ceiling, the top panel of which is 8.5 meters above ground level (figure 5-11). A horseshoe-shaped double-tiered Buddha altar (sized 7.1 x 7.6 x 1.1 m) dominates the rear center of the spacious interior space and is connected to the west ceiling slope by a short partition wall known as "the backscreen." On the backscreened altar is a set of over-life-sized statues that represent the three sermons of Maitreya Buddha (*Mile sanhui* 彌勒三會): three buddhas seated with pendant legs are accompanied by attending disciples and bodhisattvas and heavenly kings on the four corners (figure 5-12).³⁷ Judging from the traces on the altar, the original set comprised thirteen statues, among which eight are extant. According to *Sūtra on the Descent of Maitreya* (Foshuo Mile xiasheng jing 佛說彌勒下生經), this scene depicts the three sermons of Maitreya, the future buddha, given to all kinds of sentient beings after having descended from the Tuṣita heaven to a city called Ketumatī and realized awakening

36. *Dunhuang mogao ku gongyangren tiji*, 17–19, 227; Xie, *Dunhuang yishu xulu*, 144–48; Gao, "Dunhuang mogao ku di 55 ku yanjiu," 48–50.

37. Gao, "Dunhuang mogao ku di 55 ku yanjiu," 63–67, 239–47.

under a dragon-flower (*nāgapuṣpa*) tree.³⁸ Encircling the altar space are as many as sixteen transformation tableaux, of which four are depicted on the four slopes of the truncated pyramidal ceiling and twelve on the four walls (figure 5-13).³⁹ The importance of Maitreya is felt in his recurrence in a transformation tableau on the west ceiling slope right above the altar (figures 5-14 and 5-15).

The sculptural themes in Caves 275 and 55 are Maitreya in the two stages of his bipartite career. The cult of Maitreya has two systems: the ascent cult focuses on Maitreya Bodhisattva as a meditation master when he dwells in the Tuṣita heaven for 560 million years; and the descent cult focuses on Maitreya's presence in the *sahā* (mundane) world 560 million years afterward that turns it into a Pure Land.⁴⁰ The strong association with the concepts of salvation and the Pure Land in the theme of the three sermons of Maitreya Buddha of Cave 55 contrasts the dhyana-meditation connotation of the pictorial program in Cave 275. Dhyana practitioners in the Northern Dynasties regarded Maitreya Bodhisattva as an adviser rather than a savior.⁴¹ Meanwhile, the wish-granting (Skt: *varada*; Chn: *yuyuan* 與願) mudra of Maitreya in Cave 275 indicate the bodhisattva granting all sentient beings' wishes.⁴² To prevent an oversimplification of the thematic connection between Caves 275 and 55, it is necessary to consider the visual contexts and subtle adjustments. Therefore, rather than simply arguing that Cave 55 was built to

38. *Foshuo Mile xiasheng jing* 佛說彌勒下生經 [Sūtra on the descent of Maitreya], trans. Dharmarakṣa 竺法護 (ca. 231–308), *T* 453, vol. 14. In addition, four other Chinese versions exist, two of which were translated by Kumārajīva, one by Yijing, and one other by an anonymous translator.

39. Multiple sūtra paintings and narrative paintings are depicted mostly on the walls in the formats of hanging-paintings and multipaneled screens, although occasionally on the ceiling slopes. For analysis of the iconographic contents, see Gao, "Dunhuang mogao ku di 55 ku yanjiu," 79–226.

40. Wang, *Dunhuang shiku quanji: Mile jing huajuan*, 10–11.

41. Ning, "Patrons of the Earliest Dunhuang Caves," 502.

42. Wu, *kongjian de Dunhuang*, 116; Wu, *Spatial Dunhuang*, 121.

reemphasize the presence of Maitreya in this vicinity, this subsection examines the composition and iconographic elements of the Maitreya statuary and tableaux in both caves added or modified in the tenth century. It focuses on the ways in which they extend the temporal and spatial dimensions of Maitreya presented by the original contents in Cave 275.

The visual and architectural programs of Cave 55 were not derived from those of Cave 275; instead, they adapted the multi-tableaux program in late-ninth-century caves to the central-altar settings. The precedents in which the walls and ceiling slopes are all covered by transformation tableaux include the niched Cave 156 (figure 5-16) and two central altar Caves 85 and 94. They were merit caves of the political leaders or monk-officials under Zhang's regime. A complete composition of the Maitreya transformation tableau is depicted on the west ceiling slope in at least the former two cases.⁴³ Formulated since the mid-eighth century, the Maitreya transformation tableau juxtaposes the two time-spaces of the ascent and the descent in a vertical composition.⁴⁴ The top register represents Maitreya Bodhisattva in the Tuṣita heaven by depicting a bodhisattva figure in the middle of three courtyards that sit atop Mount Sumeru or float in the air; the lower and main section represents Maitreya Buddha's three sermons under the dragon-flower trees by picturing three seated Buddhas with assemblies gathering in a palatial setting. The buddha in the center is represented in frontal view, and the two others on the sides are facing each other. This basic composition is applied to the ceiling slope paintings as well as to those on the walls of Caves 275 and 55 (figure 5-17). While the central vertical axis in the Maitreya tableau on the west ceiling slope of Cave 156 or 85 is aligned with the niche or on the

43. Cave 94 has been fully repainted, and judging from the merit record, it is possible that the Maitreya tableau was at the same location.

44. Wang, *Milejing huajuan*, 45–47, 101–2.

altar below, the main buddha statue does not necessarily represent Maitreya.⁴⁵ The mural circle on the ceiling slopes and that on the walls are independent from each other.

An important innovation of Cave 55 is the connection between the two vertically subdivided spaces. Like the precedents, the two circles of tableaux signify the vertical subdivision of the cave space; the ceilings and the walls represent two levels, one on top of the other. Compared to the images set against a wall or in a niche, the images on the backscreened altar seem to “walk” out from the walls into the cave space and to be approachable from all directions, including the upper quarter. The backscreen is more than a structural device that supports the ceiling slope or a backdrop of the central buddha statue. It facilitates the visual transition from the dragon-flower trees and the jeweled canopy of Maitreya Buddha to the heavenly palaces of Tuṣita heaven. One of the visual clues are the ten flying *apsaras* depicted around the canopy and foliage. While depicted on the backscreen, the long-tailed clouds on which the *apsaras* flow indicate that they are coming from the scenes depicted on the west ceiling slope. Some of the *apsaras* present offerings in front of the pictorial Maitreya Buddha; others encircle the halo of the sculpted Maitreya Buddha (figure 5-14). In addition, two rows of *apsaras* are painted at the top of the south- and north-facing sides of the central pillar, showing them flying from the west ceiling slope to the front side of the backscreen (figure 5-18). The *apsaras* images blur the boundaries between the ceiling scenes and the backscreen painting. The visual connection is reinforced by a bridge in front of the platform on which Maitreya Buddha

45. The main icons in Caves 85 and 94 are undoubtedly Shakyamuni. The main icon in Cave 156 is seated with pendant legs, and therefore, some scholars identify it as Maitreya. However, others contend that it represents Shakyamuni based on iconographic contents inside and outside the niche. For different opinions, see Gao, “Dunhuang Mogao ku di 55 ku yanjiu,” 60; Hsu Chuanhui 許絹惠, “Dunhuang guiyijun zhengquan yu fojiao shiku zhi yanjiu 敦煌歸義軍政權與佛教石窟之研究” [The study of Dunhuang Guiyi Circuit regime with Buddhism by Mogao Grottoes], PhD diss., Ming Chuan University, 2018, 84–89.

sits within the central heavenly palace. The pictorial bridge suggests a passage for Maitreya to descend from the Tuṣita heaven to the *sahā* world. Therefore, being incorporated in this subdivided space is the bipartite time-space of Maitreya. Physically, the vertically subdivided space in Cave 55 is joint by the central pillar that connects the altar and the west ceiling slope. Conceptually, the two time-spaces are linked by the continuous scene of Maitreya on the altar and the west ceiling slope.

A spatial image of Maitreya's dharma field thus stands out from the rich visual program in Cave 55. It consists of the descent scene sculpted on the central altar and the ascent scene painted on the west ceiling slope (figure 5-19). Since a large area of the west ceiling slope is interrupted by the backscreen, the composition that fits the irregular canvas shape deviates from the standard. To represent the three sermons, the painter places the middle one in the central heavenly palace depicted in the upper register and omits the Maitreya Bodhisattva who is supposed to dwell there. In other words, Maitreya's ascent scene is "pushed up" beyond the canvas by the backscreen. The central palace, albeit with meticulous depiction and inscriptions of "Homage to the Palace of Maitreya Bodhisattva" (*namo Mile pusa gong* 南無彌勒菩薩宮), could not fully represent the other time-space of Maitreya but serves as a visual suggestion of searching further for the Ascent scene above.⁴⁶ The backscreen is connected at the lower end to the rear center of the buddha altar, serving as a backdrop of the statue set. The altar was originally equipped with miniature wooden railings (figure 5-20).⁴⁷ The horseshoe-shaped railed terrace resembles the palatial setting in Maitreya transformation tableaux. Moreover, the

46. The inscription writes "*lemi* 勒彌," which is meant to be "*mile* 彌勒." Gao, "Dunhuang Mogao ku di 55 ku yanjiu," 80.

47. Sun Yihua, "Mogao ku nei zhongxin tan yuanmao tantao 莫高窟內中心佛壇原貌探討" [The original appearance of the central altar in Mogao caves], *Dunhuang Yanjiu* 37, no. 4 (1993): 108–7.

positioning of the three buddha statues with attending bodhisattvas complies with the *pin* 品-shaped composition, as the tableau on the ceiling represents. The central Buddha statue is set against the backscreen in the rear center and faces the entrance corridor, whereas two other buddha statues are placed on the left and right sides in front of the central buddha and face each other. The plastic representation of the three sermons, which extends from the pictorial palaces of the Tuṣita heaven, highlights Maitreya's descent and implies his ascent beyond the cave.

The Maitreya tableau on the ceiling slope of Cave 55 is not the only tableau to be incomplete; the tableau added to Cave 275 also has an incomplete composition, implying extension beyond the individual caves. The latter is located under the twin-tree niche on the north wall of Cave 275 (figure 5-21). While following the standard composition, the painting curiously represents a proportionally large empty area in the lower center (figure 5-22), which the archaeological report identifies as “a pond.”⁴⁸ The pond setting deviates from the conventional composition of the Maitreya transformation tableaux, which always represent in the central bottom a scene of Brahma destroying a multistory pavilion (figure 3-45). According to some of the Maitreya sūtras, this scene is the direct cause of Maitreya's renunciation of worldly affairs and a metaphor of the impermanence of life.⁴⁹ This curious emptiness in the Cave 275 tableau signifies the incompleteness of the composition of the descent of Maitreya Buddha. The incompleteness of the descent scene in Cave 275 parallels the partial omission of the ascent scene in the Maitreya tableau on Cave 55's ceiling slope. Both imply interaction between elements within and without the pictorial canvas. In the Cave 275 tableau, the scene of Maitreya

48. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 230.

49. *Foshuo mile xiasheng cheng fo jing* 佛說彌勒下生成佛經 [Sūtra that expounds the descent of Maitreya Buddha and his enlightenment] (T454, 14:424, b, ll.21-25); and another sūtra with the same title translated by Yijing 義淨 (635–713) (T455, 14:427, a, l.24-b, l.3).

Buddha facing the pond finds visual echo in the Tuṣita heaven scene above. In the heavenly palace, Maitreya Bodhisattva is seated with cross-legs against a hipped-roofed hall in front of a lotus pond.⁵⁰ The composition similarly highlights a correspondence between the upper and lower quarters along the vertical axis.

Looking upward, an active integration is felt between the old bodhisattva statue and the new tableau. It is only under the two sculpted niches in the newly made antechamber that the transformation tableaux with heavenly palaces and palatial environment are depicted; the east wall of the remade main chamber is decorated with Buddha preaching scenes and tableaux without any architectural backdrop. These special formats suggest a comprehensive design that aims to incorporate the Maitreya transformation tableau into the sculpture group of Maitreya. Although it is uncertain whether the bodhisattva-in-meditation statue above was meant to represent Maitreya Bodhisattva or Prince Siddhartha in the original context, it displays a buddha-to-be in meditation practice before he attains buddhahood.⁵¹ The tenth-century painting below recontextualizes the bodhisattva-in-meditation statue by juxtaposing it with the scene of Maitreya Bodhisattva in his heavenly palaces. Moreover, the tiny image of Maitreya Bodhisattva is added right below the sculpted bodhisattva, as if he were emerging from his palace in the Tuṣita heaven and manifesting himself in a three-dimensional form in front of the viewer. The Maitreya transformation tableau is a tenth-century attempt to associate the fifth-century bodhisattva-in-meditation in sculptural form and the newly added heavenly palaces in pictorial form.

The bodhisattva niches on the side walls guide the viewer to eventually meet with the

50. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 229.

51. Ning, “Patrons of the Earliest Dunhuang Caves,” 503; and Liu, “Mogao ku beichao qi de shiku zaoxiang yu wailai yingxiang(shang),” 85.

large statue of Maitreya Bodhisattva. It is throned on a triangular-backed pedestal from whose lateral sides are protruded the frontal half-bodies of two lions (figure 5-4). According to Liu Yongzeng, the lion's throne was derived from sculptural representations of royalty in ancient West Asia, and it is represented mostly in early works of Chinese Buddhist statuettes.⁵² A rare example from the post-Tang period that revives the archaic format is found in Cave 55.⁵³ The main image of Maitreya Buddha seated with pendant legs is set against the backscreen (figure 5-19). At the first glance, his throne is designed in the contemporary style of a high-backed chair.⁵⁴ But a careful observer would find two winged lions depicted in profile view on the backscreen beside the throne (figure 5-23). Like the two lions extending from behind the bodhisattva statue in Cave 275, the two lion images in Cave 275 seem as to be coming out from behind the pedestal of the buddha statue. And like the lion images in Cave 55, red dots on white background were applied to the chest of a lion statue during the refurbishment of Cave 275.⁵⁵ The two lions comply with the respective designs in each cave, yet they create subtle visual correspondence between the two images of Maitreya.

The interplay between a sculpted figure and the pictorial background would not have been unfamiliar to tenth-century visitors. The strategy of sculpture-mural correspondence is already applied in Cave 61, which was historically referred to as the Mañjuśrī Hall (Wenshu Tang 文殊堂). It was constructed in 947–51, over a decade prior to the construction of Cave 55.

52. Liu, “Mogao ku beichao qi de shiku zaixiang yu wailai yingxiang(xia),” 3–5.

53. The contemporary design of a lion's throne would depict two lion images on the faces of the pedestal rather than extending from it. Examples of the contemporary design include the three pedestals in Cave 55, the lion's throne of Vairocana, and the representation of “five hundred lion's thrones” in the Vimalakīrti transformation tableaux.

54. This design first appeared in Cave 98, the merit cave of Cao Yijin, and is believed to denote divine rulership.

55. Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 214–15.

As has been well studied, the bodhisattva and his abode are respectively represented by the statue set placed on the central altar and the gigantic painting on the west wall. Thus, the true visage of Mañjuśrī represented by a statue of him riding a lion appears in front of the picture of Mount Wutai, the bodhisattva's legendary dwelling place.⁵⁶ Cave 55 inherits the strategy and refines the visuality. The vertical composition does not just correspond with the ascent-descent narrative; it also allows more parts of the pictorial background to be visible together with the statue set. The Maitreya scene in the Cave 275 antechamber is visually simpler but temporally much more complex than the Cao family caves; it encompasses the bodhisattva statue and the painting of heavenly palaces that were made over five hundred years apart. Furthermore, the juxtaposition creates a visual emphasis on the ascent scene and incorporates the statue into a visual representation of Maitreya's bipartite career.

In sum, the design of Cave 55 and the redesign of Cave 275 echo each other by means of incomplete composition and hybrid materiality. For one thing, the antechamber of Cave 275 implies interdependence beyond the pictorial space by omitting the scene of a jeweled pavilion in destruction from the Maitreya tableau. Such a multileveled structure could be conceptualized only by associating relevant cave spaces in the above and below levels. Likewise, Cave 55 extends the Maitreya Buddha theme beyond the cave space by subtracting the appearance of him in his bodhisattva stage in the ascent scene painted on the ceiling. For another, Cave 275 emphasizes the bodhisattva stage over the buddha stage by incorporating the preexisting bodhisattva statues and constraining the size and the degree of details of the descent scene. Complementarily, Cave 55 underlines the buddha stage over the bodhisattva stage by displaying the three sermons on a grand stage simulating a palatial garden and restricting the heavenly

56. Lin, *Building a Sacred Mountain*, 187–92.

palaces scene to pictorial representation high above.

Space: Designing a Transitional Experience

The composite imagery of Maitreya's realms in Caves 275 and 55 present complementary parts of the whole, thereby alluding to each other. Furthermore, they indicate the transition of time-spaces by means of the transition of scale. The main chamber of Cave 55, with a spacious volume of 11.1 (w) x 12.1 (l) x 8.95 m (maximum height), displays a shrinking scale from the descent scene to the ascent scene. The palatial terrace represented by the central altar occupies almost half the floor area, whereas the central palatial courtyard above is only as wide as the painted throne of the central Buddha statue beneath. The spatial imagery exaggerates the scaling-down transition from the Tuṣita heaven to the *sahā* world typical seen in Maitreya tableaux. In Cave 275, a reversed experience of scale-expansion takes place. Cave 275 is a small-to medium-sized chamber with a volume of 3.5 (w) x 5.5 (l) by 3.5 m (maximum height). The length of the main chamber was even reduced to 3.25 meters when the partition wall was present. Nevertheless, it accommodates a main statue of the cross-legged Maitreya Bodhisattva in height (3.25 meters) comparable to the statues of Maitreya Buddha in Cave 55. It belongs to the category of "sixteen-foot images" (*zhangliuxiang* 丈六像), which represents the purported height of a buddha, which is twice as tall as a human being.⁵⁷ This statue must have deeply impressed tenth-century viewers by the predominant size, the unusual figure-space proportion, and the antique/exotic style. The careful refurbishment and repainting of the statue betrays the respect of the late-medieval beholders. The refurbishment altered the visuality of the statue as well; parted by a partition wall, it was no longer exposed to a beholder in direct confrontation.

57. *Foguang dacidian*, 785.

Having entered the antechamber of Cave 275, the worshiper would be surrounded by small-scale images, including the twin-tree niches and two transformation tableaux below them. Only after entering the liminal space could the worshiper look into the main chamber, which is preserved for the main icon of Maitreya Bodhisattva and unified by visual contents about the causative pasts of the buddhas-to-be. By means of space layering and scale contrast, the antechamber signifies the anti-chronological transition from the newly made presence of the future Buddha to the antique presence of his past life as a bodhisattva.

The antechamber of Cave 275 was made into a small image hall from which the oversized bodhisattva statue could be worshiped from a distance. Most antechambers at Mogao are half rock-cut and half timber-structured, and therefore the front half could be wide open. Since such an antechamber would be wide and shallow, the visual focus would be on the west wall, onto which the entrance corridor is cut. Two types of visual programs were popular in the tenth century; the first type included large images of heavenly kings or bodhisattvas, whereas the second type consisted of images of transformation tableaux. The common subject matter of the transformation tableaux include the *Lotus Sūtra*, *Avataṃsaka Sūtra*, and *Vimalakīrti Sūtra*. In comparison, the Cave 275 antechamber displays several interrelated features about materiality, visual contents, and functionality that are less commonly seen in antechambers than in main chambers. First, the antechamber was enclosed by solid walls. Except for the earthen partition wall, the entire enclosure is rock-cut. This is a rare feature, as no more than three antechambers at Mogao are entirely rock cut.⁵⁸ Second, the antechamber of Cave 275 adopts the second type of visual program, but it includes two transformation tableaux of uncommon subject matter: the *Maitreya Sūtra* on the north side and the *Devatā Sūtra* on the south side (figure 5-7). The west

58. The rock-cut, four-walled antechamber at Mogao includes those of Caves 174 and 371.

wall, which normally would be the visual focus, has no images left except for some decorative borders. Judging from the fact that most of the visual content on all other repainted walls is discernible, it is not impossible that the west wall originally bore few images but served to guide one to look into the entrance. Third, the tenth-century antechamber was equipped with an inverted-cone-shaped lamp-offering platform at its completion. Judging from the remaining base (figure 5-9), this altar was located at the rear center of the antechamber. It faces Maitreya Bodhisattva to the west and the Maitreya transformation tableau to the north. The altar would be similar in form and function to an extant one in Cave 274 of the Sui period (figure 5-24), which is located on the south side of the former's entrance corridor.⁵⁹ The existence of the offering altar indicates that the antechamber not only served as a liminal space but also allowed image worship and ritual offering. Despite the intimate scale, the antechamber is topologically comparable to the 100 square meter antechamber of Cave 61, in the middle of which was placed a square altar.⁶⁰ The solid enclosure and the ritual-offering function make the Cave 275 antechamber a relatively self-contained space. As a result of the partition wall, the antechamber is visually connected to, yet physically divided from, the main chamber. A glimpse of the main chamber from the antechamber would be an action of recollecting the former career of Maitreya Bodhisattva that was pictured in the past. The offering altar together with the narrow entrance (1.9 m [h] x 0.8 m [w]) would have limited the accessibility of the main chamber but directed the worshiper to look into a window-like entrance.

59. Other less well-preserved traces of offering altar in the vicinity include those in Caves 266 and 268. For discussions of the three altars, see Fan, Cai, and Huang, *Mogao ku di 266–275 ku kaogu baogao*, 28, 50, 142, 152, 238. The archaeological report does not offer dating suggestions of the altars but mentions that the altar in Cave 275 might be relevant to the tenth-century renovation.

60. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 33, fig. 21.

The antechamber transformed Cave 275, a cave for the direct confrontation with Maitreya in the original setting, into a niche-like presentation of the past. An additional layer of spatial transition was added to it by the ante-halls of Caves 55 and 61. The ante-hall of Cave 55 was constructed along with the main chamber as a holistic project in 962. The construction of the Cave 55 ante-hall was concurrent with the Cave 61 antechamber as well, since they stood on the same platform. According to the archaeologists who excavated the remnants in the 1960s, it was renovated during the Xixia period and eventually burned to ashes in the Yuan dynasty.⁶¹ Subsequent studies of the later-periods caves suggest the possibility of predating the renovation and demolition by decades or even a century.⁶² The Cave 55 ante-hall was a large half-carved/half-built hall architecture on the northern side of a forty-meter-long platform (figure 5-25). The ante-hall of Cave 55 is sized 10 (l) x 6.8 (w) x ca. 6.35 m (height of the west wall) and that of Cave 61 is sized 12.15 (l) x 8.35 (w) x ca. 6 m (height of the west wall). Among the Guiyijun period ante-halls, the two are the largest in proportion compared to the main chamber, indicating that special emphasis was placed on them. The two gigantic ante-halls were located right below the initial cave group, flanking it on the sides.⁶³ Indeed, the ante-halls of Caves 55 and 61 adjoined from below to the overhanging, timber-structured passageway outside Caves 266–75 (figure 5-3).⁶⁴ The passageway presumably had existed since the Northern Dynasties as

61. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 44.

62. Later revision of the dating of the Xixia-period caves suggests that the destruction might have taken place in the Xixia as well. But for the purpose of this study, either suggests the usage of this ante-hall lasted for at least a couple hundred years.

63. Zhao Rong also observes the tendency of flanking in “Dunhuang Mogao ku beiliang sanku kaizao cidilunshu,” 69.

64. It is nearly impossible to date the timber façades at Dunhuang specifically or in general. Judging from other extant timber façades and textual records, one can roughly suggest that they were built around the ninth–tenth centuries, although later construction and renovations are very possible, and a few earlier constructions (i.e., from the sixth century) are also traceable.

required by circulation function. Due to material ephemerality and exposure in the outdoor environment, the passageway was likely rebuilt or renovated more frequently than the interiors of the initial group. As the ground level was elevated by nearly five meters by the mid-tenth century, not just the relative level height of the ancient caves but also the accessibility to them were transformed. Rather than climbing up to the caves suspended high above, a tenth-century visitor would be able to enter the contemporary caves from the ground-level ante-halls. Stairs and vertical passageways inside or outside the ante-halls allowed the visitor to access the ancient caves on the level above.

With what devices were the two caves historically connected? Modern documentation and archaeological traces indicate the existence of at least four devices for vertical connectivity. In the early twentieth century, the vertical connectivity in this district was maintained by stairs to the north of Cave 55. The stairs connected the ground level to a high earthen terrace in front of Cave 454, which is located on the same level as the initial cave group. The stairs are documented in the earliest elevation diagram made by Paul Pelliot in 1908 (figure 5-26) and in a more accurate drawing by Samuil Dudin in 1914–15 (figure 5-27). The appearance of the cave district has undergone significant changes, ranging from the removal of the earthen terrace in 1947 to the addition of concrete walls during the cliff reinforcement projects in 1963–66.⁶⁵ In the 1950s, Caves 275 and 55 were once connected door-to-door by a stairway built onto the cliff face (figure 5-28). Since the late 1960s, the vertical circulation between the two caves has been resumed to the north of Cave 55 by an overhanging stairway (figure 5-29). The three sets of stairs that existed in the twentieth-century or continue to exist testify to the relatively stable

65. Sun Ruxian 孫儒憫, *Dunhuang shiku baohu yu jianzhu* 敦煌石窟保護與建築 [Dunhuang cave conservation and architecture] (Lanzhou: Gansu renmin chubanshe, 2007), 37–39, 63–70.

location of vertical connectivity.⁶⁶ The historical connection between the level of the initial group and the Guiyijun-period caves will be discussed in detail in the next subsection.

The historical stairway existed around this location as well. As my theoretical reconstruction shows, it is a rock-cut stairway that connected the ground level to the north of the Cave 55 ante-hall and the passageway outside Cave 275 (figure 5-30). Traces of the stairway have been found in the ground-level Cave 467 (figure 5-31) and in front of the second-level Cave 477 (figure 5-32).⁶⁷ Both caves are located near the antechamber of Cave 55 on the north side. The lower half between Caves 467 and 477 had been concealed behind the earthen terrace of Cave 454 until the latter's demolition. Because the terrace construction was most likely concurrent with Cave 454's ante-hall, the stairway must have been carved out prior to the 970s.⁶⁸ And because Cave 477 is stylistically dated to the Yuan period, the stairway must have been used until then.⁶⁹ When the lower half of the stairway was concealed behind the earthen terrace, it is possible that a substitute was built between the ante-hall of Cave 55 and the terrace.

Although the historical stairway is technically located half outside and half behind the ante-hall of Cave 55, a historical viewer's perception of a vertically connected cave group would not be bothered by the difficult accessibility of the stairway. Other multilevel cave-front architecture or cave groups at Mogao, such as the nine-story pavilion screening Cave 96 and the three-story pavilion, have rock-cut stairs outside the gable walls.⁷⁰ Furthermore, a well-

66. Cary Y. Liu expresses a similar view regarding vertical stacking at Mogao Caves in "Architecture and Land on the Dark Side of the Moon," 169–70.

67. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 42, 65, fig. 27.

68. Sun, *Dunhuang shiku baohu yu jianzhu*, 37–39.

69. *Dunhuang Mogaoku neirong zonglu*, 174.

70. According to Sun Yihua, conservator of the three-story pavilion, a rock-cut stairway exists below the concrete stairway that connects the ground and middle levels. Private conversation, July 2022.

preserved built-in stairway in the district around Cave 96—the northern colossal-image cave—illustrates how the obscured tunnel space worked. This tunnel facilitates the vertical connection of a vertical cave-pagoda group comprising Caves 234, 237, and an earthen pagoda on the cliff top. The lower-level Cave 237 and upper-level Cave 234 are connected on the north side by “a zigzag stairway in a narrow space of almost vertical degree” (figure 5-33).⁷¹ Similarly, the tunnel of Cave 55 would have allowed only a one-by-one passing through a very steep stairway.⁷² This tunnel might have coexisted with other sets of stairs within and outside of the ante-hall of Cave 55, since the capacity of each device was very limited.⁷³ Other possible tunnels or stairs likely possess a similar degree of steepness and narrowness, judging from all stairways found at the Mogao site and the general negation of comfort in staircase design of premodern Chinese architecture.⁷⁴

71. This tunnel connects Cave 234 on the third level and Cave 237 on the lower level, both of which were constructed in early to mid-ninth century. The description is provided by Sun Yihua in Sun and Sun, 163, fig. 118.

72. Unfortunately, part of the ground of the antechamber of Cave 275, and presumably a large portion of that of Cave 457, had collapsed before any records were taken, so it is impossible to examine where the other end of the tunnel was.

73. I suspect that Guiyijun-period visitors might also have had a choice of going through a passage tunnel inside the ante-hall of Cave 55. The hole was revealed in the early 1960s, after a set of modern stairs had been removed and prior to concrete walls concealing the bare cliffs for conservation purposes. It is located at the southern end of the west wall of the Cave 55 ante-hall and carved partially into the nonextant southern wall. It is sized about 0.6 (w) x 1.4 meters (h) and is labeled as “a tunnel entrance” (*chuandao kou* 穿道口) in an elevation drawing of Cave 55’s antechamber’s west wall (Pan and Ma, *Mogao ku kuqian diantang yizhi*, 42, fig. 27). The tunnel entrance might have been connected to the ground of the Cave 55 antechamber by a nonextant earthen stairway that may have led to the now-collapsed antechamber of either Cave 275 or Cave 457 on its north side. But the traces are too scarce for any determined conclusion.

74. Other cases at Dunhuang include the staircase that connects the ground and second levels of the three-story pavilion,” that is, Caves 16, 365, and 366 and a rock-cut stairway on the south side of Cave 96. In addition, a wooden ladder connecting the second and third levels of the pavilion is almost seventy degrees to the ground and allows only one person to pass at one time. The most spacious one might be the exterior stairways. Two of them are represented in modern

The steep stairs and narrow passageways became inevitable parts of the journey in the cave district. The spatial experience corresponds to the previously discussed scale shifts that signify the transition between Maitreya's bipartite career. Taking a journey from Cave 55 to 275 means ascending spatially and retracing temporally. The journey through a narrowed and darkened tunnel is emblematic of the transformative and difficult bodhisattva path that Maitreya embarked on to attain buddhahood. Fifth-century Buddhists in northwest China imagined the Tuṣita heaven as a hidden place consisting of connected meditation chambers: "Meditation chambers connect to one another door to door, as secret as Tuṣita heaven."⁷⁵ In the Guiyijun period, the secret palace was paired with the Pure Land of Maitreya Buddha and constitute a vertical concept of space: "Ascending to the palaces of the Tuṣita heaven . . . entering the buddha land of Maitreya."⁷⁶ The passageway and antechamber of Cave 275 is reminiscent of the connectivity and hidden-ness of the palaces of the Tuṣita heaven. A pilgrim would have been reminded of the secret palace when he or she ascended through the narrow stairway and reached the upper-level Cave 275. There, one would be doubly awed by the drastically expanding spaces from the tunnel to the antechamber to the main chamber of Cave 275 and by the dramatically

records; one was located beside the earthen terrace in front of Cave 454 and the other in front of Cave 428. The latter was about forty to forty-five degrees to the ground and was still quite narrow. No more than two people can walk on it side-by-side.

75. "禪室連扃，秘如兜率。" Excerpt from "Gaochang Wancao Langzhong Qu Bin Zaosi Bei 高昌綰曹郎中麴斌造寺碑" [Stele commemorating Karakhocho General Secretariat Director Qu Bin's construction of a temple]. The stele, created in 445, was unearthed in 1882 in Karakhocho (Gaochang), outside present-day Turfan, Xinjiang. English translation is after Wu Hung in *Spatial Dunhuang*, 109. For an overview of the history of the stele and ink rubbings of it, see Huang Wenbi, *Tulufan kaogu ji*, 51–53, plates 54–57, fig. 59. For transcription, see Ikeda On 池田温, "Gaochang san bei lue kao 高昌三碑略考" [Study of three stelae from Gaochang], trans. Xie Chongguang 謝重光, *Dunhuang Xue Jikan 敦煌學輯刊*, ½ (1988): 150–54.

76. "上升兜率之宮.....得入彌陀佛國" Excerpt from Dunhuang manuscript "Hexi jiedu shi Zhang Yichao yuanjiri xingxiang wen 河西節度使張議潮遠忌日行香文" [Incense offering text in a death anniversary by Zhang Huaishen, military governor in Hexi], P.2815. Zheng and Zheng, *Dunhuang bei ming zan jieshi*, 182.

enlarged statues of Maitreya Bodhisattva from the front to the rear of the sanctuary. Furthermore, by reading the *jātaka* stories underneath the niched statues, one would be moved by the inconceivable sufferings and stalwart courage of the buddhas-to-be. Those inconceivable sufferings might be made slightly more conceivable by his or her own difficulties of getting through the dark and dusty tunnel. The journey consists of a separation from the contemporary world, a transition through layers of space, and a return to the initial dharma field of Maitreya. It could be viewed as one of the rites of passage required to attain wisdom.⁷⁷

The design principle of presenting the transitional career of Maitreya is not limited to pictorial and sculptural representations; it is also evident in correspondence between architectural representations, such as the terrace-like buddha altar in Cave 55 and the palace-symbolized gate-tower-shaped niches in Cave 275. The holistic architectural design considers not only the correspondence between architectural forms but also the embodied experience of architectural spaces.

Planning: Multiscale, Multilevel, Multi-chronic, and Real-Time Response

As the previous two subsections demonstrated, the tenth-century interventions, including the construction of Cave 55 and the renovation of Cave 275, were an integral design responding to the fifth-century Cave 275 thematically and spatially. However, one cannot ignore the fact that the two caves are not vertically aligned. Admittedly, a historical factor is the “changing cliff face.”⁷⁸ The surface had already been densely constructed before Cave 55, and therefore it was

77. For the conception of “the rite of passage,” see Arnold van Gennep, Monika B. Vizedom, Gabrielle L. Caffee, and Solon Toothaker Kimball, *The Rites of Passage* (Chicago: University of Chicago Press, 1960).

78. For “the use of cliff face,” see Ma, *Dunhuang Mogao ku shi yanjiu*, 42; Wu, *Spatial Dunhuang*, 65–67.

hard to make any perfect composition. Yet a careful observer would notice that the intervention did not treat all preexisting caves equally; the insertion of Cave 55 to the overpopulated cliff site already caused the destruction of several smaller caves.⁷⁹ The special care for Cave 275 must have been grounded on its outstanding artistic and historical values. No direct textual evidence could prove that the tenth-century beholders viewed Cave 275 as a representative of the primary core of the entire Mogao cave complex. However, Cave 275 could not have been renovated in such a disciplined manner without the self-conscious practices of “respectfully renovating ancient traces, establishing the new and adapting the ancient” since the beginning of the Guiyijun period.⁸⁰ Political and religious leaders began to cherish the construction history of the Mogao complex when they constructed their merit caves. For instance, accompanying the construction of Cave 156—the merit cave of Zhang Yichao, the first military governor of the Guiyijun circuit—the *Record of the Mogao caves* (Mogao ku ji) was compiled in 865 CE.⁸¹ The *Record* outlines a handful of the most important events in the 496-year history of the cave complex, including constructing the earliest caves by “digging into the cliff in midair.”⁸² Cave 275, which matches the locational feature of early caves and preserves one of the most magnificent statues from the early periods, must have held an irreplaceable position in the old district. As I would

79. Five small-sized caves and niches were partially damaged and concealed within the west wall during construction of this cave: Caves 56 (Sui), 478 (Tang), and three unnumbered cave above and to the north of Cave 55. Although the traces of the ante-hall show that the alternated cliff area by Cave 55 was limited within the boundaries formed by the then third-level caves such as Cave 275 and a couple of mid-sized caves on two sides such as Caves 57 and 477, no adequate evidence from the adjacent caves could justify the uncanny actuality that Cave 55 had to not be located underneath Cave 275. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 42.

80. “崇修古跡，立新改古于洪基。” Excerpt from “Du sengzheng jian pijizang zhu Yan Hui’en heshang miaozen zan bing xu 都僧政兼毗尼藏主閻會恩和尚邈真贊並序” [Eulogy of Buddhist priest Yan Hui’en and preface], P.3630+P.3718, 858 CE.

81. Discussions of this important document are numerous. See, for example, Zheng and Zheng, *Dunhuang bei ming zan jishi*, 695–700; Sha, *Guiyijun shiqi*, 49–72.

82. 架空鑄岩.

suggest, the reason Cave 55 does not have an obvious spatial relationship with Cave 275 is not because of the ignorance of siting but because of the exact opposite reason. Cave 55 was crucial to an ambitious renewal of the Mogao complex that involved revision of the overall length, sectional cliff surface, and cluster of adjacent caves. The complexity and contradiction of this renewal movement—which was cumulative, collective, and spontaneous—negated the direct visual expression of any singly purposed planning.

To understand the ambitious cave projects commissioned by the Cao clan, this study will first examine a novel device to reshape the Mogao complex, namely, the gigantic central-altar cave. In contrast to their relative scarcity in previous periods, large caves became the favorite type for political and religious leaders' merit caves. As many as fifteen large caves with a floor area of more than one hundred square meters were built during this period (appendix K, table 6).⁸³ Most of the large caves constructed during this period are central-altar caves with or without a backscreen, and some are truncated pyramidal ceiling caves with a niche.⁸⁴ Compared with the colossal-image caves from the Tang period, the popularity of gigantic central-altar caves indicates two conceptions about scale. First, as the need for social activities inside the cave increased, the cave design was dominated by the void space rather than the solid forms.⁸⁵ Second, the cave's depth was significantly greater than its height, creating a sequential viewing experience through layers of space. About half the large caves were commissioned by the two ruling families of the Guiyijun circuit, the other half by Buddhist leaders or prosperous clans.

83. Sun and Sun, *Shiku jianzhu juan*, 128.

84. The exceptions include Caves 156 and 100, which are west-niched hall caves. The only two colossal Buddha caves, Caves 96 and 130, were built in 695 and 721 CE, respectively. For the cave typology of upturned-funnel caves and colossal Buddha caves, see Xiao, *Dunhuang jianzhu yanjiu*, 44–50, 51–54.

85. For social activities in late-medieval Dunhuang caves, see Ma, *Dunhuang Mogao ku shi yanjiu*, 191–201.

During the Zhang's reign in 848–910, one cave—Cave 94 (880s)—was commissioned by Zhang Huaishen, the second military governor, whereas four other caves—Caves 16, 85, 196, and 138—were all commissioned by high-ranking monk officials and priests. During the Cao's reign in 914–1036, ten more caves were built. Five—Caves 98 (939), 61 (947–51), 55 (962), 256 (late-tenth century) and 454 (ca. 976)—are accepted to be merit caves of the Cao clan, and four—Caves 152, 233, 76, 108—are known as merit caves of other prosperous clans like the Zhang, the Yin, the Song, and the Wu clans.⁸⁶ In addition, Cave 4 is likely another merit cave of the Cao clan, since it bears a portrait of the Khotanese king Li Shengtian 李聖天 or Visa Sambhava.⁸⁷ While the cave type was first adopted by monastic patrons, it gradually became closely associated with political rulers. Carrying on the tradition of the Zhang clan, the Cao clan became the most enthusiastic patrons of gigantic central-altar caves at Dunhuang. As all the caves were inserted into preexisting cave districts, they mingled the Caos' visions of Mogao with the complex accumulated in the past five hundred years.

It was extremely costly to construct an enormous central-altar cave, especially when excavating on the ground level where the rock is more difficult to remove than rock in higher positions.⁸⁸ Hence the central-altar caves were once-in-a-lifetime monuments for the military

86. Appendix K is a location and architecture-focused expansion based on Zhang, “Dunhuang shiku de zhongxin fotan ku,” 35, table 1, and various studies.

87. The Khotanese king is represented in four caves in the Dunhuang caves, including Mogao Caves 98 and 454 and Yulin Cave 31. Yulin Cave 31 is identified to be the Cave of Son of Heaven (Tianzi Ku 天子窟) of the Khotanese king. Mogao Caves 98 and 454 are accepted to be merit caves of the Cao clan, which was related by marriage to the Khotanese royal family. Sha Wutian in *Guiyijun shiqi*, 73–96.

88. For the rock quality on the ground level, see Yang Hehe 楊赫赫 and Wang Qiheng 王其亨, “Dunhuang Mogao ku shiku jianzhu xingzhi yu jiegou tezheng tanxi 敦煌莫高窟石窟建築形制與結構特徵探析” [Investigation of the architectural typology and structural features of the Dunhuang Mogao caves], *Xibei Daxue Xuebao (ziran kexue ban) 西北大學學報(自然科學版)* 52, no. 2 (2022): 199–212.

governors, and every step in the construction process deserved serious consideration. Starting from Cao Yijin, almost every military governor of the Cao clan owned a gigantic central-altar cave. The peak construction period occurred during the reign of Cao Yuanzhong, who commissioned Caves 61 and 55 and included special themes of Mañjuśrī Bodhisattva and Maitreya. Among the predecessors of Cao Yuanzhong, Zhang Huaishen led the trend of constructing backscreened caves. Although Huaishen's Cave 94 has been fully refurbished, the initial construction process has been documented in detail in the Dunhuang documents. The Zhang Huaishen stele (P.3720, appendix B-4) emphasizes the utmost importance of siting.⁸⁹ Preceded by a background description of the prosperous conditions under Zhang's reign, the stele text points out the heroic determination of the protagonist to construct a cave at Mogao, which "was not child's play [*buwei erxi* 不為兒戲]." Then it described every step in the cave-making process, foremost siting and site cleaning, then carving interior spaces, building exterior structures, setting up images, conducting the completion rituals, and finally offering feasts.⁹⁰

One of the most important concerns of siting for Zhang was to build "to the north of the northern colossal [buddha] image." At the beginning of the ruling families' tradition of cave construction, the military governors were already conscious of the significance of occupying a visually prominent and politically meaningful spot for their caves.⁹¹ Prior to the construction of Cave 94, the only two central-altar caves, backscreened Cave 16 and non-backscreened Cave 85, were constructed for the first and second chief monk controllers, respectively. At that time, Caves 16 and 85 were the largest caves and presumably the focus within their vicinities—the northern end and middle part of the south section. In contrast, Zhang dared to locate Cave 94 in

89. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 685–94.

90. For a detailed discussion of the primary text, see chapter 5.

91. Lee, "Repository of Ingenuity," 202–3.

the vicinity of Cave 96, the tallest cave and façade structure at Dunhuang since cave construction there began. This was probably because of Zhang's ambition to impact the entire Mogao site instead of making a local-level center. He even attempted to incorporate Cave 96 into his larger project through a simultaneous renovation of this colossal buddha cave during constructing Cave 94.⁹² In addition, the cult of Maitreya was particularly favored by political leaders for its pairing with the Wheel-Turning Monarch (Skt: Cakravartī ; Chn: Zhuanlunwang 轉輪王), who embodies the Buddhist divine kingship.⁹³ Since the two Mogao colossi represent Maitreya Buddha, they magnetized the merit caves of the Zhang and the Cao clans before the mid-tenth century.⁹⁴

The close spatial relationship between the Zhang and Cao family caves and the colossal-image caves seemed to be a win-win collaboration. On the one hand, the colossal-image caves defined a politically privileged zone for the Zhang and Cao family caves—Caves 108, 100, and

92. Deng Wenkuan 鄧文寬, "Zhang huashen gaizao mogaoku bei daxiang he kaizao di 94 ku nian dai kao 張准深改建莫高窟北大像和開鑿第94窟年代考" [Dating study of Zhang Huaishen's renovation of Mogao northern colossal-image cave and construction of Cave 94], in *1990 nian dunhuang xue guoji yantao hui lunwen: Shiku kaogu bian* 1990 年敦煌學國際研討會文集·石窟考古編 [Papers for the Dunhuang Studies International Conference in 1990: Section of cave archeology], ed. Dunhuang Yanjiuyuan (Liaoning meishu chubanshe, 1995).

93. In the Maitreya descent system, the Wheel-Turning Monarch Śaṅkha was born before the descent of Maitreya, made offerings to Maitreya, and witnessed the Pure Land of Maitreya. For the conception of *cakravartī* and its impact on the discourses of kingship in medieval China, see Antonino Forte, *Political Propaganda and Ideology in China at the End of the Seventh Century* (Napoli: Istituto universitario orientale, Seminario di studi asiatici, 1976); Ku Cheng-Mei (Gu Zhengmei) 古正美, *Cong tianwang chuantong dao fowang chuantong: Zhongguo zhongshi fojiao zhiguo yishi xingtai yanjiu* 從天王傳統到佛王傳統: 中國中世佛教治國意識形態研究 [From the heavenly king tradition to the Buddhist monarch tradition: A study on the ideology of Buddhist rulership in medieval China] (Taipei: Shangzhou chubanshe, 2003), chapters 5–8; and Sun Yinggang 孫英剛, "Zhuanlunwang yu huangdi: fojiao dui zhonggu junzhu gainian de yingxiang 轉輪王與皇帝: 佛教對中古君主概念的影響" [Wheel-turning monarch and emperor: Buddhism's impact on the conception of kingship in medieval China], *Shehui kexue zhanxian* 社會科學戰線 11 (2013): 78–88.

94. Wang, *Mile jing huaquan*, 46–47.

98—all of which were located on the ground level within the cliff section between the two colossal caves. In contrast, the central-altar caves for the other families and monks were located farther south toward the southern colossal cave or approached from the cliff top (figure 5-34). Thus, the social status of the patrons is reflected in the architectural pattern of the cave landscape. On the other hand, the Zhang and Cao family caves reinforce the visual and political prominence of the Northern Colossal Image. Cave 96 is flanked by Cave 94 of Zhang Huaishen to its north and the later-joined Cave 98 of Cao Yijin to its south (figure 3-40).⁹⁵ Known also for their political significance, the two flanking caves were historically known as the Cave of the Excellency over the Masses (Situ Ku 司徒窟) and the Cave of the Great King (Dawang Ku 大王窟).⁹⁶ Thus, both the form and the aura of the Maitreya colossus in Cave 96 from the early-Tang period were upgraded in the early Guiyijun period, and the Buddhist kingship was enacted by the double patronage from the political leaders on the construction and reconstruction of the Buddhist monuments.

As Caves 94 and 98 renewed the northern colossal image vicinity, their divergent approaches toward the cliff site along with the preexisting caves indicate an increasingly comprehensive concern for the architectural context. According to the Zhang Huaishen stele, the site was thoroughly cleaned before the construction of Cave 94, and the literary exaggeration of “flattening the lofty mountain” was probably aimed to render the dominating power of the new cave over any other on-site elements than the colossal image. To “widely open” the cliff that had actually been “opened” for several hundred years, probably the site-cleaning project for Cave 94

95. Some of the compositional principles have been well observed and summarized in Lee, “Repository of Ingenuity,” 201–5. Building on Lee’s study, I focus on factors such as the Maitreya cults and the contexts of the Cave 96 vicinity and the old district that led to the siting result.

96. Cave names are mentioned in the *Lantern Distribution* manuscript (951 CE).

truly required a huge amount of work that only sage monarchs deserved and that only divine powers could conduct. The thorough clearance can still be inferred from a large area of flattened and plastered cliff surface above Cave 94 (figure 4-21). The remaining rear half of a cave—now numbered as 228 and 229—testifies to the existence of caves prior to the site clearance. Judging from the paucity of cave remnants and the textual descriptions in the Zhang Huaishen stele, it can be inferred that Cave 94 esteemed nothing at the site but the Northern Colossal Image. The one-to-one correlation conceptually situated Cave 94 at the top of the hierarchy of the Mogao cave complex, right below Cave 96.

In comparison, Cave 98 seemed to be more concerned with preserving the previous condition on-site, as most of the preexisting caves were untouched, but four were concealed.⁹⁷ Although the ante-hall of Cave 98 was one of the tallest (7.8 meters) among all the gigantic caves (appendix K, table 7), it did not require a total clearance of the cliff face. Furthermore, the north and south gable walls of its ante-hall were placed at the maximum distance without damaging the neighboring antechambers of Caves 97 and 99 (figure 5-36).

As for how Cave 98 revealed its superiority over those located above and constructed prior to it, the answer lies in the main chamber of Cave 98 (figure 5-37). The backscreened central altar had at one time supported a set of Buddhist statues, of which only the main icon, Shakyamuni Buddha, and two disciples that had been moved from elsewhere are extant.⁹⁸ Above, the four ceiling slopes bears images of thousand-buddha motifs with a Buddha preaching scene in the middle of each slope (figure 5-38). Twelve more Buddha preaching scenes are depicted on the top register of the ceiling slopes. According to the inscriptions, these scenes

97. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 13.

98. The current statue was made during the Qing dynasty (1644–1911), but according to Dunhuang manuscripts like P. 3262 and P.378, the statue was Shakyamuni Buddha.

represent the buddhas of the ten directions and Maitreya (figure 5-39). The mural circle of Buddha images is suspended above the buddha altar, as if myriad buddhas were coming to attend Shakyamuni's sermon.⁹⁹ The ceiling design inherited the template that was first presented in late-Tang Cave 196 and adds the four heavenly kings to the four ceiling corners. The visual program correlates with contemporary textual descriptions of the process of invoking deities into a ritual precinct.¹⁰⁰ Many such "invocation ritual texts" (*qiqing wen* 啟請文) in the Dunhuang documents address the buddhas of the ten directions, thousand buddhas of the good eon, and the four heavenly kings.¹⁰¹ These deities are invoked "to attend the dharma field" (*laifu daochang* 來赴道場) during repentance rituals.¹⁰² The visual program of Cave 98 simulates a ritual setting as such, yet it deviates from the textual descriptions in three aspects. First, while the invocation texts address a generic ritual space, the inscriptions on the ceilings emphasize the specific destination by requesting all the deities to "come and dwell in *this cave*" (*lai ju ciku* 來居此窟).¹⁰³ Second, while the invocation texts indicate that all deities are going to one destination, Cave 98 is centered at the altar of Shakyamuni. Thus, his dharma field becomes the destination of the other buddhas-attending-the-assembly (Fuhuifo 赴會佛), and the prominent visual forms on the altar suggest the continuous presence of the great assembly. Third, Maitreya Buddha, who

99. Liu Yongzeng 劉永增 and Chen Juxia 陳菊霞, "Mogao ku di 98 ku shi yi chanfa daochang 莫高窟第 98 窟是一懺法道場" [Mogao Cave 98 is a dharma field for repentance rituals], *Dunhuang yanjiu* 6, (2012): 32.

100. For instance, Ning Qing argues that the mural circle of buddha preaching scenes in the late-Tang backscreened Cave 196 illustrates the monastic vow for receiving Bodhisattva precepts and repentance rituals and that it is an integral part of the ordination altar for bodhisattva precepts in "Dacheng fojiao sixiang xia de pusa jietan ku yanjiu," 108.

101. The thousand buddhas of the present epoch. The good eon (Skt. *bhadra-kalpa*, *bhadra-kalpika*; Chn: *xianjie* 賢劫) happens to be the present epoch. The last was the glorious eon 莊嚴劫 and the next will be the eon of the constellations 星宿劫 (Skt. *nakṣatra-kalpa*).

102. See S. 3875, Liu and Chen, "Mogao ku di 98 ku shi yi chanfa daochang," 33.

103. 奉請 (十方佛) 來居此窟 or 謹請 (四大天王) 來降此窟.

is not mentioned in the invocation texts, is represented on the north ceiling slope of Cave 98.¹⁰⁴

These deviations were not coincidental but were carefully designed to frame a hierarchical network of Cave 98 and the other caves. First, Cave 98 is a materialized dharma field and a permanent dwelling place for all so-called buddhas of the ten directions and good eon. As recorded in a merit record that is believed to commemorate the completing of the ceiling decoration, “The appearances of all buddhas of the ten directions are copied with the distinguishing marks of the true body; a thousand honored ones of the good eon gather on a lotus flower whose hundred petals are blooming.”¹⁰⁵ Like the pictorial contents, the manner of inserting Cave 98 to the Northern Colossal Image’s district is inclusive; while the cave balances the visual weight on the opposite side of Cave 94, it does not deny the existence of neighboring caves other than Cave 96 as Cave 94 does.

Also, the image of Maitreya Buddha, which is added to the mural circle of buddhas-attending-the-assembly on the north side and addresses the direction of Cave 96—the cave containing a Maitreya Buddha colossus—is adjacent to Cave 98. Although the Maitreya image and inscription in Cave 98 are located too high to be read, the cave makers encoded in them a conceptual link between Cave 98 and the Maitreya colossus. A conceptual link between the Maitreya colossus and the newly constructed caves in its surroundings was already conceivable in the late Tang. For instance, Ma Desheng, a Buddhist priest, constructed a cave on the south side of Cave 96 in 896 CE. Although this cave enshrined Shakyamuni as the main deity, it was

104. No extant inscription, all from the south, north, and east slopes, states the past Buddha, so it was very possibly inscribed on the west ceiling slope, although nothing is legible now. Liu and Chen, “Mogao ku di 98 ku shi yi chanfa daochang,” 32.

105. 十方諸佛，模儀以毫相真身；賢劫千尊，披蓮齊臻百葉 [Merit record of Cao Yijin, the military governor and minister of the Hexi Circuit, in building a grand cave] 河西節度使尚書曹議金修大窟功德記 (P.3781, ca. 920 CE).

conceptualized as a place for awakening not far from Maitreya's sermons under the dragon-flower trees.¹⁰⁶ By representing Maitreya Buddha among the assembly of attendant buddhas, Cave 98 symbolically invokes his descent to the ritual space, thereby indicating the conceptual link to the Maitreya colossus.

Finally, the thousand buddhas of the good eon that are represented above the Shakyamuni statue is a visual parallel of the fact that Cave 98 was inserted below a multitude of preexisting image caves. As repentance rituals gained popularity in medieval China, the enactment of a ritual space necessarily required the utterance of the buddhas' names and advocacy of their descent.¹⁰⁷ Hence, the primary observers of the consecration of the cave must have sensed the iconography, despite its being not easy to see. The anonymous minor caves were not in opposition to the celebrated Maitreya colossus with which Cave 98 was aligned. Instead, they become representatives of the boundless buddha lands of the ten directions and the good eon. If Cave 94 asserted its crucial position in the cave district by clearing traces of the trivial pasts and bound itself with the future buddha, then Cave 98 achieved the same goal by centering it in a dharma field where the past and the future coexist.

With an ambition greater than Cao Yijin's, his son Cao Yuanzhong, the co-owner of Caves 98 and 100, commissioned two cave projects, Caves 61 and 55, in the old district. The

106. The preface praises the place as follows: "Once one awakes in an instant, the Flower Assembly is not far away (刹那若悟, 花會非遙)." The long poem in the following elucidates the abbreviated expression "Flower Assembly" (*huaqi*): "At the three sermons under the dragon-flower trees, [Maitreya Buddha] will assure him to be an immortal (龍花(華)三會, 必子於仙)." Therefore, one can conclude that the Maitreya Buddha is crucial to the conceptualization of the ritual function of the cave. "Tang shazhou longxing si shangzuo Ma Desheng heshang dangquan chuangxiu gongde ji," 896 CE, S.2113v. Ma, *Dunhuang Mogao ku shi yanjiu*, 104–6. Zheng and Zheng, *Dunhuang Bei ming zan jishi*, 772.

107. For theoretical bases and historical propagandas of the invocation rituals, see Liu and Chen, "Mogao ku di 98 ku shi yi chanfa daochang," 34.

construction of Caves 61 and 55 was a milestone in the Cao clan's family caves in three ways. For one, the two caves indicate the shift in focus away from the northern colossal image district, where the previous seventy-year construction concentrated, to the geometrical and initial center of the south section of the Mogao complex. For another, they reshaped the old district into a "Cao's center," where two other Cao-clan caves, Caves 256 and 454, were constructed (figure 5-34). In addition, Caves 55 and 61 led the trend of painting-sculpture correspondence in central-altar cave designs. The special themes of the two caves incorporate a larger span of time and space into the respective dharma field. In the case of Cave 61, the Mañjuśrī theme brought Mount Wutai, the pilgrimage center two-thousand miles away in central China, into the field centered at the Mañjuśrī-on-lion statue set. In the case of Cave 55, the Maitreya Buddha theme integrated the ancient cult of Maitreya Bodhisattva into the contemporary cave.

While the vision was ambitious, the architectural intervention in the old district was humble in comparison to that in the vicinity of the northern colossal image. The different manners reflect the different properties of the sites. In contrast to the northern colossal image vicinity, which has always been centered at a multileveled pavilion of monumental size, the old district before the advent of the Cao family caves was a honeycomb-like mound of three to five levels of modest-sized caves. Like many old districts in historical towns, the old district of Mogao features extreme density, an "organic" look, and rich strata of overlapped constructions.¹⁰⁸ All result from constant additions and refurbishments made since the

108. As Spiro Kostof points out, an artifact of unparalleled size and lifespan like the town is not a transparent expression of any single ideology but is a place where negotiations of politics and social structure took shape and where spaces were shaped by buildings, people, and ritual. And the "organic" patterns are not "natural" modes of the primitives, but they have their own artificiality. Spiro Kostof, *The City Shaped: Urban Patterns and Meanings Through History* (Boston: Little, Brown, 1991).

construction of the initial cave group. Therefore, a straightforward approach to intervening in the old district was prevented by many site-specific factors, including fragility of the overpopulated cliff and thin-wall caves, the intricate circulation network, and the preservation problems of certain caves like Cave 275.

The centers of the growing Mogao complex shifted multiple times, until one of them was relocated to the old district. By the end of the Northern Wei period, about thirty caves were built on lateral sides of the initial group, making the latter a middle point if not a central focus (figure 5-1). Since the construction of Cave 428, which is the largest central-pillar cave at Mogao, in the mid-sixth century, more cave constructions took place in the north side of the initial group than in the south. Consequently, the middle point was shifted from the initial group to Cave 428. This monumental cave played a leading role in structuring the outlook of the Mogao caves until the early-Tang period (figure 5-40). The rapid developments of the complex were shifted to the south side, far from the old district, first by the construction of Cave 220 in 642 CE (figure 5-41-a) and then by that of the two colossal-image caves, namely, Cave 96 in 695 CE (figure 5-41-b) and Cave 130 in the early eight century (figure 5-41-c). The districts centered at the two Maitreya colossi continued to thrive in the following centuries and to shape the appearance of the Mogao complex as it is. The rapid developments on both sides of the old district gave it a new role of connecting adjacent districts. And constant additions to the old district throughout the Tang dynasty made it the densest district, comprising as many as four levels of caves (appendix L).¹⁰⁹ In about one hundred years, between the 850s and 950s, investment in the old district declined, since more interest was vested in the newer centers elsewhere. After all, before the

109. There is less density between Caves 55-454, but it is due to a later cliff collapse, so it is uncertain if there were more caves before.

construction of Caves 61 and 55, the old district displayed the opposite ideas to monumental construction and centralized planning. Moreover, due to over development in previous centuries, the district revealed less potential for redevelopment.

The reasons behind Cao Yuanzhong and his successors' choosing to reenact the old district must have been complex. Apart from extrinsic factors such as the saturation of cliff and intrinsic factors such as the values of certain early caves, the features of the site cannot be ignored. The insertion of Caves 61 and 51 further developed the inherent property of the cave district—that it had become more of a hub of multilevel connectivity than a center of visual predominance. Even the revival of the old district cannot be separated from the primary function of connectivity. At the completion of its construction, Cave 61 facilitated the circulation in the middle area of the cave complex.

The *Lantern Distribution* manuscript (951 CE, appendix B-10) gives an overview of the distribution of caves and their connectivity.¹¹⁰ According to the text, eleven groups of lantern distributors were ordered to illuminate every cave in the complex. Supposing that each went through a zone that was defined by internal connections like passageways and staircases, it can be inferred that the Mogao caves had ten or eleven zones of local-level circulation systems (figure 5-42-a).¹¹¹ Based on the list's order and the location of each zone, I group eight zones in the multilevel cave area into two super-zones—one comprises Zones A, B, C, and D and the other Zones E, F, G, and H—to reflect the five-part sectioning of the cliff site (figure 5-42-b). Furthermore, the conjunct spots of more than one zone imply the location of devices that

110. Jin, “Dunhuang kukan mingshu kao.”

111. This study adopts the leading view about the zoning, which was proposed by Ma De in “Shi shiji zhongqi de mogao ku yamian gaiguan.” Other scholars, like Jin Weinuo, Wang Huimin, Sha Wutian, and Guo Junye, hold different opinions about the identification of individual caves, but they do not overturn Ma's thesis.

facilitated vertical circulation between these zones. Such spots include, from south to north, the two colossal-image caves, Cave 94, Cave 61, Cave 428, and the three-story pavilion (figure 43). The fact that the three multilevel pavilions of the complex coincide with three of the six spots confirms my hypothesis that these spots were equipped with infrastructure for vertical circulation. Yet the three multilevel pavilions were not even the most visited. It is Cave 61 (marked in italics) that is mentioned as many as three times in the manuscript, meaning three of the eleven zones of caves conjoin in its vicinity (appendix B-10, lines 4, 6, 10–11):

Li chan[shi] [Zone B]: [from] the north of the Cave of Situ to [the Cave of] the Temple of Lingtu [the Miraculous Picture], sixty caves. Two lamps for the Cave of the Zhai Family. Two lamps for the Cave of the Du Family. Two lamps for the Cave of the Song Family. Two lamps for Mañjuśrī Hall.

Yin falu [Zone D]: On the second level [from] the Cave of the Yin Family to the Caves of the Society Members Surnamed Linghu, located on the upper level of Mañjuśrī Hall, sixty-five lamps. One lamp for each of the small niches of the Sagely Triad.

Yin yaya, Liang sengzheng [Zone H]: On the second level, [from] the Cave of Pumen [chapter of Avalokiteśvara] to Mañjuśrī Hall, then to the Cave of the Temple of Lingtu [the Miraculous Picture], to the Cave of the Chen Family, sixty-eight caves. The niches containing a Sagely Triad are included into this count.

Based on current studies of the manuscript, Mañjuśrī Hall—that is, Cave 61—is located around the northern end of Zone D, the southern end of Zone H, and the middle of Zone B (figure 5-42-a). The excerpt indicates that the Cave 61 vicinity served as the junction of the three

zones, which in total covered approximately one-third of the six hundred caves. It was a site of connectivity for the circulation not just within the Super-Zone E-F-G-H but also for that between this zone and the adjacent Super-Zone A-B-C-D. Furthermore, language used to suggest spatial relationship implies the existence of device for vertical stacking. “The Caves of the Society Members Surnamed Linghu,” which are two caves adjacent to the initial group, are reported to be on “the upper level” of Cave 61.¹¹² The other instances of “the upper level(s)” and “the lower level(s)” mentioned in this manuscript denote vertical connection as they concern the colossal-image pavilions.¹¹³ By inference, vertical connection existed in the old district even before the advent of Cave 55; the Cave 61 vicinity had been a spot to gain accessibility to the caves above ground level. In any case, this area must have had one or more devices of vertical connection when the cave district was renewed under Cao Yuanzhong’s reign.

The construction of Cave 55 in 962 CE further strengthened this area as the hub of connectivity. To understand how Caves 61 and 55 could have functioned as a hub of circulation, one can find hints from the intricacy of the ante-halls, antechambers, and passageways on the cliff site. The level of Northern Dynasty caves, including Cave 275, was probably fronted by a timber-structured passageway whose roof and floor beams were indicated by the small rectangular holes in row; this passageway was adjoined from below by the ante-halls of Cave 61 and 55 (figure 5-30). Thus, the primary members of the old district could be preserved and revealed under the protection of the district’s latest members, and the imagery of the past could be glimpsed by the contemporary visitors.

112. “文殊堂上層令狐社眾窟。” The inscriptions next to the repainted donor figures in the neighboring Caves 263 and 265 identify them as lay members of a Buddhist society, some surnamed Linghu. *Dunhuang Mogao ku gongyangren tiji*, 111–12.

113. The phrases in the *Lantern Distribution* manuscript for describing the levels of the colossal-image pavilion are “*daxiang shangceng* 大像上層” and “*daxiang xiaceng* 大像下層.”

Cave 55 served not just a pragmatic connectivity but also architectural, religious, political, and familial connectivities. It was located in the middle of Cave 61 and Cave 53. The latter was an expansion of a Tang cave conducted around the same time as Cave 61 and patronized by Cao Yuanzhong as well.¹¹⁴ The ante-halls of Caves 61 and 53 and the later-joined Cave 55 were of comparable sizes and set at regular intervals (figure 5-25), thereby forming a set of three halls. Judging from the layout of columns, it is most likely that the ante-halls of Caves 61 and 53 had hipped-and-gabled roofs, whereas the ante-hall of Cave 55 had a hipped roof.¹¹⁵ The former two had four columns within the interior, which architectural historian Xiao Mo masterfully reconstructs as the structure that supported the hipped part of the hipped-and-gabled roof. The latter had two columns, which probably supported the main ridge of a hipped roof.¹¹⁶ Cave 55 was slightly taller (appendix K, table 7) and was equipped with a roof type and a

114. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 44–48.

115. Another study of the timber-structured part of the Cave 55 ante-hall by Wu Xiao also proposes a hipped-roof design. See Wu Xiao, “Mogao ku 55 ku kuqian jianzhu fuyuan yanjiu 莫高窟55窟窟前建築復原研究” [Reconstructional study of the frontal architecture of Mogao Cave 55], *Jianzhu Shi* 2 (2018): 29–46.

116. Xiao Mo, “Dunhuang mogao ku 53 ku kuqian songdai jianzhu fuyuan 敦煌莫高窟53窟窟前宋代建築復原” [The theoretical reconstruction of the Song dynasty ante-hall architecture of Mogao Cave 53 of Dunhuang], in Pan Yushan and Ma Shichang, *Mogao ku kuqian diantang yizhi* 123–33. Although the building sizes are quite different, the material scale (*caifen* 材分), which signifies the rank of the timber-structured buildings for official use at least since the Song dynasty, for the ante-hall of Cave 55 was even larger than any other ante-halls. The column remnants are 40–45 cm wide for Cave 55 and mostly 30 cm (with one exception of 40 cm) wide for Cave 130. The column bases for Cave 55 are 0.8–0.85 m in diameter, whereas those for Cave 130 are mostly 0.6–0.7 m (with one exception of 0.8 m). Compared to ante-halls of similar scales, all to the south of this pair, the other caves probably had smaller material scale than Cave 55. The antechambers of Caves 100 and 108 have the most similar floor plan to Cave 55, yet the column bases of Cave 100 are 60 cm in diameter (column size unknown) and the columns of Cave 108 were probably around 30 cm in diameter. The ante-halls of the other ground-floor caves to the north of Cave 55, like Caves 53, 35, and 27–30, all had columns with a diameter of around 25–35 cm. This hierarchy in material size may indicate the higher rank of Cave 55 even though its building size is not singular. Based on data from Pan and Ma, *Mogao ku kuqian diantang yizhi*, 8–58.

material-sale that signified a higher rank than the former two in the Chinese timber architecture system.¹¹⁷ Thus, the ante-hall of Cave 55 was made the middle and focal point in the architectural triad (figures 5-44 and 5-45). At the level of cave complex, Cave 55 was the latest and most special one in a set of three in terms of the theme. Apart from the Maitreya descent and ascent correlation with Cave 275, Cave 55 was also the third gigantic cave that hosted Maitreya Buddha after the two colossal caves. Thus, the three sermons of Maitreya Buddha were doubly represented by the three buddha statues in Cave 55, as well as by three major caves with the Maitreya theme—Cave 55 and the northern and southern colossal caves. While carrying on the political indication of the “Wheel-Turning Monarch,” Cave 55 presents a set of three images rather than a singular form and a dominant size.¹¹⁸ The triad was a visual parallel to the fact that Cao Yuanzhong was from a family of three brothers of military governors and the one who succeeded his two elder brothers, Cao Yande 曹元德 (r. 940–42) and Cao Yuanshen 曹元深 (r. 943–46).

Cave 454

The renewal of the old district could not be completed with any finality; shortly after the completion of Cave 55, a severe collapse occurred in the area, breaking off dozens of caves and burying the area under some five meters of rock.¹¹⁹ The central area of the collapse is too deep to preserve most of the preexisting caves, but the remaining rear parts of Caves 455–59, 275, and 55A on the south side and Caves 440–53 on the north side are indicative of the area and degree

117. The hipped roof ranks higher in the classical Chinese architecture system than the hipped-and-gable roof.

118. Gao, “Dunhuang mogao ku di 55 ku yanjiu,” 247–52.

119. Ma De suggests that the collapse happened in 966 CE and that the cause was an earthquake. Ma, “Shi shiji zhongqi de mogao ku yamian gaiguan,” 7.

of the damage (figure 5-46). Coinciding with the collapse and subsequent repair in the area, the siting and design strategy of the other two Cao family caves in the old district were changed. Because of the risk of destabilizing the entire cliff face and the caves at the bottom, the ground level was no longer ideal for excavating gigantic caves. Instead, Caves 256 and 454 were both excavated on the upper levels, without any preexisting caves suspended above them. Both caves were carefully inserted into the contexts of the site. Cave 256 seems to have replaced one or more preexisting caves, because, except for it, this level consists of Northern Wei caves at regular and close intervals (figure 5-47). Unlike the ground-level Caves 61, 55, and 53 that lowered the ground level and damaged several minor caves, the insertion of Cave 256 was gentle on the preexisting caves. But because Cave 256 was repainted in the late Guiyijun period, its initial design conception is irrecoverable. A more intriguing case to be investigated in this section is Cave 454, a large central-altar cave on the level of the initial group in the central area of the collapse (figure 5-48) whose vertical projection falls between Caves 55 and 53, indicating that the insertion intervened not only in the pre-Tang caves but also in the newly built ante-halls.

The construction history of Cave 454 is complex. The cave exhibits traces of redesign of the central altar, retracing of mural paintings, and even refurbishment right after the collapse (figure 5-51).¹²⁰ The timber-structured façade was rebuilt and the central altar refurbished sometime in the 1730s, when the cave site resumed regular maintenance after two centuries of abandonment.¹²¹ This renovation, which turned the altar into a shrine of the Children-Bringing

120. For retracing traces, see Huo Xiliang 霍熙亮, “Dunhuang diqu de fanwang jingbian 敦煌地區的梵網經變” [The Brahma’s net transformation tableaux in the Dunhuang region], in *Zhongguo shiku: Anxi Yulin ku* 中國石窟·安西榆林窟 [Chinese Caves: The Yulin caves in Anxi], ed. Dunhuang Yanjiu Yuan 敦煌研究院 [Dunhuang Academy] (Beijing: Wensu chubanshe, 1997), 188–227. For the mural fragments found during archaeological excavation found in Cave 487, see Pan and Ma, *Mogao ku kuqian diantang yizhi*, 83.

121. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 35–43.

Lady (Songzi Niangniang 送子娘娘) and the surrounding spaces into corridors for *zuanguan* rituals, makes discerning the Guiyijun-period designs more difficult.¹²² While it is accepted to be a merit cave of the Cao clan, scholars have different opinions about the patrons and construction timeline. A leading view is that the cave was commissioned by Cao Yangong, the successor and nephew of Yuanzhong, in the late 970s and eventually completed by Cao Yanlu, the successor and cousin of Yangong, in 980.¹²³ Meanwhile, others suggest that before Yangong's and Yanlu's finalization of the construction, the cave was initially commissioned by Yuanshen or Yuande.¹²⁴ In either case, the prolonged construction duration is evident in the redesign and partial repainting of the cave.

Cave 454 features a series of pagoda images along the path through which Buddhist worshipers are confronted by imagery of the holy assemblies. In addition to the interior design strategies, the appearance also simulates a towering structure. The cave design carefully deals with the preexisting caves below and the form of the cliff face above. As I would argue, Cave 454 finally combined the architectural pattern of verticality with the old district. The remaining problem about vertical connectivity was resolved by the siting of the elevated Cave 454 and the design of its terraced ante-hall. Moreover, the central altar design change during the construction reflected the changing modes of viewing and was relevant to the new mode of façade-making. The magnificent vertical façade and the concealment of Caves 53, 469, and a dozen other caves are two sides of one coin. Finally, the examples of Caves 275, 55, and 454 outline the successive

122. See chapter 3, note 111.

123. He Shizhe, Rong Xinjiang, Guo Junye, Sha Wutian, and Duan Xiaoqiang support this view. For a brief review of their opinion, see Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 48–49.

124. Ma, “Caoshi sandaku yingjian de shehui beijing”; Huo, “Dunhuang diqu de fanwang jingbian”; Wang Huimin, “Cao Yuande gongde ku kao 曹元德功德窟考” [Study of the merit cave of Cao Yuande], *Dunhuang Yanjiu* 46, no. 4 (1995), 163–70.

modes of visual engagement with the cave temple: from contemplative and ritual viewing to witnessing.

Three Pagoda Images

Like other central-altar caves, Cave 454 consists of an ante-hall built on a high terrace, a corridor, and a truncated pyramidal ceiling chamber with a central altar in the rear center (figure 5-49). The main chamber is about 10 meters wide, 11.2 meters deep, and 7 meters at its tallest point.¹²⁵ The size is relatively modest compared with the other Cao family caves in the vicinity, such as Caves 55 and 61. The cave type does not appear to be the most prestigious type of its period. As exemplified by Caves 98, 61, and 55, the most prestigious type of central-altar cave would have been equipped with a backscreen on the central altar.¹²⁶ But the pictorial program is exceptionally rich. The main chamber bears fourteen transformation tableaux (figure 5-50), which is fewer by only two than Caves 55 and 94.¹²⁷ While most of the iconographic contents follow the paradigm established by Caves 94, 98, and 55, the visual program displays originality in three aspects. First, the west ceiling slope depicts a near-life-size Many Treasures Pagoda (figures 5-52 and 2-17-a). As an image, the pagoda enshrining Shakyamuni and the many treasures buddhas does not just mark the destination of other come-flying figures in the scene but also confronts whoever enters the fully painted rock-cut chamber. As a material object, it patches the squarish area on the west ceiling slope that has undergone some modification. As a pictorial

125. Shi, *Mogao ku xing*, 1:442–44, 2, fig. 190.

126. For ranking of various cave shapes, see Shi, “Dunhuang mogaoku wantang ku de fenxi yu yanjiu.”

127. According to the merit record of Cave 94, it contains as many as sixteen transformation tableaux. No reliable reconstruction of the visual program is available, but discussions of the subject matters and their locations in the cave can be found in Fujieda, “Tonkō sembutsudō no chūkō,” 84–86; and Lee, “Repository of Ingenuity,” 222, appendix 2.

motif, it echoes two other pagoda images depicted respectively on the flat ceiling of the corridor and on the west wall of the antechamber above the entrance corridor.

Second, the corridor ceiling mural is the most detailed depiction of the scenes of Buddhist miraculous correspondences. In the lower center of this painting is represented a pagoda that enshrines the miraculous image of Ox Head Mountain (figure 5-53). The pagoda image highlights the scene about one miraculous image of the buddha against other scenes in a continuous landscape.

Third, the east wall of the antechamber above the corridor is a pagoda-shaped niche (figure 5-54). This pagoda image, which is half painted and half carved, is the visual attraction in the ante-hall. While Cave 55 preserved the niche of a preexisting and damaged cave at the same location (i.e., Cave 55A), Cave 454 created this visual attraction together with all other imagery.¹²⁸ In a word, Cave 454 presents a series of pagoda images along the elongated path from ante-hall to corridor to the main chamber. The pagoda-shaped niche, the mural paintings of a pagoda in narrative scenes, and the large iconic pagoda exhibit original ways of conveying the image of pagodas.

By the late-tenth century, almost all kinds of architectural vocabularies had been applied to paintings of pagodas in Dunhuang. Moreover, as discussed in chapter 4, ninth-century caves had explored a variety of means of combining plastic and visual images to constitute a pagoda-shaped shrine or central pillar. The originality of pagoda images in Cave 454 lies neither in invention of new architectural vocabularies nor in the notion of composite image. Instead, it concentrates on the careful interweaving of architectural vocabularies that belong to three building systems. The Cave 454 design furthers the animated scenes of come-flying pagodas for

128. The other example is Cave 420.

the sake of conjoining the worshiper's architectural experience with the witness of invocation and reception of the Buddha and hearing the sermons he gives. The following analysis will first discuss the vocabulary of the prototypical architecture and then unpack the syntax of Cave 454's pagoda images.

The three building systems in which the architectural vocabularies are evident in the pagoda images of Cave 454 are King Aśoka's stupa, the canopied shrine, and the timber-structured hall. King Aśoka (ca. 304–232 BCE) of the Maurya Empire in ancient India, was a model Buddhist monarch in medieval East Asia; one of his best-known legacies was the construction of eighty-four thousand relic stupas.¹²⁹ Pictures of miraculous correspondences in Guiyijun-period Dunhuang often represent this legend, and Aśoka's stupas have acquired distinctive visual features.¹³⁰ Dunhuang mural paintings of Aśoka's stupas are reminiscent of domed volume and masonry construction, which are characteristic of the Indian prototypical stupa (figure 5-55). Concurrently, they adapted the Indian prototype to a square plan and more complex roof ornaments, such as a larger and more ornate *chatra* and an overhanging roof with miniature stupas standing at the four corners (figure 5-56).¹³¹ Perhaps because of their impressive quantity in the legend, Aśoka's stupas are often represented in plural forms. In

129. Sun, *Fojiao dongchuan gushi huajuan*, 37–38; Strong, John Strong, *The Legend of King Aśoka: A Study and Translation of the Aśokāvadāna* (Princeton, NJ: Princeton University Press, 1983), 117.

130. For a list of the examples, see Zhang, *Dunhuang fojiao gantonghua yanjiu*, 107–9.

131. The earliest example of the five-pagoda composition in Dunhuang murals is a reliquary pagoda image in Mogao Cave 428 of the Northern Zhou period. According to a leading view in the studies of this case, it is also related to Aśoka's pagoda-construction activities. He Shizhe, Shi Pingting, and Zhang Xiaogang take the pagoda to be a five-divided true body pagoda (*wufen fashen ta* 五分法身塔), which King Aśoka constructed with the remaining relics after having built eighty-four thousand relic stupas. *Dunhuang Mogao ku*, 1:219; Shi Pingting, "Guanyu Mogao ku di 428 ku de sikao 關於莫高窟第四二八窟的思考" [Thoughts about Dunhuang Mogao Cave 428], *Dunhuang Yanjiu* 1 (1998): 1–12; Zhang, *Dunhuang fojiao gantonghua yanjiu*, 90.

addition to the corner-stupa format, another common representation depicted ten miniature stupas in the beams of light radiating from an omniscient hand (figure 5-57). In either way, the visual language of the Aśoka stupa images in Dunhuang murals represents a localized imagination that varies from the contemporary interpretations of Aśoka's stupas elsewhere, such as those built by the Wuyue 吳越 kings in central middle China (figure 5-58). But a shared idea is that the stupas, often rendered in miniature size, are nested in a larger room, be it the cave or the pagoda crypt.¹³² The canopied shrine (*zhang* 帳) is a timber-structured and richly decorated furniture that has been used to enshrine religious icons and spirits in China since ancient times. Although extant examples from the Tang period are scarce, the form is preserved by stone reliquaries in pagoda crypts (figure 5-59) and canopy-shaped niches in caves. The common features include a square plan, curtains hung between posts, a roof comprising single- or double-layered *yangyang* boards, and *shanhua jiaoye* decoration atop. The “small carpentry” (*xiao muzuo*) construction system of the canopied shrine contrasts with the “grand carpentry” (*dazuo*) of the timber-structured hall. While both belong to the post-and-lintel structure, the latter is easily distinguished from the former by the architectural scale, outdoor placement, pitched roofs, and the use of bracket sets. The stylistic features of the timber-structured hall are evident in the veranda of a Maitreya pagoda and a few cave façades in tenth century Dunhuang (figure 5-60). Despite being small and structurally dependent, the timber-structured façades would have been the most direct references for Dunhuang artisans. For instance, the feature of excluding the *ang* cantilevered beams is reflected in the main pagoda image in Cave 454. For convenience, the following analysis refers to the Aśoka stupas, the canopied shrine, and the timber-structured hall

132. For the nesting idea in Wuyue pagodas, see Lin Wei-Cheng 林偉正, “Zhakou baita: Wuyue fota de weisuo moxing 開口白塔:吳越佛塔的“縮微模型” [White pagoda of Zhakou: “Miniature Model” of the Wuyue pagodas], *Jianzhu Shi Xuekan* 3, no. 2 (2022): 31–32.

respectively as prototypes 1, 2, and 3.

The deeper the pagoda image is in Cave 454, the more intricately do the architectural vocabularies of the three systems become interwoven. The first pagoda image that a worshiper encounters is the pagoda-shaped niche in the antechamber. This pagoda image combines features of the domed stupa and the canopied shrine. The murals above the niche represent a domed roof with overhanging eaves and an ornate *chatra* (prototype 1), whereas the sculpted lower part imitates the canopy-shaped niche with door panels and the *kunmen*-arched base (prototype 2) (figure 5-61). The two relatively independent parts of the pagoda image overlap at the inwardly bent top of the pagoda body.¹³³

The second pagoda image that a worshiper passes from below is the pagoda on Ox Head Mountain in the corridor ceiling painting. The image combines features of all three systems at a basic level. The *chatra*, domed roof, and body, as well as the miniature stupas on the winged buildings flanking the pagoda, are suggestive of prototype 1, whereas the leaf-shaped bracket sets, timber pillars, and architraves are suggestive of prototype 3. The curved pillars could be viewed as a timber structure in imitation of the domed stupa body—a hybridization of prototypes 1 and 3. A characteristic vocabulary of prototype 2, namely the *yangyang* boards with eave decorations, is incorporated into the eave representation, where the upper part of prototype 1 and the lower part of prototype 3 conjoin (figure 5-62).

The third and last pagoda image a worshiper confronts is the Many Treasures Pagoda on the west ceiling slope of the main chamber. The frontally pictured structure is a timber-structured pagoda on a waisted base and with a crown-like roof and finial (figure 2-17-b). Above the

133. A precedent of this case is the main pagoda image in Cave 14, in which the top of central pillar is bent inwardly as well.

architrave that ties the inward-bending tops of the four pillars are placed eight bracket sets. On top of the intricate carpentry lie two layers of rafters that support an overhanging eave. The eave is decorated with two rows of square panels, the lower row vertically placed and the upper one tilting outward. Dragon's-head shaped ornaments, hanging bells, leaf- and flower-shaped plaques, and triangular-headed rectangular plaques enrich the contours of the eave panels. In addition, the rooftop is adorned by an elaborate *chatra* in the center and miniature pagodas at the corners. The *chatra* consists, from bottom to top, of a double-tiered base supported by three warriors, seven disks supported by a post, a jeweled canopy, and crescent moon symbols with orbs stacked at the top. Four chains of bells are hung between the *chatra*'s canopy and four miniature pagodas—of which two in the front are represented—erected at the corners of the overhanging eave.

This pagoda image further elaborates on the second one's design and achieves the most complex structure among all pagoda images in Dunhuang. The large painting has more constructive details, such as miniature stupas at the corners (prototype 1), *yangyang* board topped by *shanhua* decoration, curtains (prototype 2), and multi-tiered bracket sets (prototype 3), to make the pagoda more vivid (figure 5-63). Furthermore, the compositional division among elements of the three systems is eliminated by distributing them over the pagoda roof and body. Topological correspondences are found, for instance, between the miniature pagoda and the main pagoda (prototype 1), between the *yangyang* board and the curtains (prototype 2), and between the bracket sets and the pillars and architraves (prototype 3). This pagoda image integrated the three kind of construction systems and the various scales they indicate into one coherent structure.

Because all three pagodas integrate two or three kinds of architectural vocabularies, they

correspond with one another in certain vocabularies and create a visual rhythm for the elongated central axis. For instance, the *chatras* of all three pagoda images point outward along the axis; the *yangyang* boards, curtains, and door panels indicate interiority of all three pagodas; and the bracket sets and curved pillars of the second and third pagodas display increasing degrees of ornamentation (figure 5-64). Furthermore, because the pagoda images in the deeper locations are larger and more detailed than the ones preceding them, the experience of entering the cave coincides with a deeper visual engagement with the pagoda.

The pagoda forms are carefully designed to visually connect the three architectural spaces of the cave. Furthermore, they serve as a thread of the miraculous gatherings the pictorial contents in these spaces represent. The ante-hall could be subdivided by the pictorial contents into a major lower register and a minor upper register (figure 5-65). In the lower register, the mirroring pictures of Vaiśravaṇa invoking the Buddha(s) to enter the pagoda, beside the entrance corridor, indicate the functions of the ante-hall, namely, invoking the arrivals of deities and guarding the threshold. In the upper register, as a response to the invocation, ten buddha images with entourage on clouds are depicted going toward the pagoda-shaped niche in the center.¹³⁴ The niche, which represents a multi-handed Avalokiteśvara inside and Mañjuśrī and Samantabhadra in attendance on the door panels, seems like the recurrence of the respective bodhisattva images depicted on the ceiling (figure 5-50). Thus, the pagoda-shaped niche symbolizes the threshold to a dharma field that the Buddhist deities are invoked to enter. The

134. The ten scenes of standing buddhas with entourage depicted in the upper register of the antechamber walls are conventionally identified as the ten directional buddhas who attend an assembly, yet a recent study of Guo Junye identifies them as the twelve medicine buddhas. In either case, the pictorial composition highlights the pagoda image in the center where the buddhas are facing. *Dunhuang Mogao ku neirong zonglu*, 168; Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 106–18.

pagoda-shaped niche and the two miniature pagoda images held in the hands of Vaiśravaṇa constitute an isosceles triangular composition that unifies the thresholds for humans and for Buddhist deities.

As a continuation of the bipartite space of the antechamber, the corridor comprises a major lower register and a minor upper register of distinctive pictorial contents and scales. The walls bear over-life-sized portraits of the male members of the Cao clan, representing them in a ritual parade toward the main chamber. The ceiling panel and slopes depict miraculous images in narrative scenes and in two rows of icons. While the ceiling-slope picture represents as many as forty-four scenes as indicated by inscription cartouches, its vertical and horizontal axes intersect at the iconic representation of the pagoda on Ox Head Mountain. In the picture, the two-story pavilions winging the pagoda are bottomed by an overhanging corridor with railings instead of a regular base, suggesting that they are heavenly palaces (figure 2-34); the stairway of the pagoda cuts through the beast's-head-looking rock forms, indicating that the celestial architecture that enshrines the Buddhist deities has descended and been conjoined with the earthly terrain.¹³⁵ As the inscription in a cartouche beside the pagoda suggests, this scene represents “When Shakyamuni Buddha [came-flying] from Vulture Peak to Ox Head Mountain (*Shijiamouni cong Yunjiushan xiang Niutoushan shi* 釋迦牟尼佛從雲就山向牛頭山時).” The Buddha’s miraculous movement from Vulture Peak to Ox Head Mountain is paralleled by the visual correspondence between the pagoda image in the main chamber and this one.

The assembly at Vulture Peak was likely represented by the statue set on the central altar at its completion. Although the central altar was almost defaced by the 1730s renovation, its

135. The image of overhanging corridor with railings is has been a common visual representation of heavenly palaces since the Northern Wei period in Dunhuang. The musicians and dancers standing in the corridor reconfirm the pictorial motif.

original status is traceable (figure 5-66). The second and third tiers of the current altar were added to cover the second tier of the original altar. Above it, a set of nine figures was sculpted against a three-sided wall enclosure.¹³⁶ The statues have been removed, yet the partition walls remain. Archaeological evidence suggests that the eighteenth-century repair did not restore but altered the tenth-century altar. For example, the petal patterns and *kunmen* arches on the west-facing side of the altar reveal the tenth-century design of the second tier (figure 5-67). Moreover, the relief petals protruding from the middle of the roughly plastered back sides of the north and west partition walls are traces of three pedestals in the tenth-century design (figure 5-68).¹³⁷ Based on the three main images' location and similar central-altar designs, my theoretical reconstruction of the tenth-century altar is a double-tiered U-shaped altar decorated with *kunmen* arches on the sides and stairs in the central front (figure 5-69). By convention, the main statues of a buddha and two attending bodhisattvas would have been surrounded by disciples, standing and kneeling bodhisattvas, and heavenly kings. The sculpted altar would have been vertically aligned with the imposing image of the Many Treasures Pagoda on the west ceiling slope (figure 5-70). As Guo Junye points out, they represent the two major sermons described in the *Lotus Sūtra*, namely at the assembly of Vulture Peak below and the assembly of Void Space above. Guo further suggests that the altar was a potential setting for performing the repentance ritual of the Fahua samādhi (*Fahua sanmei chanyi* 法華三昧懺儀).¹³⁸ As a conventional design for central-altar caves, the Magic Competition tableau on the west wall has an “oppositional

136. Three Guanyin statues were placed on the rear (west) side of the altar. Two seated figures and a standing warrior were placed on each of the lateral sides. Apart from the statues on the altar, a Buddha and two attending bodhisattvas were placed in front of the altar. Moreover, two miniature “entrance halls” were added to the sides in front of the central altar to control the accessibility to the corridors behind. Shi, *Mogao ku xing*, 2, fig. 190.

137. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 293.

138. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 292–303.

composition” in which two main figures would not be blocked by the statue set on altar when seeing from the front.¹³⁹ In this case, it displays the magic power of Buddhist teachings and highlights the central vertical axis of the Fahua dharma field.

At the completion of the cave construction, the Vulture Peak scene sculpted on the central altar and the Many Treasures Pagoda image above it became the culmination of the actual and spiritual journeys; a worshiper can approach this scene only after having ascended to the elevated cave, entered the interiors screened by a timber-structured façade, passed through the transitional spaces guarded by the heavenly kings, and followed the ritual parade of the donor images. Correspondingly, the imaginary journey of a supernatural being attending the Fahua assembly starts with the invocation and the reception of the deities, followed by the descent of the deities, who are often accompanied by miraculous happenings such as flying pagodas, after which the holy assembly eventually manifests in full scale and solid form. The human beholder’s interlocutors in this imaginary journey are Mañjuśrī and Samantabhadra Bodhisattvas, who recur in pairs four times along the path—on the ceiling, on the pictorial door panels of the pagoda-shaped niche of the antechamber, on the ceiling slopes of the corridor, and in front of the Many Treasure Pagoda on the west ceiling slope of the main chamber (figure 5-71).¹⁴⁰ The recurring images of Mañjuśrī and Samantabhadra, who are the two main bodhisattvas who guide the boy pilgrim Sudhana to learn the bodhisattva path, guide the worshiper through the pagoda-oriented journey.

139. This painting depicts the contest between a Buddhist disciple, Sariputra, and a heretic Raudraksa. For more about the painting, see Wu Hung, “What is Bianxiang?—On the Relationship between Dunhuang Art and Dunhuang Literature,” *Harvard Journal of Asiatic Studies* 52, no. 1 (1992): 111–92.

140. For identification of these images, see Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 80–85, 94, 217–18, 285–86. Notably, the bodhisattva images at location (3) is a unique design among Dunhuang caves.

This kind of supernatural beings' journey to attend holy assemblies was not unimaginable for medieval Chinese beholders. The transformation tableau of the *Laṅkāvatāra Sūtra* (Lengqie jing 楞伽經) on the east ceiling slope of Cave 55 displays a mature way of representing the invitation and the reception of the Buddha in pagodas and his sermon in front of a towering pavilion (figure 5-72).¹⁴¹ The pictorial composition and positioning of the tableau had already been established in late-Tang Caves 156 and 85, and the Cave 55 tableau was modeled after the precedents with minor modifications.¹⁴² Two scenes display interesting individualization. The scene of King Rāvana going to invite Shakyamuni Buddha and that of the Buddha going to Lanka are represented by a pair of flying pagodas, whose contrails indicate that they are moving in opposite directions (figure 5-73). While the composition is conventional, the pagoda form combines features of the pagoda (*chatra* and roof) and that of the canopied shrine (curtains). The manner of composite form is similar to how the pagoda images in Cave 454 are composed. Another innovation is the scene of the Buddha giving a sermon at the nāgas' palaces deep in the ocean. The scene is distinguished from other examples in Dunhuang by a two-story pavilion rising from behind the Buddha preaching scene. Conventionally, the nāgas' palaces are represented by corridors or a corner of buildings, but the Cave 55 representation puts much more visual weight on a towering structure. In this way, a visual balance is achieved between the

141. The full title of the sūtra is *Lengqie abaduoluo bao jing* 楞伽阿跋多羅寶經 [Laṅkāvatāra Sūtra]. Trans. Guṇabhadra 求那跋陀羅. T. 16, 670. For studies of the transformation tableaux in Dunhuang, see He Shizhe 賀世哲, *Dunhuang shiku quanji: Lengqie jing huajuan* 敦煌石窟全集: 楞伽經畫卷 [Comprehensive collection of the Dunhuang grottoes: Volume on Laṅkāvatāra Sūtra painting], ed. Dunhuang Yanjiu Yuan 敦煌研究院 [Dunhuang Academy] (Hong Kong: Shangwu yinshu guan, 2003).

142. Cave 94, according to the merit record, had a Laṅkāvatāra transformation tableau among its sixteen tableaux. Although no definitive conclusion can be drawn, it is possible that the Laṅkāvatāra and the Maitreya tableaux were depicted on the east and west ceiling slopes, respectively, like its predecessors Caves 156 and 85 and its latecomer Cave 55. Gao "Mogao ku di 55 ku yanjiu," 87–88.

inviting and receiving scenes on the left side and the preaching scene on the right side of the iconic, waisted mountain of Lanka. If this tableau could be viewed as a visual template for representing the invocation, reception, and hearing of sermons of the Buddha, then Cave 454 creates a spatialized representation of the tripartite journey by fully exploring the formal and compositional potentials of the three pagoda images.

The Design Procedure Reconstructed

The pagoda imagery in the main chamber is so crucial to the design conception of the cave that it has undergone a design experiment. The procedure of redesign and partial reconstruction are reflected in the archaeological traces. A squarish area in the center and lower part has a darker background color, indicating that it was plastered at a different time from the rest of the ceiling (figures 5-51 and 5-52). Because the west wall bears no traces as such and because the painting on the west ceiling slope appears coherent, the modification most possibly happened after the ceiling slopes had been plastered or painted and before the walls were painted.¹⁴³ More accurately speaking, the modification is a design change that took place spontaneously during the construction process. To distinguish the design that had not been fully executed from the version that was materialized, this study refers to the former as the “initial design” and the latter as the “finalized design.” The retouched area is located right below the inclined *yangyang* board of the pagoda image, and a small triangle does not seem to represent any architectonic component in a complete view (figure 74). The shape resembles the top of a decorative plaque and indicates the existence of a lower level of decorative eave in the initial design. The lower part of the decorative plaque was excavated on the east-facing surface of a

143. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 31–34.

rock-cut volume connected to the west ceiling slope, the subsequent removal of which resulted in the repainted area.

What would the initial design have looked like? I propose two possibilities based on the backscreen-style central-altar cave and the central-pillar cave types. Proposal 1 takes the removed solid to be a backscreen (figure 75). A few scholars have considered the possibility of this type, yet the specific form has not yet been investigated.¹⁴⁴ The backscreen in a backscreen-style central-altar cave is a rock-cut partition wall backing the main statue and connecting the ceiling and the rear center of the U-shaped altar. The backscreen is usually a meter thick and four meters wide and has semicircular protrusions at the top of the two sides.¹⁴⁵ Contemporary examples, such as Caves 55 and 152, exhibit a revision of the backscreen design; the upper part of its backside is connected to the west wall, and the space below becomes a barrel-vaulted, narrow corridor.¹⁴⁶ Since the repainted area in Cave 454 extends to the bottom of the west ceiling slope, the rock-cut volume was similarly connected to the upper part of the west wall (figure 76). My reconstruction design of the backscreen's pictorial content follows the bipartite pictorial composition of the Fahua dharma field. The upper half of the backscreen's front face bears an image of the lower part of the Many Treasures Pagoda, folding the pagoda image from the west ceiling into the interior space. The lower half bears the halo and jeweled canopy of the main icon Shakyamuni, who is flanked by the assembly at Vulture Peak sculpted on the altar. In

144. Ma, *Dunhuang Mogao ku shi yanjiu*, 132. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 32.

145. For the dimensions of the backscreens at the Mogao Caves, see appendix K, table 5, last two columns.

146. For drawings of Cave 152, see Shi, *Mogao ku xing*, 2, fig. 24. For the dating of it, see *Dunhuang shiku neirong zonglu*, 59. There is no scholarship on the reason for the Song-period design variation. My preliminary hypothesis is that the narrowed space behind the central altar was turned into a back corridor for *zuanguan* practices. The similar device in the central-pillar caves of the late Tang and Five Dynasties is comparable to the design change in Song-period backscreened caves.

this proposal, the initial design carries the same visual program as the finalized design does, yet the former conveys the Fahua imagery in a more plastic way. Because the vertical projection of the repainted area on the altar is over two meters thick, the front face is most likely tilted and/or curved as in the ninth-century backscreened Caves 16 and 94. The design brings the image of the pagoda body downward from the ceiling slope to the wall. In other words, it appears as if coming from the virtual space to inhabit the actual space.

Because the backscreen would still be twice as thick as normal, proposal 2 illustrates an alternative possibility in which the rock-cut volume is a niched pillar (figure 5-77). In this proposal, the niched pillar represents the body and base of a pagoda, and the painting on the upper part of the pillar depicts the second and even the third layers of *yangyang* boards. The painting on the west ceiling slope becomes an extension of the ornate pagoda roof comprising multilayered *yangyang* boards and the *chatra*. The pillar and ceiling designs convey a composite image of the Many Treasures Pagoda. Since the west ceiling slope depicts various buddhas and bodhisattvas coming to attend the assembly of Void Space, it is possible that the niche enshrines two buddha images that represent Shakyamuni and the many treasures buddha. Although not common, twin-buddha niches could be found in Caves 259 and 246 (figure 5-78).¹⁴⁷ Moreover, a precedent of the composite pagoda image is Cave 14 of the late-Tang period. As discussed in chapter 4, that image consists of the roof and *chatra* painted on the west ceiling slope and the pagoda body and base represented by the central pillar. A significant difference between the two pagoda-centered caves, however, is the spatial relationship between the pagoda and the hall-like

147. For a recent study of Cave 259, see Lee Yu-min (Li Yumin) 李玉璿, “Dunhuang Mogao ku 259 ku zhi yanjiu 敦煌莫高窟二五九窟之研究” [Cave 259 at Mo-kaio, Tun-huang], *Taida Journal of Art History* 國立臺灣大學美術史研究集刊 95, no. 2: 1–26. For a recent study of Cave 246, see Chen Juxia 陳菊霞, “Mogao ku di 246 ku yanjiu 莫高窟第246窟研究” [A study of Mogao Cave 246 of Dunhuang], *Dunhuang Yanjiu* 3 (2019): 1–16.

space under the truncated pyramidal ceiling. In Cave 14, which is a central-pillar cave, the tangible form of the pagoda image is withdrawn from the hall-like space (figure 2-43). In the initial design (proposal 2) of Cave 454, the pagoda image becomes fully subsumed into the hall-like space and becomes an integral part of the statue set on altar (figure 5-79). The former displays a clear subdivision between the space of the worshiped and the space of the worshiper, whereas the latter replaces the subdivision by a triple-tiered superimposition. In this nested space, the innermost core is preserved for the buddha niche on the pillar; the intermediate tier is the central altar, on which the images of Buddhist deities are concurrently subordinated to the Buddha(s) in the niche and, together with the latter, dominate the rest of the space; the outermost tier is the unraised, leftover space surrounding the central altar and accessible to the worshiper. Unlike proposal 1, which adopts an established cave type, proposal 2 explores a unique cave shape that I shall call “the central-pillared hall cave” (figure 5-80).

In this way, the initial design (proposal 2) does not just represent an iconic scene of the *Lotus Sūtra*, namely, the assembly of Void Space, but its nested space also implies a fundamental idea of the sūtra—that is, one ultimate vehicle that encompasses all expedient devices.¹⁴⁸ As Dunhuang merit records summarize, the *Lotus Sūtra* “unites the three vehicles in one” (*guisan huiyi* 會三歸一) and “praises the truth of the one vehicle” (*zan yicheng zhi zhengzhen* 贊一乘之正真).¹⁴⁹ The nested space—a spatial metaphor of one-ness—is evident in the redesign of the central-pillar Cave 246. The cave was constructed in the Northern Wei period and almost

148. Stephen F. Teiser and Jacqueline Ilyse Stone, *Readings of the Lotus Sūtra* (New York: Columbia University Press, 2009), 15–20.

149. The first quote is from “Wu Sengtong stele 吳僧統碑” [Stele of Wu Sengtong], p. 4060, and the second is from “Datang shazhou shimen suo yibian heshang xiu gongde ji bei 大唐沙州釋門索法律義辯和尚修功德記碑” [Merit record of Buddhist priest suo yibian], S.530. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 274, 324.

completely refurbished in the late-Guiyijun or the Xixia period.¹⁵⁰ The refurbishment turned a typical central-pillar cave space into a triple-layered nested space. The innermost core is a small canopy-shaped shrine simulated by a canopy-shaped niche that enshrines the twin buddha images; the intermediate layer is a slightly larger canopied shrine simulated by the central pillar that bears images of draperies above and *kunmen*-arched base below; the outermost layer is a much larger canopied shrine simulated by the main chamber that bears similar images on the four walls and uniformed floral patterns on the ceilings. The refurbished central pillar also combines images that were made some five hundred years apart and represent buddhas of the three epochs. The front (east-facing) side was fully remade during the refurbishment, whereas the other three sides preserved the Northern Wei period niches. According to Chen Juxia, the front side of the central pillar represents the buddha of the past (Many Treasures Buddha) and the buddha of the present (Shakyamuni), whereas the rear (i.e., west-facing) side of the pillar represents the buddha of the future by a niche of Maitreya Buddha below and another of Maitreya Bodhisattva above.¹⁵¹ The refurbished Cave 246 unites three architectural spaces and the buddhas of three times—past, present, and future—in one chamber. In comparison, the initial design (proposal 2) of Cave 454 fully materializes the architectural forms of the triply nested spaces and reinforces their architectural pattern of varied scales and level heights. Furthermore, the renewal of the old district of Mogao demonstrates the unification of past, present, and future through the coexistence of Cave 454 representing the Many Treasures and Shakyamuni Buddhas, Cave 55 representing Maitreya Buddha, and Cave 275 representing Maitreya Bodhisattva.

150. The style of the repainting mural is generally accepted to be dated as early as the late Guiyijun period and as late as the Xixia period. For a different view of the dating, see Zhao, “Guanyu Dunhuang xixia qianqi dongku de taolun.”

151. Chen, “Mogao ku di 246 ku yanjiu,” 5–6.

But why was the backscreen or the central pillar removed in the finalized design? It is not likely because of regulations regarding the social status of the owner. Since the cave owner was one of the military governors, even the most prestigious cave type—the backscreened central-altar cave—would not have overstepped the line. Instead, a direct cause was likely the uncontrollable cliff collapse. As already described, the severe cliff collapse in the old district seems to have happened in the late-tenth century, and the epicenter was the cliff face where Cave 454 is located. The collapse’s damaging effect on Cave 454 is felt in the renovation of some murals on the east side of the main chamber and the application of wooden frames for the corridor walls.¹⁵² Excavating a massive volume (around 657 cubic meters) of living rock about ten meters above ground level onto a cliff site that was already honeycombed with preexisting caves risked severe destabilization of the cliff.¹⁵³ Hence, it is possible that the collapse or its aftershock happened during the construction of Cave 454. The prolonged construction duration spanning the reigns of two or three military governors is supportive evidence for this hypothesis. Presented with the damage caused by the collapse, tenth-century cave builders faced the same problem that modern conservators do: how to preserve the caves and prevent future damage. Since Cave 454 was still under construction, a necessary response would have been to remove the hazardous elements and revise the design accordingly. The backscreen or the central pillar in the initial design had much solid volume hanging from the ceiling slope, and therefore it had a high risk of being broken in the collapse. The subsequent removal of any remnants was one of

152. For the renovation of murals, see Huo, “Dunhuang diqu de Fanwang jingbian.” I noticed the wooden frames behind broken plaster layers on the north corridor wall in autumn 2021. The corridor treatment indicates that the rock form behind the plastered surface were irregularly cut off or considered unstable.

153. The volume calculation is after Shi, *Mogao ku xing*, 1:443. A similar cliff collapse is implied by a merit record about the construction of Cave 94 in the 880s. See chapter 5.

the subsequent measures used to counteract the collapse's disastrous impact. The redesign seems to put more weight on adapting the initial design to the backscreen/pillar-less interior than on responding to structural challenges posed by the loss of the weight-bearing device, since the cave size is modest among central-altar caves of the Guiyijun period. The structural reinforcements are felt in the exterior of the cave. As will be discussed in the next subsection, the magnificent ante-hall was a compensation for the lost chance of exploring a nested space inside the cave; the raised terrace reinforces the fragile cliff face below Cave 454 while sealing three layers of preexisting caves. The finalized design, which was infused with more preservation concerns for the neighboring caves, exhibits an exceptionally high degree of interest in the exteriors. In a word, it made the deepest pagoda image in the initial design to surface from, physically and metaphorically, a five-hundred-year construction history of the cave complex.

Magnificent Architecture Surfaced from a Historical Site

Like the pagoda images that dominate the central axis of the cave, Cave 454 itself played a pivotal role in reshaping the old district after the construction of Cave 55. After the Mogao cave complex was known to modern explorers and before the 1960s cliff reinforcement projects, Cave 454 was the only hall cave that dominated the entire height of a multilevel cliff area. As old photographs show (figure 5-81), the exterior of Cave 454 was composed of, from bottom to top, an elevated earthen platform with a stairway, a three-bay timber-structured façade that was not tall enough to cover the rock-cut antechamber, a gable-shaped area that was plastered and painted above the timber-structured façade, and an extruding rock formation that had multiple horizontal layers. This rock formation crowning Cave 454 looked too hazardous to modern conservators and was removed during the cliff reinforcement projects. The rock-cut ante-hall is as tall as two levels of preexisting caves in the surroundings. It is so tall that the façade built in

the eighteenth-century could cover only the lower register of murals.

What did the tenth-century façade of the ante-hall look like? Although no timber members are extant, their traces on the cliff face provide crucial clues of a three-leveled roof type and a multi-angular layout of the upper level. The special design had three tiers of eaves or roofs. The lowermost level is indicated by an edge cut in the shape of a corner bracket set on the south gable wall and two large beam holes in the central bay; the middle level is indicated by the ceiling of rock-cut ante-hall, two right-angle cuts, and two small beam holes on both gable walls; and the uppermost level is indicated by the flat bottom of the gable-shaped open-air mural and two obtuse angular cuts on the sides (figure 5-82). Notably, the small beam holes are cut into the rock at about 45 degrees. This unusual placement indicates that the second-level roof structure had two side faces that were at 135 degrees to the frontal face. Traces of the third level are too poorly preserved to lead to any decisive conclusion about the roof form. But the third level was between the ceiling level of the rock-cut antechamber and the bottom of the open-air mural, extending the overall height of the façade. Based on these clues, my theoretical reconstruction of the timber-structured façade suggests that it would have looked like a two- or three-level pavilion even though its interior was single-leveled. Furthermore, it would have appeared as if it had a rectangular layout for the first level and an octagonal layout for the second level (figure 5-83). The architectural form of the façade resembles that of Bright Hall as depicted in Mogao Cave 9 of the late Tang (figure 5-84). As two merit records from the Dunhuang documents demonstrate, Bright Hall was indeed one of the imageries that magnificent cave-front architecture was made to evoke: “The cloud pavilions are structured high, as if moon paths are connected. The sandalwood

beams almost match the style of the Bright Hall.”¹⁵⁴ The literary imagination and pictorial representation of the Bright Hall style were eventually materialized by a unique façade design.

Cave 454’s exterior was more than a simulation of Bright Hall. The literary description immediately following the “cloud pavilions” and “Bright Hall” metaphors reads, “Carved and engraved patterns resemble scales [of the dragon] and [feathers of] the phoenix and compete for brilliance. Jeweled bells are eternally [held] high; they ring in correspondence with the sound of the wind.”¹⁵⁵ In addition to the animating adornment of “dragon and phoenix,” the description implies the appearance of a pagoda by mentioning “jeweled bells.” While bells could have been hung below eaves of halls, pavilions, and pagodas, it is on chains hung from pagoda *chatras* in Dunhuang paintings that bells are exclusively represented. The cliff face provides additional space of exploring the visual languages of the organic imagination and the pagoda image. The open-air mural highlights the central vertical axis of the façade and exhibits a strong tendency of upward extension. The mural depicts a heavenly orchestra; a heavenly figure dances on one foot on a lotus flower in the middle, four musicians kneel on the two sides facing the dancer, and a flying drum is visible in a narrowed corner of the triangular shaped canvas (figure 5-85). These figures would have appeared as if standing on the rooftop of the pavilion-like ante-hall. What distinguishes the image from conventional designs of open-air mural at Mogao is the dancing figure in the middle.¹⁵⁶ This kind of figure-above-threshold was not new to Dunhuang art or Chinese Buddhist architecture. For instance, dancers and musicians emerging from lotuses were

154. “雲樓架迴，似月路而相連；梁棟栴檀，約明堂而趣樣。” Excerpt from “Guiyijun shiqi mou shijun zaoku gongdeji 歸義軍時期某使君造窟功德記” [Merit record of a certain lord in the Guiyijun Circuit Building A Cave], 3542. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1370. This lord (*shijun*) has been suggested to be Cao Yangong and Cao Yuanshen.

155. “彫文刻鏤，似鱗鳳而爭鮮。寶鐸永(承)昂，隨風聲而應響。” “Guiyijun shiqi mou shijun zaoku gongdeji” (3542). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1370.

156. For conventional designs, see appendix J, group 1.

common motifs that decorated *chaitya* arched niche lintels in Dunhuang caves of the Northern Dynasties. In Mogao Cave 249, a dancing figure painted in the middle of the niche lintel enhances the central vertical axis between the pointed halo of the buddha image inside the niche and the image of Mount Sumeru held by Asura on the west ceiling slope (figure 5-86). Another lintel decoration of a Tang-dynasty miniature stone pagoda reconfirms the figure's visual implication of vertical growth. An exquisite pagoda façade panel in the collection of the Nelson-Atkins Museum of Art, Kansas City, bears the relief carving of a Sogdian dancer standing on one foot on a lotus flower that stems from the *chaitya* archway amid tortuous dragon reliefs (figures 5-87-a and 5-87-b).¹⁵⁷ The dancing figure becomes an organic extension of the upward pointing tip of the archway. Furthermore, since the panel would have belonged to a multi-eaved, slender pagoda (figure 5-87-c), the dancing figure in the original architectural context would have reinforced the central vertical axis between the archway and the towering roofs.¹⁵⁸ Similarly, the dancing figure and orchestra depicted above the timber-structured façade of Cave 454 is not only an aura of the threshold but also a visual link between the man-made architecture below and the nature-shaped rock “crown” above.

The predominant vertical appearance is founded on the concealment of preexisting traces

157. Laurence Sickman, “An Example of Early Buddhist Sculpture,” *Parnassus* (January 1938): 8–12; Deborah Emont Scott, ed., *The Nelson-Atkins Museum of Art: A Handbook of the Collection*, 7th ed. (Kansas City, MO: Nelson-Atkins Museum of Art, 2008), 321, fig. 115.

158. This kind of pagoda is referred to as the “little dragon and tiger pagoda” (*xiao longhuta*) after the façade decoration. For studies of the extant examples, see Wang, *Shaping the Lotus Sūtra*, 330–40; Zheng Yan 鄭岩 and Liu Shanyi 劉善沂, *Shandong fojiao yiji: Shentongsi, longhuta, yu xiao longhuta* 山東佛教史跡：神通寺，龍虎塔與小龍虎塔 [The Buddhist monuments in Shandong: Shentong-si Monastery, the dragon-and-tiger pagoda, and the little dragon-and-tiger pagodas] (Taipei: Fagu wenhua shiye gufen youxian gongsi, 2007); and Zhu Jixiang 朱己祥, *Zhongyuan dongbu tangdai fotang xing zuhe shi zaoxiang ta diaocha* 中原東部唐代佛堂形組合式造像塔調查 [Study of the image pagodas of the composite Buddha-hall style in east central China of the Tang dynasty] (Lanzhou: Gansu wenhua chuban she, 2021).

on the cliff site. The platform's finishing and the mud-brick building are probably Qing-period construction and thus they were removed in 1947 by the Dunhuang Research Institute, but the rammed-earth core has likely existed since the late tenth century. The magnificent ante-hall of Cave 454, which was constructed at the completion of Cave 454, was unlikely to have been built merely on rock-cut floor as the normal antechambers were. Even if the antechamber and a necessary frontal space could have been supported by overhanging wooden decks, it would have appeared disproportional and fragile without a solid platform. Archaeological findings support this hypothesis. As Sun Ruxian points out, the platform covered about a dozen caves constructed and/or renovated prior to the Song period. Judging from the dates of the rediscovered caves below, Sun suggests that the terrace was built contemporaneously with or shortly after the construction of Cave 454.¹⁵⁹ The platform was more than 10 m wide and 8–9 m tall (figure 5-88) and concealed three levels of caves below (figure 5-89). Behind the platform of 454 (figure 5-90) are Sui-period caves 276–80 on the second level (figure 5-91) and Tang-period caves 51–54, 467, and 469 on the first level (figure 5-92). In addition, a few meters below the current ground level lie Caves 487 and 488 (figure 5-93), which are believed to be the earliest vihara (monastic cell) caves that are contemporary with or even predate the initial cave group.¹⁶⁰ Among them, Caves 276 and 53 were renovated during the Five Dynasties (907–60), and a mural fragment from Cave 487 bears an inscription addressing Cao Yijin.¹⁶¹ These traces indicate the latest dates of activities in the concealed caves. In contrast, activities around the platform continued in the subsequent periods; the caves immediately adjacent to the earthen platform, such as Caves 50, 55, and 281, were renovated in the Xixia period. Cave 477, which is located

159. Sun, *Dunhuang shiku baohu yu jianzhu*, 37–39.

160. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 81–98.

161. Pan and Ma, *Mogao ku kuqian diantang yizhi*, 83.

along the stairway at the southern edge of the platform, is also stylistically dated to the Yuan. In addition to this stairway on the side, it would not be surprising if a stairway had been built in the front side of the platform. Three other large caves on the upper levels—Caves 152, 233, and 428—were each equipped with a stairway that perpendicularly points toward the cave entrance (figure 5-94). These stairways were built or renovated in the Qing period, yet they reflect the vertical circulation that would have been needed when the caves were constructed.

Compared with Cave 94, the first central-altar cave commissioned by a military governor, the construction of Cave 454, one of the last, exhibits a more tolerant attitude toward the contexts of the site. While both were ambitious and site-altering, the former swept away almost all traces of preexisting caves, but the latter kept the preexisting caves and turned them into invisible yet constituent parts of its own foundation (figure 5-95). The practice of concealing auxiliary caves while renovating the main cave was not uncommon in Guiyijun-period Dunhuang. The most famous example is Mogao Cave 17, the so-called library cave off the corridor of Cave 16 (see chapter 1). As demonstrated in chapter 2, the sealed Cave 17 became a virtual underground crypt when Cave 16 and the two levels of caves above it were made into a pagoda.

A similar case is the Cave Suite 53/469, which was buried behind the Cave 454 terrace. Cave 53 was initially excavated in the Tang period and then expanded to the current appearance in the mid- to late tenth century.¹⁶² An auxiliary chamber cut into the north wall of the main chamber of Cave 53, which is designated as Cave 469, was concealed during the renovation of Cave 53. An inscription in Cave 469, presumably appended before its concealment, reads, “On the fifteenth day of the eighth lunar month of the third year of the Guangshun era (953 CE), the prefectural lord Taobao came to cave construction and made a vegetarian fest for two thousand

162. *Ibid.*, 44–48.

people. Record in the storage” (figure 5-96).¹⁶³ By inference, cave construction in the mid-tenth century engaged many workers and was cared for by Cao Yuanzhong. Moreover, Cave Suite 53/469 was part of or close to the site of large festive gatherings. The inscription and the built-in shelves in Cave 469 also indicate its former function as the storage area of a monastery (*zangnei* 藏內)—like Cave 17—before the concealment.¹⁶⁴ About two decades after the concealment of Cave 469, the concealment of Cave Suite 53/469, among other caves, added another spatial layer to the buried memory of the site. If the cases of Caves 469 and 17 were renewals at the levels of the cave suite and the cave composite, respectively, then the case of Cave 454 was a renewal at the level of the cave cluster, which is a cluster of over a dozen of caves in a more complex spatial structure. The onion-like agglomeration of historical layers eventually became the background on which a magnificent architecture surfaced (figure 5-97). The ambitious project of Cave 454 combines interior and exterior images, man-made and natural structures, historical memory, and renewing forces.

From Contemplating to Witnessing

The changing modes of cave-making in the old district prompt us to reflect on the ways they were intended to be seen. The early caves, exemplified by the initial group, were designed for individual beholders and emphasized meditation. It could be either a space for meditation (i.e., a meditation chamber) or the object of contemplation (i.e., the image of Maitreya or his heavenly palaces). A contemporary merit record from Gaochang (Karakhocho) in Xinjiang

163. 廣順三年歲次癸醜八月十五日/府主太保就窟工造貳仟仁齋/藏內記. *Ibid.*, 47.

164. For discussion of the function of Cave 469 as a “sūtra storage,” see Mei Lin, “469 ku yu Mogao ku shishi cangjing de fangwei tezheng 469窟與莫高窟石室經藏的方位特徵” [Cave 469 and the characteristic location of the sūtra-storing stone chambers of the Mogao caves], *Dunhuang Yanjiu* 41, no. 4 (1994): 186–97.

illustrates the fifth-century ideal of a meditation cave: “End birth and death to leave the world, and enter a meditation cave to purify the mind. . . . It was the spirit residence for the devout and a wondrous place to rest the mind.”¹⁶⁵ Since it is necessary to be detached from worldly life for one to attain a purified mind, the cave architecture was designed for private, inner experience. Small in size and difficult to access, the early caves at best served as places for purifying and resting the mind.

In comparison, the tenth-century caves, exemplified by the four gigantic central-altar caves added in the vicinity of the initial group, were designed for collective viewers and emphasized magnitude. The enlarged hall-like space and easy accessibility of these caves facilitated large ritual events and festive gatherings. The cave makers tended to believe that rather than withdrawing from the material world, the *building* and *seeing* of such architectural monuments were the means to reach their religious goals. As the merit record of the tenth-century cave, which is likely Cave 454, expresses, “Those who have constructed it accordingly terminated transmigrations in ten thousand kalpas, and those who have seen it extinguished sins as many as the sand in the Ganges River.”¹⁶⁶ Compared with the earlier mode of visual contemplation, the vocabulary for “seeing” in this excerpt—*du*—has a stronger sense of witnessing a phenomenologically real vision.¹⁶⁷ If the former relies on subjectivity, then the latter relies on objectivity—that is, a sharable visual experience that mobilizes all the senses.

165. “斷起滅以離盡，入定窟以澄神；... 信堅者之神居，息心之妙所矣。” “Gaochang Wancao Langzhong Qu Bin Zaosi Bei.” Wu, *Spatial Dunhuang*, 109.

166. “建之者隨殃萬劫，睹之者滅罪恒沙。” “Guiyijun shiqi mou shijun zaoku gongdeji” (p. 3542). Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1370.

167. According to Hanyu dacidian bianji weiyuanhui 漢語大辭典編輯委員會 [Editing Committee of the Comprehensive Chinese dictionary] ed., *Hanyu da cidian* 漢語大詞典 [Comprehensive Chinese dictionary] (Chengdu: Sichuan cishu chubanshe, 1986), 2494, *du* means to see, to investigate, to perceive, to expose.

Public rituals held at the cave site, such as construction completion ceremonies and lantern festivals, offered the best chances of enacting the immersive mode of viewing. Light and sound of these events evoked religious enthusiasm; movement within the caves and up and down the cliff structure paralleled a journey in the imaginary realms; and even the inaccessible images or hidden spaces could be temporarily brought to the surface of memory through evocation and prayers.

Conclusion

This chapter explored the mode of cave construction under the Cao clan's patronage in tenth century Mogao, with focuses on its adoption of and developments from preexisting caves. The Cao family caves borrowed strategies of siting and visual programs from the Zhang family caves; evincing a deep awareness of the construction history of the Mogao caves, the Cao caves were especially responsive to ancient traces and archaic styles. In addition, certain designs of the late-Tang period that combined the plastic and pictorial images to make an animated scene were further developed in the tenth century. For instance, the composite image of a pagoda in Cave 14 was echoed in Cave 454's altar design, and the execution challenged the design by a more apparent visual presentation of pagodas.

Meanwhile, the Cao family caves distinguish themselves from the late-Tang caves by a logic developed gradually, throughout the century-long construction and renovation practices at densely occupied cliff sites. That logic is coexistence. The notion of coexistence is felt at every scale: the elimination of destruction of preexisting caves and even the active preservation of some of them, the correlation in pictorial programs in one cave or between two or more caves, the expansion of the unit of construction from a group to a cluster of caves, and eventually the correspondence between the view of the whole and its material carrier—the cave complex. The

visual correlation allows a nuanced expression of Maitreya's bipartite time-spaces in a highly formulaic design.

Conclusion

On the New Cave Architecture of Dunhuang

Of the many extraordinary aspects of the Mogao caves, perhaps the most potent is its recruitment of architecture as a vehicle to mobilize, redirect, and deploy sacrality. In the hands of the cave builders of Mogao, the two pairs of spaces—the natural and social, and the lived and symbolic—were made to coexist. In the cave structures themselves and over the course of their millennial-long evolution, this coexistence both established and preserved Mogao’s sacrality. At Mogao, the natural, living cliff served as a canvas for extraordinary manmade structures that in turn provided visitors with a vision of paradisaical realms more vivid and more tangible than any represented by pictorial images alone.

Sacrality itself shifted along this spectrum, moving from the natural to the social and from the symbolic to the lived. It transduced from Mount Sanwei into the Mogao caves to recrystallize the raw, sacred power of the natural landscape into the human endeavors that were enacted in those newly charged natural spaces. Similarly, it reconstituted Pure Land scenes and pictures of pagodas into immersive visual environments in and among the rock-cut chambers, thus transforming symbolic space into lived space. In a word, the multivalent architecture of the Mogao cave complex achieved no less than the realization of “a new earthly paradise of supreme and peaceful beauty,” a vision inspired by the Pure Land image.¹ This is the foremost

1. Bulling, “Buddhist Temples in the T’ang Period. II,” 122.

accomplishment of its architectural turn.

To understand how this happened, I have summarized three main features of the new architecture of Mogao that emerged in the ninth to eleventh centuries: the development of cave composition at all scales, the plasticity of inner and outer spaces, and a visual commentary on Mogao's becoming and being.

The Development of Cave Composition at all Scales

The new cave architecture displayed a tendency toward the integration and intricacy of space. This tendency pervaded all scales, from the single cave to the cave group, cluster, district, section, and complex. The enriched palette of spatial composition gave rise to a more complex architectural imagery and ritual functionality.

Syncretic Cave Form

The syncretic cave is a single entity that consolidates the formal vocabularies of more than one type of cave.² Eclecticism deconstructs the fixed idea of architectural typology. For example, the seven-buddhas cave displays spatial features of the nirvana cave, the seven buddha niche, and subsequently the backsceened central-altar cave. In this way, the hall-like cave space

2. The idea of “synthetic form” was first proposed in Ma, *Dunhuang shiku yingzao shi daolu*, 53–54.

encompasses the iconologies of extinction, repair, and successive rebirth.³ Moreover, the central-pillar cave of the Guiyijun period hybridizes the central-pillar cave of earlier periods and the niched truncated pyramidal ceiling cave. It consolidates manifold imageries of pagodas and pagoda-involved ritual fields and emancipates the cave from the status of an imitation of the pagoda.

Cave Triad, Cave Suite, and Cave Composite

Caves at Mogao are commonly grouped into four subtypes: the cave triad, comprising three adjacent caves connected by a passageway or a common antechamber; two configurations of the cave suite, one comprising a main and a front or rear chamber connected by a corridor, the other that adds to the basic spatial structure one or two auxiliary rock-cut chambers; and a cave composite, consisting of two or three caves aligned vertically. The grouping of caves at Mogao exercised the three architectural principles of spatial arrangement, namely, arranging rooms along the transversal, longitudinal, and vertical axes. Concurrently, they juxtaposed the monumental scale of the architecture with the intimate and even miniature scales of the cave. As the scale contrasts among caves increased dramatically, the broad spectrum of scale made the nesting and layering of spaces possible. This strategy of nesting spaces of two or three scales complies with the Chinese traditions of representing heavenly palaces by associating large and

3. The “iconology of architecture” as coined by Dietrich Seckel denotes the symbolism that uses the architectural forms and spaces to convey the Buddhist ideas or world views. Seckel, *Buddhist Art of East Asia*, 74–78.

small architecture.⁴

Cave Cluster and Cave District

A district of caves is usually centered at or bordered by one monumental cave or cave group and comprises up to a few dozen caves that share formal or compositional principles. A cave cluster also has a central cave or cave group. Although it may lack a centralized and unifying planning concept, the component caves of a cluster appear to have closer spatial relationships with one another than with other surroundings caves. The landmarks of Mogao, which define five most recognizable cave districts, are the north and the south colossal-image caves (Cave 96, Cave 130), the three-story pavilion (Caves 16, 17, 365, and 366), Cave 428, and four clustered caves of the Cao clan (Caves 256, 61, 55, and 454). Although more than half the landmark caves had existed before the Tibetan period, they all acquired new architectural appearances in the Guiyijun period. New landmark caves were built to complete the theme of the three sermons of Maitreya, whereas preexisting landmarks were renovated to resemble the visionary architecture of heavenly palaces and pagodas. In this light, the cave landscape was renewed to be synchronized with the Buddhist paradises, featuring the Pure Land of Maitreya and the Western Pure Land of Amitābha.

4. For the architectural tradition, see Li Luke, “Shenqi zhi ju: Zhongguo jianzhu, wenxian, yu tuxiang zhong de pingzuo (yangtai) 神祇之居——中國建築、文獻與圖像中的平坐(陽臺)” [God’s dwelling: The pingzuo (balcony) in Chinese architecture, literature, and image], *Shijie Jianzhu* 世界建築 [World architecture] no. 10 (2020): 28.

Cave Section and Cave Complex

Following the demarcation of the south section of the Mogao complex at its north end by the pavilion, the complex's two sections, one ritual and the other pragmatic, gradually took mature forms. Traces of early meditation caves in the south section shed light on the process of the expansion of the ritual south section and the northward withdrawal of the pragmatic north section. The first cave of Mogao was likely a vihara cave, and it is generally accepted to have been built right below the cliff area where the primary cave group would be built.⁵ In and before the Tang period, the bilateral sides of the ritual section—foremost the north side—were exploited to be the living quarters of monks and artisans. In the Guiyijun period, the pragmatic section was relocated farther north of the current site; the relatively close spatial relationship between the ritual and pragmatic caves were distanced. Hence, the spectacular architectural appearance of the south section was reinforced by a contrast with the grotesque look of the north section (figure 6-1).

The Plasticity of Inner and Outer Spaces

The paradigmatic constructions of large caves with long corridors and magnificent ante-halls in the Guiyijun period stimulated a novel experience of the actual cave space. A visitor to one such cave must have taken a prolonged tour through its antechamber, corridor, and main chamber and

5. Ma, *Dunhuang Mogao ku shi yanjiu*, 51–60. A different view, proposed by Cary Y. Liu in “Architecture and Land on the Dark Side of the Moon,” is that it was built in the north section.

around its buddha niche/altar/pillar before comprehending its visual forms in totality.

Accordingly, strategies for conveying images through the physical space were developed. The strategies facilitated a continuous flow of images inside and outside the pictorial plane, as well as inside and outside the rock-cut cave chambers. These developments set a trend toward a more immersive visual environment in which the visitor would be able to conceive its symbolism only by physically approaching the cave.

Architectural Imageries within and beyond the Pictorial Plane

In the second half of the ninth century, the design of a pagoda-centered cave, Cave 14, experimented with “pulling” one of the four paintings of pagoda out of the ceiling slopes to complement the central pillar, an incomplete, plastic representation of the pagoda. Then, in the late tenth century, the design of another pagoda-centered cave, Cave 454, further used the pagoda images to structure the spatial sequence of the cave. It provided the visitor with a prolonged experience of encountering four pagoda imageries—one architectural, one plastic, and two pictorial—along the central axis. These spatialized images mobilized the viewer’s kinesthetic perception to witness the miraculously “come-flying” pagodas in Buddhist worlds. In this way, the place where the viewer stood was made an extension of the pictorial realm.

Visual Correspondence between the Images inside and outside a Cave

Since the Tibetan period, typical cave designs began to highlight the material presence of

the rock-cut surfaces by representing architectonic devices of the interior, such as the canopied tent, hanging and screen painting, dais, and couch. In the tenth century, trompe l'oeil techniques were further developed to define the exterior space of the caves, that is, the Mogao cliff. Open-air murals represented Pure Land elements, such as heavenly palaces, musicians and dancers, and miraculous birds, among other themes. They stretched along the cliff of the entire south section and turned the Pure Land imageries inside the caves out. The murals near the landmark caves of Mogao, such as those above Caves 94 and 428, were carefully designed to transform the timber-framed façades they decorated into imageries of heavenly pavilions and palatial complexes. Practices as such allowed the image of architecture to acquire an architectural scale and composite materiality. In this sense, the image of architecture served not just as a window to peek through; it could also be a doorway through which to enter.

Interaction within and outside a Cave Group or District

In the Tibetan period, the paradigm of vertical cave-pagoda composites occurred at Mogao. This paradigm signifies a new way of cave grouping, and it is part of a chain of inter-cave interaction that led to the architectural transformation of the cave site. Two vertical composites were built near the two Tang-period colossal-image caves to compete with the unequaled height of the latter; these in turn stimulated the vertical growth of the colossal-image pavilions. In the early Guiyijun period, the addition of a ground-level gigantic cave to the three-story pavilion made it the third tallest structure, inferior only to the two colossal-image pavilions.

In the late Guiyijun period, the spatial structure of the Mogao cave complex, which had been defined by the giant triad, was challenged and rebalanced by the renewal of the old district. Since a series of large central-altar caves were inserted, the theme of Maitreya, which the primary cave group had introduced to the site, was reenacted. Furthermore, the successive construction of monumental ante-halls, the façade of one of which occupied the entire height of the cliff, reinforced the cave cluster's position as a new counterpart of the two colossal-image caves of Maitreya. The competition and correspondence among caves of the same cave group, of different groups in the same district, and of different districts in the south section produced multiple spatial contexts for understanding the meanings and metamorphosis of each cave (group).

A Visual Commentary on Mogao's Being and Becoming

Like text—inscriptions, merit records, and stelae—the caves carry archaeological evidence of construction, design modification, maintenance, and historical reception. Some choices of siting and cave design indicate a “historiography” of cave architecture, that is, how a cave addresses the preexisting cave(s) in a self-conscious manner.⁶ In other occasions, the indigenous ways of repair and restoration were a means to argue for one particular history over another. While the architectural turn was taking place, the memory of the pre-architectural look of the ancient site and the myth of the origins of the sacred geography never faded away.

6. Lee, “Repository of Ingenuity”; Lin, “What Did Architecture Do in Visualizing Dunhuang?,” 210–11.

Mediating the Ancient Appearance of the Mogao Caves

Judging from the early-Guiyijun-period writings, cave makers began to formulate the idea of the ancient versus contemporary periods of the Mogao caves.⁷ Concurrently, the Guiyijun-period caves addressed their distinction from and connection with their ancient neighbors by visual and spatial means. Since a secluded monastic dwelling in the mountains was a historically recognized imagery of the Mogao caves of the Northern Dynasties, some noticeable practices of re-creating that archaic imagery were the reuse and reinvention of the early meditation caves. They were adapted into monastic storage areas or meditating monk's niches. However, unlike early meditation caves or meditating monk's niches that directly faced Mount Sanwei, the shadow caves were folded into the spatial sequence of the ritual caves, often in the form of an auxiliary cave in the antechamber or the corridor of a cave suite. In this way, the archaic imagery of monastic dwellings was reintegrated into the contemporary fabrics of cave architecture.

Creating Wordless Monuments of the Collective

Dunhuang merit records have often focused scholarly attention on the decision-making

7. For instance, the *Record of the Mogao Caves* (865 CE, appendix B-1) conceptualizes a three-phased history of the Mogao caves by identifying two turning points, 768 CE and 850 CE. The two dates define the beginning and end of the Tibetan occupation of the Hexi corridor. Based on the *Record*, Ma De, in *Dunhuang Mogao ku shi yanjiu*, 41–44, has defined the three historical phases of the Mogao caves as the “former” (before 768), the “interim” (769–850), and the “latter” (after 851). if one adopts the temporal viewpoint of the author of the *Record*, one can also call the three temporalities the “ancient,” the “interim,” and the “present.”

roles of powerful individuals or families in cave making, but the cave architecture tells a different story about the collective and continuous input from almost all social strata. While the merit record and commemorative stele attribute the initial construction of the three-story pavilion to the honorary cave owner Hongbian, archaeological evidence of its lifecycle indicates the active roles that his disciples, the Guiyijun regime, and the local Buddhist institutions played in its gradual development. The most detailed records about cave construction—those about the renovations of the colossal-image caves and their pavilions—at most list the names of the project leaders and the number of laborers. But cave architecture, as an outcome of the spectacular construction activities, preserves the place-memory for subsequent renovations that are key to the survival of the Buddhist cave site. Through visual language and spatial experience, cave architecture set the stage for incorporating the aspirations of the anonymous cave makers and for conveying them farther, even to those alien to the Chinese language or the religious culture.

Reinterpreting the Founding Myth of the Sacred Geography

Whereas Tang and early-Guiyijun-period merit records conceived that Mogao was created by wandering monk Yue Zun in response to miraculous Mount Sanwei, tenth-century cave makers tended to see Mogao as a sacred site where Buddhist deities manifested themselves and divine monks left their traces.⁸ Correspondingly, the tenth century saw the burgeoning

8. For instance, “The sage traces of the past benevolent in the Dangquan River Valley, the story of [Liu] Sahe’s visit [prophecy]. Therefore, ten thousand holy ones manifest, and thousand

visual representation of sacred landscapes where miraculous images and divine monks appeared. The shifting conception and visual art indicated the increasing sacrality of the Mogao cave complex and tied it to the miraculous mountainous landscape. In our era, the founding myth shifted back to the Tang-period version, as sacrality has significantly retreated from the cave complex. In 2000, a Hall of Yue Zun (Yue Zun Tang 樂尊堂), commissioned by a wealthy businessman in Dunhuang, was constructed on a peak of Mount Sanwei facing the Mogao cliff (figure 6-2). Thus, the thousand-year construction of Mogao has had an impact on this contemporary reincarnation of a shadow hall; the statue of Yue Zun is now oriented toward the cave landscape of Mogao rather than the miraculous light of Sanwei (Figures 6-3 and 0-1).

The Dunhuang Style

These ten points about the new cave architecture of Dunhuang define a Dunhuang style of cave making. In Chinese cave archaeology, *moshi* 模式, translated as a “style” or “mode,” can be understood as a set of paradigms by which visual art and architecture of a specific place and period was produced. Thus far, archaeologists have defined Liangzhou style, Yungang style, and Longmen style as the sets of paradigms that have defined the Sinicizing process of Buddhist

buddhas are seated on golden lotuses [宕谷先賢聖跡，薩訶所禮（記）因緣。因茲萬聖出現，千佛各坐金蓮.]” Excerpt from “Tang Tianfu yuannian shier yue shiba ri Jinguangming si zaoku shangliang wen 唐天復元年十二月十八日金光明寺造窟上樑文” [Beam-raising text about a Jinguangming Monastery building a cave on the eighteenth day of the twelfth lunar month in the first year of the Tianfu era, S.3905, 901 CE]. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 1486.

caves in China of the fifth and sixth centuries.⁹ Dunhuang style is not so much a statewide style as a local style of the Dunhuang-Anxi region. And it provides not so much the experience of Sinicization as that of localization, specifically the localization of visual images in the cave space and the cliff site.

Formally speaking, Dunhuang style is characterized by a continuous flow of Pure Land imagery through all visual mediums, the syncretic cave forms based on historical prototypes, the grouping of caves and (semi-)standalone architecture, and the care for an overall appearance of the cave complex. Historically speaking, the style developed at the Mogao site where the Tang and many other architectural traditions had met and mingled. Moreover, the religious and political leaders of the Guiyijun Circuit became increasingly conscious about the historical value of the cave site and maintained it as a means of cultural revival. Furthermore, the professionalization of cave art in this period made the extensive and uniform renovations of the Mogao complex possible. These local conditions contributed to the emergence of the Dunhuang style. Despite being a local style, it epitomizes the Chinese cave makers' creative response to the awkward transition between the cave and stand-alone architecture.

Dunhuang style emerged at Mogao with a sense of situated-ness, yet it has corresponded with or inspired architectural phenomena beyond Mogao. Although a full investigation of the

9. Mizuno Seiichi and Nagahiro Toshio, *Unkō Sekkutsu: Seireki Goseiki ni Okeru Chūgoku Hokubu Bukkyō Kutsuin no Kōkogakuteki Chōsa Hōkoku* 雲岡石窟：西曆五世紀における中國北部佛教窟院の考古學的調査報告 [The Yungang caves: Archaeological report of the Buddhist cave complex in north China of the fifth century], 16 vols. (Kyōto: Kyōto Daigaku Jinbun Kagaku Kenkyūjo, 1951–56); Su, “Liangzhou shiku yiji he liangzhou moshi.”

implications and full impact of Dunhuang style is beyond the scope of this dissertation, it is worth mentioning here the three levels of its interconnectivity for future studies. In my view, this style is relevant to architectural monuments in the historical town of Dunhuang, at other cave sites in the Dunhuang-Anxi region, and, most significantly, to the design of contemporary Chinese Buddhist architecture. At these different levels, Dunhuang style manifests as a placemaking strategy, as an appropriable model, and as a set of visual vocabularies, all of which make a particular architectural culture identifiable.

Appendix A

Inventory of the Caves of the Three-Story Pavilion and Vicinity

Table 1. Cave numbers, locations, and dates

Current No. (Dunhuang Academy)	Stein No.	Pelliot No.	Oldenburg No.	Zhang Daqian No.	Shi Yanning No.	Location	Dating
366	--	163	163	165	420	Third level, main cave	Tibetan, Xixia, Qing
366A	--	--	--	165A	--	Third level, south of Cave 366, cut into east wall of the antechamber, 1 m above ground level of main cave	Tang-Song
365	--	163	163	164	413	Second level, main cave	832–34, Xixia, Qing
365A*	--	--	△	164B	--	Cut by SE corner of Cave 365, 2 m below ground level of main cave	Sui-Tang
365B*	--	--	--	--	--	East wall of Cave 365, north of entrance, below	Sui
365C*	--	--	--	--	--	East wall of Cave 365, north of entrance, above	Sui
365D*	--	--	--	--	--	East end of north wall of Cave 365, 1.2 m above ground level of main cave	Sui

364	--	--	--	--	--	North of Cave 365, used to be antechamber of Cave 365D, 1.2 m above ground level of Cave 365	Sui, Late Tang, Xixia
476	--	--	--	--	--	“Mezzanine level” between first and second levels, cut into west wall of Cave 16 ante-hall, above Cave 17	Sui-Tang, Five Dynasties
16	CH. I	163	163	151	401	First level, main cave	851, Song, Xixia, Qing
17	Polyg lot librar y, hidde n chape l, “treas ure cave”	163	163	151+	401 -38	First level, cut into north wall of Cave 16 corridor, 1.4 m above corridor ground	851, Xixia, Qing

Note: The numbers marked with * were catalogued in 2007. Those marked with △ were photographed but not numbered. Dating follows the Dunhuang Academy’s dating.

Appendix B

Selected Primary Texts and Partly Translation

1. “Record of the Mogao Caves” (P.3720, attributed to Wuzhen, 865 CE)

莫高窟記

右在州東南廿五裡三危山上。[前]秦建元年中，有沙門樂僔仗錫西遊，至此，遙禮其山，見金光如千佛之狀，遂架空鑿岩，大造龕像。次有法良禪師東來，多諸神異，複於僔師龕側又造一龕。伽藍之建，肇於二僧。晉司空索靖題壁號仙岩寺。自茲已後，鑄造不絕，可有五百餘龕。又至此（延）載二年，禪師靈隱共居士陰祖等造北大像，高一百卅尺。又開元年中，僧處諺與鄉人馬思忠等造南大像，高一百二十尺。開皇年中，僧善喜造講堂。從初量窟至大曆三年戊申，即四百四年。又至今大唐庚午（辰）年四百九十六年。

時鹹通六年正月十五日記。¹

Record of the Mogao Caves

At the summit of Mount Sanwei, twenty-five *li* southwest of the prefectural seat, during the Jianyuan era of the [former] Qin dynasty, the Buddhist mendicant Yue Zun with a monk's staff traveled west to this place. Paying homage to the mountain from a far, he

1. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 695.

saw a golden light that had the appearance of a thousand buddhas. He thereupon dug the cliff in midair, building a cave and likeness. After this, the meditation master Faliang came from the east and with many gods and spirits built a cave beside Master [Yue] Zun's cave. The origin of the *samghārāma* can be traced back to these monks. In the Jin dynasty, the minister of public works, Suo Jin, inscribed the cliff face, calling [the site] the Monastery of Immortal's Cliff. Henceforth, caves were constructed without cease, resulting in more than five hundred niches. Then, in the second year of the [Yan]zai era [695 CE], the meditation master Lingyin with the laymen Yin Zu and others built the Northern Colossal Image of 130 *chi* in height. During the Kaiyuan era [713–41 CE], monk Chuyan and the local people Ma Sizhong and others built the Southern Colossal Image of 120 *chi* in height. During the Kaihuang era [581–600 CE], monk Shanxi built a lecture hall. Since the establishment of the caves until the third year of the Dali reign period [768 CE], a Wushen year, it has been 404 years; further on, until the Gengwu year [850 CE] of our present Great Tang dynasty, it has been 496 years. The time is the fifteenth day of the first month of the sixth year of the Xiantong era [865 CE].²

2. Daozhen, Colophon (S.5663), 935 CE

乙未年正月十五日，三界寺修《大般若經》，兼內道場課念沙門道真，兼修諸經十一部，兼寫《報恩經》一部，兼寫《大佛名經》一部，道真發心造《大般若(經)》佚六十個，並是錦緋錦綾具全。造銀番五十口，並施入三界寺。銅令(鈴)香爐(爐)壺、香爐(爐)壹，香兼壹，施入三界寺。道真造劉薩訶和尚，施入番二七口，銅

2. Some of the translation is adapted from Liu, "Architecture and Land on the Dark Side of the Moon," 186.

令香爐壹，香兼，花甌壹，已上施入和尚永為供養。道真修《大般若(經)》壹部，修諸經十三部，番(幡)二七口，銅令香爐壹、香兼壹、經案壹，經藏一口，經布一條，花甌壹，已上施入經藏供養。³

On the fifteenth day of the first month in the Yiwei [935 CE], a copy of the *Large Prajñāpāramitā Sūtras* had been repaired at the Sanjie Temple in conjunction with a session of recitation in the inner sanctuary (*nei daochang* 內道場) [of the temple]. Conjointly, the śramaṇa Daozhen repaired eleven sets of different scriptures and also made a copy of the *Bao'en jing* 報恩經 [Scripture on the recompensing of kindness] as well as a copy of the *Buddhanāma Sūtra*. With pious inclination, Daozhen had sixty [sūtra] wrappers for the *Large Prajñāpāramitā [Sūtras]* made of dark red, embroidered silk cloth, all complete. He [also] had fifty silver-[embroidered] banners made and bestowed them on the Sanjie Temple, as well as a bronze bell, an incense burner, and an incense bowl (?), which he bestowed on the Sanjie Temple.

Daozhen had an image of the Venerable Liu Sahe [劉薩訶, b. ca. 345] made, as well as twenty-seven streamers, a bronze bell, an incense burner, another incense burner, and one flowery carpet. All of the above donations were entered into [the shrine of] the venerable as eternal offerings.

Daozhen repaired one set of the *Large Prajñāpāramitā Sūtras*, thirteen sets of other scriptures, twenty-seven streamers, a bronze bell, an incense burner, one incense bowl,

3. Transcription in Sun, “Dunhuang Sanjiesi,” 59; Shi, “Sanjiesi,” 184.

one sūtra table, one sūtra case, one sūtra cover, and one flowery carpet. All of the above donations were entered into the scriptural storage [of Sanjie Temple] as offerings.⁴

3. “Stele of Zhang Huaishen” (Zhang Huaishen bei 張淮深碑; S. 3329+S.6973+S.6161+S.11564+P.2762)

乃見宕泉北大像，建立多年，棟樑摧毀。若非大力所制，諸下孰敢能為？退故朽之摧殘，葺聆矚之新樣。於是杼匠治材而樸斲，郢人興役以施功。先豎四牆，後隨締構。曳其楸（栢）櫟，憑八股之輶轡，上壑運泥，斡雙輪於霞際。舊閣乃重飛四級，靡稱金身；新增而橫敞五層，高低得所。玉豪（毫）揚采，與旭日而連暉；結脊雙鷄，對危峰而爭聳。更欲鑄龕一所，躊躇瞻眺，餘所竟無，唯此一岑，嵯峨可劈。匪限耗廣，務取工成。情專穿石之殷，志切移山之重。於是稽天神於上，激地祇於下。龜筮告吉，揆日興功。鑿鑿才施，其山自坼。未經數日，裂兆轉開，再禱焚香，飛沙時起，于初夜分，歛爾崩騰，驚駭一川，發聲雷震，豁開青壁，崖如削成。此則十力化造，八部冥資，感而遂通，助成積善。是用宏開虛洞，三載功充，廓落精華，正當顯敞。

4. “Stele Recording the Merit of Cave Construction by Zhang Huaishen” (Zhang Huaishen zaoku gongde bei 張淮深造窟功德碑, P.3720, S.5630, ca. 882 CE)

4. Translation adapted from Sørensen, “The Life and Times of Daozhen,” 12–13.

時因景泰，五稼豐登。深募良緣，克誠建福。宕泉金地，方擬鑄龕。公乃海量宏博，胸納百川；洞蹟擇幽微，不為兒戲。遂於北大像之北，欲建龍龕。以山峻崔嵬，有妨鑄鑿，遍問諸下，無敢枝梧。公乃喟然歎曰：“移山覆海，其非聖人乎！哥舒決海，貳師劈山，吾當效焉。”即日興工，橫開山面。公以虔誠注意，上感天神，前驅滄海之龍，後擁雨師之卒。黃雲四合，盤旋宕穀之中。掣電明光，直上碧岩之上。才當夜半，地吼鼉聲，未及晨雞，山摧一面。谷風凜烈，蕩石吹沙。猛獸奔竄于參岑，飛鳥搏空而戢翼。須臾隕石，大若盤陀；積壘堆阜於東終，截斷澗流於西渚。既平巒嶠，然後施工。攢鐵鎚以扣石，架鋼鑿以傍通。日往月來，俄成廣室。連雲聳出，不異鷲嶺之峰；峭狀煙霞，有似育王之室。門當崦嵫，鑿成香積之宮。再換星霜，化出蓬萊之傾（頂）。金樓玉序（宇），徘徊多奉壁之仙。靉靆祥雲，每睹瓊瑤之什。班輸妙盡，構天匠以濟功。紫殿龍軒，對鳳樓而青翠。

At that time, because the circumstance was peaceful, there was a bumper harvest of five crops. [Zhang Huaishen] profoundly levied agreeable karma and sincerely built up good fortune; only then did he plan to engrave a niche on the golden site of Dangquan (the Unaffected Spring). The lord [Zhang Huaishen] had a broad mind of sea-like capacity; his heart received a hundred rivers. He selected the tranquil and subtle among the deep caves, which was not child's play. Therefore, he desired to build the dragon niche to the north of the Northern Colossal Image. Because the mountain was lofty and rocky and it was difficult to engrave and chisel, [Zhang] asked all his men; no one dared to prevaricate. The lord sighed: "Isn't he a sage who moves mountains and inverts seas! I will follow Geshu, who breached the sea, and Eshi, who hacked the mountain." On this

very day, the construction job was started; the cliff was horizontally opened. Because of his sincerity and concentration, the lord moved the celestial deities above, whose vanguards were the dragons of the deep blue sea and whose rear guards were the soldiers of the rain master. Yellow clouds gathered from four directions, hovering in the middle of the empty valley; lightning emitted blazing lights, soaring above the azure rocks. Right at midnight, the earth howled like a huge sea turtle's roaring; before cocks' singing at dawn, the mountain had already been broken on one side. The wind in the valley blew strongly, shaking the rocks and dispersing the sands. The beasts fled to the hills; the birds hit the sky and folded their wings. For a moment, the falling rocks were as big as mountains; they piled up into a mound at the east end and cut off the streams of the west islets. After flattening the lofty mountain, labor works were applied. [Artisans] used iron hammers to smash the rocks and employed steel chisels to make a wide connection. Days and months passed. Presently, a spacious chamber was completed. [The mountain] loftily rose through continuous clouds, not different from the summit of Vulture Peak;⁵ the precipitous cliffs steamed mist and clouds in the twilight, resembling the chamber [pagoda?] of King Asoka.⁶ The doorway confronted the precipitous cliffs, being carved into the Palace of Xiangji (Fragrant Accumulation).⁷ A year passed;⁸ a roof of Penglai

5. A mountain in India, recognized as the place where the historical Buddha Shakyamuni preached.

6. King Asoka is famous for being a royal believer and patron of early Buddhism in India. His best known architectural patronage are the many Asoka stupas that appear throughout India.

7. Seems to refer to the monastery of Xinagji, a splendid Buddhist Monastery in Chang'an built around the beginning of the eighth century, and one of the ancestry monastery of Pure Land Buddhism in China. Another way is to understand it as any splendid architecture where fragrance accumulates.

8. Literally, "The constellations and frost were replaced."

was manifested.⁹ In the golden pavilion and jade eaves hung about many immortals who held jade; through the foggy field of the auspicious clouds, one often sees various things of preciousness and beauty. To exhaust the skills of the most skillful carpenters exhausted their wondrous crafts: to compose divine works on the acquirement of merit.¹⁰ The purple hall of the dragon confronted the verdant pavilion of the phoenix.¹¹

5. “Merit Record of Cao Yuanzhong, Military Governor of the Guiyijun Circuit, and Wife Lady Zhai Repairing the Northern Colossal Image [Cave]” (Guiyijun jiedushi Cao Yuanzhong fufu xiu beidaxiang gongde ji 歸義軍節度使曹元忠夫婦修北大像功德記, Ch.00207V, 966 CE)

大宋乾德四年（966）歲次丙寅五月九日敕歸義軍節度使特進檢校太師兼中書令托西大王曹元忠與敕受（授）涼國夫人潯陽翟氏因為齋月，屆此仙岩...遂睹北大像彌勒建立年深，下接兩層，材木損折。大王夫人，見斯頹毀，便乃虔告焚香，誘諭都僧統大師兼及僧俗官吏，心意一決，更無二三，不經旬時，締構已畢。梁棟則穀中採取，總是早歲枯乾。逐今□□□□□並仗信心，檀越工人，供備實是豐盈，飯似債（積）山，酒如江海。可謂時平道泰，俗富人安。盡因明主以陶鎔，皆由仁君而造化。不唯此際功德，如今福田遍谷而施力施勤，處處而舍財舍寶。...涼國夫人翟氏

9. Penglai either refers to Daming Palace in the palace city in Chang'an, or a fabled abode of immortals.

10. The name *banshu* refers to Gong Shuban 公輸班, one of the best-recognized carpenters and engineers in ancient China.

11. Literally, “the purple hall and the dragon balcony.” *Xuan* could refer to several different types of architecture and structure, thus it is hard to decide which is the most proper translation here. It could be a canopied carriage, a small chamber or corridor with windows, architectural components like doors, windows, floors or railings, or a lofty space. Here I tentatively use *dragon balcony* to refer to the elevated, screened, and railed platform, that is, the central altar.

自手造食供備工人，其月廿一廿二兩日換柱材木，損折較多，不堪安置，至廿三日下手拆。大王夫人于南谷住至廿四日拆了。夜間大王夫人從南谷回來，至廿五日便縛棚閣上材木締構，至六月二日功畢，四日入城。助修勾當應管內外都僧統辯正大師賜紫鋼惠、釋門僧正願啟、釋門僧正信力、都頭知子弟虞候李幸思、一十二寺每寺僧二十人，木匠五十六人，泥匠十人，其工匠官家供備食飯，師僧三日供食，已後當寺供給。

On the ninth day of the fifth lunar month of the year of Bing-Yin, the fourth year of the Qiande era of the Song dynasty [966 CE], Cao Yuanzhong, the military governor of the Guiyijun Circuit (and long titles . . . grand preceptor, head of the secretariat, the great king of supporting the west) and Lady Zhao of Xunyang, the Lady of Liang State, because of the month of fast, came to the immortal's crags. . . . Then they observed that [due to the fact that] the Northern Colossal Image of Maitreya Buddha had been established for a long age, the two lower levels [of the ante-hall] were broken. The great king and the lady, having seen the deserted condition, sincerely prayed and burned incense. They persuaded Chief Monk Supervisor the Great Master, the clergy and the laymen, and the officials [to restore the front-hall]. They made up their mind without hesitation. Even before ten days had passed, the construction was completed. The beams and columns were collected from the valley, where there was dried wood from the previous year. And now . . . [these were prepared] with confidence. The patrons [Skt: *dānapati*] and workers. The supplies were really abundant: food was piled [as high] as the mountains, and wine [flowed] like rivers. It could be said that the time was peaceful and the path was safe, folks were rich, and people were settled. All is in debt to the

brilliant leader who cultivated them and the benevolent lord who created them. Not just the merit of this event, [but also] the field of merit was all over the valley now; many offered their labor and diligence, and everywhere people gave away their property and treasures [for the construction projects]. . . . Lady Zhai, the Lady of Liang State, with her own hands made food for the workers. On the twenty-first and twenty-second days of that month [the fifth lunar month], two days were spent replacing the timber members of the columns. As the breakage was severe, the columns could not bear a relocation. On the twenty-third day, they decided to dismantle the structure. The Great King and the Lady resided in the South Valley until the twenty-fourth day, and the dismantlement was completed by then. In the evening, the Great King and the Lady came back from the South Valley. On the twenty-fifth day, temporary scaffoldings were erected and, above, wood members were put into construction. On the second day of the sixth lunar month, the work was completed. On the fourth day, [Governor Cao and Lady Zhai] returned to the town. Those who assisted the construction included the general Buddhist commander and purple-robed Master Ganghui, the Directors of Monks Yuanqi and Xinli, the Disciples of General Master Yu Hou and Li Xingsi, monks from twelve monasteries, twenty each, fifty-six carpenters, and ten masons. The artisans' food was supplied by the office. As for the priests and monks, the first three days' food was the responsibility of the office, that of the following days was offered by the respective monasteries.

6. “Official Document about Monk Cheng’en and Others Renovating a Maitreya Image of the Mogao caves” (Cheng’en deng chongxiu mogaoku mile xiang tie 乘恩等重修莫高窟彌勒像帖, DX.06056, ca. 817 CE)

(前缺) □月廿一日諸寺尊宿教授法律就靈圖寺.....高窟彌勒像所要色縹麻膠等物

仰.....所要人工，仰諸寺尊宿禪律有徒弟者.....其林木白土仰窟家供。親赴窟檢校大德，宋教授閣梨二人，李教授閣梨二人，張閣梨二人，唐閣梨一人，索教授閣梨一人，杜法律閣梨二人，康閣梨二人，陰法律二人，照法律，吳律師二人，照法律二人，宋律師二人，法圓律師，洪辯律師二人，真法師，哲法師，岩法師，辯惠法師，張上座。應管窟額僧仰當寺排合，除充病及至小者，五人為一蕃，從起首日至終，一蕃上五人，除本居窟者，終而複始。其法律大德等應有名者，並限今月廿四日夜窟頭取齊，道光禪師，智超准上限，須到窟頭並鋸一。乘恩。

7. “The Merit Record of Cao Yijin, the Military Governor and Minister of the Hexi Circuit, in Building a Grand Cave” (Hexi jiedushi shagnshu Cao Yijin xiu daku gongde ji 河西節度使尚書曹議金修大窟功德記, P.3781, ca. 920 CE)

...是以先陳至懇，想鷲嶺而傾心；頓舍[珍財]，發勝心而開大窟；彫鑄越樣，以月路而輝鮮；石落星流，共林花而發彩。不延期歲，化成寶宮。裝畫上層，如同切利。十方諸佛，摸儀以毫相真□；賢劫千尊，披蓮齊臻百葉。四王護法，執寶杵而摧魔。侍從龍天，亦威光而怛赫。煥然金色，疑從初下□□（如盛日之寶山）。梵響凌空，布翔鸞於碧落。是時也，寒光漸逼，林樹方彫；萬善剋成，眾福俱集。總斯多善，無限勝因，先用莊嚴，梵釋四王，龍天八部，伏願威光轉勝，福力彌增，興運慈悲，救人護國。使河清海晏，千年無九橫之殃；夏順秋調，萬載罷三災之難。大樑帝主，永坐蓬萊。十道爭馳，誓心獻款。又持勝福，伏用莊嚴，我河西節度使尚書貴位，伏願榮高一品，同王母之延齡；位兼五侯，比麻姑之遠壽。東開鳳閣，□聖主之腹心。西定戎煙，鎮龍沙而永固。天公主寶朗，常榮松柏之貞。夫人閨顏，永貴琴瑟之美。郎君納祐，負忠孝以臨人。小娘子延祥，共天仙而皎潔。合

宅長幼，常承雨露之榮。但是宗枝，保宜洪湘不竭。亡過郡君，尊妣逍遙十地之街；娘子及至閤梨，便登九仙之位。四方開泰，使人不阻於前程。南北伐征，駟騎往來而無滯。蝗飛永散，萬劫不起于邊甿。水治洪津，競唱南風雅韻。多生業障，丞斬鑿而消除。見世新熏，藉繪畫而盪盡。府僚大將，各盡節於轅門。親從之官，務均平而奉主。所有傷魂幽識，舍怨結速住蓮台。六道四生，因茲總歸淨土。然後三邊告靜，隘無燿火之憂。四塞來賓，路有輪珍之款。

8. A Merit Record Inscribed above the Entrance Corridor, East Wall, Antechamber, Cave 431.

□莫□□□號靈崑飛.....

[竹]□（樹）垂陰[茂]煩華之 ...

□神化身於此內使 ...

[於]降福□[後][運]丹青而不...

□[其]□（惟）太原郡閻[公]□□□

嵩衡稟瑞...

□□掌同機略於古今習文[史]啓於...

□□遺久歷要司懷智德[以]効官立...

上[留]名能行駟於渡獸而又黃沙...

□ 即今

府主仍賜高班作轅門之爪牙為衙廷之中 ...

德仁之風州府暢寬弘之道若齊鈞...

□□□□君之大節公之娘子者...見[同]仙眾躡越時幾千嬌粧雨臉之中百...而專[勤]貢
油投真尋真諦而意 ...

之口報莫酬未來之良鰥...

上善謠就仙崑之穀通窟瞻看...

客外□□□□至甚 ...

柱□□妙遍東夏以無口其...

括[才]□□以生懽□斯寶 ...

周侍中嘉慶[伏][願]府主

大王[端]居貴位大口蒼生永為西塞...

□咸康維樂...

神山捧擁百祥[所]集五福[鹹][臻][官][爵]...

北□□同登佛道

**9. An Inscription by Zhang Yingrun outside the South Wall of the Ante-Hall of Cave 108
(108 ku kuyan nanbi waice zhang yingrun tibi 108窟窟簷南壁外側張盈潤題壁, 939 CE)**

潤，忝事台輩，戟佐駟馳

登峻嶺而驟謁靈巖

下深谷而欽禮聖跡

傍通閣道，巡萬像如同佛國

重開石室，禮千尊似到蓬萊

遂聞音樂梵響，清麗以徹碧霄

香煙滿鼻，極添幽冥罪苦

更乃遊翫

花，誰不割捨煩瑣

觀看玳瑁，豈戀世間恩愛

潤，前因有果，此身得凡類之身

休為色利，無端牽徙於火宅之內

今見我佛難量，擬將肝腦塗地

雖則未可碎體，誓歸釋教

偶因沿(沿)從，輒題淺句

久待公門奉駟馳

累沐鴻恩納効微

昨登長坡上大阪

走下深谷觀花池

旁通重開千龕窟

此穀昔聞萬佛輝

瑞草芬芳而錦繡

祥鳥每常繞樹飛

愚情從今歸真教

世間濁濫誓不歸

乾祐二年六月廿三日節度押衙張盈潤題

10. “The List of Caves for Distributing Lanterns during the Light Up on the Eighth Day of the Twelve Month” (Laba randeng fenpei kuan mingshu 臘八燃燈分配窟龕名數, 951 CE)

庚戌年十二月八日夜口口口社人遍窟燃燈分配窟龕名數

田闍梨：南大像以北至司徒窟，六十一盞。張都衙窟兩盞，大王、天公主窟各兩盞，大像下層四盞，司徒窟兩盞，大像天王四盞。

李禪：司徒窟北至靈圖寺，六十窟。翟家窟兩盞，杜家窟兩盞，宋家窟兩盞，文殊堂兩盞。

張僧政：崖下獨煞神至狼子神堂，六十盞。獨煞神五盞。

陰法律：第二層陰家窟至文殊堂上層令狐社眾窟，六十五盞。內三聖小龕各燃一盞。

羅闍梨：第三層太保窟至七佛堂，八十二窟。內有三聖刹心各燃一盞。

曹都頭：吳和尚以南至天龍八部窟，計八十窟。刹心內龕總在裡邊。

索幸（行）者：第二層至第三層宋家八金光窟，八十窟。

陰押衙、梁僧政：第二層普門窟至文殊堂，又至靈圖寺窟、至陳家窟，六十三窟。有三聖龕總在裡邊。

王行者：南頭第二層，六十二窟。何法師窟兩盞，刹心佛堂兩盞，大像上層四盞，至法華塔。

安押衙、杜押衙：吳和尚窟至天王堂，卅六窟。吳和尚窟三盞，七佛七盞，天王堂兩盞。

喜成郎君：陰家窟至南大像，卅八龕，五十二盞。陰家窟三盞，王家兩盞，宋家窟兩盞，李家窟三盞，大像四盞，吳家窟四盞，大像天王四盞。

右件(又見?)社人依其所配，好生精心注灸，不得懈怠觸穢。如有闕然(燃)及穢不盡(淨)者，近(匠)人罰布一匹，充為工廩。近(匠)下之人痛決尻杖十五，的無容免。

辛亥年十二月七日釋門僧政道真。

Tian *zheli* (Zone A): [from] the South Colossal [buddha] Image all the way north to the Cave of *Situ* (minister of education [history]) sixty-one lamps. Two lamps for the Cave of Zhang *Duya* [chief governor]. Two lamps for each of the Cave of the Great King and that of the Heavenly Princess. Four lamps for the lower level of the Colossal Image. Two lamps for the Cave of *Situ*. Four lamps for the Heavenly Kings of the Colossal Image.

Li *chan [shi]* (Zone B): [from] the north of the Cave of *Situ* to [the Cave of] the Temple of Lingtu (the Miraculous Picture), sixty caves. Two lamps for the Cave of the Zhai Family. Two lamps for the Cave of the Du Family. Two lamps for the Cave of the Song Family. Two lamps for the Hall of Mañjuśrī.

Zhang *sengzheng* (Zone C): Under the cliff [from] the Divine [Hall] of Dusha [Avalokiteśvara] to the Divine Hall of Langzi (Son of Wolf), sixty lamps. Five lamps for the Divine [Hall] of Dusha [Avalokiteśvara].

Yin *falv* (Zone D): On the second level [from] the Cave of the Yin Family to the Multiple Caves of the Linghu She-Group, located on the above level of the Hall of Mañjuśrī, sixty-five lamps. One lamp for each of the small niches of the Sagely Triad.¹²

Luo *zheli* (Zone E): On the third level [from] the Cave of Taibao (Great Protection) to the Hall of the Seven-Buddha, eighty-two caves. One lamp for each of those containing a *kṣetra*-core of the Sagely Triad.¹³

Cao *dutou* (Zone F): [From the Cave] of Preceptor Wu all the way south to the Cave of the Devas, Nāgas and the Eight Groups of Beings, counting eighty caves. The *kṣetra*-cores with niches are included into the count.

12. There is a debate about the meaning of “內三聖小龕.” Ma De suggests that “三聖小龕” refers to a particular cave (244), but he does not explain what 內 means. I find it problematic to understand those caves described with their formal characteristics but not their patrons’ names, so here I consider them to be caves of a general type instead of individual caves.

13. 內有三聖刹心 causes two points of confusion. First, *chaxin* 刹心, literally the heart of *kṣetra*, could refer either to (the main niche of) the central pillar in the central-pillar caves, or a particular cave among the central-pillar caves, as most scholars suggest. *Cha* is a Chinese transliteration of the Sanskrit word *kṣetra*, which could mean either a temple or a stupa; thus *chaxin* may refer to the central pillar in the central-pillar caves or the central altar in the central-altar caves. But because it is described as “having a sagely triad inside” (*nei you sansheng* 內有三聖), it is more possibly a central core with niche, that is, the central pillar. However, another way to read *nei you sansheng* is that “among the eighty-two caves, those possessing a sagely triad.” Here I suggest that it be read as the multiple central-pillar caves that have niches containing a sagely triad within, because *ge* 各 (each) indicates that more than one needed to be lighted.

Suo *xingzhe* (Zone G): [From] the second level to the third level, the eight caves of Golden Light of the Song Family, eighty caves.

Yin *yaya*, Liang *sengzheng* (Zone H): On the second level, [from] the Cave of Pumen (Chapter on Avalokiteśvara) to the Hall of Mañjuśrī, then to the Cave of the Temple of Lingtu (the Miraculous Picture), to the Cave of the Chen Family, sixty-eight caves. The niches containing a Sagely Triad are included into this count.

Wang *xingzhe* (Zone I): Southern end on the second level, sixty-two caves. Two lamps for the Cave of Dharma Master He. Two lamps for the Buddha Hall with a *kṣetra*-core, Four lamps for the upper level(s) of the Colossal Image. To the Pagoda of Fahua (Dharma Flower).

An *yaya*, Du *yaya* (Zone J): [From] the Cave of Preceptor Wu to the Hall of the Heavenly Kings, thirty-six caves. Three lamps for the Cave of Preceptor Wu. Seven Lamps for [the Hall of] the Seven Buddhas. Two lamps for the Hall of the Heavenly Kings.

Xicheng *langjun* (Zone K): [From] the Cave of the Yin Family to the Southern Colossal Image, thirty-eight niches, fifty-two lamps. Three lamps for the Cave of the Yin Family. Two lamps for [the Cave of] the Wang Family. Two lamps for the Cave of the Song Family. Three lamps for the Cave of the Li Family. Four lamps for the [Southern] Colossal Image. Four lamps for the Cave of the Wu Family. Four lamps for [the Hall of] the Heavenly Kings of the [Southern] Colossal Image.

Attention: The society members, according to the assignment, should properly and carefully pour [the lamp oil] and ignite [the light]. They must not be remiss or touch filth. If there is absence of lighting or [presence of] filth and impurity, an artisan [*jinren* or *jiangren*] is imposed a fine of a *pi* of cloth, and demoted to corvée labor [*gongxie*]; a person with lower rank than artisan is imposed a severe punishment of buttock-flogging for fifteen times. It is exact and no exemption from punishment.

Appendix C

Analysis of the Tibetan Inscription in Mogao Cave 365

1. Introduction

The Tibetan inscription under examination is a votive text placed in situ that records the construction completion and the consecration ceremony of Mogao Cave 365 in 832–34 CE.¹ This analysis aims to bring our knowledge of the inscription to a new level, adding more accuracy, nuance, and contextual reading to the current scholarships. This analysis has two specific goals: to provide an exercise in reading the ancient Tibetan language in a particular historical context, and to better understand the construction activities related to this cave temple in the late-Tibetan period. With the assistance of Karma Ngodup, I reidentified a third of the inscription and provided a new English translation. Furthermore, I explored the terms of Buddhist art and architecture, the consecration ritual, and the human agents from the perspective of Dunhuang materials and visual culture. This report will begin with an introduction of the cave and the inscription, then summarize the current scholarships and my research steps, and finally analyze the text phrase by phrase in its original reading order.

1.1 Basic Information about the Tibetan Inscription

The Tibetan inscription was made with black ink on clay surface in the middle of the upper edge of the offering altar, which is attached to the front of the seven-buddha altar (figure

1. Huang, “Ba Dunaghuang 365ku zhangwen tiji.”

1-24-a). The horizontal frame of the Tibetan inscription is over 1 m wide and about 6 cm tall.² Beneath the Tibetan inscription, there is a Chinese inscription printed in ink on a red-colored clay rectangular surface, which is 96 cm wide by 112.5 cm high.³ The two inscriptions form a T-shaped composition (figure 1-24-b). The Tibetan inscription has three horizontal lines with each reading from left to right, whereas the Chinese inscription comprises thirty-six vertical lines from right to left. Because an outer layer was painted over these texts, probably during the Tangut period, the inner plaster layer on which the inscriptions were written has been severely damaged by bamboo brushes that were used to prepare the ground for the new plaster and painting. Only about one-third of the Tibetan characters are legible, and quite a few have vaguely discernable strokes. The Chinese characters has suffered even severe damage.

1.2 Contents of the Tibetan Inscription

To give an overview of the Tibetan inscription and its content, I list below the transcription, the Wylie transliteration, and the English translation. A detailed analysis will be provided after an introduction to the current studies and my research methods.

1.2.1 Transcription (damaged and/or indiscernible letters are marked in gray):

(Line 1:) །མཚེས་ལྷོ་ལྷོ་ །། འཕྲུལ་གྱི་ལྷ་བཙུན་པོ། །།ཁྲི་གཙུག་ལྷོ་བཙུན་གྱི་སྐྱེ་རིང་ལ། (missing 4-6 letters) །སྐྱེ་ཡོན་ལྷོ། (missing 2–3 letters) ལྷོ་འཚེས་ཏེ་(missing 1-2 letters) བསམས་བར་སེམས་ཅན་ཐམས་ཅད་གྱི་བསོད་ནམས་ (missing 20–30 letters) ི་... ེོ་... ཉོང་བེན་

2. Huang’s article states “60 cm,” but that seems to be a typo, judging from the proportion of the inscription frame and the actual dimension of the altar. Huang, “Ba Dunaghuang 365ku zhangwen tiji,” 47.

3. *Dunhuang mogao ku gongyangren tiji*, 141.

/(Line 2:) སྒོས།

གཙུག་ལག་ཁང་འདི། རྒྱ་པོ་བྱི་བའི་ལོའི་དབྱིང་མགོ་བཙུགས་ཏེ། བྱིང་པོ་སྐྱག་གི་ལོའི་སྟོན་ཚར་རྒྱགས་

(missing 3–5 letters) ཞིག་ རྩོན་སྐྱེ་འབྲིང་པོ་ཉ་ལ། རྒྱ་གཟུགས་སྐྱུན་བྱིས་ཏེ།

ཞེ་ལ་བསྐོས་སོ

(Line 3:) ཐ་ཏུ་དང་སག་(ས་ག་)ཤེན་གིས་(missing 2–3 letters) སྐོན་ལི་དུ་གསོལ།

1.2.2 Wylie Transliteration:

(Line 1:) 'phru gyi lha btsan po. Khrī gtsug lde brtsan gyi sku ring la....(missing 4–6 letters)...Sku yon phul...(missing 2–3 letters)...phyag 'tshal te (missing 1–2 letters) bsams par sems can thams chad gyi bsod nams.....(missing 20–30 letters)...

1..e..o...hong pen //(Line 2:) sgos. Gtsug lag khang 'dī. Chu pho byi ba 'i lo 'i dpyid mgo btsugs te. Shing pho stag gi lo 'a ston tshal rgyigs...(missing 3-5 letters)...zhig. Ston sla 'bring po nya la. Sku gzugs sbyan phyis te. Zhal bsros so.

(Line 3:) So hwa hwa dang sag shen (sa ga shen) gīs (missing 2–3 letters) smon lâ du gsol.

1.2.3. English Translation:

(Line 1:) “During the respectful reign of Khri-Gtsug-Lde-Brtsan [lit., the Crown Devine King, r. 815–38 CE], the Miraculous, Sagely King of Tibet, . . . (missing 4 through 6 letters) . . . [I/We] presented offerings, (missing 2 through 3 words) and paid homage [to the Buddha], . . . (missing 1–2 letters) . . . [for increasing] the merit of all sentient

beings . . . (missing 20 through 30 letters) . . . Hong-pen [a.k.a. Hongbian]/ (Line 2:) In particular, this temple hall began to establish in the spring of the Water-Rat's Year [832 CE], and the construction was almost . . . (missing 3 through 5 letters) . . . completed in the autumn of the Wood-Tiger's Year [834 CE]. On the day of full moon in the middle month of the auspicious autumn [the fifteenth day of the eighth month in the lunar calendar], [as for] the Buddhist images, the eyes were dazzled, and [thereby] the face-warming ritual was completed.

(Line 3:) "So-hwa-hwa and Sag-shen [or Sa-ga-shen] made the prayer."

2. Literature Review and My Approach

2.1 Current Studies of the Inscription

Despite its limited legibility, the Tibetan inscription in Cave 365 is crucial material for studies of Dunhuang Tibetan documents and Buddhist cave art and architecture. It reveals not only the construction and consecration process of the cave temple that bears it but also the social circle of the cave owner-designer, patrons, participants, and visitors. While the Tibetan inscription is best read in its spatial context and together with other Chinese texts associated with Cave 365, it provides information about the cave construction that is not available in any other textual or visual sources. Specifically, the inscription sheds light on the ways in which Hongbian (a.k.a. Hong-pen, d. 862 CE), a Buddhist monk-official of the Tibetan period and the subsequent Guiyijun period (848–1036) at Dunhuang, managed the cave construction project. The Chinese inscription, being a repentance ritual text, mentions "monk Hongbian" but has no dates.⁴ In

4. For the most recent version of the transcription, see Mei, "Mogao ku di 365 ku hanwen tiji chong lu bing ba," 351–59.

comparison, the Tibetan inscription, as a votive text, records not only Hongbian's name but also the patrons' names and the years, seasons, and even the specific date and time of the construction process, valuable information that has attracted much scholarly attention. Two scholars are especially noteworthy for their work on this inscription, focusing on identifying the texts, certain figures, and terminologies: Huang Wenhuan, who in 1980 published a short but canonical article on identifying the texts and interpreting the historical contexts; and Imaeda Yoshiro, an established Japanese-born Tibetologist, whose 2007 article acknowledged the Tibetan inscription in Cave 365 to be "the single most important Tibetan inscriptions which has been found in the caves of Mogao and Yulin," as it sets a standard T-shape" format for Chinese-Tibetan bilingual inscription.⁵

Huang's article offers his transcription of the Tibetan inscription, as well as the Wylie transliteration and his two versions of Chinese translation. As the first modern examiner of the inscription, Huang identified the Tibetan King Ralpacan and the two years in the traditional calendar, which allowed him to identify the beginning and completion year of the cave construction as 842 and 834 CE, respectively. In addition, he pointed out the mentioning of "Hong-pen" in line 1, which reinforces the thesis that the cave owner was monk Hongbian, whose name had already been identified in the Chinese inscription below. Huang also pointed out two names—"Tha-tha" and "Sag-shen"—in line 3, which he believed signified the important patrons/managers of the cave and belonged to minority ethnicities other than Tibetan or Han. Lastly, Huang recognized the particularities of the T-shaped composition and its political implication, saying that the composition visualizes the priority of the Tibetans to the Chinese and other ethnic groups. The T-shaped bilingual composition in ninth-century Dunhuang caves has

5. Imaeda, "T-shaped Inscription Frames in Mogao (Dunhuang) and Yulin Caves," 94n4.

continuously stimulated new discussions about the Tibetan-period Dunhuang cave art.⁶

Imaeda revisited Cave 365 in 2006 and reconfirmed Huang's identification to be mostly accurate, despite there being fewer legible characters in Imaeda's time than in Huang's. In the article, Imaeda offered an almost identical new Wylie transliteration, except for a couple characters that were newly identified. Imaeda recognized two different hands—one in lines 1 and 2 and one in line 3—of the Tibetan inscription, suggesting that the latter was written later than the former. He also provided a couple of reinterpretations of technical terms of the consecration of Buddhist statues, such as *spyen phyed* (“to open the eyes”) and *zhal bsros* (“to warm the face).”

2.2 The Unsettled Questions

In brief, Huang and Imaeda have grounded a historical study of Cave 365's construction in their meticulous readings of the names of several historical figures and the dates appearing in the Tibetan inscription. Monk Hongbian's name, and only his name, being mentioned in both the Tibetan and the Chinese inscriptions in Cave 365 is the major evidence for suggesting that he had the most privileged access to and most responsibility for the cave construction, suggesting that he was the cave owner and/or designer. The mention of Tibetan King “Khri-Gtsug-Lde-Brtsan” (a.k.a. Ralpacan) at the beginning of the Tibetan inscription is the most important criterion for dating the cave construction to the second quarter of the ninth century, which

6. Huang himself points out that a similar composition can be found in Mogao Cave 251; the west, south, and north sides of the central pillar; and Mogao Cave 75 beneath the main niche. Later, Imaeda Yoshiro identified the Tibetan inscription in Cave 75 (2007, 95n10), and added to this list another Dunhuang cave—Yulin Cave 25. For the last cave and its Tibetan inscription, see Matthew Kapstein, “The Treaty Temple of De ga g.Yu tshal: Iconography and Identification,” in *Essays on the International Conference on Tibetan Archaeology and Art*, ed. Huo Wei (Chengdu: Sichuan Renmin Chubanshe, 2004), 98–127.

becomes a basic time window for locating the Years of Water-Mouse and Wood-Tiger. The two other names mentioned in line 3 indicate that there was a multiethnic collaboration in the cave's construction.

Nonetheless, there is still room for increasing the accuracy of the identification and for comprehensively interpreting the texts in the historical, linguistic, and artistic contexts. In brief, there are several unsettled questions about the Tibetan inscription, including the invention of the T-shaped composition of the Chinese and the Tibetan inscriptions, the identities of the patrons and the maker, the sociopolitical conditions in Dunhuang during the Tibetan period, and the religious functions of the Buddhist caves. There has also been no good explanation as to why the Tibetan and the Chinese inscriptions were placed adjacent to one another, especially given that they are not reiterations of each other and that they are almost completely unrelated in language, content, and length and heterogeneous in function (votive vs. ritual). While Dunhuang scholar Mei Lin has not discussed the Tibetan inscription except for the shared name of Hongbian, the overly political reading of the two inscriptions offered by Huang and Imaeda was mainly based on the T-shaped format.⁷ However, what has been understudied are the ways in which the

7. Huang's overly political reading that the composition visualizes the message of "Tibetans' rule over the Chinese and other ethnic groups" is based on the Tibetan part's placement above the Chinese part. This thesis is largely supported and reinforced by Imaeda. Further examination of the T-shaped format is needed. In my view, it was not an intentional design, and thus the political hierarchy emphasized by Huang and Imaeda should be reconsidered. The Tibetan inscription is placed on the curb of the offering altar, whereas the Chinese was placed on the front façade. They are not a single composition, and the lower part would have had a longer tradition than the upper (as we see in Cave 158). In terms of proportion, it is a fat T with almost equal horizontal and vertical frames, unlike the slim ones in Yulin Cave 25. Imaeda's textual analysis is careful and helpful, especially the reference to Mogao Cave 365. But the claim about the Tibetan legacy in inscription formatting does not seem well-founded to me. This is a reiteration of Huang's political reading of the T-shaped composition in Cave 365, which, unlike Yulin Cave 25, was filled with Tibetan texts in the horizontal frame and Chinese texts in the

content and function of the two inscriptions complement, connect with, or contradict each other. In this study, this new reading of the Tibetan inscription that has been provided by Ngodup and myself will offer some nuanced insights into the consecration ritual as part of the votive actions described.

2.3 Approach and Research Process

My approach is comprehensive and critically engages with the bilingual textual materials and visual culture. As a beginner in the Tibetan language, I have relied heavily on my Tibetan language instructor, Professor Karma Ngodup, on discerning the handwriting. My research process proceeded in five major steps:

Step 1 (August 2019–January 2020): I visited Mogao Cave 365, took photos of parts of the Tibetan inscription, and made a photocollage of the entirety of the inscription. The field work and graphic work provided me with the inscription’s most current condition and with the primary visual material for further investigation.

Step 2 (January–February 2020): I worked closely with Ngodup in reexamining the scripts, in addition to consulting orthographic references. We identified several letters that had not been identified and recognized some of Huang’s misidentification. We

vertical part (thus, a “standard” reference). Imaeda’s major explanation for the drastic difference of the painting styles in Yulin Cave 25 is the “change of political and military regime from the Tibetan occupation to that of the Guiyijun” (92), and it is implied here that the latter regime is Chinese culturally oriented as opposed to the Tibetan culturally dominated former period. But he points out in an earlier paragraph that the reminiscence of the Tibetan language and costumes, which are evident in the Tibetan graffiti and the Tibetan wedding scene (that he consider to be dated after the Tibetan occupation) “must have lasted for quite some time” afterward (91). Here, it is not clear whether the Tibetan visual culture is persistent, and it is not explained what the mechanism whereby it persisted or disappeared exactly was.

identified missing parts of the incomplete letters and came up with a hypothesis for the missing content for future investigation. We confirmed two writing styles: the main text in lines 1 and 2 by one hand and the text of line 3 by another. I also noticed that there is probably an underlayer, as faint traces are seen around line 3. Such evidence casts more doubt on the different temporalities of the two kinds of texts, which Imaeda pointed out previously.

Step 3 (February–March 2020): I applied a new imaging method to better visualize the identification process. I edited the photocollage in Photoshop, adding a translucent layer of transcription to show missing strokes. In response to Ngodup’s suggestions, I laid a layer of translucent texts over the photocollage image to give the best sense of the shape of possible letters that the remaining strokes suggest. I tried to overlap the computer-typed letters with the handwritten inscriptions, and at times, I trace-copied the irregular strokes.

Step 4 (February 2020): Transcription and translation into English. As in a primary stage, the translations are based on previous scholars’ Chinese translation and my rudimentary usage of several Tibetan-English and Tibetan-Chinese dictionaries.⁸ Due to the time limit, I have not perfected the translation, and there is still much opportunity for further investigation of the linguistic and historical aspects. I hope to receive more suggestions

8. The dictionaries I consulted include *Tibetan-Chinese Encyclopedia* (Zang han da cidian 藏漢大辭典, TCE), *Rangjung Yeshe Dictionary* (RY), *Monlam Tibetan-Eng Dictionary* (Monlam), *Yuqie shidi lun han zang fan suoyi n* 瑜伽師地論漢藏梵索引 [A Chinese-Tibetan-Sanskrit index of Yogacara-bhumi-sastra] (Yogacara Index), among many others. The search engines I used are Goldendict PC application and “THL Tibetan to English Translation Tool,” <http://www.thlib.org/reference/dictionaries/tibetan-dictionary/translate.php>.

and comments on the current work.

Step 5 (March 2020): I analyzed the linguistic, historical, and religious features and adjusted previous readings while writing this report.

3. Inscription Revisited and Reinterpreted

In this longest section of the report, I will offer a close reading of the Tibetan inscription, including the writing and reidentification, the translation of terms, and the issues they raise. I subdivided the three lines into thirteen phrases based on the pauses in the language flow. Based on the content of the inscriptions, this reading will be presented in six subsections: the name and reign of the forty-first Tibetan King, the eulogy and vow, the cave owner(s), the cave construction, the consecration ritual, and finally the inscription scribe(s). Line 1 contains more general background information and is more severely damaged (especially 1-4 through 1-6). Line 2 contains more specific information and is more certain. Line 3 seems to be of a different brush (and ink), hand, and date. Those characters that were already less legible since Huang are marked in gray; those characters that are new or different from two previous versions identified by other scholars are marked in red, or pink if half-legible.

3.1 Khri-Gtsug-Lde-Brtsan: A Special Reference to Tibetan King Ralpacan

Line 1-1

Huang	འཕུལ་གྱི་ལྷ་རྩལ་པོ།
Imaeda	འཕུལ་གྱི་ལྷ་(བ)རྩལ་པོ།
Ngodup & Zhou	འཕུལ་གྱི་ལྷ་བཙལ་པོ། <i>'phrul gyi lha btsan po.</i>

Image



Trans 1 The miraculous, sagely king of Tibet

This phrase is the complete title of any king from the Tibetan Empire *bod chen po* (629–877 CE). *phrul* is already illegible, except for the round hook of the vowel *gi* in *phru*. So here, the previous scholars’ identification is adopted. *gyi* has a clear mirrored vowel *i*, which is hereafter transcribed as *ɿ*. The legible parts of the following letter—the curve of superscript *la* and the long-tailed curve of radical *ha*—confirm the previous identification *lha*. A small point reveals the prefix *ba* of *btsan*. And although *tsa* or *rtsa* is only partly legible, the height of the remaining curvy stroke of the radical *tsa* is half of the entire height, making it more likely a *tsa* than a *rtsa*. The possibility of latter letter is nevertheless supported by a legible *rtsa* in the following phrase. The last letter has a clearly blank interior, therefore it is most certain to be a *po*, instead of a *pho*, which should include a short line connecting the vertical and the diagonal edges.

Line 1-2

Huang །མི་གཞུག་ལྷེ་བཙུན་གྱི་སྐྱེ་རིང་ལ།

Imaeda །མི་གཞུག་ལྷེ་བཙུན་གྱི་སྐྱེ་རིང་ལ།

Ngodup & Zhou །མི་གཞུག་ལྷེ་བཙུན་གྱི་སྐྱེ་རིང་ལ།

Khrɿ gtsug lde brtsan gyɿ sku rɿng la

Image



This completely recognizable phrase points out a historical period in the imperial Tibetan chronology. Khri-Gtsug-Lde-Brtsan (Khri Gtsug Lde Brtsan), or usually written as Khri Gtsug Lde Btsan, is the real name (*mtshan dngos*) of the forty-first king of Tibet, Ralpacan. This is evident in a brief biographical account from *bod kyi yig rnying zhib 'jug* as follows:

ཁྲི་གཙུག་ལྷེ་བཙན། མཚན་གཞན་ལ་ཁྲི་རལ་པ་ཅན་ཡང་བློ་བཟོ།

དབུ་སྐྱ་རལ་པའི་ལན་བུ་རྣམ་པར་དུང་པས་ན་མཚན་དེ་ལྟར་ཐོགས། ལྷི་ལོ་815ནས་841བར་ཁྲིར་འཁོད།

བཙན་པོ་འདིས་རྒྱ་བལ་གྱི་བ།⁹

*Khri gtsug lde btsan/ mtshan gzhan la khyi ral pa can yang zel/ dbu skra ral pa'i lan bu
rnam par dud pas na mtshan de ltar thogs/ sbyi lo 815 nas 841 par khri' 'khod/ btsan po
'dis rgya bar gyi pa//*

[Tibetan King] Khri-Gtsug-Lde-Btsan is also named “khri-ral-pa-can” in other references. Because of his noble matted hair [*ralpa*] full of gray braids, he accordingly holds that name [Ralpacan]. He reigned [lit., sat on the throne] from 815 to 841 CE.¹⁰ The king thereby [had?] Chinese wool.

As Ngodup pointed out to me, it is unusual to refer to Ralpacan as “Khri-Gtsug-Lde-Brtsan,” which is a characteristic use in the Dunhuang Tibetan documents. Although we have not

9. Bkrashis Tshering, ed., *Bod kyi yig rnying zhib 'jug* བོད་གྱི་ཡིག་རྫིང་ཞིབ་འཇུག [Research of Tibet's old scriptures] (Pecin: Mi rigs dpe sgun khang [Ethnicity Publisher House], 2003), 51.

10. There are different versions of the ending year of his reign. The majority agree on 838 CE, while some say 836 or 841. It is not clear to me which is more accurate. And it seems that 841 is the year of his death, if that is different from the ending year of his reign.

figured out the reasons, I would add that in the Chinese tradition, it is also usually used to refer to an emperor or anyone respectful (e.g., one’s father or ancestors) by their real names. The Chinese taboo of uttering aloud the names of respected people is called *minghui* 名諱. To give an example, the Chinese name of Avalokiteśvara Bodhisattva was changed from “Guan-shi-yin” to “Guan-yin” to avoid the character *shi*—the middle character in the real name of Tang Emperor Taizong (r. 626–49 CE) “Li Shi-ming.” Would, then, the use of “Khri-Gtsug-Lde-Brtsan” in Dunhuang texts indicate an exception to the norms in both the Tibetan and Chinese traditions? And would it give a clue of the Dunhuang locals’ attitudes toward the Tibetan rulers? This is a question to be further explored.

According to Tibetologists, the phrase *GEN-ring-la* (“in the time of”) indicates a less specific duration of time. It is frequently used in imperial inscriptions, although elsewhere it occurs less frequently.¹¹ One would notice that in the Mogao Cave 365 inscription, the honorific particle *sku* (“respectful”) is added to this expression of time. The honorific wording would give a hint about the formality of this writing.

3.2 Eulogy and Vow: For Whom and by Whom?

Line 1-3

Huang		སྐྱུ་ཡོན་
Imaeda		སྐྱུ་ཡོན་
Ngodup & Zhou	(missing 4-6 letters)	སྐྱུ་ཡོན་ཕུལ

11. One can find a similar phrase in a Buddhist monument’s inscription: *btsan po phri lde gtshug rtsan gyi ring la* བཅོན་པོ་འཁྲི་ལྷེ་གཞུག་རྩན་གྱི་རིང་ལ (Zol inscription, South face). Note the letter *i* in *ring la* is mirrored in the same way as in the Dunhuang inscription. See Imaeda Yoshiro, Matthew Kapstein, and Tsuguhito Takeuchi, *New Studies of the Old Tibetan Documents: Philology History and Religion* (Tokyo: Research Institute for Languages and Cultures of Asia and Africa Tokyo University of Foreign Studies, 2011), 8.

(missing 4-6 letters) *Sku yon phul*

Image



Trans ...presented offerings



Neither Huang nor Imaeda mentions the missing characters here or elsewhere in the inscription. However, they should be noted, because they give a sense of how much information is missing and whether the recognizable texts were originally continuous or fragmented words. This makes a difference in the meaning, as I will demonstrate in this paper.

The word *phul* is newly identified by Ngodup. The traces are very pale, but one can still see the left half of radical *phu*, the leftmost part of the curved stroke, the diagonal and the vertical strokes of suffix *la*. I amplified the traces with the translucent typed characters as in the above image.

The subject of this phrase is unclear to me, and thus there are multiple possibilities of translation. *Sku yon* can mean “good qualities,” “donation,” “offering,” “attainments,” or “accomplishments” (RY). And *phul* can mean “highest degree, perfection” or “offered, presented (to the Buddha)” (RY). So if the subject is Ralpacan, this phrase can be read as “[The Tibetan king’s] perfected virtue/accomplishments,” which is the opinion of Huang. If the subject is the patrons and designers such as Hongbian, this phrase can be read as “[The donors] presented offerings.” The latter is what I am proposing in the following translation. My reasoning is based on four observations: (1) Ralpacan is mentioned in line 1–1 and 2 as the reign, not as the subject; (2) the text is a votive text in a Buddhist cave temple, thus its content is more possibly related to this theme; (3) even if this text is about praising someone’s virtue, the object of praise can be the Tibetan king, but it can also be the Buddha; and (4) the phrase that follows provides an important

clue to the activities of venerating the Buddha.

Line 1-4


Photo	
Huang	N/A
Imaeda	N/A
Ngodup & Zhou	(missing 2–3 letters) ཕྱག་འཚམ་ཏེ། (missing 1–2 letters) བསམས་པར་ (missing 2-3 letters) <i>phyag 'tshal te</i> (missing 1–2 letters) <i>bsams par</i>
Image	
Trans	... and paid homage. ... being mindful of ...

This part is severely damaged (see photo) and has been omitted in Huang’s and Imaeda’s versions. But Ngodup managed to recognize twelve letters based on the traces of strokes, for example the very upper part of the letters *phyag 'tshal* and the lower part of *te, bsams par*. My reconstruction of this identification can be seen in the image above.

Phyag 'tshal (“to pay homage, to bow down”) clearly shows that this is a devotional action. It gives us a clue that the previous phrase, *sku yon phul*, is probably a devotional action, too, and can be translated as “presented offerings.” In addition, the continuative particle *te* indicates that this sentence describes a series of actions of a similar nature—votive—and that there is more to come in the list. *bsams pa* (“to set the mind, thought, contemplated”) are the beginning words of probably the next action in the list.

Line 1-5

Huang	སེམས་ཅན་ཐམས་ཅད་ཀྱི་བསྐྱོད་པའི་
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Imaeda	སེམས་ཅན་ཐམས་ཅད་གྱི་བསྐྱེད་པའི་
Ngodup & Zhou	སེམས་ཅན་ཐམས་ཅད་གྱི་བསྐྱེད་ལྷན་པའི་ <i>sems can thams chad gyi bsod nams</i>
Image	
Trans	The merit of all sentient beings

This phrase seems to continue describing the beneficial actions and vows of the cave patrons or text compilers. *Sems can* (“sentient beings”) and *thams chad* (“all,” commonly spelled as *thams cad*) form the common Buddhist term “all sentient beings,” which refers to any living being in one of the six realms who has not attained liberation. The six realms include the hells, the realm of hungry ghosts, the realm of animals, the realm of humans, the realm of asuras (demigods), and the heavens, from low to high. There are two ways of reading the last part of the phrase. Although previously identified as *bsā* by Huang and Imaeda, Ngodup suggests *bsod nams* based on the language use. The last four letters in this part are entirely illegible to me, so I can only conjecture about these possibilities. If the last word was *bsā* (or maybe *bsō* as a different spelling), then it is a vocal term used in rites and ceremonies, indicating the hope for an increase of merit retribution (TCE: 3050). This interpretation would make clear that the sentence was for a vocalized prayer. If the last word can be identified as *bsod nams*, then it refers to “the positive karmic result from virtuous actions (RY).” This interpretation similarly indicates a merit (transference), probably from the beneficial deed of “being mindful of all sentient beings.” Yet the latter seems to be less of a vow than a praise as compared to the former interpretation.

3.3 Cave Owner(s): Hong-pen and Missing Information

Line 1-6

Huang	... འི ... འི་ཉང་པེན།
Imaeda	...ཉང་པེན།
Ngodup & Zhou	(missing 20-30 letters) འི...ེོ... ཉང་པེན་ (missing 20-30 letters)... <i>i.e.o...hong pen</i>
Image	
English Hong-Pen.

This severely damaged phrase has crucial information at the end: *hong pen*. This is commonly accepted as the Tibetan transliteration of the name Hongbian. What could the information in the damaged area have been? If the previous phrase ends with *bsa*, it would already be a relatively complete sentence, and the current phrase would probably be information about the donors. It could be either the full title of Hongbian, who was chief preceptor (*du-jiaoshou*) of the local Tibetan authority, or the names of other patron(s) in addition to Hongbian.¹² On the other hand, if the previous sentence is not finished, the damage area would have listed other beneficial and devotional deeds. Because this part is about the length of twenty to thirty letters, it seems that the information was not just about Hongbian's title.

3.4 Cave Construction: Multivalent Term for Temple and More Specific Timeline

Line 2-1

Huang	སྒོ་ས་གཞུག་ལག་ཁང་འདི་
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12. Information from the Wu Sengtong stele.

Imaeda	སྐོས། གཙུག་ལག་ཁང་འདི།
Ngodup & Zhou	སྐོས། གཙུག་ལག་ཁང་འདི། <i>sgos. Gtsug lag khang 'di.</i>
Image	
English	In particular, this temple hall

This phrase is completely legible, and it points out the particular event of cave temple construction. *Sgos* is an indication of a shift in the narrative; it refers to “special” as opposed to “general,” “particular” as opposed to “generic,” “private” as opposed to “public” (TCE: 599). This indicates that the second line of the inscription deals with a particular act (of the donors featuring Hongbian), as opposed to the generic deeds of offering, worshiping, and making vows for sentient beings, which are described in the first line.

Gtsug lag khang is the term for the cave temple in this case and many other cave inscriptions at medieval Dunhuang and beyond. What is particularly interesting to me about this medieval term is its generic and universal nature. *Gtsug lag khang* can convey any of several meanings: “sanctuary of the Triple Jewels” (TCE: 2194), “main shrine hall (in a monastery)” (RY), “*vihara*, or monastic living quarter,” “place where scriptures are kept” (Monlam), and, in the broadest sense, “a dharma field (Chn: *daochang*; skt: *bodhimanda*)” (Yogacara Index). I do not know any modern term of Buddhist architecture in Chinese or English that has the same capacity.¹³ *Gtsug lag khang* is not limited to the physical structure, as it can refer to a

13. In Chinese, *miao* 庙 (temple) and *si* 寺 (monastery) are the most generic terms for a

freestanding building and a cave temple carved from the living rock. In addition, *gtsug lag khang* is not limited to the functionality, as it can refer to ritual space, assembly hall, living quarter, and even educational space. I would welcome the opportunity to further explore the actual commonality in medieval Tibetan Buddhist architecture as indicated by the terminology. That is, what were the physical features at the core of a sacred space? Would there be any shared behaviors in a place called *gtsug lag khang*?

For further investigation and for demonstrating the commonality of the term, here I want to point out other Dunhuang and Tibetan cave inscriptions and manuscripts that refer to the cave temples as *gtsug lag khang* (“temple hall”). The first case is a Tibetan inscription in Mogao Cave 75. This inscription describes the cave temple as “*byams pa sprul pa’i gtsug lag khang*,” or “Temple Hall of Maitrya the Miraculous.”¹⁴ The second case is a manuscript text associated with Cave 25 of the Yulin caves, which is the second largest cave complex in the Dunhuang

religious or Buddhist building. But they usually refer to the entirety of a courtyard complex or the major image halls in it. The halls are more often referred to as *dian* 殿, *tang* 堂, or *ge* 阁 (if having multiple levels). For monastic dormitories and smaller-scaled monasteries, *jingshe* 精舍 or *qielan* 伽蓝, the equivalent to *vihara*, is often used. And for Buddhist libraries, they are often called *cangjing-lou* 藏经楼 or *cangjing-ge* 藏经阁, “tower-pavilion for storing the sūtra.” For cave-temples, the Dunhuang medieval manuscripts reveal several generic terms: *ku* 窟 “cave,” *kan* 龕 “niche,” and occasionally, *shaxin fotang* 刹心佛堂 “Buddha hall with a pagoda-core.” Note that the first two terms specifically point out the physical structure. *Daochang* 道场 might be the most flexible term, as it basically points to any place for Buddhist practices. But it is less architecturally specific, as even “a straight mind” can also be a *daochang*, according to the Chinese translation of the *Vimalakirti Sūtra* by Kumarajiva (344–413) and a few later versions.

14. Mogao Cave 75 dates to the high-Tang period (705–70 CE) with renovation from the late-Tang period (848–906), according to Dunhuang wenwu yanjiu suo ed., *Dunhuang Mogao ku Neirong zonglu*, 25. Imaeda suggests that the Tibetan inscription is a graffito of a later period. The entire inscription reads “*byams pa sprul pa’i gtsug lag khang gi yon / bdag yang beng ‘co’i rkyo* (?). . .” His translation is “Yang Beng-’co, the patron of the temple of Maitreya, the miraculous. . .” See Imaeda, “T-shaped Inscription Frames in Mogao (Dunhuang) and Yulin Caves,” 95n10.

area. According to Tibetologist Matthew Kapstein, this cave temple could be either identified as or understood as an imitation of “*gtsigs kyi gtsug lag khang*,” or “Temple of the Treaty.”¹⁵ This temple is described in detail in Dunhuang manuscript P.t. 16/IOL Tib J 750. The third case is Zhabs Cave at Be gdong of Rtswa mda’ County in Mnga’ Ris Prefecture of Western Tibet. According to Xiong Wenbin, this cave, probably dated the eleventh–twelfth centuries, was originally referred to as “*gzhal yas gtsug lag khang*,” or “the Temple Hall of Infinity,” in a contemporaneous inscription in the cave.¹⁶ These cases allow us to further investigate the

15. Kapstein first suggested, in “The Treaty Temple of De ga g.Yu tshal,” that the Temple of the Treaty is Yulin Cave 25 because of the correspondence between the iconographical program in the cave temple and that described in the text, in addition to similar dating and hints in the name. Later, in “The Treaty Temple of the Turquoise Grove,” in *Buddhism between Tibet and China*, ed. Matthew Kapstein (Boston: Wisdom Publications, 2009), 21–72, Kapstein discussed the reasons in detail and offered a less aggressive argument that the cave temple imitated the design of the temple hall described in the manuscript, if it was not the identical temple. Most recently, in “The Treaty Temple of De ga g.yu tshal: Reconsiderations,” *Journal of Tibetan Studies* (Sichuan University) 10 (2014): 32–34, Kapstein considered that the second argument still holds true.

16. This inscription is written on the upper west side of the corridor, above a red frame and red background. The cave has thousand-buddha images all around the four walls. Xiong’s identification and Wylie’s transliteration of the inscription is as follows:

// slob dpon dran pa rgyal mtshan gyi zhal snga nas/ dpal (zhu)vi gnas yul zhag gi dben gnas
 dpal/ gzhal yas gtsug lag khang vdir skald pa bzang povi/ sangs rgyas stong gi gzhal yas bzhengs
 pavi bkav rtsi . . . / sangs rgyal rgu brgyav bzhi bcuv bdag gis bris//

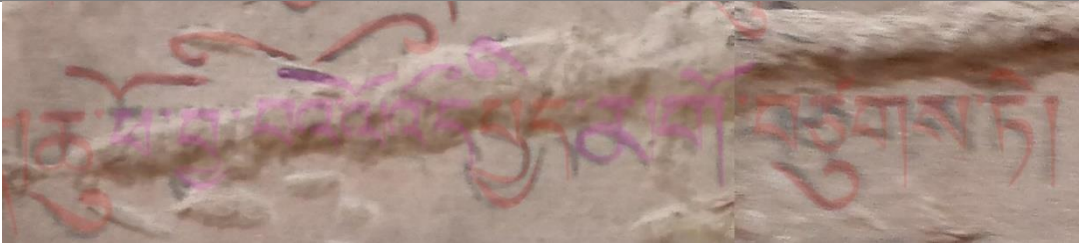
// drug bcu tha(m) s gis (m)a sol//

Rufei Luo (2020) offers an English translation:

“According to the order of Master Dran pa rgyal mtshan, the Bhadrakalpa Thousand Buddhas should be painted in the quiet and saint Eternal Temple in Zhag of Dpal [?]. I have painted 940 buddhas and there are sixty buddhas (have not been finished).” Here I want to express special thanks to Rufei Luo, who informed me about the same use of “*gtsug lag khang*” in her studies of the cave temple in Western Tibet and the general use in reference to monasteries in Tibet in later periods. For the Wylie transliteration, see Xiong Wenbin 熊文彬, “Ali bai dong po shiku, qianfo shiku he yishi dian qianfo bihua diaocha ji 阿里白東波石窟、千佛石窟和譯師殿千佛壁畫調查記” [A survey of the Thousand-Buddha Mural Painting in the Zhabs temple, the Tousand Buddha Cave-temple and the Temple Hall of Translator Master in Ngari Prefecture]. In *Xizang zongpu: Jinian guge-ciren jiabu zangxue yanjiu wenji* 西藏宗譜：紀念古格·次仁加布藏學研究文集 [Tibetan genealogies: Studies in memoriam of Guge Tsering Gyalpo (1961–

conception of cave temple in the Tibetan tradition from both linguistic and visual aspects.

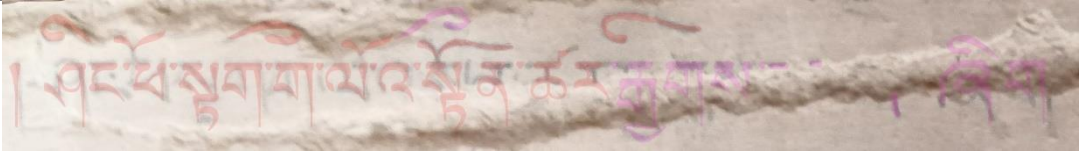
Line 2-2

Huang	ལྷ་ཕོ་བྱི་བའི་ལོའི་དབྱིད་ན་གསུགས་ཏེ།
Imaeda	ལྷ་ཕོ་བྱི་བའི་ལོའི་དབྱིད་ན་བསུགས་ཏེ།
Ngodup & Zhou	ལྷ་ཕོ་བྱི་བའི་ལོའི་དབྱིད་མགོ་བསུགས་ཏེ། <i>Chu pho byi ba 'i lo 'i dpyid mgo btsugs te.</i>
Image	
English	In the Water-Male-Rat's Year's spring, began to establish

This phrase reveals the beginning year of the cave's construction. The year *chu po byi ba* “Water-Male-Rat” during Ralpacan's reign has only one possibility: 832 CE, as Huang points out. Both Imaeda and Nogdup recognize what Huang did not recognize: that the vowel *i* in *dpyid* should not be mirrored and that there is a prefix *ba* in *btsugs*. In addition, Nogdup further identifies the word *mgo* (“beginning”) that is followed by *btsugs* (“establish, set up”), revealing a more momentary rendering of the action. As discussed earlier, *te* indicates that this phrase is followed by additional actions in the construction. It is also interesting to see that the action of cave construction is not described in a literal way, such as “carving” or “excavating,” but in a more generic sense, such as “set up” and “establish.” This aligns with the contemporary Chinese terms for cave construction such as *jian* 建 (“construct”).

2015)] (Beijing: Zhongguo zangxue chuban she, 2018), 388. Also see Luo Rufei, “A Preliminary Research on Murals of Thousand Buddhas in Tibet: Starting from the Zhabs Cave at Be gdong of Rtswa mda' County in Mnga' Ris Prefecture of Western Tibet,” paper delivered at the Visual and Material Perspectives on East Asia Workshop, Chicago, March 6, 2020, 5n8.


Line 2-3

Huang	ཤིང་ཕོ་སྟག་གི་ལོ་...སོན་ཅ་ན་...གྱི་
Imaeda	། ཤིང་ཕོ་སྟག་གི་ལོའི་སྟོན་
Ngodup & Zhou	། ཤིང་ཕོ་སྟག་གི་ལོའི་སྟོན་ཚར་རྒྱུགས་(missing 3-5 letters) ཞིག <i>Shing pho stag gi lo 'a ston tshal rgyigs...(missing 3-5 letters)...zhig.</i>
Image	
English	In Wood-Male-Tiger's Year's autumn, [construction] almost . . . completed

This phrase reveals the year of construction completion. The year *shing pho stag* (“Wood-Male-Tiger”) during Ralpacan’s reign is 834 CE, again as Huang points out. Both Imaeda and Nogdup recognize a subscript *ta* in *ston* “autumn,” while Nogdup recognizes three more words (seven more letters) than previous scholars: *tshal rgyigs . . . zhig*. The first word *tshal* (“finish”) and the last word *zhig* (“just about, approximately, roughly”) indicate that the cave construction was near completion in the autumn. Words between these two words are mostly illegible and uncertain in meaning (I could not find *rgyigs* in any dictionary).

The identification of *tshal* (“finish”) is important here because it gives us a more complete picture of the process of the cave construction. Huang, who did not recognize this word, combines this phrase with the following phrase as one and misses the temporal sequence of the completion of the major structure and the consecration ceremony. In this new reading (mostly in line 2-4 through 2-6), I would point out that these two actions are clearly distinguished. In addition, the specificity of the time for the two actions are significantly different, as the moment of consecration is much more specific.


Line 2-4

Huang	ལྷོན་སྐྱ་འབྲིང་བ།
Imaeda	ལྷོན་སྐྱ་འབྲིང་ལ།
Ngodup & Zhou	ལྷོན་སྐྱ་འབྲིང་པོ་ཉ་ལ། <i>Ston sla 'bring po nya la.</i>
Image	
English	On the day of the full moon in the middle month of the preferable autumn

This phrase offers information of the month and day of the consecration ceremony. Huang, as well as Imaeda, identifies only the month (“in the middle autumn of the Year of Wood-Tiger”). Ngodup’s newly identified letter *nya* (or sometimes spelled as *nya mo*), “day of full moon,” refers to the fifteenth day of a given lunar month. This provides crucial new information, allowing us to specify the date, which is most likely the fifteenth day of the eighth month in the lunar calendar. This day is a traditional Chinese festival known as the Mid-Autumn Festival, and thus was probably auspicious for holding ceremonies. We can even find literary descriptions of the gathering and memorial activities during the night of this day in a poem titled “Paying Homage to the New Moon” in Dunhuang manuscript P. 2838. It is unspecified in the inscription whether the consecration ceremony was held during daytime or nighttime. But another Dunhuang manuscript about a lantern lighting event indicates the possibility of a nighttime ritual at the Mogao Caves.

3.5 Consecration Ritual: “Eye-Opening” or “Face-Warming”?

Line 2-5

Huang	སྐུ་གཟུགས་སྐྱུན་ཕྱིང་དེ།
Imaeda	སྐུ་གཟུགས་སྐྱུན་ཕྱིང་ཏེ།
Ngodup & Zhou	སྐུ་གཟུགས་སྐྱུན་ཕྱིང་ཏེ། <i>Sku gzugs sbyan phyis te.</i>
Image	
English	(as for) the Buddhist images, the eyes were dazzled

This phrase describes the consecration ceremony, as well as the following and last phrase. The series of actions and the incompleteness of this phrase is indicated by the connective particle *te*. The focus of the ceremony was the Buddhist statues enshrined in the cave temple, which is indicated by the first word in this phrase, *sku gzugs* (“buddha statue”). And it would be interesting to discuss the ontology of the statue based on the use of language. *Sku gzugs* clearly refers to the seven sitting buddha statues in this case, yet this word, as multivalent as *gtsug lag khang*, can mean many other things, including body, image, and portrait. It seems to me that the bodily form of the buddha, plastic and pictorial representations of the former, collapse in this term. I would translate *sku gzugs* as “Buddha image” or “Buddha icon,” which corresponds to a more generic medieval Chinese term *foxiang* 佛像, which is a conventional way of rendering it in North American academic writing.

A crucial, alternative reading of this phrase is based on the new identification of the verb *phyis* (past tense of *‘phyapa*, “[the eyes] dazzled [by brilliant light]” or “wiped”). Huang and

Imaeda identify this word to be *phyid* (past tense of *'byed pa*, “opened”). This is the critical word from which Huang and Imaeda associate the inscription with a consecration ceremony. Huang renders this term as *kaiguang* 開光. *Kaiguang* literally means “opening the light” and is often translated as “eye-opening,” because in this ritual, a monastic painter and ritual specialist would paint the eyes of the Buddhist statue, followed by a ritualistic reading and sermon.¹⁷ In medieval Chinese context, the “eye-opening” ritual marks the final step in the production of a sculpted or painted icon, and this step is considered crucial in turning the physical form into a sacred and animated work.¹⁸ It is a term that refers to the consecration of images and statues, and it sounds familiar to the Chinese ear. Imaeda further explains that *spyan phyed* must be a literal translation of the Chinese expression *kaiyan* 開眼, literally, “to open the eyes.”¹⁹ However, looking at the original inscription, it is clear that the suffix is *sa* instead of *da*, meaning this word is *phyis* instead of *phyid*. One can still doubt; can *phyis* mean “opened” here, giving that it could also be the imperative form of both *'byed pa* and *'phya pa*? I would say *phyis* is less likely the imperative form than the past tense of a verb, because the parallel verb in the following phase is unambiguously in past tense (*bsros*, past tense of *sro ba*). Therefore, I suggest reading *phyis* as “dazzled” and *sbyan phyis* as “eye dazzled.”

Now that we recognize this term not to be *spyan phyed* (“opened the eyes”) but *sbyan phyis* (“dazzled the eyes”), what does it mean? First, this could mean that the Tibetan text is not


17. This reconstruction was conducted by Michelle C. Wang based on a historical account of the eye-opening ceremony of the Great Buddha in Todaiji (Nara, Japan) in 752 CE. Towao Sakaehara, “The Prayers of the Retired Emperor Shomu: Performing Arts and Politics of Todaiji Temple in the 8th Century,” *Urban Culture Research* 1 (2003): 15. Also see Michelle C. Wang, “Early Chinese Buddhist Sculptures as Animated Bodies and Living Presence,” *Art Orientalis* 46 (2006): 14–15.

18. Wang, “Early Chinese Buddhist Sculptures,” 14.

19. Imaeda, “T-shaped Inscription Frames in Mogao (Dunhuang) and Yulin Caves,” 94n4.

simply a translation of the Chinese counterpart; the particular language indicates a more autonomous understanding of the consecration ritual. Second, it could mean that the consecration ritual described here was conducted in a way different from the Chinese eye-opening ceremony. In line 2-6, I will discuss how it indicates the expected effect of the consecration.

Line 2-6

Huang	འཇལ་བསྐྱོ་སྐྱོ།།
Imaeda	འཇལ་བསྐྱོ་སྐྱོ།།
Ngodup & Zhou	འཇལ་བསྐྱོ་སྐྱོ། <i>Zhal bsros so.</i>
Image	
English	face-warming was completed.

This is the final phrase of the sentence, as indicated by the sentence’s final particle, *so*. It describes the final step in the consecration ritual—*zhal bsros* (past tense of *zhal sro ba*), which literally means “made the face warm.” But until a recent study by Dan Martin, it has been uncertain how to understand this less common phrase. Huang did not bother to explain this term apart from offering the literal translation, and he in his final rendering simply omitted this strange term and used “eye opening” to represent the entire consecration ceremony (“... accomplished the ‘eye-opening’ ritual”). Imaeda noticed the “enigmatic” nature of the term *zhal bsros* and tried to explain its non-Chinese origin as opposed to the parallel term *spyan phyed* (“eye opening”), yet he offered no reference or clue about its historical application.²⁰

20. Ibid.

Dan Martin shed some light on the historical application in his 2013 article on an eleventh–thirteenth century Tibetan consecration ritual text “Expanded Chest.”²¹ Martin suggests that *zhal bsro* refers to a ritual that was performed “in a particular rite that occurs near the end of the main part of the complex consecration ritual” by an Indian monk named Atiśa (d. 1054) at the Nyingma educational center Dorjedrak Monastery.²² Cited by the THL online translation tool, Martin considers *zhal bsro* to be “a special ritual prayer for softening (and making human and kind) the heart of the deity” and suggests that “warming the heart” would be a more revealing translation.²³

In addition to Martin’s study, Kapstein provides a Dunhuang example of the application of *zhal bsro* in a ninth-century consecration ceremony. In the abovementioned Dunhuang manuscript associated with the Temple of the Treaty, a long list of participants making offerings includes the following line:

དེ་ག་གཅིག་ལ་གྱི་གཙུག་ལང་ནལ་བསོ་བའི་ཚེ་བདེ་སློབ་གྱི་སློབ་ལམ་དུ་གསོལ་བའ

de ga gtsiḡs kyi gtsug lag khang zhal bsro ba 'i tshe bde blon gyi smon lam du gsol ba'

“Offered as a prayer by the pacification minister on the occasion of the face-warming

21. Dan Martin, “Ritual Indigenisation as a Debated Issue in Tibetan Buddhism (11th to early 13th Centuries),” in *Ritual Indigenisation as a Debated Issue in Tibetan Buddhism (11th to early 13th Centuries)* (Leiden: Brill, 2013), 171–72.

22. In his note further explaining this term, Martin considers it to be “an older [than 11th century] and less common word for the consecration ritual” as it occurs in Mogao Cave 365 and IOL Tibet J 751. Martin also discusses the multiple contexts in which the term was applied; one is Bön, a common word for concertation in consecration texts found by a Bön master Shenchen Luga (966–1035), and the other is Buddhist (the *Vinaya Sūtra* translated into Tibetan during the Imperial period). Martin, “Ritual Indigenisation,” 171–72n29.

23. Entry “zhal bsro” in THL Tibetan to English Translation Tool, under “DM.” In “Ritual Indigenisation,” Martin mentions that this colloquial rendering is suggested by Sangye Tenzin Jongsong, abbot of Bönpo Monastic Centre, Dolanji.

ritual of the Temple of the Treaty of Dega”²⁴

This line clearly uses *zhal bsro* to refer to the consecration, confirming the thesis that “the face-warming ritual” was an actual ritual applied in medieval Dunhuang and Tibet. This reinforces my point in line 2-5 that the consecration at Mogao Cave 365 was not simply an eye-opening ritual. In the following, I will discuss the way in which the consecration ceremony would have been conducted at Cave 365, based on textual evidence from Tibet and visual evidence from this cave.

First, what would this ritual have looked like? Although I cannot find any Dunhuang sources that describe this ritual, the “Expanded Chest” describes it in detail. According to this ritual text, the “face-warming” ritual involves offering, vowing, and chanting in repetition. After performing the offerings and requests, one should evoke the Buddha’s names and the Three Jewels. This passage is quoted in its entirety as follows:

རྗེས་ལ་མངའ་གསོལ་རྟེན་ཀྱན་ལ
དེས་བརྒྱད་ལྷ་བདུན་དབུ་བ་དང
བཀྲ་ཤིས་བྱིན་ཆེར་གསོལ་བ་ནི
འབྲང་རྒྱས་ལ་སོགས་བཀྲ་ཤིས་རྗེས
མང་ལ་འཇུག་རྟེན་དགེ་བ་དང
མངོན་པ་བརྒྱ་གཉིས་དཀོན་མཆོག་གསུམ

24. IOL Tib J 751, 35a3–38b2. Kapstein, “The Treaty Temple of the Turquoise Grove,” 32. Translation adapted from Kapstein.

རིགས་ལྔ་ལ་སོགས་མང་པོ་ནི

བསྐྱུག་དང་གྱེར་བས་ཞལ་བསོ་བྱ

rjes la mnga' gsol rten kun la

rdzas brgyad sna bdun dbul ba dang bkra

shis byin cher gsol ba ni

'brang rgyas la sogs bkra shis rdzas

mang la 'jug rten

dge ba dang

mdzad pa bcu gnyis dkon mchog gsum

rigs lnga la sogs mang po ni

bklag dang gyer bas zhal bsro bya

After [those initiation rites] perform the enthronement offerings. To every icon offer the eight [auspicious] substances and the seven different [insignia of royalty].

Perform the request, with great majesty, for auspiciousness.

Offer the Expanded Chest and other auspicious substances.

If [the offerings] are many you will receive worldly virtues.

Read and recite [gyer ba] many times

the twelve deeds of a Buddha, the Three Jewels, and

the [names of the] five types of tathāgatas, [thereby] performing the “face warming.”²⁵

Second, to what extent would the Cave 365 consecration have matched the above description? The short answer is that the cave probably entailed and records a consecration ritual similar to the abovementioned “face-warming” ritual, as indicated by the cave inscriptions. My long answer would engage with the content in the Chinese inscription and the corresponding language used in both the Chinese and the Tibetan inscriptions.

For one thing, the Chinese inscription possibly utters the various offerings that are necessary and preferable for an adorned ritual ceremony such as the consecration. According to Mei Lin, the Chinese inscription is a Mahayana Buddhist scripture for a repentance ritual, namely, the *Sūtra of the Transference Wheel*.²⁶ In the preface (lines 1 through 7), the *Wheel* sets up a dharma field and preaches to those who have received bodhisattva precepts. The main content includes (1) repenting the evil deeds already conducted and vowing to detach from them

25. The passage was also quoted by an abbot of Dorjedrak in the late seventeenth century, who compiled *The Heart of the Jewel that Clarifies the Ocean of Meanings of Tantra, a Disquisition on Consecration Rituals*. Thus, we can infer that this passage perhaps accords with what would have happened. Wylie transcription and translation from Martin, “Ritual Indigenisation,” 171.

26. The Chinese inscription was first transcribed in *Dunhuang gongyangren tiji* and considered to be a votive text. But a well-accepted later study by Mei Lin shows that the text is the *Sūtra of the Transference Wheel* (Mei, “Dunhuang Mogaoku di 365 ku hanwen tiji chonglu bing ba”). Both studies recognize the appearance of the character “biqiu hongbian 比丘洪辯 (bhikṣu Hongbian).” And Mei’s study indicates the inscription is a “customized” version of the sūtra text by replacing the generic reference to the sūtra chanter “dizi moujia 弟子某甲” (disciple so-and-so) with the Hongbian’s name (1). Mei also points out that among the Dunhuang manuscripts there are six copies of this sūtra written during the eighth to ninth centuries, including S.1385, S.2540, P.2008, P.3918, BD7321, and No. 0385 of the *Lishi Jiancang Dunhuang Xieben Mulu* 李氏鑑藏敦煌寫本目錄 [Mr. Li’s catalog of the Dunhuang manuscripts]. Tibetan historians—notably Ueyama Daishu (1972) and Shirasu Jōshin (1974)—have debated whether this inscription predates or postdates these manuscript copies and whether this sūtra was transmitted to Dunhuang from Chang’an or from Tibet, after it was first translated in Beiting 北庭 (near present-day Urumuqi, Xinjiang Autonomous Region) in 789 CE.

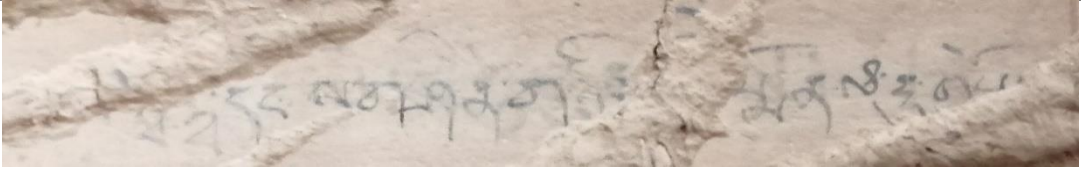
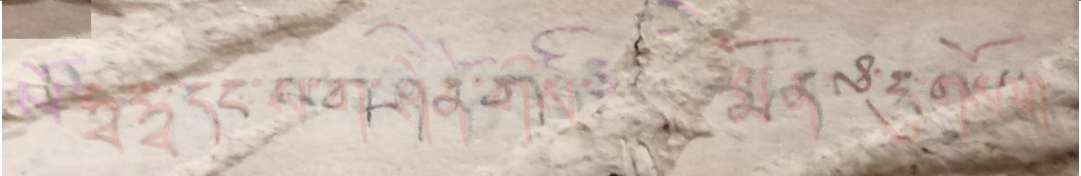
(lines 7 through 16); (2) offering various jewels, monuments, medicine, trees and flowers, mountains, clouds, and lanterns to all buddhas and bodhisattvas (lines 16 through 28); and (3) transferring the merit of offering to the vows of the buddhas dwelling in the world and extinguishing the sins (lines 28 through 32). Lastly, the *Wheel* evokes a *darani* spell and explains the merit of holding the spell (lines 32 through 36). In brief, the *Wheel*—although it begins with a repentance—focuses on offering, vowing, and chanting, that is, the three ritualistic activities similarly featured in the description of a “face-warming” consecration ritual. More than half the *Wheel* describes the various jewels and treasures to be offered to the Buddhist deities, as well as the vows to be made during the offering. Besides, this ritual text is also performative and vocal, as it includes a spell and repeats the vows.

For another, the languages used in both the Tibetan and the Chinese inscriptions similarly show a favor for luminosity. This linguistic choice gives us more hints on the expected effects of the “face-warming” ritual. The Tibetan inscription describes this ritual with two phrases that indicate light sources: *sbyan phyis* (“the eyes were dazzled”), which indicates a strong, brilliant light that could dazzle the eyes; and *zhal bsros* (“the face was warmed”), which implies fire or sunlight that could warm the face (RY). In comparison, the Chinese inscription also emphasizes the brilliance in the dharma field by elaborating on the jewelry lights. It repetitively uses *bao* 寶 (“jewel”) for almost every kind of offerings and describes the accumulative effects as “accumulated flames” and “dazzling lights.” The emphasis on luminosity is one of the reasons for the less common use of *zhal bsros*. And this emphasis is interestingly different from that of “eye-opening.” It seems that the former focuses on the external light sources that could animate the Buddhist images, whereas the latter focuses on the sight of the Buddhist images—which might be understood as internal light—that confirms its sacredness. Therefore, we may say that

there is a consistent effort in conveying the luminosity of the particular “face-warming” ritual in the selection of the Chinese sūtra and the composition of the Tibetan inscription.

3.6 Signature Line: Did a Contemporaneous Sūtra Scribe Write It?

Line 3

Photo	
Huang	ཐ་ཐ་དང་སག་ཤེན་...སློན་ལི་དུ་གསོལ།
Imaeda	ཐ་ཐ་དང་སག་ཤེན་...སློན་ལི་དུ་གསོལ།།
Ngodup & Zhou	སོ་སྐ་སྐ་དང་སག་(ས་ག་)ཤེན་གིས་(missing 2–3 letters) སློན་ལི་དུ་གསོལ། <i>So hwa hwa dang sag shen (sa ga shen) gis (missing 2-3 letters) smon lâ du gsol.</i>
Image	
English	So-hwa-hwa and Sag-shen [or Sa-ga-shen] made the prayer.

As Imaeda has pointed out, line 3 was written by a different hand from that used for lines 1 and 2. We can see in the photo that the writing style is less formal, more cursive, and that the letter size is significantly smaller. Thus, we must question to what extent the two people whose names are mentioned in this line were involved in the cave’s construction or renovation. In other words, is this a graffito written by some random visitors after the completion of the cave? Or was it written by someone else from the construction or manager’s team?

A key to this set of questions is a newly reidentified letter *hwa* in the first name mentioned. Huang and Imaeda both consider the first two letters in this line to be the identical

letter *tha*. The most legible parts of two letters are a triangle “z” in the each’s lower half, and the upper halves are damaged to different degrees. But upon close observation of the photograph, Ngodup points out that the second one, which is less damaged, is most possibly identified as a *hwa*. It has a horizontal, convex curve—“∩”—connected to the upper point of the triangle “z.” This curve is connected on the left end by a double-curve stroke that looks like a “3.” Together, the three-curve configuration resembles the radical *ha*, and the triangle would be the subscript *wa-su*. I would further suggest that the first letter is possibly a *hwa* as well. At first glance, it seems like a *tha*, as the convex curve “∩” seems to extend to the middle of the upper oblique side of the triangle. However, it is hard to tell whether they are connected from the photograph, since the extending part is so pale. Besides, one can see that a short, diagonal line “\” is unquestionably connected to the left end of the the convex curve “∩”. This leads me to ponder the possibility whether the short line was the trace of a “3” that has been damaged and plastered with a thick layer of clay. Thus, the letters are possibly *hwa hwa*.

In addition, in front of *hwa hwa*, there is a pointed joint of two strokes that indicates a mostly damaged letter. This letter could be any one of many possibilities, such as *sa*, *la*, *ma*, *pa pha*, or *ba*. One cannot tell which letter it is solely based on the inscription.

Who would this “X-hwa-hwa” be? Huang only proposes that “Sag-shen” would be a Sogdian, or at least a minority ethnic other than Tibetan, based on the last name *sag* (Chn: *suo* 索), but he was not able to find any name that would pronounce similar to “Tha-tha.” Now that we have updated the identification from “Tha-tha” to “X-hwa-hwa,” can we find more clue about this person? My answer is yes. In fact, I have found some similar names in the Tibetan manuscript *Sūtras from the Dunhuang Library Cave*. At least two sūtra scribes have “hwa-hwa” in their signatures. In table 2, I listed ten scribe signatures of “So-hwa-hwa” and four of “Hwaa-

hwa-hwa” in the French Dunhuang manuscript collections. We can infer that “hwa-hwa” was probably a title or generic reference, whereas “So” and “Hwaa” were the family names of the two scribes. Upon examining the writing styles of the manuscript signatures, one can see clearly how a medieval Dunhuang writer would write the letter *hwa* in the same way as shown the cave inscription. The particular way of configuring the radical *ha* and the subscript *wa-su* are especially evident in P.t.3595/215 and P.t.3880/226 by So-hwa-hwa. What’s more, it seems to me that even the calligraphic style of So-hwa-hwa in the vowel marks, *na-ro*, *gi-gu*, resembles the cave inscription more than Hwaa-hwa-hwa’s. If the visual similarity is evident, I wonder if it is possible to consider that So-hwa-hwa’s scribe signatures and the cave inscription were done by the same hand. If this is the case, then we can identify the damaged letter before *hwa-hwa* in the cave inscription as *so*.

What would be the further implication of this discovery? First, we could see that line 3 was written at the time or soon after the construction completion. The “hwa-hwa” signatures are all by sūtra scribes who involved in copying *the Mahayana Sūtra of the Essentials on Infinite Life* (Chn:*dacheng wuliangshou zognyao jing* 大乘無量壽宗要經; Tbt: *tse dpag tu mid pa zhes by aba theg pa chen po 'i mdo* ཆོ་དཔག་ཏུ་མིད་པ་ཞེས་བྱ་བ་ཐེག་པ་ཆེན་པོའི་མདོ།). As many scholars have pointed out, this sūtra-copying project took place during Ralpacan’s reign, more specifically, around the early 830s.²⁷ Second, we may infer that the cave construction and the

27. The transcription I used are from Zhang Yanqing ed., *Facang Dunhuang guzangwen chaojing tiji zonglu* 法藏敦煌古藏文抄經題記總錄 [A catalog of the inscription of Dunhuang ancient Tibetan sūtra manuscripts in the French collections] (Beijing: Zhongguo zangxue chubanshe, 2017). A study of the sūtra-copying individuals and institutions is Nishioka Soshu, “A List of the Scribes and Revisers of the Tibetan Versions of the <Wu-Liang-Shou-Tsung-Yao-Ching> in the Pelliot Collection,” *Journal of Indian and Buddhist Studies* (Indogaku Bukkyogaku

sūtra-scribing project had some kind of association and that this association could have been physical proximity, shared labor, or both. At the very least, there was some flexibility that has allowed a sūtra scribe, whose social status was presumably much lower than Hongbian's, to visit the cave temple and to leave marks there. Third, it is possible that the sūtra-copying project and the cave construction were in their own ways associated with the cult of Pure Land. The sūtra is a Tibetan version of the *Amitabha Sūtra*, which the Western Pure Land. The cave features the Seven Buddhas of the Eastern Pure Land. And the Chinese cave inscription is explicit about the vow of being reborn into the Pure Land.

4. Summary

First, Ngodup and I newly identified or reidentified more than 40 letters since Huang's canonical identification of some 116 letters, in addition to pointing out the approximate word count and potential content of the damaged parts. Together, they potentially reveal more information and increase the accuracy of interpretation.

Second, I reinterpreted many words as carefully as I could, ranging from the real name of the Tibetan king to the years, months, and even days of the cave construction, from the terms for temple architecture to that for Buddhist statues, and from the rhetorical, eulogistic phrases to the technical, ritual terms. More specifically, I have closely examined the terms for the consecration ritual; I discussed the “face-warming” process that possibly took place at Mogao Cave 365 by incorporating other textual and visual evidence. In these ways, I have sought to demonstrate the

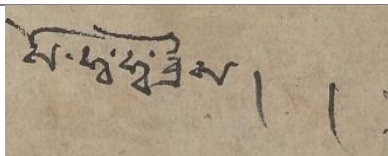
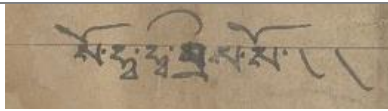
Kenkyū) 33, no. 1 (1984): 314–20. A brief review of scholarship on dating this set of sūtra manuscripts can be found in Sangji Dongzhi 桑吉東知, “Dunhuang zangwen xieben <dacheng wuliangshou zongyao jing> zhengli yanjiu de huigu yu zhanwang 敦煌藏文寫本《大乘無量壽宗要經》整理研究的回顧與展望” [Literature review of the collection and studies of the Dunhuang Tibetan manuscripts <the Mahayana Sūtra of the Essentials on Infinite Life>], *Zangxue Yanjiu*, no. 7 (2019): 101–8.

nuance of these local terms in comparison to the Tibetan and Chinese equivalents.

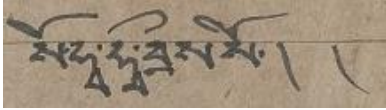
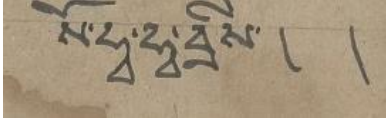
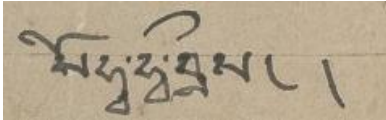
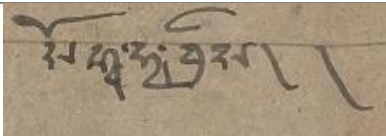
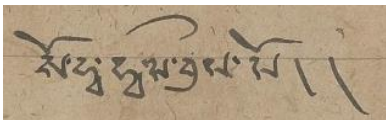
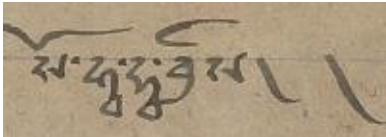
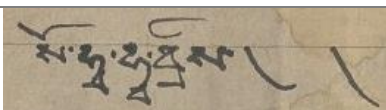
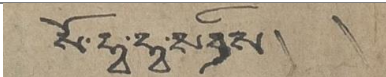
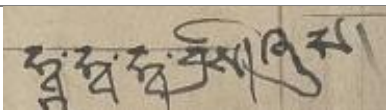
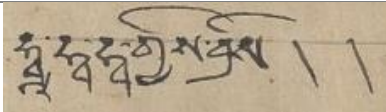
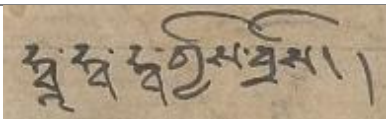
Third, I have suggested that the Tibetan inscription—despite having been written by two different hands—were written around the same time at the completion of the cave construction. In addition, I have also found material evidence in the Dunhuang Tibetan documents for the thesis that the inscription scribe(s), at least the one(s) who wrote line 3, might have been involved in a sūtra-copying project during Ralpacan’s reign. My assumption is that the cave construction project and the sūtra-copying project probably belong to a larger picture of the social interconnectivity and the prevalent cult of Pure Land in the late-Tibetan period at Dunhuang.

Fourth, I have discussed the ways in which the adjacent Chinese inscription corresponds to the Tibetan inscription. Rather than the existing approaches of oversimplifying the T-shape format as political symbolism or neglecting the connection due to the different content, I have proposed an alternative approach, namely, recognizing the elaborate and performative descriptions of offering in the Chinese ritual text and recontextualizing them in the consecration ritual in the cave space, which is the subject matter of the Tibetan votive text.

Table 2. “Hwa-hwa” scribe’s signatures in some Dunhuang Tibetan manuscripts.

Manuscript No.	Inscription (Image from IDP)	Transcription in....	Source ²⁸
P.t.3508/212		སོ་ལྷ་ལྷ་བྱིས། <i>so hwa hwa bris</i>	p. 209
P.t.3595/215		སོ་ལྷ་ལྷ་བྱིས་སོ། <i>so hwa hwa bris so</i>	p. 209

28. The transcriptions are adapted from Zhang, *Facang Dunhuang guzangwen chaojing tiji zonglu*, as I noticed that a few are inaccurate when being compared to the IDP images. Nishioka’s exhaustive study of the scribes’ names confirms my assumption that there are and only are two “hwa-hwas” in the Pelliot Collection. He listed nine entries for So-hwa-hwa and eight for Hwaa-hwa-hwa. See Nishioka, “A List of the Scribes and Revisers,” 315.

P.t.3670/218		སོ་ལྷ་ལྷ་བྲིས་སོ། <i>so hwa hwa bris so</i>	p. 266
P.t.3692/218		སོ་ལྷ་ལྷ་བྲིས། <i>so hwa hwa bris</i>	p. 274
		སོ་ལྷ་ལྷ་བྲིས། <i>so hwa hwa bris</i>	
P.t.3745/220		སོ་ལྷ་ལྷ་བྲིས། <i>so hua hua bris</i>	p. 291
		སོ་ལྷ་ལྷ་བྲིས་སོ། <i>so hwa hwa bris so</i>	
		སོ་ལྷ་ལྷ་བྲིས། <i>so hwa hwa bris</i>	
P.t.3880/226		སོ་ལྷ་ལྷ་བྲིས། <i>so hwa hwa bris</i>	p. 342
P.t.3881/226		སོ་ལྷ་ལྷ་བྲིས། <i>so hwa hwa bris</i>	p. 343
P.t.3698/219	No available image	ཧ་ལྷ་ལྷ་བྲིས་བྲིས། <i>ha hwa hwa gyis bris</i>	p. 276
P.t.3875/224		ལྷ་ལྷ་ལྷ་བྲིས། ལྷ། <i>hwa hwa hwa bris shul</i>	p. 341
P.t.3897/226		ལྷ་ལྷ་ལྷ་བྲིས་བྲིས། <i>hwa hwa hwa gyis bris</i>	p. 347
P.t.3710/219		ལྷ་ལྷ་ལྷ་བྲིས་བྲིས། <i>hwa hwa hwa gyis bris</i>	p. 280

Appendix D

Analysis of the Wu Sengtong Stele Text

This analysis examines the material remains and manuscript copy of the Wu Sengtong stele, or “Stele of Monk Controller Surnamed Wu.” The stele text provides the most detailed accounts of the biography and cave construction activities of a Dunhuang monk official Wu Hongbian (d. 862). The text was originally inscribed on a stone stele of which only two fragments are known to modern scholars. In 1907 and 1908, Aurel M. Stein and Paul Pelliot, respectively, saw the stele fragments in the porch of Mogao Cave 16 and reproduced them in photographs.¹ In October 1904, an ink rubbing of it was sent by the magistrate of Dunhuang County, Wang Zonghan 王宗翰, to a Chinese literatus-official, Ye Changchi 葉昌熾, who called it the “Tubo stele” (*tubo bei* 吐蕃碑).² Ye recognized the honorific title of the Tibetan King Ralpacan (r. 802–38) and addressed the historical value of the stele in *Yushi* 語石 (On stone inscriptions), which was published in 1909.³ Fortunately, the text has been copied and

1. Stein, *Ruins of Desert Cathay*, vol. 2, plate 189; Pelliot, *Les grottes de Touen-Houang*, 4, plate 354c.

2. Ye Changchi 葉昌熾, *Yuanlu zhai riji chao* 緣督廬日記抄 [Copies of the diary of the Yuanlu Studio] (Shanghai: Yinyin lu, 1933), 11:142–43. Digitized by the Chinese Text Project and available at <https://ctext.org/library.pl?if=gb&file=22069&page=143&remap=gb> (Accessed December 29, 2021).

3. Ye Changchi, *Yushi* 語石 [On stone inscriptions] (Published by Ye, 1909), 1:89. Digitized by the Chinese Text Project and available at <https://ctext.org/library.pl?if=gb&file=31100&page=89&remap=gb> (Accessed December 29,

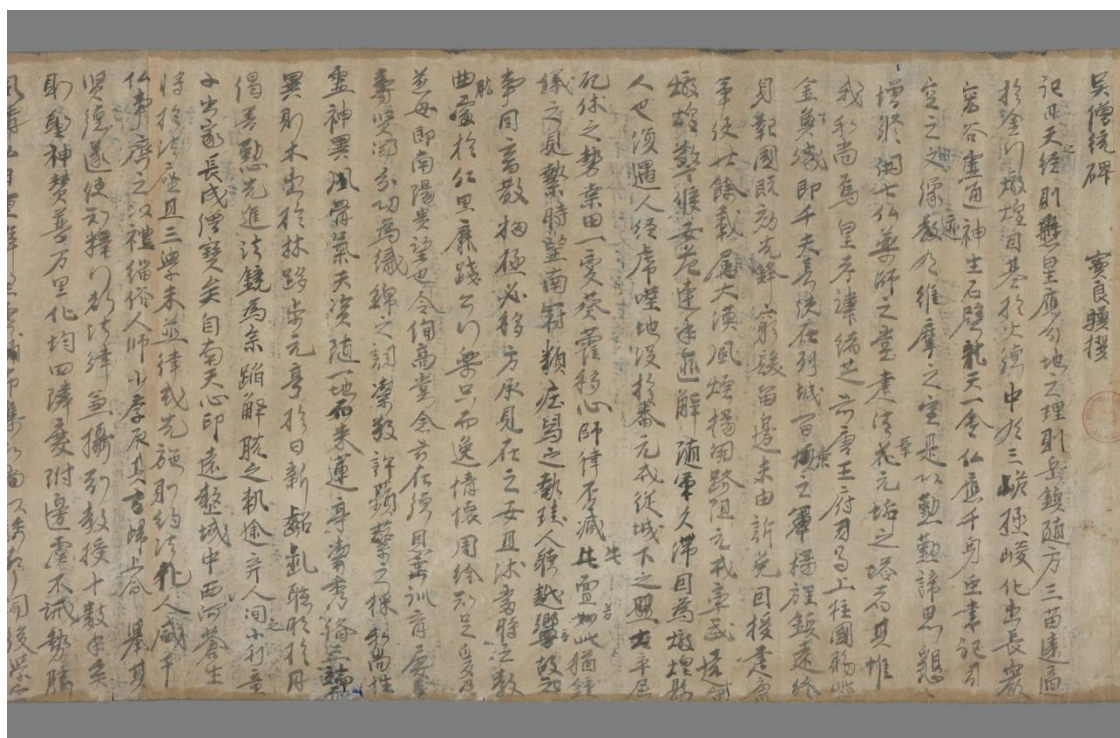
preserved in a manuscript scroll (figure D-1). This report provides (1) an updated transcription of the text in a Dunhuang manuscript P. 4640, which was a transcription of the now-lost stele in circa 900 CE; (2) a theoretical reconstruction of the now lost stele—made in circa 834 CE—based on historical photographs, transcription, and the manuscript text; and (3) my translation of the full text based on the manuscript version.

1. Digitized Images of the Manuscript from IDP and My Transcription

The transcription of the manuscript text is based on Zheng and Zheng, *Dunhuang bei ming zan jishi*, 273–75. The photographic copy of the manuscript is taken from the digital library “gallica” of Bibliothèque nationale de France, of which the manuscript is currently in repository.⁴ I identified a few characters and substituted some characters with their less common versions (*yiti zi* 異體字) as appeared in the manuscript.

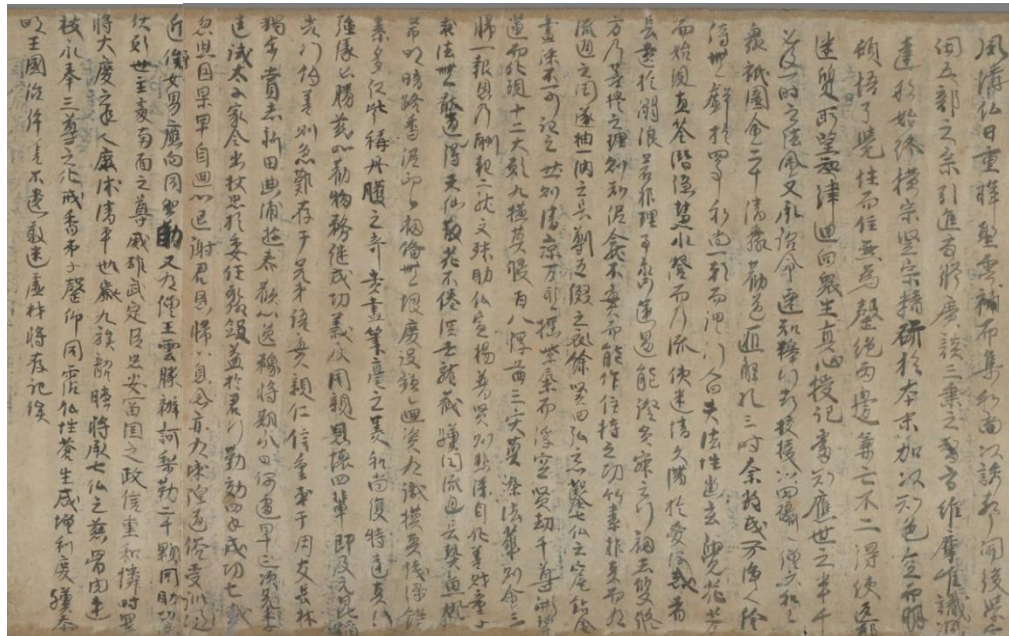
2021); Li Jianhong 李劍虹, “Lun dunhuang shibao ji Ye Changchi yuandulu riji chao 論敦煌失寶及葉昌熾《緣督廬日記鈔》” [On the disseminated treasures of Dunhuang and the diary of the Yuandu Cottage by Ye Changchi], *Dunhuang Yanjiu* 64, no. 2 (2000): 37.

4. gallica webpage: <https://gallica.bnf.fr/ark:/12148/btv1b8304060b>, accessed April 9, 2023.



- 吳僧統碑 竇良驥撰
- 1 吳僧統碑 竇良驥撰
 - 2 記曰天之經則懸星應分地之理則岳鎮隨方三百遠適
 - 3 於金行燉煌因基於火德中有三峽極峻化出長巖
 - 4 宏谷虛通神生石壁龍天一會仙應千身匪書記司
 - 5 空之文像迹有維摩之室是以懃懃諦思懇々
 - 6 增修開七仙藥師之堂建法華元垢之塔者其惟
 - 7 我和尚焉皇考諱緒芝前唐王府司馬上柱國賜紫
 - 8 金魚袋即千夫長使在列城百乘之軍揚旌鎮遠終
 - 9 身報國既効先鋒窮發留邊未由訴免因授建康
 - 10 軍使廿餘載屬大漠風煙楊閑路阻元戎率武遠守
 - 11 燉煌警候安危連年匪解隨軍久滯因為燉煌縣
 - 12 人也復遇人經虎噬地沒於蕃元戎從城下之盟士卒屈
 - 13 死休之勢桑田一變葵藿移心師律否臧屯亶若此猶鐘
 - 14 儀之見繫時望南冠類庄象之執珪人聽越音故知
 - 15 事因畜散物極必移方承見在之安且沐當時之教
 - 16 曲肱處於仁里靡踐公門樂只而逸情懷周給知足爰及
 - 17 慈母即南陽貴望也令伺高堂念茲在德恩垂訓育慶
 - 18 壽賢聞分功為織錦之詞潔敬許蘋蘩之採和尚性
 - 19 靈神異風骨氣天資隨一地而來蓮亭潔秀備三端而
 - 20 異則木出於林路步元亨於日新韶齟聰明於月
 - 21 偈善懃先進法鏡為宗蹈解脫之軌途棄人間之小利童
 - 22 子出家長成僧寶矣自南天心印遠整域中河西蒼生
 - 23 將移法座且三學未並律或先施則約法化人盛于
 - 24 仙事齊之以禮緇俗人師小學承其旨歸上命舉其
 - 25 賢德遂使知釋門都法律兼攝副教授十數年矣
 - 26 則聖神贊普万里化均四鄰慶附邊虞不誠勢勝

Figure D-1. The Wu Sengtong text section from P. 4640, Recto, 27 × 747.3 cm. a) photographic copy, source: gallica.bnf.fr/ Bibliothèque nationale de France. b) transcription by author.



- 27 風清仏日重暉聖雲布集和尚以誘聲聞後學宏
- 28 開五部之宗引進前修廣談三乘之旨維摩唯識洞
- 29 達於始終橫宗豎宗精研於本末加以知色空而明
- 30 頓悟了覺性而住無為罄絕兩邊兼亡不二得使返邪
- 31 迷質所望知津迴向眾生真心授記當知應世之半千
- 32 必及一時之法會又承詔命遷知釋門都教授以四攝々僧六和々
- 33 眾祇園會二千清眾勸道匪解於三時奈數成一万淨人給
- 34 侍無虧於四事和尚一朝而謂門人曰夫法性幽玄覺花芳
- 35 而始現真筌潛隱慧水澄而乃流使迷情久滯於愛河惑者
- 36 長遺於溺浪若非理事齊運過能澄員寂之門福志雙修
- 37 方乃菩提之理則知泥龕不實而能作住持之功竹素非真而有
- 38 流通之用遂抽一納之長鞘五綴之衣餘豎四弘之心鑿七仏之窟
- 貼金
- 39 畫彩不可記之然則清涼万聖搖紫氣而浮空賢劫千尊開碧
- 40 蓮而化現十二大願九橫莫侵百八浮岫三灾莫染法華則會三
- 41 歸一報恩乃酬起二親文殊助仏宣揚普賢則悲深自化善財童子
- 42 求法無厭得道天仙散花不倦經书龍藏驥用流通長熱魚燈
- 43 希明暗路香泥印印福備無垠慶設頻頻迴資有識摸真淺綠飾
- 44 素多紅紫稱丹腹之奇貴畫筆毫之美和尚復特達真門
- 45 強緣必勝慈心勸物務繼成功義及周親恩懷四輩即及元昆蹈
- 46 光門傳善則急難存于兄弟語實親仁信重成于朋友長林
- 47 獨步賞志新田典浦遊春歡心逸豫將期永日何遽早亡次兄季
- 48 連試太子家令出杖忠於委任聚劍益於君門勤効四年成功七載
- 49 忽思因果早自迴心退謝君恩歸心息念亦有城隍道俗受訓門人
- 50 近侍女男應向同僧助又有僧王雲勝辦訶梨勒二千顆同助功德
- 51 伏願世主處南面之尊威雄武定臣忠安富國之政信重和憐時豐
- 52 將大慶之年人康沐清平世歲九族韶睦將承七仏之慈骨肉連
- 53 枝永奉三尊之化戒香弟子罄仰同霑仏性蒼生咸增利度驥忝

Figure D-1, continued.

2. Theoretical Reconstruction of the Now-Lost Stele

Both Pelliot, and a Chinese archaeologist, Chen Wanli 陳萬里 (1892–1969), have encountered the remains of the Wu Sengtong stele at the Mogao caves in the first quarter of the twentieth century.⁵ They have not yet conducted any studies on the relationship between these remains and the manuscript text.⁶ For example, although Pelliot noticed and photographed the two fragments placed in front of Caves 16 and 17 (figure D-2)—that is, the cave ensemble thought to be designed by or for Hongbian—he did not further discuss if the stele was related to the construction of the cave ensemble. Chen recorded them only as stone carvings from the Tibetan period but did not specify which cave it is associated with. His transcription is as follows:

（缺）教授和尚/（缺）金魚袋即千夫/（缺）路阻元戎率武遠/（缺）一變葵藿
移心師/（缺）當時之教曲肱處於仁/（缺）織錦之詞潔敬許蘋蘩之/（缺）偈善勤
先進法鏡為宗蹈解/（缺）先施則約法化人盛於（缺）/（缺）聖神贊普萬裏化均
四鄰慶/（缺）維□□洞達於始終橫/（缺）教記當知應世/（缺）揚/（缺）/（缺）

5. Chen Wanli 陳萬里, *Xixing riji* 西行日記 [Diary of journey to the West] (Beijing: Pushe, 1926; republished in Lanzhou: Gansu renmin chubanshe, 2002), 138.

6. The only exception is the IDP catalog that mentions “Un fragment de la stèle gravée a été découvert dans la grotte 16.” It is important that it mentioned the location—in Cave 16. Note that the Pelliot photograph shows the stele fragments in the porch of the antechamber of Cave 16. The catalog does not identify which stele it is or what historical connections there were between the stele and the manuscript.

念亦/ (缺) 圀之政/ (缺) 增利度/ (缺) 潛達 (缺)/ (缺) 戒惠□惠⁷



Figure D-2. Two fragments of a stone stele in the porch of Mogao Cave 16 (Pelliot No. 163). Photo by Charles Nouette in 1908. After Pelliot, *Les grottes de Touen-houang*, vol. 4, plate 354c.

In the early 1960s, Japanese scholars Ishihama Juntarō 石濱純太郎 (1888–1968) and Fujieda Akira 藤枝晃 (1911–98) saw the stele in Dunhuang County School (敦煌縣學).⁸ Shortly afterward, Fujieda proposed a theoretical reconstruction of the stele by comparing the manuscript copy (P. 4640) and the two stele fragments (Figure D-3). He also found a text in Dunhuang manuscript S.779v that seems to be the title of this stele: “Dabo Shazhou shimen jiaoshou heshang Hongbian xiu gongde [bei] 大蕃沙州釋門教授和尚洪誓修功德[碑]” ([stele

7. Transcription in Chen, *Xixing riji*, 138. Chen has partly recognized 率 (□十), 鏡 (金□), 記 (□巳), used 仁 for 人, did not specify a line behind 揚.

8. Fujieda, “Tonkō sembutsudō no chūkō,” 92–93.

recording] the merit of Hongbian, Buddhist Preceptor of Shazhou of the great kingdom of Tibet, constructing a cave). The manuscript also records the compiler of that merit record to be “Dabo guozijian boshi Dou Liangji 大蕃國子監博士竇良驥” (Dou Liangji, broadly learned scholar of the National Imperial Academy of the great kingdom of Tibet), supporting the argument that the title recorded is the original title of the “Wu Sengtong stele.”⁹ After these important advancements in the study of this stele, the whereabouts of the two stele fragments has become mysterious. In 1996, Dunhuang historian Ma De reported that the fragments of this stele were in the collections of the Dunhuang Academy.¹⁰ However, I was unable to locate the stele fragments in 2021–22.

Fujieda’s reconstruction is accurate in general, but it does not reflect the materiality of the stele. Based on Pelliot’s photograph of the stele fragments placed in the porch of Cave 16 and Chen’s transcription and the accepted original title, I reexamined the manuscript copy and the legible text’s locational relationship and reconstructed the stele’s material form (figures D-4, D-5).

9. Fujieda, “Tonkō sembutsudō no chūkō,” 92–98.

10. Ma, *Dunhuang Mogao ku shi yanjiu*, 98.

記曰天之經則懸星應分地之理則岳鎮隨方三苗遠適於金門燉煌因基於火德中有三峴極峻化出長巖宏谷虛通神生石壁龍天一舍

仏應下身虫書記司空之文像迹有維摩之室是以敷敷諦思懇懇增修開七佛藥師之堂建法華无垢之塔者其惟我教授和尚矣

皇孝諱緒芝前唐王府司馬上柱國賜紫金魚袋即千夫

長使在列城百乘之軍楊旌鎮遠終身報國既効先鋒窮髮留邊末由訴免因授建康軍使廿餘載屬大漠風煙陽關路阻元戎率武遠守燉煌警候安危連年匪懈隨軍久滯因為燉煌縣人也復遇人經虎噬地沒於蕃元戎從城下之盟士卒屈死休之勢桑田一變葵藿移心師

律否域屯竄若此猶鍾儀之見鸞時望南冠類莊鳥之執珪人聽越馨故知事因畜散物極必移方承見在之安且沐當時之教曲肱處於仁

里靡踐公門樂只而逸情懷周給知足爰及慈母即南陽貴望也令聞高堂念茲在德恩垂訓育慶賢聞分功爲織錦之詞潔敬許蘋蘩之

採和尚性靈神異氣骨天資隨一地而來蓮亭潔秀備三端而異則木出於林跂步元亭於日新韶訖聰明於月偈善勤先進法鏡爲宗蹈解

脫軌途棄人間之小利童子出家長成僧實矣自南天心印遠整域中河西蒼生將於法座且三學未並律或先施則約法化人盛于

10

佛事齊之以禮緇俗人師小學承其旨歸上命舉其賢德遂使知釋門都法律兼攝行教授十數年矣則聖神贊普万里化均四隣慶

附遊虞不誠勢勝風清佛日重暉聖雲補集和尚以誘聲聞後學宏開五部之宗引進前修廣說三乘之旨維摩唯識洞達於始終橫

宗暨宗精研於本末加以知色空而明頓悟了覺性而住無爲警絕兩邊兼亡不二得使返邪迷質所望知律迴向衆生真心授記普知應世

之半千必及一時之法會又承詔命遷知釋門都教授以四攝一僧六和三衆祇園會二十清衆勸道匪解於三時奈成一萬淨人給侍無

虧於四事和尚一朝而謂門人曰夫法性幽玄覺花芳而始現眞筌潛隱慧水澄而乃流使迷情久滯於愛河惑者長遭於瀾浪若非理事齊運

15

邇能證員寂之行福志雙修方乃菩提之理則知泥龜不實而能作住持之功竹素非眞而有流通之用遂抽一柄之長制五纏之餘暨四弘之

心鑿七佛之窟點金畫綵不可記之然則清涼萬聖搖紫氣而浮空賢劫千尊開碧蓮而化現十二大願九橫莫侵百八浮圖三灾莫染法華

則合三歸一報恩乃酬起三親文殊助佛宣揚普賢則悲深自化善財童子求法無厭得道天仙散花不倦經書龍藏寶流通長蘇魚燈希

明暗路香泥印印福備無垠慶設頻頻迴資有識模眞淺綠筋素多紅皆稱丹醴之奇貴盡筆毫之美和尚復特達眞門強緣不勝慈心勸物

務繼成功義及周親恩懷四輩即及元昆滔光門傳善則急難存於弟兄語實親仁信重于朋友長林獨步賞志新田曲浦遊春歡心邊豫

20

將期永日何遽早亡次兄季連試太子家令出狀忠於委任聚斂益於君門勤効四年成功七載忽思因果早自迴心退謝君恩歸心息念亦

有城隍道俗受訓濟人近事女男應向同助又有僧王雲勝辨詞裂勒二千願同助功德伏願世主處南面之尊威雄武定臣忠安富國之政

信重和隣時豐將大慶之年人庶沐清平歲九族韶睦將承七佛之慈骨肉連枝永奉三尊之化戒香弟子嚮仰同嚮佛性蒼生感增利慶

驥明王國治許善不遺敢述虛材將存化俟

24

戒惠
潛達

Figure D-3. Fujieda Akira's theoretical reconstruction of the Wu Sengtong stele inscription. Yellow areas highlight the remaining texts on the two fragments. After Fujieda, "Tonkō sembutsudō no chūkō," 93–94. Image modified by author.



Figure D-4. Theoretical reconstruction of the now-lost Wu Sengtong stele with a stele head showing at the bottom. Image by author.

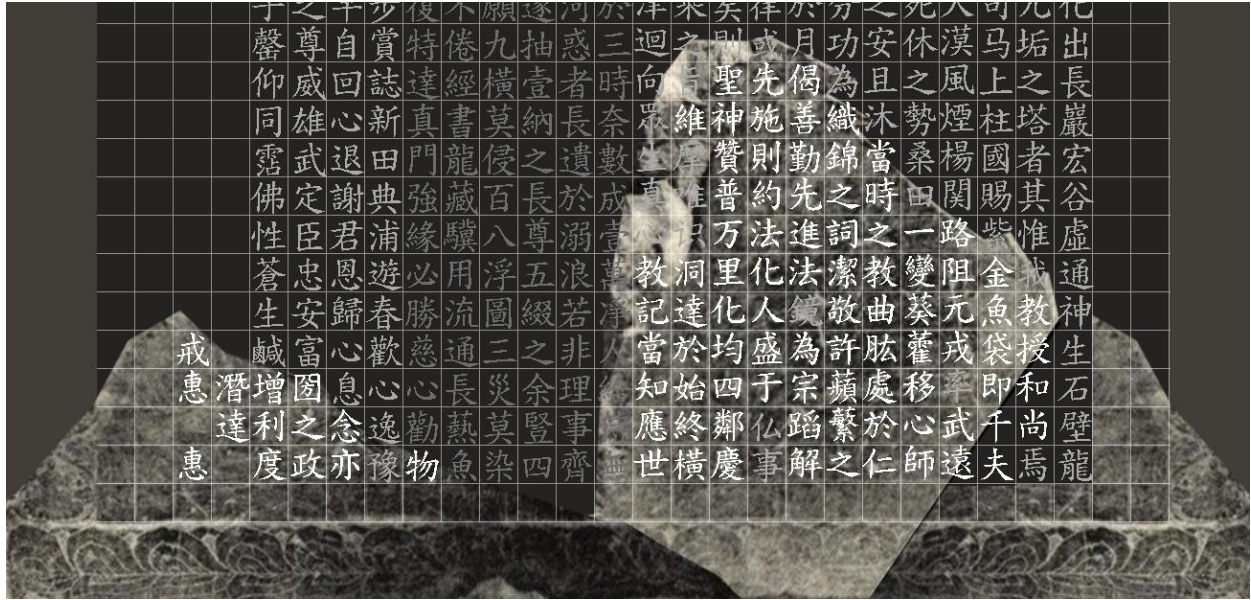


Figure D-5. Details of figure D-4, showing how the reconstruction matches Chen’s transcription and Pelliot’s photo. Image by author.

I have listed below a comparison of the remaining stele text and the manuscript text. The characters that are on both the fragmented stele and the manuscript are marked by a double underline; those that appear only on the stele are underlined; those that appear on the manuscript and contradict the texts on the stele are marked by a dotted underline; those that appear only on the manuscript and cannot be verified from the stele are shown in normal format. The stele lines are numbered, and the manuscript lines are indicated by virgule (/).

- 0 大蕃沙州釋門教授和尚洪晉修功德[碑](吳僧統碑) 大蕃國子監博士竇良驥撰/
- 1 記曰天之經則懸星應分地之理則岳鎮隨方三苗遠適/於金行燉煌因基於火德中有三
峴極峻化出長巖/宏穀虛通神生石壁龍
- 2 天一會仏應千身虫書記司/空之文像跡有維摩之室是以懃懃諦思懇懇/增修開七仏藥
師之堂建法華元垢之塔者其惟/我教授和尚焉
- 3 皇考諱緒芝前唐王府司馬上柱國賜紫/金魚袋即千夫
- 4 長使在列城百乘之軍揚旌鎮遠終/身報國既効先鋒窮發留邊未由訴免因授建康/軍使
廿餘載屬大漠風煙楊関路阻元戎率武遠

- 5 守/燉煌警候安危連年匪解隨軍久滯因為燉煌縣/人也復遇人經虎噬地沒於蕃元戎從城下之盟士卒屈/死休之勢桑田一變（變）葵藿移心師
- 6 律否臧屯直若此猶鐘/儀之見繫時望南冠類莊象之執珪人聽越音故知/事因畜散物極必移方承見在之安且沐當時之教/曲肱處於仁
- 7 里靡踐公門樂只而逸情懷周給知足爰及/慈母即南陽貴望也令徇高堂念茲在德恩垂訓育慶□/壽賢聞分功為織錦之詞潔敬許蘋蘩之
- 8 採和尚性/靈神異風骨氣天資隨一地而來蓮亭潔秀備三端而/異則木出於林跣步元亨於日新齟齬聰明於月/偈善勤（勤）先進法鏡為宗蹈解
- 9 脫之軌途棄人間之小利童/子出家長成僧寶矣自南天心印遠整域中河西蒼生/將移法座且三學未並律或先施則約法化人盛於/仏事
- 10 齊之以禮緇俗人師小學承其旨歸上命舉其/賢德遂使知釋門都法律兼攝副教授十數年矣/則聖神贊普萬里化均四鄰慶
- 11 附邊虞不誠勢勝/風清仏日重暉聖雲布集和尚以誘聲聞後學宏/開五部之宗引進前修廣談三乘之旨維□□□（摩唯識）洞/達於始終橫
- 12 宗豎宗精研於本末加以知色空而明/頓悟了覺性而住無為罄絕兩邊兼亡不二得使返邪/迷質所望知津迴向眾生真心教（授）記當知應世
- 13 之半千/必及一時之法會又承詔命遷知釋門都校授以四攝攝僧六和和/眾祇園會二千清眾勸道匪解於三時奈數成一萬淨人給/侍無
- 14 虧於四事和尚一朝而謂門人曰夫法性幽玄覺花芳/而始現真筌潛隱慧水澄而乃流使迷情久滯於愛河惑者/長遺於溺浪若非理事齊
- 15 運過能澄員寂之門福志雙修/方乃菩提之理則知泥龕不實而能作住持之功竹素非真而有/流通之用遂抽一納之長劔五綴之衣餘豎四
- 16 弘之心鑿七仏之窟貼金/畫彩不可記之然則清涼萬聖搖紫氣而浮空賢劫千尊開碧/蓮而化現十二大願九橫莫侵百八浮囂三災莫染
- 17 法華則會三/歸一報恩乃酬起二親文殊助仏宣揚普賢則悲深自化善財童子/求法無厭得道天仙散花不倦經書龍藏驥用流通長熱魚
- 18 燈/希明暗路香泥印印福備無垠慶設頻頻迴資有識摸真淺綠飾/素多紅紫稱丹腹之奇貴畫筆毫之美和尚復特達真門/強緣必勝慈心勸物
- 19 務繼成功義及周親恩懷四輩即及元昆蹈/光門傳善則急難存于兄弟語實親仁信重成于朋友長林/獨步賞志新田典浦遊春歡心逸豫
- 20 將期永日何遽早亡次兄季/連試太子家令出杖忠於委任聚劍益於君門勤効四年成功七載/忽思因果早自迴心退謝君恩歸心息念亦
- 21 有城隍道俗受訓門人/近侍女男應向同僧助又有僧王雲勝辦訶梨勒二千顆同助功德/伏願世主處南面之尊威雄武定臣忠安富國（國）之政

- 22 信重和憐時豐/將大慶之年人康沐清平世歲九族韶睦將承七仏之慈骨肉連/枝永奉三
尊之化戒香弟子罄仰同霑仏性蒼生鹹增利度
- 23 驥忝/明王國治許善不遺敢迷虛材將存記矣
- 24 □□潛達/
- 25 □□戒惠□惠

In general, the two versions match well. Yet there are a couple of places where the revisions seem to be intentional. First, in stele line 2, the protagonist is referred to as “*jiaoshou* *heshang* 教授和尚” or “instructional preceptor” in the stele text but as “*heshang* 和尚” or “preceptor” in the manuscript version. One can associate the removal of “*jiaoshou*”—the protagonist’s official title during the Tibetan period—here with the use of “*sengtong*”—his title during the Guiyijun period. They both reinforce the thesis that the manuscript text was not an exact copy but an adaptation of the stele text. This thesis may help us further discuss the reasons why the biography of the protagonist’s father seems to be altered in the manuscript copy. This alternation is indicated by the significantly fewer than normal characters of stele line 3.

Second, in stele line 21, the word *country* is written as “囡” in the stele text but as “國” in the manuscript version. The former is one of the special characters invented and used under the reign of female Emperor Wu (Wu Zhao 武曩, r. 690–705). Although exceptions exist, scholars usually attribute texts with these special characters to the early Tang. It is possible that the stele text, at least the votive’s concluding part, was a customized text based on an earlier example or template.

3. Translation

In this section, I have subdivided the main text into ten sections based on the contents. The text starts with an introduction of (1) the site and (2) the protagonist and the construction projects. It then traces back to (3) the father and (4) the mother of the protagonist. They provide backgrounds for a detailed discussion of (5) the Buddhist career and accomplishments of the protagonist. Following this general timeline until the moment of the cave project, the text offers (6) an anecdotal sermon in which the protagonists justified the cave project. Then, the text gives a detailed account of (7) the execution of the cave project and, with some transitions, (8) the siblings of the protagonist and other helpers in the construction projects. Finally, the text records (9) the vows made upon the completion of the cave project and (10) the author's voice. The dictionaries I consulted include the *Digital Dictionary of Buddhism*, *Foguang da cidian* 佛光大辭典, *Foxue da cidian* 丁福保佛學大詞典, and *Handian* 漢典.¹¹

3.1 Title and Author

大蕃沙州釋門教授和尚洪誓修功德 (吳僧統碑)

[Stele recording] the merit of Hongbian, Buddhist Preceptor of Shazhou of the great kingdom of Tibet, constructing a cave. Also known as the stele of Wu (du-)sengtong

11. *Digital Dictionary of Buddhism*: <http://www.buddhism-dict.net/ddb/> (Accessed June 10, 2020). *Foguang da cidian* 佛光大辭典 [Foguang dictionary of Chinese Buddhist terms], 8 vols., Ciyi 慈怡 et al., eds. (Beijing: Beijing tushu guan chuban she, 1990). *Foxuen da cidian* 佛學大詞典 [A dictionary of Chinese Buddhist terms], Ding Fubao 丁福保, ed., (Shanghai: Shanghai shudian, 2015). *Handian* 漢典: <https://www.zdic.net/> (Accessed June 10, 2020).

([chief] monk controller).

大蕃國子監博士竇良驥撰

Dou Liangji, broadly learned scholar of the National Imperial Academy of the great kingdom of Tibet, wrote.

3.2 Introduction of the Site

This section begins the text by introducing the general location of Dunhuang and the numinous landscape and historical features of the Mogao caves.

記曰：	It is thus recorded:
天之經則懸星應分，	Responding to the axes of the heaven, the constellations are positioned.
地之理則岳鎮隨方。	According with the order of the earth, the mountains and towns are oriented.
三苗遠適於金行，	The three Miao ethnic tribes traveled afar to the course of Metal, ¹²
燉煌因基於火德。	Dunhuang thereby is founded on the virtual of Fire.
中有三峽極峻，	In the middle [of Dunhuang], there is the [Mount.] Sanwei [lit., the Mountain of Three Ranges], which is extremely precipitous.
化出長巖。	There, large rocks grow out.
宏穀虛通，	Grand valleys link up the voids.
神生石壁。	Spirits live in the rocky cliffs.
龍天一會，	Naga [kings] and heavenly beings form an assembly.
仏（佛）應千身。	Buddhas correspond with a thousand bodies.
蟲書記司空之文，	
像跡有維摩之室。	

12. *Samiao* 三苗 may refer to an ancient country in central south China or the minor ethnic groups in China. It was supposed to be in the Jiangnan region, between the Dongting and Poyang Lakes. This place name seems to be irrelevant to Dunhuang, which is located in northwest China. Yet there are two possible ways to associate them. First, this sentence was to offer a general view of the geography in China, so it includes other places under this five-courses (*wuxing*) orientation. Second, they allude to the multiethnicity in Dunhuang, as the *Book: Classics of Shun* (书: 舜典) says “to expel the Three Miaos to Sanwei [the Three Ranges] (窜三苗于三危).”

Seal scripts [lit., worm script] record the text of Sikong.¹³
Traces of images subsume the Chamber of Vimalakirti.¹⁴

3.3 Introduction of the Protagonist and the Construction Projects

This section introduces the construction projects associated with the protagonist Hongbian. It points out that the master was the one who initiated the “Hall of Seven Buddhas of Medicine Master” and erected the “Pagoda of the Undefined Lotus.”

是以懃懃諦思，	The one who as such diligently thought over,
懇懇增修；	sincerely repaired more, ¹⁵
開七仏（佛）藥師之	excavated the Hall of the Seven Medicine Buddhas [Skt:
堂，	Bashajaguru],
建法華元（無）垢之	and constructed the Pagoda of the Undefined Lotus, ¹⁶
塔者，	
其惟我(教授)和尚	must be nobody but my [instructional] preceptor! ¹⁷
焉。	

13. *Chongshu* 虫书, also called *chongzhuan* 虫篆 is a calligraphy style. This style is based on the *zhuan* 篆书 style (seal script), but *chongshu* strokes are more meandering like the twisting bodies of worms. An official title of the “Minister of Public Works,” or a person surnamed Sikong. In this context, it may refer to a Dunhuang local and a Minister of Public Works in the Western Jin dynasty, Suo Jing 索靖 (239–303). Born to a clan of officers, Suo was known as a celebrated calligrapher in medieval Dunhuang. His scribing accomplishments at the Mogao caves has been mentioned in other Dunhuang texts, such as the *Record of the Mogao Caves*.

14. In the manuscript version, *xiangji* 像迹 (“the trace of images”) was written as *xiangjiao* 像教 (“the teaching of the image” first, then the *jiao* character was crossed out and changed to *ji*).

15. *Xiu* 修 has many meanings: restoring, reconstruction, refurbishment, revision building works, compiling texts, and even cultivating one’s inner qualities.

16. *Fahua* 法華 is abbreviated after *Miaofa lianhua jing* 妙法蓮華經 or *the Scripture of the Lotus Blossom of the Sublime Dharma* (Skt: *Saddharma Puṇḍarīka Sūtra*). Since this sūtra is often referred to as the *Lotus Sūtra*, here *fahua* is translated as “the lotus.” The characters written in the manuscript are somewhat strange. *Hua* 華 was once written in the simplified version 花 then crossed out and corrected. *Wugou* 无垢 was written as *yuangou* 元垢, which would mean the opposite, that is, “the original contamination.”

17. *Jiaoshou* 教授 is present only in the stele version. It is a monk official’s name during the Tibetan period, often translated as “instructor” or “instructional preceptor.”

3.4 Biography of the Father of the Protagonist

This section provides a biography of Wu Xuzhi, who was the father of the protagonist. By narrating his military career, the text explains why this clan, originally from inland China, was relocated in Dunhuang. The manuscript copy must have removed some content about Xuzhi's background that was originally presented in the stele. In addition, the hostility toward Tibetans in this section is radically different from the rest of the text. This indicates that this section was composed at a different time, most probably after the Tibetan occupation.

皇考諱緒芝，	His respectful deceased father was named [Wu] Xuzhi.
前唐王府司馬上柱國	At the former Tang princely establishments of the vice supreme pillar
賜紫金魚袋，	of state, bestowed purple robe and golden fish-shape bag,
即千夫長。	[Xuzhi] held a position as the leader of a thousand men,
使在列城，	He was sent to the frontier towns,
百乘之軍。	[and joined] an army of a hundred vehicles.
揚旌鎮遠，	He fought and suppressed revolts in the remote regions,
終身報國。	and dedicated his entire career to the service of the nation.
既効先鋒，	Since serving as a vanguard in the army,
窮發留邊，	he poorly was ordered to stay at the borders.
未由訴免。	And no negotiation or exemption was allowed.
因授建康軍使廿餘	As such, he had been appointed to be an envoy of the Jiankang Army
載。	[the army of constructing peacefulness] for more than twenty years. ¹⁸
	He belonged to the wind and smoke of great deserts.

屬大漠風煙，

18. According to historical records in *Yuanhe junxian tuzhi* 元和郡县图志 (Pictorial gazetteer of the counties of Yuanhe), vol. 40, the Jiankang Army was a Tang army established by a minister, Wang Xiaojie 王孝杰, in 695 CE. This army, comprising fifty-two hundred men and five hundred horses, was set in the Hexi region, two hundred *li* from Ganzhou 甘州 (present-day Zhangye in Gansu Province). The purpose of the army was to protect the distant land between Ganzhou and Suzhou 肃州 (present-day Jiuquan in Gansu Province) from invasions of neighboring states. Nonetheless, this area was occupied by Tibetans, which forced the Jiankang Army to move westward to Dunhuang. Ganzhou and Suzhou fell to Tibetan occupation around 766 CE. Zheng and Zheng suggest that Xuzhi was in the Jiankang Army in 746–66 CE. See Zheng and Zheng, *Dunhuang bei ming zan jishi*, 284n8.

楊（陽）關路阻。 元戎率武， 遠守燉煌。 警候安危， 連年匪解， 隨軍久滯， 因為燉煌縣人也。 復遇人經虎噬， 地沒於蕃。 元戎從城下之盟， 士卒屈死休之勢。 桑田一變， 葵藿移心。 師律否臧， 屯亶若此。 猶鐘儀之見繫， 時望南冠。 類莊象之執珪， 人聽越音。 故知事因畜（蓄） 散，	The paths to Yangguan Pass [the pass of the sun] were obstructed. ¹⁹ The commanders leading the warriors, all traveled afar to defend Dunhuang. [Despite that], they alertly monitored the conditions of safety and danger. In successive years [the danger] were not released. Having been detained there with the army for a long time, [Xuzhi] thus became a resident of the Dunhuang County. Once again, he passed through [difficulties such as] human hanged and devoured by tiger. The land was lost to the Tibetans. Commanders followed the treaty signed under coercion. Soldiers yielded the tendency of fighting to death. The general world [lit., a field of mulberry trees] once changed, the loyal followers [lit., sunflowers and purple giant hyssop] moved their minds. Whether the military discipline was bad or good, The difficult situation was as such. ²⁰ Just like Zhong Yi who was arrested, one looks to the southern-style headgear. ²¹ Like Zhuang Xiang [Xin] who held a jade tablet, people heard the songs of the Yue State. ²² Therefore, one knows things disperse because of having been gathered,
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19. Yangguan pass is a mountain pass that was fortified by Emperor Wu of the Western Han Dynasty around 120 BC and used as an outpost in the colonial dominions adjacent to ancient China. It is located approximately 70 km (43 mi) southwest of Dunhuang.

20. *Tundan* 屯亶 is the same as *zhunzhan* 屯亶.

21. Zhong Yi 鐘儀 was a musician at the court of the Chu state during the Spring and Autumn period. According to *Zuozhuan*, Zhong was captured by the Zheng state and sent to the Jin state. The Lord of Jin noticed that Zhong was wearing southern-style headgear and asked about his background and ordered him to play a song. Zhong played a southern song and replied decently. The Lord of Jin praised Zhong's four virtues: kindness, credibility, loyalty, and intelligence.

22. Zhuang Xiang 庄象 was known as Zhuang Xin 庄辛. Two events in his career were mentioned in the prose. First, Zhuang persuaded the lord of Chu to be alert and self-disciplined, but the lord did not listen until the state of Qin defeated his state. The lord then regretted and gave a jade tablet to Zhuang, showing his respect and reliance on Zhuang. The second event was earlier in Zhuang's career, when he met the lord at his ordination ceremony. Zhuang wanted to hold the Lord's hands but was refused. He then told the lord a story of the Song of the Yue Boatman, in which another prince of Chu greeted a boatman of Yue after hearing his song. The lord was moved and eventually offered Zhuang his hand in reconciliation.

物極必移。	and things of extremities must change.
方承見在之安，	At the time he accepted the current peace.
且沐當時之教。	Moreover, he immersed himself in the teachings of the time [Buddhism?].
曲肱處於仁里，	He lived a humble but reposeful life [lit., bending one's forearms to make a pillow] in the living quarters of kindness.
靡踐公門；	He did not step into the gates of the officials.
樂只而逸情懷，	He was happy and released,
周給知足。	helping others and being self-content.

3.5 Brief Biography of the Mother of the Protagonist

This section, in contrast to the long preceding section, briefly introduces the mother of the protagonist. It introduces the mother's clan, the familial and personal virtues. In comparison to the father, who was an immigrant, the mother appears to have been born to a local prestigious clan.

爰及慈母，	Then, as for the kind mother [of Hongbian],
即南陽貴望也。	She was from a prominent [Zhang] clan of Nanyang. ²³
令佻（聞）高堂，	Good fame was her parents,
念茲在德。	who were often reminded of because of their virtue.
恩垂訓育，	Receiving their kindness, she was brought up and educated.
慶□壽賢聞。	To be celebrated is her longevity and erudition.
分功為織錦之詞，	She composed phrases as rich as the brocade, sharing merits and credits. ²⁴
潔敬許蘋蘩之採。	She sincerely offered pure food in [ancestral] worship, fulfilling to the wifely duties. ²⁵

23. According to Zheng, this is the Zhang 張 clan. The Zhang clan of Nanyang was the clan of the first ruler, Zhang Yichao, of the Guiyijun period. Zheng and Zheng, *Dunhuang bei ming zan jishi*, 286n15.

24. *Fengong* 分功 could refer to any of three meanings: a strategy in chess that distributes the forces to places where the strength is weak, labor specialization, or the sharing of merits and credits.

25. *Pin* 蘋 (four-leaf clover) and *fan* 蘩 (wormwood) are two kinds of edible herbs that were often used in worship ceremonies. They represent the general offering in worship. This term also refers to the ability of following the rites of worship and the wifely obligations in general.

3.6 Biography of the Protagonist

This section, the longest in the text, narrates the protagonist's Buddhist career from childhood to the time when the text was composed. It includes the period before the protagonist's official appointment, the period when he was Buddhist chief preceptor and vice instructor, and the period when he was vice instructor. It does not indicate the later period when he became monk controller. This suggests that at least this section was composed during the Tibetan period, most possibly contemporaneous to the completion of the Seven Buddha Cave (834 CE). The most elaborate discussions of Buddhist teachings of this section appear in the third subsection—the protagonist's vice instructor period. It is interesting to further consider how a learned lay scholar in ninth-century Dunhuang would have composed a piece with so many Buddhist technical terms.

3.6.1 Childhood. This subsection introduces the protagonist by praising his inherent talents and intelligence and that he was strongly attracted to Buddhism since early childhood.

和尚性靈神異，
風骨氣天資。

隨一地而來，

蓮亭潔秀。

備三端而異，

則木出於林。

The preceptor has a spiritual nature and an exceptional spirit,
a vigorous character and an inherent talent.

He came with [all good characters that grow from] the One Ground
[i.e., the Buddha Nature of all living beings].²⁶

Like a lotus, he was upright, clean and graceful.

He possessed the Three Tips and excelled,²⁷

26. *Yidi* 一地 refers to the buddha nature of all living beings—as all the plants grow out of the one ground, so all good character and works grow from the one Buddha-nature.

27. *Sanduan* 三端 (“three tips”) refers to the tip of the brush of a literatus, the tip of the sword of a warrior, and the tip of the tongue of a speaker.

跢步元亨於日新，
韶齟聰明於月偈。

善懃先進，
法鏡為宗。
蹈解脫之軌途，
棄人間之小利。
童子出家，
長成僧寶矣。

like a tree that outstands the entire forest.²⁸

He moved forward on the Great Way in constant progress.²⁹

In his early childhood, he was sensitive to Chan Buddhist verses [lit., the Verse of the Moon].³⁰

While he was good at diligently [learning from all] the advanced, he took the mirror-like Buddha wisdom as the fundamentals.³¹

He sought to follow the path of detachment,³²

abandoning the trivial benefits in the mundane world.

He has left home since childhood,

and grown into a respectful Buddhist monk.³³

3.6.2. *Early career (before ca. 820 CE)*. This subsection briefly introduces Hongbian's

Buddhist training and service in local communities before he was appointed to any official

position. According to the text, the protagonist's focus was monastic regulations. As beginners

accepted his teaching, authorities noticed and recommended him.

自南天心印遠整域
中；

Since the mind-seal of Southern India from afar renovated the
[Chinese] world,³⁴

28. A more common expression is *mu xiu yu lin* 木秀於林.

29. *Yuanheng* 元亨 is another way of saying *datong* 大通, which means the great way, the way of understanding the principles of things.

30. *Tiaochen* 韶齟 refers to early childhood (around six or seven years old), a period when the deciduous teeth fall and the permanent teeth grow. *Yueji* 月偈 refers to the poetic verses in Chan Buddhism in which the moons, often in plural, are often discussed as a metaphor for the ultimate and conventional truths and the instructional languages.

31. *Fajing* 法鏡 (“dharma mirror”) is a metaphor in Buddhist teaching or wisdom. It conveys that the dharma, as bright and clear as a mirror, can shine through all things. It reflects the buddha-wisdom.

32. *Jietuo* 解脫 (Skt. *apavarga*, *adhimukti*; *adhimukta*) in Buddhism means detaching from suffering, afflictions, illusion, and transmigration. It denotes nirvana and awakening to reality.

33. *Sengbao* 僧寶 (“sangha treasure”) usually refers to the community of monks and nuns taken as one of the Three Treasures, but here it refers to an individual in the sangha (community).

34. *Nantian* 南天 is an abbreviation of 南天竺, southern India. It was one of the five regions of ancient India. Here it refers to the attributed founder of the Chan lineage, Bodhidharma (d. 536),

河西蒼生，	[For] the common people in the Hexi region, ³⁵
將移法座。	he was going to move his dharma seat. ³⁶
且三學未並，	When the Three Disciplines has not yet [been learned] all at once, ³⁷
律或先施。	the Vinaya may be foremost applied.
則約法化人，	Then he committed to law and regulations for educating the people.
盛於仏事。	doing plentiful Buddhist works. ³⁸
齊之以禮，	Making them achieve good manners and rites,
緇俗人師。	he was a teacher of both the monastic and the laic.
小學承其旨歸(規)，	The elementary learners followed the principles and norms he set,
上命舉其賢德。	While the authorities recommended him for the virtue he possessed.

3.6.3. *Vice instructor period (821–32)*. This subsection highlines the protagonist’s versatile teaching and efficacy when he held the official positions of Buddhist chief preceptor and vice instructor under the reign of Tibetan King Ralpacan (r. 815–38).³⁹ After introducing the official titles and the favorable prosperity of the political and religious atmospheres, the

who was born in south India and went to China during the Northern and Southern dynasties. *Xinyin* 心印 (Skt. *citta-mudrā*, *hṛn-mudrā*), “mind-seal,” indicates the direct approach of Chan Buddhism, asserting independence from language. This term is also seen in the *Platform Sūtra*. *Yuzhong* 域中 refers to the entire world in the traditional Chinese conception. Here the parallel words of *nantian* and *yuzhong* show a relativist view of the Buddhist geography.

35. Hexi 河西 (“land west of the [Yellow] River”) refers to present-day Gansu Province and the western part of the Shaanxi Province.

36. *Fazuo* 法座 refers to the venue for a dharma lecture. This indicates that he was going to open a venue for Buddhist lectures for people in the Hexi region.

37. *Sanxue* 三學 refers to the three general aspects of Buddhist practice: precepts (Chn: *jie* 戒; Skt: *śīla*), learning through moral discipline to guard against the evil consequences of error by word, deed, or thought; meditation (Chn: *ding* 定; Skt: *samādhi*), learning through meditative concentration; and wisdom (Chn: *hui* 慧; Skt: *prajñā*), the study of Buddhist doctrine. It also refers to the Tripitaka, including the Vinaya (*lü* 律), the sūtras (*jing* 經), and the śāstras (*lun* 論).

38. *Foshi* 佛事 refers to the work that a Buddha does, including delivering the Buddha’s teachings, saving sentient beings, and attaining enlightenment, and to Buddhist services, prayers, and worship. Here this word may have both meanings.

39. For the chronology of the protagonist’s official positions, see Peng, “Dunhuang shouren Hexi du sengtong,” 157–63.

subsection elaborates on the protagonist's capability of preaching various Mahayana Buddhist teachings and guiding numerous learners to follow the Middle Way.

遂使知釋門都法律，	Thereupon, he has been appointed Buddhist chief preceptor [<i>shimen dufaliu</i>] ⁴⁰
兼攝副教授十數年 矣。	and, at the same time, acted as vice instructor [<i>fu-jiaoshou</i>] for more than ten years.
則聖神贊普万里化 均，	Then the sagely and spiritual kings of Tibet prevailed over [the land of] ten thousand <i>li</i> . ⁴¹
四鄰慶附，	The neighboring states in the four directions celebrated and adhered [to the Tibetans].
邊虞不誠，	The borders needed no warns,
勢勝風清，	The situations were flourishing, and the customs were purifying.
仏日重暉，	The sun-like Buddha[’s teaching] again radiated, ⁴²
聖雲布集。	The sagely clouds disseminated and accumulated. ⁴³
和尚以誘聲聞後學，	The preceptor, for the purpose of guiding the primary disciples and the junior learners, ⁴⁴
宏開五部之宗；	widely lectured about the principles of the Five Groups. ⁴⁵

40. *Faliu* 法律 is a monk-official rank. It refers to the preceptor at an ordination ceremony who teaches ritual to the receiver of the precepts.

41. The Tibetan kings include Trisong Detsen (r.755–97), Muné Tsenpo (r. c. 797–99), Sadnalegs (r. c. 800–15), and Ralpacan (r. 815–38). It was during the reign of Ralpacan that Hongbian rose to the aforementioned positions and managed some prominent cave construction at the Mogao Caves, so this part probably is a praise of Ralpacan foremost.

42. *Fori* 佛日 is a metaphor for the Buddha. It conveys that the Buddha's teaching is compassionate and broad, that it can make sentient beings awakened, and that it is like the sun whose light penetrates the darkness and shines over the earth.

43. *Shengyun* 聖雲 “sagely clouds” here refers to the words and teaching of Buddhism.

44. *Shengwen* 聲聞 (skt: *srāvaka*) refers to one of the three kinds of disciples of the Buddha. The other two are *yuanjue* 緣覺 (skt: *pratyeka-buddha*) and *pusa* 菩薩 (skt: *bodhisattva*).]

45. *Wubu* 五部 refers to the four truths (*sidi* 四諦), which are understood as being subsumed in the Path of Seeing (*jiandao* 見道), plus the Path of Cultivation (*xiudao* 修道). The four noble truths include 1) the truth of suffering (Skt: *duḥkha*, Chn: *kudi* 苦諦), 2) the truth of the arising of suffering (Skt: *samudaya*, Chn: *jidi* 集諦), 3) the truth of the extinction of suffering (Skt: *nirodha*, Chn: *miedi* 滅諦), the truth of the path to the extinction of suffering (Skt: *mārga*, Chn: *daodi* 道諦).

引進前修，	[For the aim of] introducing previous practitioners [into Mahayana Buddhism], ⁴⁶
廣談三乘之旨。	he broadly discussed the purposes of the Three Vehicles. ⁴⁷
維摩唯識，	The <i>Vimalakīrti</i> [<i>Sūtra</i>] and [the teaching of] mind-only, ⁴⁸
洞達於始終。	he thoroughly understood them from beginning to end [by him].
橫宗豎宗，	Teachings of the Buddhas across spaces and from all times [lit., the horizontal and vertical ancestries], ⁴⁹

46. *Qianxiu* 前修 refers to the practitioners from the previous periods. It is possible that here it refers to Buddhist disciples of previous masters or practitioners of other religions.

47. *Sancheng* 三乘 (Skt. *tri-yāna*) are the programs of practice in Buddhism for the purpose of crossing the cyclic existence (*saṃsāra*) to the shores of nirvana. As taught by the Mahayana schools, three programs of practice that are suitable for different capacities of sentient beings. These are the vehicles of *śrāvaka* 聲聞, *pratyekabuddha* 緣覺 and bodhisattva 菩薩. The first two of these are categorized by the Mahāyāna schools as lesser vehicles or *hīnayāna* (*xiaocheng* 小乘) and are referred to as the “two vehicles (*er’cheng* 二乘).” Mahāyāna texts such as the *Śrīmālā-sūtra* (*Shengman jing* 勝鬘經) and the Lotus *Sūtra* 法華經 offer extensive analysis of the relative capacities of these three, with the Lotus *Sūtra* asserting that all three vehicles are eventually subsumed by the One Vehicle (*yicheng* 一乘).

48. The two nouns seem to belong to different categories, but they share the same pronunciation for the first character, *wei*. So perhaps they are juxtaposed here for the rhyme and for they reveal a diversity in Mahayana texts and teachings. *Vimalakīrti* (Weimojie 維摩詰) refers to a learned layman who lived in Vaiśālī, India, and was renowned for his profound understanding of Mahāyāna. The *sūtra* named after him, the *Vimalakīrti Nirdeśa Sūtra* (Weimojie-jing 維摩經), was a popular text in China as well as in Dunhuang since the Northern and Southern dynasties. It even became a very influential text in the Chan School. For the influence of the *Vimalakīrti* on the *Platform Sūtra*, see Peter N. Gregory, “The Platform *Sūtra* as the Sudden Teaching”, in Morten Schlütter and Stephen F. Teiser, eds, *Readings of the Platform Sūtra* (New York: Columbia University Press), 2012: 83–88. *Weishi* 唯識 (Skt. *viññapti-mātratā*, *viññapti-mātra*, *citta-mātra*) a seminal component of the thought of the school of Yogācāra, the “Yoga Practice” school of Indian Buddhism. The view of *weishi* includes that nothing is cognized independently from the transformations occurring within our own consciousness; in other words, everything we become aware of is “nothing but the transformations of consciousness.” For an introduction to Yogacara school and its discussion on consciousness, see Paul Williams and Anthony Tribe, *Buddhist Thought: A Complete Introduction to the Indian Tradition* (New York: Routledge, 2000): 154–60.

49. *Hengzong* 橫宗 (lit., horizontal ancestry) and *shuzong* 豎宗 (lit., vertical ancestry) are not common terms in Buddhism, and I do not know exactly what they mean. Like *weimo* and *weishi*, they seem to share an identical character so might be used for rhyme and a bi-dimensional sense

精研於本末。	he proficiently studied them from the fundamental to the incidental.
加以知色空而明頓悟，	Moreover, he knew form and/is emptiness and illuminated the sudden awakening. ⁵⁰
了覺性而住無為。	He understood the awakening nature and abided in the unconditioned status. ⁵¹
罄絕兩邊，	He extinguished [the view of] both extremes, ⁵²

of the Buddhist teaching. Perhaps some popular use of the Chinese language and some common terms of grouping Buddhas may shed some lights. This pair connotes the special versus temporal dimensions, in other words, “synchronic” versus “diachronic.”

50. *Sekong* 色空 can be read in two ways. First, *se* 色 (Skt: *rūpāni*) refers to the form of things, while *kong* 空 (Skt: *śūnyatā*) means all constituents of reality are dependently originated and devoid of own being. They denote the conventional and the ultimate truths of any and everything. Second, it is an abbreviation of “色即是空” or “Form is Emptiness,” a well-known phrase in the *Heart Sūtra* and other Perfection of Wisdom (skt: *prajnaparamita*) texts. It means that all things are deprived of their self-nature. In both cases, *kong*, as one of the key terms in East Asian Buddhism, does not mean void, but it is a negation of self-nature, or in other words, an independent, determinable, permanent existence. For a general introduction to *se* and *kong*, see Paul Copp, “A First Guide to East Asian Mahayana Buddhist Thought,” University of Chicago course handout, version 10.26.2016: 1. For an early Huayan view of *kong*, see Robert M. Gimello, “Apophatic and Kataphatic Discourse in Mahayana: A Chinese View,” *Philosophy East and West* 26, no. 2 (April, 1976): 120–21. For a discussion of the two terms’ slight twist on native concepts of phenomena and illusion in pre-Buddhist Chinese texts like *Zhuangzi*, see Stephen H. West, Pauline Yu, and American Council of Learned Societies, *Ways with Words: Writing about Reading Texts from Early China* (Berkeley: University of California Press, 2000): 126–29. *Dunwu* 頓悟 refers to the kind of awakening attained immediately and instinctively, without reliance on dualistic, goal-oriented constructs. As Copp pointed out during our group reading section of this text on March 11, 2020, it is interesting to see this term in a ninth-century Dunhuang text, since it was a relatively late invention in the more east part of China.

51. *Juexing* 覺性 refers to the enlightened mind free from all illusion. The mind as the agent of knowledge, or enlightenment. *Wuwei* 無為, lit., “No Action”, refers to an uncompounded and uncreated status that which is not arisen on the basis of causes and conditions. According to Charles Muller, *wuwei* is another name for nirvana or *tathatā*. This was originally an important technical term in Daoism. In the Daoist context, *wuwei* refers to a non-active, passive, spontaneous and returning-to-nature status. It means letting things take their own course without human intervention.

52. *Liangbian* 兩邊 (lit., “two sides”) refers to a relative view in which Buddhas and sentient beings, oneself and the world, are considered as two opposite sides. This is a view that is thought to be incomplete by Buddhists, who should hold the middle way (i.e., eightfold paths) and the four noble truths.

兼亡不二。	and as well destroyed [the view of] nonduality. ⁵³
得使返邪迷質，	He managed to let those who were deluded give up their evil ways, ⁵⁴
所望知津。	and to let those who were searching recognize the right way.
迴向眾生，	He transferred [the merits] to all sentient beings, ⁵⁵
真心授記。	and assured them of the mind of real faith. ⁵⁶
當知應世之半千，	He must have known [the ways of] accordingly responding to half a thousand in the world. ⁵⁷
必及一時之法會。	And he surely has reached to the Buddhist assembly of the time.

53. *Bu'er* 不二 (Skt. *advaita*), lit, “no two,” is also known as *li liangbian* 離兩邊, lit., “detaching from two sides,” and thus is an antonym of the above-mentioned term *liangbian*. *Bu'er* refers to a holistic view which emphasizes the principle of the One Truth. That is, the universal Buddha nature does not discriminate Buddhas from sentient beings, oneself from the world. There is no definite distinction between one and the other.

54. *Fanxie* 返邪 is an abbreviation of the expression *fanxie guizheng* 返邪歸正. It means “to give up evil ways and return to the right” instead of “to return to the evil”— the literal translation of the two-character word.

55. *Huxiang* 迴向, lit., “turning around and directing toward,” means turning the merit that one achieved through cultivation and practice and let it go to the direction one aspires. Transferring merits to all sentient beings refers to giving to others the merit, virtue, and good roots one achieved through cultivation.

56. I understand this phrase to be an object (*zhenxin*)-verb (*shouji*) construction. It denotes the assurance of a true mind. *Zhenxin* 真心 means 1) a pure, undefiled mind, and 2), as a synonym of *xinxin* 信心, the mind of real faith in true Pure Land. *Shouji* 授記, is often translated as “assurance (of future enlightenment).” It also means “assuring the disciples’ spiritual achievements or the place in which they would be reborn in the next life.” It derives from the primary meaning of the word, which is “analyzing teachings, explaining and commentating on the Buddhist teachings in a question-and-answer format.”

57. *Yingshi* 應世, in a Buddhist context, denotes “a buddha or bodhisattva responds appropriately to the individual circumstances and abilities of sentient beings.” *Banqian* 半千 means half a thousand, but here should not be understood as a literal quantity. It might allude to half of a world in Buddhist terminology, as the cosmos is often known as “a great chiliocosm or universe of the three kinds of thousands of worlds” (*sanqian daqian shijie* 三千大千世界), comprising *xiaoqian* 小千 (a small chiliocosm), *zhongqian* 中千 (a medium-length chiliocosm); *daqian* 大千 (a great chiliocosm).

3.6.4. Chief instructor period (832–current, that is, the time when the text was originally

composed). This subsection discusses how the protagonist, when holding the position of

Buddhist chief instructor, was successful in leading the sangha and the lay community.

又承詔命，	Thereupon, having received an imperial edict,
遷知釋門都校（教）	he was promoted to Buddhist chief instructor [<i>shimen du jiaoshou</i>]
授。	
以四攝攝僧，	He directed the sangha by four means of containing, ⁵⁸
六和和眾。	and harmonized with the assembly by means of six conformities. ⁵⁹
祇園會二千清眾，	[Just like those who attended] the Buddhist assembly at the Jetavana
	Garden, two thousand undefiled [monastic] followers [of
	Hongbian] ⁶⁰
勸道匪解於三時。	preached the way non-negligently at the three times. ⁶¹
奈數成一萬淨人，	[Just like those who served at Buddhist monasteries] in the City of

58. *Sishe* 四攝 (Skt. *saṃgraha-vastu*) means the four methods that bodhisattvas employ to approach and save people: charitable offerings (Skt: *dāna*, Chn: *bushi* 布施), loving words (Skt: *priyavacana*, Chn: *aiyu* 愛語), helpfulness or beneficial conduct (Skt: *arthakṛtya*, Chn: *lixing* 利行), and working together (Skt: *samānārthatā*, Chn: *tongshi* 同事).

59. *Lihe* 六和 refers to the six ways (conformities, unifications) that Buddhist practitioners should live in harmony and be sensitive and caring toward each other, according to which practitioners should be unified in their respectful deportment (*shenhe* 身和), chanting (*kouke* 口和), purpose (*yihejing* 意和敬), practices of purity (*jiehejing* 戒和敬), view (*jianhe* 見和), and benefits (*lihe* 利和), which refers to profit (*li* 利), deeds (*xing* 行), discipline (*xue* 學), and generosity (*shi* 施).

60. Jetavana (“Jeta’s Wood” or “Jeta’s Grove”) refers to the Jetavana Garden (Skt: Jetavana Vihāra, Chn: Zhiyuan Jingshe 祇園精舍).

61. *Sanshi* 三時 refers to the three seasons of spring, summer, and autumn in a year or the three periods of morning, afternoon, and evening in a day. In Buddhist contexts, it could mean the three epochs of the Buddha’s teaching: the period of the true dharma (*zhengfa* 正法), the period of the semblance dharma (*xiangfa* 像法), and the end of dharma (*mofa* 末法). It also refers to the three periods of Buddha’s teaching (*sanshi jiao* 三時教), which may denote turning, illuminating, and maintaining the dharma wheel or the teaching of existence, emptiness, and the middle way, according to different texts and schools. Here we can simply take *sanshi* to be the three seasons in a year or three periods in a day, which indicates the frequency and regularity of the sangha’s works.

給侍無虧於四事。 Vārāṇasī, ten thousand laypeople [under his leadership]⁶²
provided services without lacking any of the four matters.⁶³

3.7 An Anecdotal Sermon to Warrant the Cave Construction Project

This section discusses the protagonist's reasons for commissioning the cave and pagoda projects. Rhetorically, he seems to claim a more sophisticated way of understanding the merit of building caves. That is, niches, caves, images, and texts, as media, allow one to ponder the ultimate truth that is otherwise ungraspable. The several messages that this anecdote sought to convey are, in my view, as follows:

- 1) There are the concealed absolute truth and the revealing conventional truth.
- 2) Excessive conventional truth traps people in desire and affliction.
- 3) One should balance their understanding and practices of both the absolute and the conventional.
- 4) One should understand unportable structures and portable artifacts in this sense. That is, they are illusory (conventional), yet they have functions.
- 5) A function of the unportable media is holding, while that of the portable media is

62. *Jingren* 淨人 (Skt: *kalpiya-kāraka*) refers to the lay people who serve in the Buddhist monasteries. *Naishucheng* 奈数成 might be an abbreviation of the transliteration of the city of Vārāṇasī, often translated as *bolonaisi-cheng* 波羅奈斯城. Vārāṇasī, present-day Benares, was the capital of the country of Vārāṇasī, one of the sixteen major states of ancient India. It was here in Sarnath (Luye Yuan 鹿野苑) where Śākyamuni first taught the content of his enlightenment experience to the original five disciples.

63. *Sishi* 四事 refers to the four necessities of a monk: clothing, food, bedding, and medicine (or herbs). Another set is dwelling, clothing, food, and medicine.

transmitting.

和尚一朝而謂門人
曰：

“夫法性幽玄，
覺花芳而始現；
真筌潛隱，
慧水澄而乃流。
使迷情久滯於愛河，

惑者長遺於溺浪。
若非理事齊運，
過能澄[澄]員[圓]寂
之門？

福志[智]雙修，
方乃[悟]菩提之理。
則知泥龕不實，
而能作住持之功；

竹素非真，
而有流通之用。”

One day, the preceptor told the disciples:

“While dharma nature is profound and abstruse,⁶⁴
the flower of awakening emits aroma and becomes visible.⁶⁵
While the words of reality are concealed and secret,⁶⁶
the water of wisdom is clearing and then flowing.⁶⁷
[The flow] let the deluded minds be obstructed for long in the river of
desire,⁶⁸

and the disturbed minds get lost in the drowning waves.
If not equally mastering principle and phenomena,⁶⁹
how can one ascend to the door of perfect extinction?

Having doubly practiced merit and wisdom,⁷⁰
only then one could apprehend the principle of bodhi.⁷¹
Thus, one knows clay niches are not substantial,
but they are able to exert themselves holding [the Buddha’s

64. *Faxing* 法性 (Skt. *dharmatā*) refers to the true nature of things, reality as complete in itself and not changed according to conditions.

65. *Juehua* 覺花 or 覺華 is a metaphor of the true wisdom. The awakening of one’s wisdom is analogous to the blooming of a flower.

66. *Zhenquan* 真筌 (also written as 真詮) means the commentaries or treatises on reality. *Quan* 筌 is bamboo fish trap and is usually placed under water. So here the two words *zhenquan* and *huishui* seem to be corresponding with each other in the images they provide.

67. *Huishui* 慧水 is another metaphor of wisdom. Wisdom that is able to wash away the defiled afflictions is analogous to water that can clean things.

68. *Ai’hai* 愛河 is a metaphor of desire. It means the river of desire in which man are drowned.

69. *Li* 理 and *shi* 事 are paired terms that refer to the absolute truth (*zhendi* 真諦) and the conventional truth (*sudi* 俗諦), which together are known as the twofold truth. *Li* refers to the view of reality that transcends ordinary speech, dualistic logic, and linguistic constructions, while *shi* refers to common or ordinary statements, as if phenomena were real.

70. *Fuzhi* 福智 (“merit and wisdom”) comprises the two essentials for Buddhist practice and enlightenment.

71. *Puti* 菩提 (Skt: *bodhi*) means wisdom or awakening.

teachings].⁷²
Bamboo and silk[-based texts and images] are not real,
but they have the function of circulating [the teachings].”⁷³

3.8. Execution of the Cave Construction Project

This section describes how the project was executed. It includes the financial resource, the name of the cave, the iconographical programs, the multiple functionalities, the ceremonial activities, and a praise of the project’s artistic achievement.

3.8.1. This subsection indicates that Hongbian saved personal expenses to financially prepare for the project—the Seven Buddha Cave.

遂抽一納之長， 剗五綴之衣。	Thereupon, he took benefit from a patched monastic robe, ⁷⁴ and saved [the expenses on] clothing of five decorations [as funding for the cave project].
餘豎四弘之心， 鑿七仏之窟。 貼金畫彩，	Additionally, he set his mind on the four great vows, ⁷⁵ And carved the cave of seven buddhas. [Images that are] gilded with gold and painted with colors,

72. *Zhuchi* 住持 means “to maintain,” “to hold firmly to,” especially “to preserve the teachings.” I rendered it as “to hold” because it similarly has a dual meaning depending on whether the verb takes an object. When it is used as an intransitive verb, it means “to last.” In the context, it could mean that the clay niches are enduring in form and material. When it is used as a transitive verb, it means “to maintain something,” “to accommodate something.” In the context, it could mean that the clay niches can contain the images, maintain them intact, and even maintain a field for Buddhist assemblies.

73. *Liutong* 流通 means to flow continuously, without interruption; to circulate widely in society; and to spread abroad and permeate, especially with regard to the transmission and spread of the Buddha’s teachings. Thus we know that both *zhuchi* and *liutong* may indicate the object to be the Buddha’s teachings.

74. *Na* 納 means a robe, as in *nayi* 纳衣, a patchwork robe that reuses fabrics. It is used to demonstrate the humble material needs of the monks.

75. The four great vows are a set of vows of a buddha or bodhisattva in East Asian Mahayana Buddhism. It usually includes a vow to save all living beings without limit, to put an end to all afflictions and delusions however numerous, to study and learn all methods and means without end, and to become perfect in the supreme buddha law.

不可記之。

Nobody is capable of recording them all.

3.8.2. This subsection is an ekphrasis of the images or pictorial programs in the cave. It vividly describes the subject matters as if they are expected to be animated: thousands of buddhas and bodhisattvas, hundreds of pagodas, scenes of the *Bhaiṣajyaguru Sūtra*, the *Lotus Sūtra*, and the *Sūtra of Repaying Kindness*, the Bodhisattvas Manjusri and Samantabhadra, Sudhana and heavenly beings.

然則清涼萬聖，

搖紫氣而浮空。

賢劫千尊，

開碧蓮而化現。

十二大願，

九橫莫侵。

百八浮圖（圖），

Nonetheless, ten thousand sages who are clear and cool,⁷⁶

soar with purple clouds and emerge in the air.

A thousand honored ones of the good kalpa,⁷⁷

bloom the jade-like lotus and disclose themselves.

The twelve great vows [of Bhaiṣajyaguru Buddha],⁷⁸

76. *Sheng* 聖 refers to a person who is enlightened. It could be the Buddha, a bodhisattva, or an arhat.

77. *Xianjie* 賢劫 (Skt: *bhadrakalpa*) is the present epoch in the Buddhist view of time. In this view, the three great epochs are the good eon of the present, the glorious eon of the past (*guoqu zhuangyan jie* 过去庄严劫), and the eon of the constellations of the future (*weilai xingxiu jie* 未来星宿劫). It is called the good eon because in this period, there are a thousand worthies, among whom are the past buddhas Krakucchanda, Kanakamuni, Kāśyapa, and Śākyamuni, as well as the future buddha Maitreya.

78. The twelve vows of Bhaiṣajyaguru include the vow to brightly illuminate his own body and the bodies of others, to have a body like lapis lazuli, to use his power to quicken the enlightenment of sentient beings, to have sentient beings satisfy their wants and not suffer from poverty, to firmly establish all sentient beings in the course of the Great Vehicle, to have all sentient beings live morally and embrace the three sets of precepts, to fully enhance the spiritual capacities of those who are lacking them by means of hearing the Buddha's name, to free all sentient beings from the myriad sicknesses by means of hearing the Buddha's name, to transform females into males by means of hearing the Buddha's name, to liberate all sentient beings from the entrapments of Māra and mistaken non-Buddhist paths and to let them gain the correct views, to liberate all sentient beings from the unexpected misfortune of unjust governing, prison and punishments, and other disasters, to have all hungry and thirsty human beings gain excellent nutrition, and to assure that the poor, who lack clothing, will be given fine garments.

三災莫染。
法華則會三歸一，
報恩乃酬起二親。

文殊助仏宣揚，
普賢則悲深自化。

善財童子，
求法無厭。
得道天仙，
散花不倦。

may never allow the nine kinds of irregular death violate [any life].⁷⁹

A hundred and eight stupas,

may never let the three disasters infect [any sentient being].⁸⁰

The *Lotus Sūtra* unites the three vehicles into one,⁸¹

while the *Sūtra on Repaying Kindness* seeks to recompense one's parents.⁸²

Mañjuśrī Bodhisattva assists the Buddha in sermons,

while Samantabhadra Bodhisattva deeply practices compassion and transforms [sentient beings] in an unconditioned way.⁸³

The youth Sudhana,⁸⁴

seeks the Dharma untiredly.

The heavenly beings who attained the Way,

79. The nine kinds of irregular (usually untimely) death are divided into two groups, one having to do with improper food or meals, the other with improper medical treatment, law-breaking, drowning, and the like. They include death caused by wrong medication, official punishment, undisciplined and immoral behaviors, being burned to death, being bitten by beasts, drowning, falling from mountains, poisoning or being cursed, and by starvation or dehydration.

80. *Sanzai* 三災 refers to three kinds of disasters at the end of a dharma period. The three small disasters are warfare, disease, and hunger, which will happen at the end of the decreasing kalpas (*miejie* 滅劫) in the eon of existing (*zhujie* 住劫). The three great disasters are fire, tornado, and flood, which will happen at the end of the eon of decay (*huaijie* 壞劫).

81 This and the next sentences discuss the subject matters of sūtra paintings that would have decorated the four walls of the cave. The idea of uniting the Three Vehicles in One Vehicle is evident in the first half of the *Lotus Sūtra*. The Three Vehicles of śrāvaka, pratyekabuddha, and bodhisattva.

82 *Bao'en* 報恩 is an abbreviation of *Da fangbian fo bao'en jing* 大方便佛報恩經, or the *Great Skillful Means Sūtra on the Buddha's Repayment of Kindness* (K 402, T 156). This sūtra was a popular theme of sūtra paintings since the end of high Tang at Dunhuang, and scholars suggest that this theme highlights filial piety to parent and loyalty to authorities.

83 Mañjuśrī and Samantabhadra are the two bodhisattvas attending Vairocana Buddha in an Avataṃsaka (flower garland) trio. This pair of bodhisattvas are often painted on the two sides of main niches or entrances in Dunhuang caves since the mid-Tang. *Zihua* 自化 may refer to “to nurture, educate and cultivate (the people) in an unconditioned way” or “transform oneself”. In this context, the first meaning seems more feasible.

84. Sudhana (Sudhana-śreṣṭhi-dāraka) is the practitioner depicted in the *Chapter of Entering into the Dharma Realm* portion of the *Avataṃsaka Sūtra*. It is well known that Sudhana visited a succession of fifty-three benevolent teachers seeking enlightenment. Through the instruction of Samantabhadra Bodhisattva, he finally aspired to be born in the Western Pure Land.

scatter flowers non-negligently.⁸⁵

3.8.3. This subsection discusses the function and activities happening in the caves: (1) circulating scriptures and lighting lamps, which are actual and metaphorical deeds for accumulating wisdom; and (2) producing portable images and holding feasts, which are individual and public activities for accumulating merit. This discussion corresponds with the abovementioned recommendation of “doubly practicing merit and wisdom” in 3.6.

經書龍藏， 驥[冀]用流通。 長熱魚燈， 希明暗路。 香泥印印， 福備無垠。 慶設頻頻， 迴資有識。	The classics and the Buddhist canon (lit., dragon treasury), ⁸⁶ expect an effective circulation. The ever-heating candles and lamps, ⁸⁷ hopefully brighten the dark paths. Incense ashes were stamped [into Buddhist images], ⁸⁸ readily preparing boundless merits. Ceremonies and feasts were held frequently, ⁸⁹ transferring the accumulated spiritual resources to all perceptive
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85. Scattering flowers is an act of offering and paying homage to the Buddhist deities. Since the scriptures speak of flowers falling from the sky to welcome buddhas and bodhisattvas, the custom developed of making offerings to a buddha by strewing flowers. When this is carried out as a ceremony, the implications are that the fragrance of the flowers drives away evil spirits and purifies the temple or meditation area. In Dunhuang mural paintings, the scenes of heavenly beings scattering flowers are often depicted around major deities in Buddha preaching scenes or sūtra paintings.

86. *Longzang* 龍藏 is a term for the Mahāyāna canon (Chn: *dacheng jingdian* 大乘經典; Skt. *hasti-garbha*). Historically, there was a “Dragon Treasury” or library, formerly in the Longxing Monastery at Chang-an. It is also possible to interpret this word (pronounced “*longkang*”) as “to be well stored like a reclining dragon,” if it is a verb and forms a pair with *jiyong* 驥用. But *jiyong* seems to be a very uncommon word, and it could be *jiyong* 冀用 “hope to be used,” which is how I would translate it.

87. *Yudeng* 魚燈 (“fish lamp”) can refer to either candles and artificial light sources in general or the fish-shaped lantern as a festival prop. Since here it seems to refer to a regularly lighting device, I chose to use the first meaning.

88. This refers to *tufo* 脱佛, a practice of multiplying Buddha images by means of stamping, printing, and molding, usually of a large quantity and with less durable materials.

89. This refers to vegetarian feast, which is a public display of devotion. During Buddhist festivals and special days like the consecration of caves, a public vegetarian feast would usually be held for the monastics and the public.

beings.⁹⁰

3.8.4. This subsection discusses the exquisite execution of the images. The cave is assured to be a high-quality visual art project.

摸[模]真淺綠，	[Artisans] depicted the likeness [of Buddhist deities] in light green,
飾素多紅紫。	and decorated the plain [images] often with red and purple.
稱丹牖之奇，	[Beholders] praised the wondrousness rendered by the rich
	pigments, ⁹¹
貴畫筆毫之美。	And esteemed the beautifulness executed by the painting brushes.

3.9. Siblings and Helpers of the Protagonist

3.9.1. This subsection begins the section by praising the protagonist's inclusive approach to his relatives and disciples. While he was knowledgeable and highly accomplished in Buddhist practices, he also encouraged the others to continue practice and assured their success. This subsection is a transitional paragraph from the protagonist's own accomplishments to those of the others influenced by him.

和尚復特達真門，	The preceptor, again, knew extremely well the approach to truth, ⁹²
強緣必勝。	and he had strong causation of an indisputable victory.
慈心勸物，	With a compassionate mind, he encouraged others ⁹³
務繼成功。	that they surely would continue to succeed [in Buddhist practices].
義及周親，	His righteousness extended to the neighbors and relatives,

90. *Zi* 資, or *ziliang* 資糧, refers to the preparation or accumulation for attaining enlightenment, the good roots and meritorious virtues that are the basis of practice. *Perceptive being* is another term for sentient being.

91. *Danhuo* 丹牖 originally referred to the cinnabar that was used as a pigment. The term is often used to refer to the colors and decorations in general.

92. *Zhenmen* 真門 originally referred to the twentieth vow of Amitabha Buddha, which is to guide by clarifying the reality of the name of the Buddha. In general, it refers to the approach of achieving buddhahood through learning and practicing the Buddha's teachings.

93. *Quanwu* 勸物 refers to the encouragement that buddhas and bodhisattvas give to sentient beings, that there will be a result to their practices.

恩懷四輩。

And his kindness embraced the four groups of Buddhist disciples.⁹⁴

3.9.2. This subsection introduces the protagonist's elder brother Daoguang. It praises his familial virtues and spiritual purity and regrets his early death.

即及元昆蹈光，	Then, as for [the preceptor's] elder brother Daoguang,
門傳善則，	he transmitted the benevolent rules of the family,
急難存于兄弟。	being eager to help the siblings out of trouble.
語實親仁，	His talked honestly and approached others humanely,
信重成于朋友。	having wholehearted trust in the friends.
長林獨步，	He walked alone in reclusion, ⁹⁵
賞志新田。	and appreciated the newly cultivated fields.
典浦遊春，	He made excursions to riverbanks in the spring,
歡心逸豫。	having a joyful mind and living a carefree life.
將期永日，	As he expected to enjoy longevity,
何遽早亡？	how unexpected was an early death?

3.9.3. This subsection introduces the protagonist's second elder brother Jilian. It describes his civic service experiences and his eventual conversion to Buddhism.

次兄季連，	[As for the preceptor's] second elder brother Jilian,
試太子家令。	he was probationary household provisioner of the crowned prince.
出杖忠於委任，	Whenever moving his staff, he was loyal to the mandates.
聚劍益於君門。	Whenever collecting his sword, he benefited the imperial court.
勤効四年，	He had diligently served for four years,
成功七載。	and had been successful for seven years.
忽思因果，	

94. *Sibei* 四輩 refers to the male and female practitioners who renounce the world or remain in society: monks (Chn: *biqiu* 比丘; Skt: *bhikṣu*), nuns (Chn: *biqiuni* 比丘尼; Skt: *bhikṣuṇī*), laymen (Chn: *youposai* 優婆塞; Skt: *upāsaka*), and laywomen (Chn: *youpoyi* 優婆夷; Skt: *upāsikā*).

95. *Changlin* 長林 originally referred to dense woods, and it is a metaphor for the dwelling of a hermit.

早自迴心。	Suddenly, he pondered on cause and effect. ⁹⁶
退謝君恩，	Soon, he turned his mind [toward Buddhism].
歸心息念。	He withdrew from the imperial kindness, returned to the [true] mind and stopped [deluded] thoughts.

3.9.4. This subsection briefly introduces other donors for the projects and their merits.

亦有城隍道俗，	In addition, there were local clergies and lays,
受訓門人，	disciples who received training,
近侍女男，	female and male personal attendants,
應向同僧助。	who responded and helped like the Sangha.
又有僧王雲勝，	Moreover, there was a monk called Wang Yunsheng.
辦訶梨勒二千顆，	He set up two thousand yellow Myrobalan trees, ⁹⁷
同助功德。	[and had] the merit and virtue of assisting together.

3.10. The Vows Made upon the Completion of the Seven Buddha Cave

This section lists seven vows that combine the formulaic passages of a votive text and the specific features of the Seven Buddha Cave. Though it is not explicit on who made the vow, it is clear in terms of for whom they were made: the current ruler, the ministers and government, the coming season, the expanded and immediate families, the disciples, and sentient beings.

伏願世主處南面之尊，	The sincere vows are as follows: may the lord of our time dwell in the south-facing, honorable position,
威雄武定，	mighty, grandeur, valiant, and steady.
臣忠安富國之政，	May the ministers be committed to the governance that prospers the nation,
信重和憐。	trustful, reliable, harmonious, and sympathetic.

96. The teaching of the law of cause and effect is one of the most fundamental threads of Buddhist discourse. *Yinguo* 因果 thus also refers to the reality of the world as in Buddha's teachings.

97. *Helile* 訶梨勒 (Skt. *harītakī*) is yellow myrobalan (*Terminalia chubula*), a medicinal herb grown in India and Indonesia.

時豐將大慶之年，	May there be a year of grand celebration at the harvest season,
人康沐清平世歲。	a year in which people are healthy, clear, and peaceful.
九族韶睦，	May the nine generations be beautiful and amiable, ⁹⁸
將承七仏之慈。	and soon receive the kindness of the seven buddhas.
骨肉連枝，	May the parents and siblings,
永奉三尊之化。	eternally observe the teachings of the three honored ones. ⁹⁹
戒香弟子，	May the disciples who observe precepts,
罄仰同霑。	together rely on and immerse themselves in [the Buddha's teaching].
仏性蒼生，	May all sentient beings who have buddha nature,
鹹增利度。	all increase the benefits and measures.

3.10. *Author's voice.* This final section expresses the author's commitment to record without confusing and illusory materials.

驥忝明王國治，	[Liang]ji [i.e., I] has the honor to serve under the governance of a brilliant king,
許善不遺。	who promises the benevolent with no exception.
敢迷虛材，	I dare not confuse [the actuality] with vain materials.
將存記矣。	I just have kept and recorded it.

98. The nine generation are one's great-great-grandfather, great-grandfather, grandfather, father, oneself, son, grandson, great-grandson, great-great-grandson.

99. *Sanzun* 三尊 may refer to the Three Jewels (Buddha, dharma, and sangha); the three beings worthy of respect (buddhas, pratyekabuddhas, and arhats; and a group of a particular Buddha and two attending bodhisattvas—for example, Bhaiṣajyaguru Buddha flanked by the bodhisattvas Sūryaprabha 日光菩薩 and Candraprabha 月光菩薩. Here it might be the general connotation of the Three Jewels or the specific Bhaiṣajyaguru trio, since the previous sentence was somewhat specific about the subject matter in this cave.

Appendix E

Chronology of the Colossal-Image Pavilions and Vicinity

Year	Event
690	<p>(In the fourth month, monk Faming 法明 and others “discovered” the <i>Great Cloud Sūtra</i> (Dayun jingshu 大雲經), which is probably their fabrication)</p> <p>In the seventh month, monk Faming 法明 and others compiled the <i>Commentary of the Great Cloud Sūtra</i> (Dayun jingshu 大雲經疏). They stated that the then Empress Dowager Wu was the descent of the Maitreya Buddha. This sūtra was revealed to the country.</p>
	<p>In the tenth month, an imperial edit ordered the two capital cities and all states to set up a Great Cloud Monastery (Dayun Si 大雲寺) in order to store a copy of the <i>Great Cloud Sūtra</i>.</p>
691	<p>In the first month, a Dunhuang resident Yin Sijian 陰嗣鑿 saw an auspicious omen—a bird of five colors—at the Resort of Wu Xiaotong 武孝通園 in Pingkang Xiang 平康鄉. This bird is said to have a crown on its head, five-color feathers on its wings and tail, a cinnabar-color beak and red feet. (沙洲都督府圖經 p. 2005)</p>
	<p>Another Dunhuang resident Yin Shouzhong 陰守忠 claimed to have seen another auspicious omen—a white wolf—wandering around Shouzhong Zhuang 守忠莊.</p>

	The wolf is said not to harm children or domestic animals, and its fur was the color of snow.
695	Four years later (in the second year of Yanzai, i.e., 695 CE), a Chan monk, Lingyin 靈隱, and a layman, Yin Zu 陰祖, who was Yin Shouzhong’s father, together constructed the northern colossal-buddha image (Cave 96). The image is said to be as tall as 140 <i>chi</i> (41.16 m or 135 ft). (<i>Mogao kuji</i>)
721–25	The southern colossal-buddha image (Cave 130) was completed. Monk Chuyan 處諺 and layman Ma Sizhong 馬思忠 among others built the cave. Donor portraits of a prefecture chief official Le Tinghuan 樂庭環 and wife, Lady Wang 王氏, were depicted on the corridor walls. (<i>Mogao kuji</i>)
Ca. 817	The colossal image of Cave 130 was refurbished. Local monks and monasteries participated. (<i>Cheng’en tie</i> 承恩帖)
839	Cave 231 was constructed “on the second level” not far from Cave 96 to the north. A commemorative text was compiled to document the process and preserved in the Dunhuang documents. The niche slopes depicts a collective set of auspicious images including the Fanhe auspicious image (《大番故敦煌郡莫高窟陰處士公修功德記》 and 《陰處士碑》)
850	<i>Mogao kuj</i> 莫高窟記 was compiled.
862–67	Cave 85 was constructed under the patronage of the Guiyijun monk official Zhai Farong. The corridor depicts collective auspicious images.

860–70	Cave 72 was constructed. A Fanhe auspicious image transformation tableau was depicted on the southern wall of the main chamber. And a <i>Maitreya Sūtra</i> painting on the north wall of the main chamber. Sagely monks flank the west niche, on the ceiling slope of which collective auspicious images are painted.
874–88	Zhang Huaishen renovate the structures around the northern colossal image, adding four walls and built timber structures. Added a fifth layer to the originally four-story structure. Monks assisted the renovation. (張氏修功德記)
	After renovating Cave 96 pavilion, Zhang Huaishen commissioned Cave 94. At the beginning, the mountain “broke” to show a neatly cut cliff. The renovation and construction activities of Zhang was documented in 張氏修功德記 and 張淮深造窟功德碑.
896	A commemorative text attributed to the completion of Cave 97 was written (唐沙州龍興寺上座馬德勝和尚宕泉創修功德記).
939	On the south side of the north colossal buddha, a backscreen Cave 98 was constructed under Cao Yijin. Its backscreen depicts the Fanhe auspicious image on the back.
966	Cave 96 was renovated under the patronage of Cao Yuanzhong and his wife, Lady Zhai (歸義軍節度使曹元忠夫婦修北大像功德記)
1002–14	Cave 130, including the pavilion and a cliff-top pagoda, was systematically refurbished.

10th– 11th c.	Cave 231 was renovated during the Cao Guiyijun late period. Antechamber repainted, probably structure renovated too.
10th– 11th c.	Cave 94 was systematically renovated with the exterior mural repainted during the Cao Guiyijun late period to the Xixia period.
13th– 14th c.	Cave 95 was constructed during the Yuan dynasty.
13th– 14th c.	The ground of Cave 96 was repaved during the Yuan dynasty.
1360	The Huangqing Monastery was established and probably located in the northern colossal buddha vicinity. (皇慶寺碑)
1870	A big fire at Mogao burned the timber structure of the colossal buddha
1879	A Hungarian expedition team visited Mogao in April to May, and a team member, Gustav Kreitner, produced the first engraving illustration of the Mogao site.
1879	A Russian expedition team led by Nikolay Przhevalsky arrived in Dunhuang in June, and a team member made a sketch of the Cave 130 colossal image.
1898	A five-story structure for Cave 96 was built under the patronage of local gentries and clergy.
1924	US art historian Longden Warner visited the Mogao caves and saw the exposed Cave 96 colossal image
1935	A nine-story structure for Cave 96 was completed under the patronage of local

	gentries and clergy.
1943	Several expedition teams, including James Lo and Joseph Needham, visited Dunhuang and photographed the colossal buddha.
1945– 52	Chang Shuhong made a series of paintings of the nine-story pavilion.
1999	The Dunhuang Academy archaeologists excavated the ante-halls of Cave 96.

Appendix F

Large Ante-halls of the Mogao Caves during the Guiyijun Period

Table 3. Large ante-halls at Mogao and the sizes

Cave no.	cave type	antechamber			main chamber			a-to-m ratio
		w	d	area	w	d	area	
108	central-altar	10	5.2	52.0	10.15	11.25	114.2	46%
98	central-altar	11.16	6.6	73.7	12.6	15	189.0	39%
100	west niche	10	5.5	55.0	9.4	9.25	87.0	63%
85	central-altar	8.9	4.4	39.2	10.05	11.2	112.6	35%
196	central-altar	9.75	4.5	43.9	9.9	10.4	103.0	43%
76	central-altar	9.8	5.5	53.9	9.3	11	102.3	53%
72	west niche	7.3	5.1	37.2	6.45	6.55	42.2	88%
61	central-altar	12.15	8.35	101.5	13.43	14.35	192.7	53%
55	central-altar	10	6.8	68.0	11.22	12.15	136.3	50%
53	west niche	7.25	5.6	40.6	6.7	6.1	40.9	99%
35	west niche	7.45	5.1	38.0	6.8	7.7	52.4	73%
27-30	west niche	7.55-14.2	4.3-5.62	70.8	varied	varied	78.5	90%
44	central-pillar*	7.25	5.4	39.2	8	5.1	40.8	96%
45	west niche	4.25	3.35	14.2	4.5	4.5	20.25	70%
46	west niche	4.8	3.4	16.3	4.35	4.55	19.7925	82%
130	colossal image*	18.8	9.75	183.3	17.5	7	122.5	150%
96	colossal image*	14.5-19.4	8.2-12.3	218.6	18.45	7.4	136.53	160%

Note: * For central pillar caves and colossal image caves, only the front chamber is counted.

Appendix G

The Imaginary Journey in the Pure Land Transformation Tableau in Mogao Cave 172

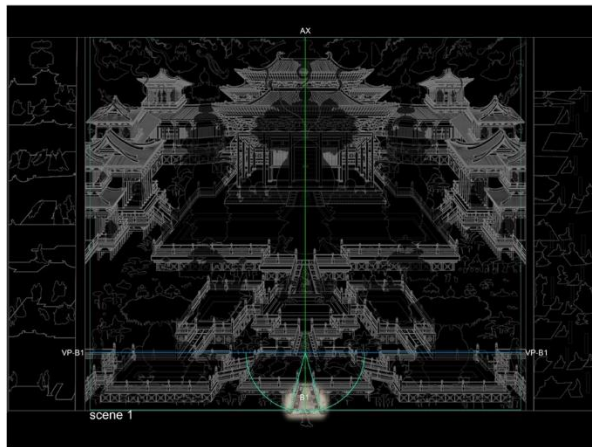
The sequential viewing of the Pure Land painting is paralleled with a walk-through experience of the Pure Land architecture it represents. Since the herringbone perspective has multiple vanishing points, it suggests a viewing experience by moving through the space. For example, the vertical axis of the picture indicates that the main route is along the central axis in the pictorial space. And the shifting perspectives toward those buildings and architectural components are designated according to the perspective analysis of the painting. By adopting contemporary techniques of visualizing architecture spaces (with software such as Sketchup, AutoCAD, and Adobe Photoshop), I made a walk-through animation (<https://vimeo.com/368701715>) to represent the bodily experience of the Pure Land topography in a way familiar to a present-day audience.

The diagrams paired with scenes from a walk-through animation show how the viewing experience of the painting evokes an imagination of a bodily experience into the Pure Land topography (Figure G-1): A beholder arrives at the Land of Bliss through the central-front bridge (scene 1). Then he or she goes closer to the main shrine, passing through terraces and bridges one after another (scenes 2 through 5). This imaginary pilgrimage comes to a climax when he or she stands on the main terrace (scene 6). The viewer then looks up at the main hall and enters it (scenes 7 and 8), then passes through the main shrine and similarly looks up at the hall in the rear

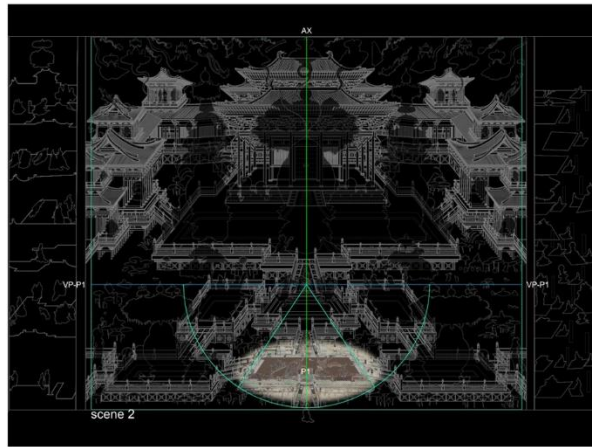
center (scenes 9 and 10). The viewer may climb up to the corner pavilions and gaze at the distant landscape (scenes 11 through 13). He or she can also stay suspended in the air with the celestial beings attending the meeting and look from above at the subsidiary halls, the terraces, and the lotus ponds (scenes 14 through 16).

**Contemplation Sūtra transformation
tableau, North Wall, Mogao Cave 172**

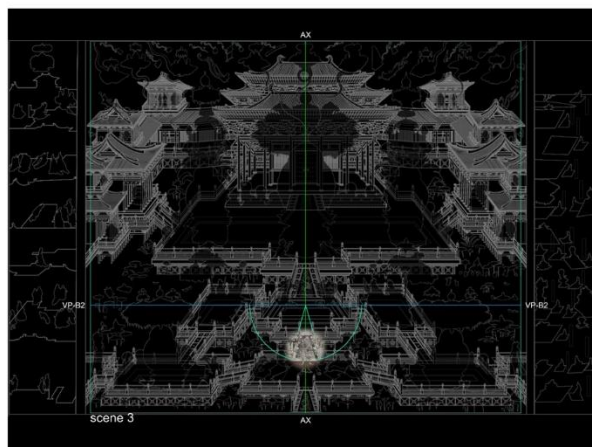
**Walk-through Video, A theoretical reconstruction
of the Western Pure Land architecture**



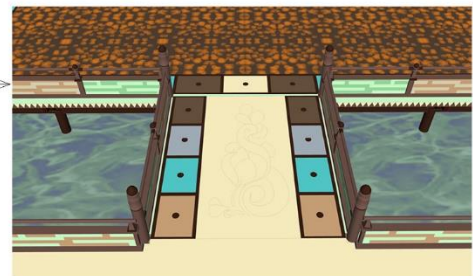
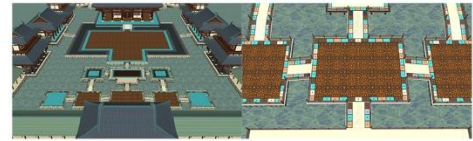
one-point perspective with a high view point



one-point perspective with a high view point



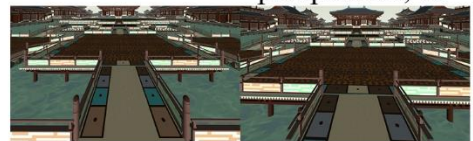
one-point perspective with a high view point



Scene 1

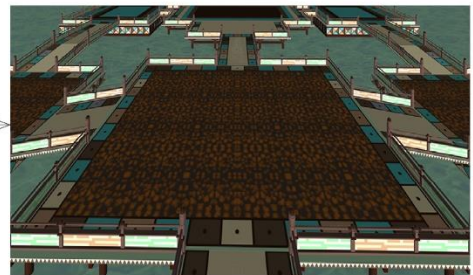
stepping
onto the
central-front
bridge

perspective, 35°

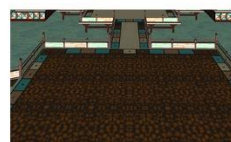


Scene 2

stepping
onto the
central-front
terrace

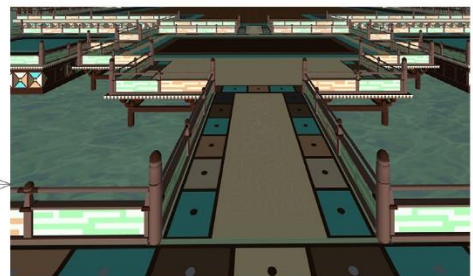


two-point
perspective, 35°



Scene 3

stepping
onto the
central-
middle
bridge



two-point perspective, 35°

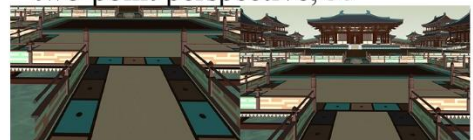
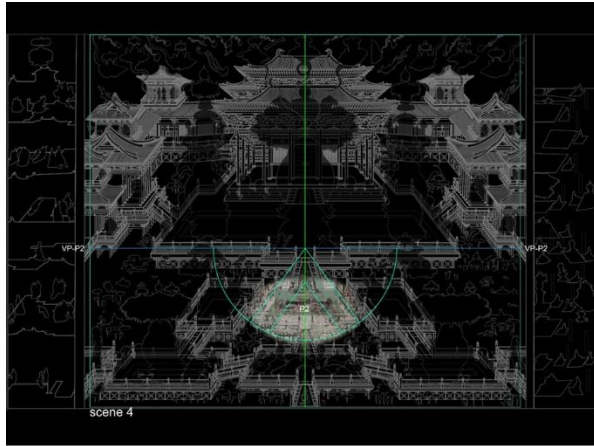
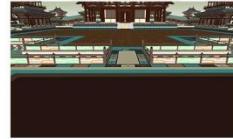


Figure G-1. The sequential viewing of the Pure Land painting (*left*) paired with scenes from a walk-through experience (*right*).

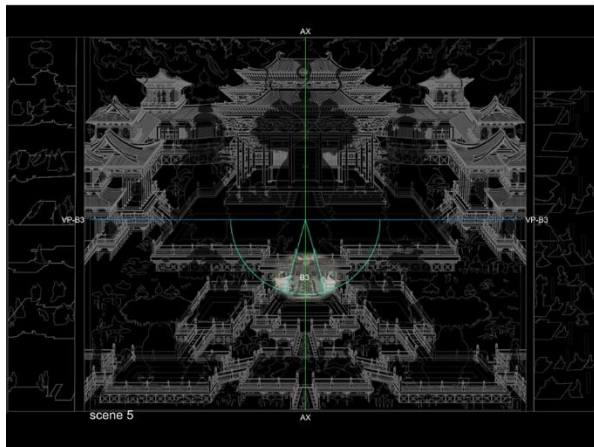


one-point perspective with a high view point

Scene 4
stepping
onto the
central-rear
terrace

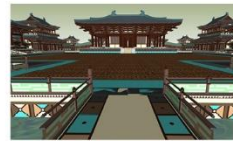
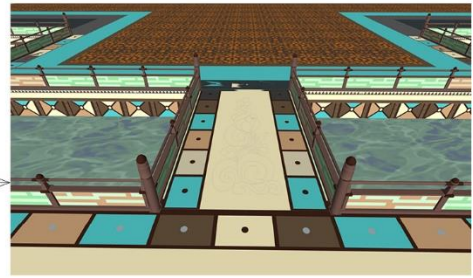


perspective, 45°

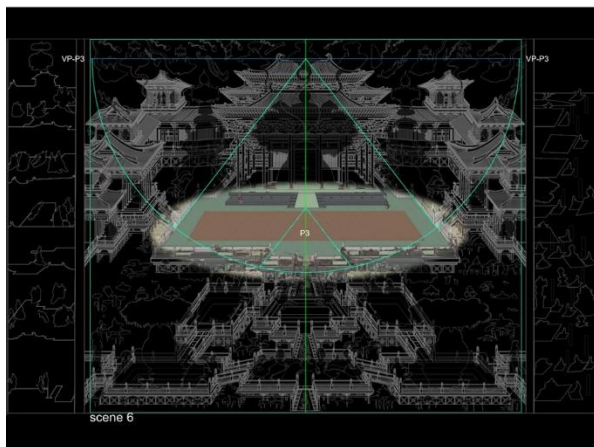


one-point perspective with a high view point

Scene 5
stepping
onto the
central-rear
bridge

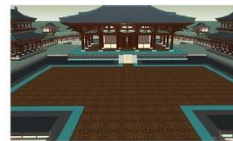
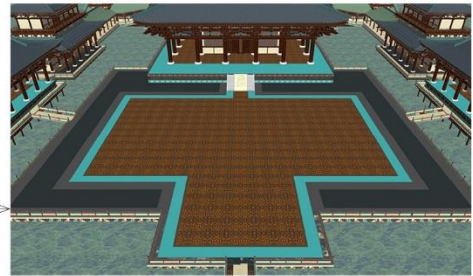


perspective, 50°



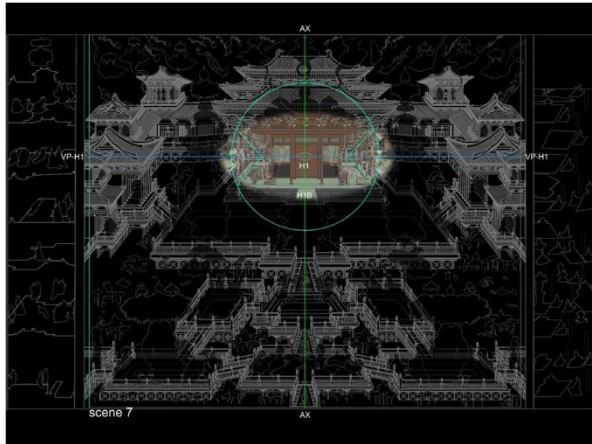
one-point perspective with a high view point

Scene 6
stepping
onto the
main terrace



perspective, 45°

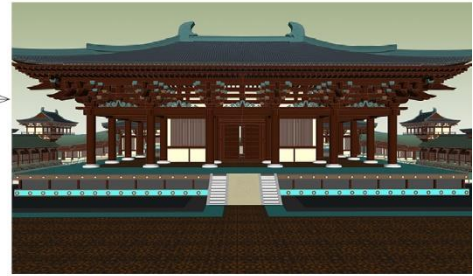
Figure G-1, continued.



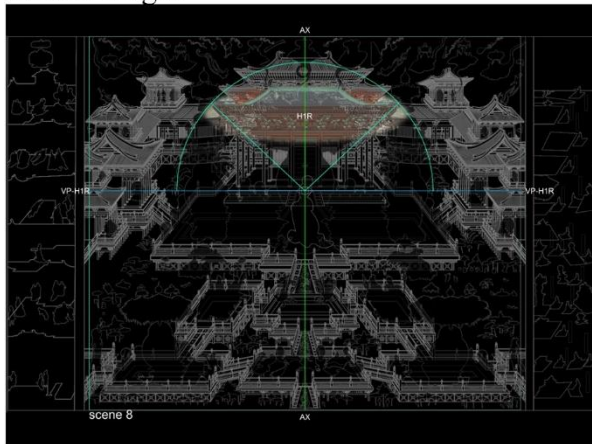
one-point perspective with a view point of middle height

Scene 7

looking at the front facade of the main shrine



perspective, 45°



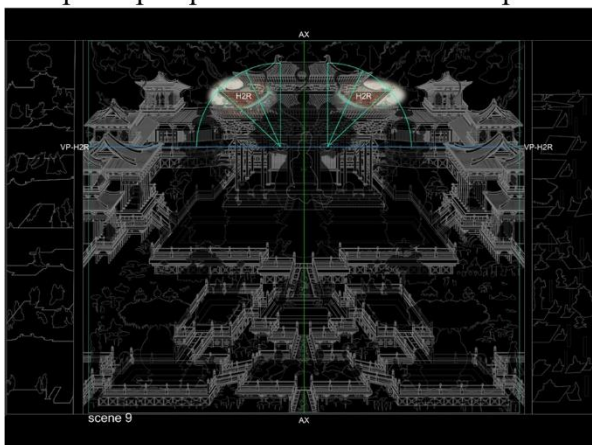
one-point perspective with a low view point

Scene 8

looking upwards at the cornice and the roof of the main shrine



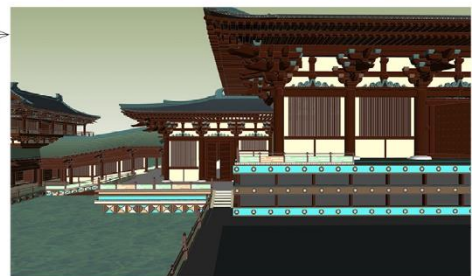
perspective, 60°



one-point perspectives with a low view point

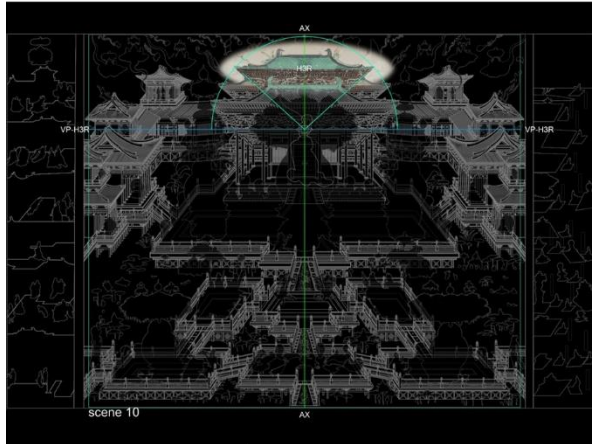
Scene 9

looking upward at the two ear-halls of the rear shrine



perspective, 35°

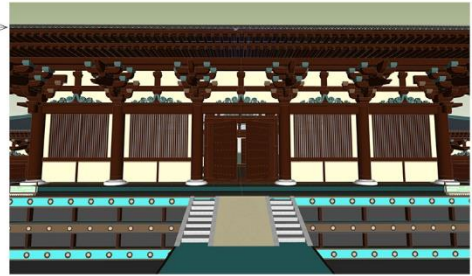
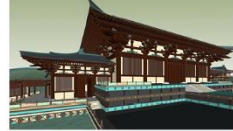
Figure G-1, continued.



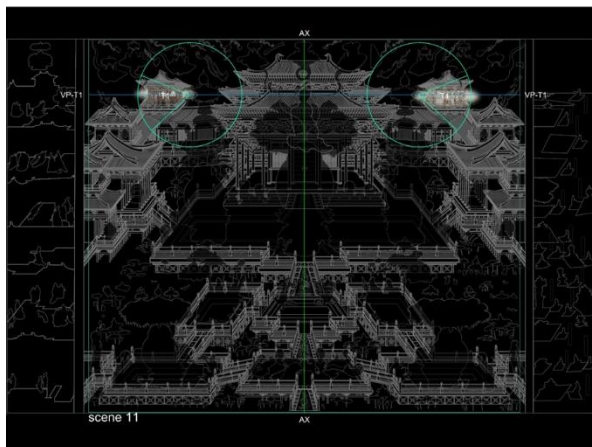
one-point perspective with a low view point

Scene 10

looking upward at the cornice and the roof of the rear shrine



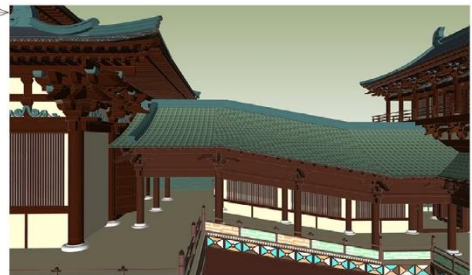
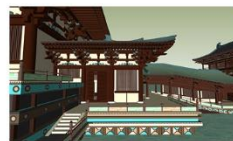
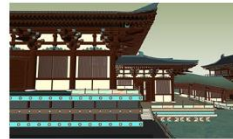
perspective, 45°



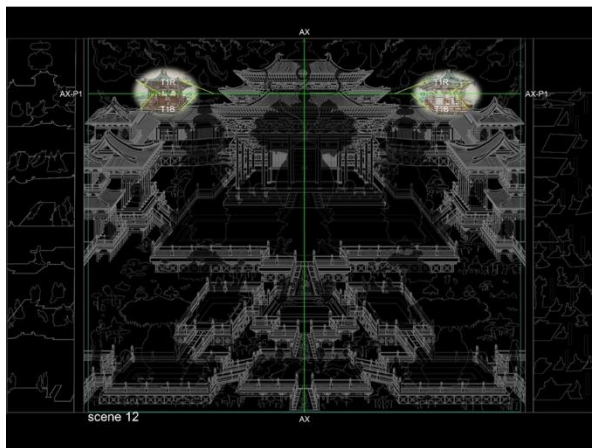
one-point perspectives with a view point of in-between-height

Scene 11

looking at the landscape with peripheral vision of the two corner watchtowers



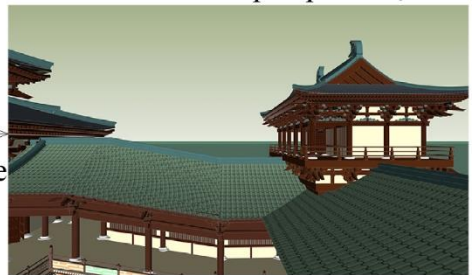
perspective, 45°



oblique parallel projection with a view point of middle height

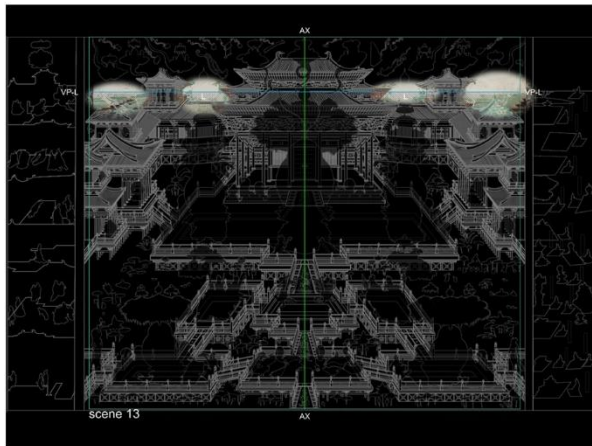
Scene 12

looking at the two corner watchtowers' roofs and platforms



perspective, 45°

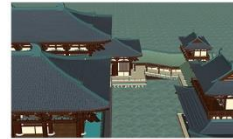
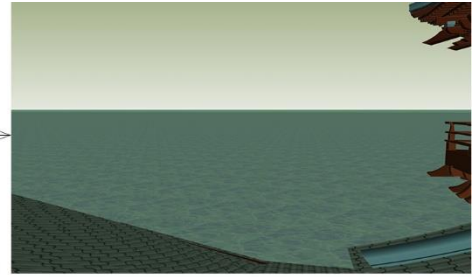
Figure G-1, continued.



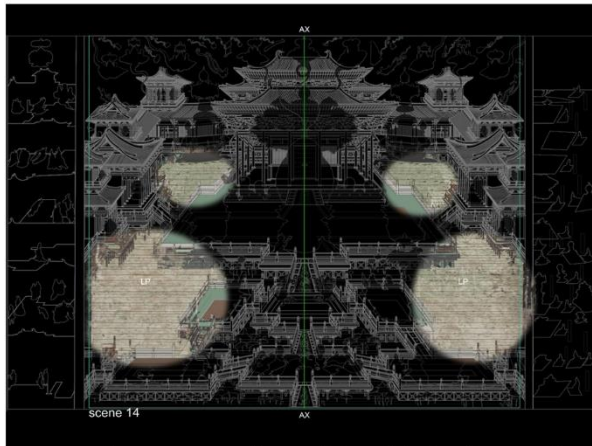
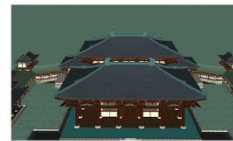
zero-point perspective with a high view point

Scene 13

perceiving the two corner watchtowers' roofs and platforms



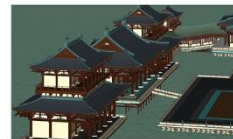
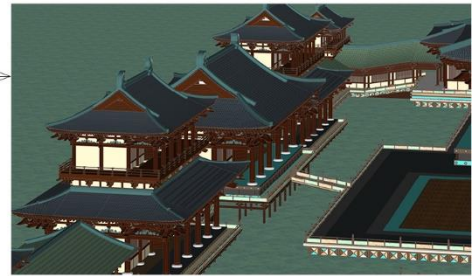
perspective, 10°



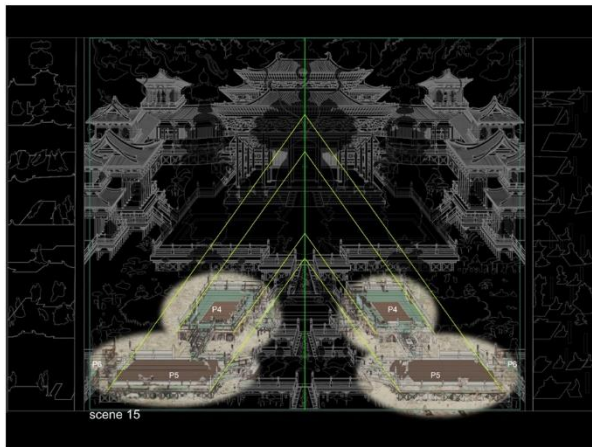
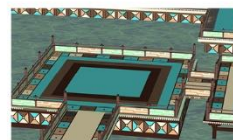
zero-point perspective with a high view point

Scene 14

seeing the landscape at infinite distance



perspective, 10°



oblique parallel projection with a high view point

Scene 15

perceiving the terraces and the bridges on the left and right side

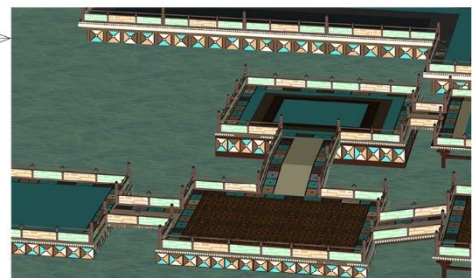
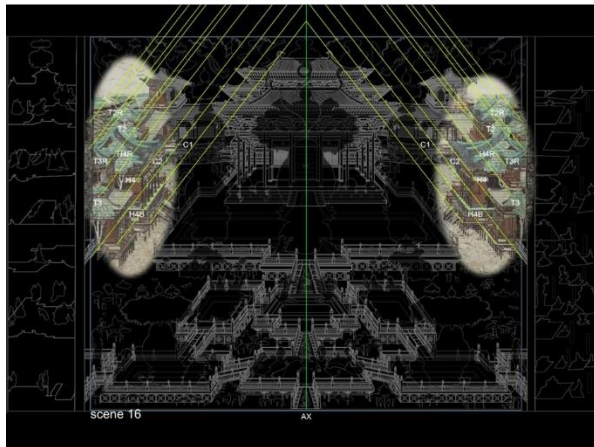


Figure G-1, continued.

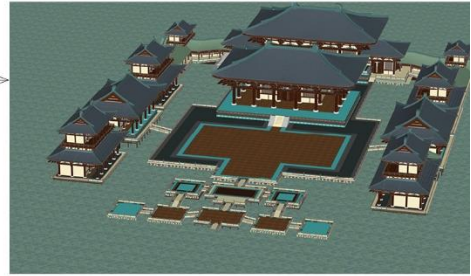


oblique parallel projection with a high view point

Scene 16
 ← Perceiving the corridors and the shrines on the left and right sides →



parallel projection



perspective, 15°

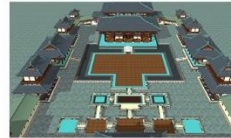
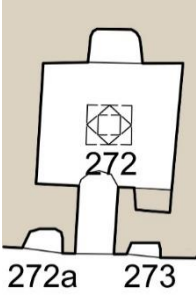


Figure G-1, continued.

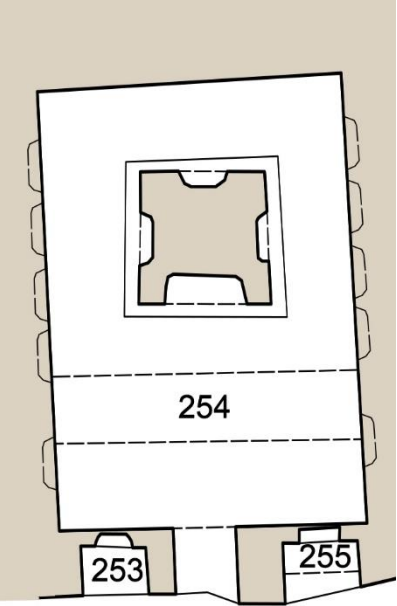
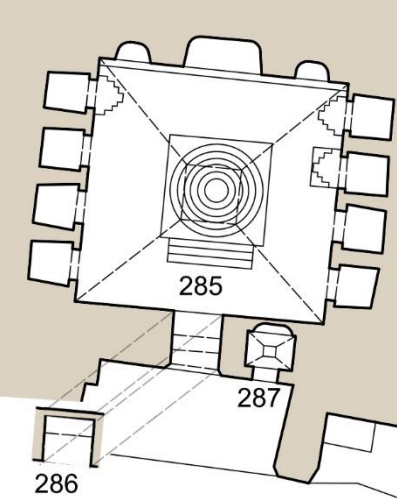
Appendix H

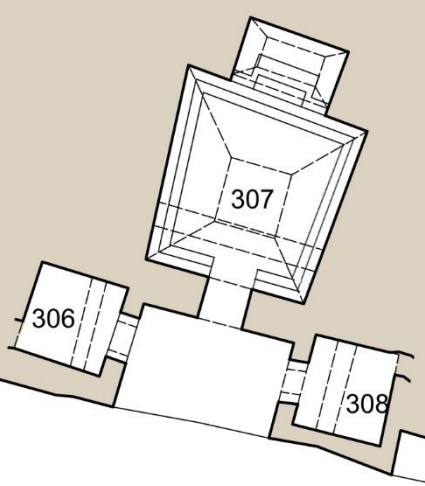
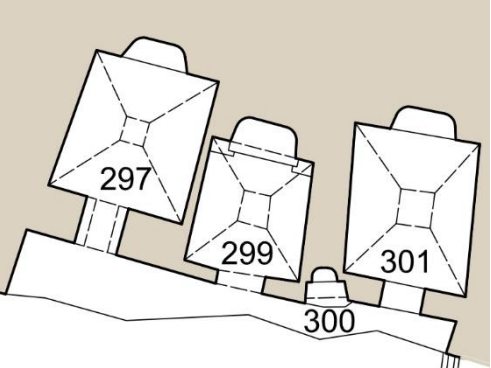
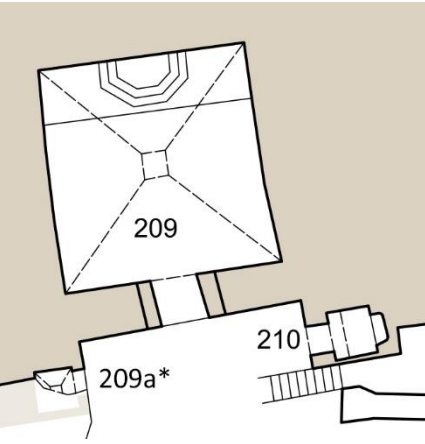
Cave Suites at the Mogao Caves

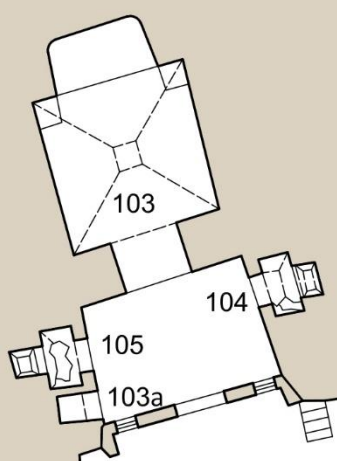
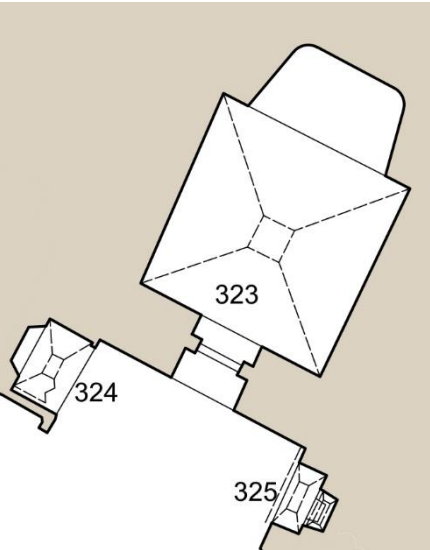
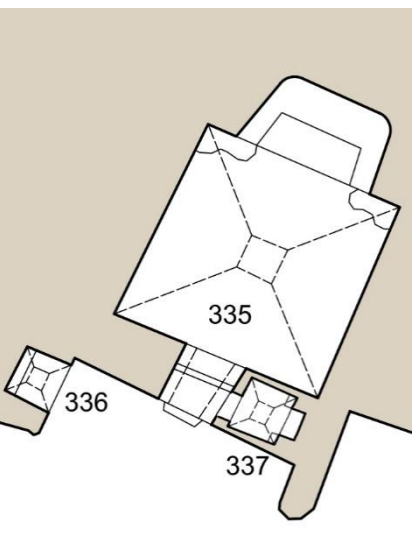
Table 4. Cave numbers and plan drawings of cave suites at Mogao

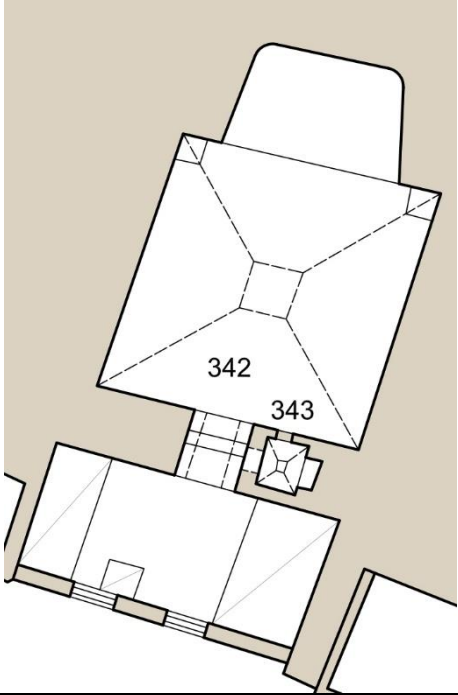
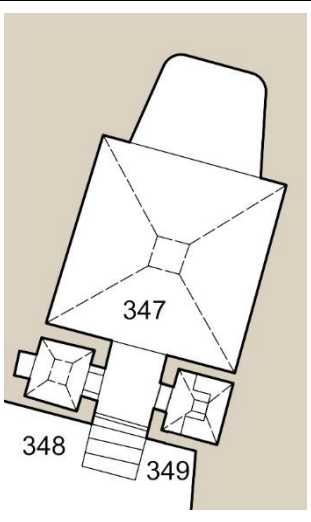
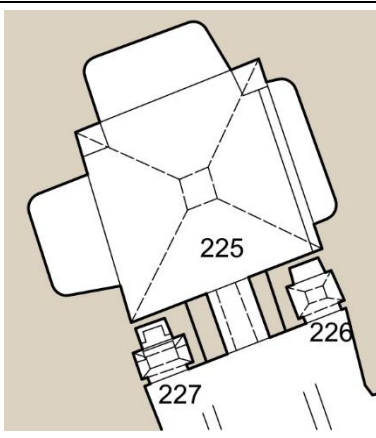
Set no.	Cave nos. [main cave(s)/auxiliary cave(s)]; location of the ear caves or auxiliary caves; construction periods [main cave(s)+(auxiliary cave(s)), renovation periods of the main cave; brief description of the formation of the cave suite and special function of the ear cave if applicable.*	Plan drawings (drawing by author, data based on Oldenburg expedition team's drawings)
1	272/(273+272a); Cliff face; Northern Liang+(Northern Wei); the two niches enshrining statues of meditating monks were added later.	

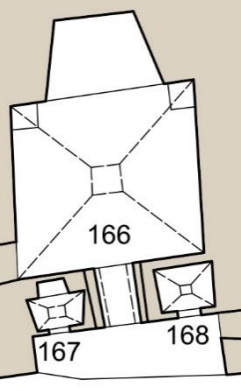
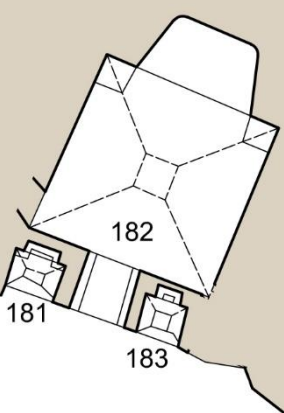
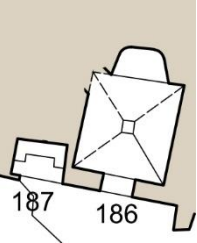
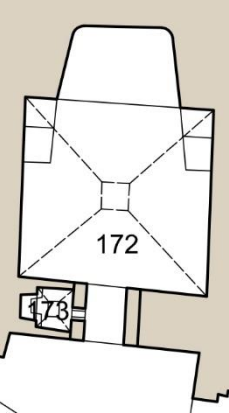
* In this study “ear cave” refers to inhabitable caves and niches, whereas “auxiliary cave” refers to caves ample enough to be entered.

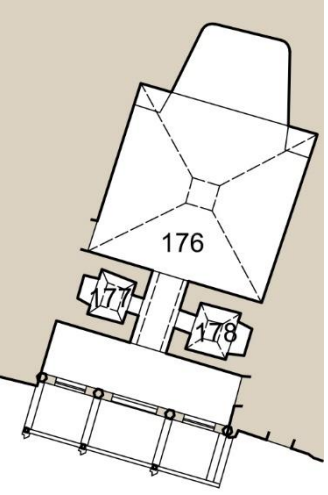
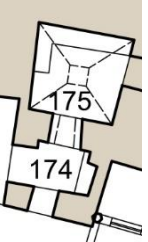
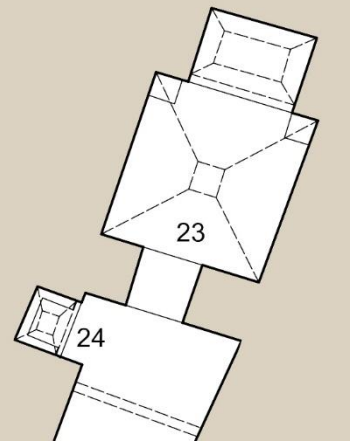
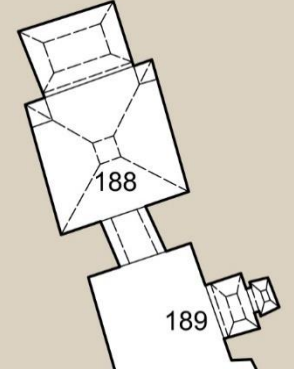
<p>2</p>	<p>254/(253+255); Cliff face; Northern Wei+(Sui), Sui renovation; the two ear caves were added during the renovation of the corridor to the main cave.</p>	
<p>3</p>	<p>285/(286+287); Antechamber, west wall above and north; Western Wei+(Western Wei+Early- Tang), mid-Tang, Song, Xixia, Yuan renovations; Cave 286 was adapted from a high window above the corridor to Cave 285 during the construction of the latter, whereas Cave 287 was added later.</p>	

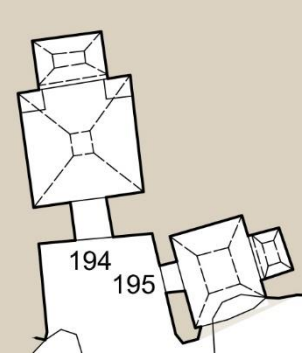
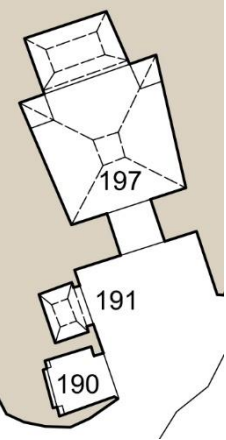
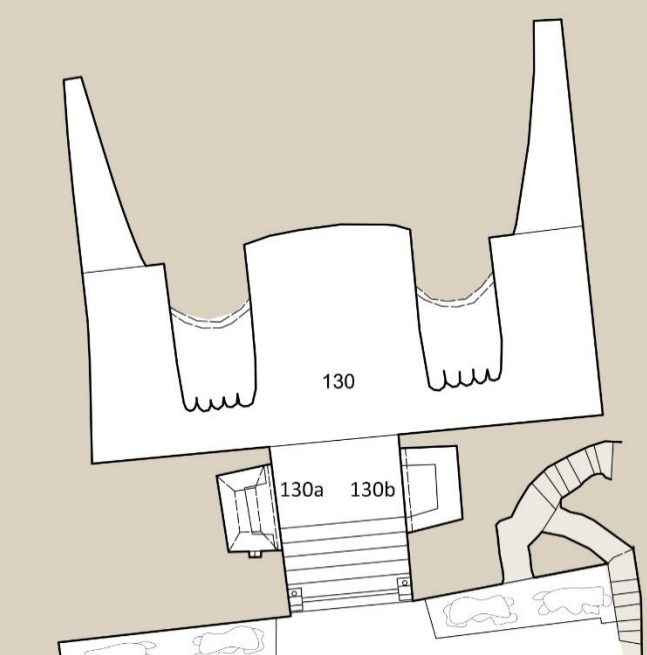
<p>4</p>	<p>307/(306+308); Antechamber, south and north walls; Sui+(Sui), Five Dynasties and Xixia renovations; the three caves were made and renovated in the same periods. The niche of the main cave was added later.</p>	
<p>5</p>	<p>297+299+301/300; Antechamber, west wall middle; Northern Zhou+(late-Tang); Cave 300 was added between Caves 299 and 301, which were adapted to share an antechamber.</p>	
<p>6</p>	<p>209/(210+209a); Antechamber, south and north walls; early-Tang+(early-Tang), Five Dynasties renovation; the main cave and at least one of the ear cave were made at the same time. I attributed number 209a to a half-damaged cave on the south wall of the antechamber of Cave 209. It is not included in the current numbering system.</p>	

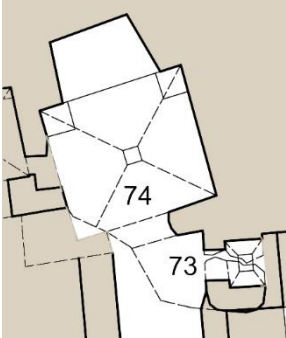
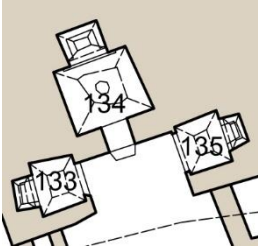
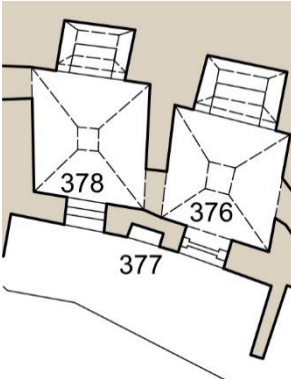
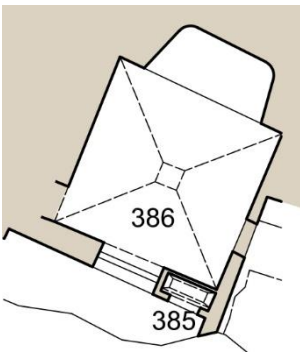
7	<p>103/(104+105+103a); Antechamber, south and north walls; early-Tang+(mid through late-Tang); Caves 104 and 105 are buddha image shrines with sculpted canopy- shaped niches typical of the mid- Tang period, whereas Cave 103a was a shadow cave of which a monk statue was recorded in the early twentieth century but is no longer extant.</p>	 <p>The diagram shows a large central square structure labeled 103, which is the main cave. To its right are two smaller rectangular structures labeled 104 and 105, representing Buddha image shrines with canopy-shaped niches. Below these, a narrow passage leads to a small rectangular structure labeled 103a, which is a shadow cave. The entire complex is set against a light brown background.</p>
8	<p>323/(324+325); Antechamber, south and north walls; early-Tang+(Xixia+Five Dynasties), Five Dynasties and Xixia renovations; two ear caves added respectively during two renovations.</p>	 <p>The diagram shows a large central square structure labeled 323, representing the main cave. To its left and right are two smaller rectangular structures labeled 324 and 325, representing ear caves. The structures are connected by a narrow passage. The background is light brown.</p>
9	<p>335/(336+337); Corridor north wall, and antechamber south wall early-Tang+(late-Tang), mid-Tang and Yuan renovations; the two ear caves were added later, probably during or between the subsequent renovations of the main cave.</p>	 <p>The diagram shows a large central square structure labeled 335, representing the main cave. To its left and right are two smaller rectangular structures labeled 336 and 337, representing ear caves. The structures are connected by a narrow passage. The background is light brown.</p>

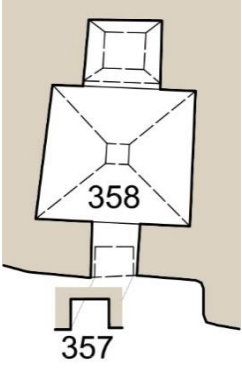
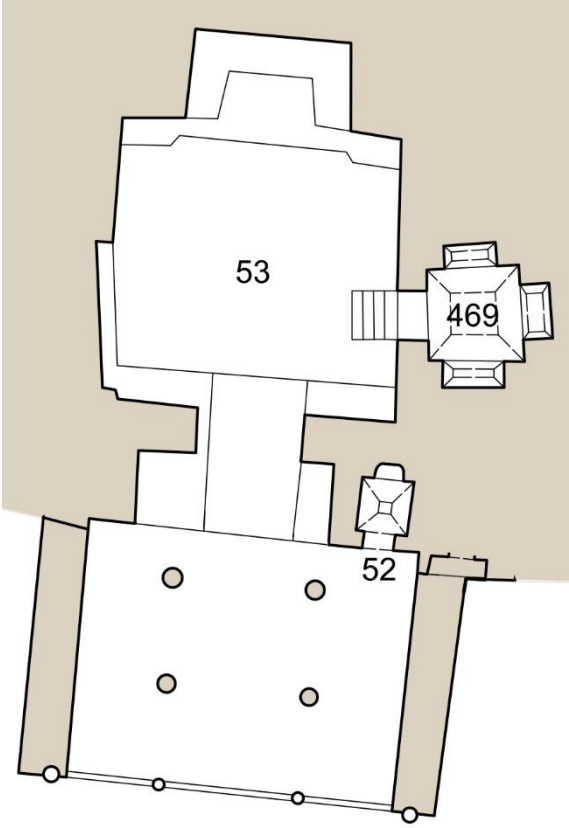
<p>10</p>	<p>342/343; Corridor, north wall; early-Tang+(late-Tang), Five Dynasties renovation; Cave 343 was originally cut onto the north wall of the corridor of Cave 342, and it was concealed in the Five Dynasties period. At some point later, it was broken into from the east wall of the main chamber of Cave 342.</p>	
<p>11</p>	<p>347/(348+349); Corridor, south and north walls; high-Tang+(late-Tang), Five Dynasties and Xixia renovation; the two ear caves were added later than the main chamber, probably during a renovation of the main cave, and the cave suite was together refurbished in the Xixia period.</p>	
<p>12</p>	<p>225/(226+227); Antechamber, west wall; high-Tang+(mid-Tang+late-Tang), mid-Tang and Five Dynasties renovations; Cave 226 was added during the first time of renovation, whereas Cave 227 was probably added during the second time of renovation.</p>	

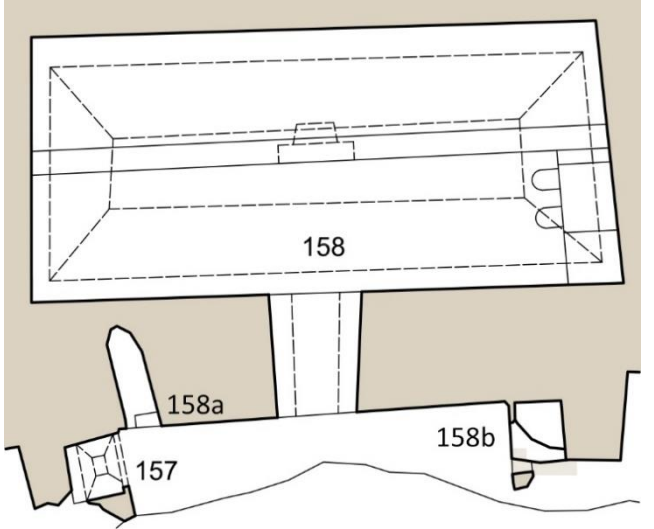
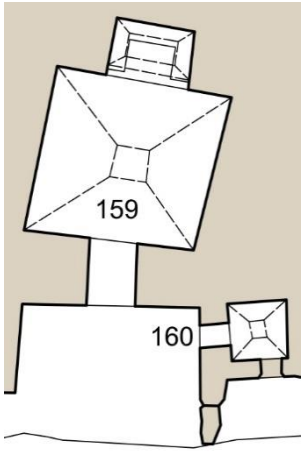
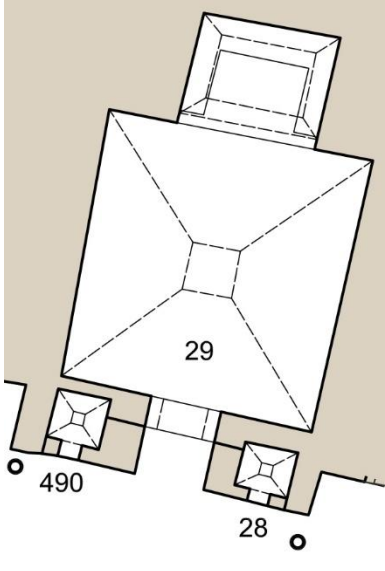
13	<p>166/(167+168); Antechamber, west wall; high-Tang+(late-Tang), mid-Tang, Five Dynasties, Song renovations; the ear caves were added later, and Cave 167 and the main cave were renovation in the same period (Song).</p>	
14	<p>182/(181+183); Antechamber, west wall; high-Tang+(late-Tang), Song renovation; the ear caves were added later.</p>	
15	<p>186/(187); Antechamber, west wall south; mid-Tang+(Five Dynasties), Five Dynasties renovation; the two caves share an antechamber.</p>	
16	<p>172/173; Corridor, south wall; high-Tang+(late-Tang), Song renovation; the ear cave was added during a renovation of the main cave.</p>	

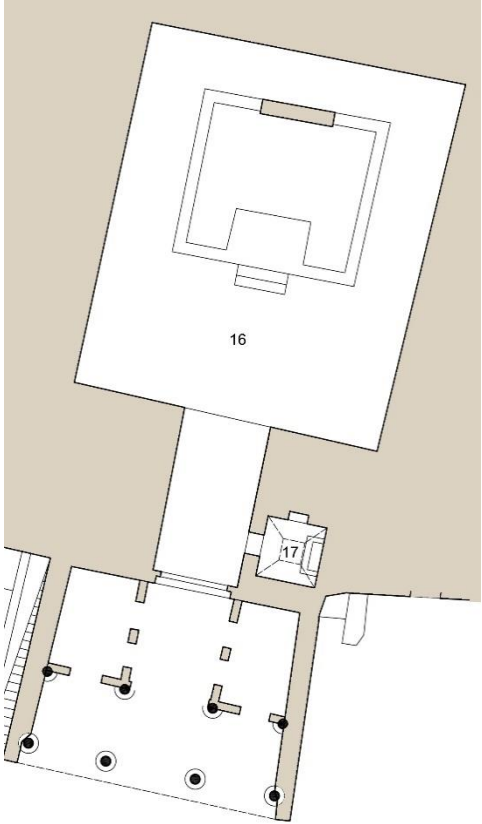
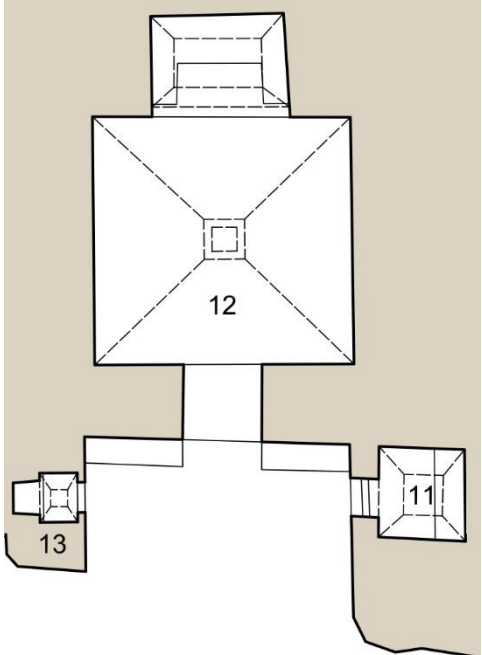
17	<p>176/(177+178); Corridor, south and north walls; high-Tang+(late-Tang); mid-Tang and Song renovations; the two ear caves were added later, and the cave suite together was renovated in the Song period.</p>	
18	<p>175+174/(174 niche); Antechamber, north wall; high-Tang+(Song), Song renovation; the niche on the north wall of Cave 174 (i.e., the antechamber of Cave 175) functioned as a shadow cave.</p>	
19	<p>23/24; Antechamber, south wall; high-Tang+(late-Tang), mid-Tang and Five Dynasties renovations; the ear cave was added during or in- between the subsequent renovations of the main cave.</p>	
20	<p>188/189; Antechamber, north wall; high- and mid-Tang+(Five Dynasties), Five Dynasties, and Song renovations; the ear cave was added and renovated during the subsequent renovations of the main cave, whose construction was initiated in high Tang and completed in mid-Tang.</p>	

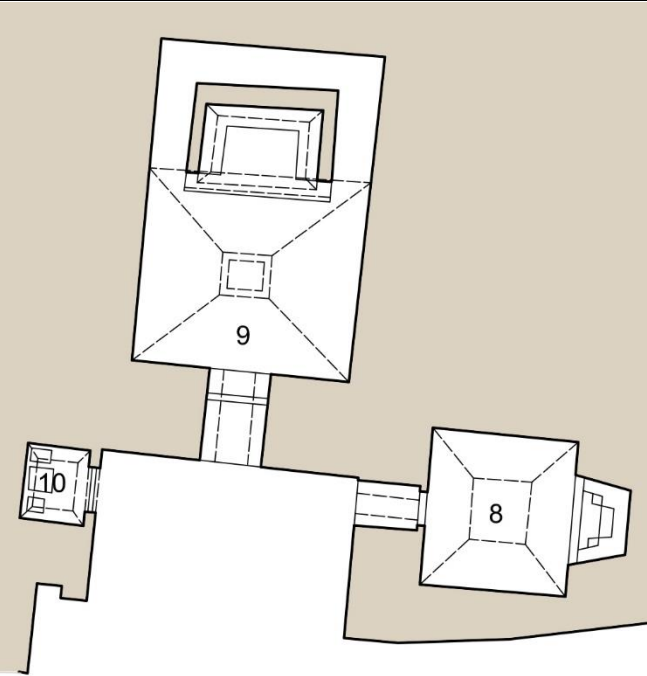
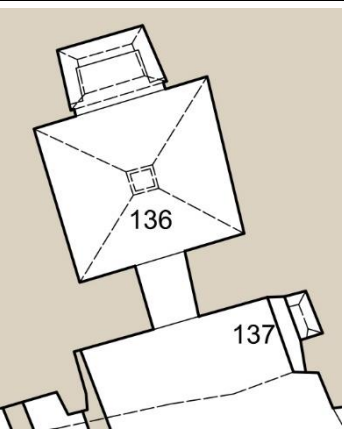
21	<p>194/195; Antechamber, north wall; high-Tang+(late-Tang), late-Tang and Xixia renovations; the auxiliary cave was added during the first renovation of the main cave.</p>	
22	<p>197/(191+190); Antechamber, south wall; mid-Tang+(mid-Tang+late-Tang), Five Dynasties and Song renovations; Caves 197 and 191 were constructed in the same period whereas Cave 190 was added later.</p>	
23	<p>130/(130a+130b); Corridor, south and north walls; high-Tang+(high-Tang), Song renovation; Caves 130a and 130b are located on the upper part of the ground-level corridor of Cave 130, and their position indicate the existence of a mezzanine level in the ante-hall of Cave 130.</p>	

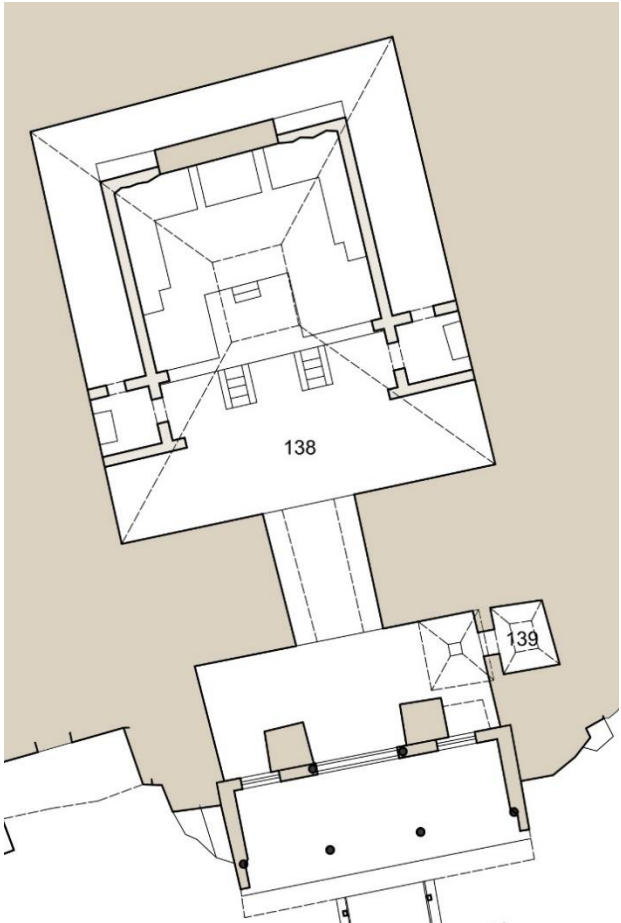
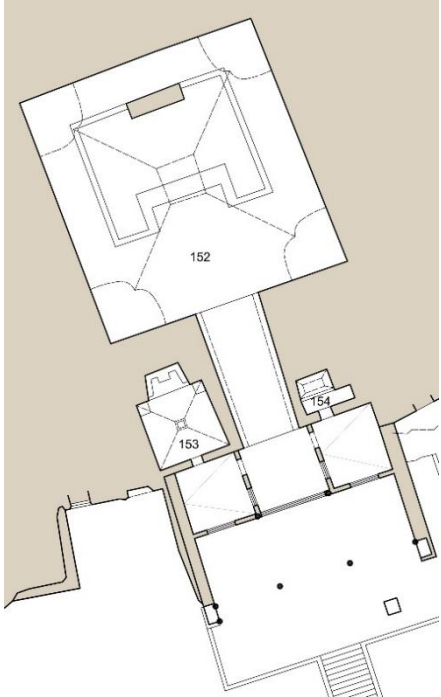
<p>24</p>	<p>74/73; antechamber, north wall; high-Tang+(Song), Five Dynasties renovation; the ear cave was added later, probably during the renovation of the main chamber. At some point later, Cave 73 was broken into from the antechamber of Cave 72.</p>	
<p>25</p>	<p>134/(133+135); antechamber, south and north walls; mid-Tang+(mid-Tang), late-Tang and Song renovations; the three caves were made and renovated around the same periods.</p>	
<p>26</p>	<p>(376+378)/377; antechamber, west wall middle; Sui+(Song); Song renovation; The ear cave was added during the renovation of the two main caves that were adapted to share an antechamber.</p>	
<p>27</p>	<p>386/385; antechamber, west wall north; Early-Tang+(Five Dynasties); mid-Tang, Five Dynasties renovations; The ear cave was added later around the Five-Dynasties renovation of the main cave, which seems to be contingently constructed from the early to mid-Tang periods.</p>	

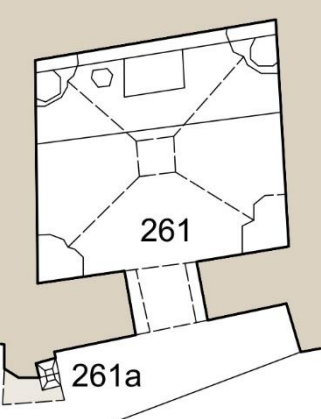
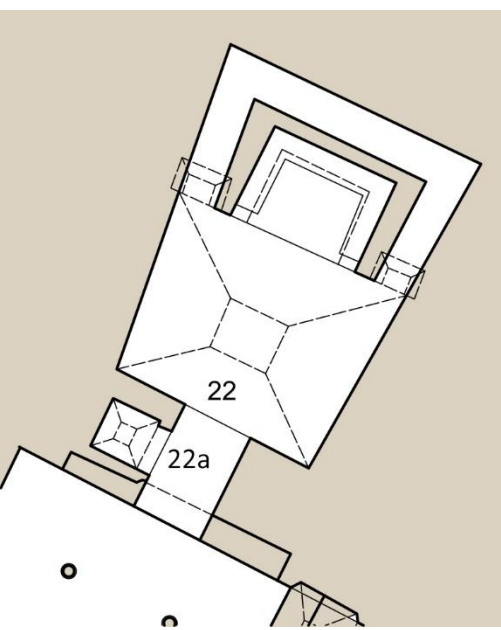
<p>28</p>	<p>358/357; Cliff face, above the entrance corridor; Mid-Tang+(mid-Tang), Five dynasties, Xixia renovation; Cave 357 enshrines a meditating monk's statue and therefore might have been adapted to serve as a shadow cave. It was likely sheltered under a roof during a renovation of the main cave.</p>	
<p>29</p>	<p>53/(469+52); mid-Tang+(mid-Tang+high-Tang), Five Dynasties renovation; Cave 53 was expanded in the Five Dynasties, and Cave 469 was used as a sūtra storage with an inscription dated 953 CE.</p>	

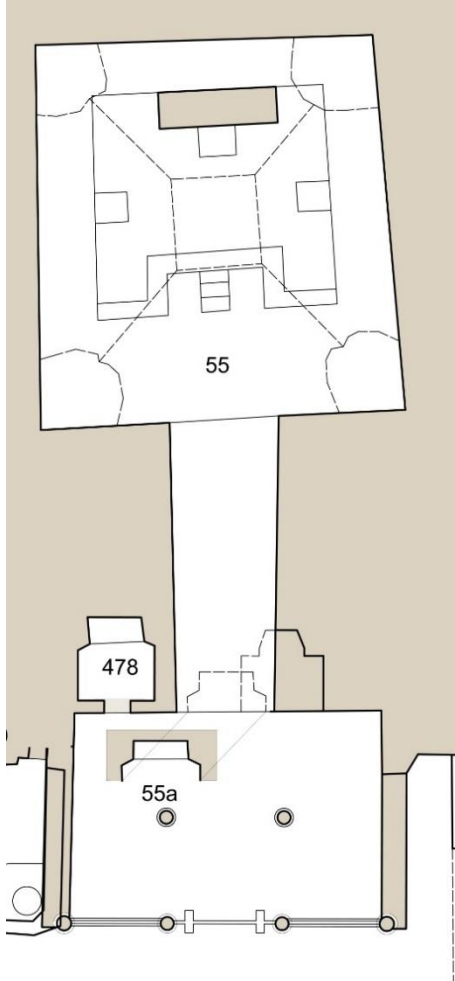
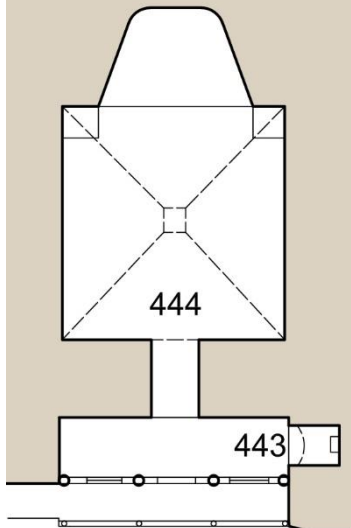
<p>30</p>	<p>158/(157+158a+158b); mid-Tang+(mid-Tang+unknown period), Xixia renovation; Caves 157 and 158b seem to be a pair of ear caves which were made around the same time with the main cave, whereas Cave 158a seems unfinished.</p>	 <p>The drawing shows a large rectangular cave labeled 158 with a trapezoidal interior. Below it are three smaller ear caves: 157 on the left, 158a in the middle, and 158b on the right. Dashed lines indicate the original structure and modifications.</p>
<p>31</p>	<p>159/(160); Mid-Tang+(late-Tang); The ear cave was added to the main cave and was later broken into from the cliff.</p>	 <p>The drawing shows a large trapezoidal cave labeled 159 with a smaller square ear cave labeled 160 attached to its side. Dashed lines show the original structure and the later addition of the ear cave.</p>
<p>32</p>	<p>29/(490+28); late-Tang (+high-Tang); Cave 29 is inserted in between the preexisting Caves 490 and 28 or expanded from another preexisting cave, and Cave 29's antechamber partly destroyed Caves 490 and 28.</p>	 <p>The drawing shows a large trapezoidal cave labeled 29. Below it are two smaller ear caves labeled 490 and 28. Dashed lines indicate the original structure and the later addition of Cave 29, which partially destroyed the other two caves.</p>

<p>33</p>	<p>16/17; late-Tang+(late-Tang), Song/Xixia renovation; the ear cave was made at the same time or slightly later than the main cave and then concealed during the renovation of the latter. Cave 17 successively served as a shadow cave and a storage.</p>	
<p>34</p>	<p>12/(11+13); late-Tang+(late-Tang), Five dynasties renovation; the ear chambers were likely made at the same time as the main cave, and Cave 11, which was fully refurbished in the Qing, exhibits positional and typological features of the late-Tang shadow caves.</p>	

<p>35</p>	<p>9/(8+10); late-Tang+(late-Tang), Song and Yuan renovations; The main cave, auxiliary cave, and ear cave, were made around the same time.</p>	
<p>36</p>	<p>136/137; late-Tang+(Five Dynasties), Song and Xixia renovation; the ear cave was made at the same time or slightly later than the main cave and then half destroyed by an expansion of the antechamber of the latter. Cave 137 served as a shadow cave.</p>	

<p>37</p>	<p>138/139; late-Tang+(late-Tang), Five Dynasties and Yuan renovations; the ante-hall of Cave 138 destroyed the ground and walls of a preexisting cave; the main cave and the ear cave were made at the same time. Cave 139 served as a shadow cave.</p>	
<p>38</p>	<p>152/(153+154); Song+(mid-Tang), Uighur/Xixia renovation; the main cave was inserted between two preexisting caves and the former's antechamber partly destroyed one of the latter (Cave 154). The cave suite together was renovated later.</p>	

<p>39</p>	<p>261/261a; Five Dynasties+(Five Dynasties); the main cave and the ear cave were made at the same time.</p>	 <p>The diagram shows a plan view of a cave system. A large rectangular chamber, labeled '261', is connected to a smaller, narrower chamber labeled '261a'. The main chamber '261' has a complex internal structure with several rectangular and trapezoidal sections, suggesting a multi-roomed or partitioned space. The ear cave '261a' is a simple rectangular passage. The entire structure is shown in a perspective view, slightly tilted.</p>
<p>40</p>	<p>22/22a; Five Dynasties+(Five Dynasties); the main cave and the ear cave were made at the same time.</p>	 <p>The diagram shows a plan view of a cave system. A large, irregularly shaped chamber, labeled '22', is connected to a smaller chamber labeled '22a'. Chamber '22' has a complex internal structure with several rectangular and trapezoidal sections, suggesting a multi-roomed or partitioned space. Chamber '22a' is a simple rectangular passage. The entire structure is shown in a perspective view, slightly tilted.</p>

<p>41</p>	<p>55/(55a+56+478+two unnumbered caves); Song+(Sui+mid-Tang); Song renovation; the corridor of Cave 55 was located right below Sui Cave 55a, and the ante-hall of Cave 55 leads to the destruction and concealment of Sui Cave 56 and mid-Tang Cave 478 and two unnumbered caves.</p>	 <p>The diagram shows a plan view of Cave 55, which is a large rectangular chamber with an internal structure of smaller rooms and corridors. A vertical passage connects Cave 55 to Cave 55a below it. To the left of this passage is Cave 478, a smaller rectangular chamber. The entire structure is set against a light brown background representing the rock face.</p>
<p>42</p>	<p>444/443; high-Tang+(Song), Song renovation; the ear cave was made during the renovation of the main chamber. Cave 443 served as a shadow cave.</p>	 <p>The diagram shows a plan view of Cave 444, a large rectangular chamber with a trapezoidal opening at the top. A vertical passage connects Cave 444 to Cave 443 below it. Cave 443 is a smaller rectangular chamber with a small square opening on its right side. The entire structure is set against a light brown background representing the rock face.</p>

Appendix I

A List of the Extant Open-Air Murals at the Mogao Caves

The list is based on my on-site surveys from August 2019 to April 2022 and several sources from the early twentieth century to the last decade.¹ There are fifty-two places of extant open-air murals, and the total area is approximately 411 m². They are distributed from the south end (Cave 147) to the north end (Cave 4) of the south section of the Mogao caves, which is over eight hundred meters long. It is generally agreed that the paintings were made during the Guiyijun period (848–1036) (alternate dates are otherwise noted).

Table 5. List of extant open-air murals at the Mogao caves

No.	Location	Area (m ²)	Preservation quality*	Subject matter*
1	Cave 147, above	0.21	C	no information
2	between Caves 148 and 149	2	C	no information
3	Cave 149, above	1.5	D	no information
4	Cave 152, above	2.5	D	N/A
5	Cave 130, upper north	11.84	D	demonic guardians or heavenly kings in two tiers
6	Cave 170, above	0.72	A	a pitched roof
7	Cave 174 through 175, around	0.4	D	no information
8	Caves 181 through 185, above	0.21	D	no information
9	Cave 196, north	7.5	D	N/A
10	Cave 202	3	D	N/A
11	Cave 203, above	4.9	A	a peacock flanked by two flying

1. For source materials, see chapter 4n42–44.

				apsaras, scattered flowers
12	Caves 204-205, above	6.7	B	four apsaras flying toward north
13	Cave 214, above	3	D	no information
14	Cave 207, above	6	D	no information
15	Cave 206, above	2	D	no information
16	Between Caves 207 & 206	1	B	a meditating monk
17	Cave 96, north	4	C	right elbow and top of halo of a heavenly king
18	Cave 94, above	98.5	B	a three-bay timber hall; four guardian kings inside; a martial guardian and an armored guardian outside; two flying apsaras above
19	Cave 233, north	17	D	no information
20	Cave 234, north	0.7	D	no information
21	Cave 248, north	0.48	D	no information
22	Cave 454, above	30.93	C	a dancing figure; two pairs of offering figures or musicians; a flying drum(?)
23	Cave 450, north	2.6	D	floating sashes of flags or banners, and flames of a halo (probably of a guardian figure)
24	Cave 448, south	1.5	D	no information
25	Cave 444, north	2	B	an eleven-headed Avalokiteśvara Bodhisattva
26	Cave 437, above	4.5	D	N/A
27	Cave 437, south side of antechamber	2	A	a monk disciple offering flowers in standing position, with cartouche frame
28	Cave 437, south	0.5	D	head of a heavenly king
29	Cave 431, above	23.55	C	a mythical bird standing in frontal view, flanked by four flying apsaras and a small figure(?); a flying <i>qin</i> (lute) (?)
30	Cave 431, south	1.5	A	a warrior figure
31	Cave 428, above	27	B	a mythical bird standing in frontal view, flanked by six flying apsaras, three on each side, clouds and

				flowers
32	Cave 429, above	1.5	A	two monk disciples standing with palms joined in front of chest; the left one faces Cave 428 and the right one faces Cave 427; flowers and clouds floating in surroundings; two layers of paintings.
33	Cave 427, above	20	D	a mythical bird standing in frontal view, flanked by three flying apsaras, one on the south side and two on the north side; a winged demigod on the south side faces the direction of Cave 428.
34	Caves 294-301	20	C/D	two flying apsaras, perhaps more on the continuous trip
35	Cave 302-3, above	3.5	A	two flying apsaras (?), a flaming jewel on clouds, scattered flowers
36	Cave 305, above	1.5	C	a flying apsaras
37	Cave 307, above	1.9	D	a <i>kalaviṅka</i> , and more figures
38	Caves 309-10, above	2	D	no information
39	Cave 310, south-facing side	1	D	capped head of a meditating monk, two small flying apsaras
40	Cave 306, outside	6.5	A	a heavenly king holding a sword and supported by two demonic guardians, identified as Virūḍhaka
41	Cave 308, outside	4.5	D	a heavenly king, probably Vaiśravaṇa
42	Cave 31, south and north	4	D	no information
43	Cave 418-419, above	2.1	C	no information
44	Cave 321, north	5	C	a heavenly king accompanied by a demonic guardian
45	Cave 395, antechamber north	3	B	a heavenly king, probably Vaiśravaṇa
46	Cave 395, antechamber south	3	A	a senior monk seated on chair, with cartouche identifying the figure as the eminent monk Sengqie; a deer

				holding a monk's bag in its mouth; mountain background
47	An ante-hall excavated in 1960s	2	D	monk's feet and a lion
48	Cave 365, antechamber exterior	40	B	four guardians (Qing dynasty)
49	Cave 7, south	3	A	a Buddhist monk/nun (facing Cave 7); a demonic guardian (facing Cave 358)
50	Cave 7, north upper	0.2	C	no information
51	Cave 4, south	7	D	no information
52	Cave 4, north	9	D	no information

Note: *. Preservation quality: A = image is complete and clear; B = majority of the image is visible; C = considerable portion of the image is damaged, yet the subject matter and the overall composition is identifiable from remaining image; D = majority of the image is damaged.

※. "No information" means the image was non-extant at the time of the author's surveys and no documentation of the visual contents was available to the author. "N/A" means visual documentation was available, but the author could not identify any image.

Appendix J

Trace-Copy Drawing and Digital Restoration of Selective Extant Open-Air Murals at the Mogao Caves

This catalog includes five pieces or groups of better-preserved open-air murals from south to north along the Mogao cliff. Each group begins with a brief description of the visual features, then a line drawing indicating the location of the murals in relationship to the antechambers of the caves, an overview of the murals overlapped with trace-copy drawings, and views of murals associated with each cave if applicable. Unless otherwise noted, the photographs and drawings are made by me.

Group 1: Caves 202, 203, and 205

This area of open-air mural above Caves 202 to 205 (figures J-1, J-2) belongs to the mural tripe above the top-level caves between the two colossal image caves. Those above Caves 170 and 181–85 belong to the same mural stripe. A tipped-in-the-middle rectangular area above the antechamber of Cave 203 bears the image of a frontal-view peacock flanked by two flying *apsaras* floating on clouds (figure J-3). The mural above Cave 205 has only a small portion on the south side left. The shape of the image frame indicates that the painting would have been a concave gable shape, as the upper border tilts upward on the north side. The remaining area depicts, above wavy, dense clouds, four *apsaras* flying north, the direction of Cave 205's central axis (figure J-4). There was presumably a similar composition on the now-lost side. Therefore,

this mural would have had a large composition of eight to nine figures. Judging from the historical drawing, Cave 202 was at one time topped by an exterior mural that had a similar gable shape and was larger than those of Caves 203 and 205. This format is also shared with other large-sized caves on the top level, such as Caves 454 and Cave 428.

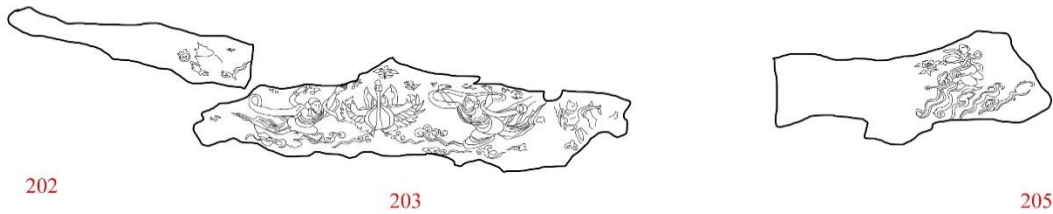


Figure J-1. Location of the open-air mural in Group 1.



Figure J-2. Overview of the open-air mural in Group 1, overlapped with trace-copy line drawings.



Figure J-3. Open-air mural above Cave 203 overlapped with trace-copy line drawings.

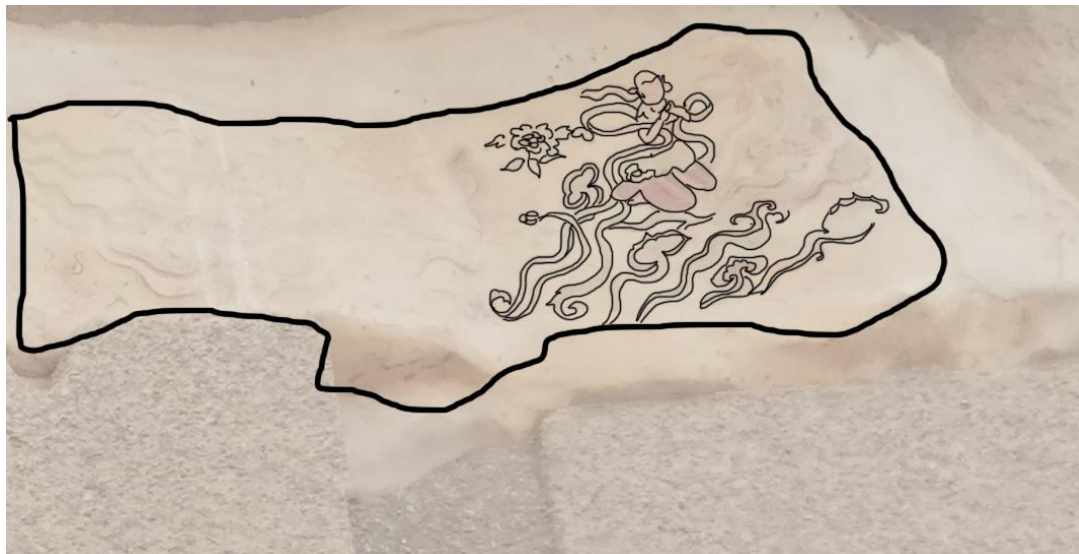


Figure J-4. Open-air mural above Cave 205 overlapped with trace-copy line drawings.

Group 2: Caves 94 and 231

One of the largest mural paintings, if not the largest, is a roughly rectangular area above Cave 94 (figures J-5, J-6). Although only fragments are discernable, it covers an area of 98.5 square meters and extends from right above the ground-level antechamber to the top of the cliff section. It extends to the area above Cave 231.

The mural above Cave 94 depicts a three-bay-wide timber edifice in which four heavenly kings stand. The rightmost, corner column stands behind a railing and supports purlin beams, on which an overhanging roof is raised. The beams, which have distinctive, red outlines and interval lines, are topped with Ω -shaped brackets, the surfaces on and between which are filled with floral motifs. Above them, the perspectival depiction of two levels of rafters evokes an illusion in which the eave protrudes from the pictorial surface. The major timber members are rendered in cinnabar color, distinguishing them from the beige-colored background and the polychromic ornaments. The building's large columns are decorated in the middle with a green band. On the top register, two flying *apsaras* are approaching each other from opposite sides, and between them is a jewel-like object comprising two circular shapes one on top of another and a cinnabar triangular shape on the top, suggesting an offering or the visible part of the building's finial.

The mural above the gable-front antechamber of Cave 231 bears mainly figural images. Two guardian figures stand above the slopes of the gable-front roof, and their sashes spiral and flow behind. Between them is a flying *apsaras* and a scattering of flowers.

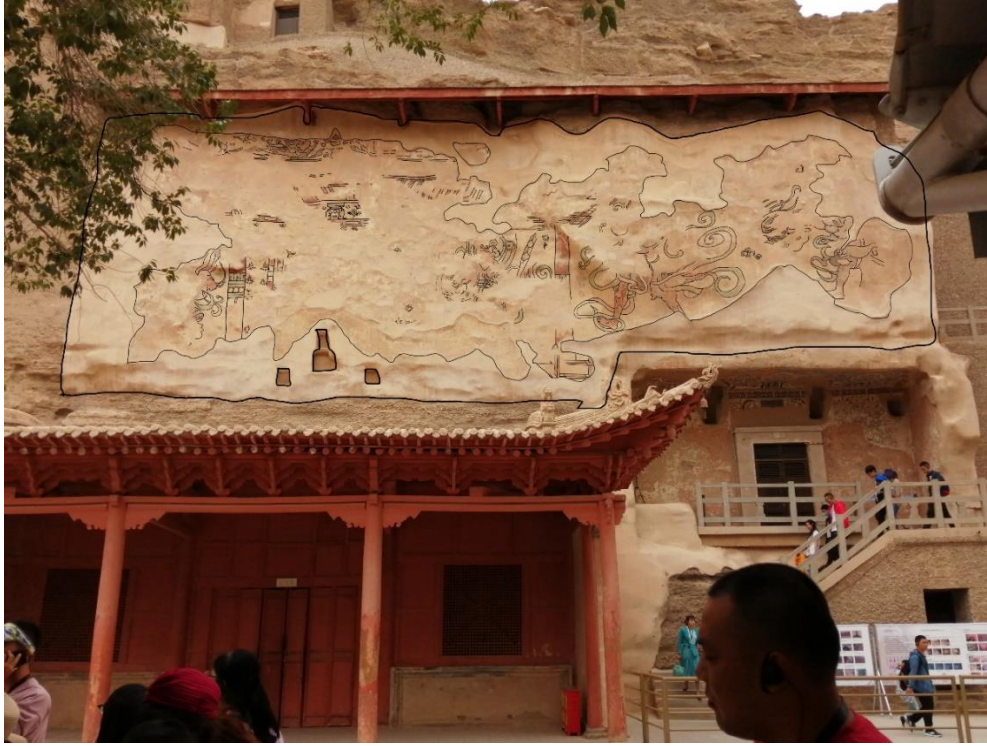


Figure J-5. Open-air mural above Caves 94 and 231 overlapped with trace-copy line drawings.

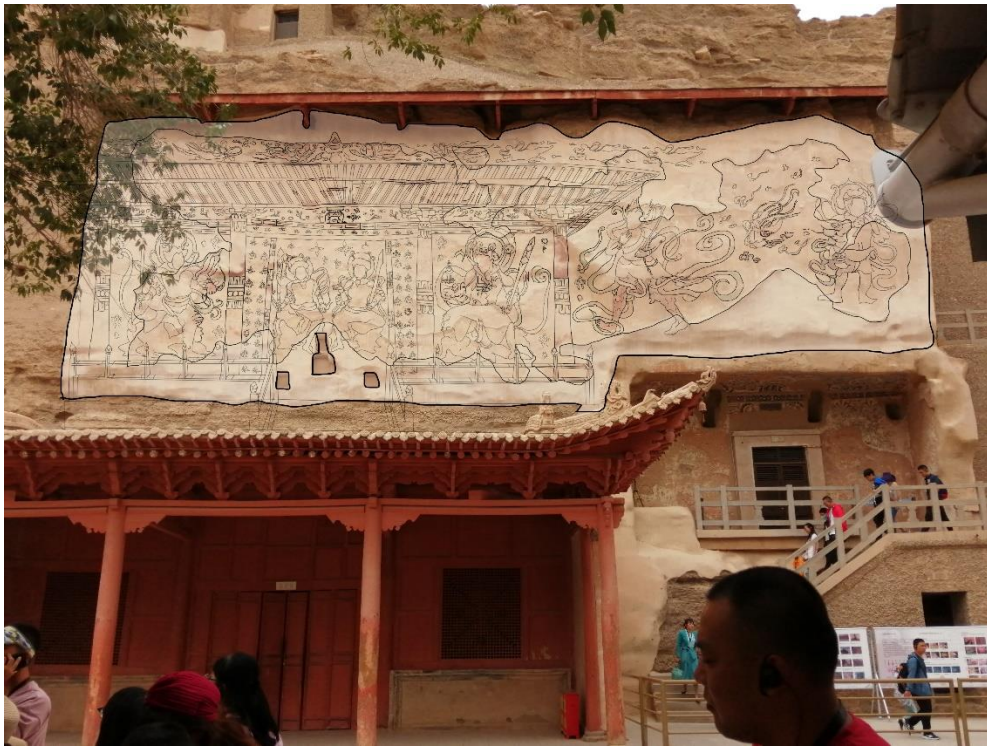


Figure J-6. Open-air mural above Caves 94 and 231 overlapped with trace-copy line drawings.

Group 3: Caves 450–58

A gable-shaped mural painting covers an area of 30.93 m² on the cliff surface above Cave 454 (figures J-7, J-8). Composed symmetrically of five heavenly figures and some instruments (one remaining), its central vertical axis aligns with that of the antechamber. In other words, it visually extends the temple façade toward the sky. The gable-shaped painting appears to be an integral part of the façade design, and the painting style is similar to that of the antechamber and corridor, which were renovated around 980 CE. That the mural stripe extends above the half-collapsed Cave 458 indicates the reason of renovation—the cliff area underwent a severe collapse sometime around the 960s.

This external large-size mural is pivot around a scene of musical and dancing offering (figure J-9). Five figures and one or two musical instruments are depicted in a symmetrical layout, centering on a bodhisattva-looking figure who dances on his right foot. This dancer aligns with the central vertical axis of the antechamber and extends it upward. Two ornate figures kneeling in three-quarter view face the dancer on his left and the viewer's right-hand side. They are respectively clapping and holding an offering item or an instrument that has a drapery. Two other figures almost mirror their position, yet due to the severe damage of the painting, it is impossible to identify them or the items they hold. Despite the partial visibility, all five bodhisattvas or heavenly beings are “floating” on mats and lotus flowers; their sashes weave high, as if being blown by wind from below. The kind of heavenly musical instrument that sounds on its own appears as well. To the right of the rightmost figure flows a drum-like, large,

brownish-red object surrounded by flying sashes. This kind of musical instrument is typically depicted in the uppermost register in Pure Land transformation tableaux, rendering the miraculous atmosphere above a holy assembly. Therefore, one may say that this scene animates the magnificent architectural setting—the once-existing timber façade below it and the large chamber behind it—and indicates a visionary journey to the Pure Land.

The widening area to the south of the gable shape is the extant portion of the open-air mural above Cave 458 (figure J-10). It bears images of scattered flowers and clouds. The other widening area to the north of the gable shape is the extant portion of the open-air mural above Cave 450 (figure J-11). It bears similar images of clouds and flowers. The diagonal direction of the cloud flows indicates that the mural above Cave 450 originally covered a gable-shaped area.

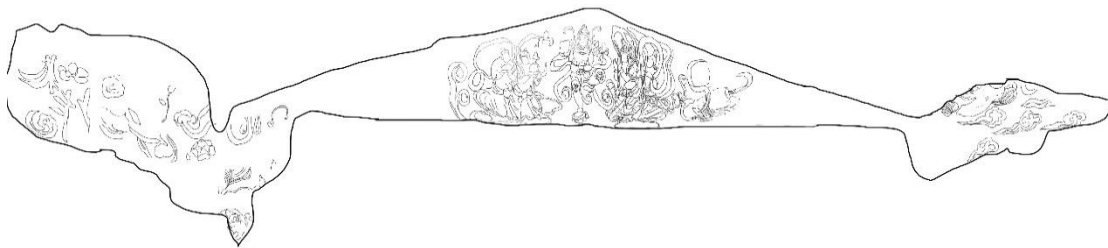


Figure J-7. Location of the open-air mural in Group 3.



Figure J-8. Overview of the open-air mural in Group 3, overlapped with trace-copy line drawings.



Figure J-9. Open-air mural above Cave 454 overlapped with trace-copy line drawings.

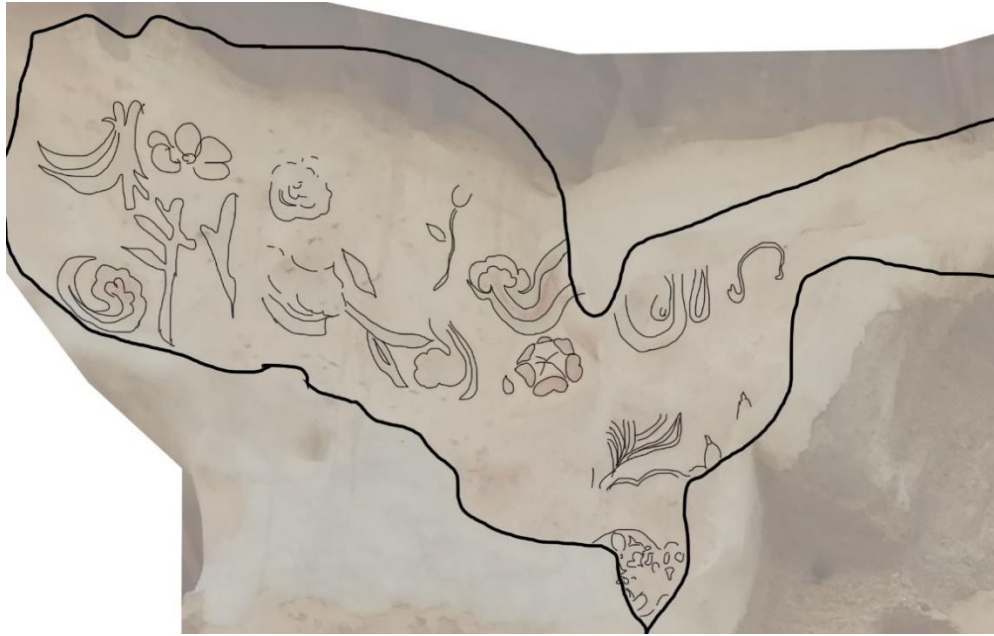


Figure J-10. Open-air mural in-between the area above Caves 458 and 454 overlapped with trace-copy line drawings.

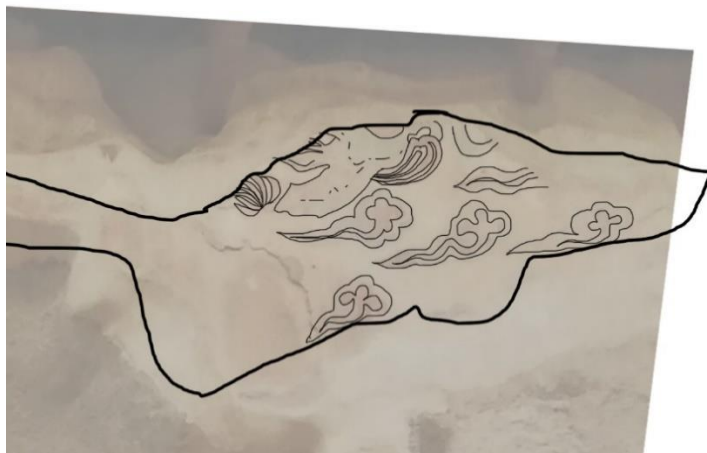


Figure J-11. Open-air mural in-between the area above Caves 450 and 454 overlapped with trace-copy line drawings.

Group 4: Caves 427–31, 299–306

The area centered around Cave 428 has the best-preserved timber structures and open-air murals among the Mogao caves. The timber structures include pillars and beams of Cave 428,

and four timber façades of Caves 427, 431, 437, and 444. The exterior mural bears images of Buddhist offering and guardian figures, flowers, and clouds. They cover three levels of an approximately forty-meter-long, densely carved area. The upper-level Caves 424 to 432 and the middle-level Caves 292 to 308 preserve painting traces (figures J-12, J-13).

The visual focus would have been around the top level and would have been emphasized by the large-size gable-shaped mural above Cave 428. In accordance with a gable-shaped roof, the open-air mural above it depicts a flowering plant or cloud that occupies the tip of the gable-shaped canvas and a flying *apsaras* playing a flute (figure J-14). This figure was paired with another flying *apsaras*, only a small portion of whose sash is extant. In the surrounding area are scattered clouds and flowers and what seems to be a *qin* (lute) with long sashes. An additional stripe of mural below Cave 428 depicts a half-naked guardian figure and a flaming jewel amid clouds and flowers.

The mural stripes continue on the lateral sides and sandwich two smaller antechambers of Cave 427 to the north and Cave 431 to the south. Above the roof of Cave 431 is depicted a scene of four flying *apsaras* attending a peacock-like bird standing in frontal view on a lotus throne (figure J-15). The image above Cave 427 is similar, except that the leftmost figure, which seems like a winged demigod, faces the direction of Cave 428 instead of Cave 427 (figure J-16).

On the second level, the mural outside Caves 306–8 exemplifies the transition between interior and exterior images. The outside face of the antechamber's east wall presumably bore image of two heavenly kings. The south-side image outside an auxiliary Cave 306 of the cave

suite is extant (figure J-17), and by the principle of symmetry, there must be a north-side one outside the other auxiliary Cave 308. The images are painted on the cliff surface from which a timber-structured passageway was overhung. It occupies a gray space between interior and exterior.

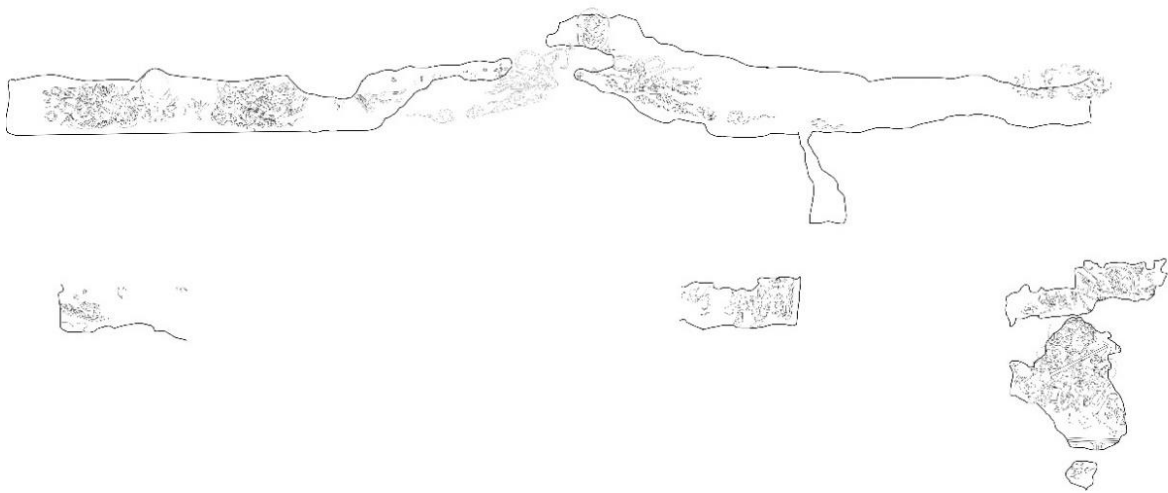


Figure J-12. Location of the open-air mural in Group 4.



Figure J-13. Overview of the open-air mural in Group 4, overlapped with trace-copy line drawings.



Figure J-14. Open-air murals above and below Cave 428 overlapped with trace-copy line drawings.

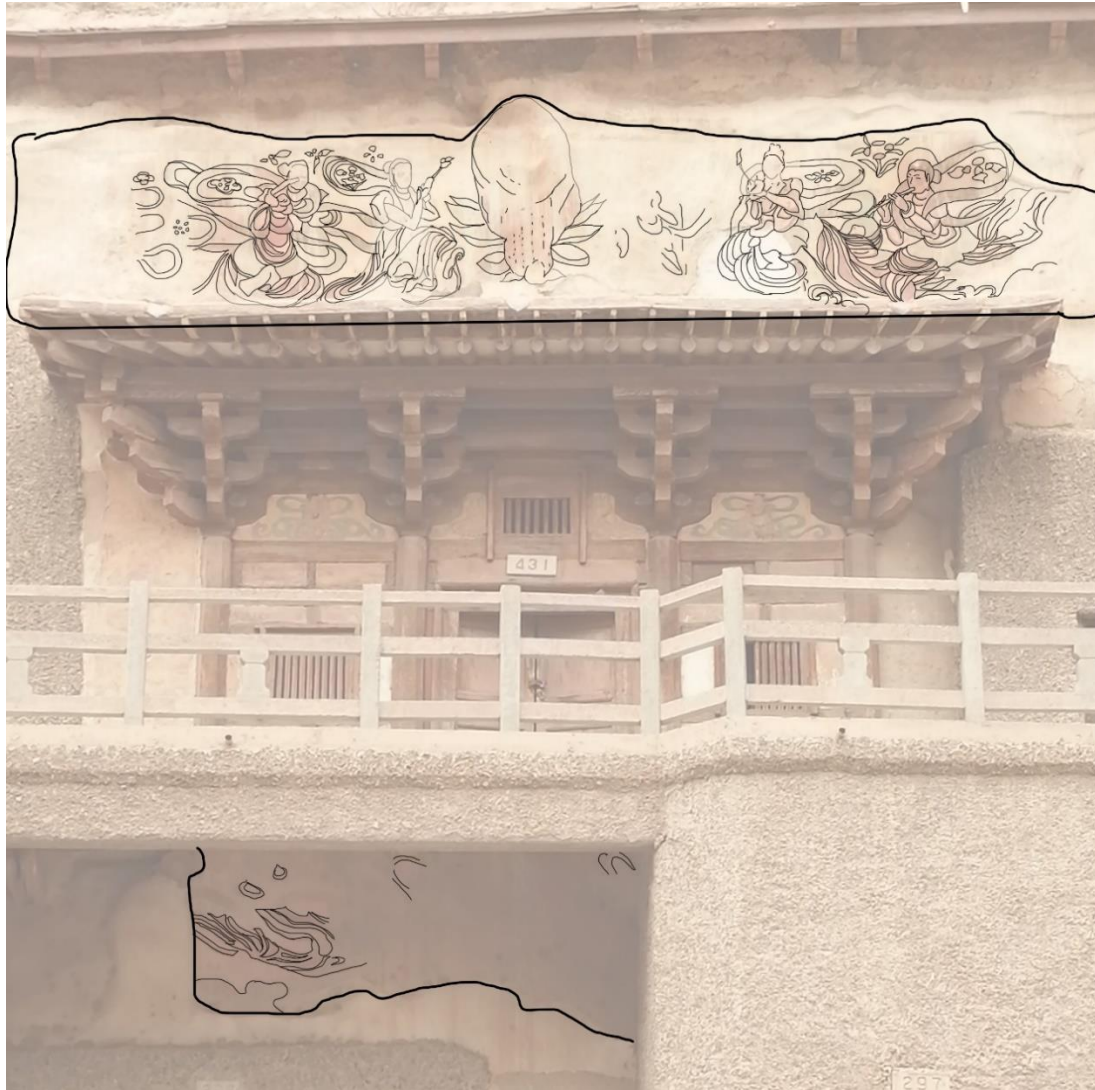


Figure J-15. Open-air murals above and below Cave 431 overlapped with trace-copy line drawings.



Figure J-16. Open-air murals above and below Cave 427 overlapped with trace-copy line drawings.



Figure J-17. Open-air murals outside Cave 306 (south ear chamber of Cave 307) overlapped with trace-copy line drawings.

Group 5: Caves 358 and 7

Two fragments of open-air mural in between Caves 358 and 7 indicate the northern expansion of the mural stripe (figures J-18, J-19). One of them is located to the north of Cave 358 and bears the image of a flag and the upper body of a demonic guardian (figure J-20). The

other is located to the south Cave 7 and bears the image of the upper body of a monk and a long-stem plant (figure J-21). Both figures are around real size. Each is represented in a three-quarter view and facing the non-extant antechamber of the respective cave.

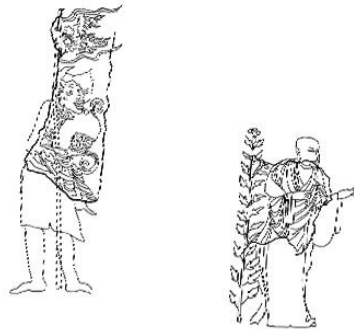


Figure J-18. Location of the open-air mural in Group 5.



Figure J-19. Overview of the open-air mural in Group 5, overlapped with trace-copy line drawings. Base photo after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 3, fig. 13.



Figure J-20. Open-air murals to the north of Cave 358 overlapped with trace-copy line drawings.



Figure J-21. Open-air murals to the south of Cave 7 overlapped with trace-copy line drawings.

Appendix K

Central-Altar Caves of the Guiyijun Period (848–1036)

Table 6. Names, dates, and locations of central-altar caves at Mogao¹

Cave	Name in <i>Lantern Distribution</i>	Patron	Construction time	Zone	Location
205*	Buddha Hall with a <i>kṣetra</i> -core 刹心佛堂	Renovated by the Cao family	Early Tang (640-705)	Zone I	south-second
161*	The Hall of Dusha (Avalokiteśvara) 獨煞神堂	(Facheng 法成 /Zhang Huaishen 張淮深)	Early/mid-9th century	Zone C	south-third
16	The Cave of Preceptor Wu 吳和尚窟	Hongbian 洪辯	851–62	Zones F/J	north-ground
85	The Cave of the Zhai Family 翟家窟	Farong 法榮	860s	Zone B	mid-ground
94	The Cave of <i>Situ</i> 司徒窟	Zhang Huaishen 張淮深	880s	Zones A/B	mid-ground
196	The Cave of Dharma Master He 何法師窟	Jiezhi 戒智	late 9th century	Zone I	south-uppermost
138	The Cave of the Yin Family 陰家窟	Yin Haiyan, etc. 陰海晏等	late 9th century	Zone K	south-second
146	The Cave of the Song Family 宋家窟		10th century	Zone K	south-ground

1. The information of caves and donors is based on information from Zhang, “Dunhuang shiku de zhongxin fotan ku,” 35, table 1. Dating based on Pan and Ma, *Mogao ku kuqian diantang yizhi*; and Dunhuang yan jiu yuan, *Dunhuang shiku neirong zonglu*.

152	The Cave of the Wu Family 吳家窟		10th century	Zone K	south-ground
233	The Cave of the Yin Family 陰家窟		10th century	Zone D	south-third
76*	The Cave of the Song Family 宋家窟		Tang, renovated in 10th century	Zone B	south-ground
98	The Cave of the Great King 大王窟	Cao Yijing 曹議金	939	Zone A	south-ground
108	The Cave of Zhang <i>Duya</i> 張都衙窟	Zhang Huaiqing 張淮慶	939	Zone A	south-ground-low
61	The Hall of Mañjuśrī 文殊堂	Cao Yuanzhong 曹元忠	951	Zones B/D/H	mid-ground
55		Cao Yuanzhong 曹元忠	962	(Zone B)	mid-ground
256		Cao Yuanshen 曹元深	late 10th century	(Zone D)	mid-second
454		Cao Yangong 曹延恭	late 10th century	(Zone H)	middle-second
4	unknown	unknown	late 10th century	Zone J	north-ground

Note: * The cave is a pre-Guiyijun-period cave with a square altar in its center and a comparative example to the central-altar caves of the Guiyijun period.

Table 7. Dimensions of the antechamber, corridor, main chamber, and central altar (unit: meter)²

Cave	Antechamber			Corridor			Main Chamber			Central Altar			Backscreen	
	width	depth	height	w	d	h	w	d	h	w	d	h	d	w
205*	7.15	2.8	4	1.5	1.2	2.5	6.4	6.75	6	3.9	4.2	0.7	N/A	N/A
4	10.1	N/A	N/A	3.3	5	4.5	11.4	11.7	8.7	9.45	9.1	1.35	6.5	0.7
16	11	4.1	7.9	3.7	7.2	4.6	15.2	16.6	9.5	7.6	8.6	1.3	0.9	3.4
85	8.9	4.4	5.5	2.6	4.1	3.7	10.05	11.2	7.9	5.7	6.5	1.2	N/A	N/A
94	10.7	4.3	4.9	3.85	6.6	4.8	13.95	16.65	9.65	7.6	8.5	1.4	1.3	3.45
161*	5.45	2	2.8	1.05	0.6	1.8	4.2	3.9	3.7	2.25	1.46	0.55	N/A	N/A
196	9.75	4.5	5	2.4	3.8	3.5	9.9	10.4	8.5	5.2	6.7	0.9	1	3.5
138	10	4.4	4.35	2.9	4.6	4.35	12.75	13.9	7.85	7.4	8.3	1.4	1	4
146	8.8	2.4	N/A	2.68	5	3.7	8.68	9.4	8.6	5.6	5.9	1.1	0.85	2.6
152	11.3	3.8	6.5	3.5	8	6	14.35	14.35	9.45	7.2	10	1.1	1	5.45
233	11.1	4.3	5	2.9	7	3.8	11.1	11.7	6.5	7.2	6.65	1.1	N/A	N/A
76*	9.8	5.5	N/A	4.2	4.3	3.5	9.3	11	6.2	5.6	7.1	0.8	N/A	N/A
98	11.16	6.6	7.8	3.7	7.1	4.9	12.6	15	9.8	7.5	8.4	1.35	1.3	4.3
108	10	5.2	5	2.8	5.7	3.9	10.15	11.25	7.9	5.9	6.7	1.25	N/A	N/A
61	12.15	8.35	6	3.85	9.25	4.8	13.43	14.35	8.85	7	8.5	1.45	0.95	4
55	10	6.8	6.35	3.4	8.6	5	11.22	12.15	8.5	7.1	7.6	1.1	1	3.7
256	9.8	2.95	4.5	3	5.95	4.25	11	12.4	8.25	6.5	7	1.2	N/A	N/A
454	8.65	2.9	4.7	2.65	5.9	4.1	10.2	11.2	6.7	6.4	7.8	1	N/A	N/A

2. The dimensions are based on Zhang Jingfeng's "zhongxin fotan ku": 35, table 1, and Shi Zhangru's *Mogao ku xing*.

Appendix L

The Development of the Old District, 366–962 CE

My theoretical reconstruction of the construction sequence in the central area of the old district is based on the dating of the caves and their stratigraphical relationship. Originally, the primary group comprising Caves 268, 272, 275 was constructed about thirteen meters above the then ground level, and Cave 489 was constructed on the then ground level beneath Cave 272 (figure L-1). Vertical and horizontal connection presumably existed. During the Northern Wei period, Caves 260, 263, and 265 were built adjacent to the initial group to the south (figure L-2). Central-pillar Caves 263 and 265 might have been built as a pair. During the Sui period, Caves 457, 456, and 455 were constructed to the north of the initial group and Caves 262 and 266 to the south of it. The period also saw refurbishments of the Northern Dynasties caves and the addition of caves to the unused cliff face left between them. A row of small hall caves, including Caves 64, 63, 62, 59, 56, and 55, were built underneath the initial group (figure L-3). During the early Tang period, the unused cliff face in the Sui-period row were filled up by Caves 65, 60, 58, and 57. A third row of tiny caves, including Caves 484, 483, 482, 481, 480, 479, and 478, were built below the row of Sui-period caves (Figure L-4). In the high- and mid-Tang periods, a fourth row of larger hall caves, including Caves 264, 460, 458, was built above the level of the initial group (figures L-5, L-6).

At that point, the cliff was saturated by four levels of caves. In the subsequent hundred years, not much intervention occurred in the area. In 947–51, the construction of Cave 61 on the elevated ground level started to change the architectural pattern of the area. Its ante-hall, which is as tall as two levels of caves, destroyed Caves 60, 62, 63, 64, 484, 485, and an unnumbered one (figure L-7). In 962, the subsequent construction of Cave 55 destructed 55a, 56, 478, and two unnumbered caves (figure L-8). The two monumental ante-halls flanked the overhanging passageway in front of the initial group from below (figure L-9).

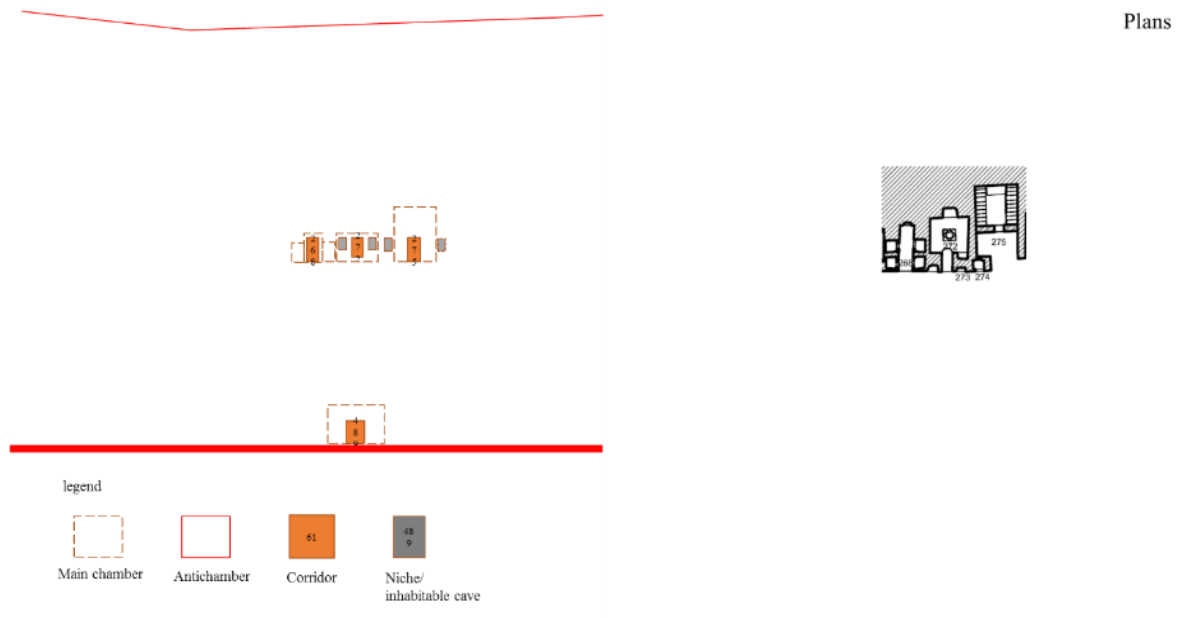


Figure L-1. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the Sixteen Kingdoms (366–439 CE). Series of diagrams by author.

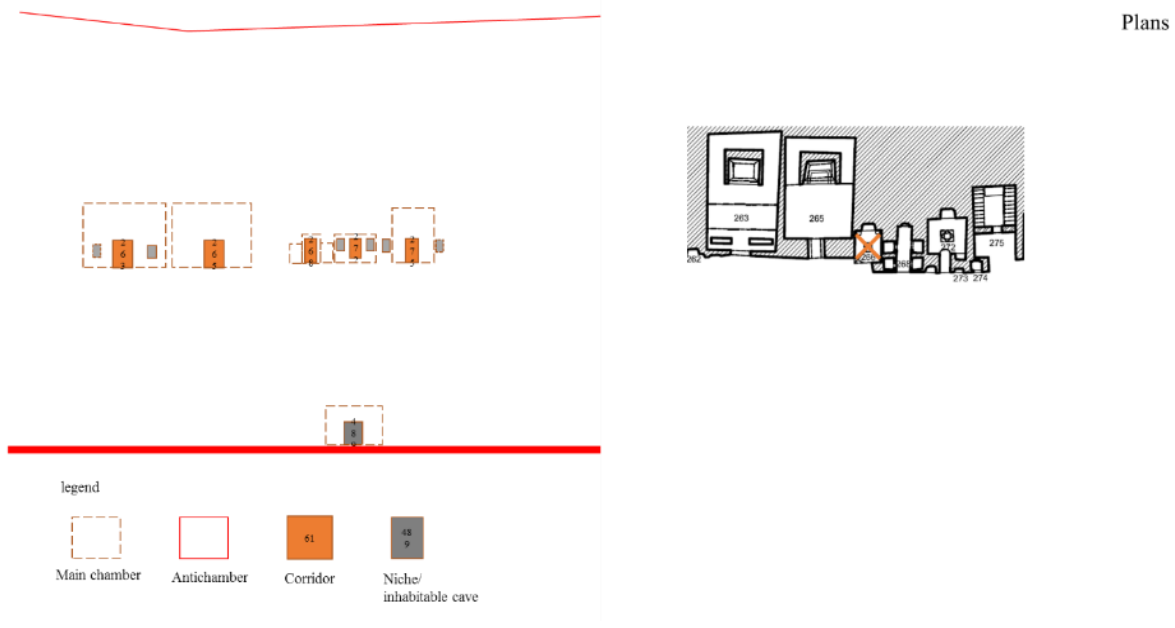


Figure L-2. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the Northern Dynasties (439–581 CE).

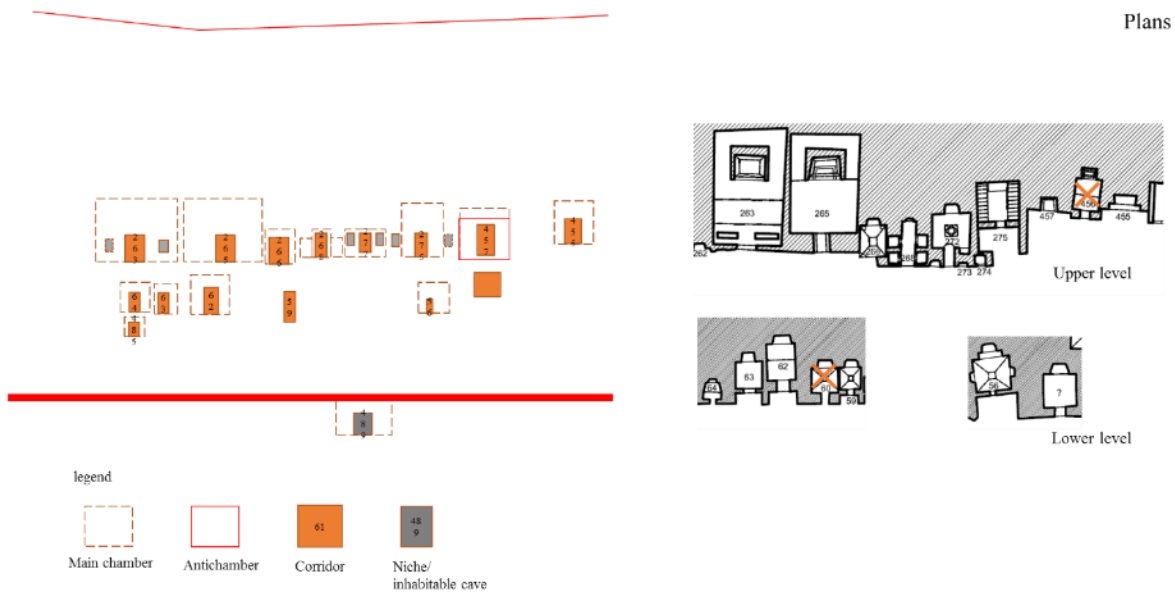


Figure L-3. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the Sui dynasty (581–618 CE).

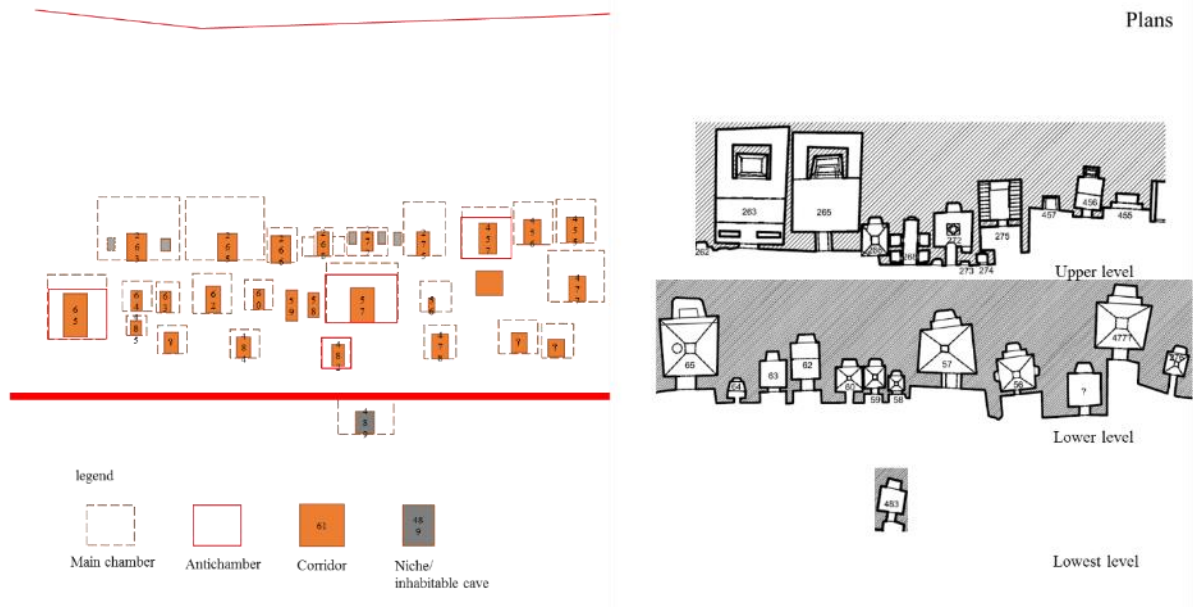


Figure L-4. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the early-Tang period (618–704 CE).

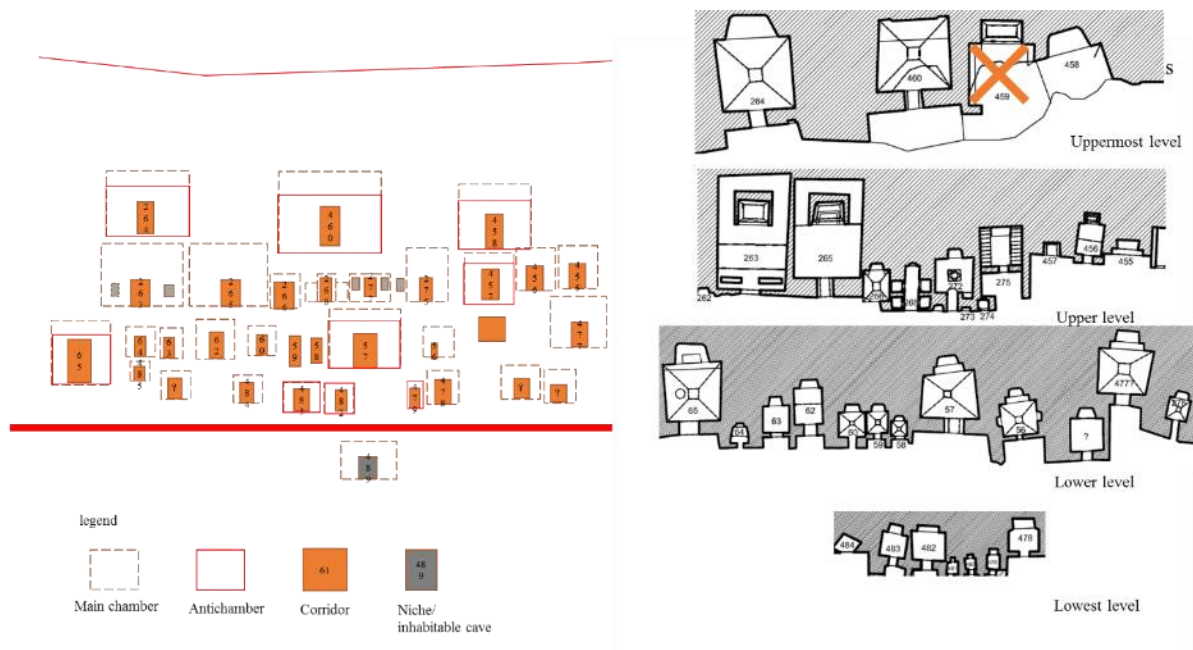


Figure L-5. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the high-Tang period (705–80 CE).

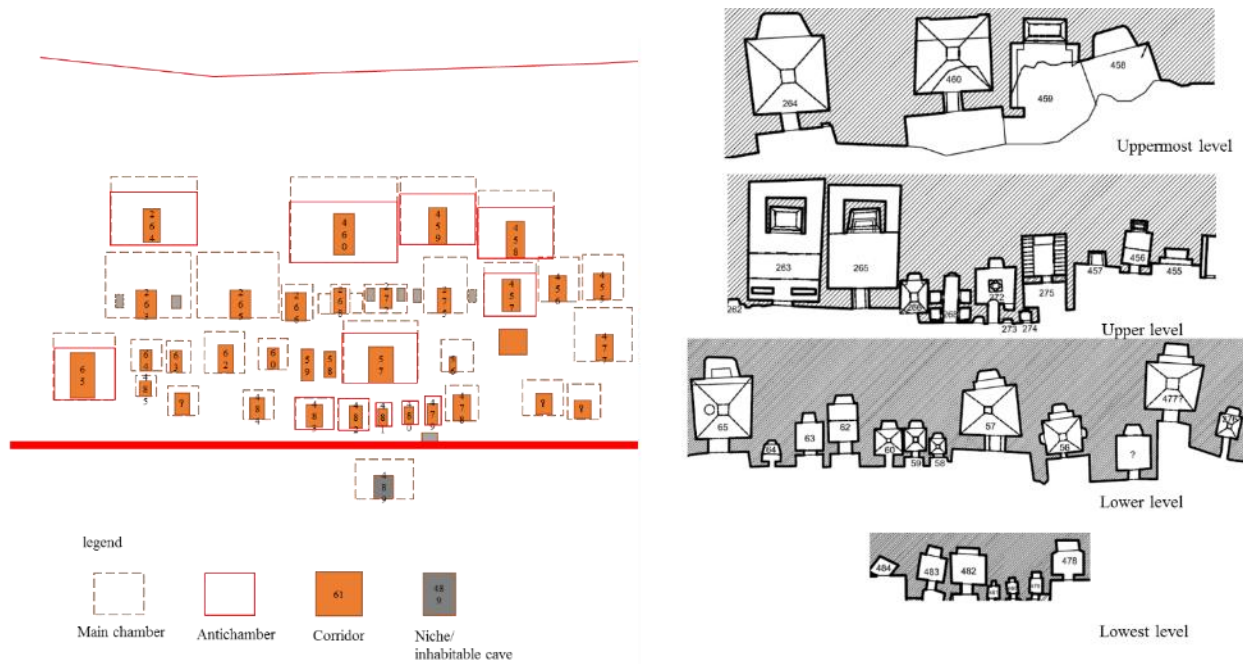


Figure L-6. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) during the Tibetan period (781–847 CE).

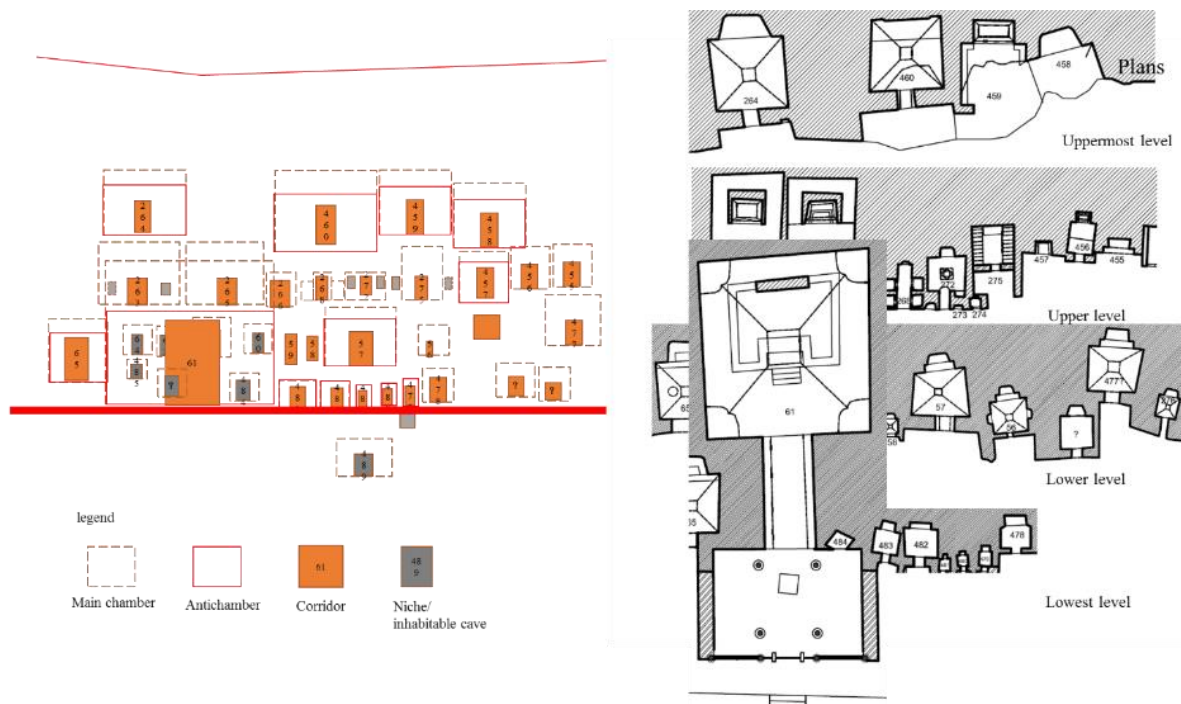


Figure L-7. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) in 951 CE.

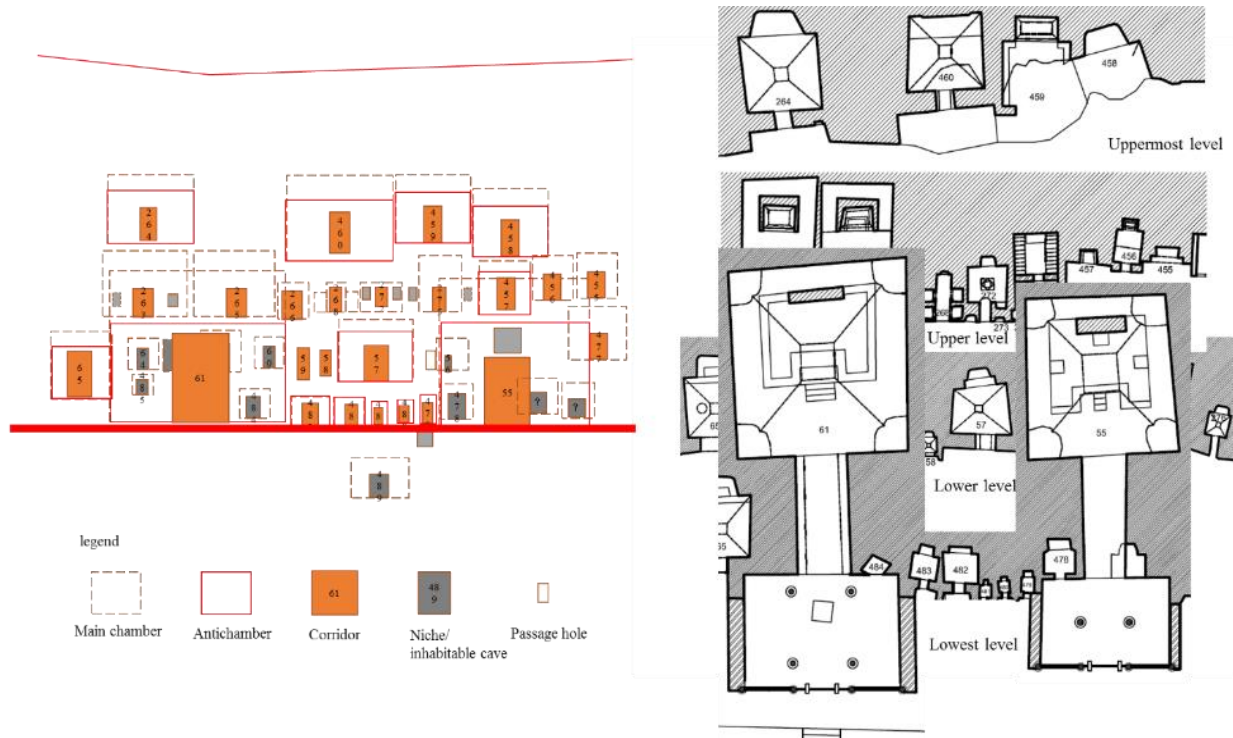


Figure L-8. Theoretical reconstruction of the cliff surface (*left*) and the cave plans (*right*) in 962 CE.



Figure L-9. Theoretical reconstruction of the cliff surface with passageways (*left*) and the cave plans in a larger area (*right*) in 962 CE.

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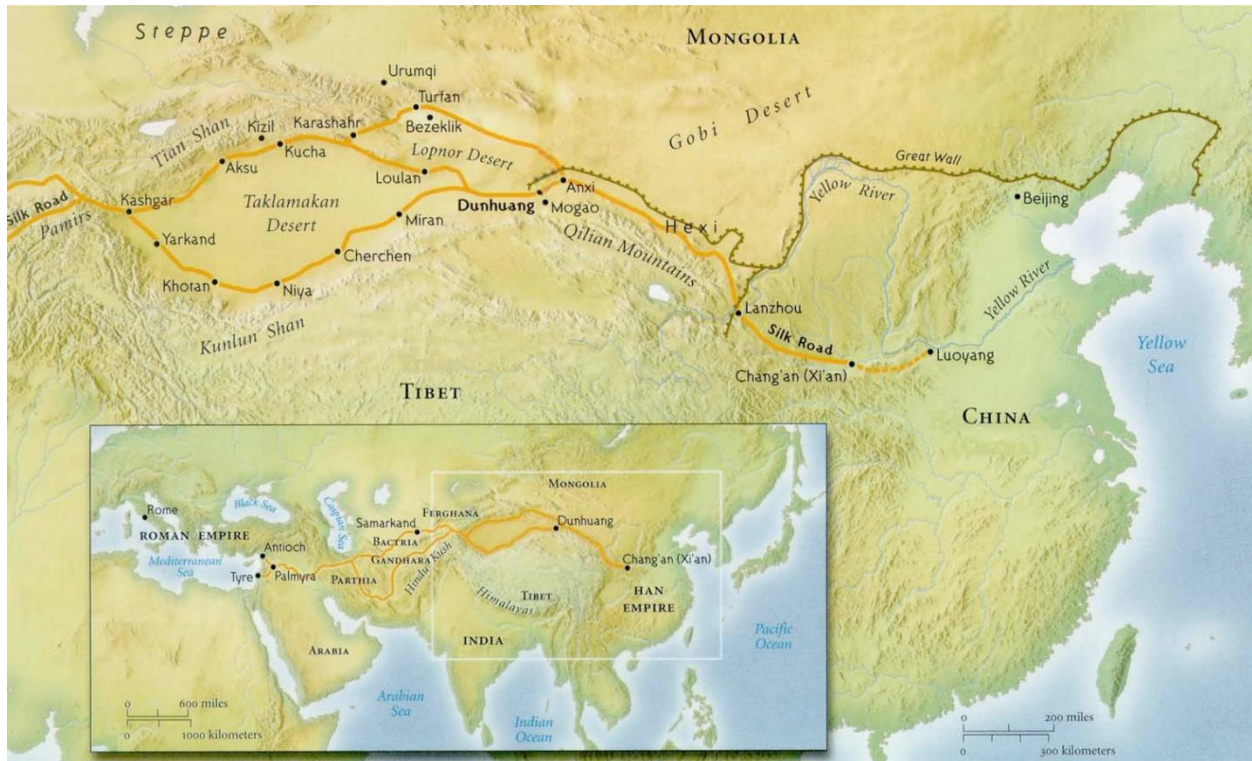
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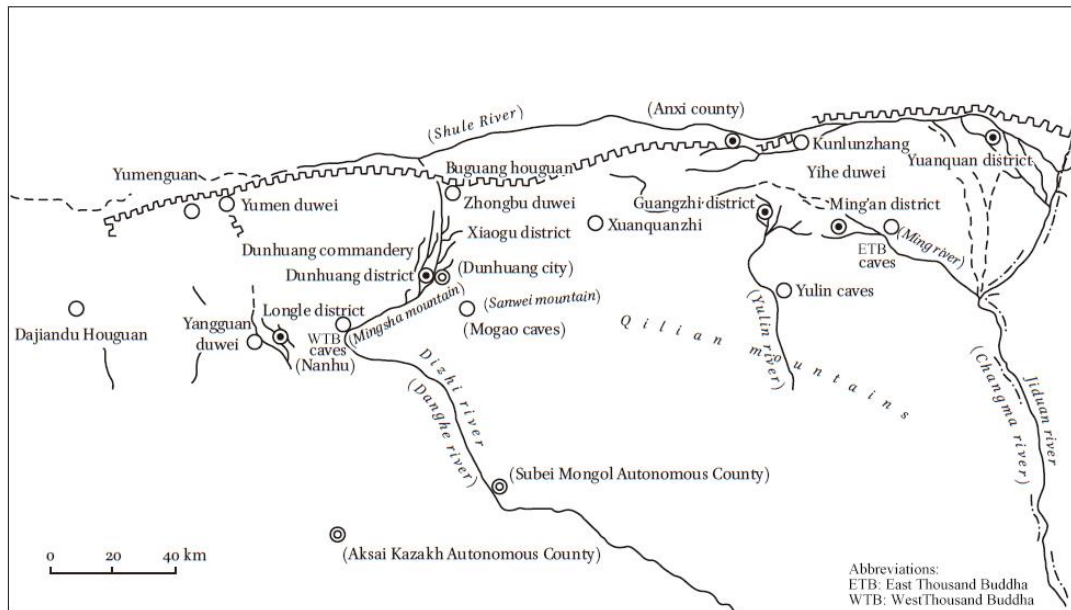
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Zhongyang yanjiu yuan lishi yuyan yanjiusuo 中央研究院歷史語言研究所 [Institute of History and Philology, Academia Sinica]. Lishi ziliao shuwei diancang ziliao ku 歷史資料數位典藏資料庫 [Digital archives of archaeological data]. https://ndweb.iis.sinica.edu.tw/archaeo2_public/System/Media/Frame_Advance_Search.htm. Accessed October 9, 2021.

Maps



Map 1. Dunhuang on the Silk Road. After Wong and Agnew, *Conservation of Cave 85*, 3, fig. 1.1.



Map 2. Dunhuang commandery (present-day Dunhuang-Anxi region). Modified after Rong, *Eighteen Lectures*, 16, map 1.

Figures

0. Introduction



Figure 0-1. The Mogao caves (south section), seen from Mount Sanwei. Photo by Sun Zhijun. After Agnew et al., *Cave Temples of Dunhuang*, ii–iii.



Figure 0-2. The three-story pavilion, seen from the south side. Photo by James Lo, 1943–44. James and Lucy Lo Photograph Archive.



Figure 0-3. *Meditation Sūtra* transformation tableau, north wall, Mogao Cave 217, Dunhuang, high-Tang period. After Sun and Sun, *Jianzhu hua juan*, 121, fig. 105.

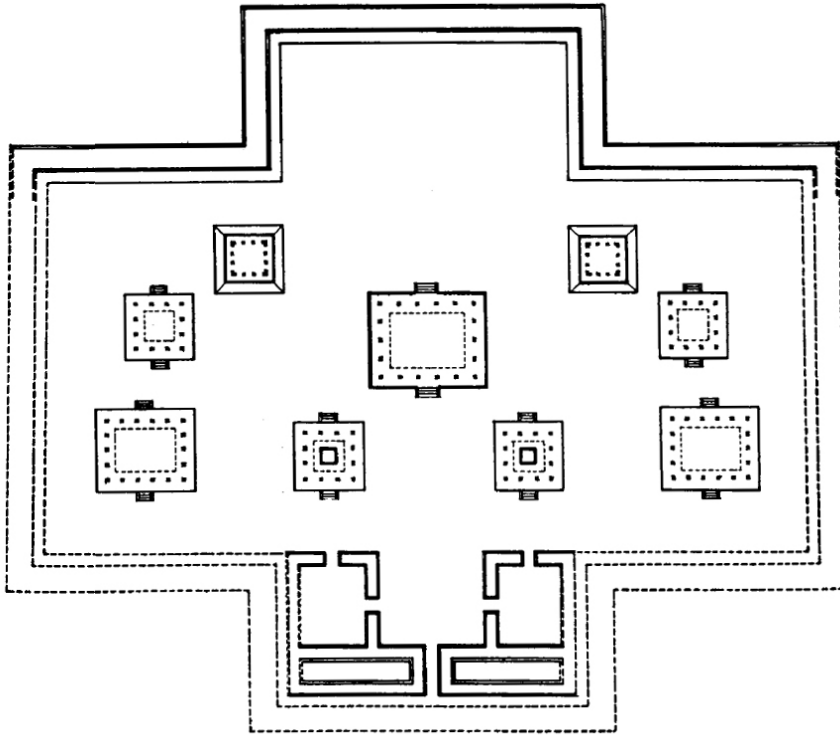
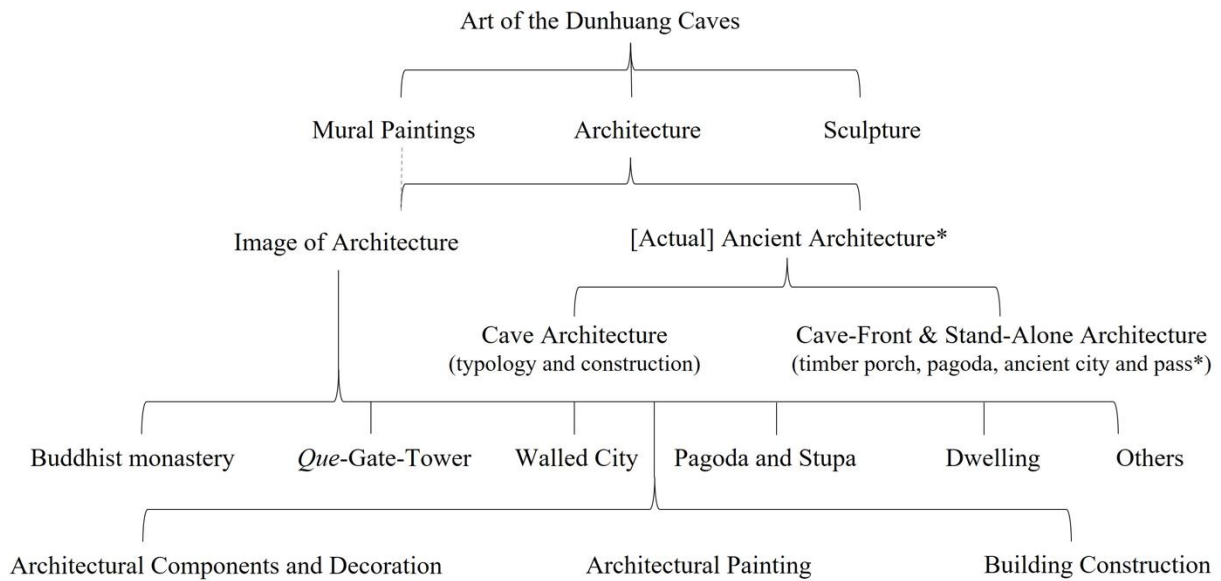


Figure 0-4. Anneliese Bulling's plan reconstruction of the building complex in figure 0-3 in 1936. After Bulling, "Die chinesische Architektur," plate 144.



*: Expanded categories since 2002

Figure 0-5. Xiao Mo's taxonomy of Dunhuang architecture. Diagram by author.

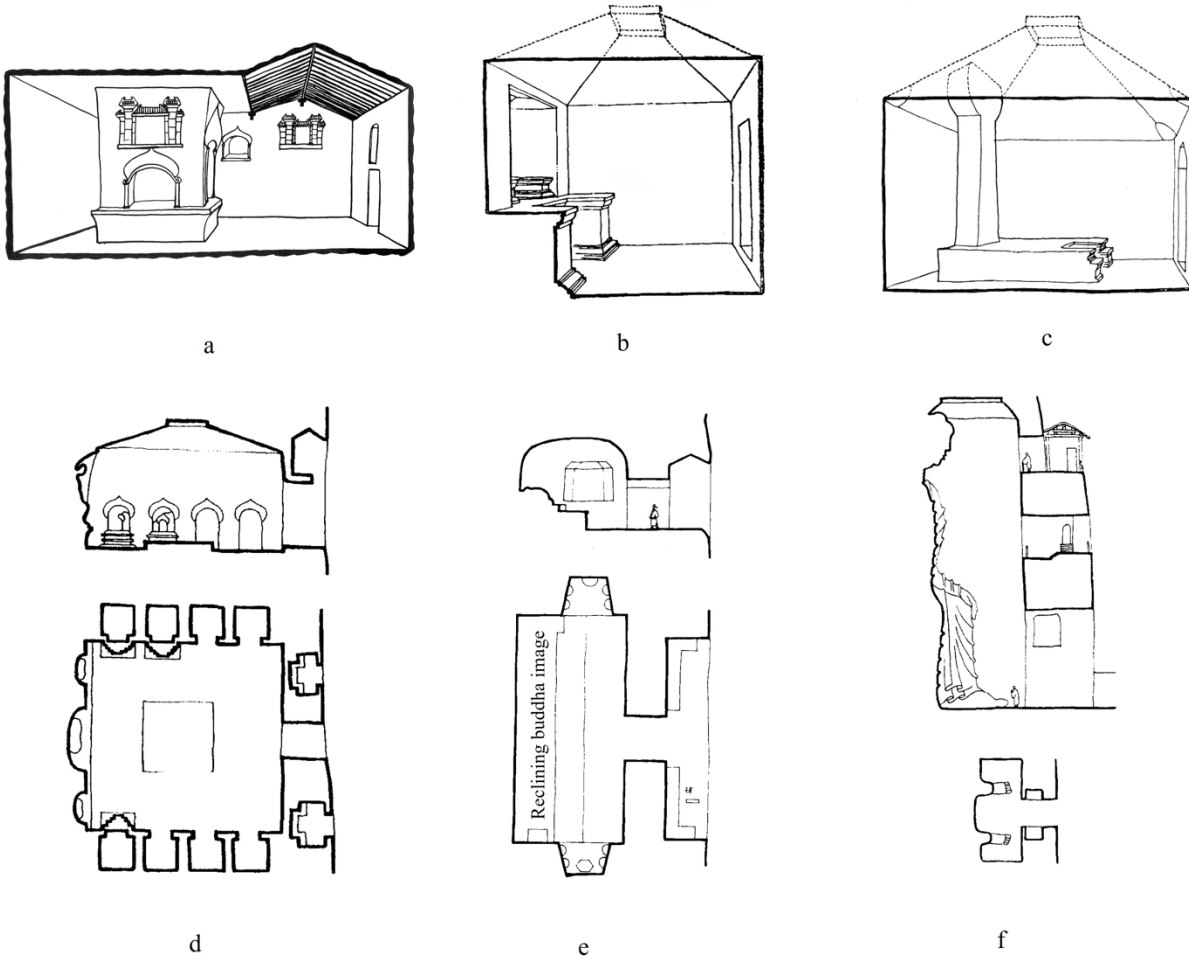


Figure 0-6. Major cave types in Dunhuang according to Xiao Mo. a) central-pillar cave; b) upturned-funnel cave; c) backscreened central-altar cave; d) vihara cave; e) nirvana cave; f) colossal-buddha image cave. After Xiao, *Dunhuang jianzhu yanjiu*, 36, 42, 51, 52, figs. 4, 9-2, 15-1, 16-1.

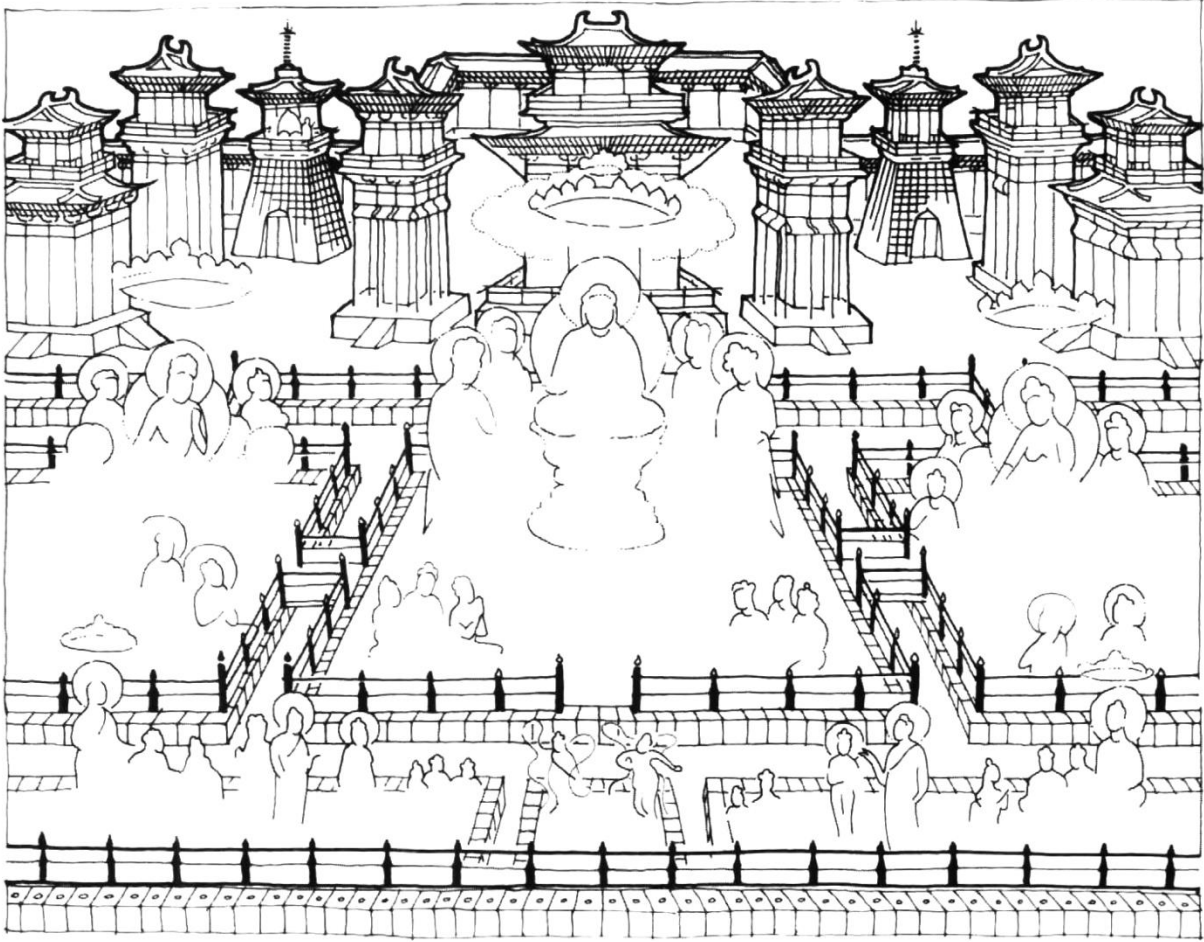


Figure 0-7. Xiao Mo's trace-copy line drawing of the building complex in figure 0-3 in 1989.
After Xiao, *Dunhuang jianzhu yanjiu*, 3rd ed., 67, fig. 1-9.

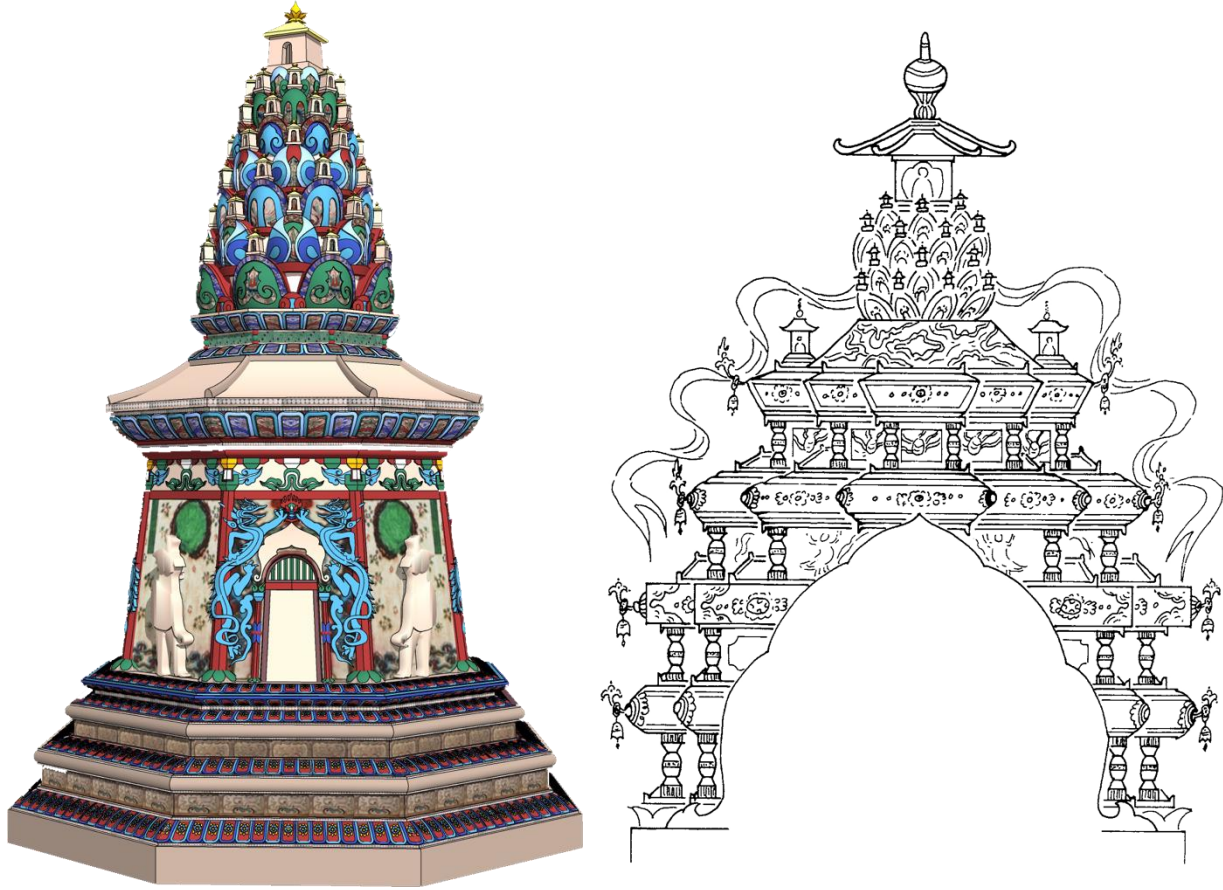


Figure 0-8. Architecture and image of the flower pagoda in Dunhuang. a) Digital model of an earthen pagoda at Chengcheng bend of the Daquan valley with the polychromic painting restored, second-half of the tenth century, 10 m (h), drawing by author; b) Trace-copy line drawing of a flower pagoda in the eight pagodas transformation tableau in Yulin Cave 3 of the Xixia period, drawing by Sun Yihua, after Sun and Sun, *Shiku jianzhu juan*, 231.

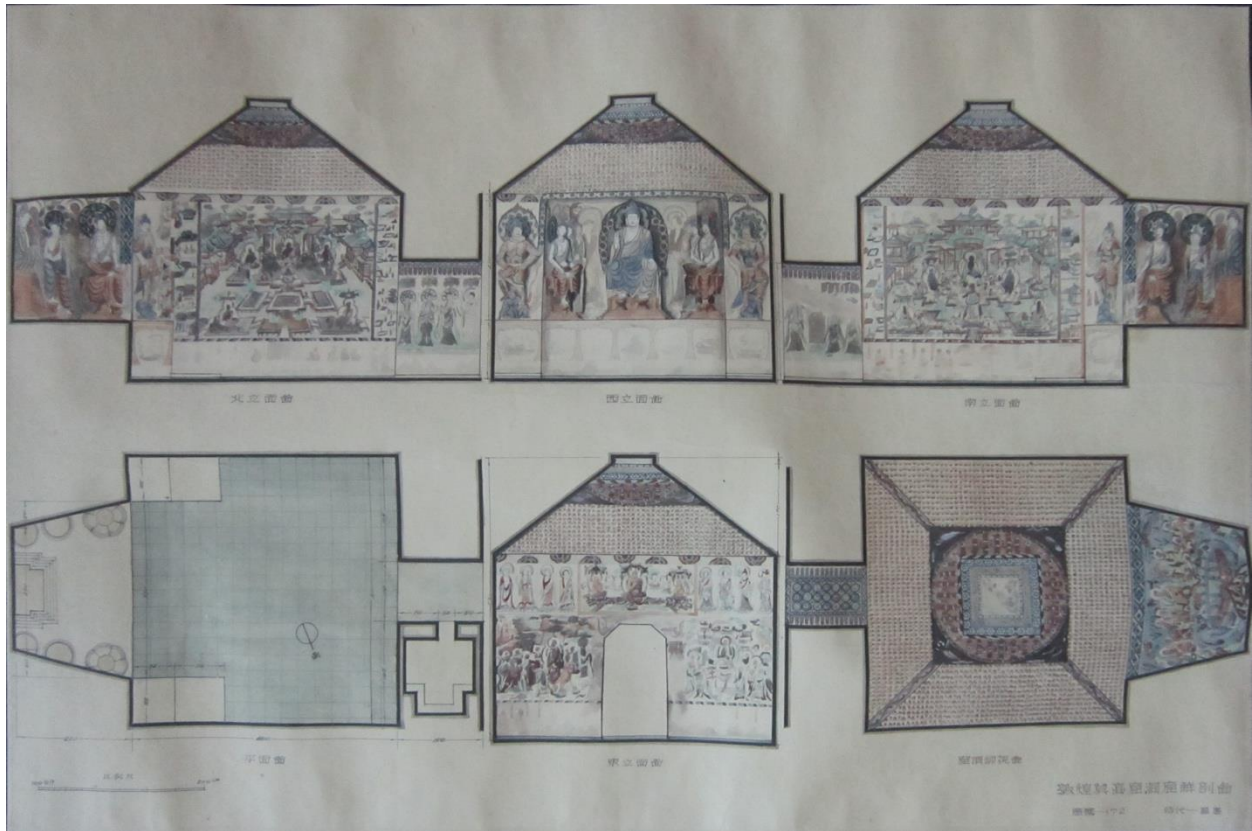


Figure 0-9. Sun Ruxian, *Anatomical Renderings of the Cave Type of Mogao Cave 172*, 1951, 75.5 cm (w) x 52.5 cm (h), watercolor. After Sun and Sun, *Shiku jianzhu juan*, 255.

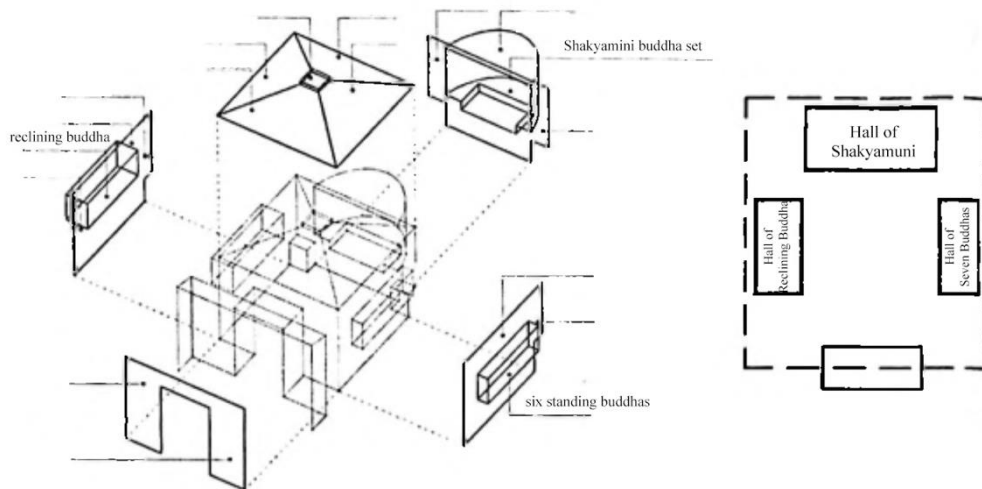


Figure 0-10. The cave space and main visual contents of Mogao Cave 46 (left) and a diagrammatic plan of the cloister based on the former (right). Adapted from Zhao and Duan, *Dunhuang Mogao ku yu 6 zhi 11 shiji fojiao kongjian buju yanjiu*, 74, figs. 2-28 and 2-29.

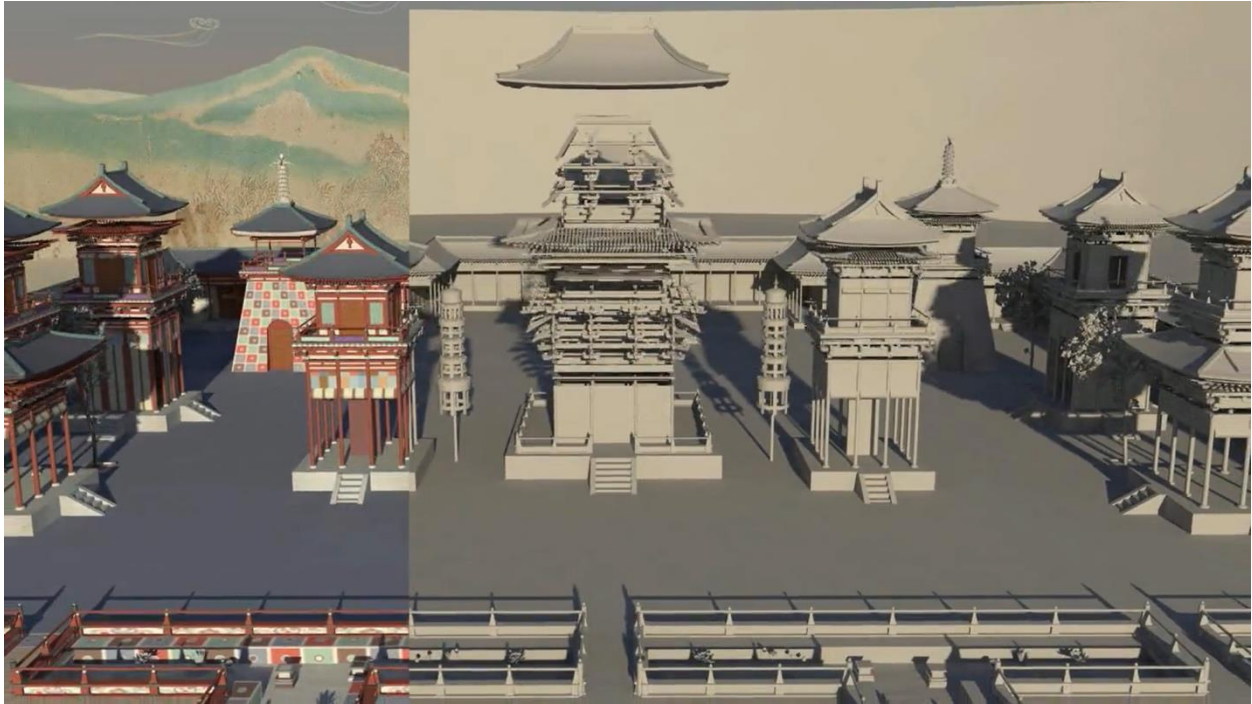


Figure 0-11. Snapshot from Ning Yuhang, “Tang-Styled Pure Land Re-presented” [Tangfeng guyun jingtu zaixian 唐風古韻 淨土重現], video (2017), which reconstructs the construction sequence of the building complex in Figure 0-3.



Figure 0-12. A walk-through video of the Pure Land architecture represented in Mogao Cave 172 juxtaposed with a physical model of another example of Pure Land architecture represented in Cave 148 at the exhibition *A Thousand Years of Construction*. Installation design by Liu Fei, Huang Hai, and the author; photo by author.

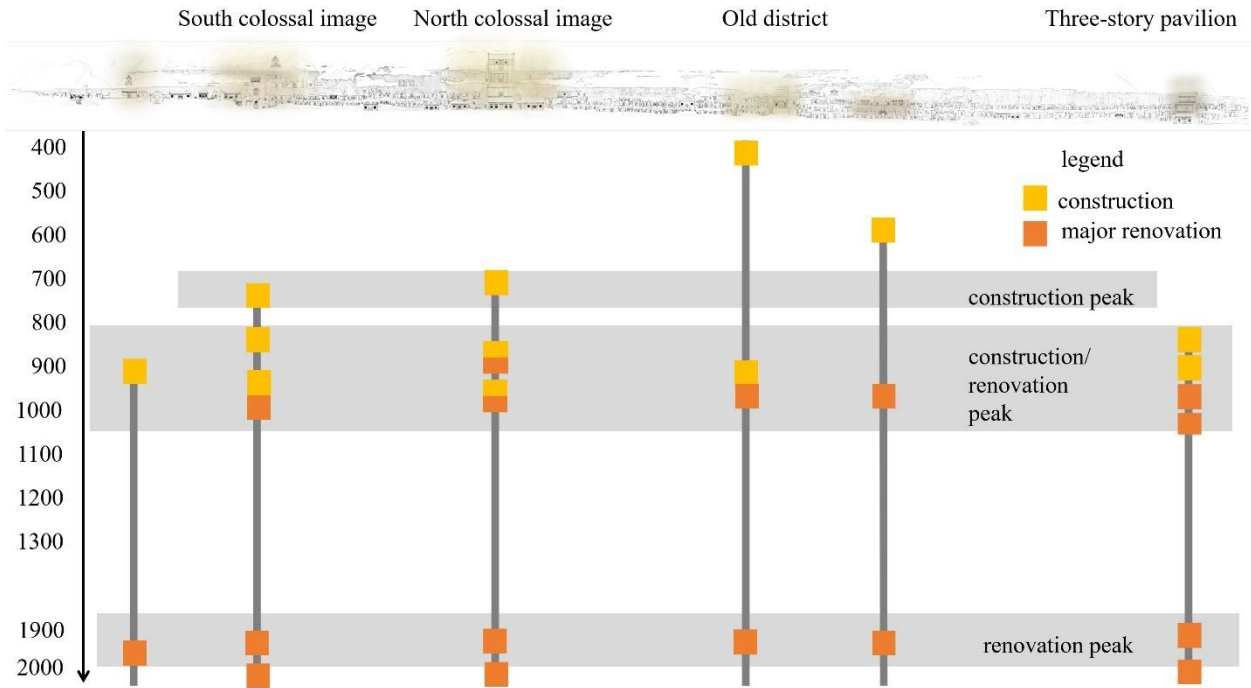


Figure 0-13. The landmark caves, cave groups, and cave clusters of Mogao (*upper*) and the duration of their constructions and major renovations (*lower*). Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotation and diagram by author.

1. *Becoming the Pavilion*

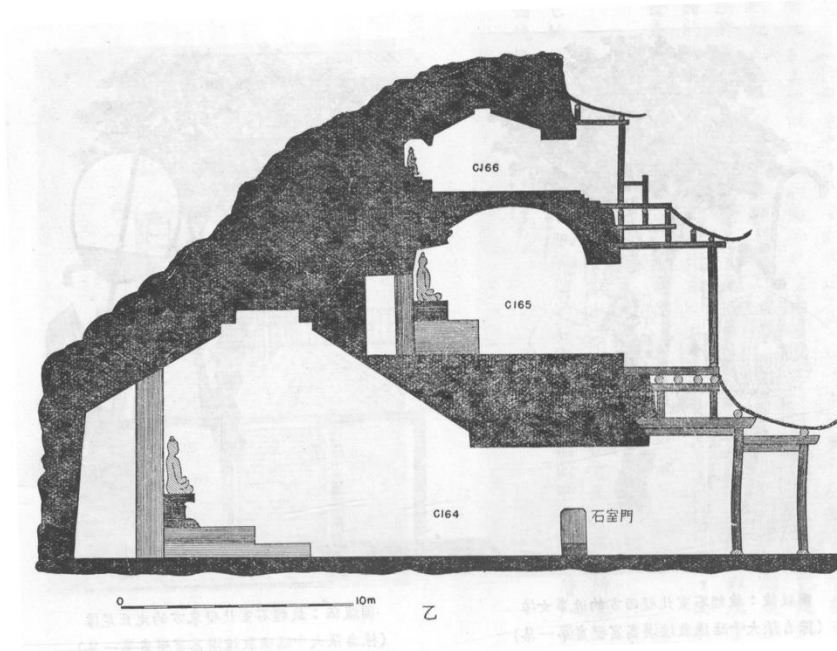
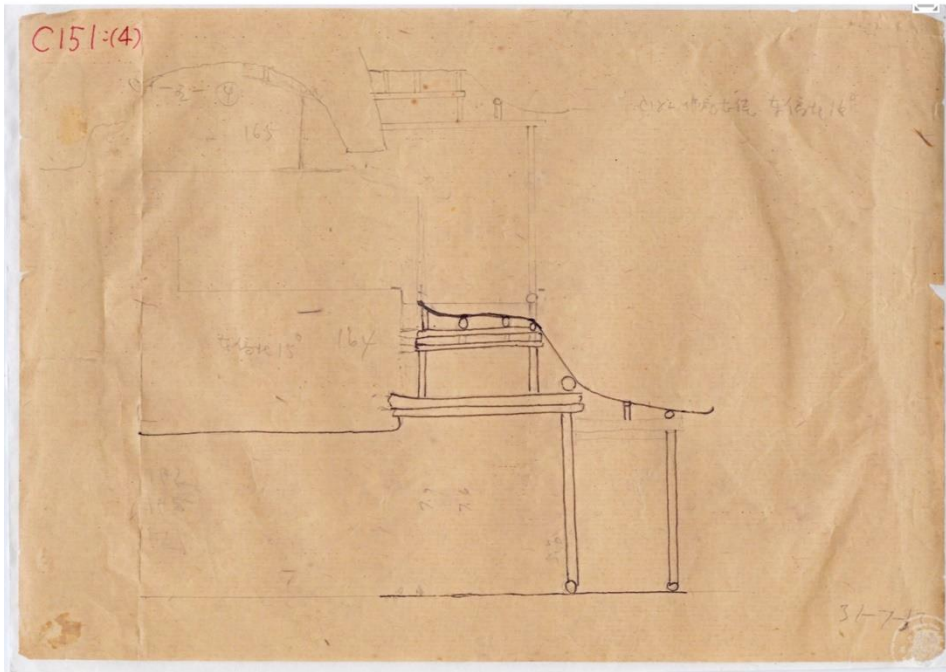


Figure 1-1. The sectional drawings of the pavilion by Shi Zhangru. a) a sketch of the antechambers of Caves 16 and 365, measured and drawn on July 13, 1942, in the collection of the Institute of History and Philology, Academia Sinica (MOGAO_FIG125BTWA_04), courtesy of the Institute of History and Philology, Academia Sinica; b) a sectional drawing of Caves 16, 365, and 366. After Shi, “Guanyu Cangjing dong de jige wenti,” 37, fig. 2.

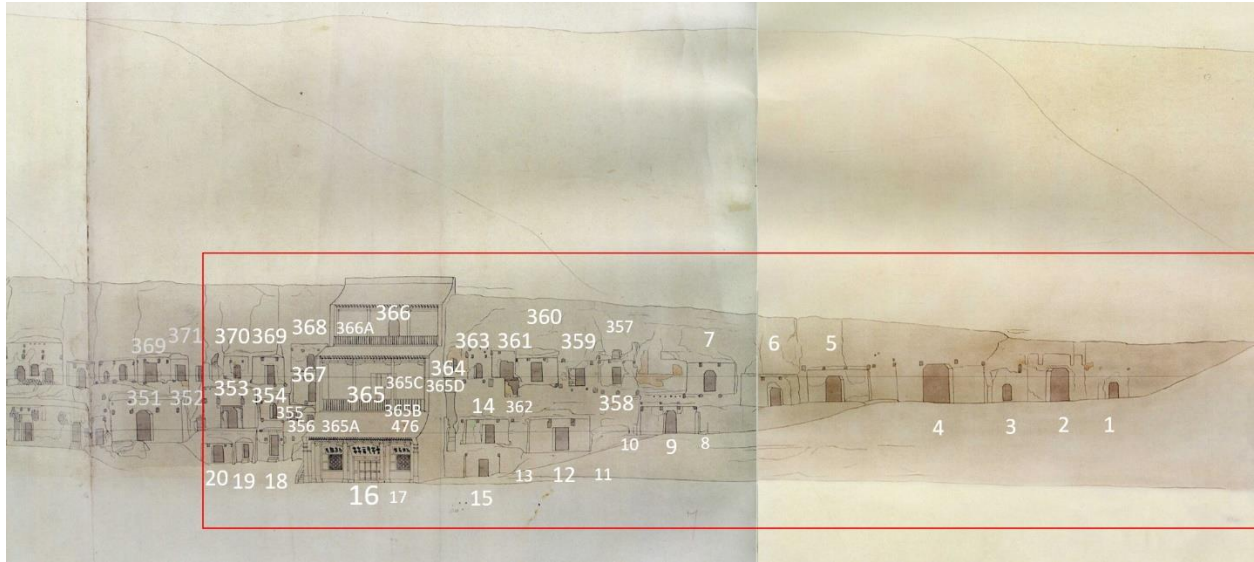


Figure 1-2. The northmost district of the south section of the Mogao caves. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotation by author.

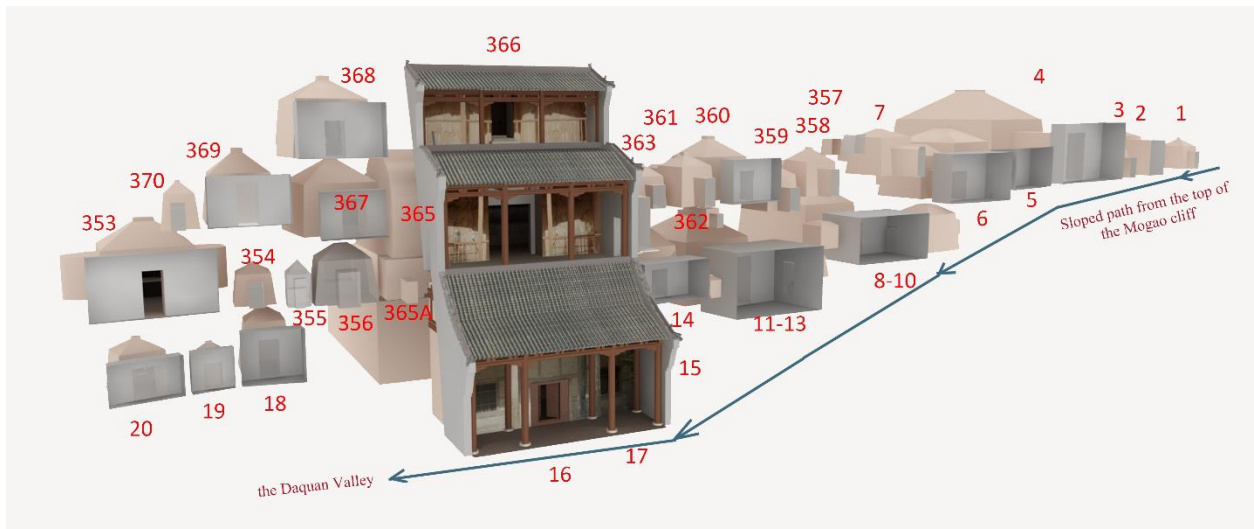


Figure 1-3. Digital model of the caves in the northmost district. Drawing by author.



Figure 1-4. The protruding rock formation between the northmost district and the adjacent district on its south side. Photos after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 3:69–70. Digital collage and annotation by author.

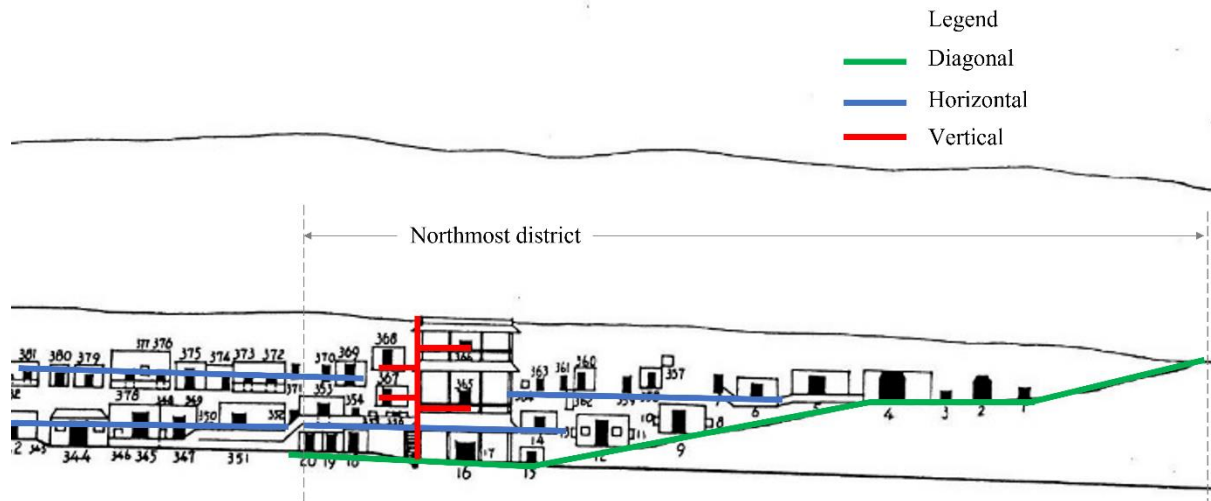


Figure 1-5. The three principles of cave distribution in the northmost district of the south section of the Mogao caves. Base map after Sun Ruxian. Annotation by author.

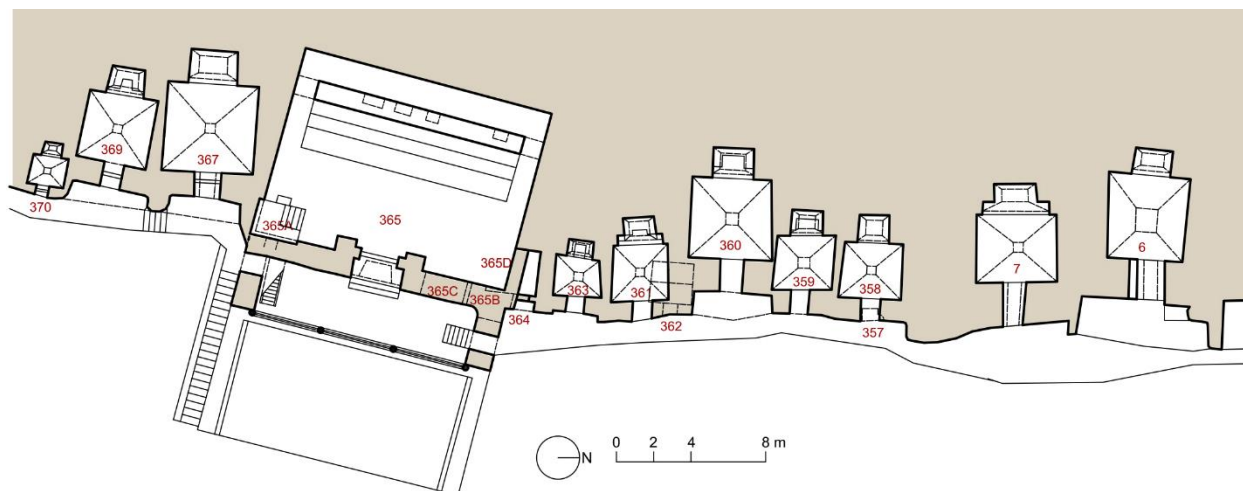


Figure 1-6. Plan drawing of the top level in the northmost district. Data based on Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5 and author's measurements. Drawing by author.

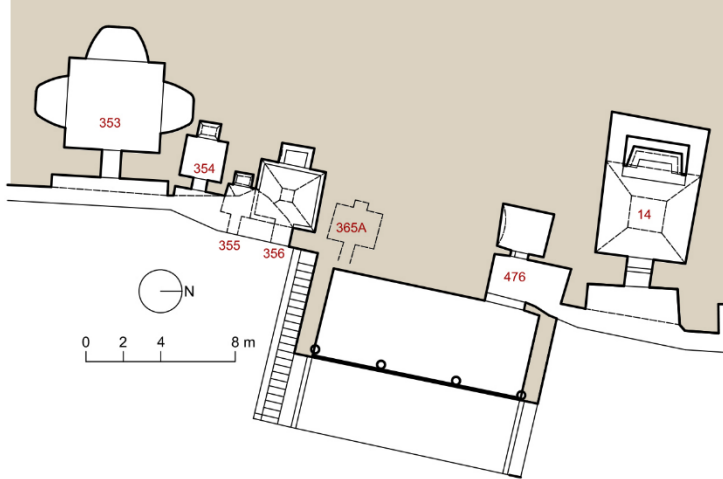


Figure 1-7. Plan drawing of the mezzanine level in the northmost district. Data based on Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, Shi, *Mogao ku xing*, vol. 2, and Zhang and Wang, “di 476 ku kaogu qingli baogao;” drawing by author.

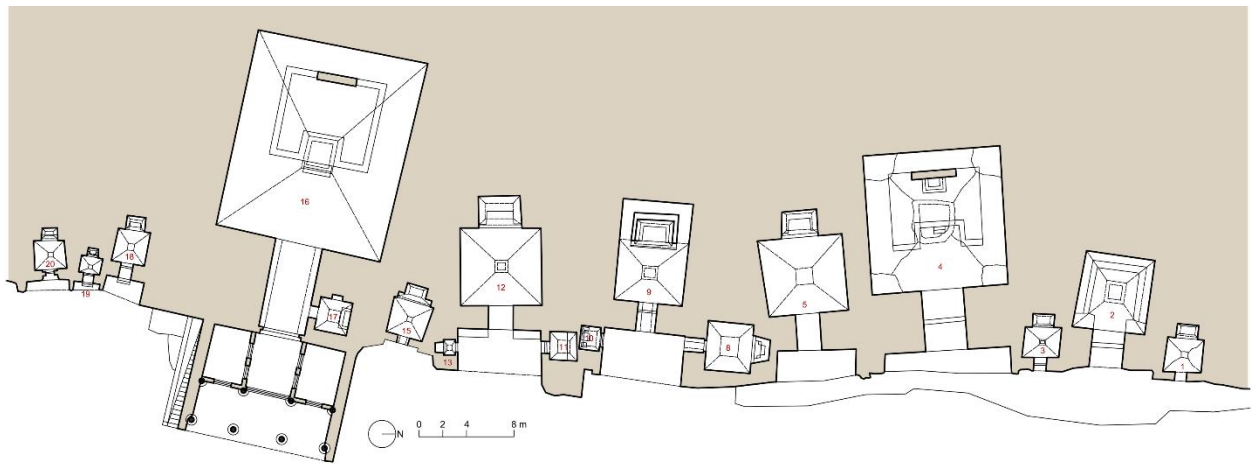


Figure 1-8. Plan drawing of the caves distributed along the sloped path in the northmost district. Data based on Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5; and Shi, *Mogao ku xing*, vol. 2. Drawing by author.

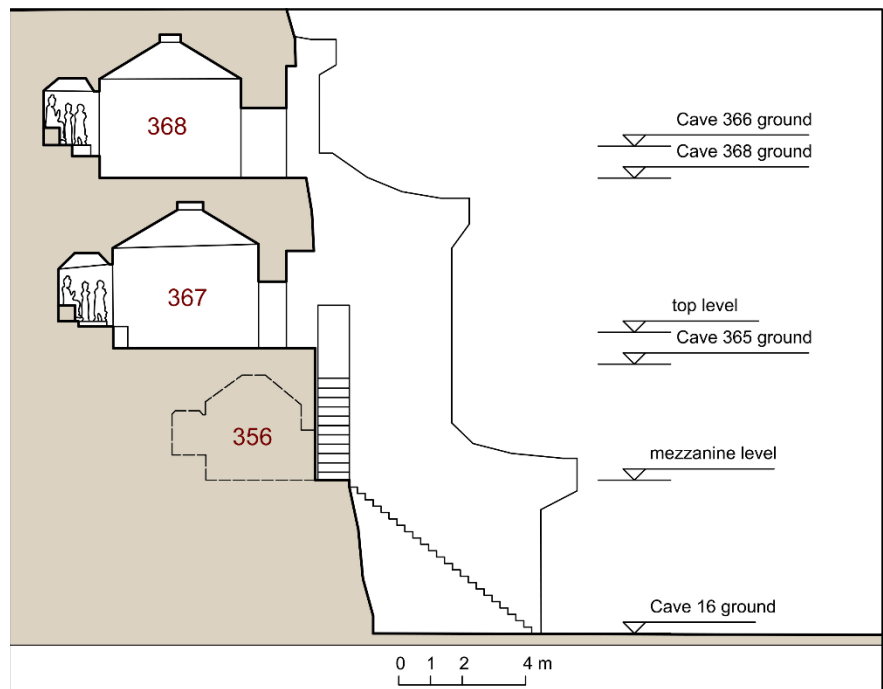
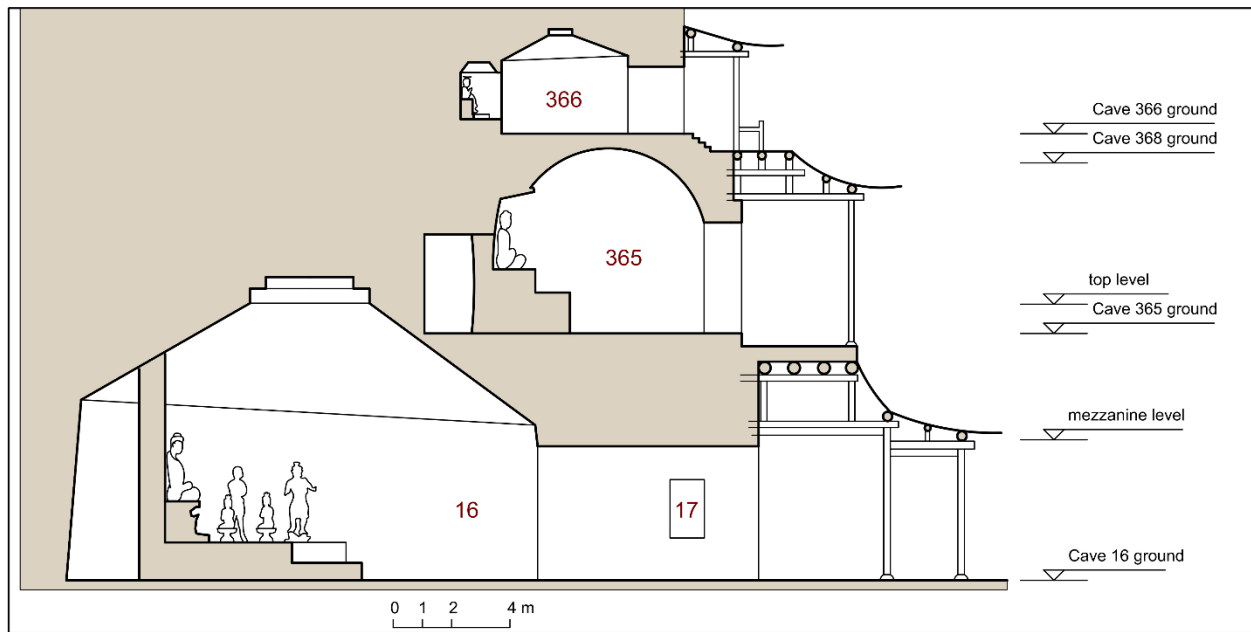


Figure 1-9. Sectional drawings of the northmost district. a) the long section of Caves 366, 365, and 16; b) the long section of Caves 368, 367, and 356. Data based on Shi, *Mogao ku xing*, vol. 2. Drawing by author.

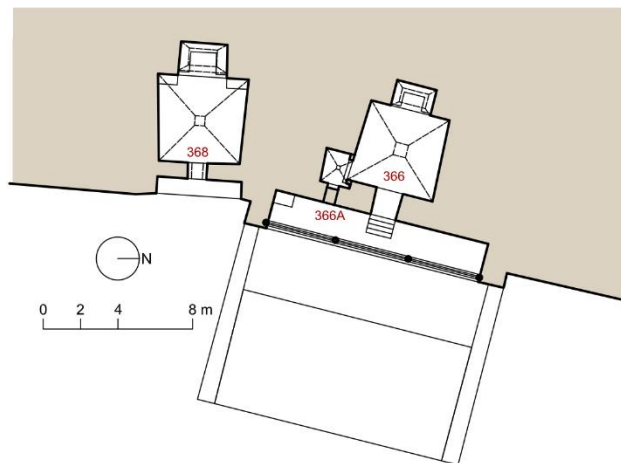


Figure 1-10. Plan drawing of the top level in the northmost district. Data based on Shi, *Mogao kuxing*, vol. 2, and author's measurements. Drawing by author.

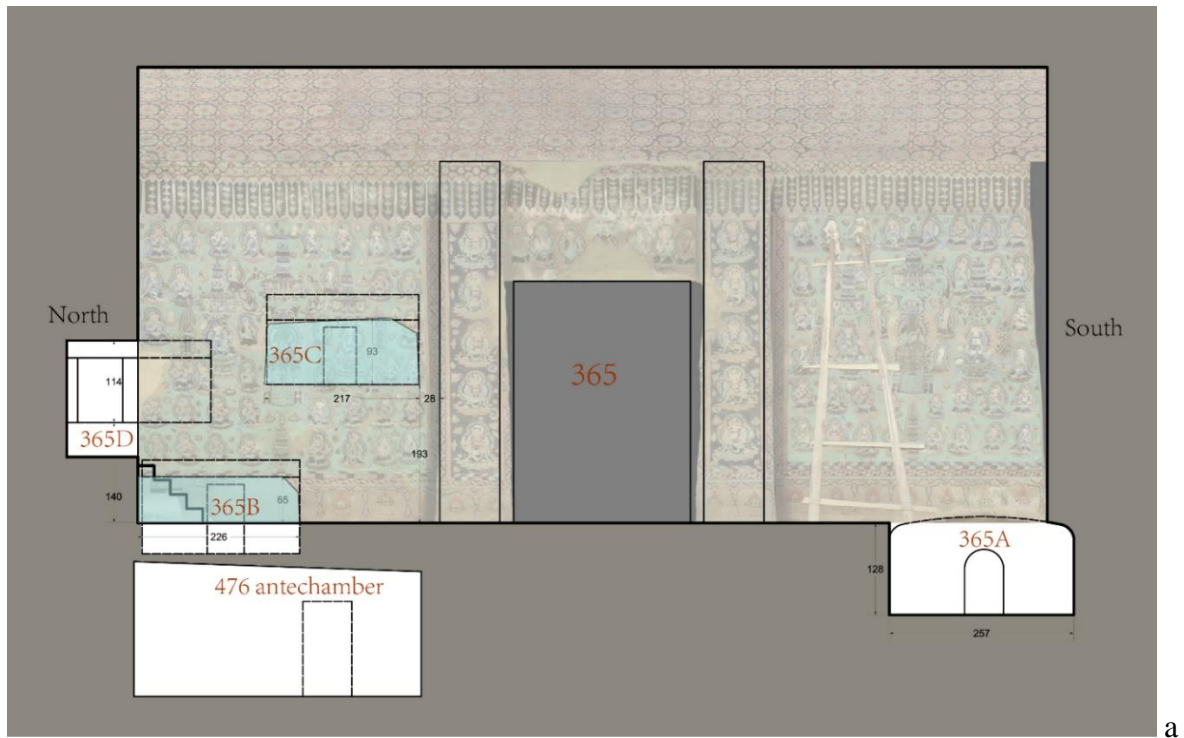


Figure 1-11. The locations of two groups of small caves near Cave 365. a) sectional drawing of the east wall of Cave 365 showing two regularly cut murals in blue shapes and the author's theoretical reconstruction of the hidden and broken caves in dashed lines. Base map after image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18115473). Drawing and annotation by author. b) location of shadow caves at the northern end of the south section of the Mogao caves. Numbers in red and orange squares refer to the shadow caves, and numbers with white frames refer to the main caves these shadow caves are likely affiliated with, if applicable. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi Guo Li Ai'ermitashi Bowuguan cang dunhuang yishupin*, vol. 3, plate 1-7. Annotation by author.

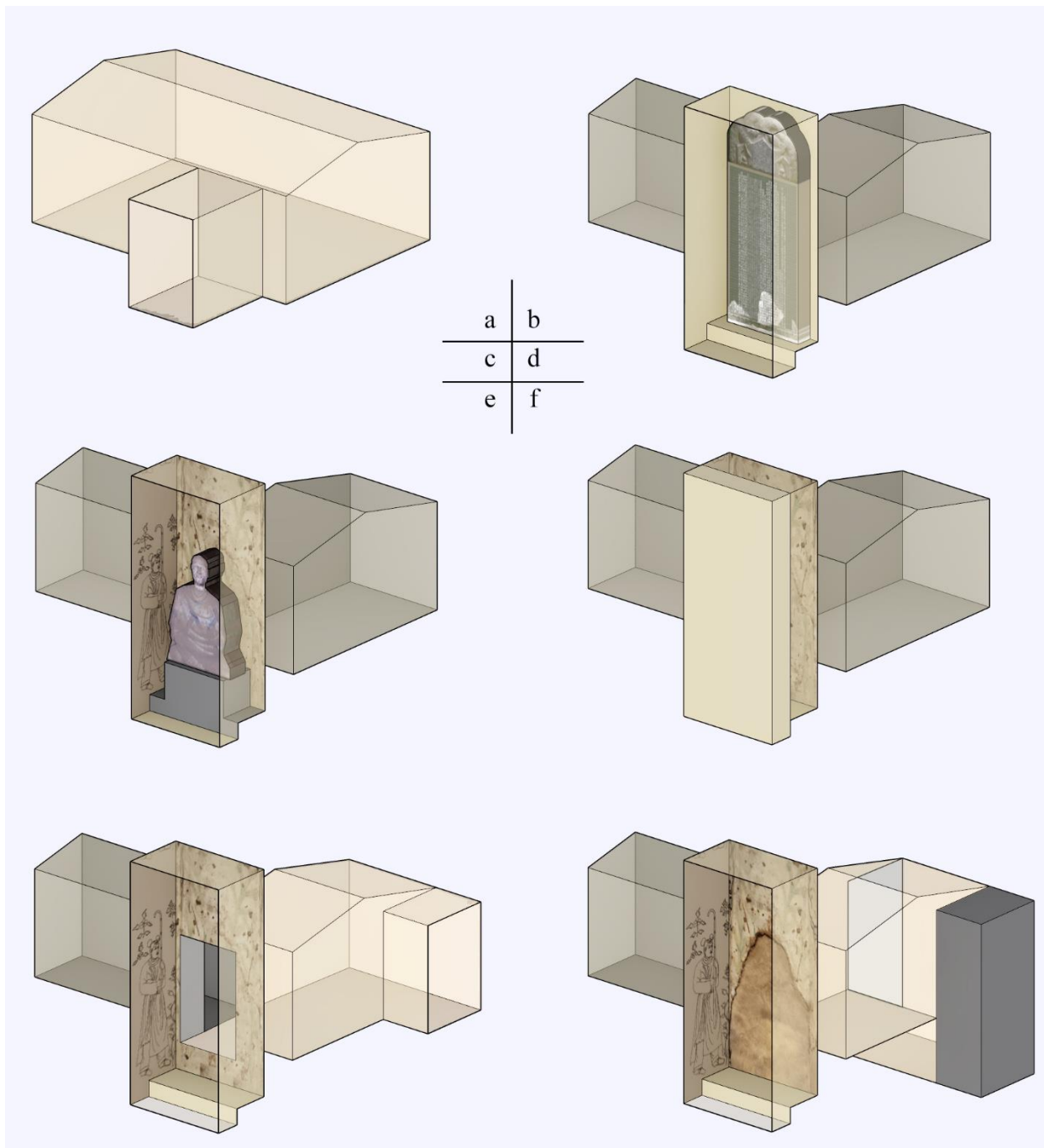


Figure 1-12. Author's theoretical reconstruction of the construction and modification history of Cave 364-365D. a) construction of the cave; b) breakage and sealing of Cave 365D, enlargement and adaptation of the corridor into a niche enshrining the Wu Sengtong stele; c) adaptation of the stele niche into a meditating monk's niche; d) sealing of Cave 364 and removal of the monk statue; e) breakages of the cave compound in the north and east directions; f) enlargement and breakage of Cave 365D in the west direction and subsequent sealing of openings in the north and east directions as in the current status. Drawing by author.

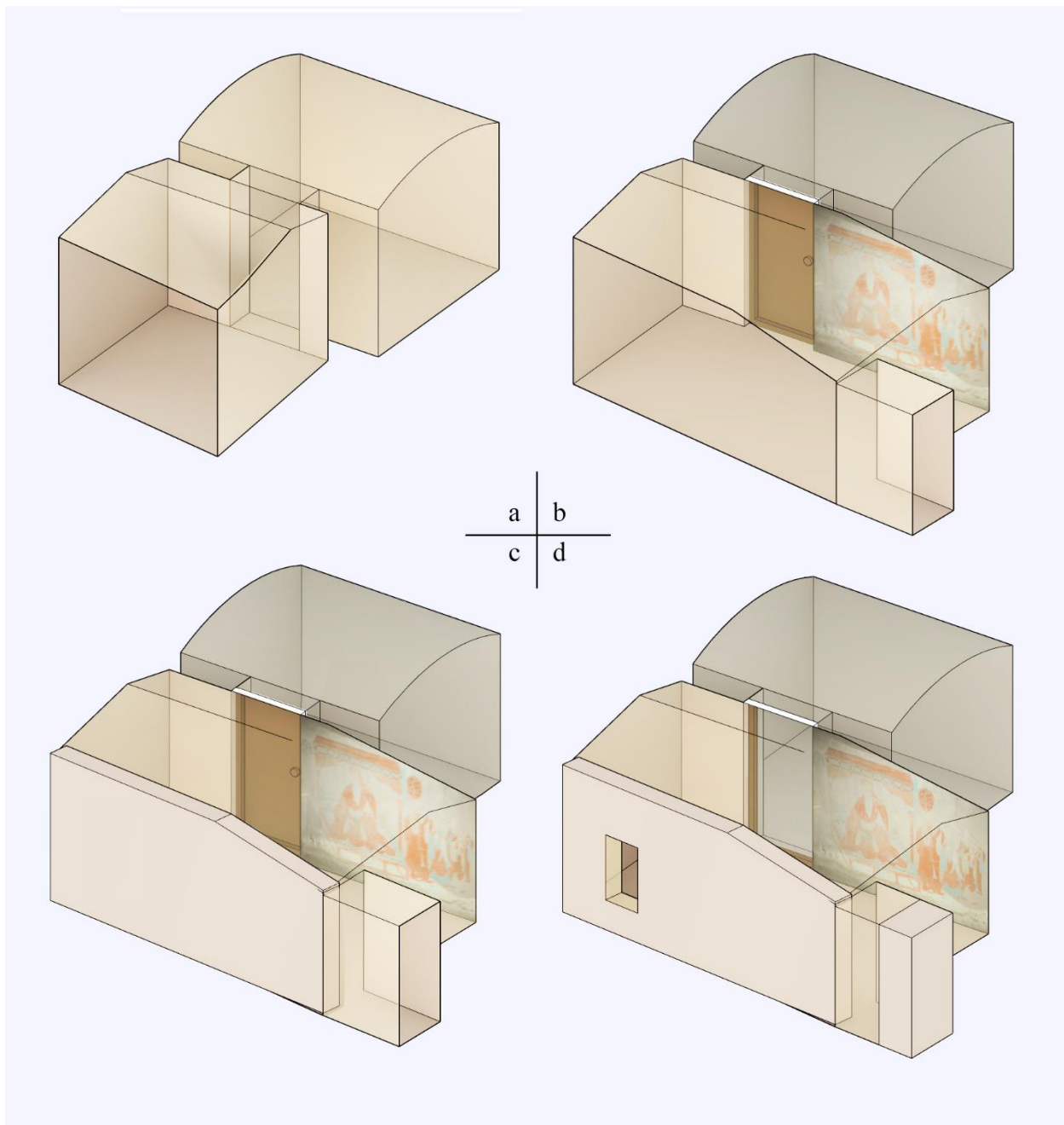
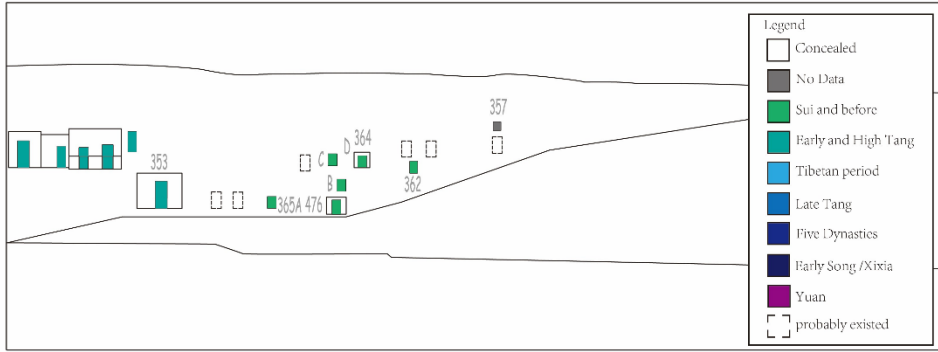
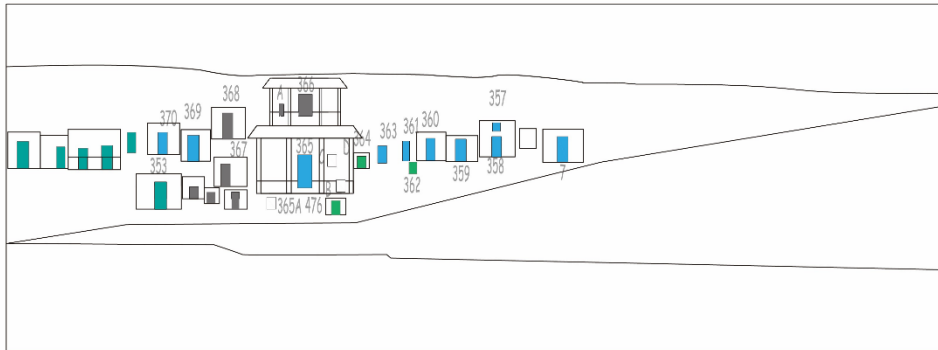


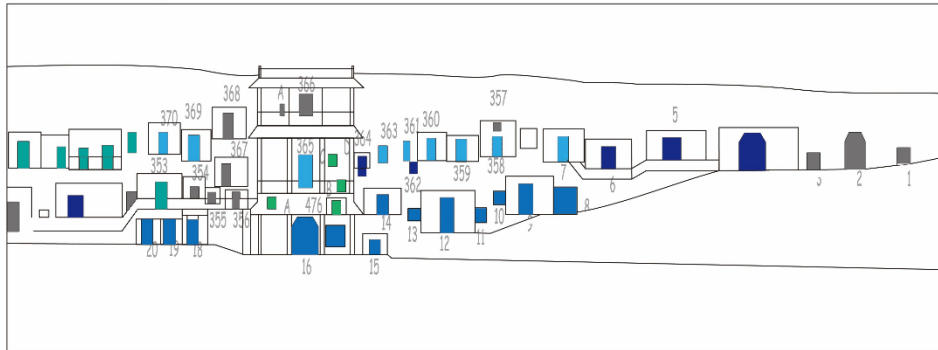
Figure 1-13. Author's theoretical reconstruction of the construction and modification of Cave 476. a) construction of the pragmatic cave, b) enlargement of the antechamber, excavation of a passageway on the north side, adaptation of the pragmatic cave into a storage and a shadow cave, c) concealment of the east side of the antechamber, d) passageway blocked and a window added to the partition wall in the 1960s. Drawing by author.



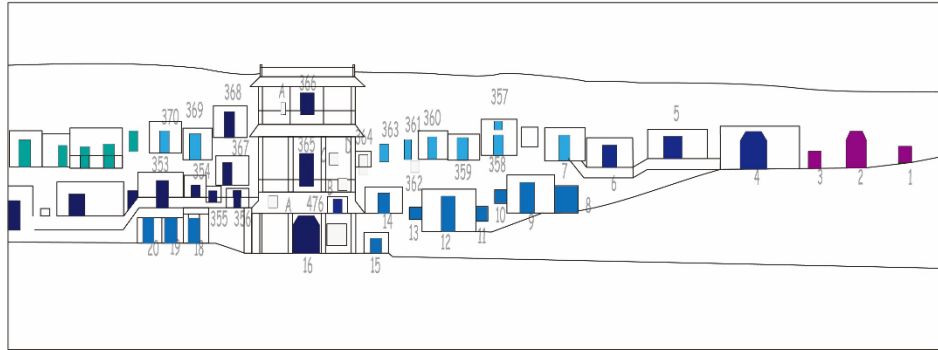
a) prior to the Tibetan period



b) in the Tibetan period



c) by the end of the tenth century



d) after the Yuan period

Figure 1-14. The construction and renovation sequence of the northmost district. a) before Tibetan period; b) in Tibetan period; c) by the end of the tenth century; d) after the Yuan period. Drawing by author.

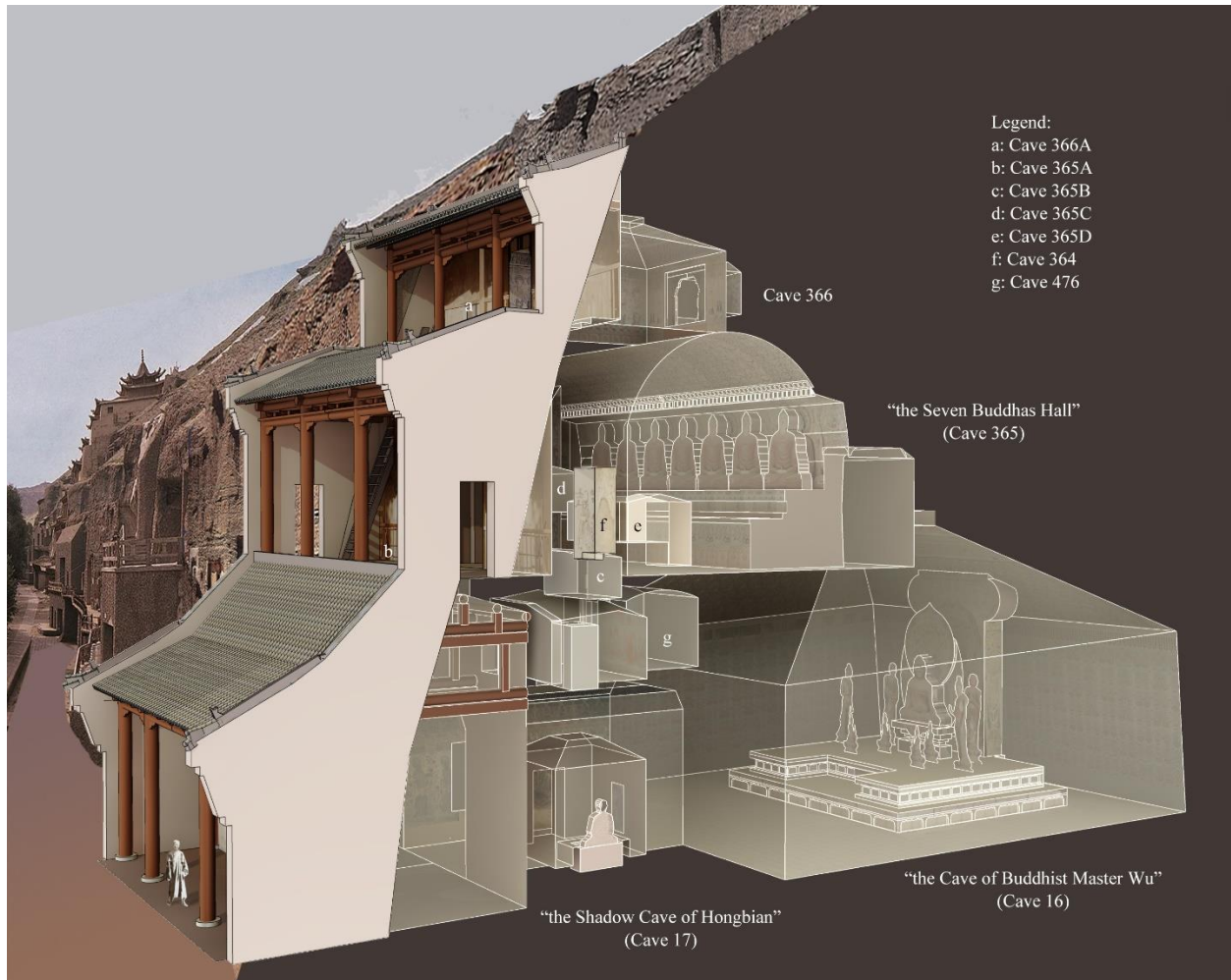


Figure 1-16. Digital model of the three-story pavilion in the current condition, Mogao caves. Caves carved since the ninth century, murals repainted in the eleventh century, and façade reconstructed in the twentieth century. Drawing by author.

MOGAO CAVE 366, MID TANG (771-845 AD)

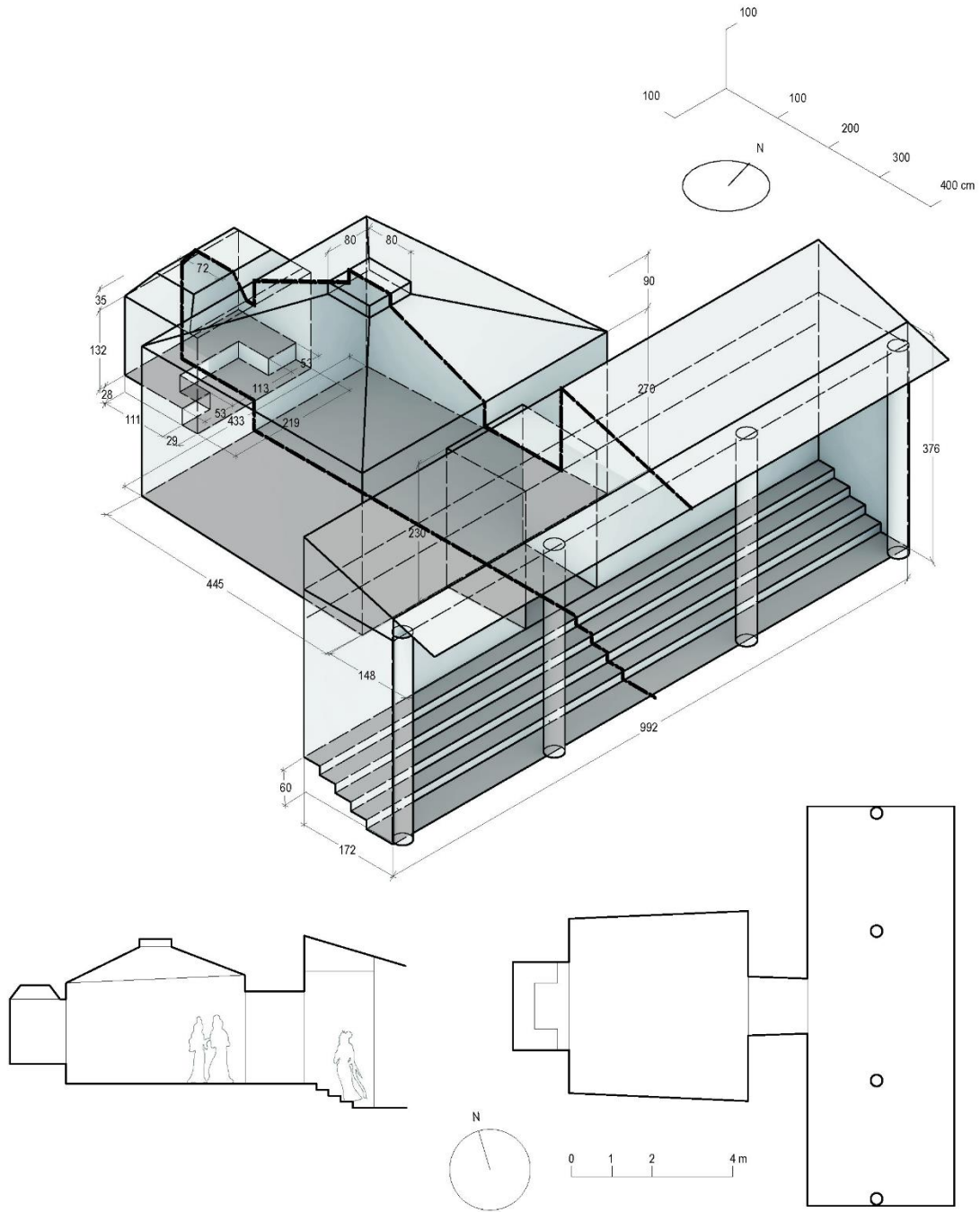


Figure 1-17. Isometric view, plan, and sectional drawings of Mogao Cave 366. Drawing by author.



Figure 1-18. Interior of Cave 366. Likely excavated in Tibetan period, remade in the eleventh century, and refurbished in 1900–6. Photo courtesy of Dunhuang Academy.



a



b

Figure 1-19. Author's theoretical constructions of the cliff-top structure above Cave 366. a) Proposal 1: a timber-structured pagoda; b) Proposal 2: a timber-structured *chatra*. Drawing by author.

MOGAO CAVE 365, MID TANG (771-845 AD)

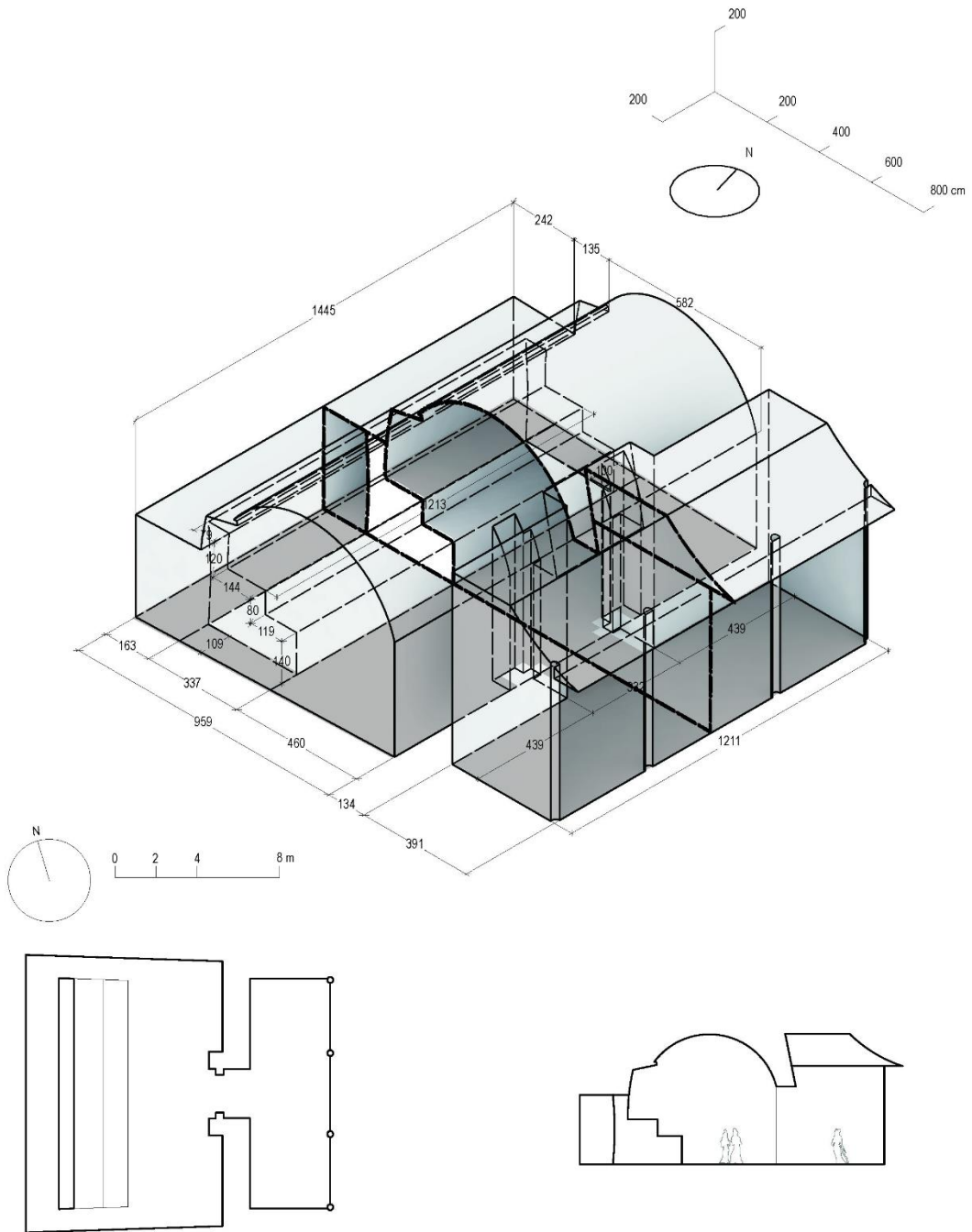


Figure 1-20. Isometric view, plan, and sectional drawings of Mogao Cave 365. Drawing by author.

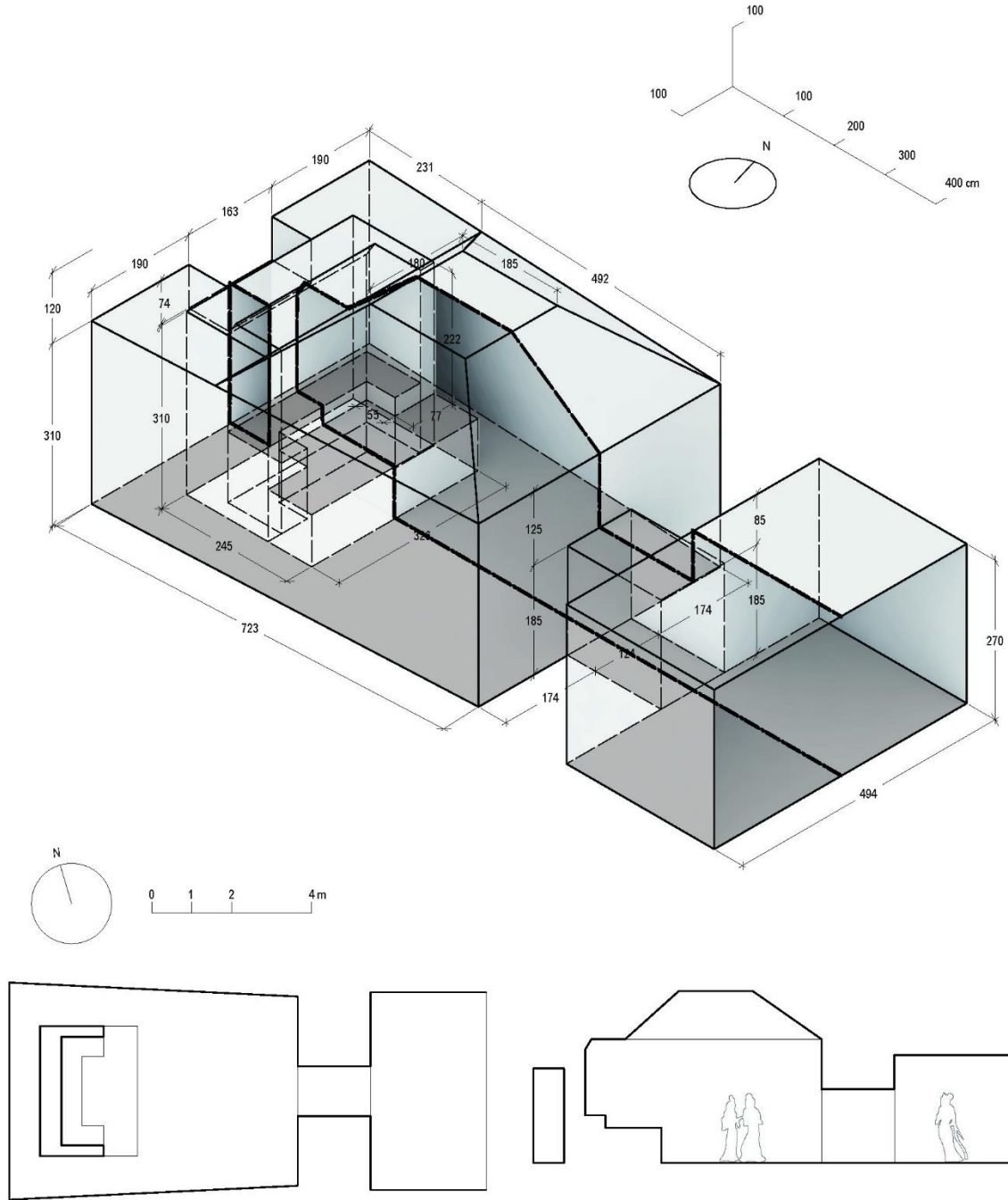


Figure 1-21. Seven-buddhas statues in Cave 365. Built in 832–34 CE, refurbished in the eleventh century and in 1904. After Liu, *Suxiang juan*, 222–23, fig. 195.



Figure 1-23. A view of the main chamber of Cave 16 and Cave 17 from the corridor of Cave 16. Built in the late-Tang period, refurbished in the eleventh century and in 1900–6. Photo courtesy of Dunhuang Academy.

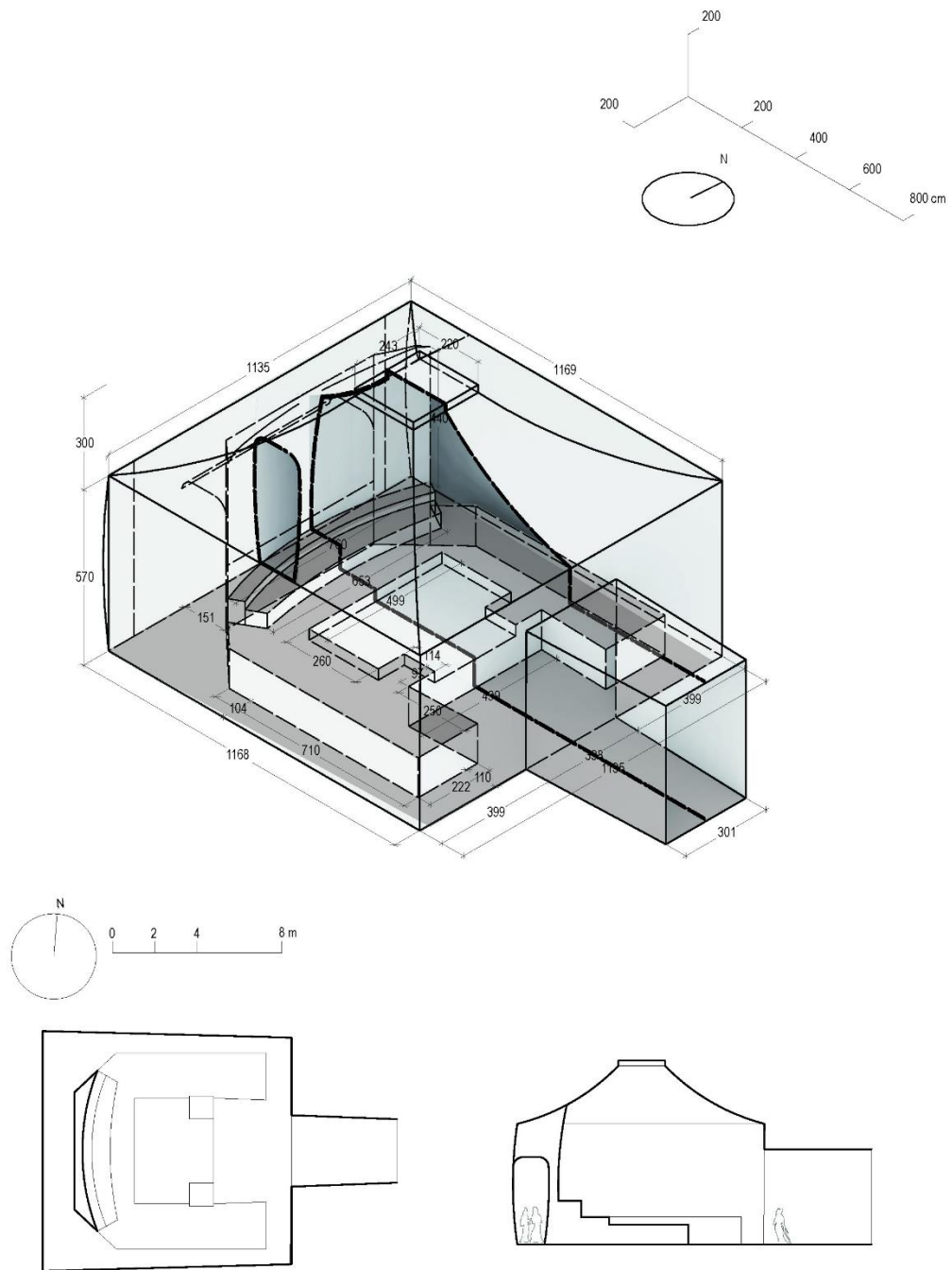
MOGAO CAVE 14, HIGH TANG (705-770 AD)



a

Figure 1-24. The cave types in the northmost district. a) the central-pillar cave represented by Cave 14; b) the central-altar caves in the backscreen style represented by Cave 4; c) the truncated-pyramidal ceiling cave with one niche represented by Cave 15; d) the truncated-pyramidal ceiling cave with three niches represented by Cave 353; e) the truncated-pyramidal ceiling cave with a U-shaped altar set against three walls represented by Cave 2. Drawing by author.

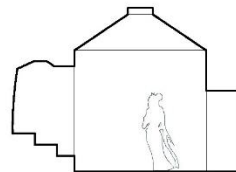
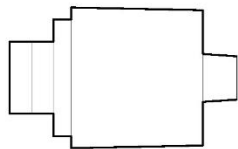
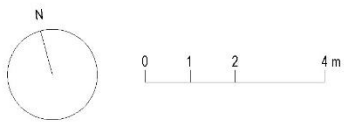
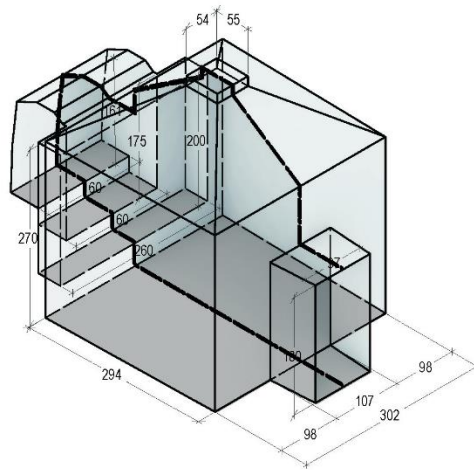
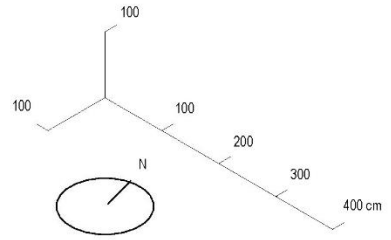
MOGAO CAVE 4, FIVE DYNASTIES (907-960 AD)



b

Figure 1-24, continued

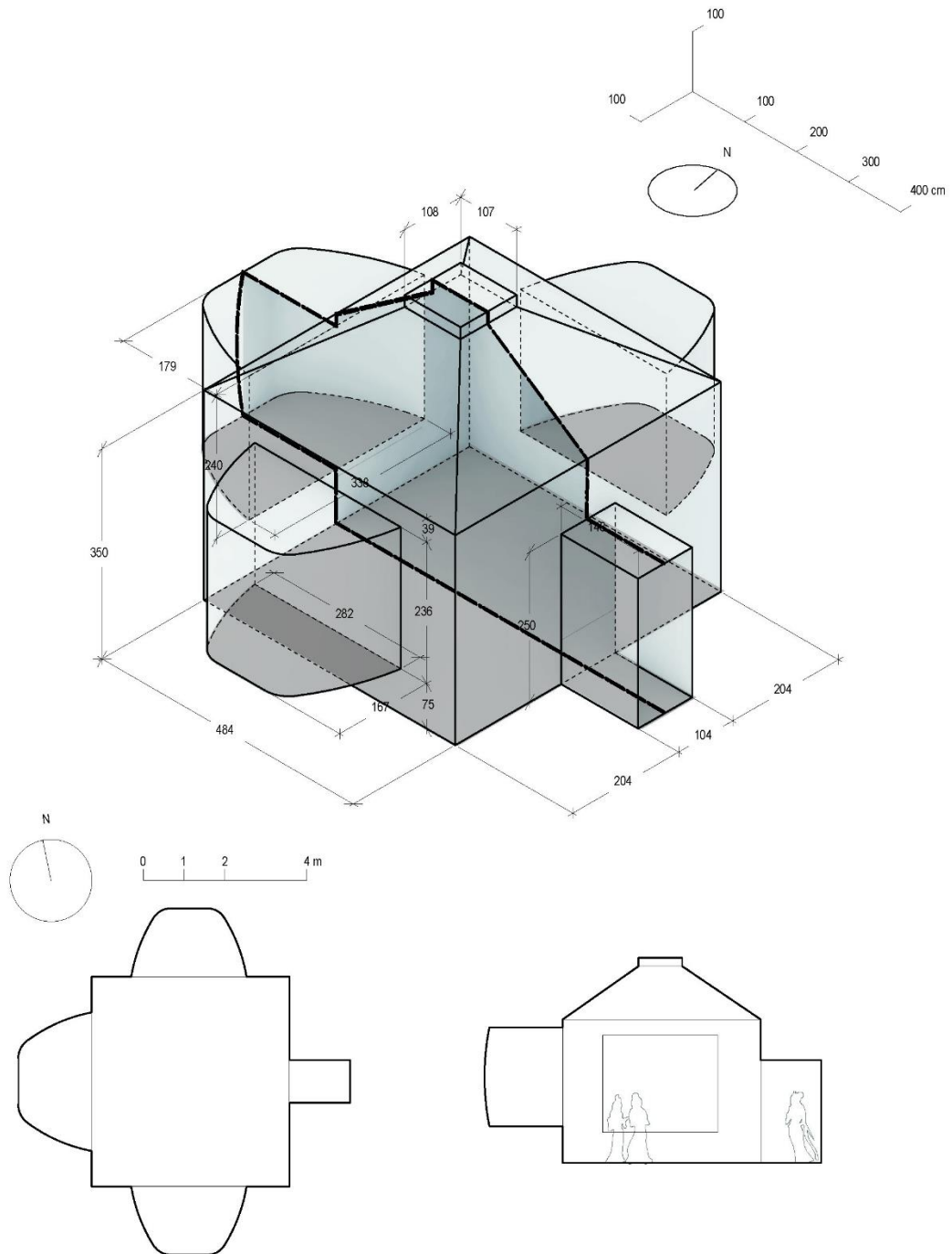
MOGAO CAVE 15, HIGH TANG (705-770 AD)



c

Figure 1-24, continued

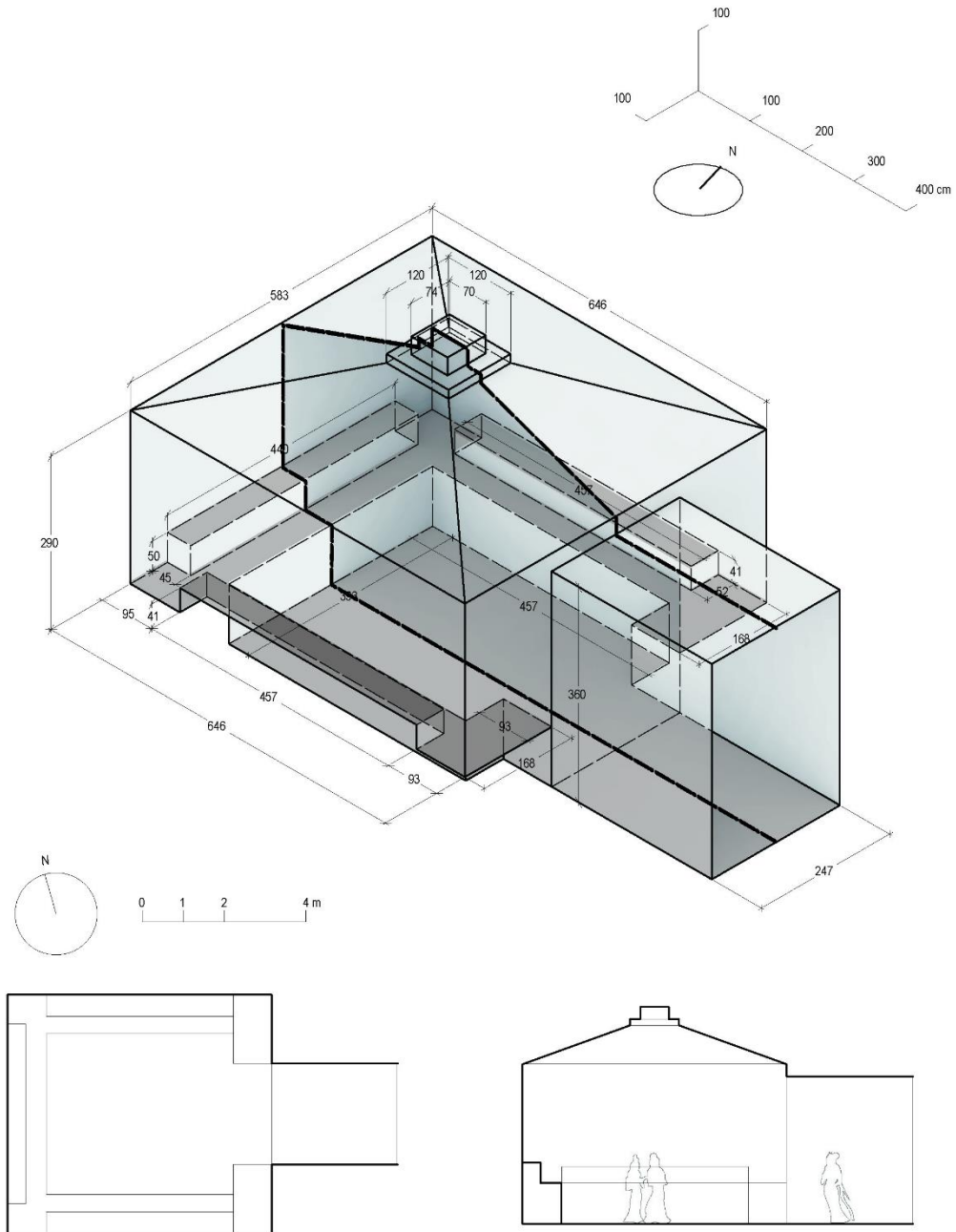
MOGAO CAVE 353, HIGH TANG (705-770 AD)



d

Figure 1-24, continued

MOGAO CAVE 2, YUAN (1271-1368 AD)



e

Figure 1-24, continued

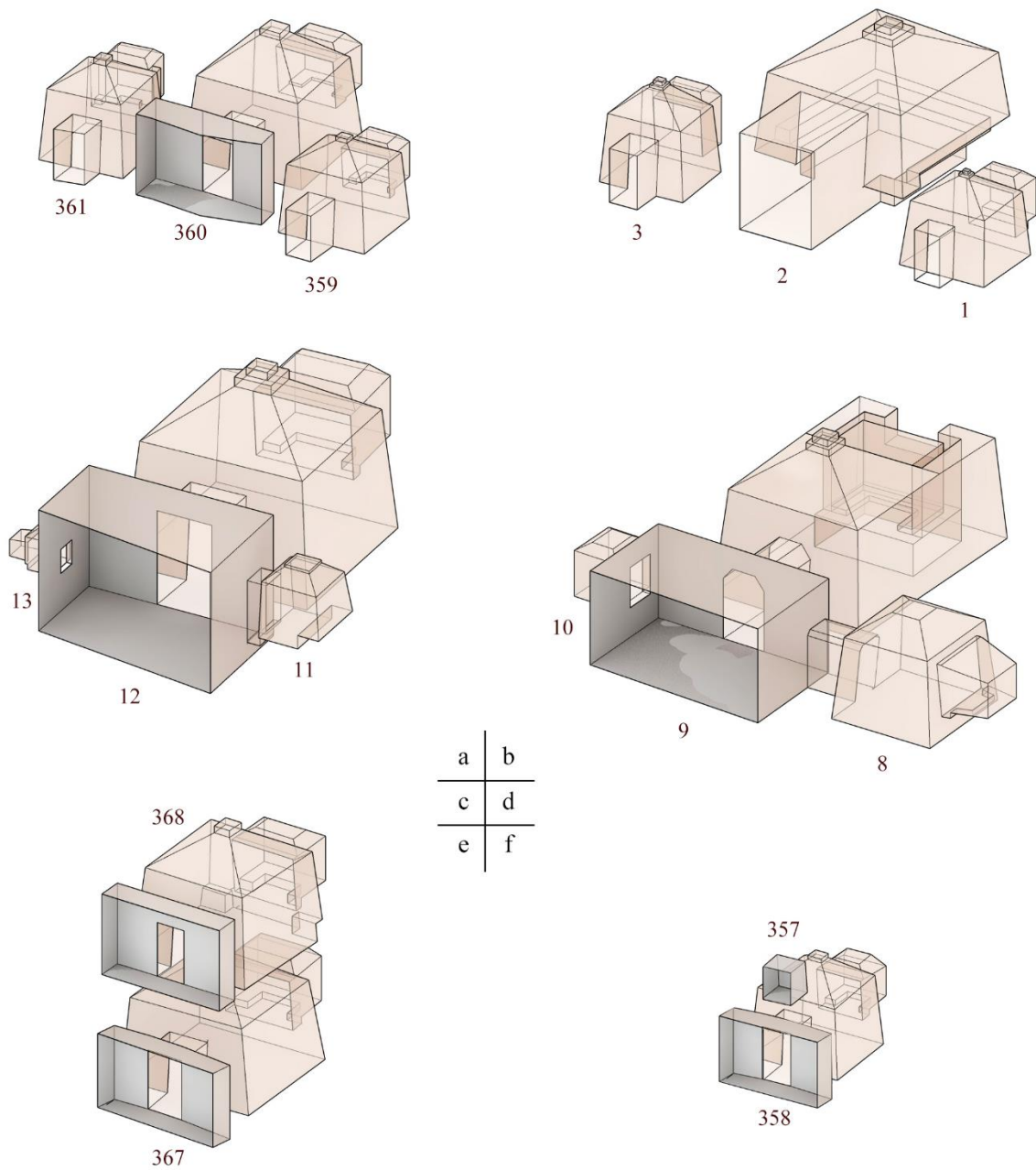


Figure 1-25. The types of cave suites and groups in the northmost district. a) the cave triad consisting of Caves 359, 360, and 361; b) the cave triad consisting of Caves 1, 2, and 3; c) Cave Suite 12/11/13; d) the composite of Cave Suite 9/10 and Cave 8 that share an antechamber; e) the vertical composite of Caves 367 and 368; f) Cave Suite 358/357. Drawing by author.

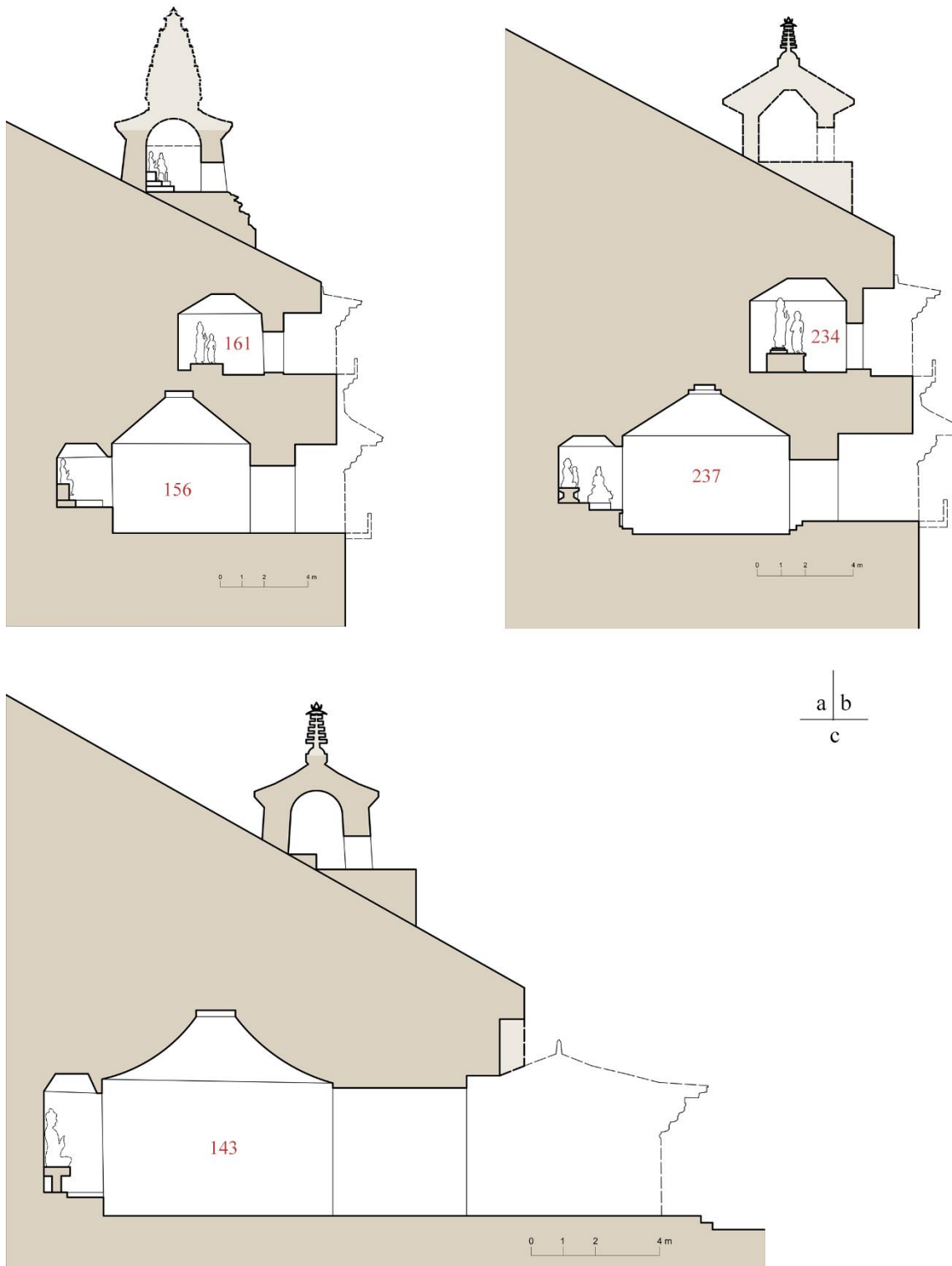
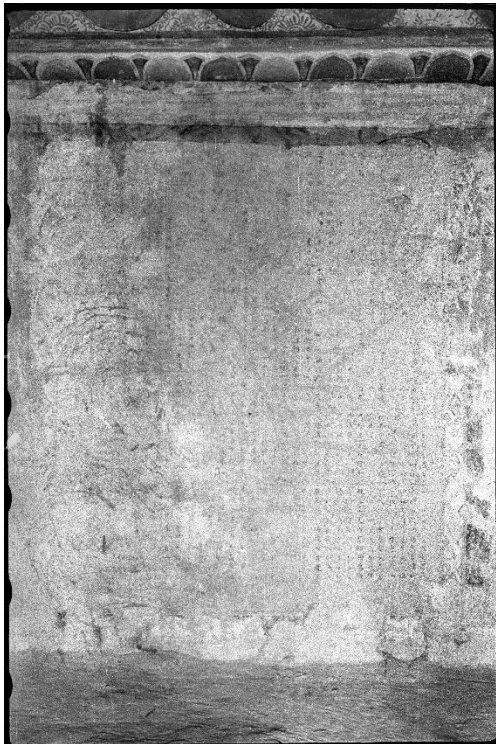


Figure 1-26. Sectional drawings of three vertical cave-pagoda composites at the Mogao caves showing author's theoretical reconstructions in dashed lines and light beige color. a) Caves 161, 156, and a cliff-top pagoda; b) Caves 234, 237 and a cliff-top shrine; c) Cave 143 and a cliff-top pagoda. Drawing by author.



a



b

Figure 1-27. The cartouches in Cave 365, Tibetan period. a) a general view of the buddha altar, highlighting the cartouche for the Chinese inscription in red and that for the Tibetan inscription in orange; b) a detail view of the cartouches. Photo by James Lo, 1943–44. James and Lucy Lo Photograph Archive.



Figure 1-28. The southeast corner of the upper-level buddha altar in Cave 365 showing a half of a *kunmen* arch and a half-cut-off lotus petal below. Photo by author with permission of Dunhuang Academy, September 2019.

MOGAO CAVE 148, HIGH TANG (705-770 AD)

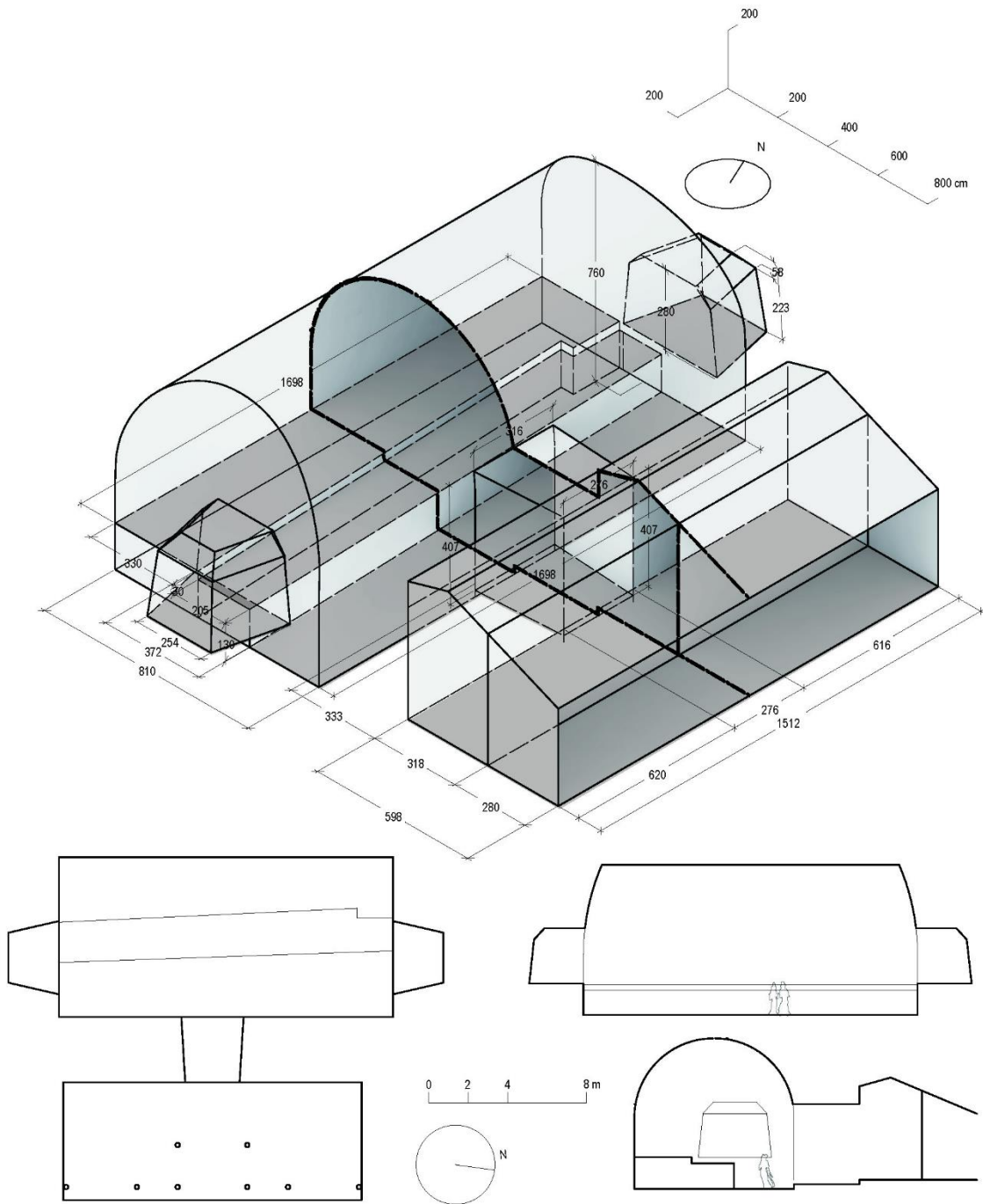


Figure 1-29. The plan, sectional, and isometric drawings of Cave 148, high-Tang period. Drawing by author.



Figure 1-30. Interior of Cave 148, high-Tang period, 776 CE. Sun and Sun, *Shiku jianzhu juan*, 130, fig. 91.

MOGAO CAVE 158, HIGH TANG (705-770 AD)

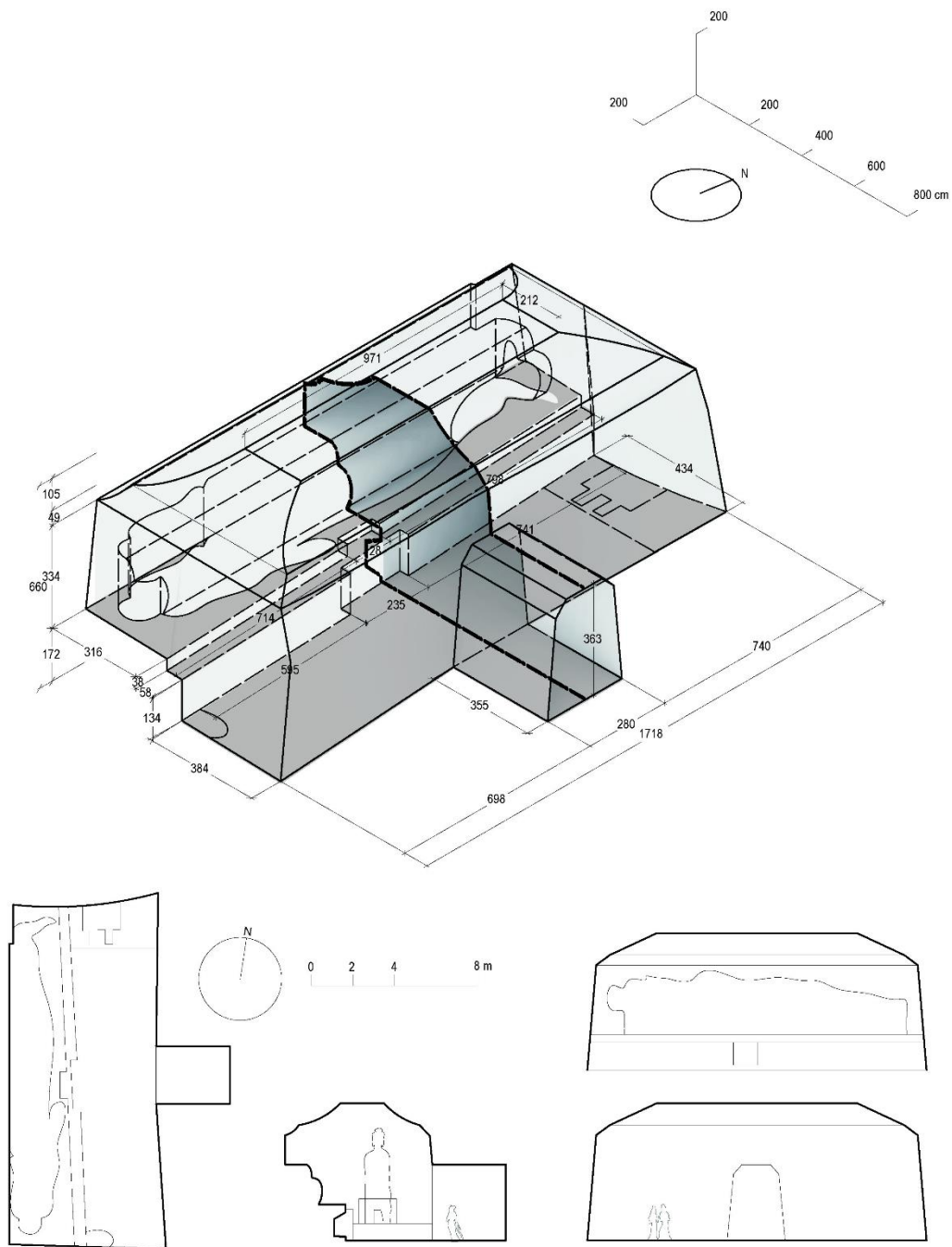


Figure 1-31. The plan, sectional, and isometric drawings of Cave 158, Tibetan period. Drawing by author.



Figure 1-32. Scene of seven medicine buddhas in a ritual setting, north wall of Mogao Cave 220, early-Tang period, 642 CE. After Dunhuang wenwu yanjiu suo, *Dunhuang Mogao ku*, vol 3, plate 27.

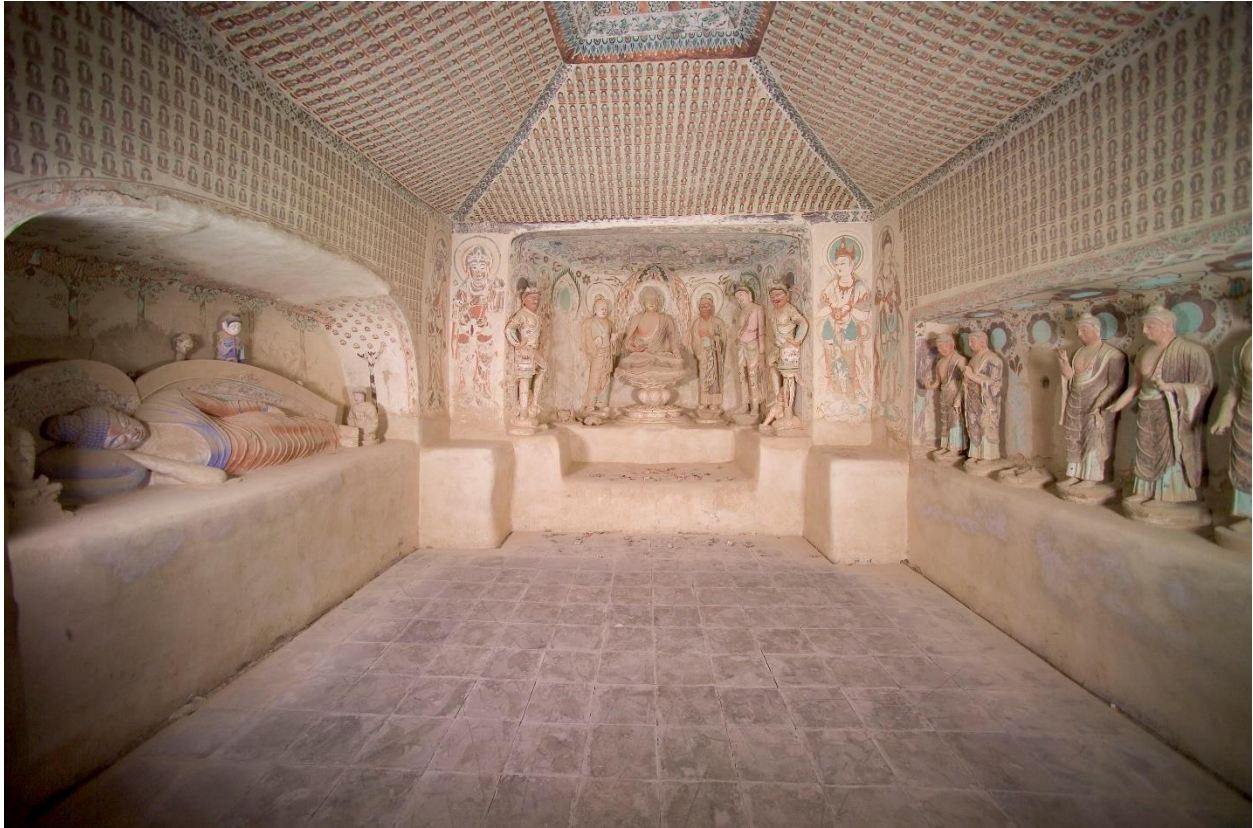


Figure 1-33. Interior of Cave 46, high-Tang period, circa 710 CE. Sun and Sun, *Shiku jianzhu juan*, 121, fig. 85.



Figure 1-34. Mogao cliff overview in Tibetan period, highlighting Caves 148, 158, and 365. Base map after Shi, *Mogao ku xing*, vol. 2, fig. 6. Annotation by author.

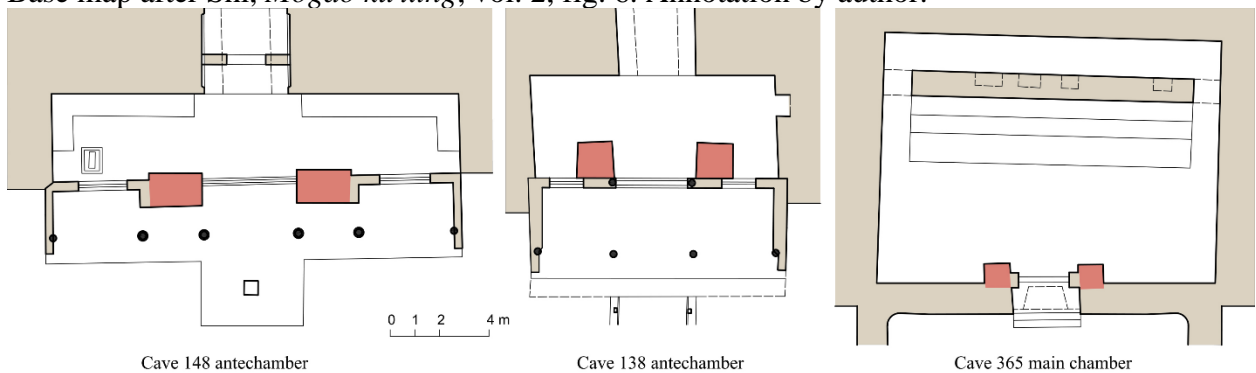
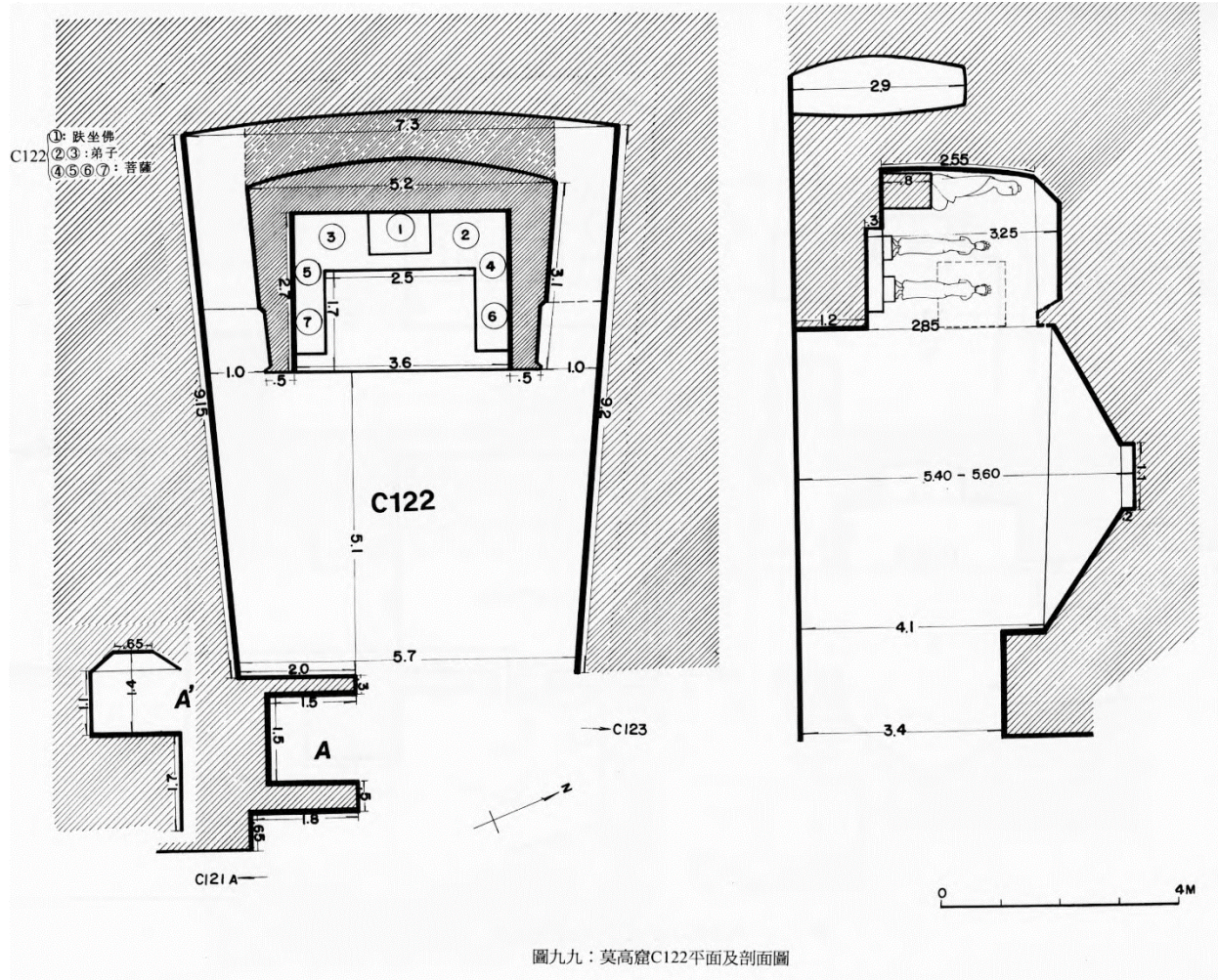


Figure 1-35. Three pair of rock-cut pillars at Mogao. a) ante-hall of Cave 148, high-Tang period; b) ante-hall of Cave 138, late-Tang period; c) main chamber of Cave 365, mid-Tang period. Drawing by author.

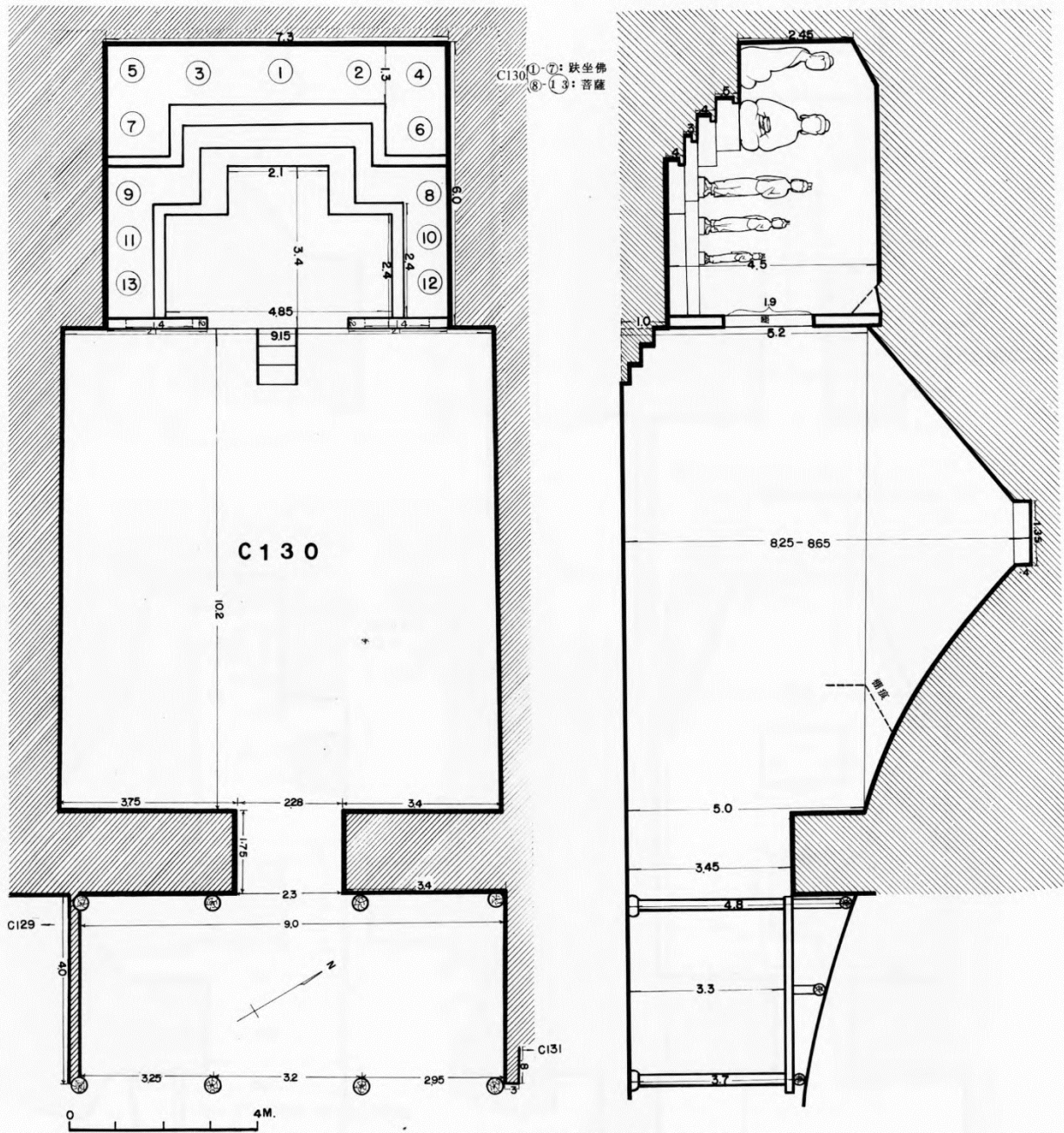


Figure 1-36. Looking up at the repainted buddha preaching scene above the south (*left*) and north entrances (*right*) of the corridors in Cave 365. Photo by author with permission of Dunhuang Academy, September 2019 and July 2021.



圖九九：莫高窟C122平面及剖面圖

Figure 1-37. Plan and sectional drawings of Mogao Cave 22, Five Dynasties period. After Shi, *Mogao ku xing*, vol. 2, fig. 99.



圖一〇六：莫高窟C130平面及剖面圖

Figure 1-38. Plan and sectional drawings of Mogao Cave 327, Xixia period. After Shi, *Mogao kuxing*, vol. 2, fig. 108.



Figure 1-39. A photo collage of the statue set of seven buddhas and attending bodhisattvas against the south, west, and north walls in the niche of Cave 327. At least four of the standing bodhisattvas were moved from some other caves to their current locations. Xixia period. Photo by James Lo in 1943–44. James and Lucy Lo Photograph Archive. Digital collage by author.

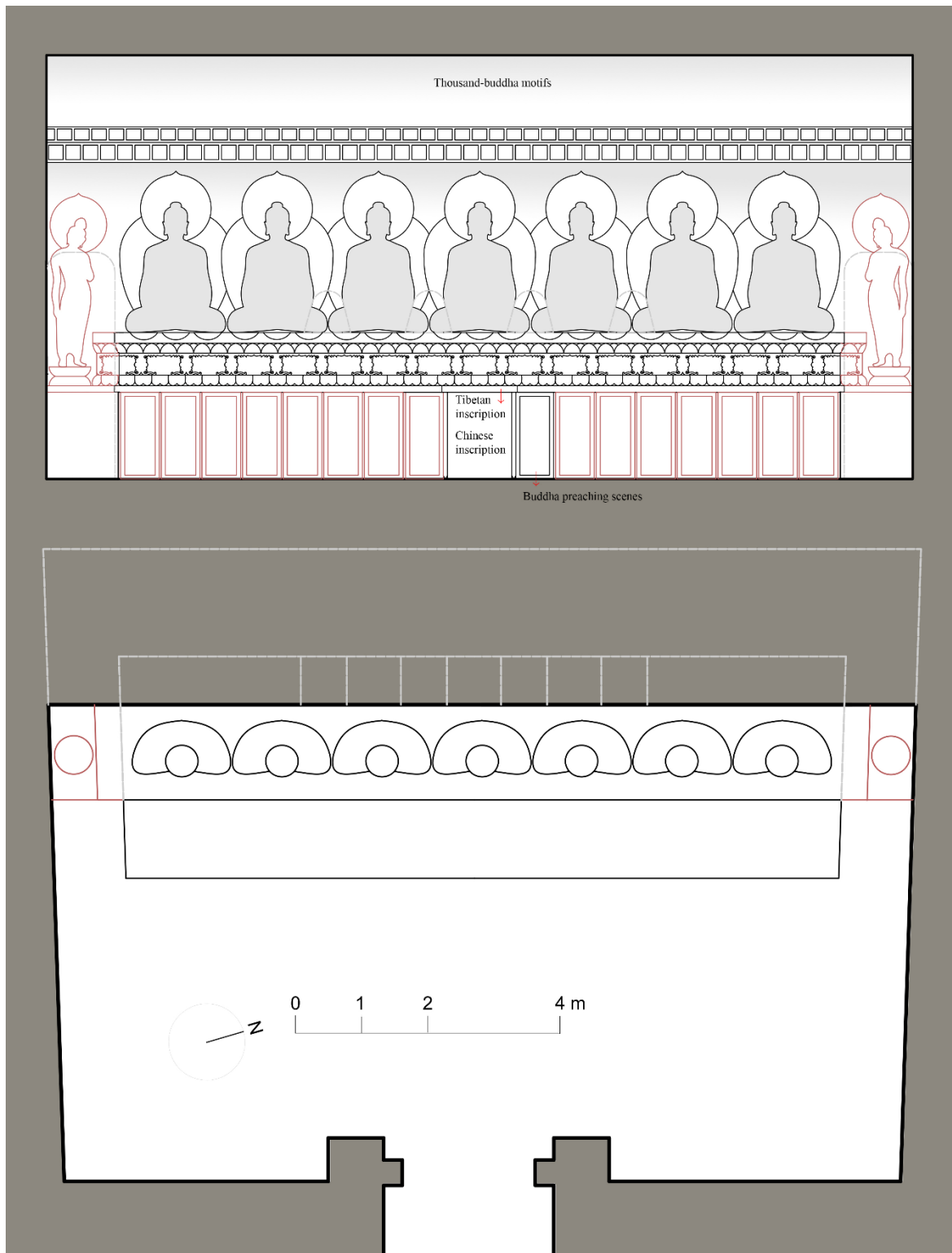


Figure 1-40. The author's theoretical reconstruction of the west wall of Cave 365 in Tibetan period. Red lines indicate author's reconstruction, and dashed gray lines indicate the openings to the rear corridor in the current condition. a) section drawing; b) plan drawing. Drawing by author.

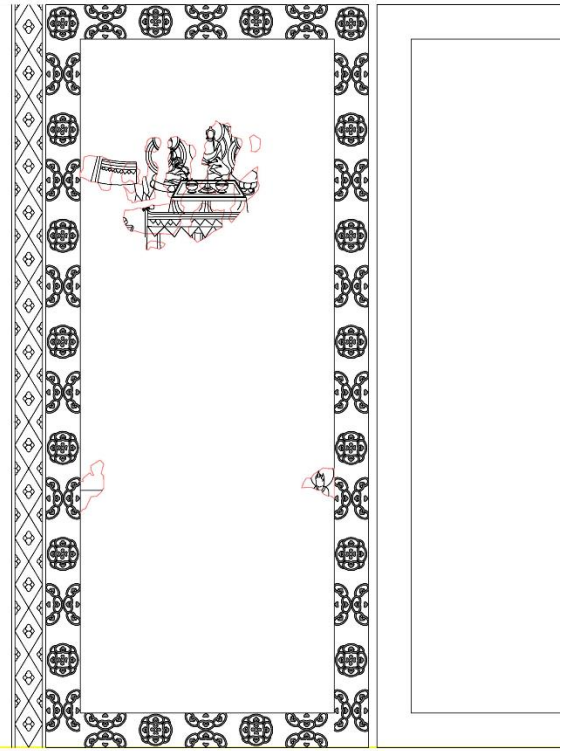
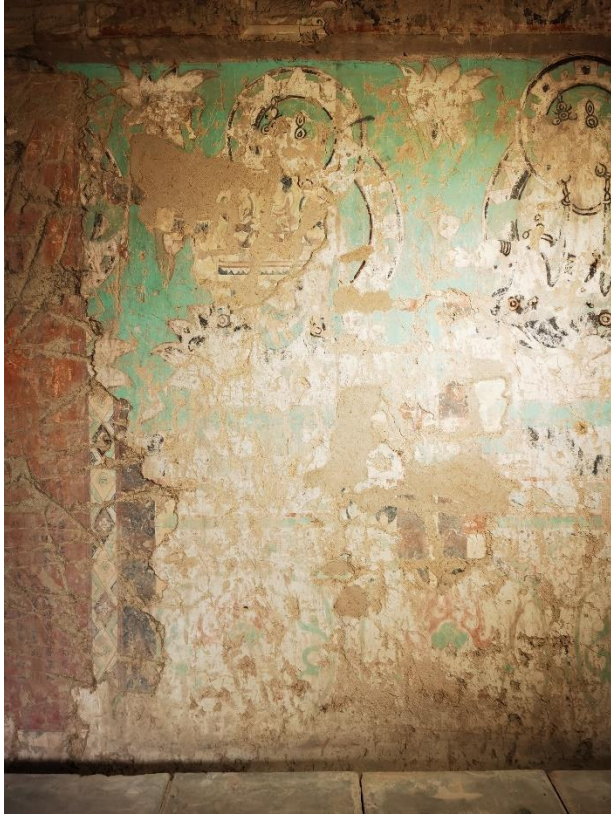


Figure 1-41. The underlayer mural of panel paintings on the north side of the cartouche for Chinese inscriptions on the front side of the altar in Cave 365, Tibetan period. Red contours indicate the areas where the current layer has been removed. a) photo; b) trace-copy line drawing. Photo and drawing by author, November 2021.



Figure 1-42. The screen paintings below the canopy-shaped niche in Mogao Cave 18, late-Tang period. Photo by author with permission of Dunhuang Academy, June 27, 2022, courtesy of Dunhuang Academy.

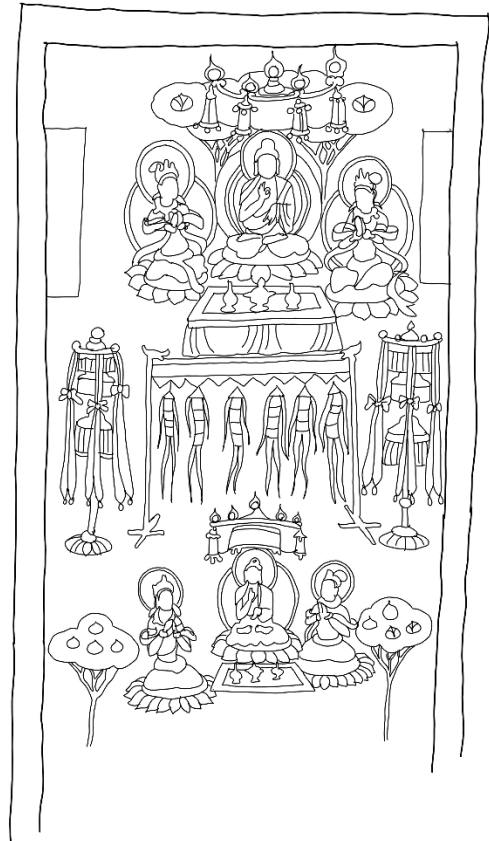
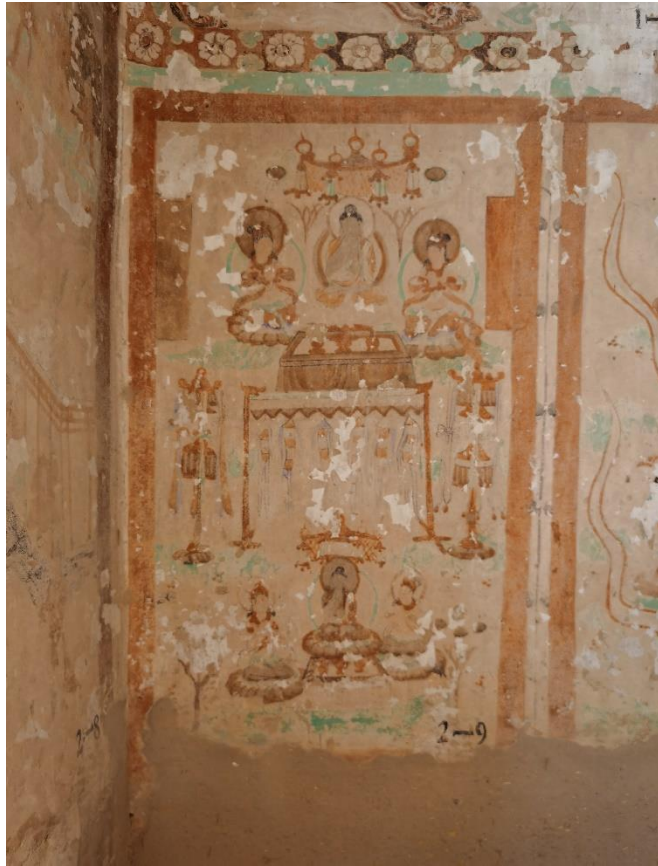


Figure 1-43. The southmost screen panel painted below the niche in Mogao Cave 18, late-Tang period. a) photo of mural; b) trace-copy line drawing. Photo and drawing by author.

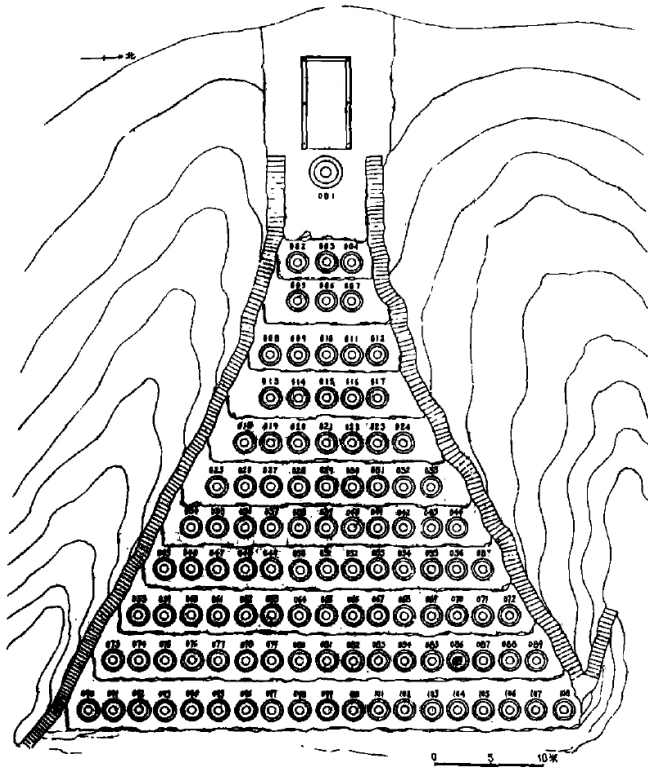


Figure 1-44. Master plan drawing of a hundred and eight stupas near the Qingtongxia Reservoir in Ningxia Province, Xixia period. Lei and Yu, “Ningxia Qingtongxia shi yibailingba ta qingli weixiu jianbao,” 28, fig. 2.

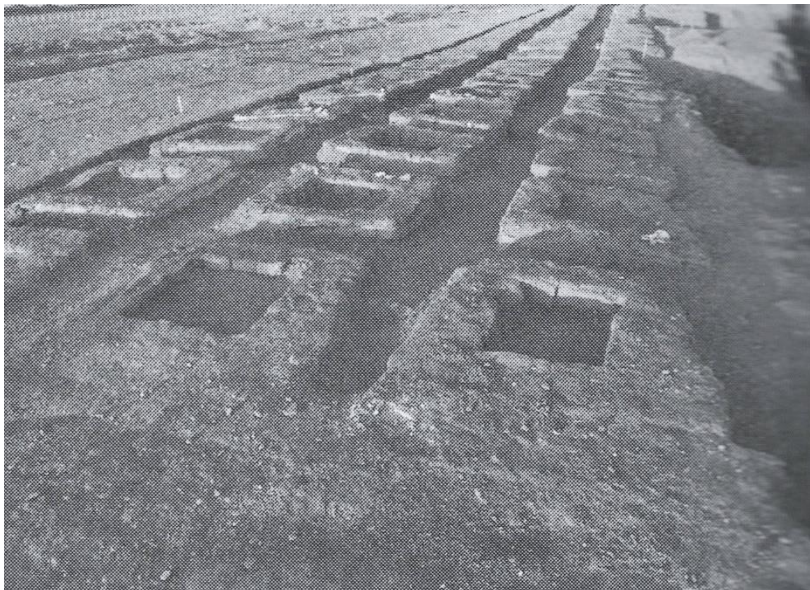


Figure 1-45. The bases of the hollowed stupas (front) and solid stupas (rear) on the cliff top of the West Thousand Buddhas Caves, excavated in 2013. After Dunhuang yanjiu yuan ed, *Dunhuang yanjiu yuan nianjian 2013*, 368.



Figure 1-46. The thousand-buddhas-in-stupa motifs on the north ceiling slope of Cave 205, early-Tang period. Photo by James Lo, 1943–44. After Ching, *Visualizing Dunhuang*, 5:320.

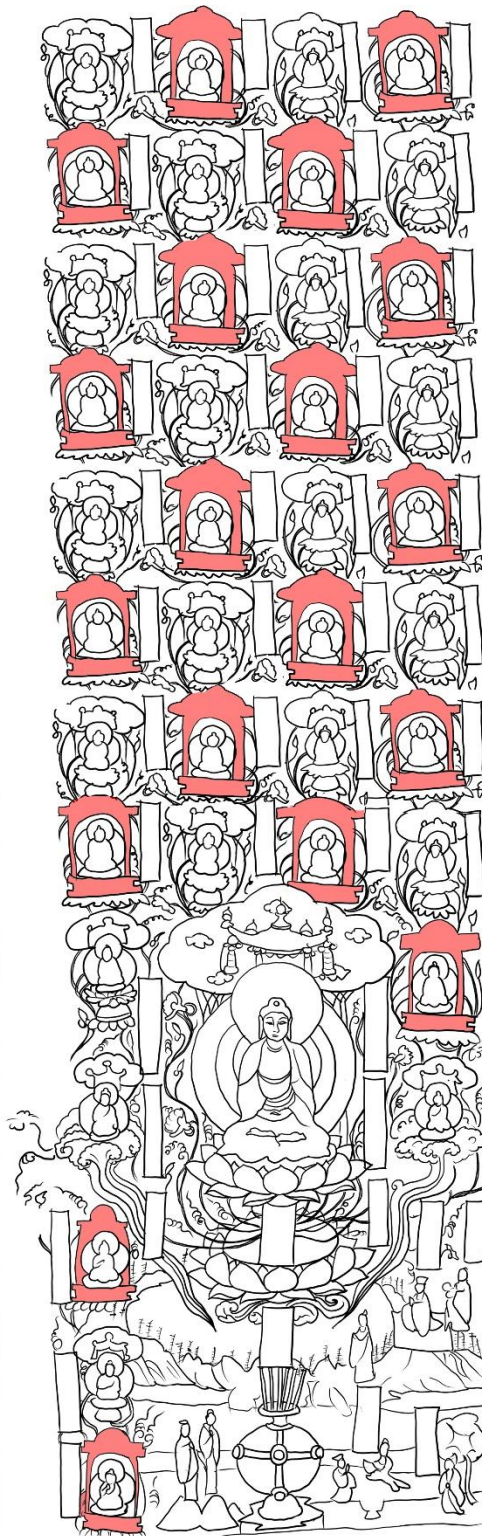
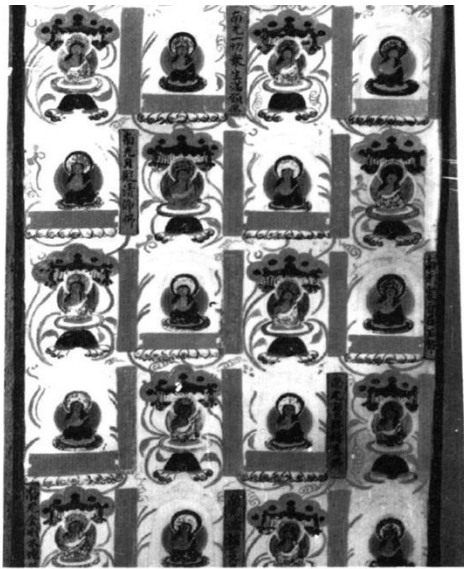


Figure 1-47. The transformation tableau of the Thousand Buddhas of the Good Eons, rear ceiling of Cave 9, the late-Tang period. a) photos of the mural painting; b) line drawing highlighting the pagoda images in red shapes. Photos after Sha, *Guiyijun shiqi*, 211, fig. 5; Liang, “Lue lun Dunhuang wantang yishu de shisuhua,” 20, fig. 16. Drawing by author.

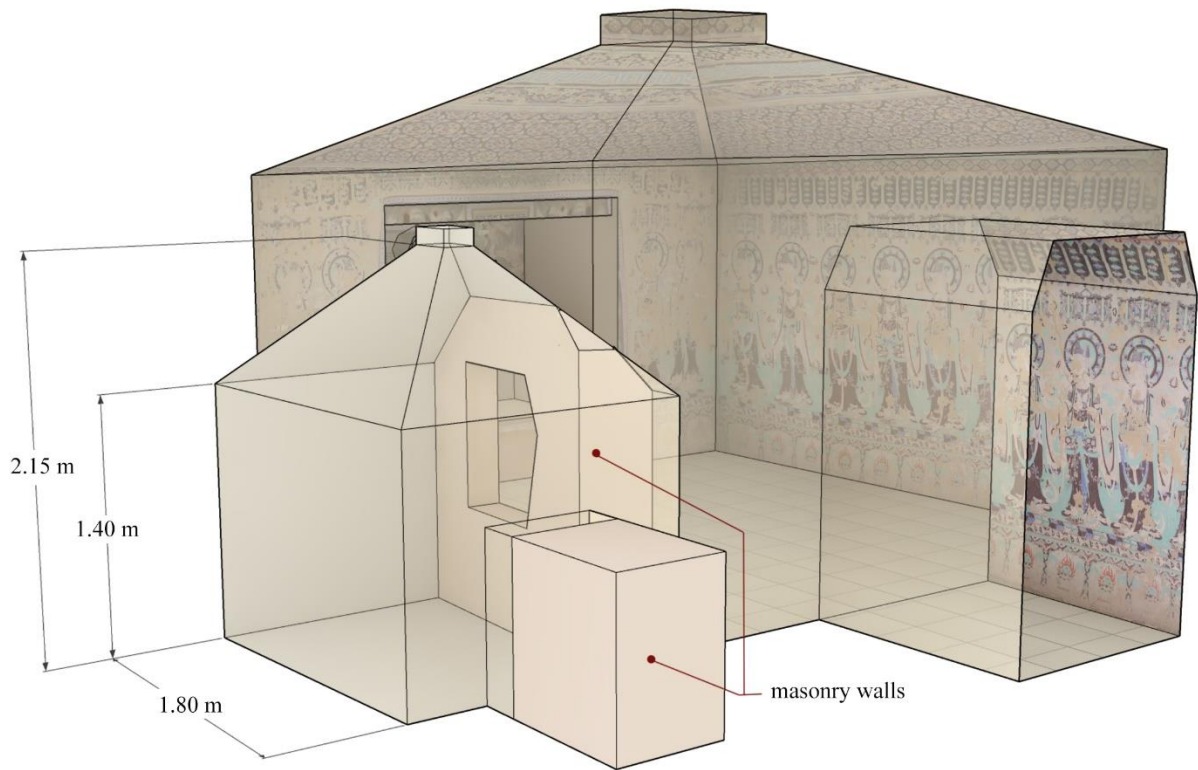


Figure 1-48. A digital model of Caves 366 (*right*) and 366A (*left*) in the current status. Drawing by author.

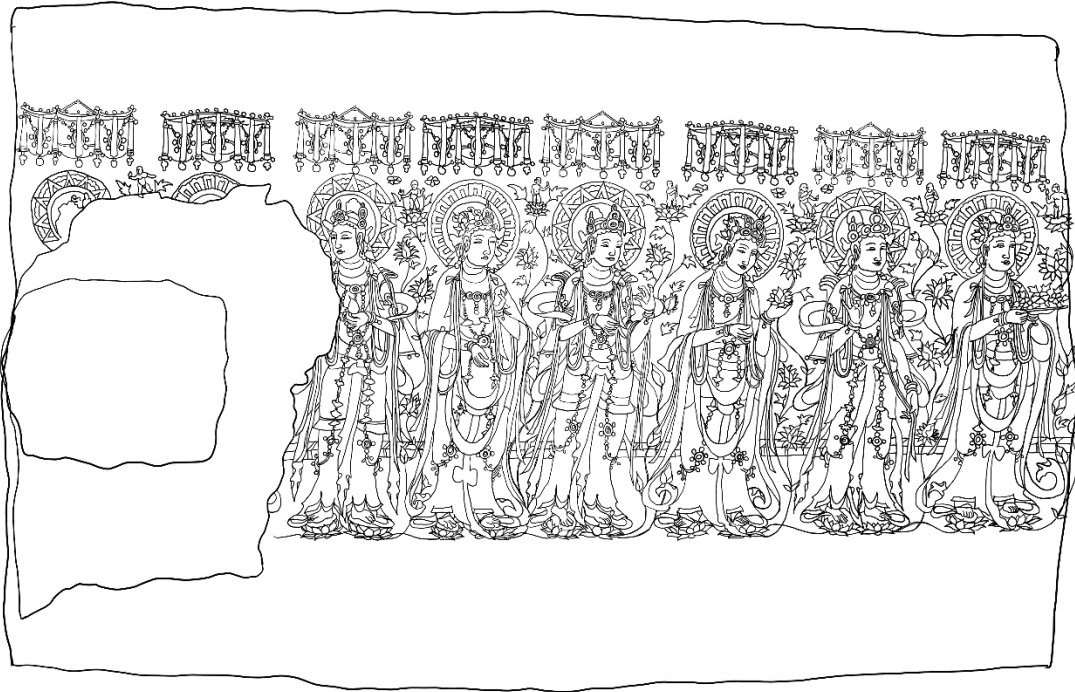


Figure 1-49. A row of bodhisattva images on the south wall of Mogao Cave 366, circa eleventh century. The bodhisattva images are about 1.5 m in height. The east end of the wall was broken, sealed, and decorated with a stele image, and then broken again. a) photo; b) trace-copy line drawing. Sha, *Guiyijun shiqi*, 257, fig. 19. Drawing by author.



Figure 1-50. Peeping into the east wall of Cave 366A from Cave 366 showing broken area of the east wall of Cave 366. Photo by author with permission of Dunhuang Academy, January 16, 2022.



Figure 1-51. A deep hole cutting into the rock mass, detail around the navel of the third bodhisattva from west on the south wall of Cave 366. Photo by author with permission of Dunhuang Academy, September 2019.



Figure 1-52. Northwest corner of the ceiling slopes in Cave 366 showing mural remains on the rock mass. Photo courtesy of the Dunhuang Academy.

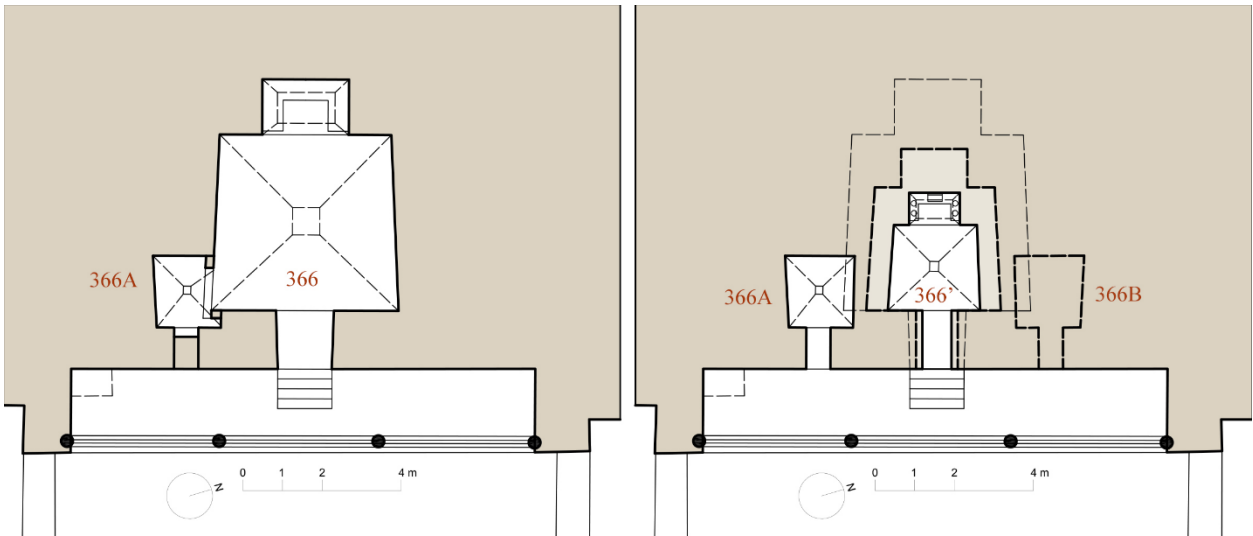


Figure 1-53. Plan drawings of the top-level caves of the Pavilion. a) the current status; b) author's reconstruction of the initial design of a cave triad that were later modified into Caves 366 and 366A showing the reconstructed design in thick dashed lines. Drawing by author.

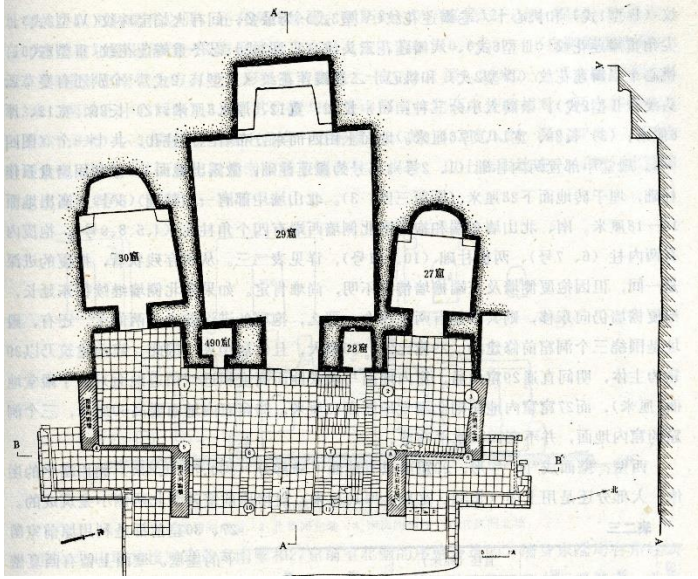


Figure 1-54. The plan drawing of Caves 27 to 30 and the Xixia-period ante-hall. After Pan and Ma, *Mogaoku kuqian diantang yishi*, fig. 41.

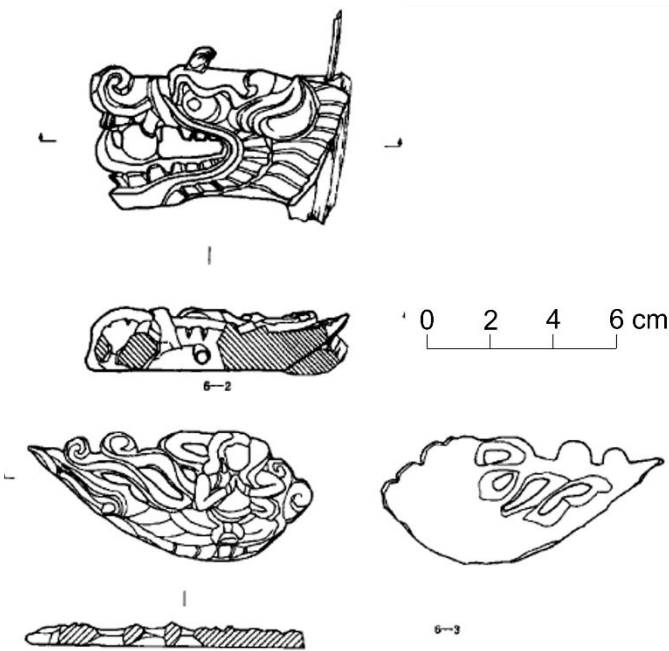


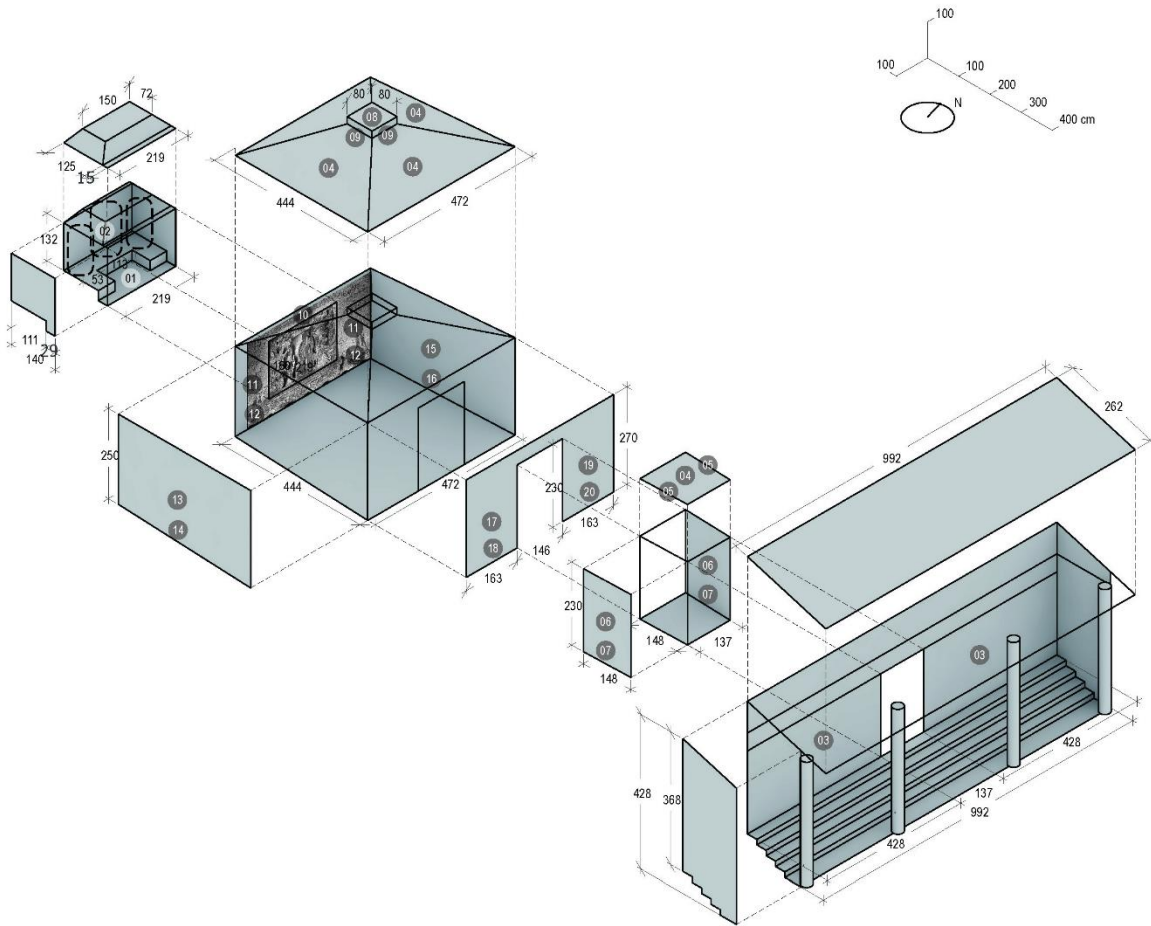
Figure 1-55. a) Two wooden components in the shapes of dragon's head and flying apsaras found in Cave 476 and b) a small wooden backscreen found at the Mogao caves that bears similar decorations highlighted in red frames. After Zhang and Wang, "Dunhuang mogao ku di 476 ku kaogu baogao," 98, fig. 6. Photo by Bai Xudong, courtesy of Dunhuang Academy.



Figure 1-56. The backscreened buddha niche in two Mogao caves of Tibetan period. a) a blank area on the west niche wall indicating the existence of a backscreen in Cave 361, circa 145 cm (h); b) the backscreen for the main buddha icon in Cave 112, decorations along the top edges removed, circa 85 cm (h). Photo courtesy of Dunhuang Academy.



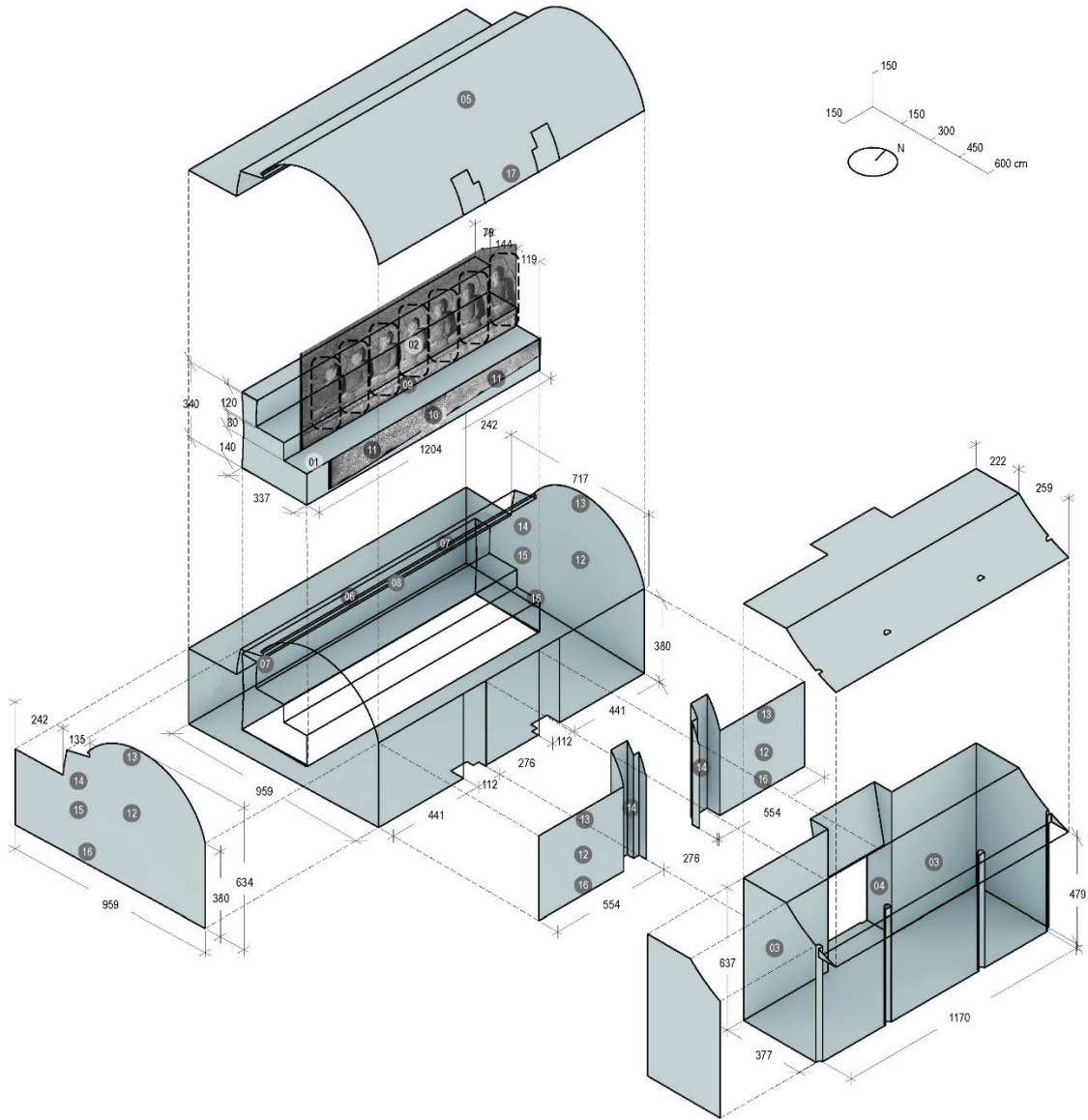
Figure 1-57. Vairocana seated in front of a backscreen, detail in the Manḍala of Eight Great Bodhisattvas, south wall, Cave 14, late-Tang period. After Peng, *Mijiao huajuan*, 123, fig. 97.



- 01 Wide-opening and tent-shaped niche
- 02 Jade Emperor and two attendants, during the Qing dynasty (1644-1911 AD)
- 03 Remaining paintings of the Qing dynasty (1644-1911 AD)
- 04 Patterns of flower clusters
- 05 Drapery
- 06 Offering Bodhisattva(s)
- 07 Three Kun Men with offering jewel patterns
- 08 Coffered ceiling/Caisson ceiling, with a relief of curled phenix
- 09 Rectengular-spiral pattern, curvy-grass pattern
- 10 tent-ceiling pattern
- 11 Two offering Bodhisattvas
- 12 Kun Men with offering jewel patterns
- 13 Six offering Bodhisattvas remaining (eight in total), broken painted stele
- 14 Six Kun Men with offering jewel patterns
- 15 Eight offering Bodhisattvas
- 16 Eleven Kun Men with offering jewel patterns
- 17 Meeting Mañjuśrī Bodhisattva
- 18 Three Kun Men with offering jewel patterns
- 19 Meeting Samantabhadra Bodhisattva
- 20 Four Kun Men with offering jewel patterns

- 盃顶帐形龕
- 清塑玉皇一铺三身
- 清残画
- 团花图案
- 垂幔
- 供养菩萨
- 壶门内供宝三个
- 藻井浮塑团凤井心
- 回文卷草
- 帐形图案
- 供养菩萨
- 壶门内供宝
- 供养菩萨存六身(原八身), 碑(毁)
- 壶门内供宝六个
- 供养菩萨存八身
- 壶门内供宝十一个
- 文殊变
- 壶门内供宝三个
- 普贤变
- 壶门内供宝四个

Figure 1-58. The distribution of iconographic contents in Cave 366 in the present condition. Drawing by author.



- | | | |
|----|--------------------------------------------------------------------------------------------------------------------------------|---------------|
| 01 | Buddha altar | 佛坛 |
| 02 | Seven meditating Buddhas (built during the Tang dynasty (618-908 AD), heads renovated during the Qing dynasty (1644-1911 AD)) | 唐塑七禅定佛 (清修头部) |
| 03 | Two heavenly kings, the Qing dynasty (1644-1911 AD) | 二天王 |
| 04 | Offering Bodhisattva(s) remains | 残存供养菩萨 |
| 05 | Patterns of flower clusters | 团花图案 |
| 06 | Seven Bodhi canopies, seven Buddha aureoles (painted during the mid-Tang dynasty (771-835 AD)) | 中唐画菩提宝盖、佛光各七个 |
| 07 | Buddhas attending an assembly | 赴会佛一铺 |
| 08 | Thousand-Buddhas in a row | 千佛一排 |
| 09 | Kun Men with flower branches (painted during the Song dynasty (960-1279 AD)) | 壶门内宋画折枝花卉 |
| 10 | Inscriptions in Tibetan characters, sutra manuscripts in Chinese characters (written during the mid-Tang dynasty (771-835 AD)) | 中唐吐蕃文题记, 汉字写经 |
| 11 | Twenty Bodhisattvas in total | 菩萨二十身 |
| 12 | Pure Land scene | 净土变 |
| 13 | Drapery | 垂幔 |
| 14 | Four Bodhisattvas listening to the preaching | 听法菩萨四身 |
| 15 | Offering Bodhisattva | 供养菩萨一身 |
| 16 | Kun Men with offering jewel patterns | 壶门内供宝 |
| 17 | Preaching scene | 说法图 |

Figure 1-59. The distribution of iconographic contents in Cave 365 in the present condition. Drawing by author.



Figure 1-61. The attending bodhisattva images on the sides of the backscreen in Cave 16. a) the bodhisattva on the south-facing side, identified by inscription as “Mahāsthāmaprāpta Bodhisattva”; b) the bodhisattva on the north-facing side, identified by inscription as “Avalokiteśvara Bodhisattva.” Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18124610, 18118097).

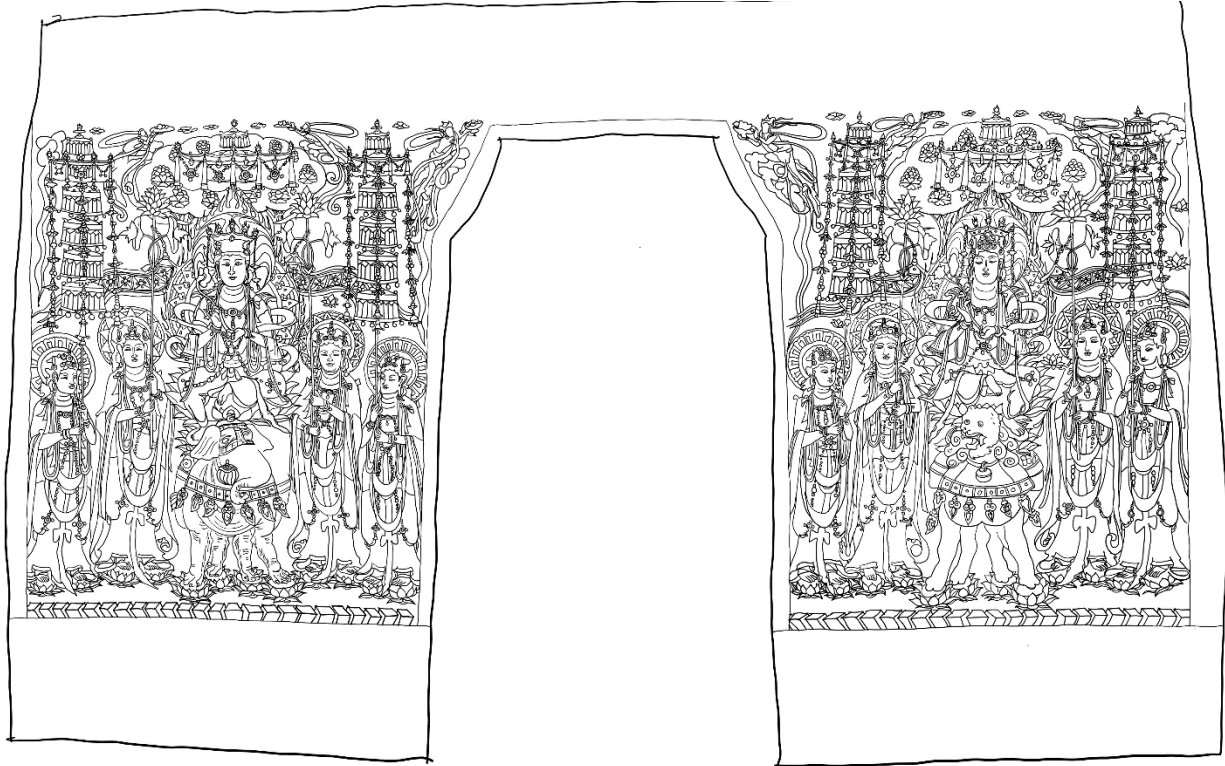


Figure 1-62. Tableaux of Mañjuśrī (south) and Samantabhadra (north) on the east wall of Mogao Cave 366, circa eleventh century. a) photo. Photo courtesy of Dunhuang Academy. b) trace-copy line drawing. Drawing by author.

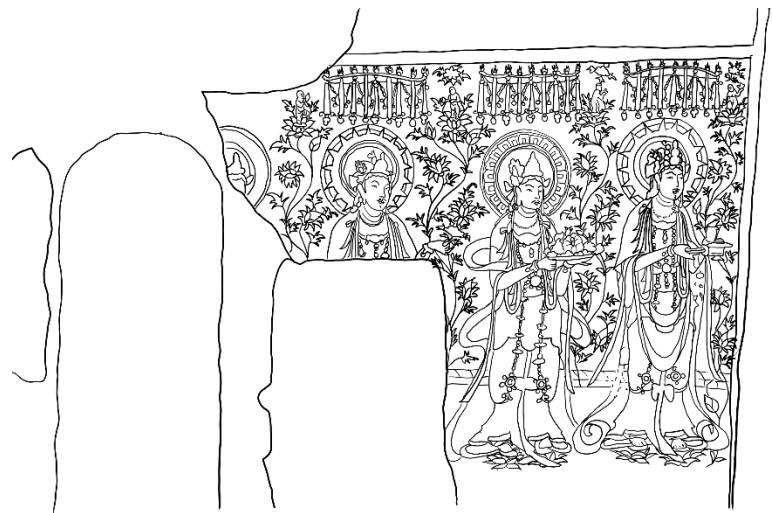


Figure 1-63. A row of bodhisattva images on the south wall of the corridor of Mogao Cave 16, circa eleventh century. The bodhisattva images are about 2.0 m in height. The middle of the wall is interrupted by the 1906 renovation stele on the left and by the Dazhong stele (removed) on the right. a) digitized mural painting. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18144131). b) trace-copy line drawing. Drawing by author.

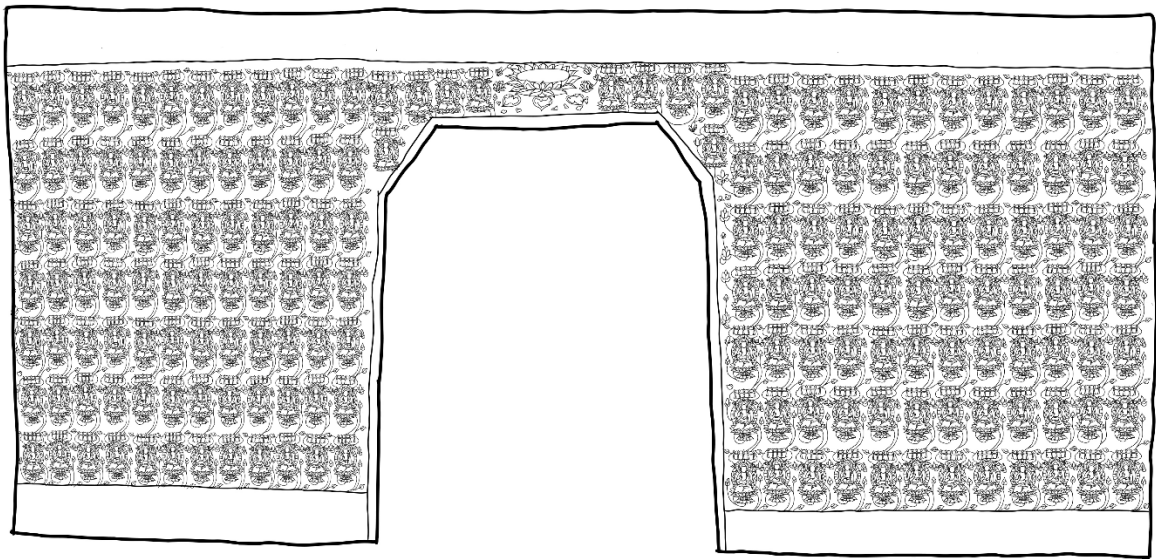


Figure 1-64. The thousand-buddha motifs and a lotus image on the east wall Mogao Cave 16, circa eleventh century. a) digitized mural painting. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 22277543). b) trace-copy line drawing. Drawing by author.

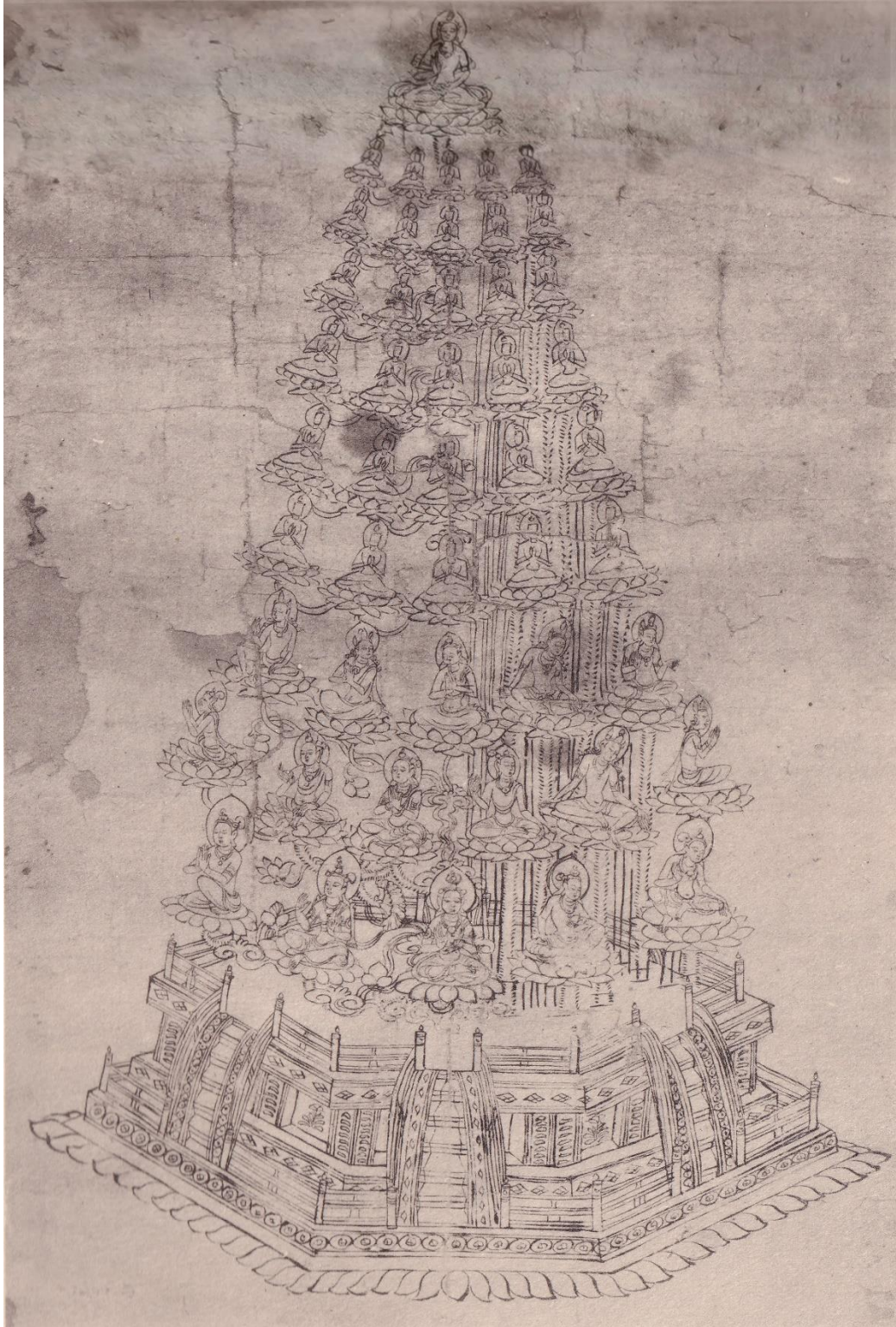


Figure 1-65. The Picture of Many Sons Pagoda. Ink on paper, 41.6×28 cm, circa ninth to tenth century. Found in Mogao Cave 17, in the collection of National Museum of India, New Delhi (Ch.00427, Stein painting 390). After Matsumoto, *Tonkōga no Kenkyū*, 2: plate 126a.



Figure 1-66. An architecture-less Pure Land scene on the north side of the east wall of Mogao Cave 365, circa eleventh century. a) digitized mural painting. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18115473). b) trace-copy line drawing. Drawing by author.

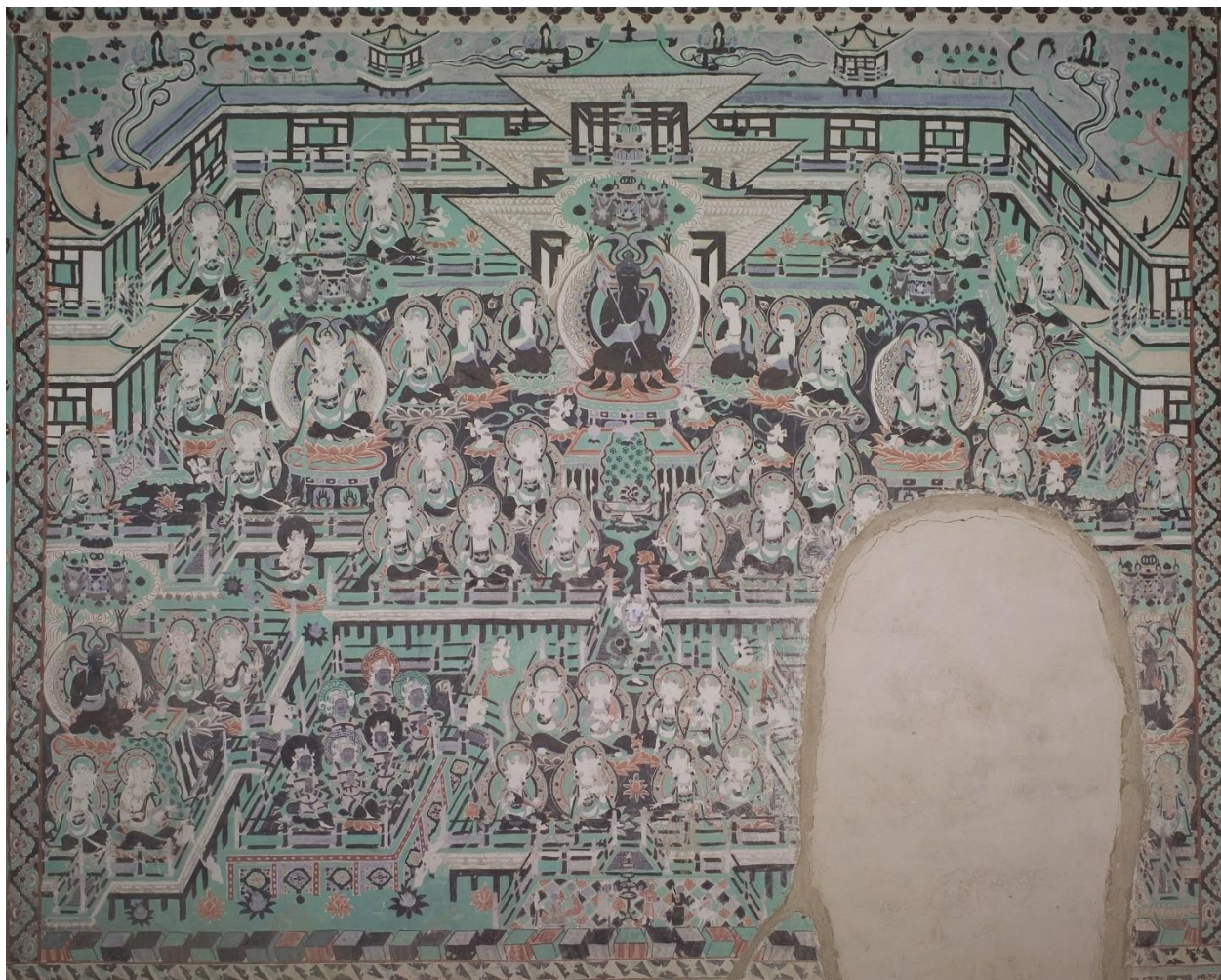


Figure 1-67. Medicine Buddha transformation tableau, north wall of Mogao Cave 400, circa eleventh century. After Zhao, "Xixia qianqi dongku," 2, fig. 1.



Figure 1-68. A newly discovered mural fragment in a hollow spot in the east wall of Cave 365, circa eleventh century, discovered around 2002. a) photograph. After Sun and Sun, *Shiku jianzhu juan*, 221, fig. 185. b) line drawing with partial reconstruction. Drawing by author.

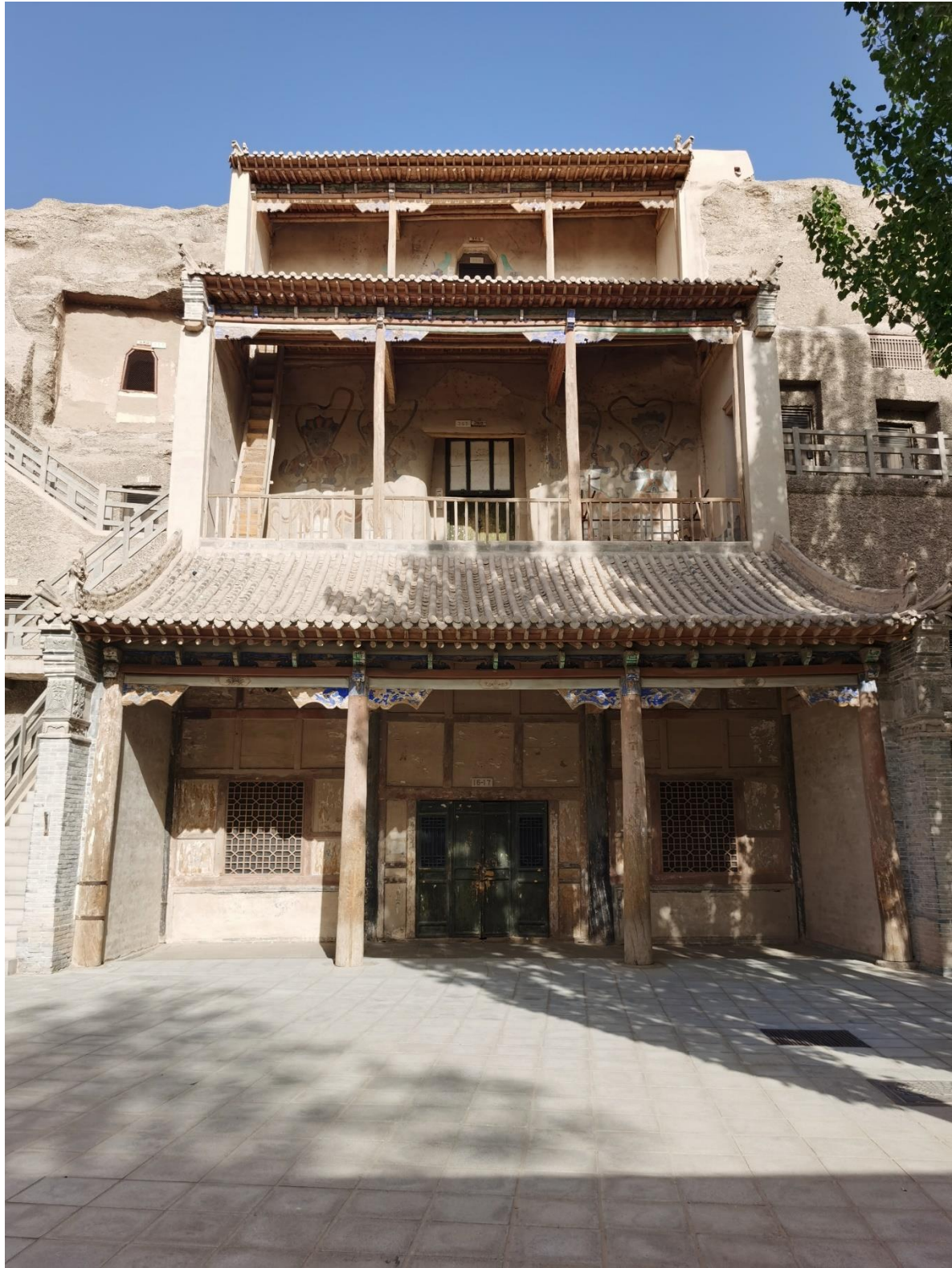


Figure 1-69. The timber-framed three-story porch screening Mogao Caves 16, 365, 366 and their auxiliary caves, built between 1900 and 1906. Photo by author.



a) a tile in Cave 366



b) a tile in the corridor of Cave 16



c) ink rubbing of a V-1 tile



d) ink rubbing of a V-2 tile



e) ink rubbing of a V-4 tile

Figure 1-70. The patterned tiles preserved in the pavilion and comparative examples. a) a tile in Cave 366; b) a tile in the corridor Cave 16; c) a tile of the V-1 sub-type; d) a tile of the V-2 sub-type; e) a tile of the V-4 sub-type. Photos by author with permission of the Dunhuang Academy, rubbing after Pan and Ma, *Mogao ku kuqian diantang yizhi*, 78, fig. 51.

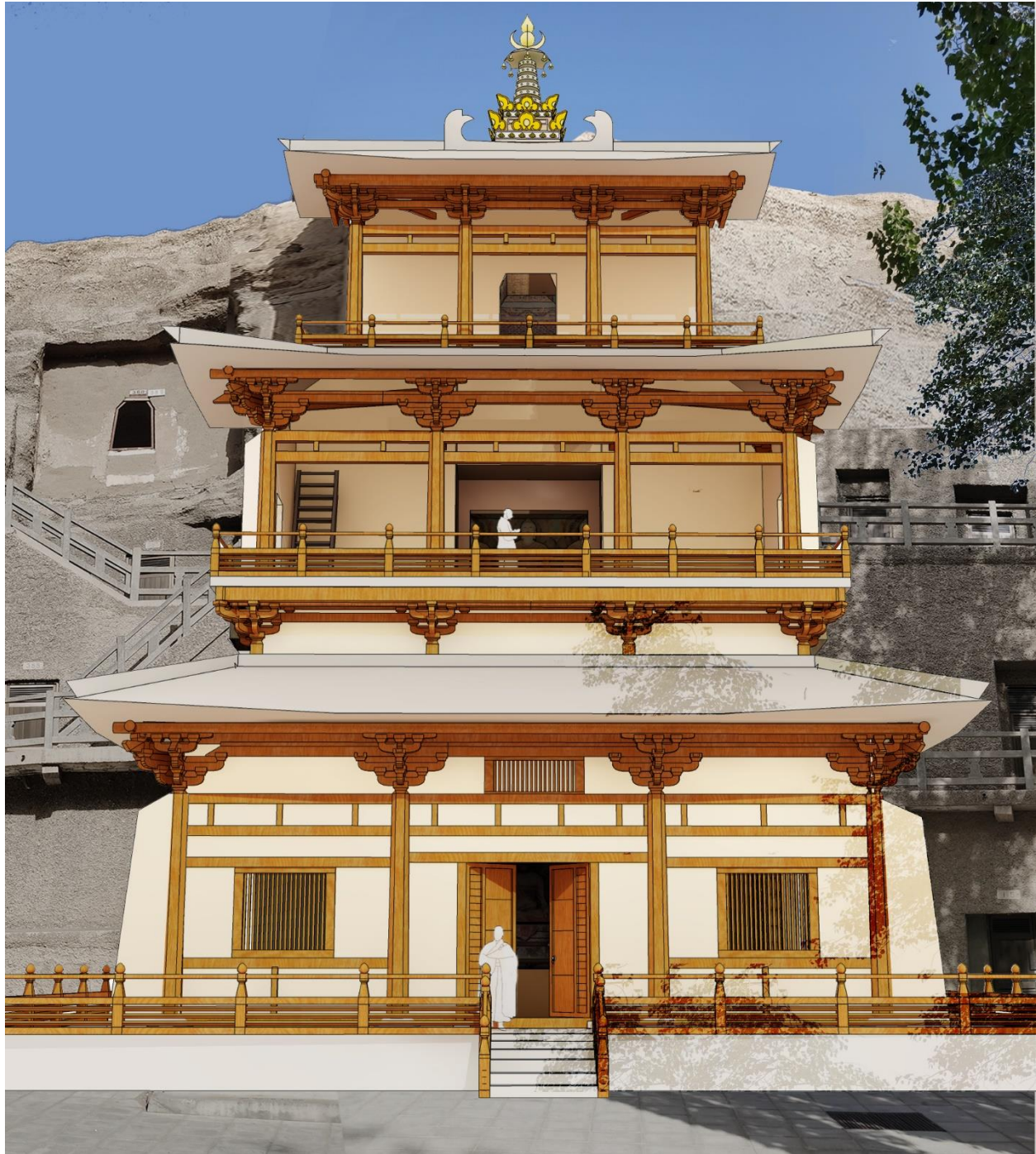


Figure 1-71. Author's reconstruction design of the eleventh-century timber-structured porch screening Mogao Caves 16, 365, 366, and their auxiliary caves. Drawing by author.



Figure 1-72. The curled phoenix patterns on the ceiling panels of Mogao Caves 16, 366, and 367, circa eleventh century. Photo courtesy of Dunhuang Academy. Diagram by author.



Figure 1-73. A two-story round pavilion topped by a phoenix-shaped finial, south wall of Mogao Cave 237, Tibetan period. Photo courtesy of Dunhuang Academy.



Figure 1-74. A phoenix-shaped ridge ornament that originally decorated the Phoenix Hall of Byōdō-in 平等院, Uji, Nara Prefecture, Japan. Made as a gilded bronze in 1053 CE. Current height is circa 105 cm, and total height with the five-color feathers reconstructed is circa 135 cm. a) the current status; b) reconstruction of the original appearance. Photo copyright of Byodo-in and Shikoku shimbun.

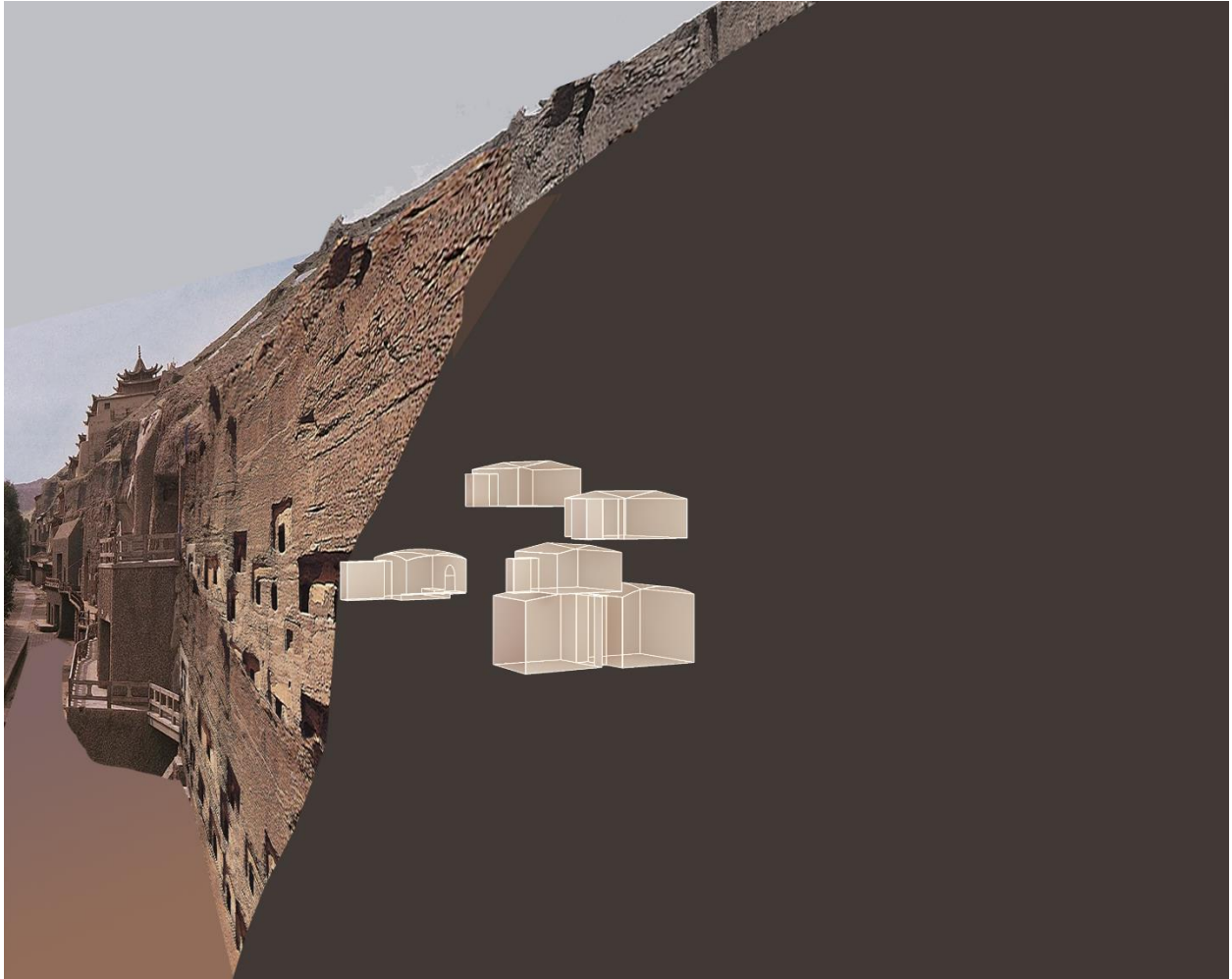


Figure 1-75. The author's reconstruction of Phase 0 in the construction history of the pavilion. A few pragmatic caves were excavated on the cliff face that would be taken by Cave 365. Drawing by author.



Figure 1-76. The author's reconstruction of Phase 1 in the construction history of the pavilion. Cave 365 was constructed in 832–34; most of the meditation caves were destroyed and concealed, and Cave 364 was made into a stele niche. Drawing by author.

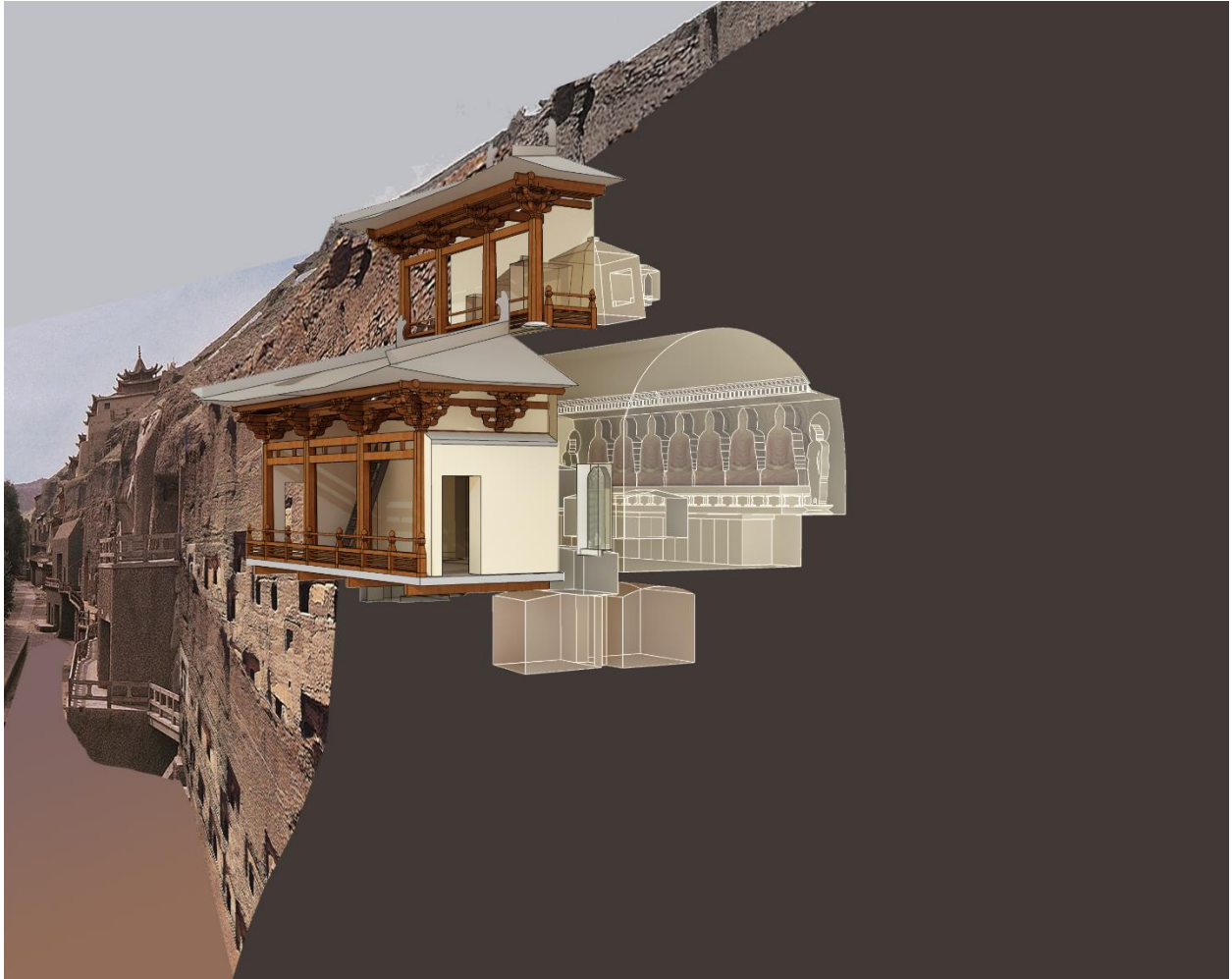


Figure 1-77. The author's reconstruction of Phase 2 in the construction history of the pavilion. A small cave triad was planned to be built above Cave 365, but only the central cave (Cave 366') was completed and the south cave (Cave 366A) was excavated. Drawing by author.

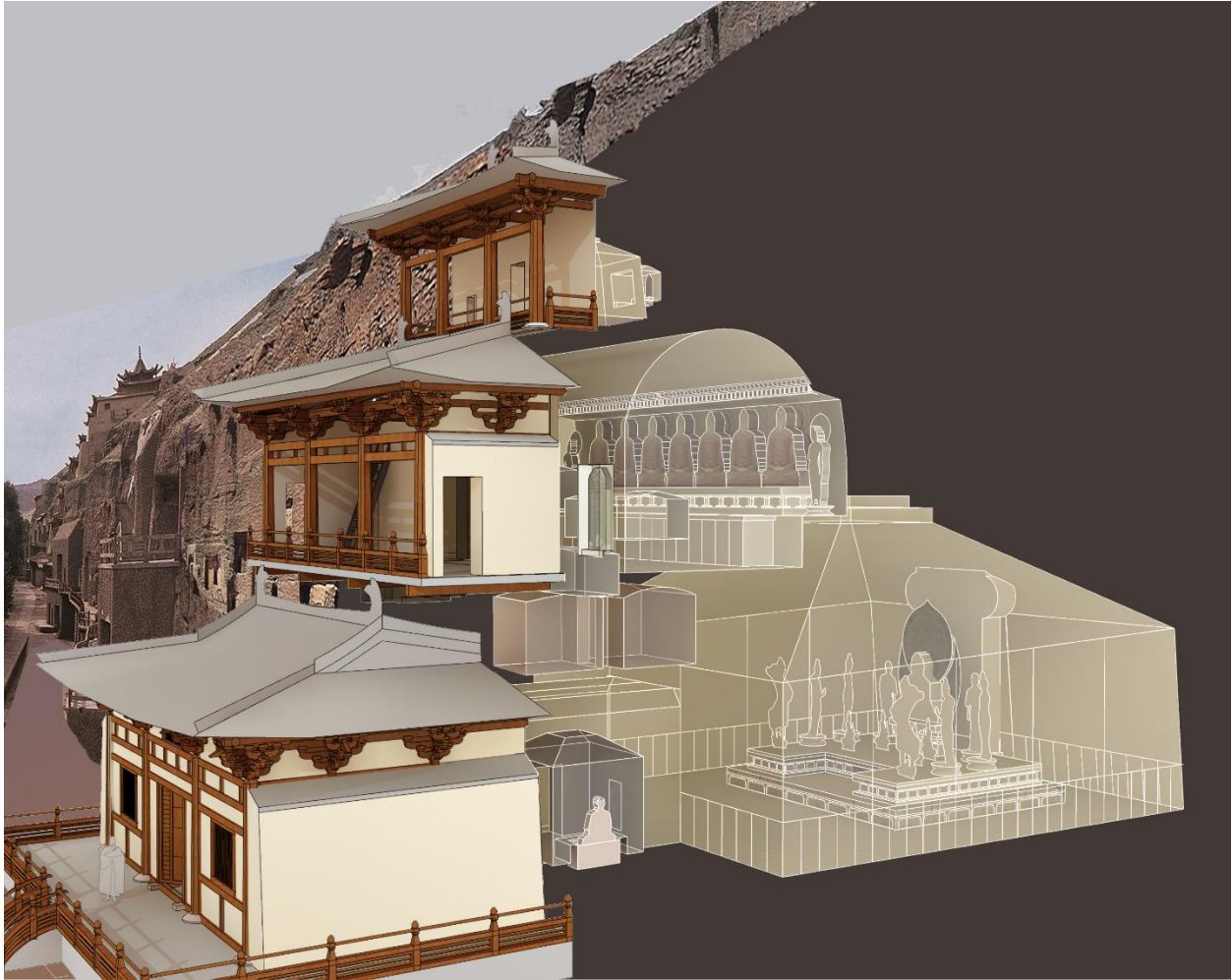


Figure 1-78. The author's reconstruction of Phase 3 in the construction history of the Pavilion. Cave Suite 16/17 was constructed in the late-Tang period. Drawing by author.

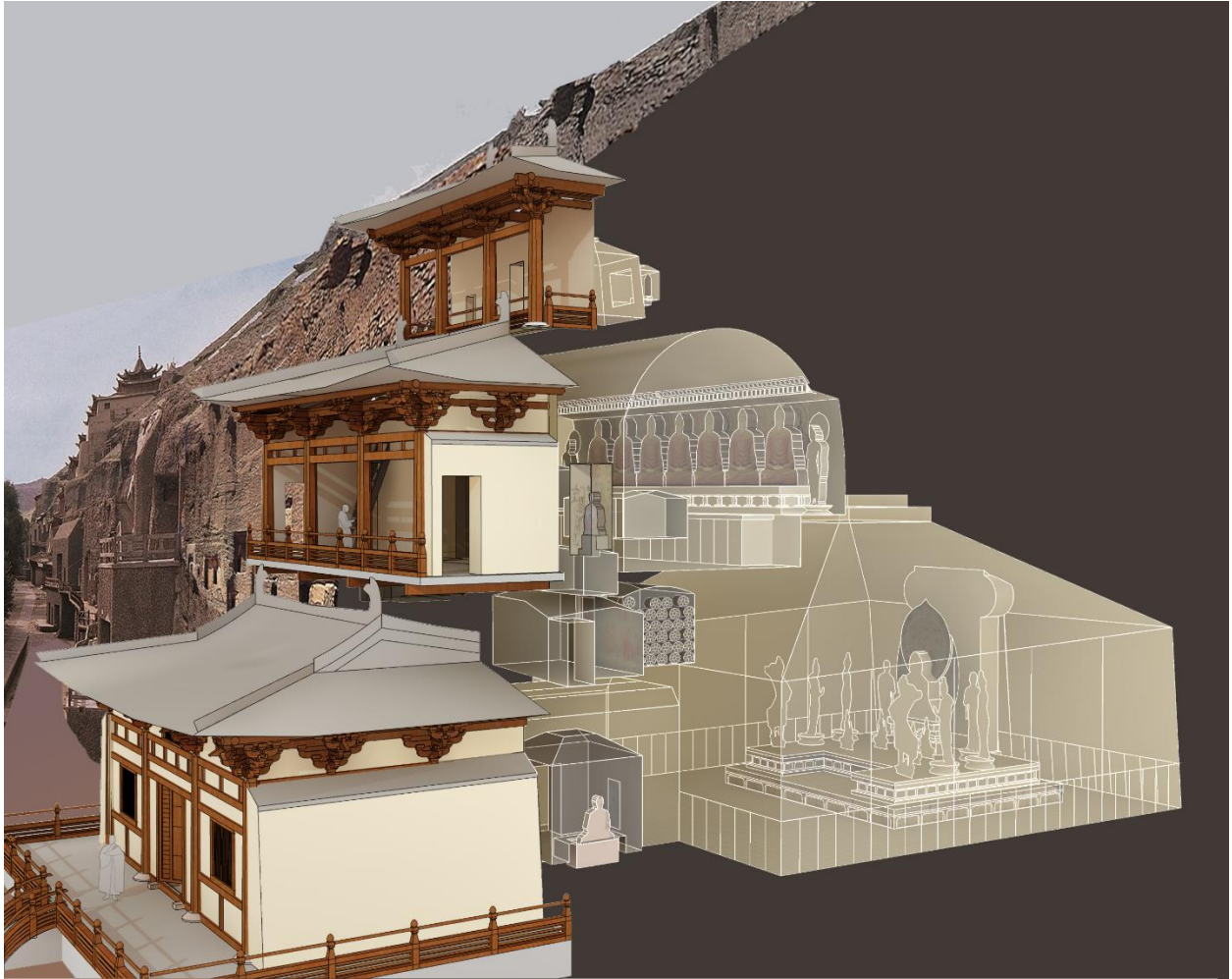


Figure 1-79. The author's reconstruction of Phase 4 in the construction history of the Pavilion. In the tenth century, Caves 364 and 467 were adapted into a shadow cave and a sutra storage, respectively; Cave 17 probably underwent a functional change. Drawing by author.



Figure 1-80. The author's reconstruction of Phase 5 in the construction history of the Pavilion. Around the eleventh century, Cave 366' was enlarged, Cave 365 was refurbished, the rear and side corridors around the seven-buddhas niche were cut out, Cave 16 was refurbished, and Cave 17 was concealed. Then a unifying façade screening Caves 366, 365, 16, and 476 was constructed, and a cliff-top structure (Proposal B) was erected. Drawing by author.

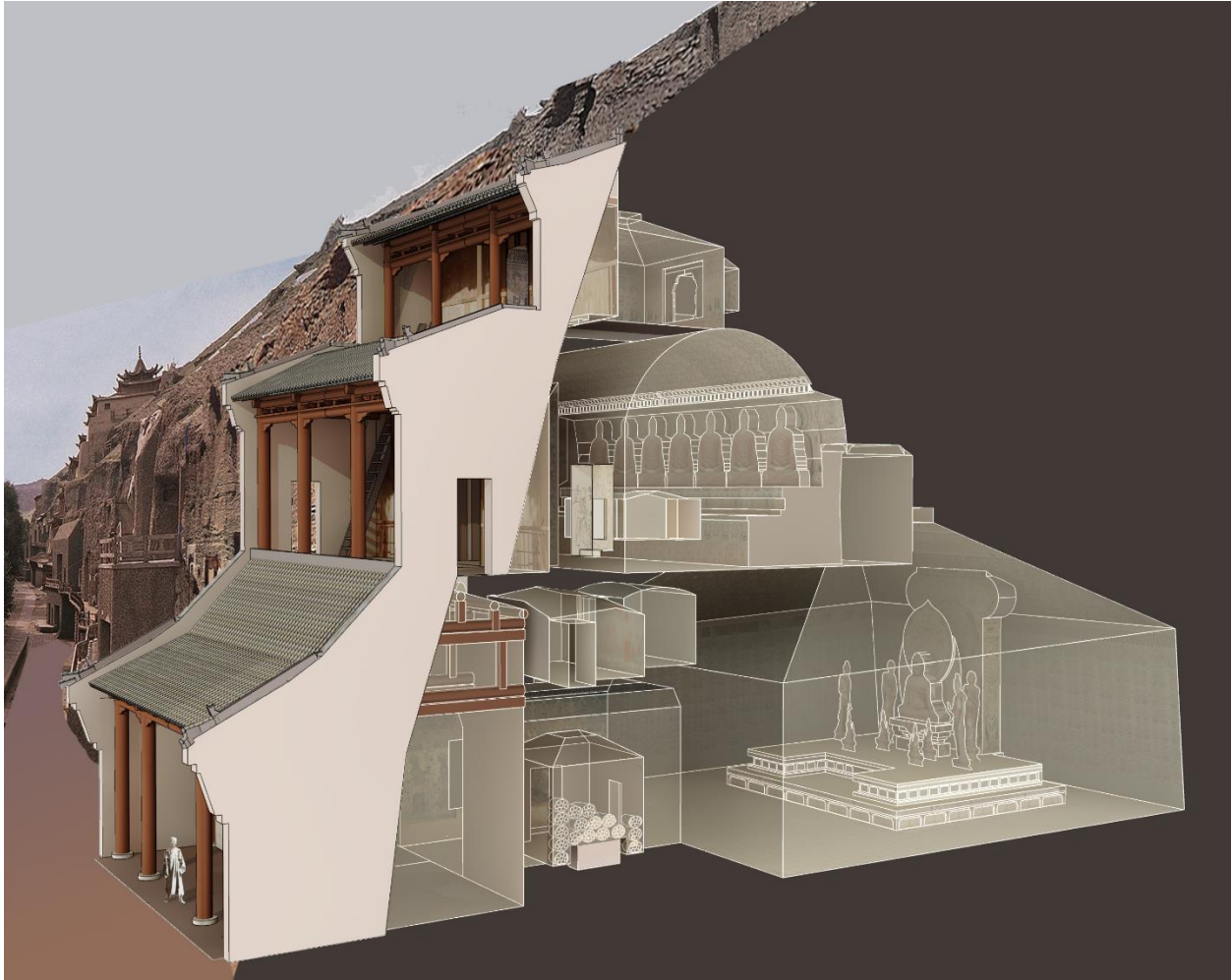


Figure 1-81. The author's reconstruction of Phase 6 in the construction history of the pavilion. In 1900–6, the niches and altars in Caves 365, 366, and 16 were refurbished, Cave 17 was reopened, and a three-story façade was rebuilt. Caves 364, 365A, 365D, and 366A seemed to have been broken by that time. Drawing by author.



Figure 1-82. Medicine Buddha transformation tableau, north wall, Mogao Cave 361, Tibetan period. Photo courtesy of Dunhuang Academy.

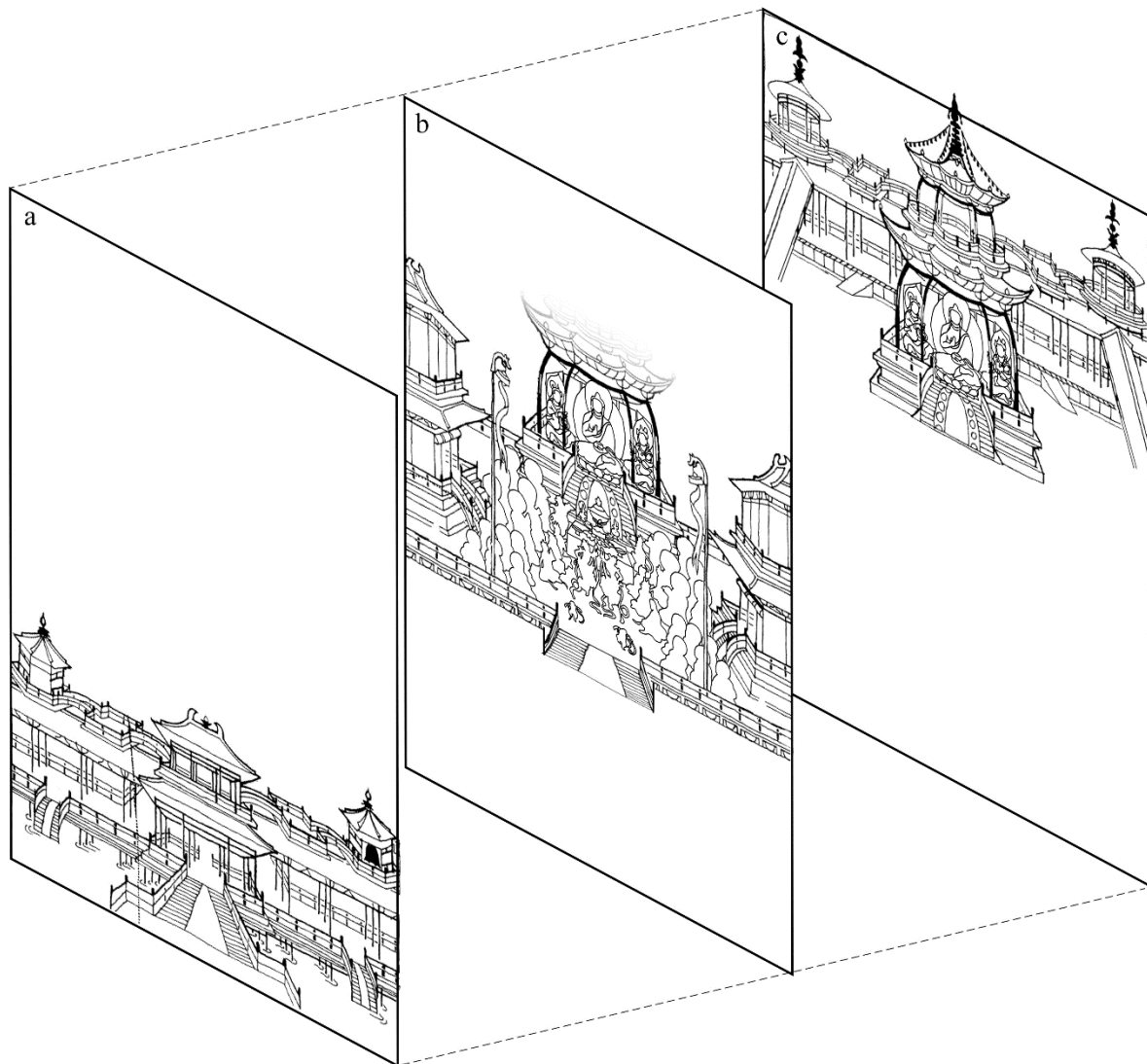


Figure 1-83. A diagram showing the three spatial layers in the tableau. Drawing by author, base map adapted from Xiao, *Dunhuang jianzhu yanjiu*, 73, fig. 36.

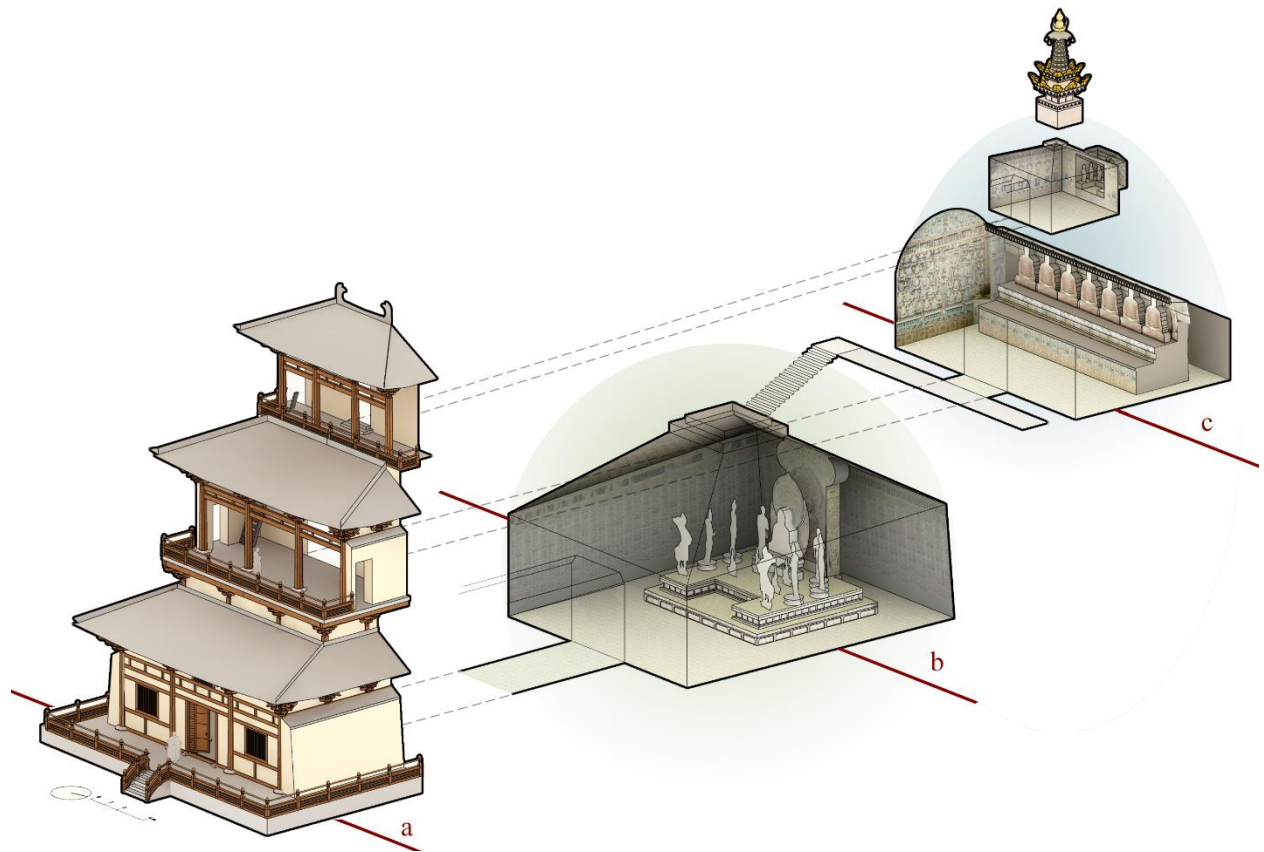


Figure 1-84. A diagram showing the three spatial layers of the pavilion in Phase 5. Drawing by author.

2. Enlivening Pagodas in Caves

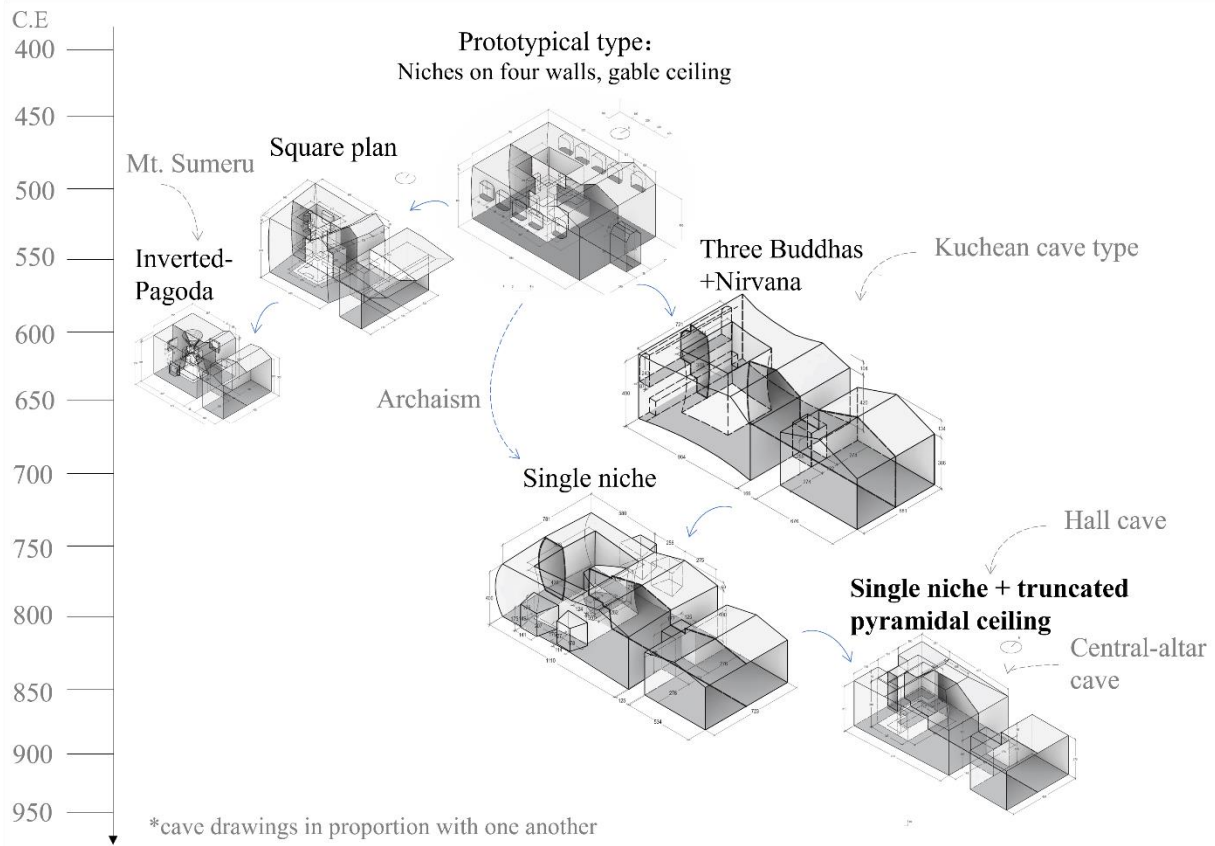


Figure 2-1. Cave space developments of the central-pillar caves in Dunhuang between the fifth and the tenth century. Drawing by author.

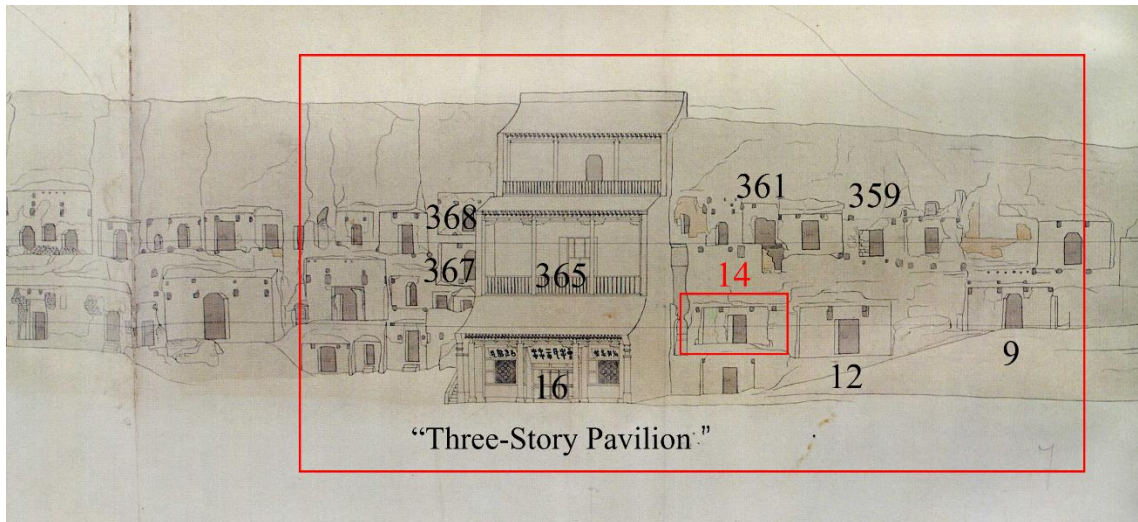


Figure 2-2. The location of Cave 14 and relevant caves in the northern end of the south section of the Mogao caves. Base map after Gosudarstvennyĭ Ėrmitazh, *E'luosi cang Dunhuang yishu pin*, vol. 5, fig. 1. Annotation by author.

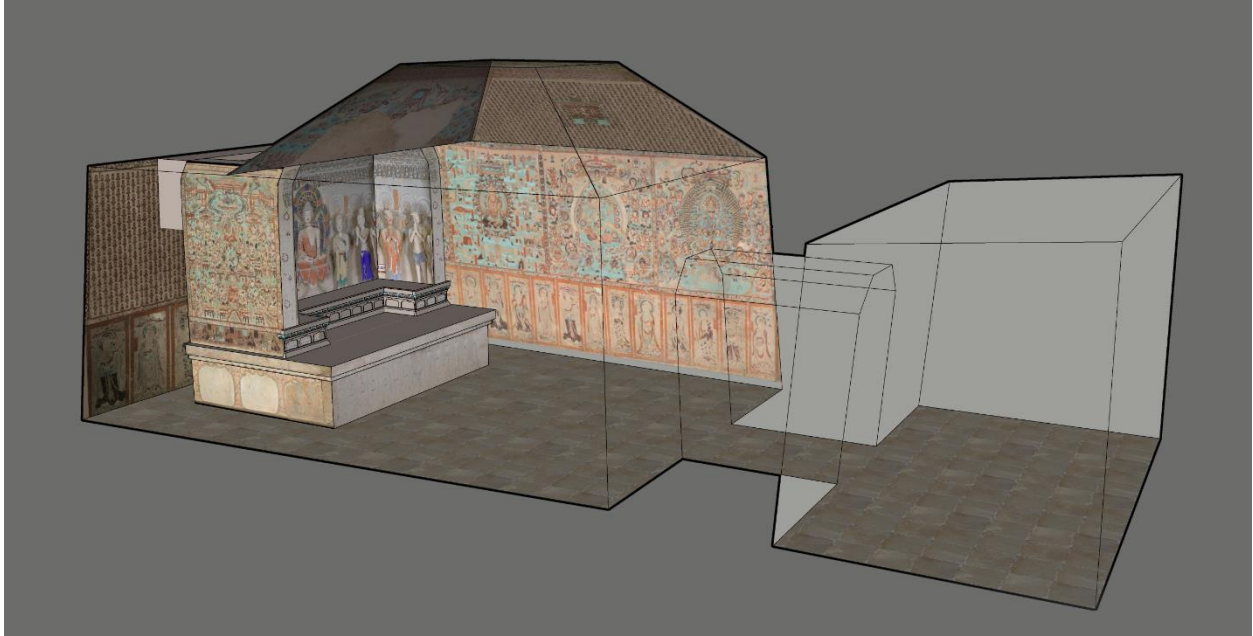


Figure 2-3. A digital model of Mogao Cave 14, late-Tang period, renovated in the Song and the Qing periods. Drawing by author.



Figure 2-4. Looking at the central pillar of Mogao Cave 14 from the frontal space in the main cave chamber. Photo courtesy of Dunhuang Academy.

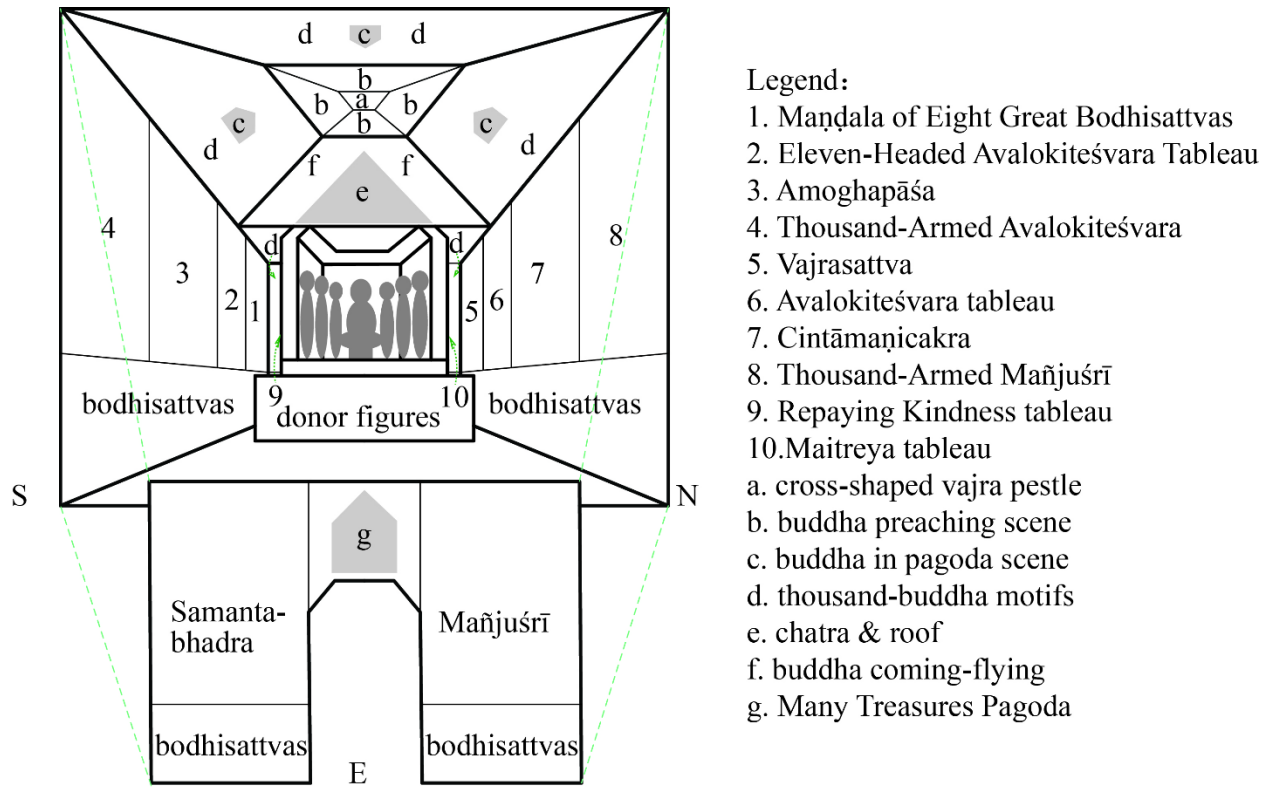


Figure 2-5. Iconographic contents in the main chamber of Mogao Cave 14. Diagram by author.

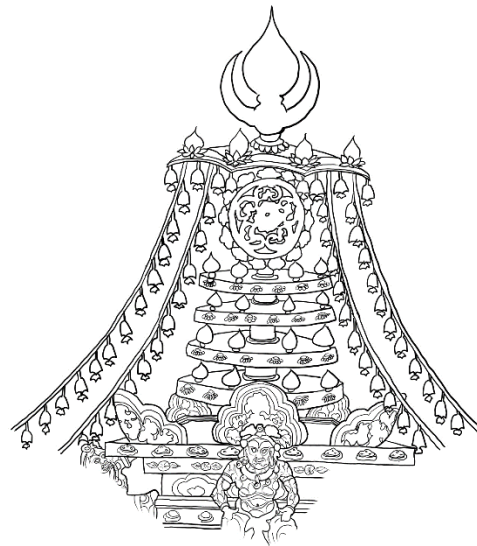
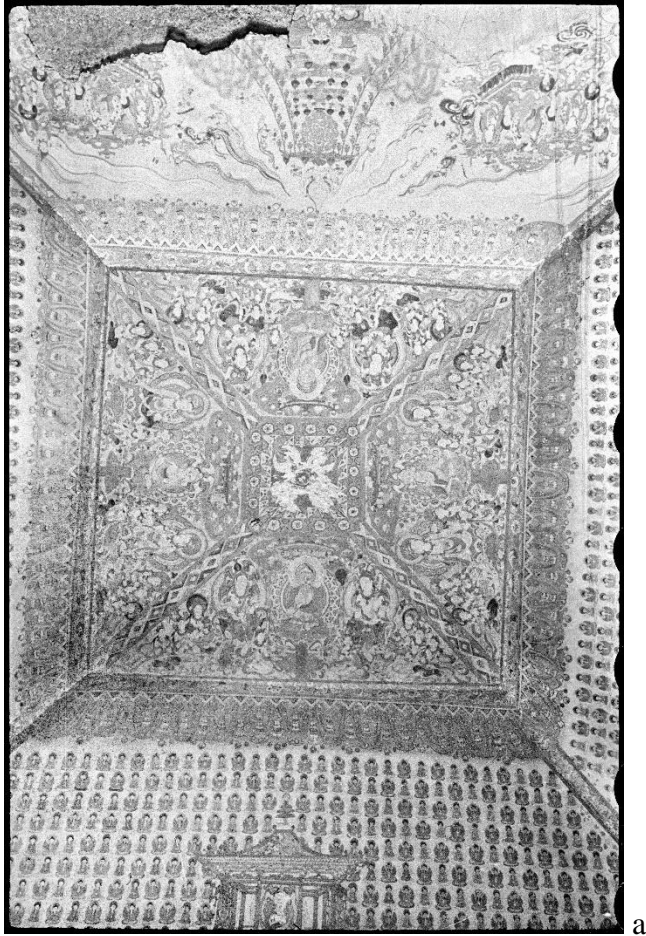
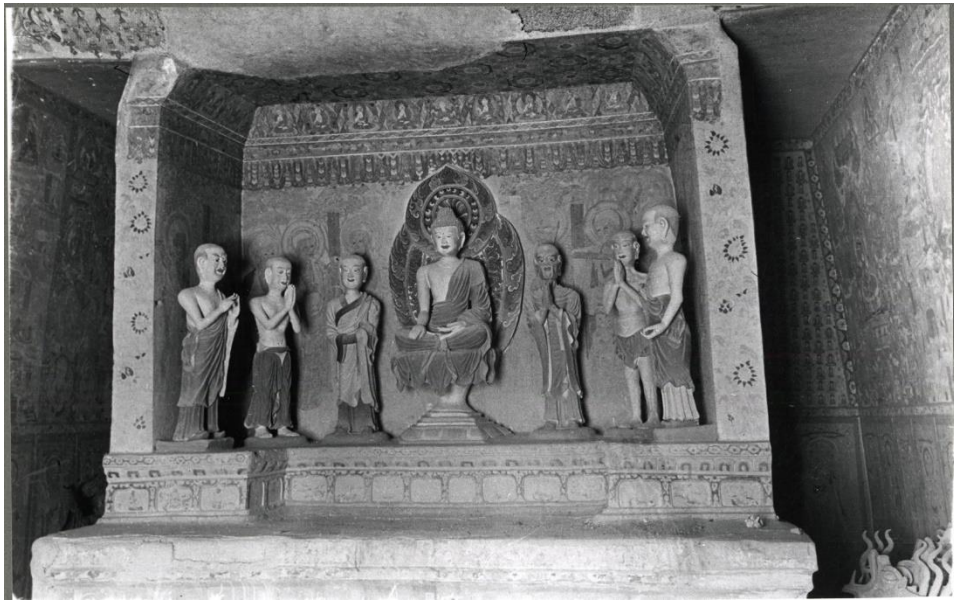


Figure 2-6. Remaining mural painting of a pagoda *chatra* on the west ceiling slope of Mogao Cave 14, late-Tang period. a) photograph of the mural painting. After Sun and Sun, *Jianzhu hua juan*, 214, fig. 209. b) trace-copy line drawing. Drawing by author.



a



b

Figure 2-7. Photographs of the interiors of Mogao Cave 14 taken by James Lo, 1943–44. a) the ceiling panels; b) the central pillar. Ching, *Visualizing Dunhuang*, vol. 6, figs. 265, 266.

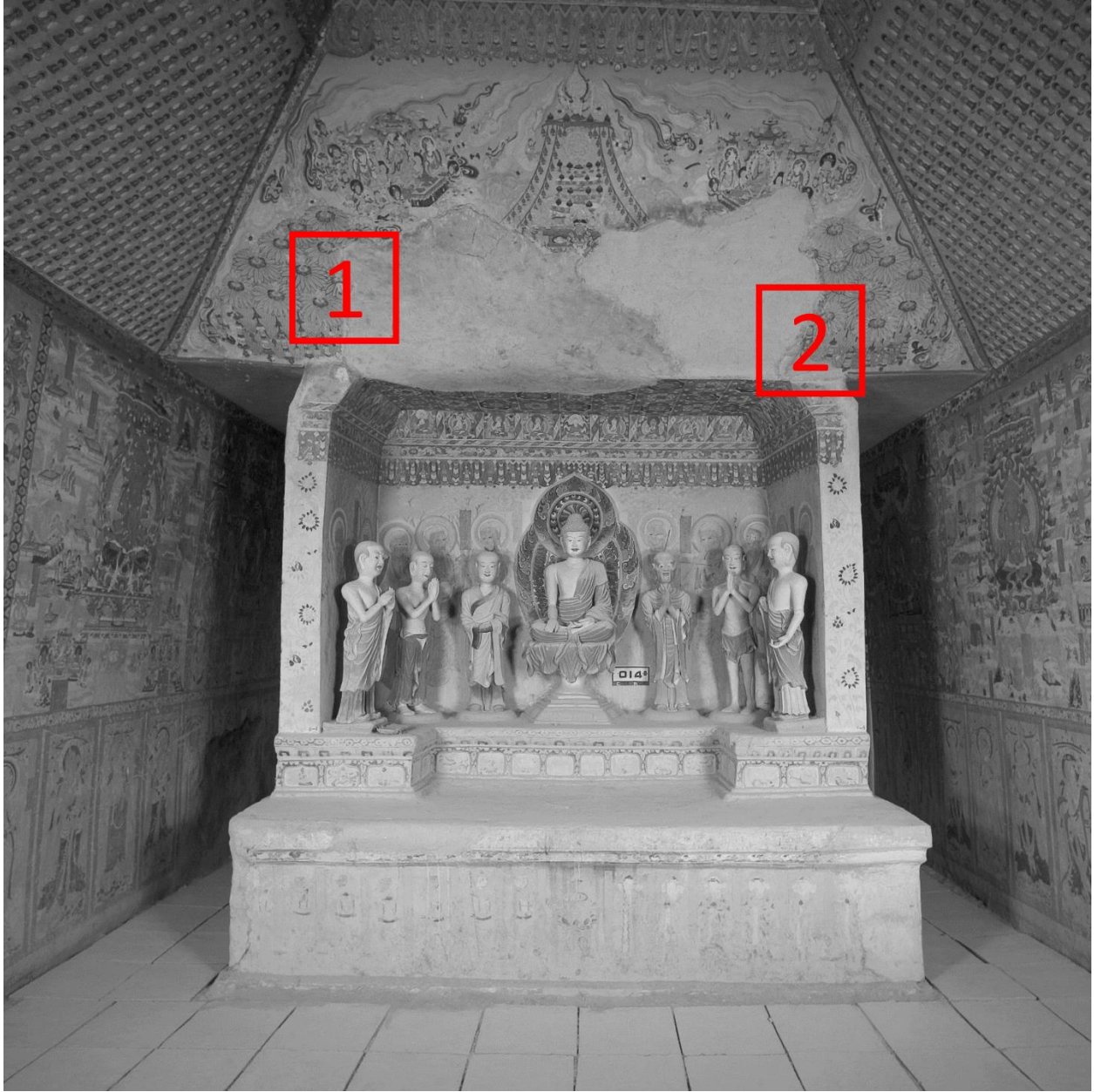


Figure 2-8. Location of two mural details on the west ceiling slope of Mogao Cave 14, late-Tang period. See figure 2-9 for detail 1 and figure 2-12 for detail 2. Photo courtesy of Dunhuang Academy. Annotation by author.



Figure 2-9. Remaining mural painting of a beast-head-shaped ornament on the west ceiling slope of Mogao Cave 14, late-Tang period. a) photograph of the mural painting, photo courtesy of Dunhuang Academy; b) trace-copy line drawing overlapped on the photograph showing the current status in black lines and author's theoretical reconstruction in gray lines. Drawing by author.

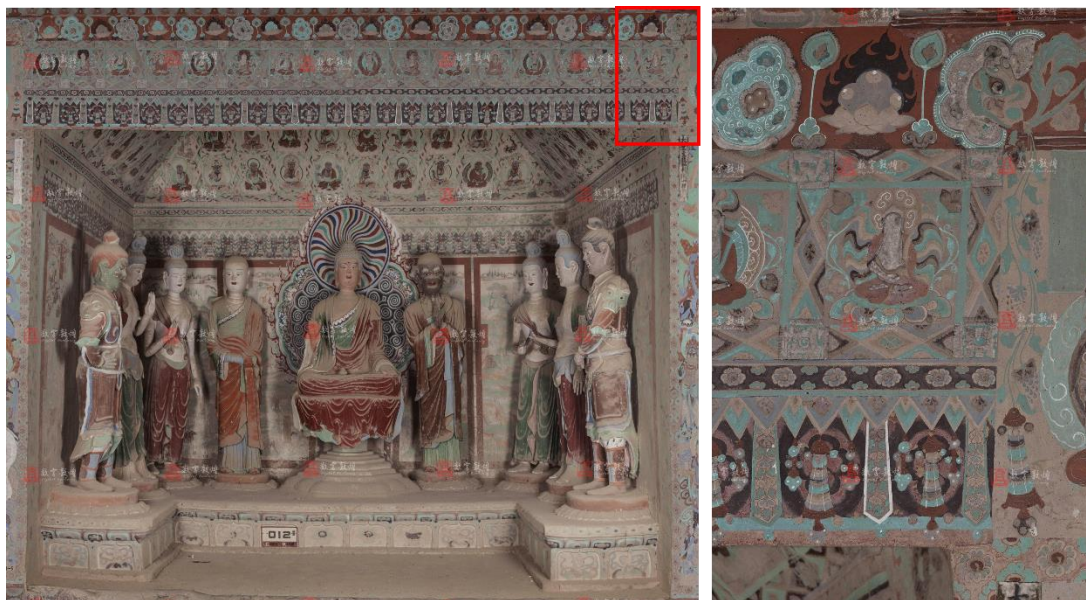


Figure 2-10. a) The canopy-shaped niche of Mogao Cave 12 and b) details of the ornaments near the northern end of the niche lintel. Digital Dunhuang website: <https://www.e-dunhuang.com/cave/10.0001/0001.0001.0012>.



Figure 2-11. A green glazed pottery plaque bearing a high relief of a beast's head in frontal view. Excavated from Shangyang Palace in Luoyang, Henan Province, Tang dynasty. After Shi and Rui, "Shilun liangjing diqu chutu de tangdai jianzhu liuli," plate 70-1.



Figure 2-12. Remaining mural painting of square panels filled with clustered camellia flowers on the west ceiling slope of Mogao Cave 14, late-Tang period. a) photograph of the mural painting, photo courtesy of Dunhuang Academy; b) trace-copy line drawing showing the current status in black lines and author's theoretical reconstruction in gray lines. Drawing by author.



Figure 2-13. The chessboard pattern each filled with a clustered camellia flower motif. Mural details on the ceiling panel of the niche of Cave 14, late-Tang period. Dunhuang yanjiu yuan, *Dunhuang shiku quanji: di shisi ku*.



Figure 2-14. Mural painting of a base bearer in a *kunmen* arch of the central altar in Mogao Cave 16, late-Tang period. Photo by author with permission of Dunhuang Academy.



Figure 2-15. A wooden statuette of a beam bearer, tenth century. Originally placed on the architrave of the Maitreya Pagoda (Cishi-ta 慈氏塔) of Laojun-tang 老君堂, Mount Sanwei, Dunhuang. a) current photograph; b) a digital photo collage showing the original placement of this kind of beam bearers. Photo by author and Wu Jun. Digital collage by author.



Figure 2-16. A polychromic clay image of a base bearer, located at a corner of the *chakra* base of the West Pagoda, Baisikou 拜寺口, Helan County, Ningxia Province. Xixia period. After Lei, Yu, and He, *Xixia fota*, 246, fig. 163.



a



b

Figure 2-17. Image of Many Jewels Pagoda, west ceiling slope, Mogao Cave 454, Song period. a) mural painting. After Sun and Sun, *Jianzhu hua juan*, 258, fig. 259. b) reconstruction design. Design and drawing by author.

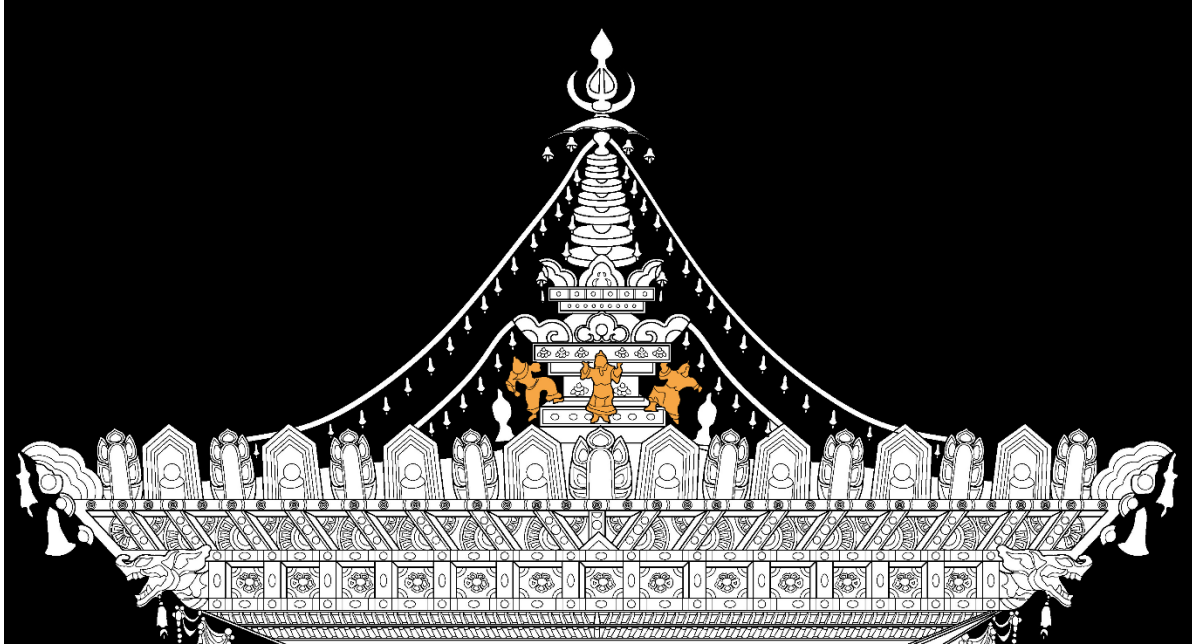


Figure 2-18. Trace-copy line drawing of the *chhatra* of Many Jewels Pagoda in figure 2-17, highlighting the bearers of the *chhatra* base in orange color. Drawing by author.

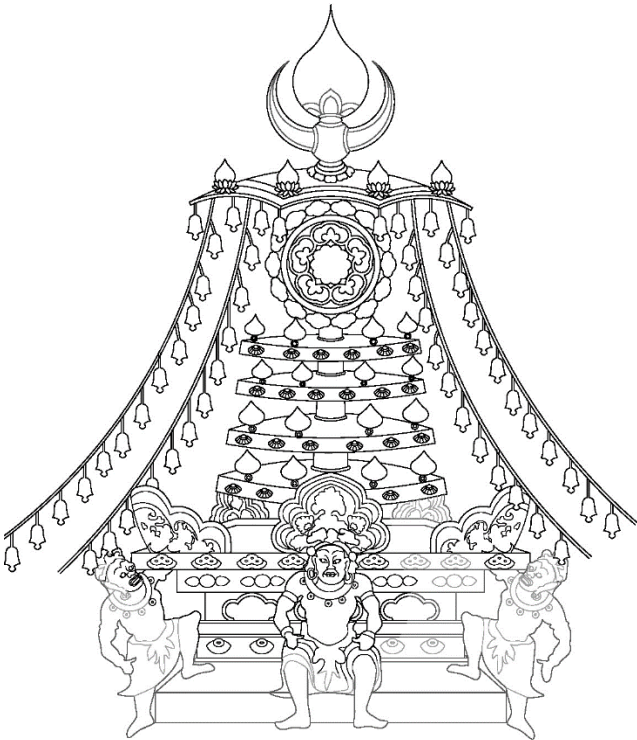


Figure 2-19. Trace-copy line drawing and theoretical reconstruction of the *chhatra* and bearers images on west ceiling slope of Mogao Cave 14. Black lines indicate the current status; gray lines indicate author's theoretical reconstruction. Drawing by author.

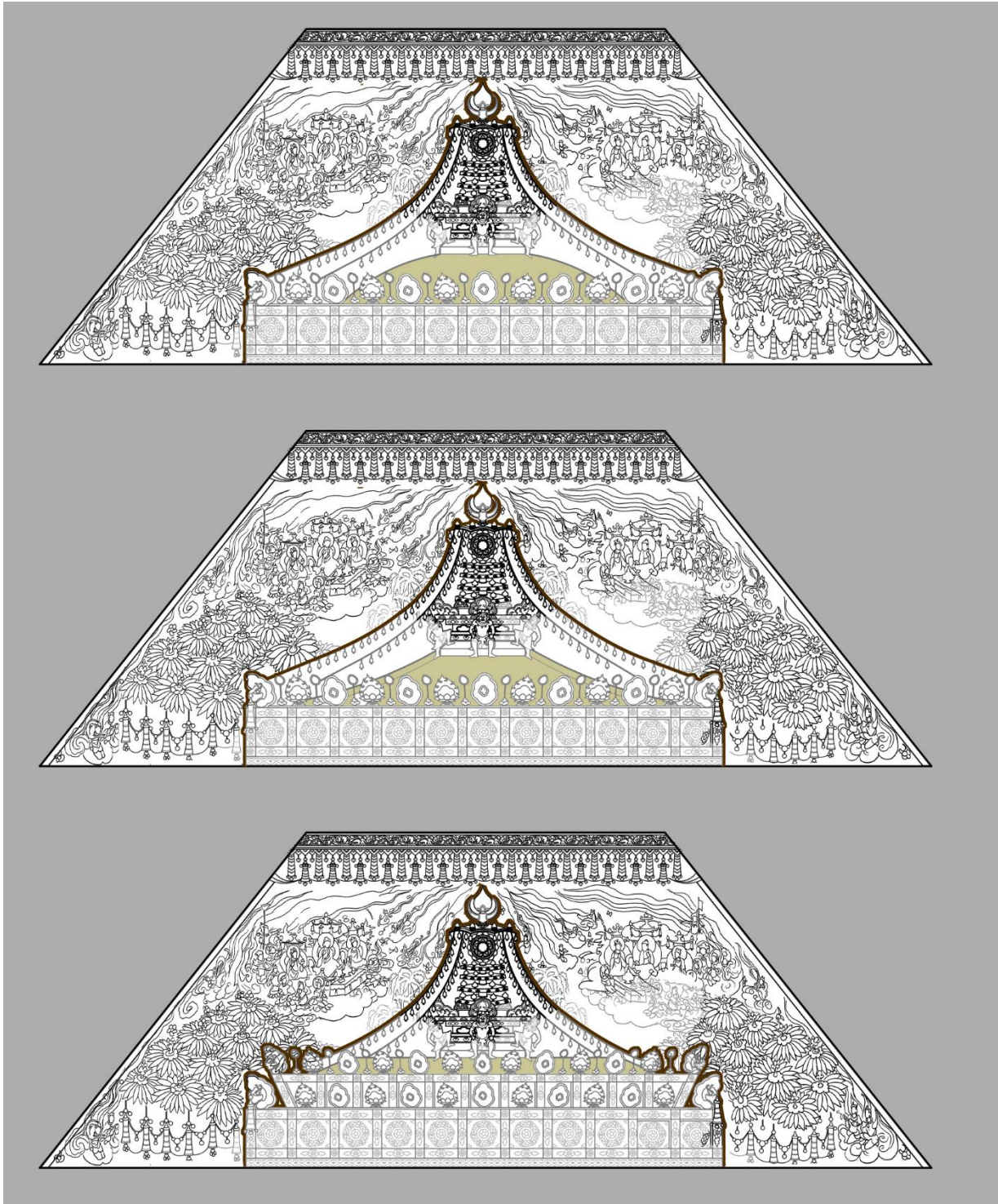


Figure 2-20. Three proposals of theoretical reconstruction of the mural painting on west ceiling slope of Mogao Cave 14 represented in line drawings. Black lines indicate the current status; gray lines indicate author's theoretical reconstruction. a) single eave and domed roof; b) single eave and pyramidal roof; c) double eaves and truncated pyramidal roof. Design and drawing by author.

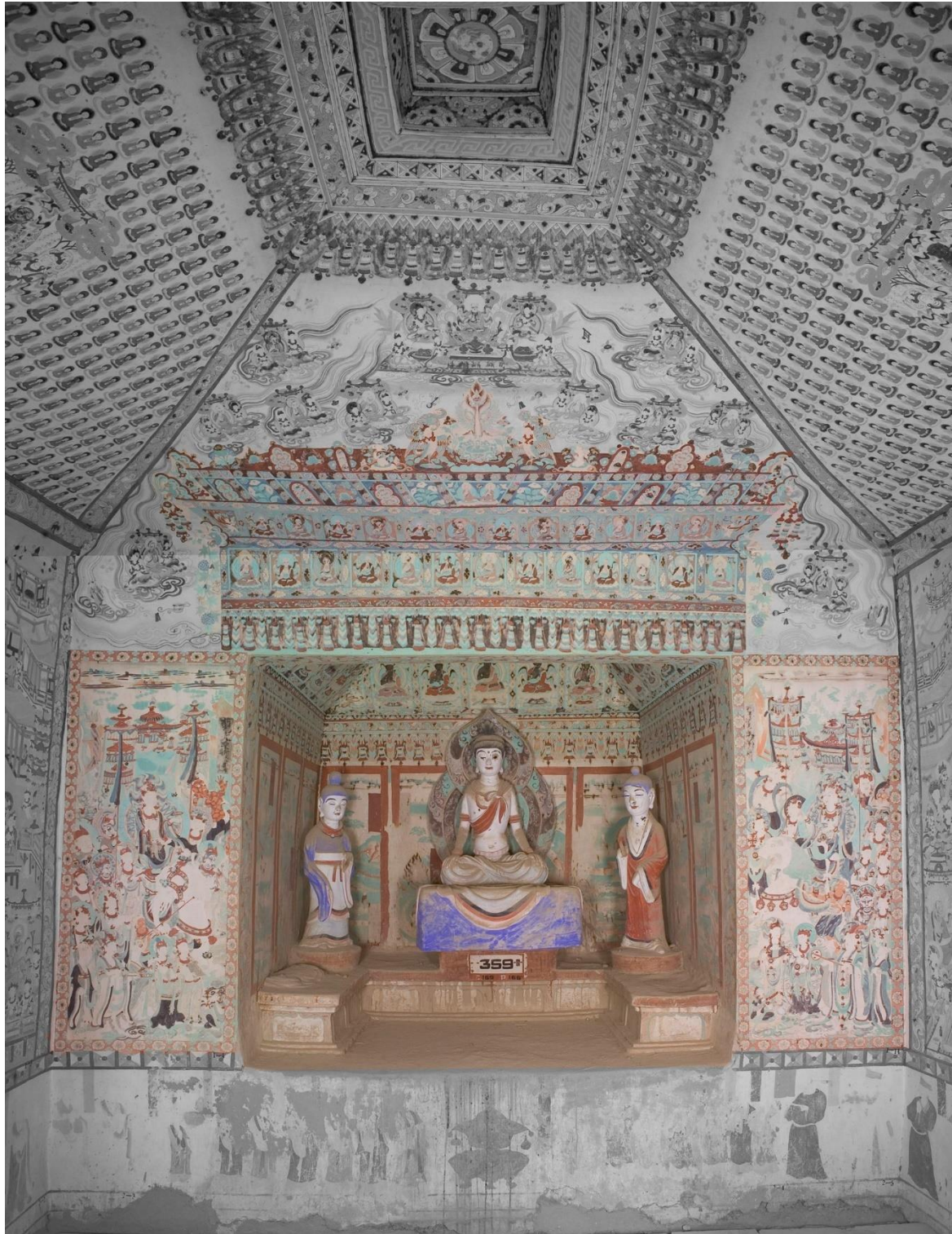


Figure 2-21. A canopy-shaped niche in Mogao Cave 359, Tibetan period. The niches and the constructive decoration of the simulated canopies are represented in color; the rest of the cave is represented in monochrome. Photo courtesy of Dunhuang Academy. Photo processed by author.



Figure 2-22. A double-layered canopy-shaped niche in Mogao Cave 361 showing author's theoretical reconstruction of the canopy posts in brown lines and translucent colors. The niches and the constructive decoration of the simulated canopies are represented in color; the rest of the cave is represented in monochrome. After Sun and Sun, *Shiku jianzhu juan*, 124, fig. 88. Photo processed by author.



Figure 2-23. Mural details of a bell tower and its pairing building (likely a sutra pavilion) in the shape of pavilion-style pagodas. *Meditation Sūtra* transformation tableau, north wall, Mogao Cave 217, high-Tang period. Digital Dunhuang website, <https://www.e-dunhuang.com/cave/10.0001/0001.0001.0217>.

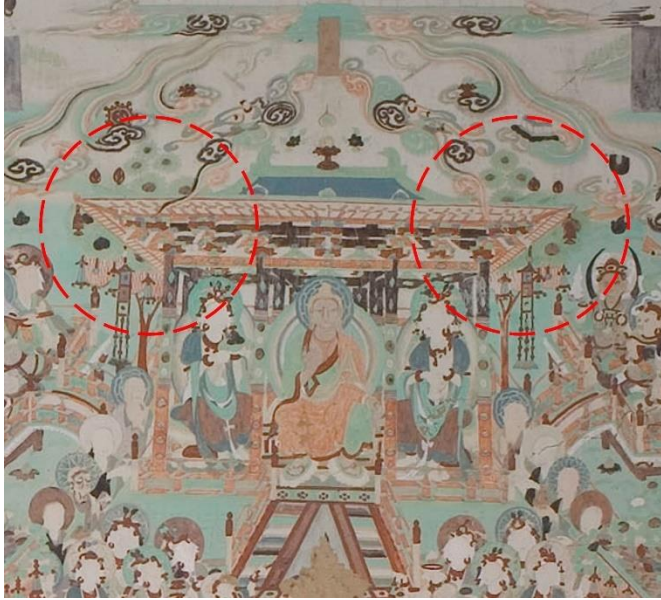


Figure 2-24. Buddha preaching scene in Maitreya transformation tableau, highlighting the foliage with jeweled pendants and nets besides the main hall in red dashed-line circles. Mogao Cave 361, Tibetan period. Photo courtesy of Dunhuang Academy. Annotation by author.

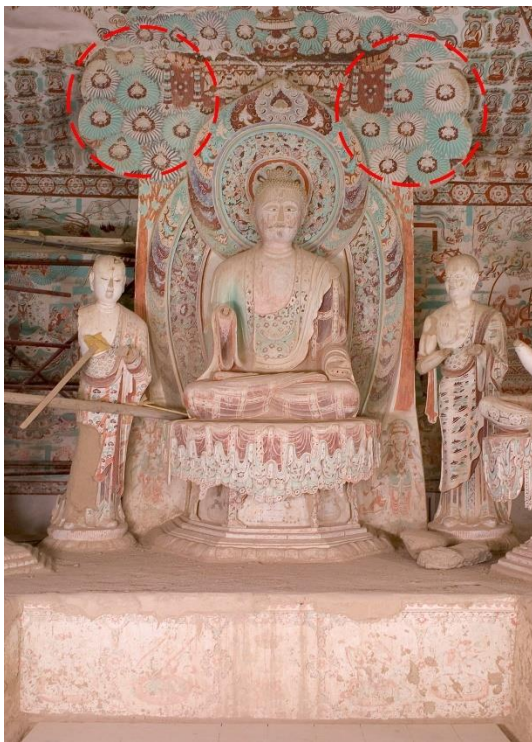


Figure 2-25. The central altar with a backscreen in Mogao Cave 196, highlighting the foliage besides a jeweled canopy above the Buddha statue in red dashed-line circles. late-Tang period. After Wu, *Spatial Dunhuang*, 163, fig. 3.45. Annotation by author.



Figure 2-26. The foliage besides the pagoda roof and *chakra* highlighted in red dashed-line circles, west ceiling slope, Mogao Cave 14. Theoretical reconstruction based on Proposal 2. Drawing by author.



Figure 2-27. The central pillar in the shape of a canopy, Mogao Cave 9, late-Tang period, showing author's theoretical reconstruction of the canopy lintel and posts in brown lines and translucent colors. After Sun and Sun, *Shiku jianzhu juan*, 117, fig. 80. Photo processed by author.

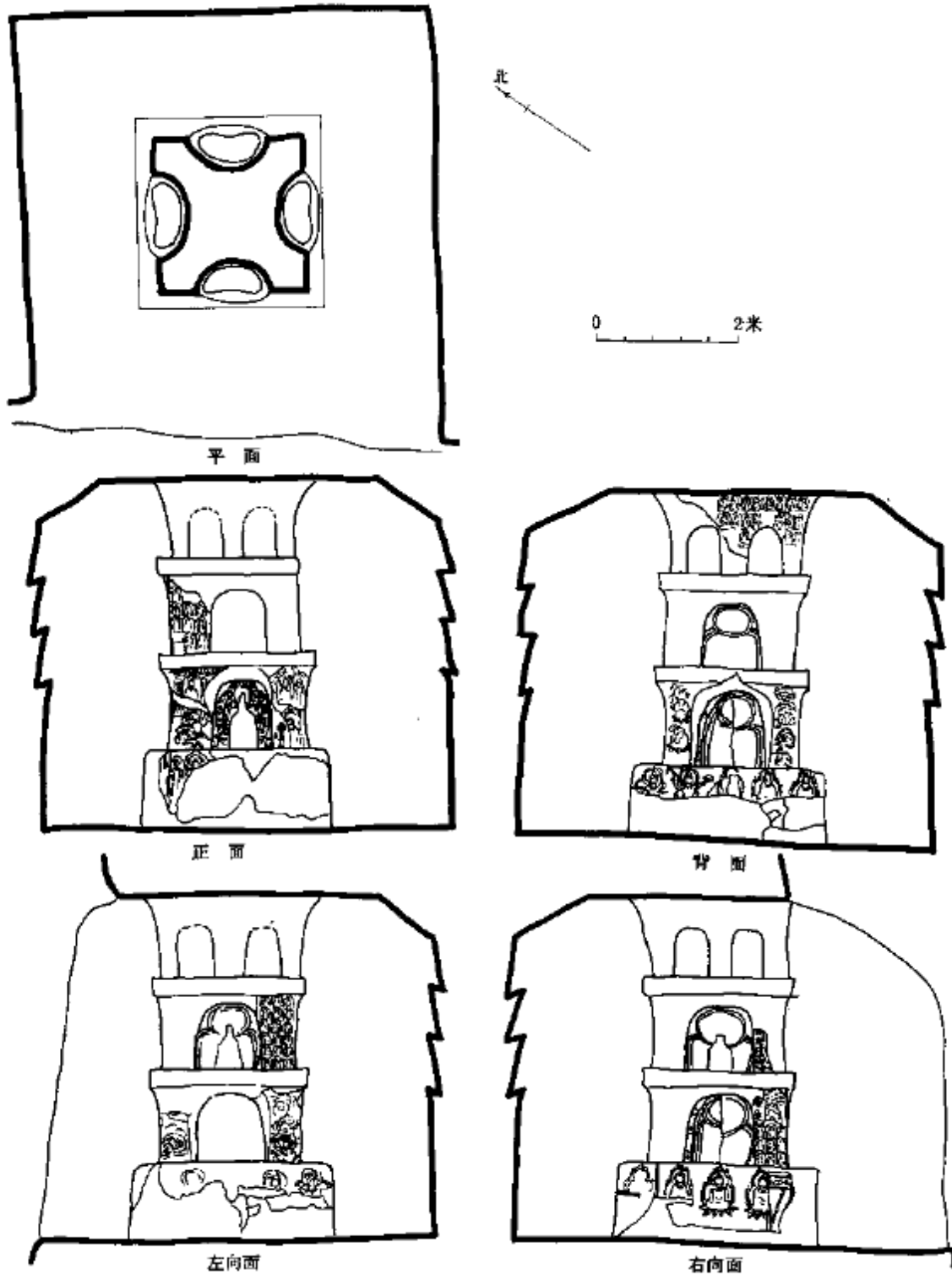


Figure 2-28. Plan and sectional drawings of Tiantishan Cave 1, Wuwei, Gansu, fourth–fifth century. After *Wuwei Tiantishan shiku*, 66, fig. 32.



Figure 2-29. Reconstruction design of a pagoda temple, highlighting the central pagoda pillar in more saturated colors. Design and drawing by author.

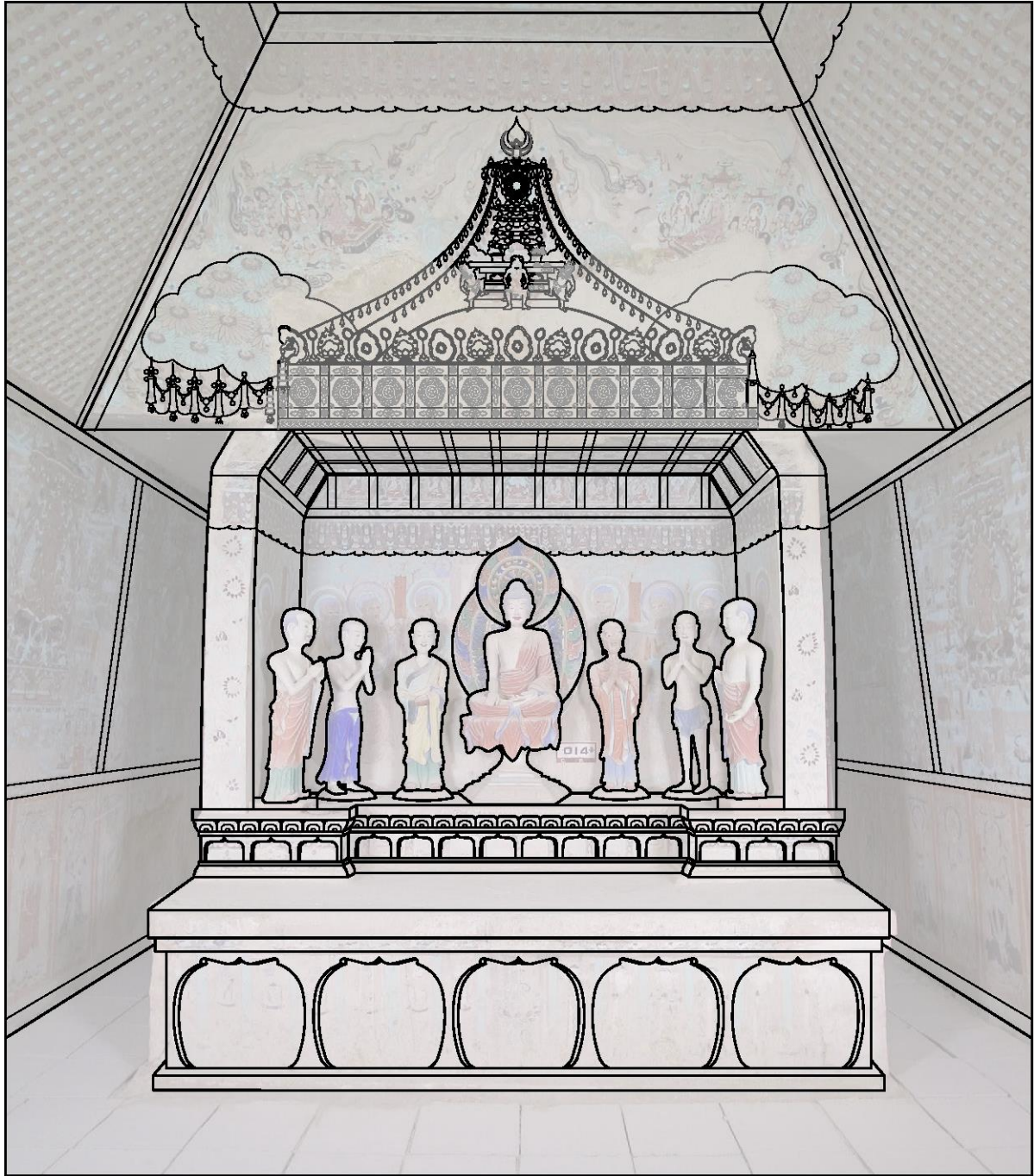


Figure 2-30. Theoretical reconstruction Proposal 1 of the imagery of pagoda in Mogao Cave 14, characterized by the single eave and the domed roof. Design and drawing by author.

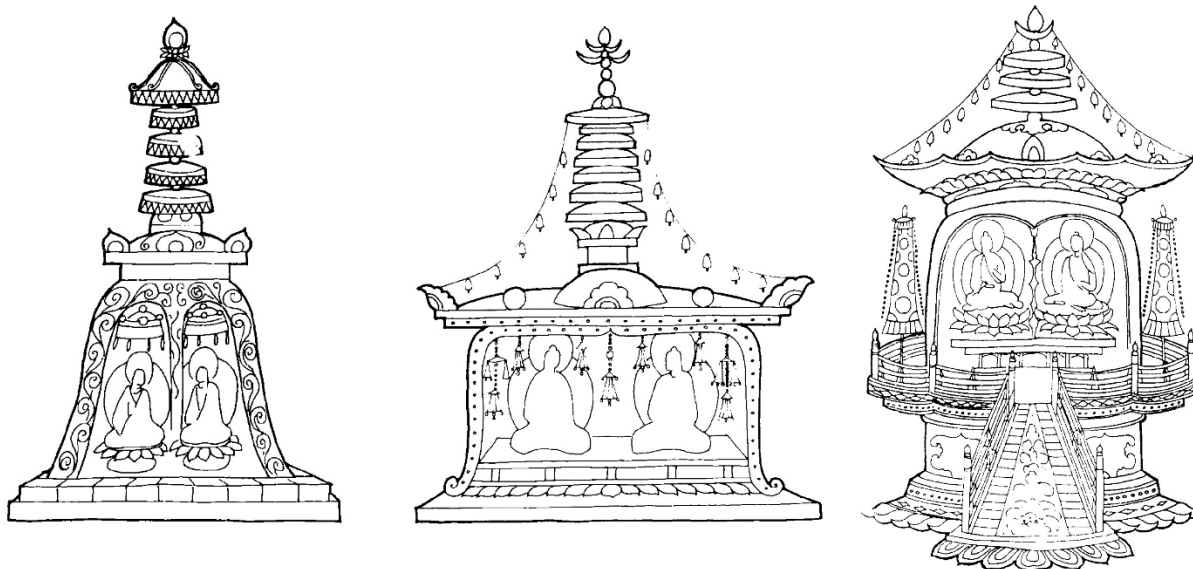


Figure 2-31. Line drawings of the Many Jewels Pagodas images in Dunhuang murals, which are in the form of a domed masonry pagoda with overhanging eaves mural paintings. a) Cave 340, early-Tang period; b) Cave 332, early-Tang period; c) Cave 361, Tibetan period. After Sun, “Dunhuang bihua zhong ta de xingxiang.”



PL. 63

Figure 2-32. Fragments of a mandala painting. color on paper, eighth–ninth centuries, (fragment size) 30 cm (h) × 104.5 cm (w). Indian National Museum of Delhi (CH. 00383 c). After Klimburg-Salter et al., *The Silk Route and the Diamond Path*, plate 63.



Figure 2-33. A curved-pillared hall in a buddha preaching scene (the First Sermon) in the Avatamsaka transformation tableau, Mogao Cave 231, Tibetan period. After Sun and Sun, *Jianzhu hua juan*, 196, fig. 188.

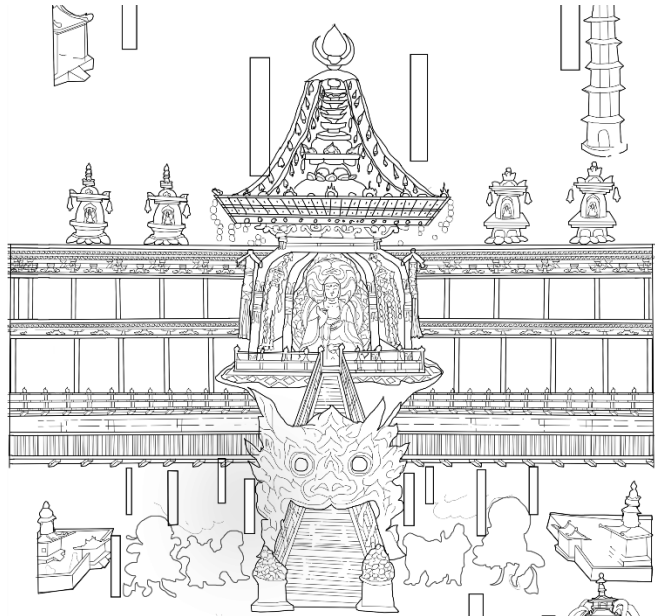


Figure 2-34. A curved-pillared, domed pagoda image on the corridor ceiling of Mogao Cave 454, Song period. a) photograph of the mural painting, after Sun and Sun, *Jianzhu hua juan*, 259, fig. 260; b) line-drawing trace copy. Drawing by author.



Figure 2-35. Lower part of the north facing side of the central pillar of Mogao Cave 14 showing two female donor figures in the *kunmen* arches of the lower-level register and eight monk figures in the upper-level register. Late-Tang period, repainted in the tenth century. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18135498).

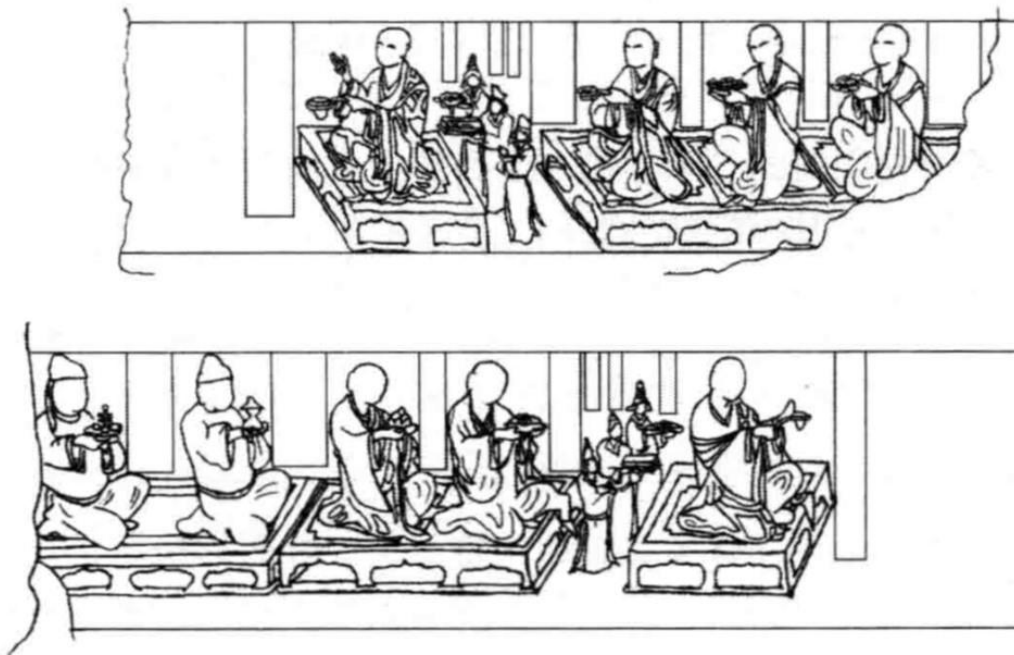


Figure 2-36. Trace-copy line drawings of monk figures making offerings, attended and followed by lay figures in Tibetan- and Tang-style customs, bottom register of the north (upper) and south (lower) walls of Mogao Cave 361, Tibetan period. Zhao, *Tubo tongshi shiqi Dunhuang mijiao yanjiu*, 458–59, figs. 101, 102.

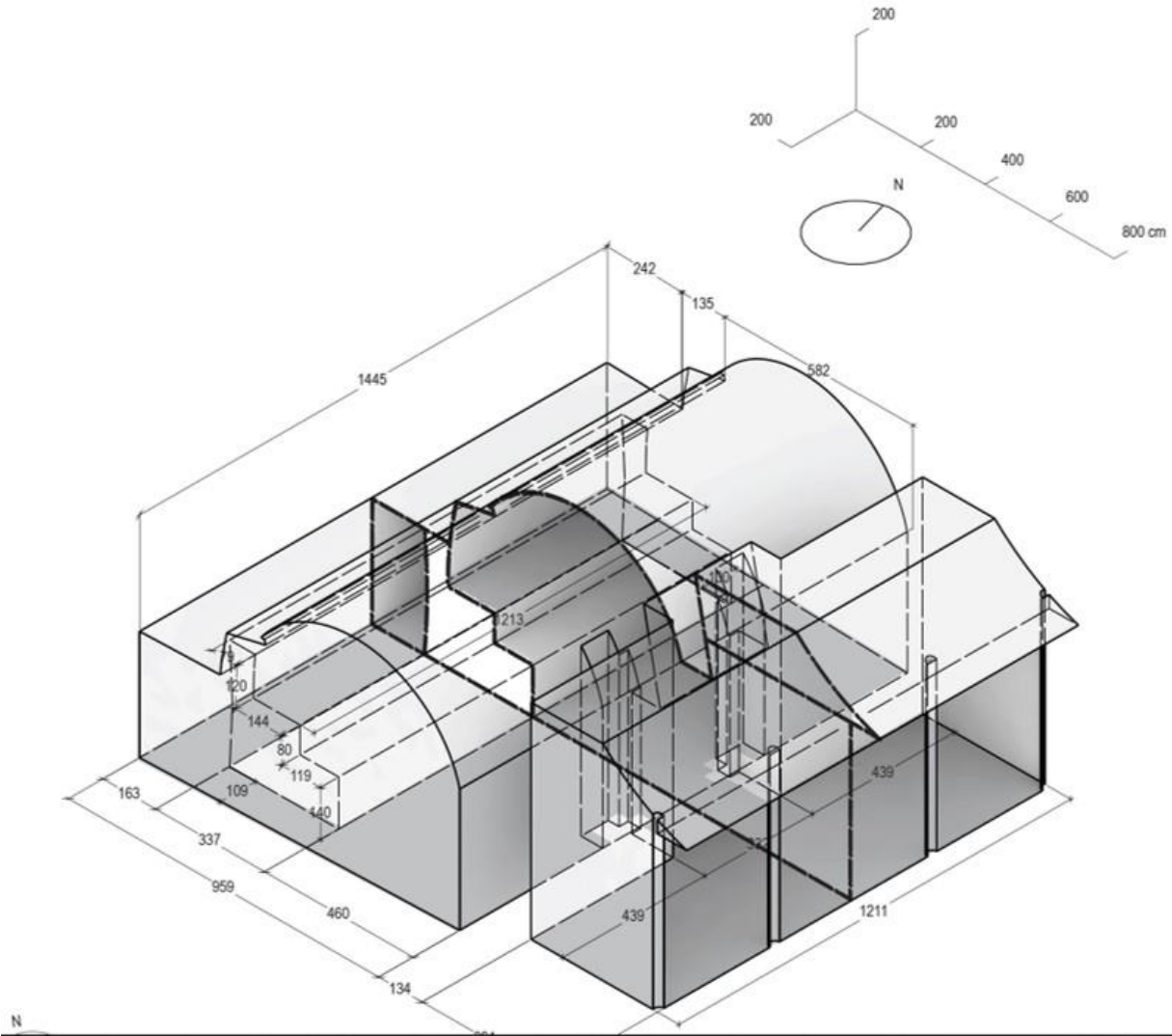


Figure 2-37. Isometric diagram of Mogao Cave 365, Tibetan period, 832–34 CE. Drawing by author.

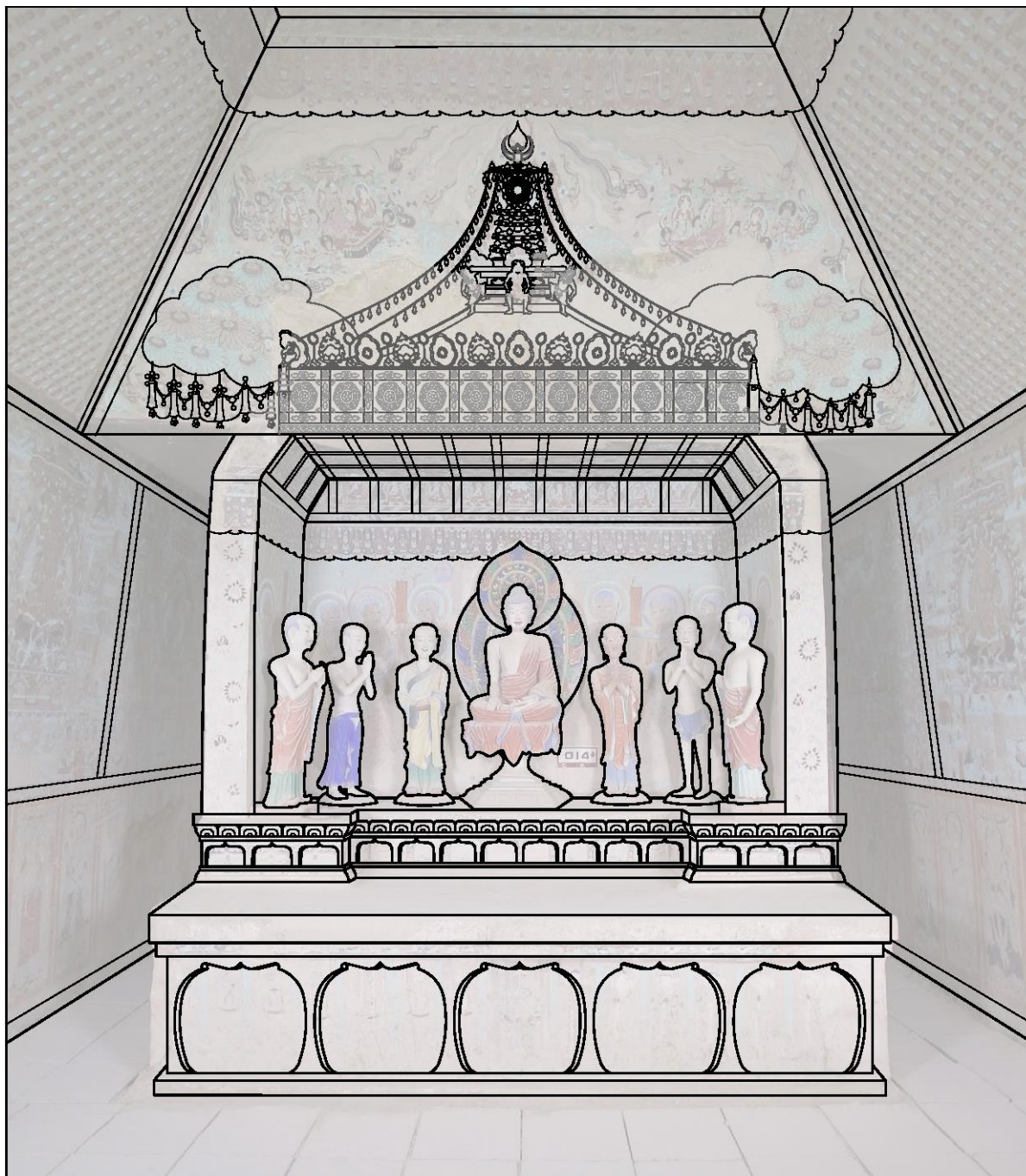


Figure 2-38. Theoretical reconstruction Proposal 2 of the imagery of pagoda in Mogao Cave 14, characterized by the single eave and the pyramidal roof. Design and drawing by author.



Figure 2-39. Scene of a buddha preaching in a pyramidal ceiling pagoda, south ceiling slope, Mogao Cave 14, late-Tang period. Dunhuang yanjiu yuan, *Dunhuang shiku quanji: di shisi ku*.

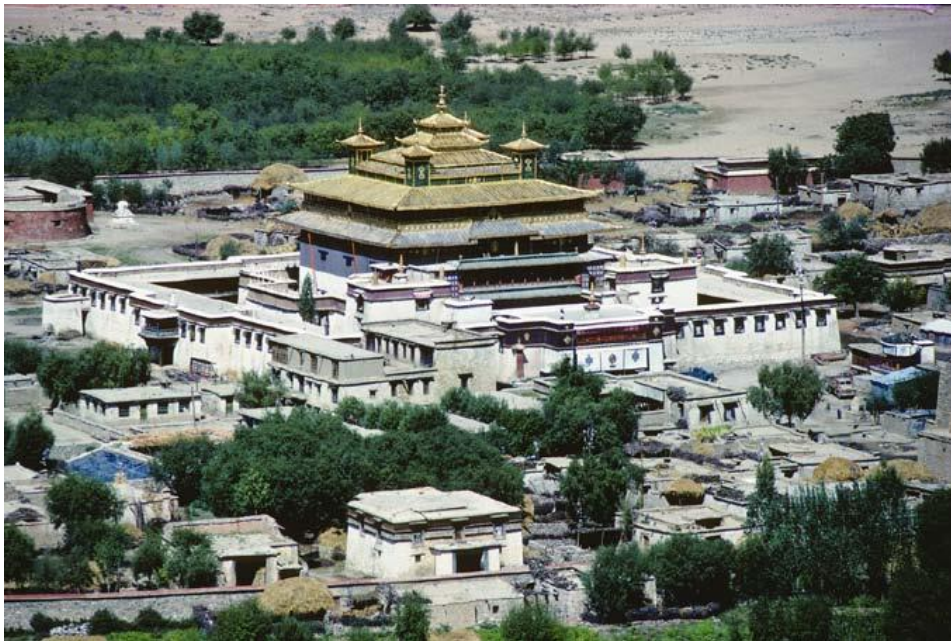


Figure 2-40. Samye Monastery. Pugyal dynasty (seventh–ninth century), circa 779. Shannan, Tibet Autonomous Region. Photo by Katia Buffetrille in 1989. After Wang, *Mandala in the Making*, 53, fig. 15.

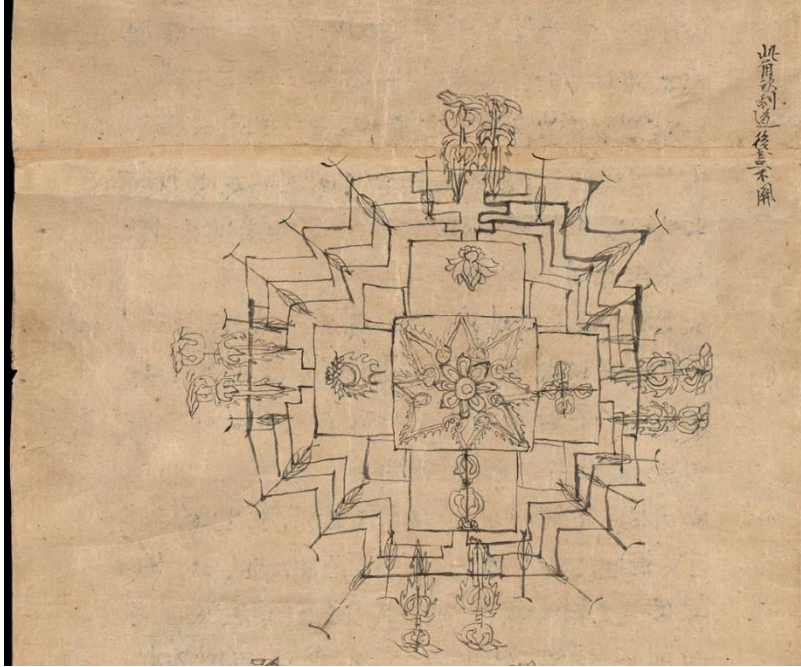


Figure 2-41. Diagram of the Five Buddha Mandala. Ink on paper, 26.5 cm (l) × 26.5 cm (w). Circa tenth century. Discovered in Mogao Cave 17. In the collection of British Museum (S.848v). International Dunhuang Project: Or.8210/S.848.<http://idp.bl.uk/>.



Figure 2-42. Long section perspective of Mogao Cave 14. An orange cross indicates the four buddhas of the inner court; a yellow cross indicates the four buddhas of the outer court. Drawing by author.

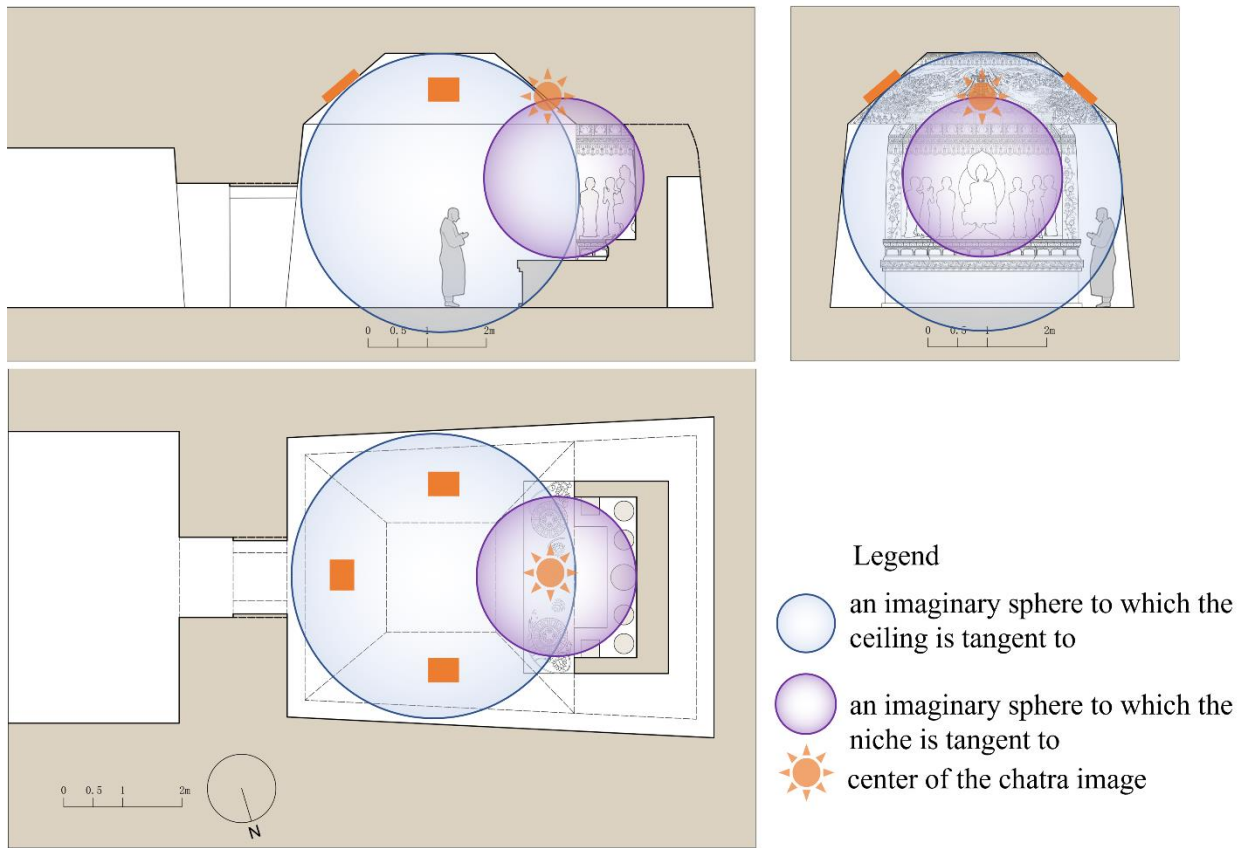


Figure 2-43. Diagram of the spatial relationship between the main chamber and the niche of Mogao Cave 14. Drawing by author.



Figure 2-44. Picture of the gods of Mount Song sending a pillar. West facing side, central pillar of Mogao Cave 9, late-Tang period. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18123171). Annotation by author.

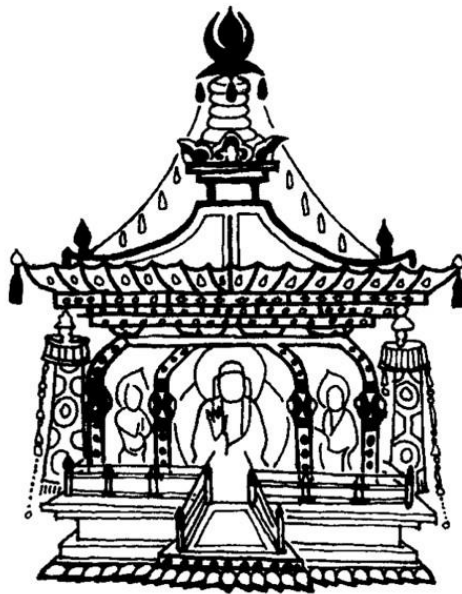


Figure 2-45. Scene of a buddha preaching in a curved pillared, pyramidal ceiling pagoda, one of the four ceiling slopes, Mogao Cave 72, late-Tang or Five Dynasties period. a) Photograph of the mural painting, photo by author with permission of Dunhuang Academy; b) trace-copy line drawing. Xiao, *Dunhuang jianzhu yanjiu*, 190, fig. 4-5.

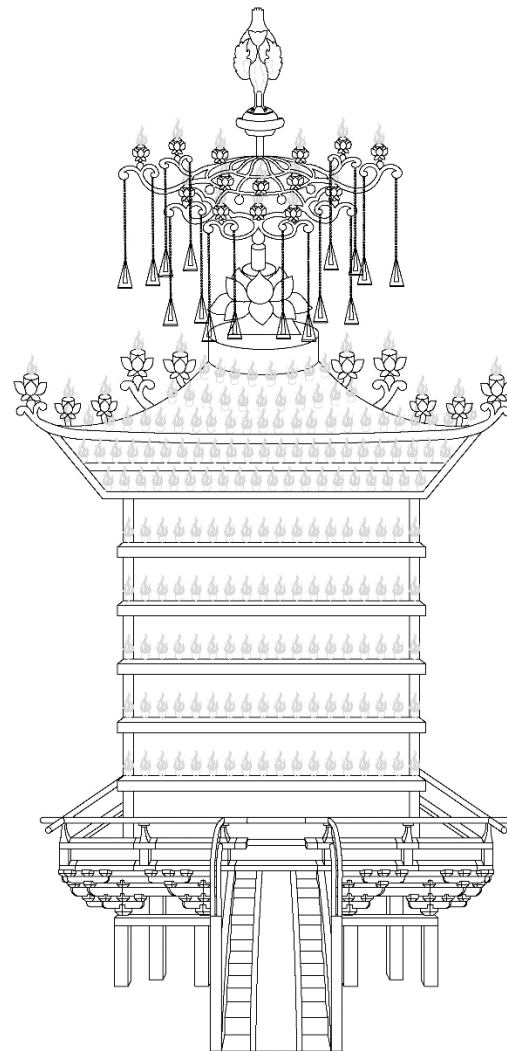


Figure 2-46. A lamp pagoda image in the Bhaiṣajyaguru transformation tableau, Mogao Cave 220, early-Tang period. a) photograph of the mural painting, Digital Dunhuang website: <https://www.e-dunhuang.com/cave/10.0001/0001.0001.0220>. b) trace-copy line drawing. Drawing by author.

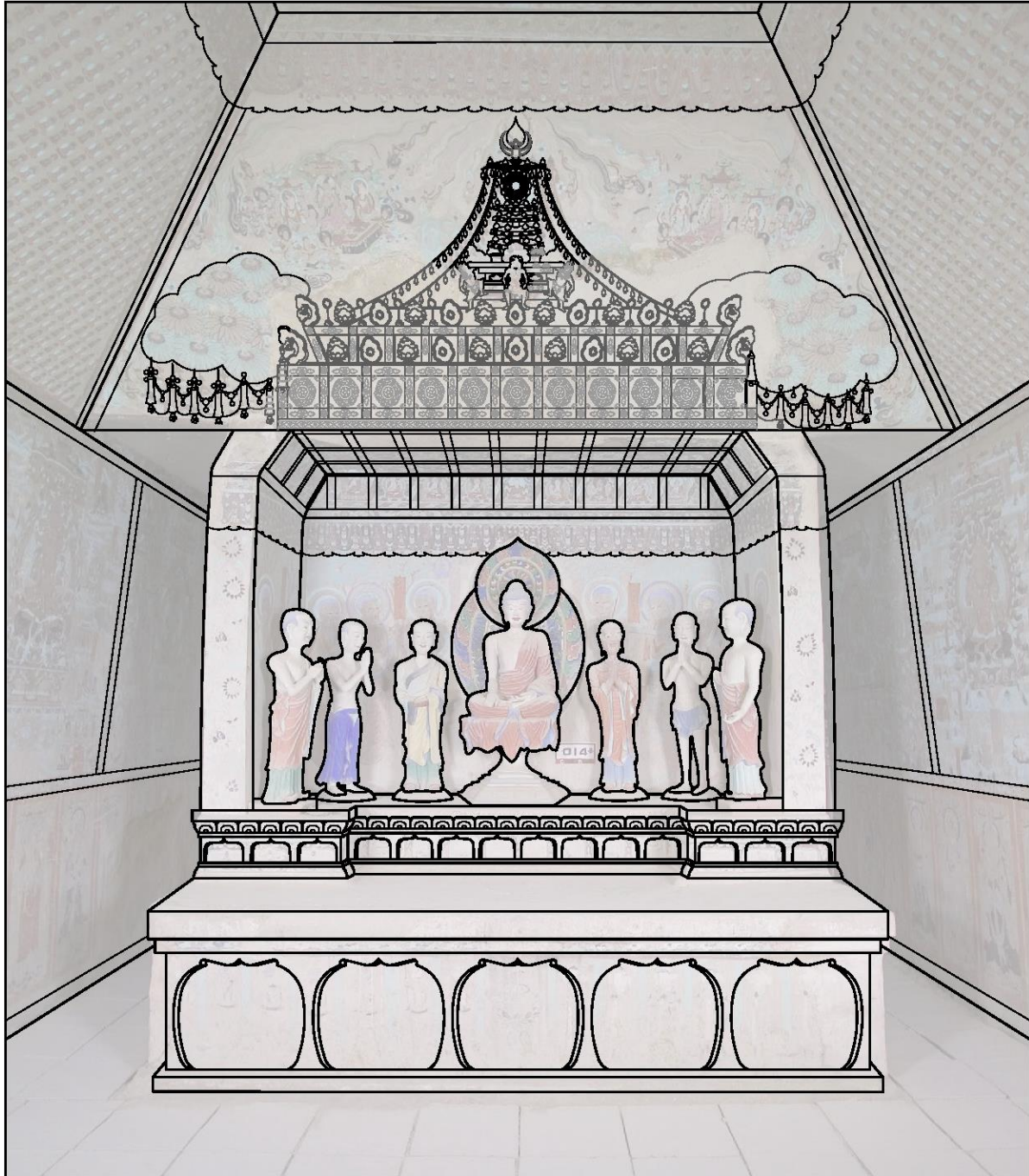


Figure 2-47. Theoretical reconstruction Proposal 3 of the imagery of pagoda in Mogao Cave 14, characterized by the double eaves and the truncated pyramidal roof. Design and drawing by author.



Figure 2-48. Multi-paneled screen paintings of bodhisattvas, lower register of the north wall in Mogao Cave 14, late-Tang period. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18122018).

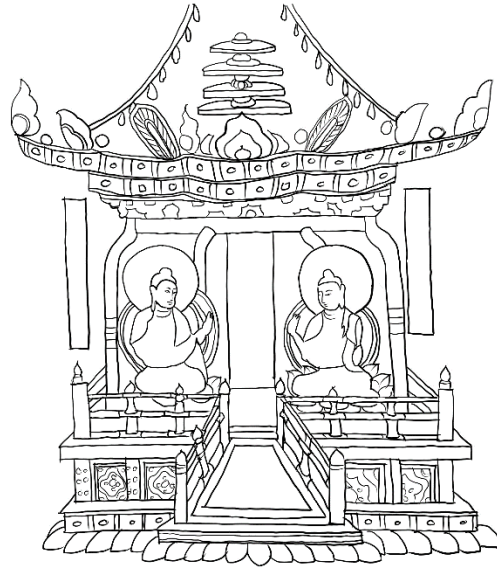


Figure 2-49. Picture of Many Jewels Pagoda, east wall above entrance corridor, Mogao Cave 14, late-Tang period, repainted in the tenth century. a) photograph of the mural painting, Dunhuang yanjiu yuan, *Dunhuang shiku quanji: di shisi ku*; b) trace-copy line drawing. Drawing by author.

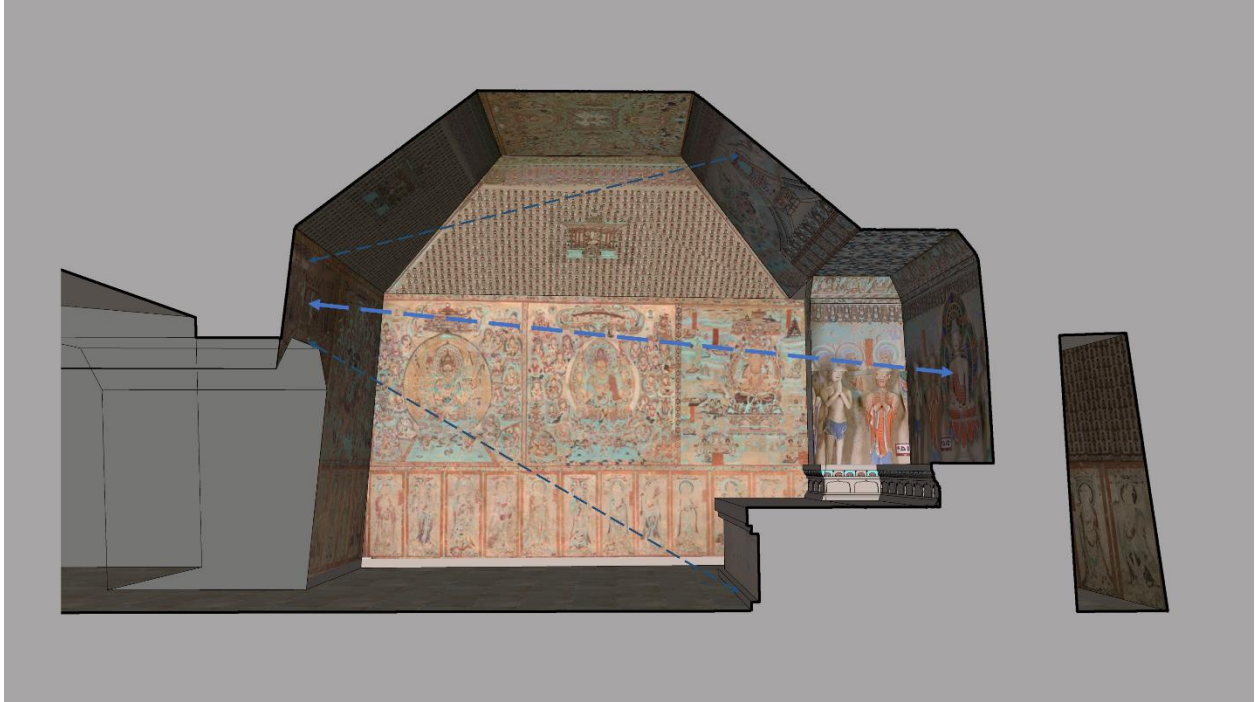


Figure 2-50. Long section perspective of Mogao Cave 14, with dashed blue lines highlighting the opposite position of the main pagoda imagery and the Many Jewels Pagoda image. Drawing by author.

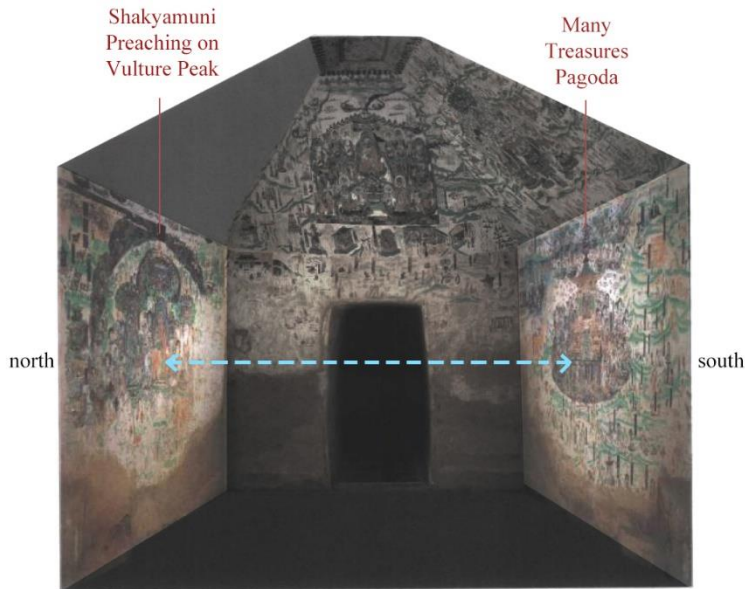


Figure 2-51. A sectional perspective showing the oppositional positions of the Many Treasures Pagoda picture and the scene of Shakyamuni preaching on Vulture Peak, south and north walls, Mogao Cave 23, high-Tang period. After He, *Fahua jing juan*, 74, fig. 64. Image processed and annotated by author.

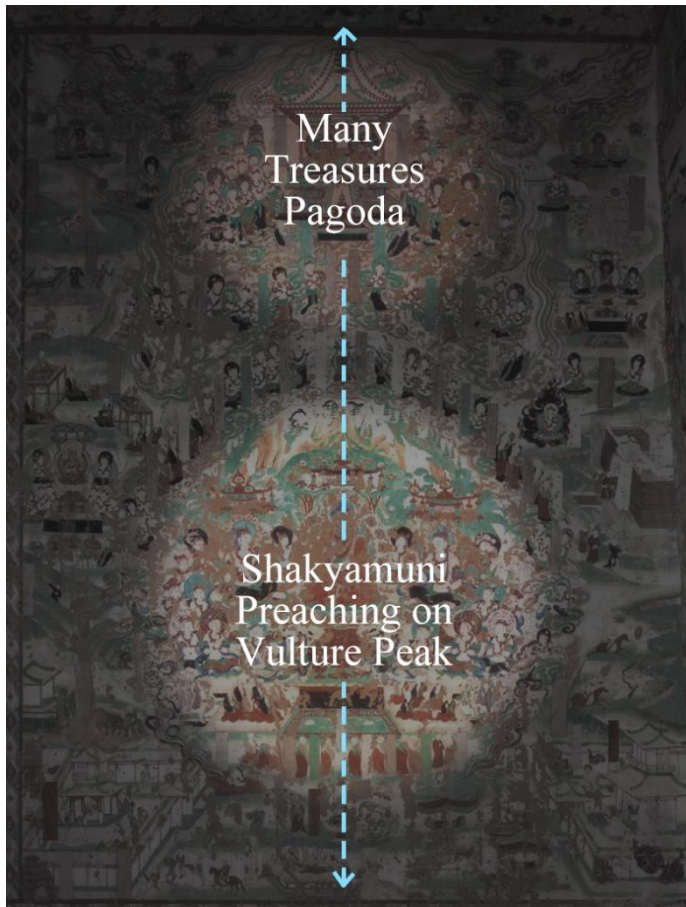


Figure 2-52. The dual-centered template of *Lotus Sūtra* transformation tableau in Mogao Cave 159, Tibetan period. After He, *Fahua jing juan*, 94, fig. 81. Image processed and annotated by author.

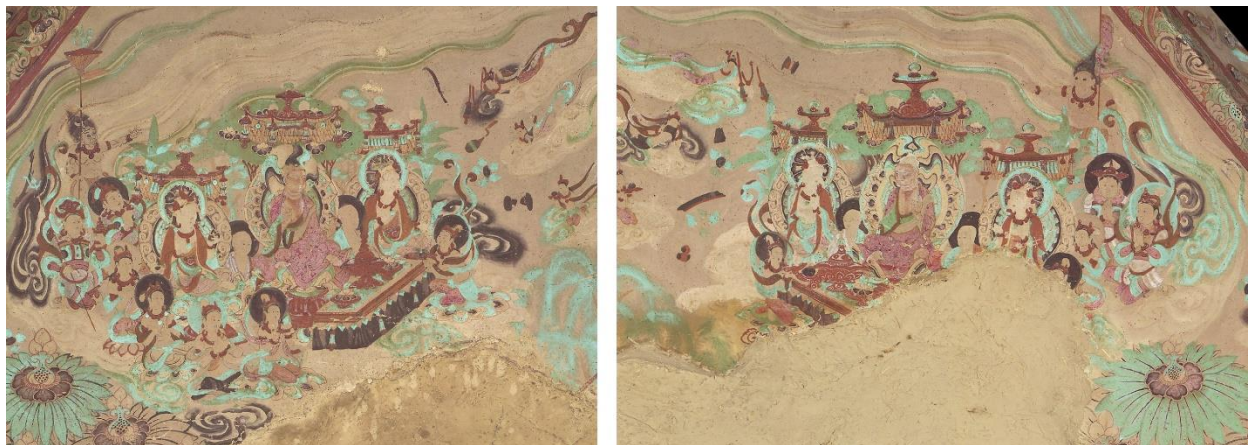
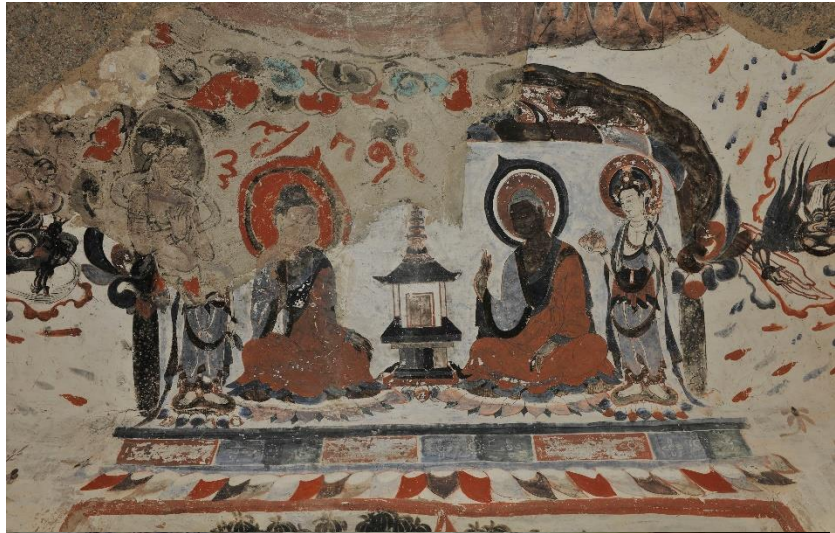
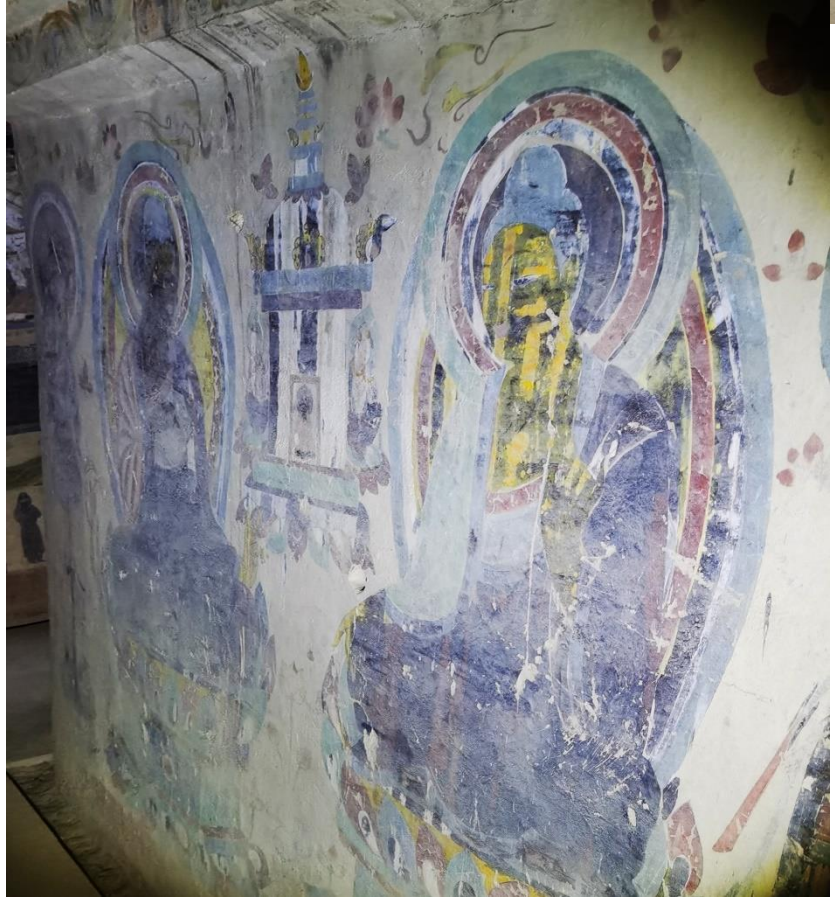


Figure 2-53. Mural details of two buddhas-in-attendance with entourage, west ceiling slope, Mogao Cave 14, late-Tang period. a) the buddha on the south side; b) the buddha on the north side. Dunhuang yanjiu yuan, *Dunhuang shiku quanji: di shisi ku*.



a



b

Figure 2-54. Two Dunhuang mural paintings of Many Treasures Pagoda that depict the buddhas outside the pagoda. a) west ceiling slope, Mogao Cave 276, Sui period, partly repainted in Five Dynasties; b) west facing side of the central pillar, Mogao Cave 431, Western Wei period, renovated and painted in the early Tang period. Photo courtesy of Dunhuang Academy.



Figure 2-55. Mural details of Many Treasures Pagoda, highlighting two buddhas inside the pagoda and the entourage outside the pagoda. West ceiling slope, Mogao Cave 454, Song period. Base map after Sun and Sun, *Jianzhu hua juan*, 258, fig. 259. Photo processed by author.



Figure 2-56. Scenes of Vaiśravaṇa inviting Amitābha Buddha to enter the pagoda, besides the niche lintel, Mogao Cave 72, late-Tang or Five Dynasties period. The two scenes, the canopy-shaped niche and a pagoda image on the west ceiling slope are highlighted in color. Photo courtesy of Dunhuang Academy. Photo processed by author.



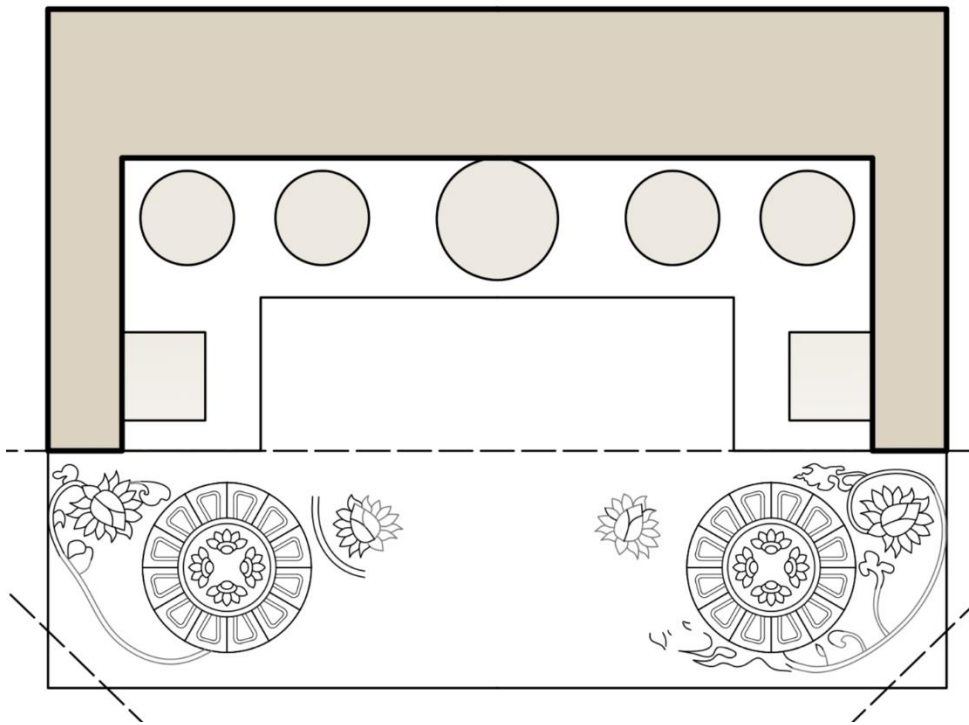
Figure 2-57. The *Avatamsaka Sūtra* transformation tableau in Mogao Cave 12, late-Tang period. Digital Dunhuang website: <https://www.e-dunhuang.com/cave/10.0001/0001.0001.0012>.



Figure 2-58. The niched central pillar and a lotus-shaped altar in Mogao Cave 44, high-Tang period. Sun and Sun, *Shiku jianzhu juan*, 116, fig. 78.



a



b

Figure 2-59. Lotus flower patterns on the top surface of the altar fronting the central pillar in Mogao Cave 14, painted in the tenth century. a) photograph of the mural painting, photo by author with permission of Dunhuang Academy; b) trace-copy line drawing, with black lines indicating the current status, and gray, thin lines indicating author's theoretical reconstruction. Drawing by author.



south---north

south---north

Figure 2-60. Lotus flower patterns on the east-facing side of the central pillar in Mogao Cave 14, painted in the tenth century. a) photograph of the mural painting, photo courtesy of Dunhuang Academy, b) trace-copy line drawing. Drawing by author.



Figure 2-61. A mural detail of a rectangular lotus pond with a crossed-shaped vajra pestle, in the Mandala of Vairocana (Rocana) with eight great bodhisattvas. South wall west end, Mogao Cave 14, late-Tang period. Dunhuang yanjiu yuan, *Dunhuang shiku quanji: di shisi ku*.

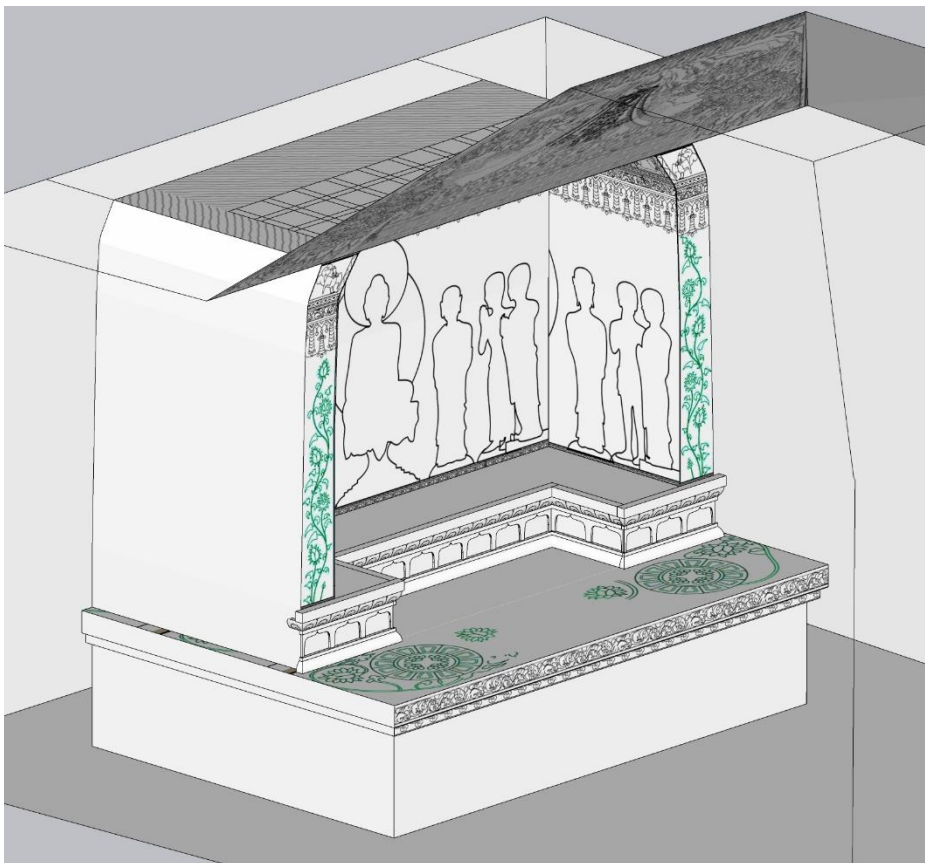


Figure 2-62. Isometric diagram showing the location of the lotus flower patterns and two pillars of stemmed lotuses around the central pillar of Mogao Cave 14. Drawing by author.



Figure 2-63. Canopy-shaped niche in Mogao Cave 367 highlighting the lotus below the niche in dashed red lines. circa eleventh century. Photo courtesy of Dunhuang Academy. Annotation by author.

3. Imaging the Unparalleled Height

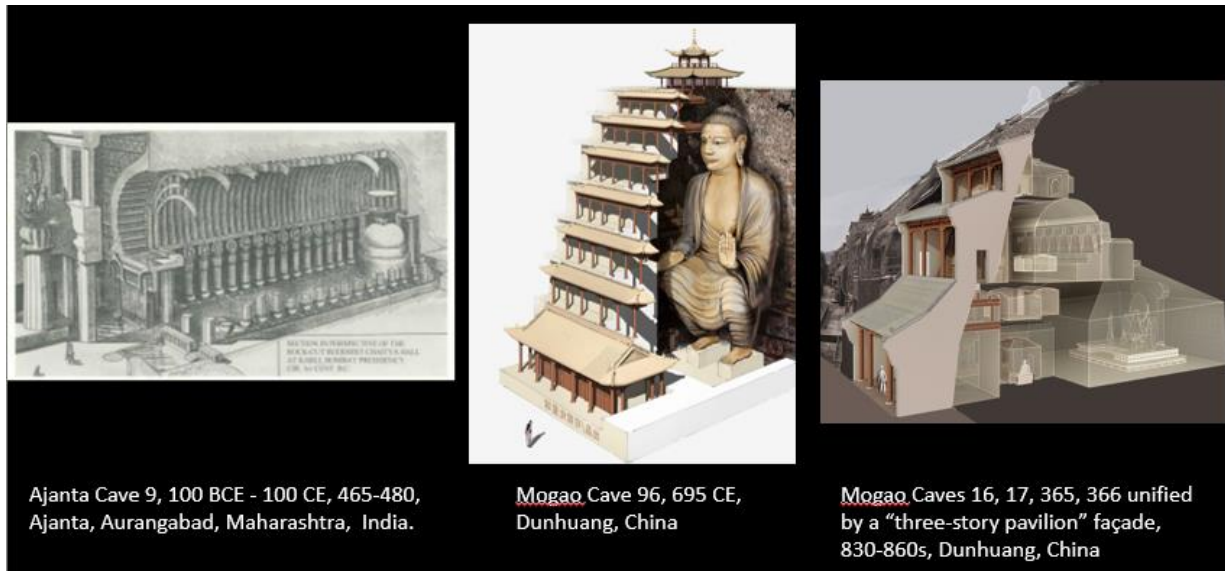


Figure 3-1. A comparison of three types of façaded Buddhist cave temples. a) Ajanta Cave 9, 100 BCE–100 CE, 465–80 CE, Ajanta, Aurangabad, Maharashtra, India, from Percy Brown, *Indian Architecture: Buddhist and Hindu Periods*, 5th ed. (Bombay: D. B. Taraporevala Sons & Co., 1965), plate XIX; b) Mogao Cave 96, 695 CE, Dunhuang, China, image in the public domain; c) Mogao Caves 16, 17, 365, 366 unified by a “three-story pavilion” façade, 830s–60s, Dunhuang, China. Drawing by author.



Figure 3-2. The timber-structured façade and exterior mural of Mogao Cave 431 showing three-step bracket-sets, a three-bay façade, and an overhanging roof. Dated by inscription to 980 CE. 486 cm (w) × 142 cm (d) × 320 cm (h). Wood, mud brick, polychromic pigments. Photo by author, January 20, 2022.



Figure 3-3. The area to the north of Cave 96 in 1943–44 showing the nine-story pavilion of Cave 96, the Qing-period ante-halls of Caves 98, 100, and 108 on the ground level, the late-Tang porch of Cave 196 on the third level, and the beams for the overhanging corridors that connect the exposed antechambers of the second level. Photo by James Lo in 1943–44. James and Lucy Lo Photograph Archive.

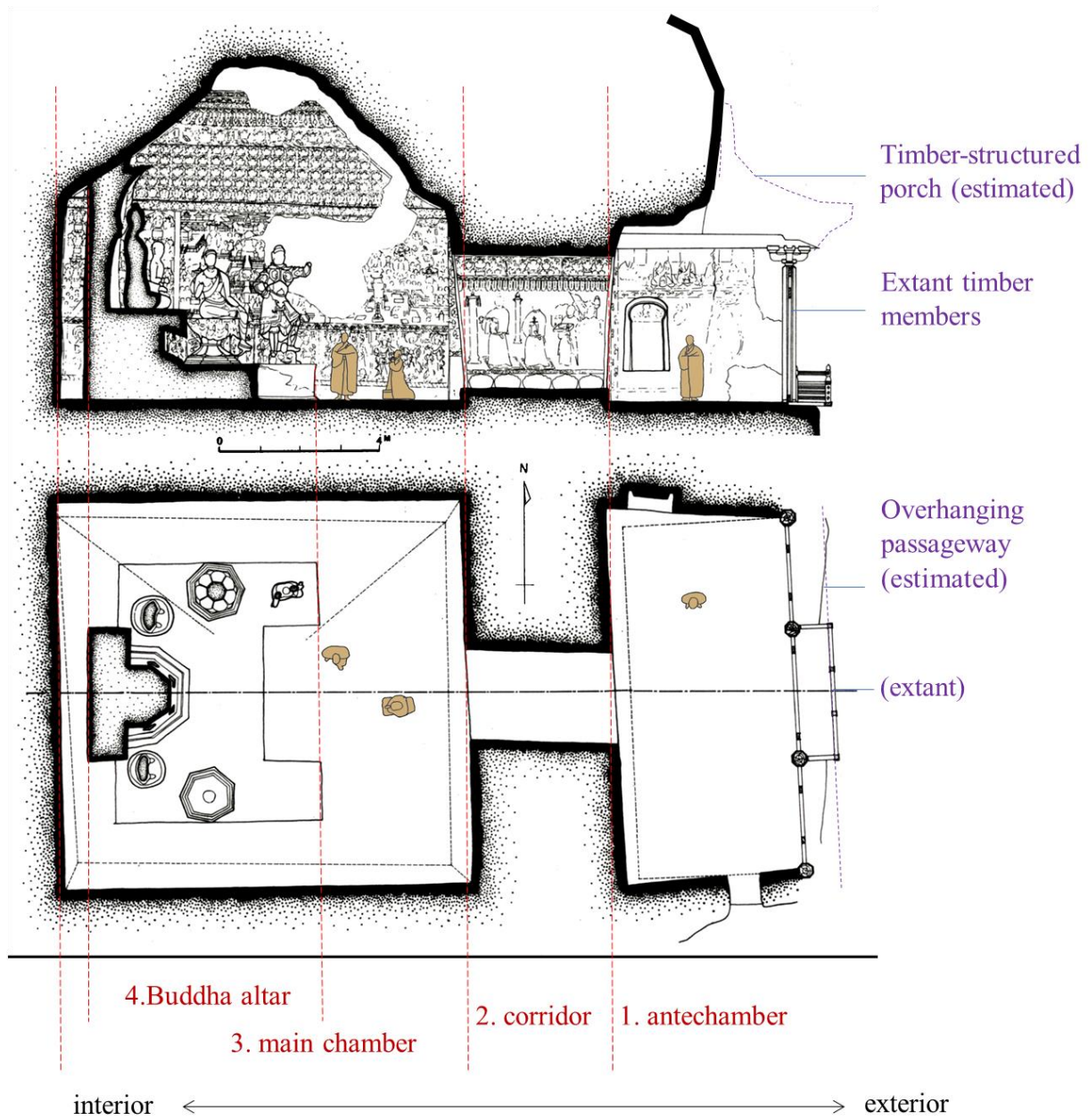


Figure 3-4. Section and plan drawings of Mogao Cave 196, late-Tang period (851–907). Base map after Dunhuang yanjiu yuan, *Zhongguo shiku*, 4:236. Figures and annotations added by author.

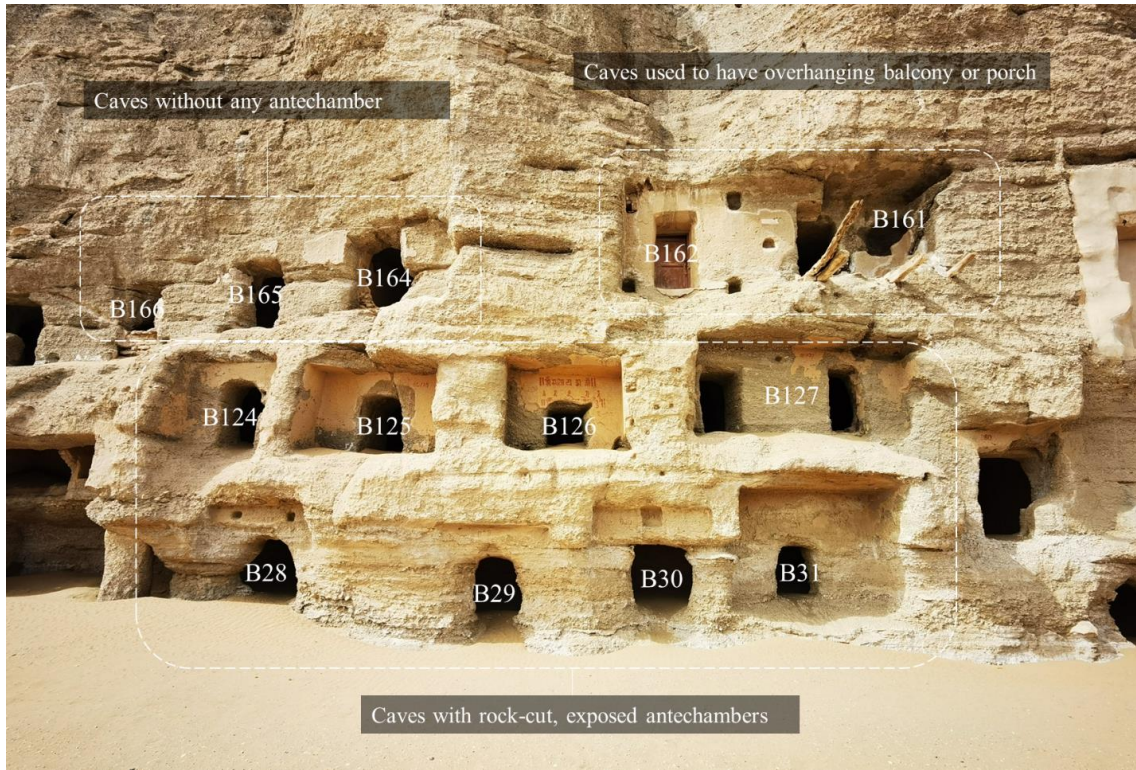


Figure 3-5. A cluster of caves in the north section of the Mogao caves showing three types of treatments regarding the antechamber. Periods varied and some unidentifiable, constructed after the sixth century and used until the fourteenth century. Photo by author, October 13, 2021. Annotation by author.

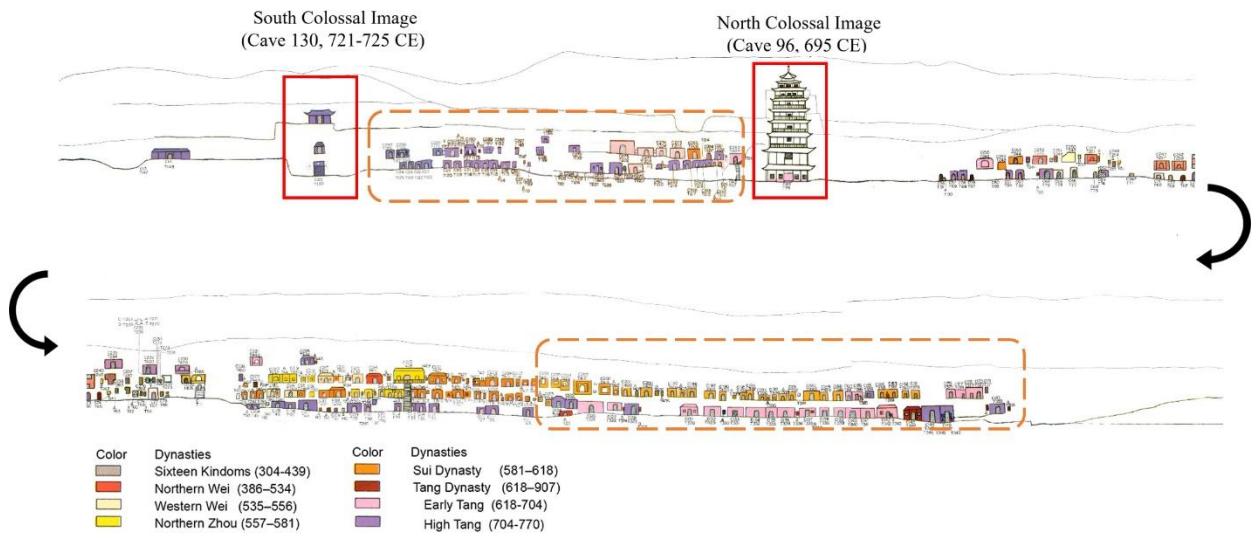


Figure 3-6. Distribution of the caves by the end of the high-Tang period. The orange frames with rounded corners mark the major area of cave construction during the Sui and the early and high-Tang periods. Base map after Shi, *Mogao ku xing*, 2:8-16, fig. 6. Image processed and annotated by author.

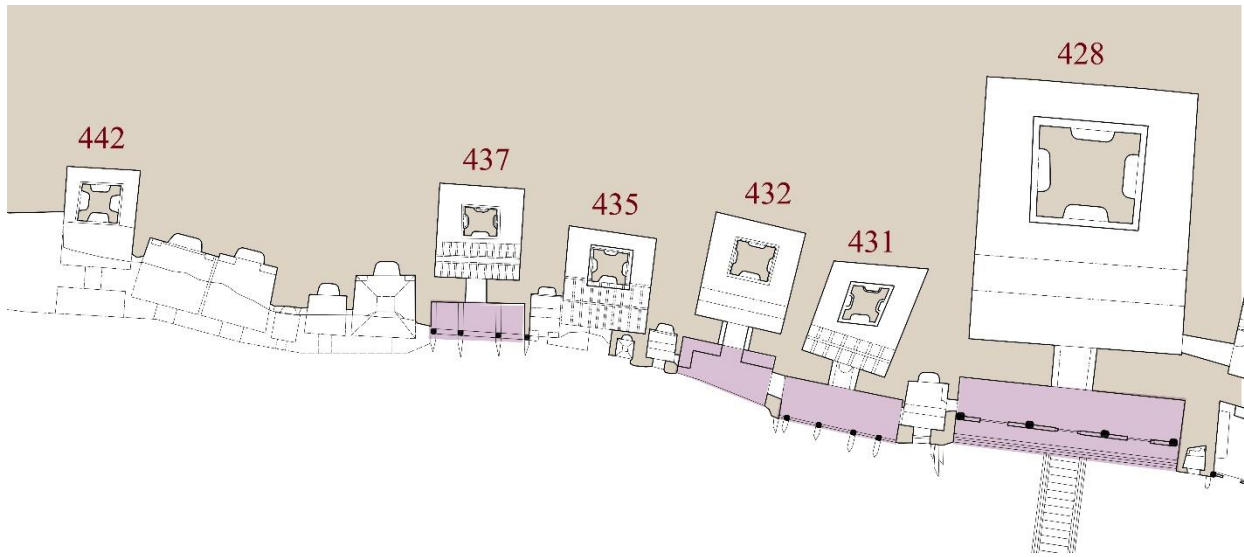


Figure 3-7. Continuous plan drawing of Northern Dynasties Caves 428–442. Drawing by author.



Figure 3-8. Traces of the earliest porched antechambers at Mogao. *Left*, underpainting of thousand-buddha motifs, north wall, Cave 428, Northern Zhou period (557–81); *Right*, underpainting of red rafters, west ceiling slope, Cave 432, Western Wei period (535–57). Photo by author with permission of Dunhuang Academy, 2021–22.

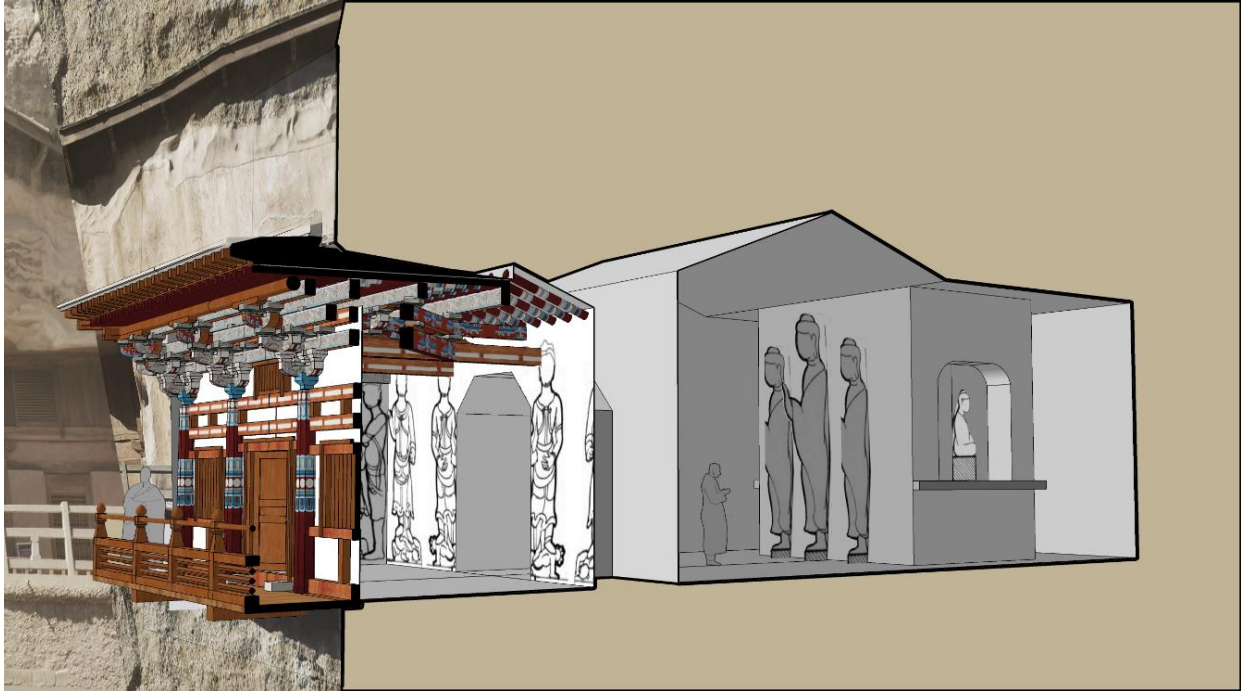


Figure 3-9. Sectional perspective of a digital model of Cave 427. Main chamber and statues in antechamber from the Sui period, the reconstructed timber-structured porch is dated by inscription to 970 CE. Drawing by author.



Figure 3-10. Line drawing of the pavilion scene in Mogao Cave 275. Size of remaining mural: 85–101 cm (h) × 80–102 cm (w). Drawing by Zhao Rong. After Zhao, “Chuanfa shoujie tu,” fig. 2.

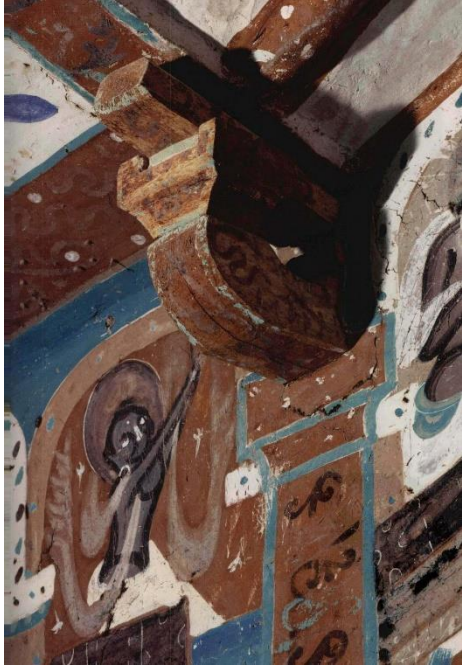


Figure 3-11. A wooden bracket-set under the gable roof in Mogao Cave 251, Northern Wei period. Sun and Sun, *shiku jianzhu juan*, 77, fig. 45.



Figure 3-12. Wooden door frame screening the entrance corridor of Cave 430, Northern Zhou period. Photo by author, April 21, 2022.



Figure 3-13. A view of the exposed head of the colossal-buddha image in Cave 96 and the antehalls of Caves 96-94. Photo by Langdon Warner in 1924. In the collection of the Fine Arts Library, Harvard University.

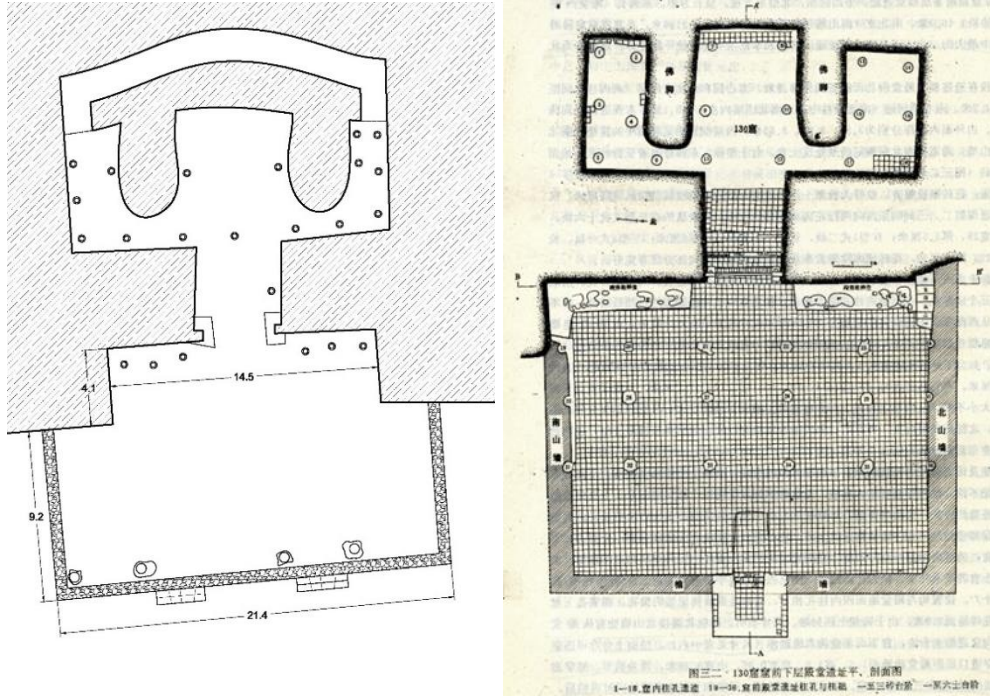


Figure 3-14. Plan drawings of the bottom-level architectural platform in front of Mogao Caves 96 (left) and 130 (right), respectively dated to the Tang and the Guiyijun periods. Data collected from the Dunhuang Academy and redrawn by author. Pan and Ma, *Mogaoku kuqian diantang yizhi*, 50, fig. 32.

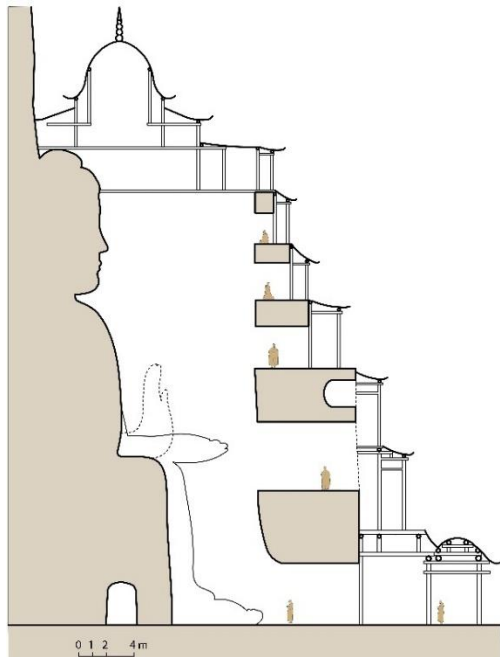


Figure 3-15. Sectional drawing of Mogao Cave 96, initially constructed in 695, façade reconstructed in 1927–35. Drawing by author.



Figure 3-16. Traces of beam holes between the colossal images (*left*) and a theoretical reconstruction of the timber structure screening the Fengxian Temple of the Longmen grottoes showing a double-eave timber porch with two corridors on the sides (*right*). Design and drawing by Li Ruoshui. After Peng and Li, “Longmen fengxian si da lushena xiangkan tangdai de buzao yu jiajian,” 114–15, figs. 5, 7.

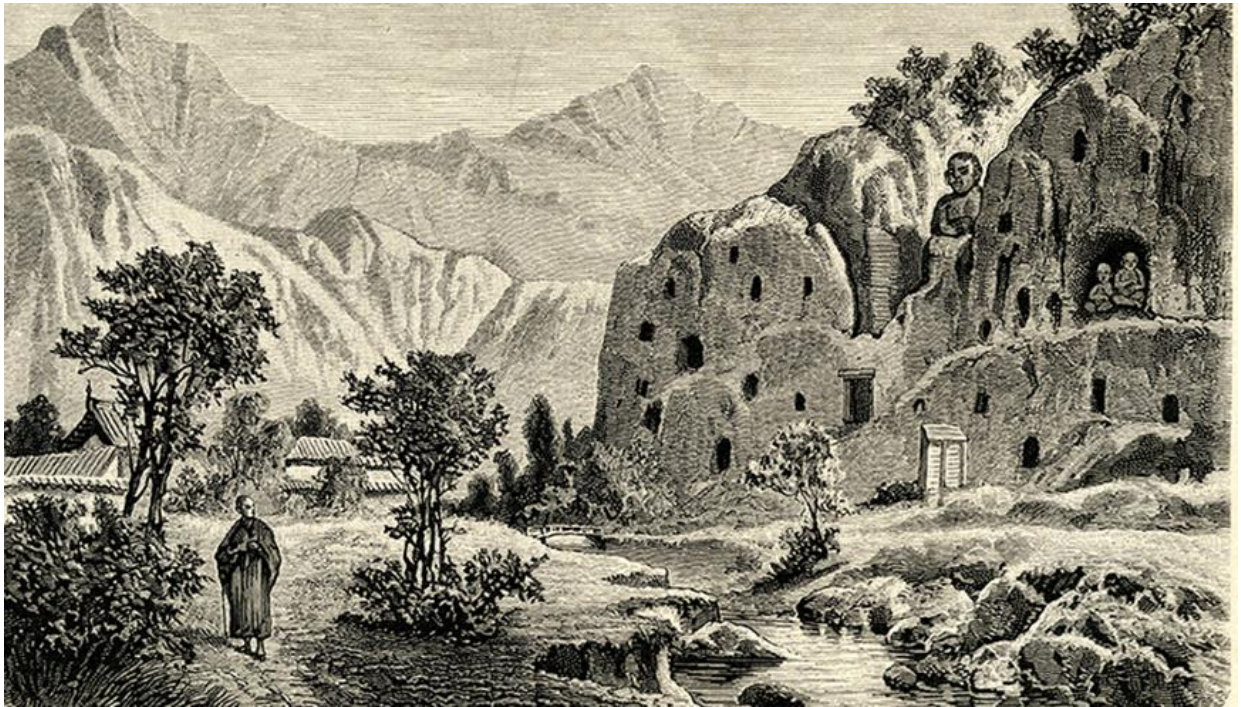


Figure 3-17. The first visual representation of the Mogao caves in modern times showing a monk in the foreground and an exposed colossal-buddha image and numerous caves cut into the rock cliff across a stream. Kreitner, *Im fernen Osten*, 665.



Figure 3-18. A sketch of the colossal-buddha image in Mogao Cave 130. Drawing by the Przhevsky Expedition Team in 1879. Wang, *Sitanyin Dunhuang*, 28, fig. 20.

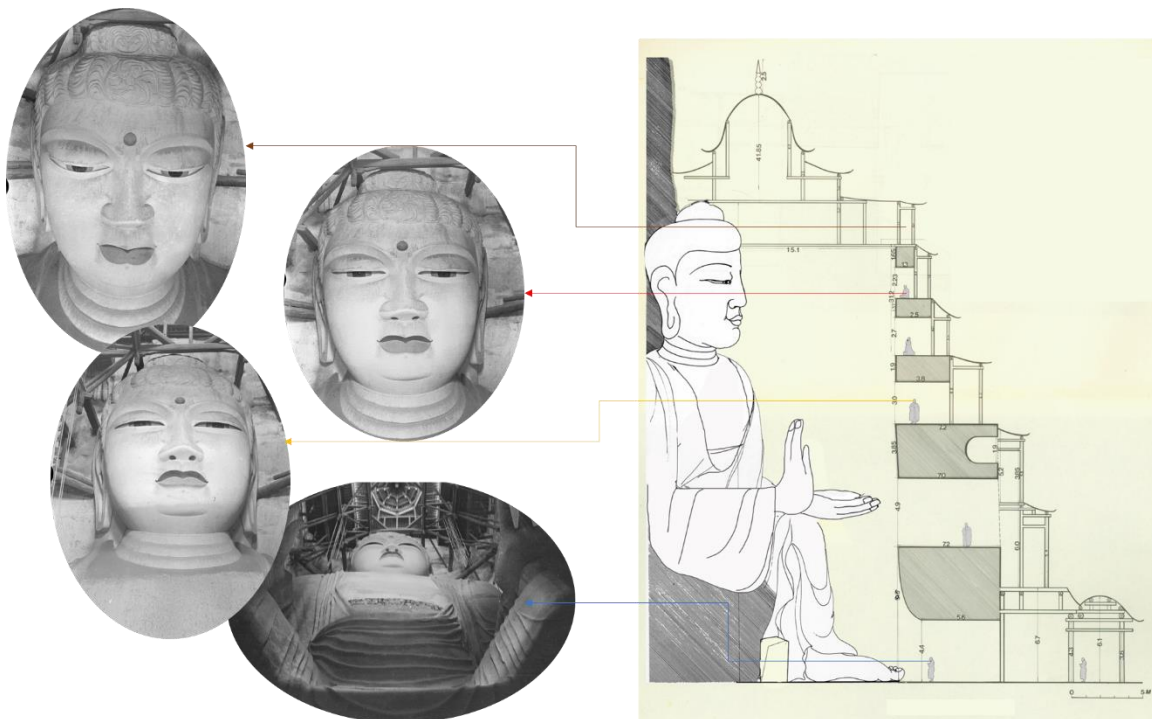


Figure 3-19. Looking at the colossal-buddha image in Cave 96 from corridors on the first, third, fifth, and sixth levels. Photo by James Lo in 1943–44. James and Lucy Lo Photograph Archive. Drawing adapted from Shi, *Mogao ku xing*, 2:49, fig. 43. Collage by author.

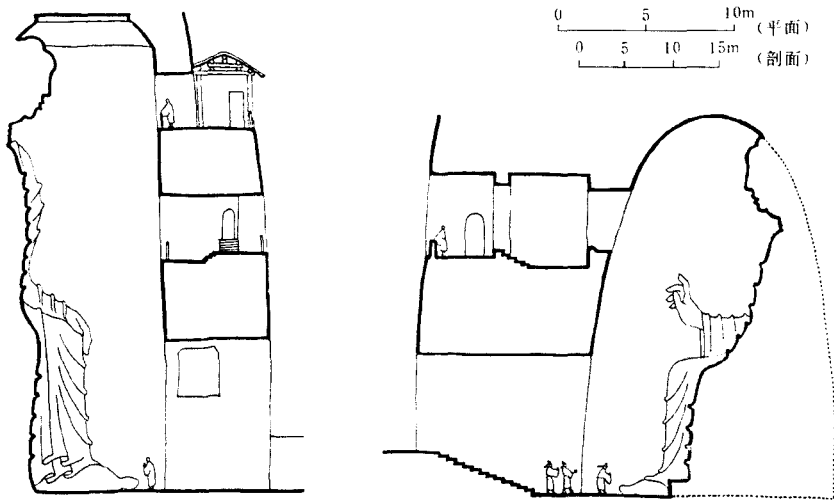


Figure 3-20. Sectional drawings of two colossal-image caves in Dunhuang. *Left*, Mogao Cave 130; *Right*, Yulin Cave 6. Xiao, *Dunhuang jianzhu yanjiu*, 52, fig. 16.



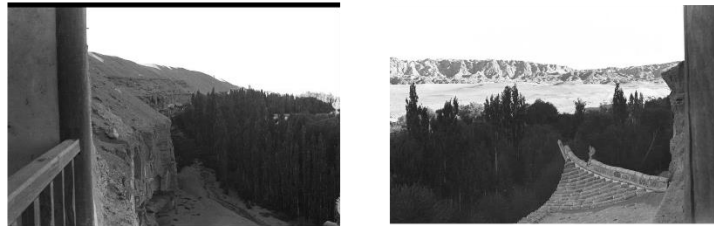
Figure 3-21. The high window above the entrance of the main Buddha hall of Todai-ji, Nara, Japan. Initial construction completed in 751, current structure rebuilt in 1709. Photo after Kato, “Nara’s Todaiji Temple Closed.”



Fifth level



Fourth level



Third level

Figure 3-22. Looking out at the grove, the Daquan valley, and Mount Sanwei from the third, fourth, and fifth levels of the Nine Story Pavilion screening Cave 96. Photo by Joseph Needham in 1943. Photo collage by author.

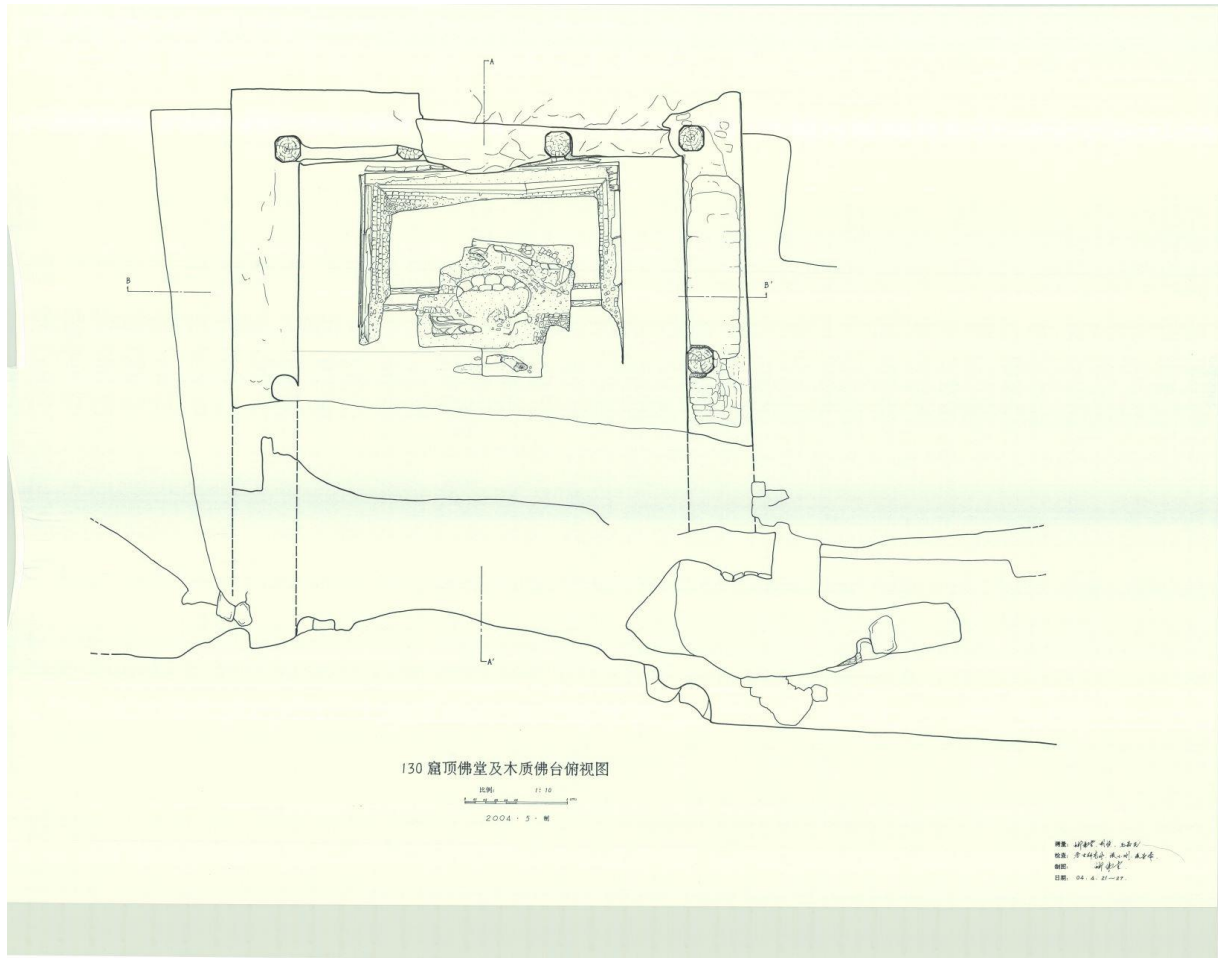


Figure 3-23. Plan drawing of the remains of a shrine on the cliff top above Mogao Cave 130. Drawing by Li Weitang. Image courtesy of Dunhuang Academy.

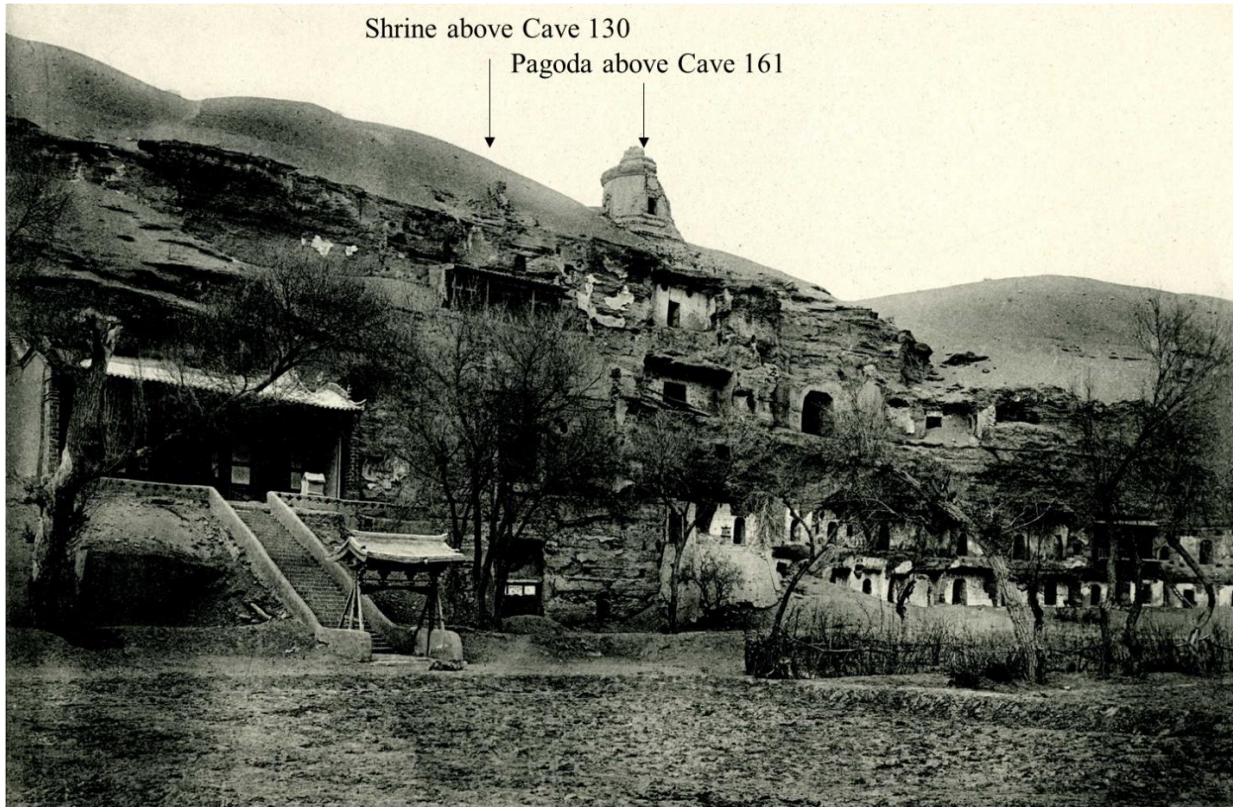


Figure 3-24. The area near Mogao Cave 130 in 1908, arrows pointing at remains of two cliff-top structures. After Pelliot, *Les grottes de Touen-houang*, vol. 1, plate 5. Annotation by author.

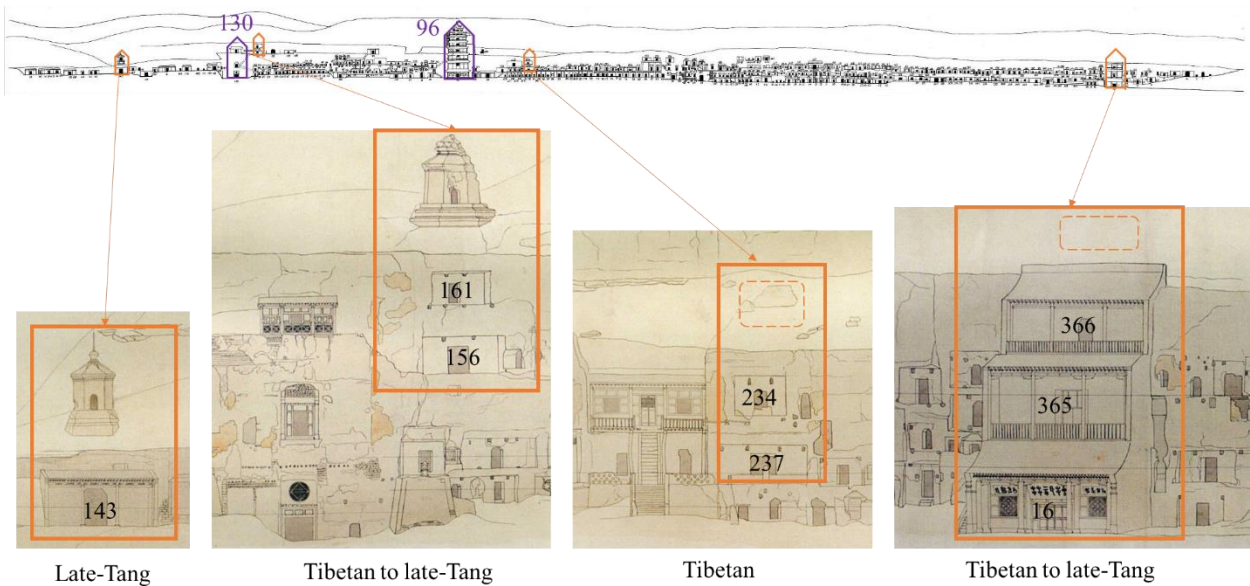


Figure 3-25. Distribution of the four vertical cave-pagoda composites on the cliff site of Mogao. Base maps by Sun Ruxian and Samil Dudin. Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotation by author.

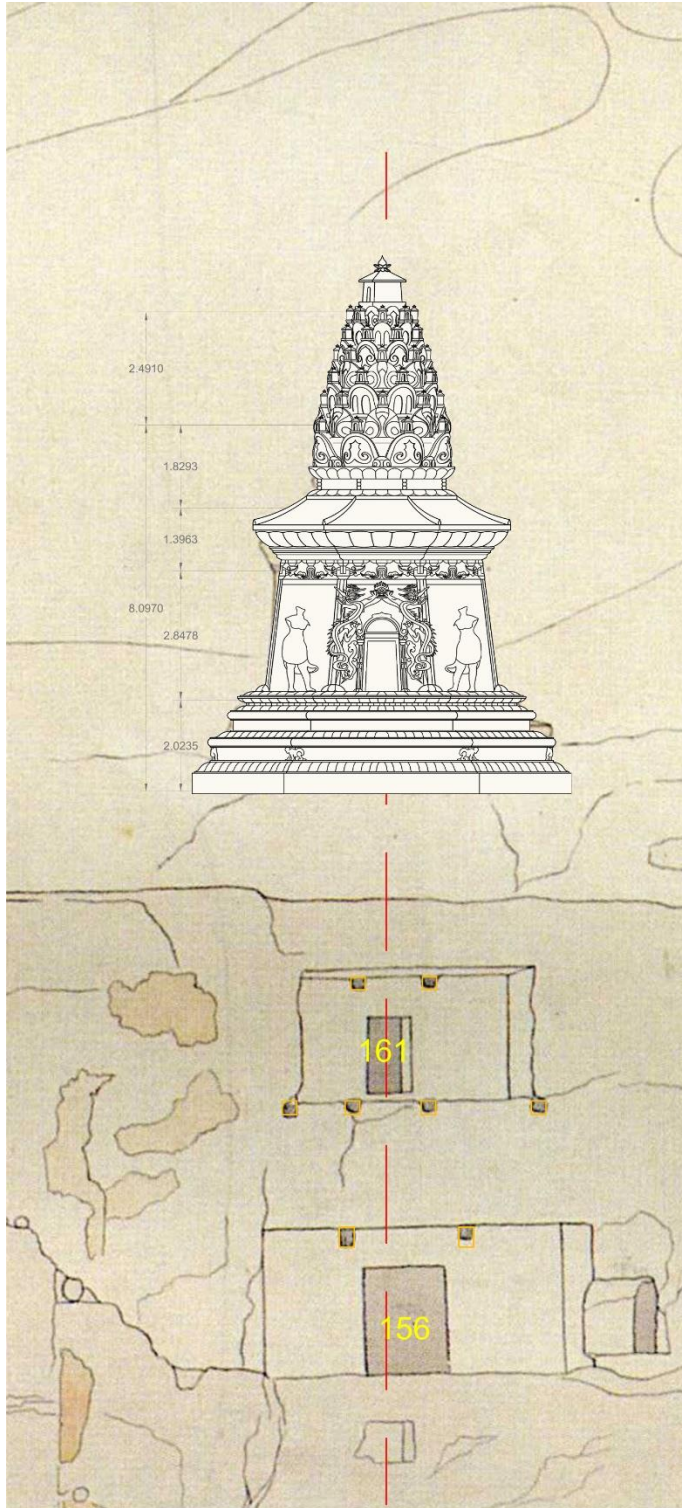


Figure 3-26. A theoretical reconstruction of the earthen pagoda on the cliff-top slope above Cave 161, mid- to late ninth century. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Design and drawing of the pagoda with measurements by author.

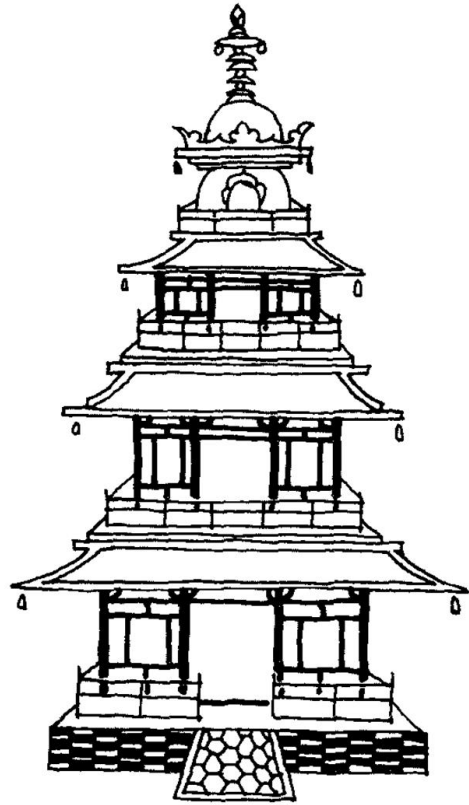


Figure 3-27. The Pavilion of Great Compassion in the West of Zhenzhou City represented as a pavilion-style pagoda, picture of Mount Wutai, west wall, Cave 61, 947 CE. *Left*, mural, digital Dunhuang Website (<https://www.e-dunhuang.com/cave/10.0001/0001.0001.0061>); *Right*, Line drawing copy by Xiao Mo. Xiao, *Dunhuang jianzhu yanjiu*, 155, fig. 100-2.

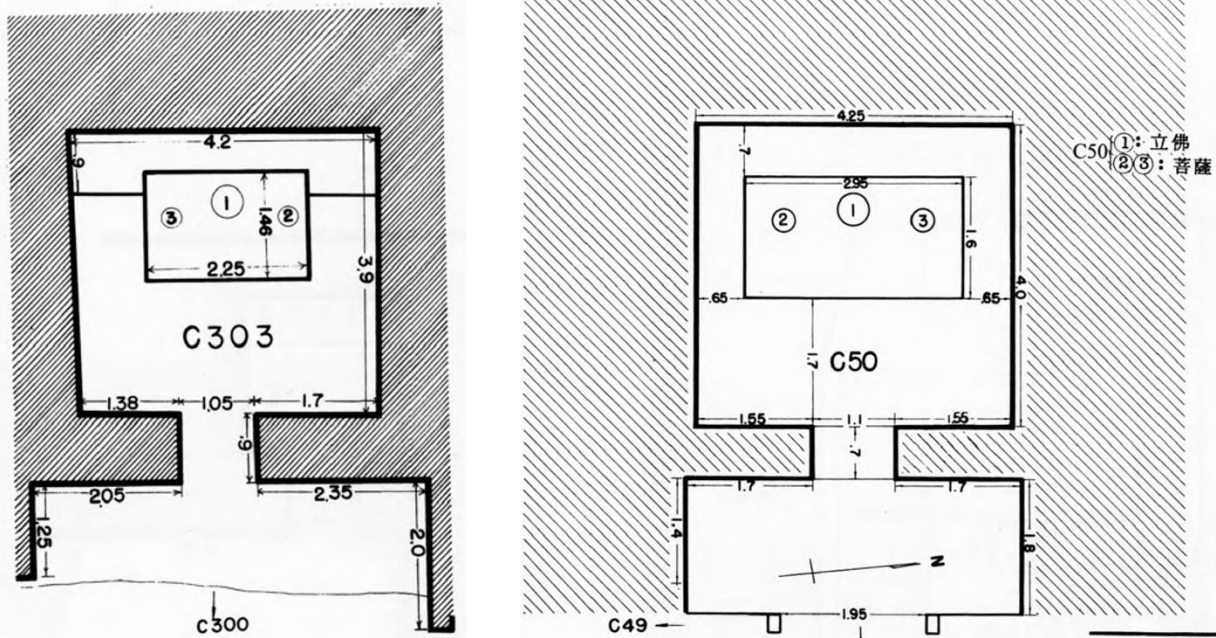


Figure 3-28. Plan drawings of Mogao Caves 161 (*left*) and 234 (*right*), ninth century. Shi, *Mogao ku xing*, vol. 2, figs. 257, 48.



Figure 3-29. Remains of a wooden *kunmen* arch panel shrine that encircled the central altar in the shrine on the cliff top above Mogao Cave 130. 186 cm (l) × 23.5 cm (h) × 4 cm (d). Sun, “*kuyan jianzhu yiji diaocha*,” 23, fig. 15.



Figure 3-30. *Kunmen* arches on the upper-level buddha altar, Mogao Cave 365, 832–34, repainted in the eleventh century and the early twentieth centuries. Sun and Sun, *Shiku jianzhu juan*, 150, fig. 108.



Figure 3-31. *Kunmen* arches on the east-facing face of the upper-level buddha altar, Mogao Cave 16 showing the motif of a heavenly guardian and two attending figures. Late-Tang period, repainted in the eleventh century. Photo by author with permission of Dunhuang Academy, June 2022.



Figure 3-32. The motifs of *kunmen* arches and flaming jewels in comparison. *Left*, those at the south-west corner of the shrine above Cave 130. Sun, “kuyan jianzhu yiji diaocha,” 23, fig. 14; *Right*, those in Cave 365, 832–34, repainted in the eleventh century. Image data from Northwestern University, made available by Mellon International Dunhuang Archive (MIDA) on Artstor (SSID: 18120118).



Figure 3-33. A bracket set consisting of an arm and three blocks, of which the arm was discovered near Mogao Cave 130. Photo by author, May 11, 2022.



Figure 3-34. Theoretical reconstruction of the composite cave-front architecture of Mogao Cave 130, cave constructed in early eight century, and pavilion in the tenth–eleventh century. Design and drawing by author.



Figure 3-35. Picture of Mount Sumeru, ink on paper, scroll, circa tenth century. Found in Mogao Cave 17. Image source: gallica.bnf.fr/ Bibliothèque nationale de France (Pelliot chinois 2012).

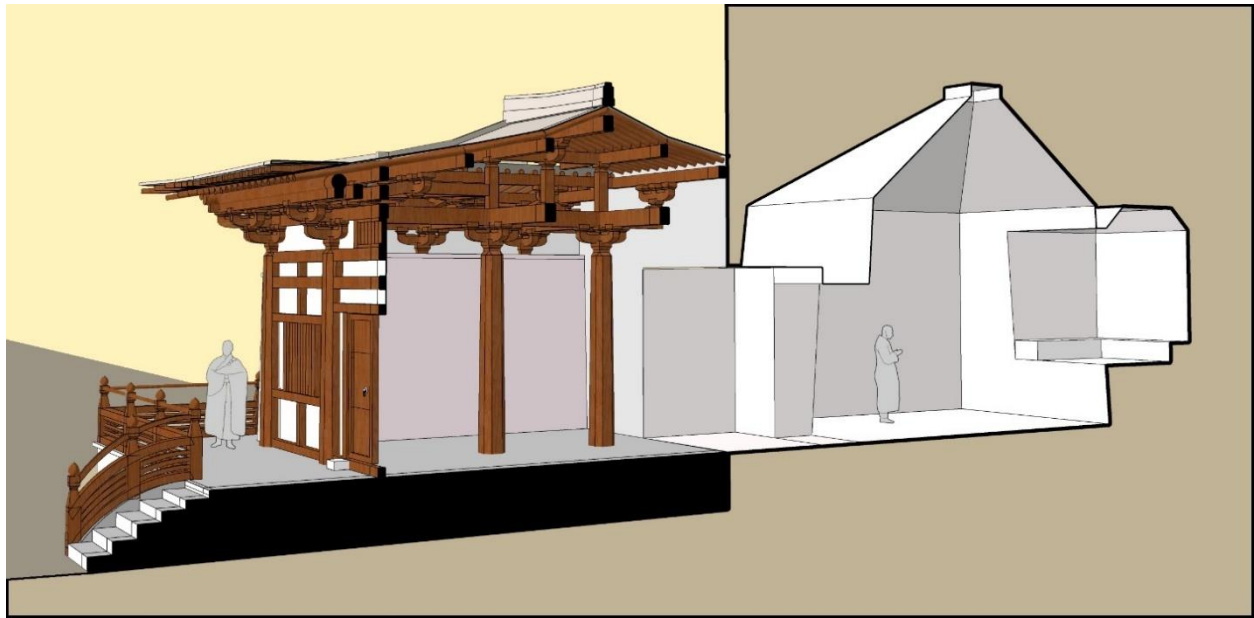


Figure 3-36. Sectional perspective of Mogao Cave 53 with the ante-hall reconstructed. Tenth century. Ante-hall reconstruction design by Xiao Mo. Drawing by author.

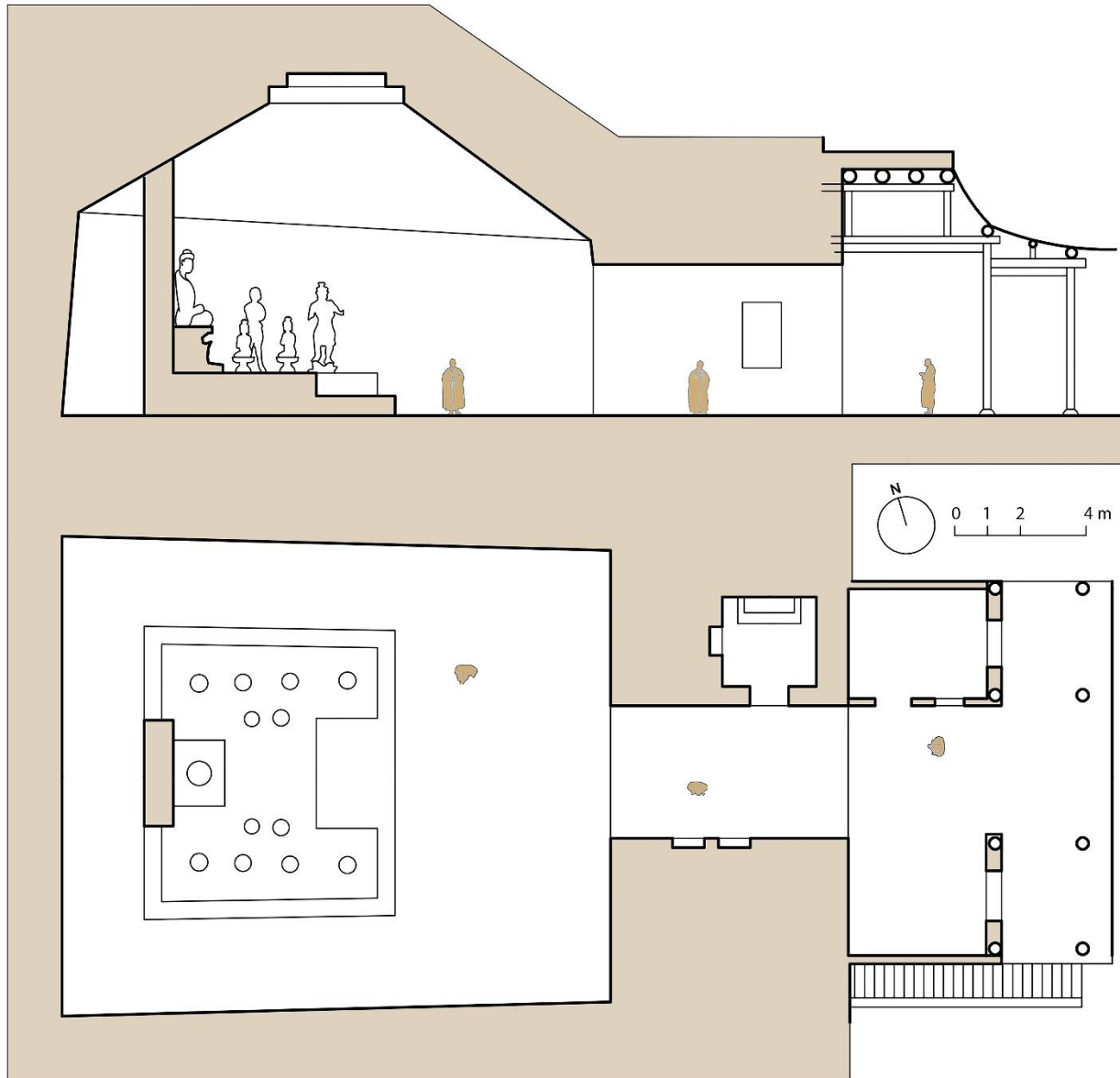


Figure 3-37. Plan and sectional drawings of Mogao Cave 16. Late-Tang period, the ante-hall reconstructed in 1906. Data after Shi, *Mogao ku xing*. Drawing by author.

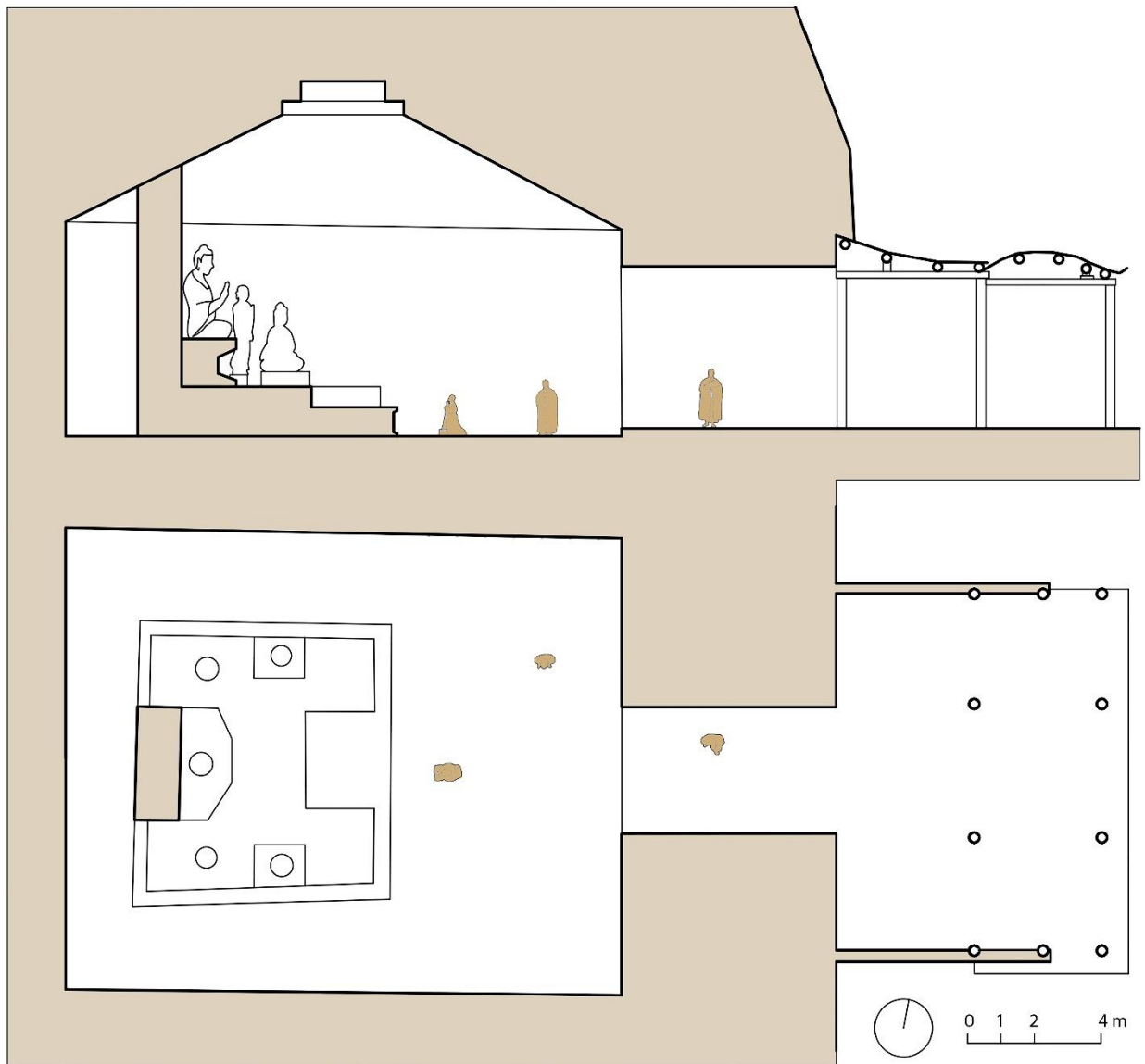


Figure 3-38. Plan and sectional drawings of Mogao Cave 94. Late-Tang period, circa 885–88 CE, the ante-hall reconstructed in the Qing (1644–1911) or the Republican periods (1911–49). Data after Shi, *Mogao ku xing*. Drawing by author.



Figure 3-39. Distribution of the ground-level ante-halls on the cliff site of Mogao. Base map by Sun Ruxian. Annotation by author.

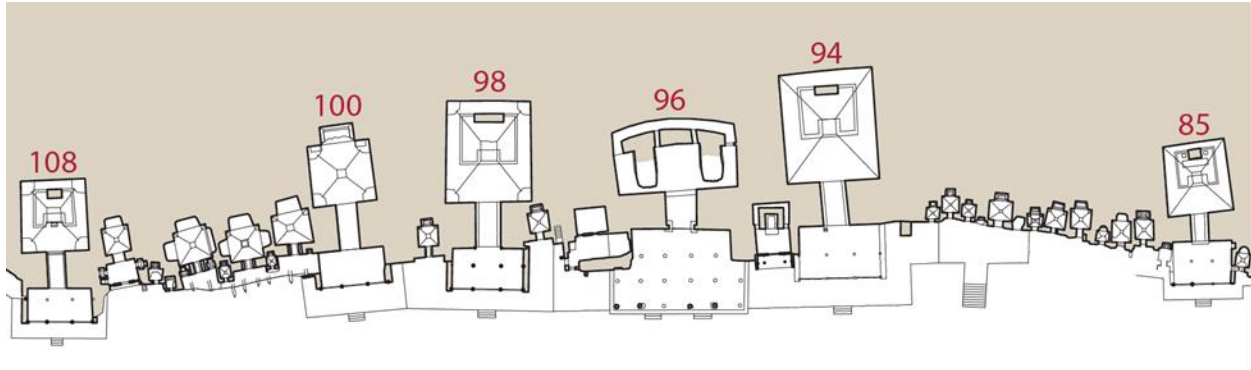


Figure 3-40. Plan drawing of the ground-level caves near Mogao Cave 96, numbered caves indicating ante-halls built during the Guiyijun period. Drawing by author.

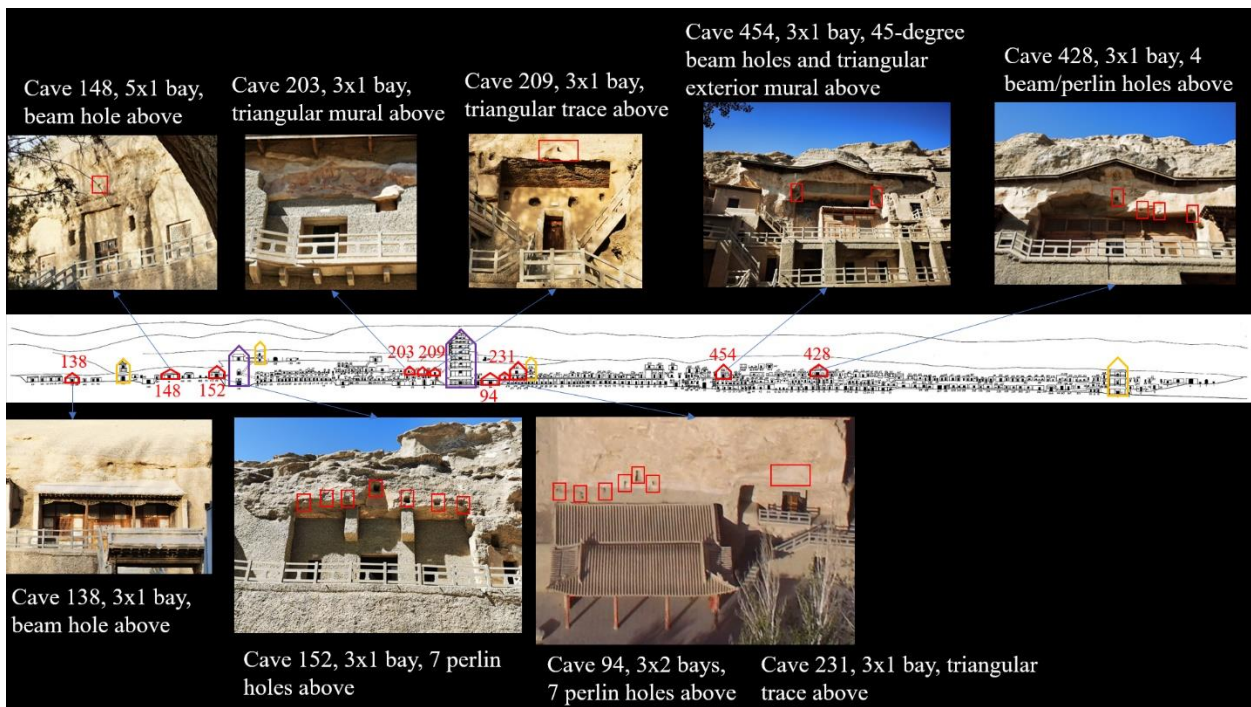


Figure 3-41. The distribution and traces of special types of cave-front architecture. Purple: colossal-image pavilion; yellow: vertical cave-pagoda composites; red: roofs other than eave-sided. Drawing and photo by author.

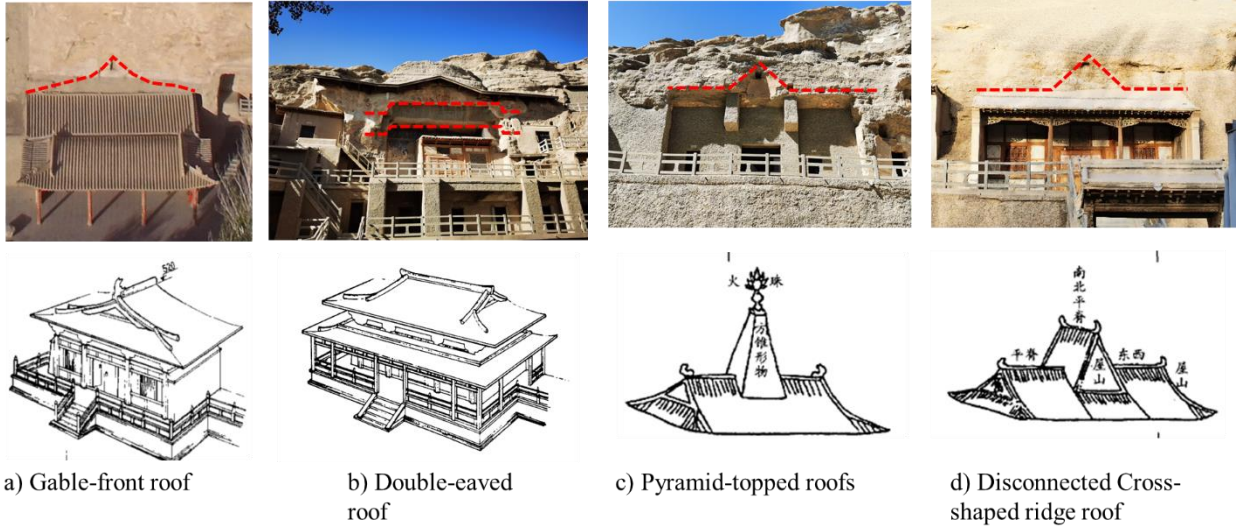


Figure 3-42. Special roof types for ante-halls at the Mogao caves. Drawings after Xiao, *Dunhuang jianzhu yanjiu* and Le, *Zhongguo jianzhu shi*. Photo and annotation by author.



Figure 3-43. The architectural backdrop in a transformation tableau of the Western Pure Land showing halls and pavilions with hipped roofs overlaid, hipped-and-gable roofs in a gable-front orientation, and the octagonal-planned pointed roofs. South wall, Mogao Cave 12, late-Tang period. Image courtesy of Dunhuang Academy.

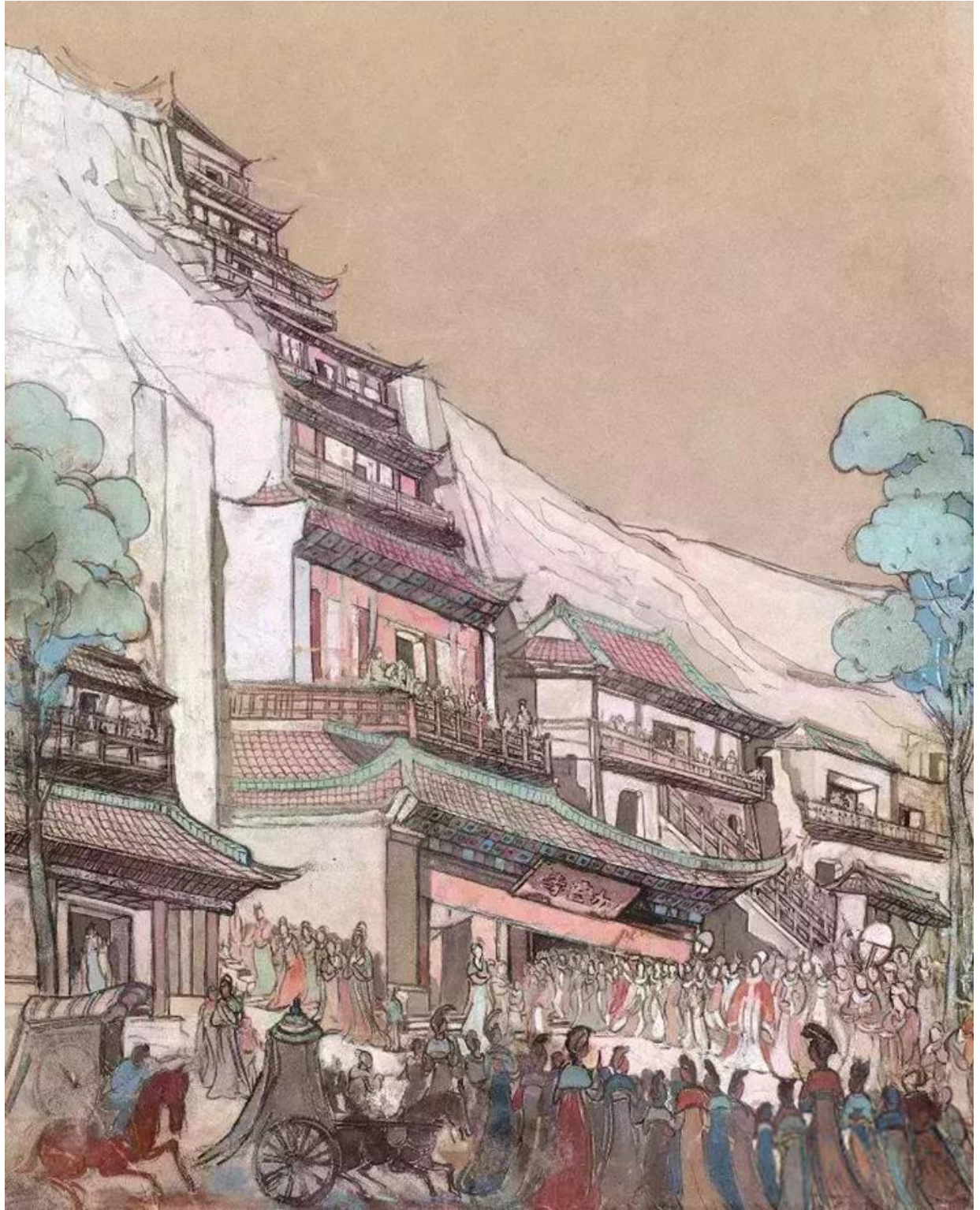


Figure 3-44. Chang Shuhong (1904–94), *The nine-story pavilion*, 1945. Color on paper. Chang, “Fengchen buzhu de huiyi,” 145.



Figure 3-45. Destruction of a jewel pavilion, scene of the Maitreya Pure Land, Yulin Cave 25, Tibetan period (787–848). Sun and Sun, *Jianzhu hua juan*, 228, fig. 224.

4. *Constructing a Pure Land in Situ*



Figure 4-1. *Meditation Sūtra* transformation tableau. north wall of Mogao Cave 172. High-Tang period. Mural painting. 400 (w) × 270 (h) cm. Sun and Sun, *Jianzhu hua juan*, 111, fig. 125.



Figure 4-2. The main ritual buildings in Chi Lin Nunnery, Hong Kong, China. Built in 1994–99. The building complex with a pond was intended to imitate the layout of the Western Pure Land in figure 4-1. Photo courtesy of Chi Lin Nunnery.

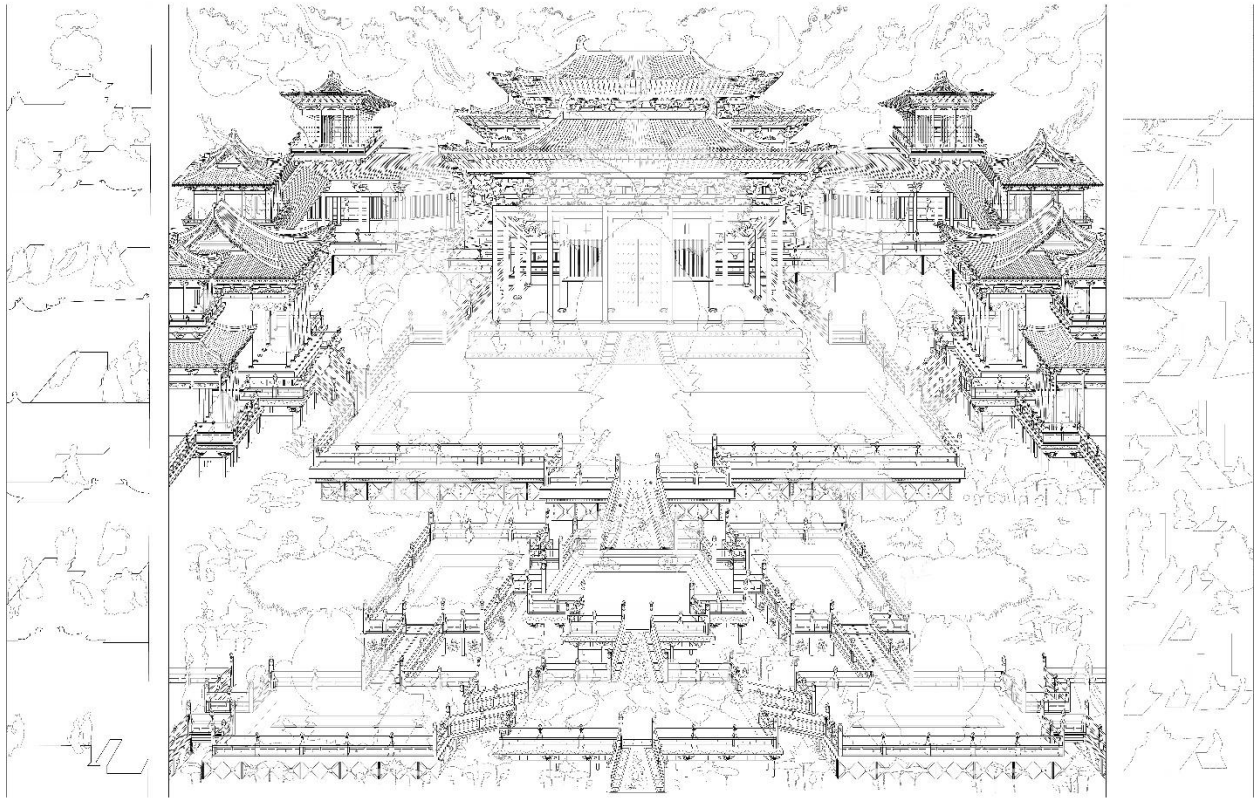


Figure 4-3. A trace-copy line drawing of the architectural setting in figure 4-1. Drawing by author.

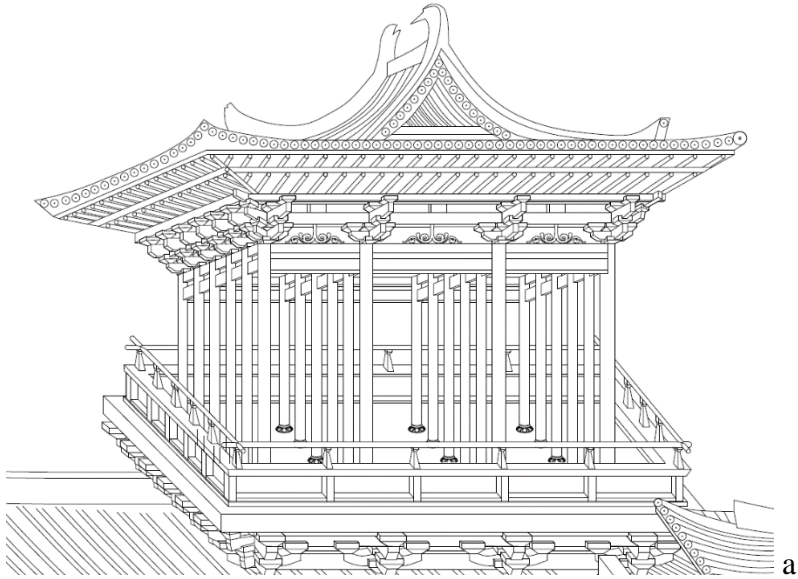
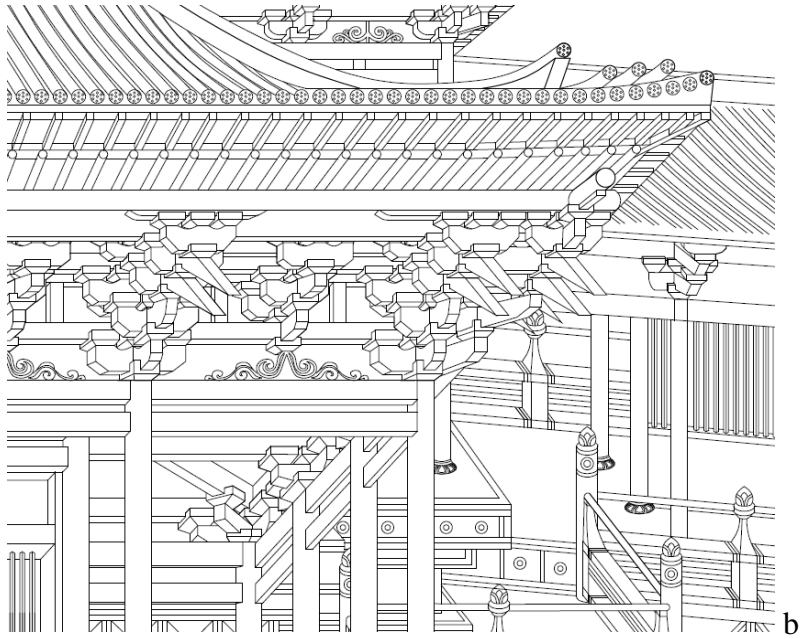
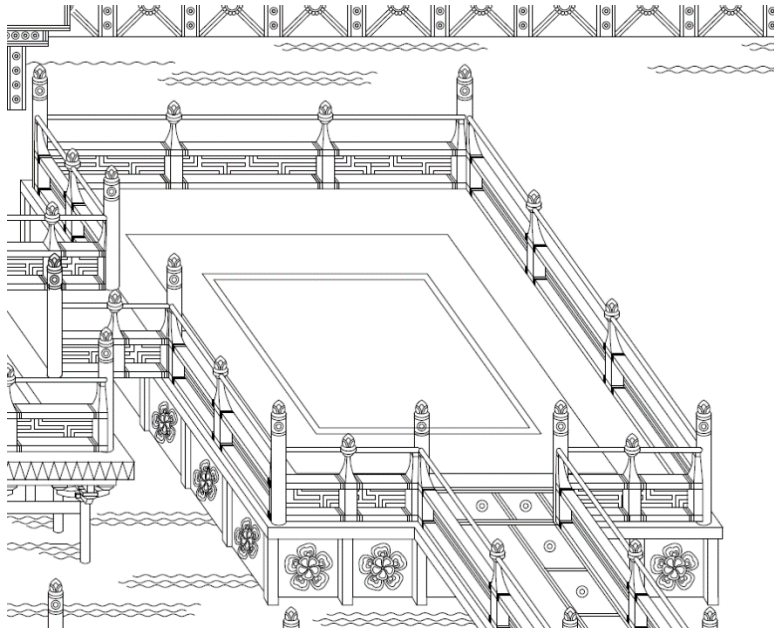


Figure 4-4. Details in figure 4-3. a) a corner pavilion represented in a frontal perspective; b) the bracket sets and rafters of the main hall seen from below; c) a terrace seen from above. Drawing by author.



b



c

Figure 4-4, continued.



Figure 4-5. A bird's-eye view of the Western Pure Land, author's reconstruction design based on figure 4-1. Digital photo collage by author.



Figure 4-6. A one-point perspective of the Western Pure Land from a standpoint on the bridge looking toward the main terrace, author's reconstruction design based on figure 4-1. Digital photo collage by author.

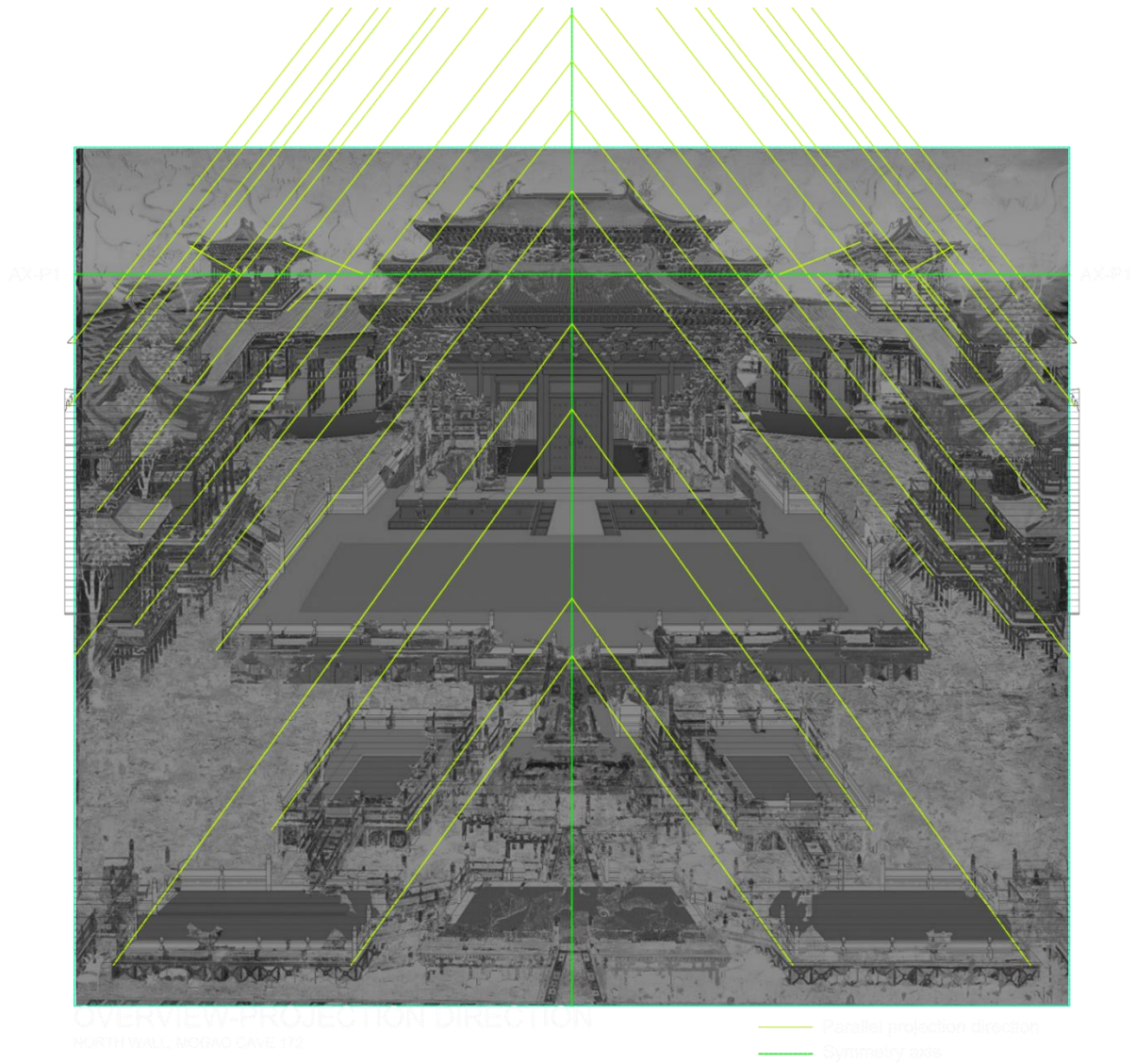


Figure 4-7. The herringbone-like construct of multiple “vanishing points” in figure 4-1. Diagram by author.

OVERVIEW-SCENARIO
NORTH WALL, MOGAO CAVE 172

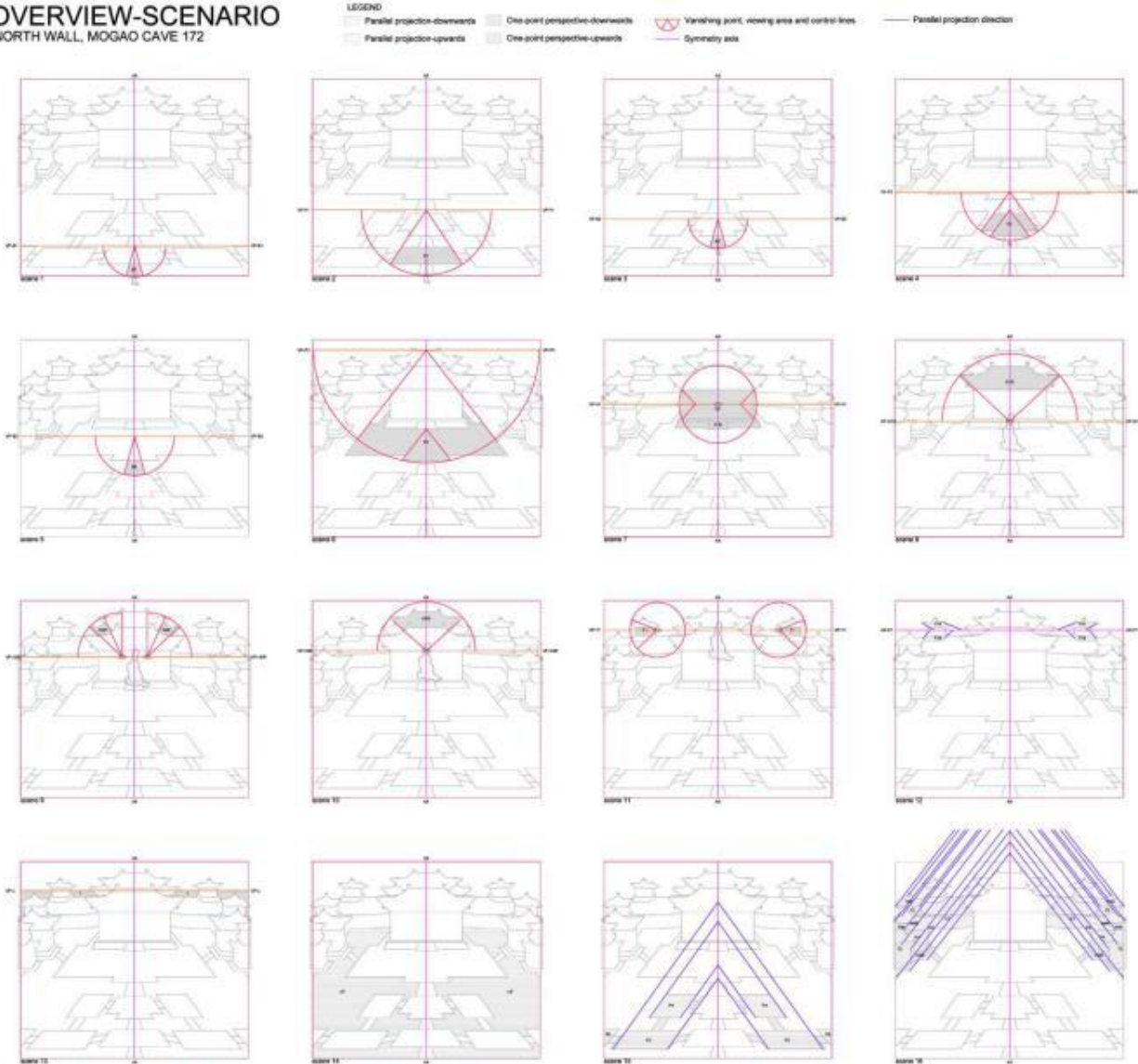


Figure 4-8. Sixteen steps of contemplating the pictorial space in figure 4-1. Diagram by author. Horizontal line is the level of the viewpoint of the imaginary traveler. Diagonal lines in a circle or semicircle are lines that are parallel in the pictorial space and represented as conjoining at the center of the circle (i.e., the “vanishing point”). Sets of diagonal lines mirrored along the vertical axis are direction of parallel projection.

Scene 1: Contemplating (an imaginary traveler’s) stepping onto the central-front bridge (one-point perspective with a high viewpoint)

Scene 2: Contemplating (an imaginary traveler’s) stepping onto the central-front terrace (one-point perspective with a high viewpoint)

Scene 3: Contemplating (an imaginary traveler’s) stepping onto the central-middle bridge (one-point perspective with a high viewpoint)

Scene 4: Contemplating (an imaginary traveler’s) stepping onto the central-rear terrace (one-point perspective with a high viewpoint)

Scene 5: Contemplating (an imaginary traveler’s) stepping onto the central-rear bridge (one-

point perspective with a high viewpoint)

Scene 6: Contemplating (an imaginary traveler's) stepping onto the main terrace (one-point perspective with a high viewpoint)

Scene 7: Contemplating (the beholder him/herself) looking at the front façade of the main shrine (one-point perspective with a mid-height viewpoint)

Scene 8: Contemplating (the worshiper him/herself) looking upward at the cornice and the roof of the main shrine (one-point perspective with a low viewpoint)

Scene 9: Contemplating (the worshiper him/herself) looking upward at the cornices and the roofs of the two ear halls of the rear shrine (one-point perspectives with a low viewpoint)

Scene 10: Contemplating (the worshiper him/herself) looking upward at the cornice and the roof of the rear shrine (one-point perspective with a low viewpoint)

Scene 11: Contemplating (the worshiper him/herself) looking at the landscape at infinite distance with peripheral vision of the two corner watchtowers (one-point perspectives with a mid-height viewpoint)

Scene 12: Perceiving the two corner watchtowers' roofs and platforms (oblique parallel projection with a mid-height viewpoint)

Scene 13: Contemplating the landscape at infinite distance (zero-point perspective with a high viewpoint)

Scene 14: Contemplating the lotus ponds (zero-point perspective with a high viewpoint)

Scene 15: Perceiving the terraces and the bridges on the left and right sides (oblique parallel projection with a high viewpoint)

Scene 16: Perceiving the corridors and the shrines on the left and right sides (oblique parallel projection with a high viewpoint)

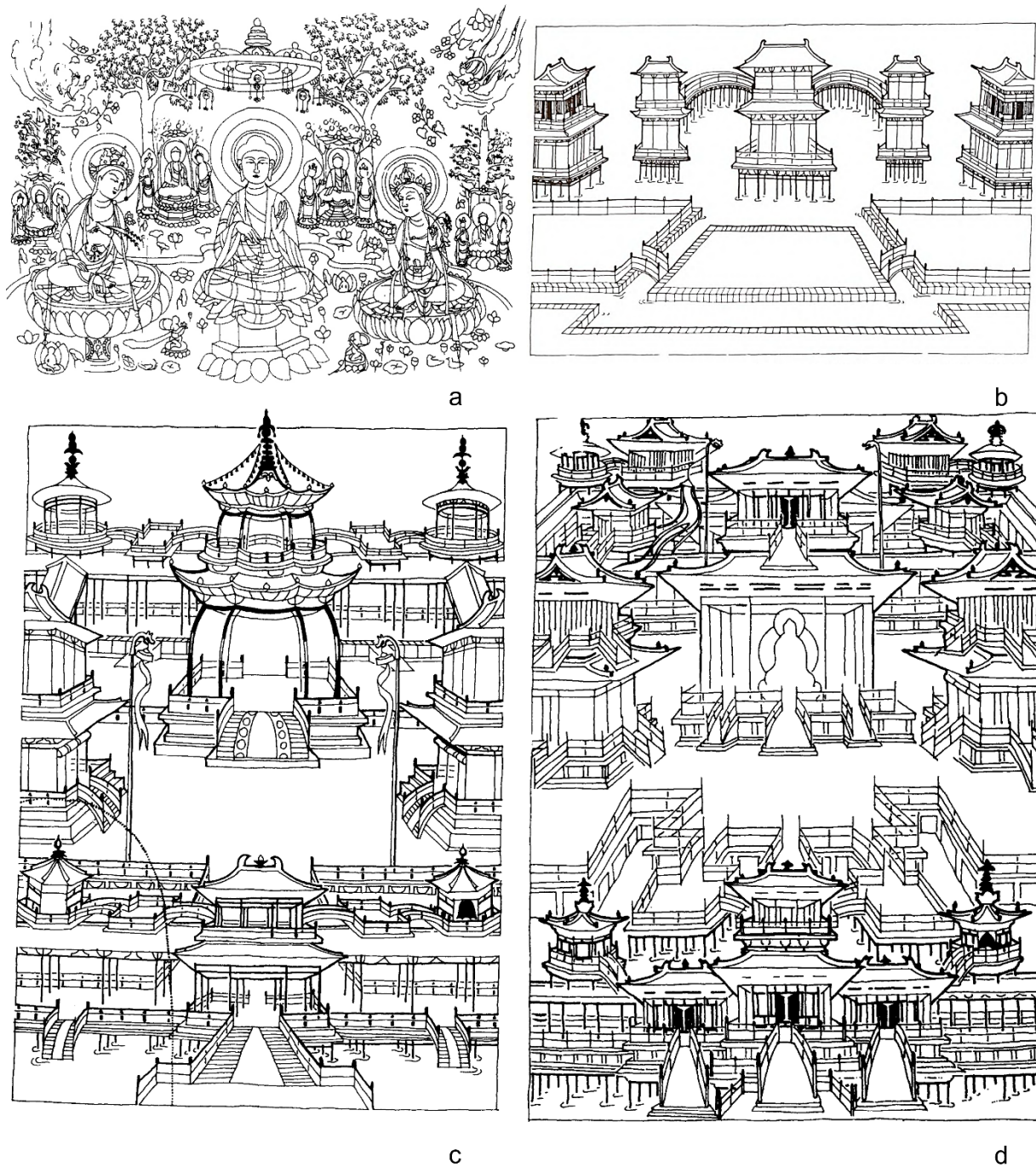
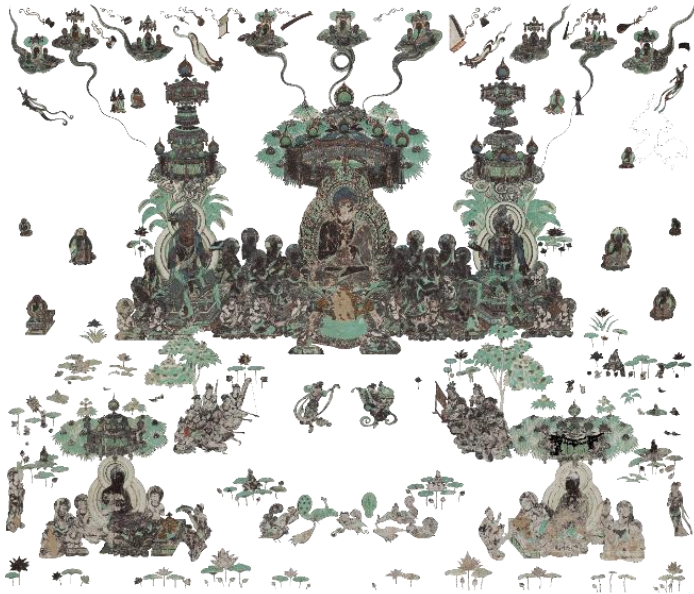
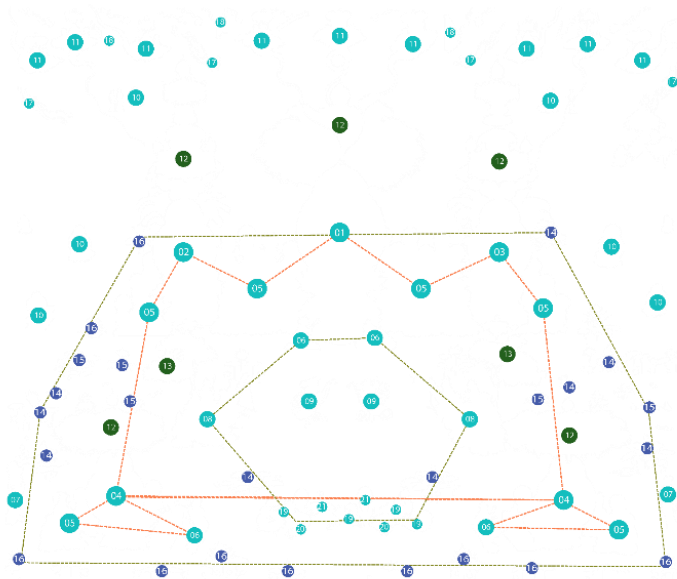


Figure 4-9. Representative pictorial compositions of the Pure Land transformation tableaux in Dunhuang between the sixth to twelfth centuries. Line-drawings. a) Western Pure Land, west wall, Mogao Cave 393, Sui period; b) Western Pure Land, north wall, Mogao Cave 205, the early-Tang period; c) Eastern Pure Land, north wall, Mogao Cave 361, mid-Tang period; d) Eastern Pure Land, north wall, Mogao Cave 146, Five Dynasties period. After Shi, *Amituojing huajuan*, 20; Xiao, *Dunhuang jianzhu yanjiu*, 65, 73, 77, figs. 28, 36, 40.



a



b

Figure 4-10. The pictorial composition of figural images in figure 4-1. a) the isolated deity figures; b) the location and relationship between several figures. Digital photo collage and diagram by author.

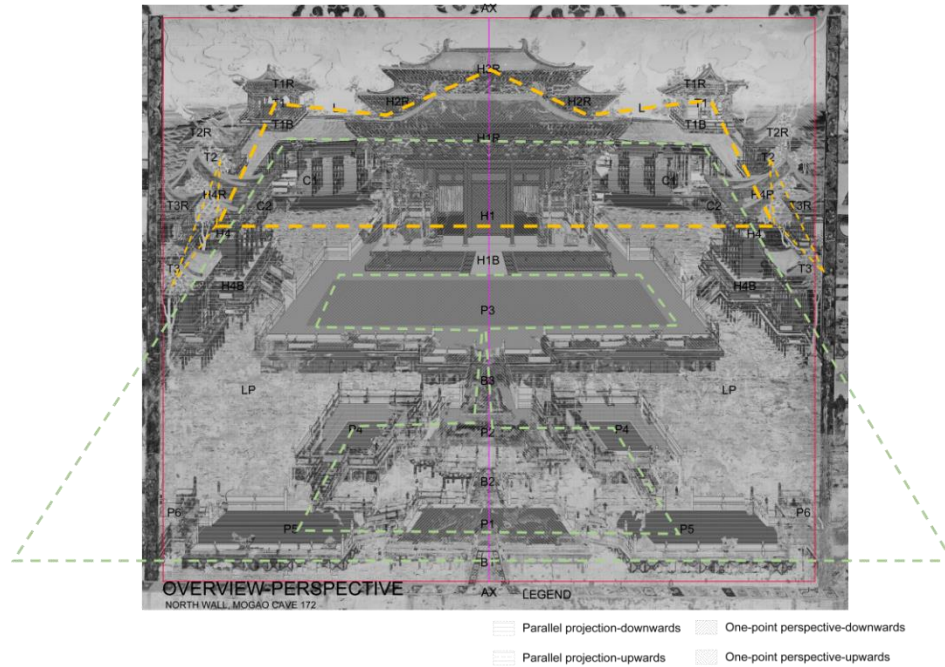


Figure 4-11. The pictorial composition of architectural images in figure 4-1. Digital photo collage and diagram by author.

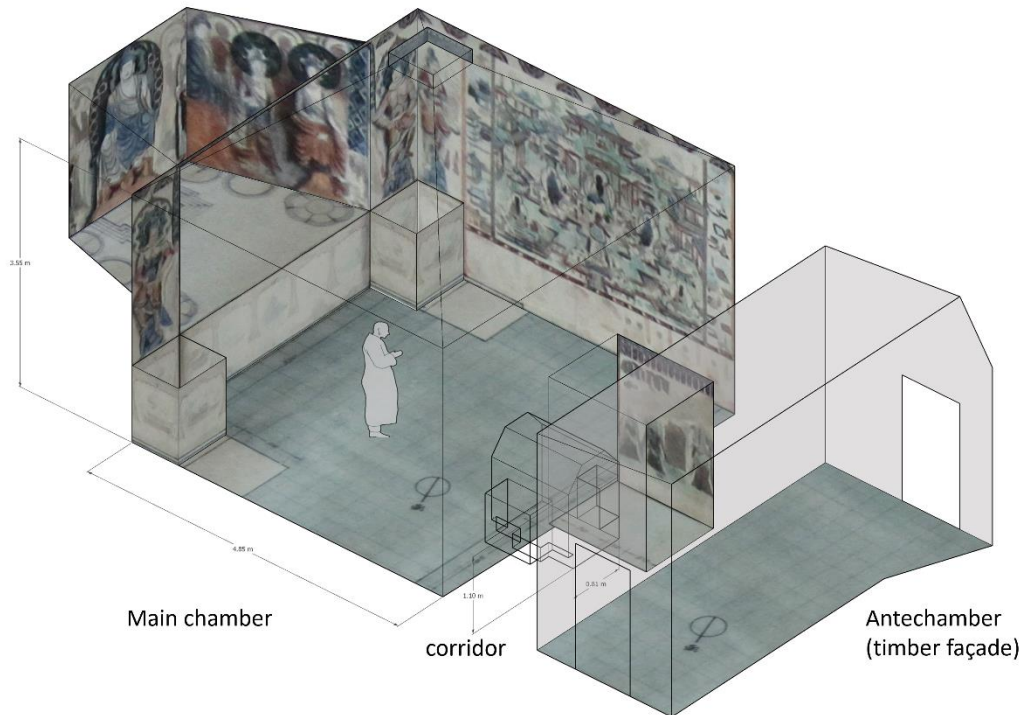
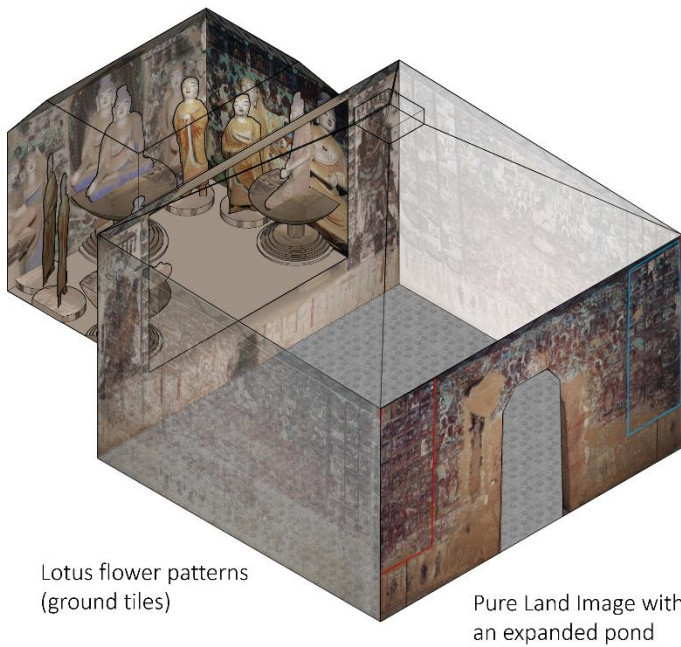


Figure 4-12. Isometric view of Cave 172 showing the dimensions of a main chamber wall and an ear-chamber wall. Drawing by author, texture after Sun Ruxian's rendering in Sun and Sun, *Shiku jianzhu juan*, 225.



Figure 4-13. Potential viewing angles of the Pure land paintings in Cave 172 (figure's height: 1.70 m). Drawing by author, texture after Sun Ruxian's renderings in Sun and Sun, *Shiku jianzhu juan*, 225.

Amitabha Buddha (statue) and Fifty Bodhisattvas (mural)



Lotus flower patterns
(ground tiles)

Pure Land Image with
an expanded pond

Figure 4-14. Isometric view of the main chamber of Cave 171 showing the subject matter of the images along the niche-entrance dimension. Drawing by author.



Figure 4-15. Cave 173 (the ear-chamber on the corridor north wall of Cave 172), late-Tang period, statues remade in the Qing period. Photo courtesy of the Dunhuang Academy.

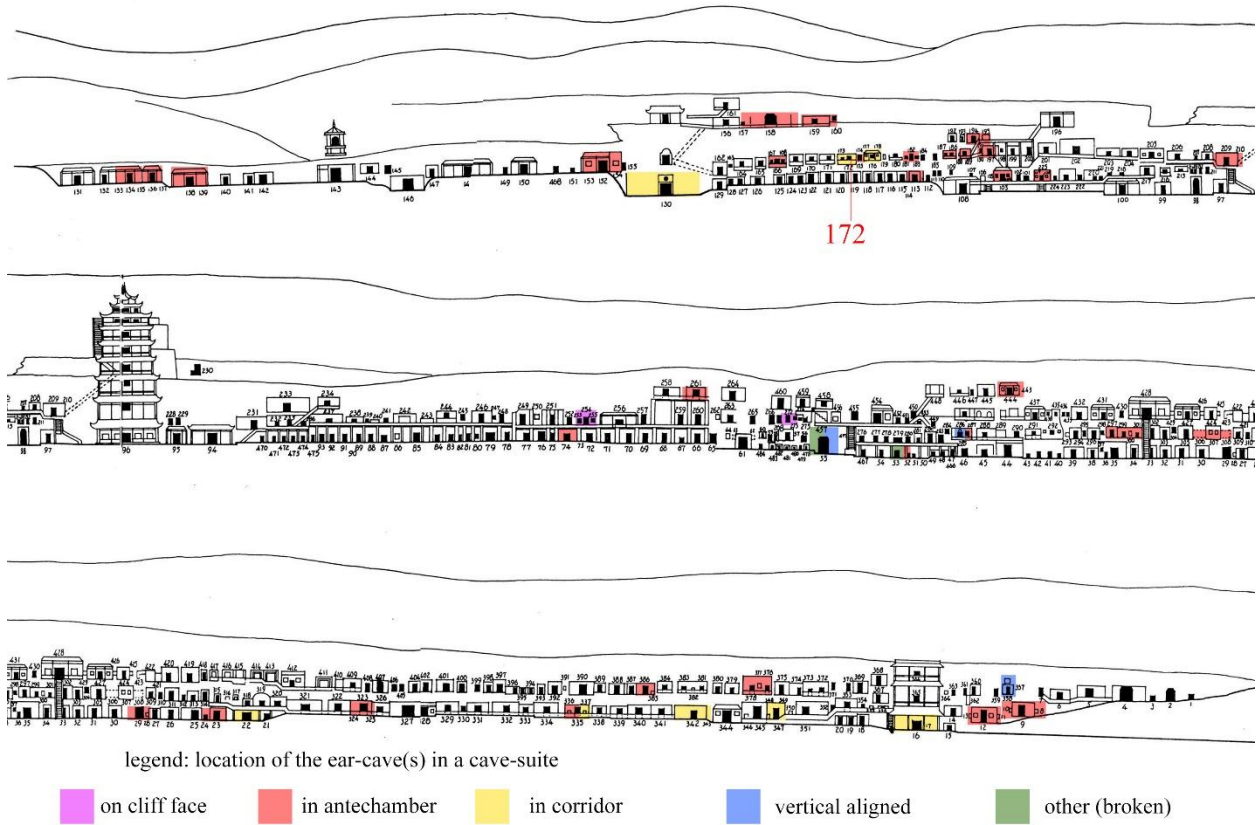


Figure 4-16. Distribution of cave suites at the Mogao Caves. Base map by Sun Ruxian. Annotation by author.

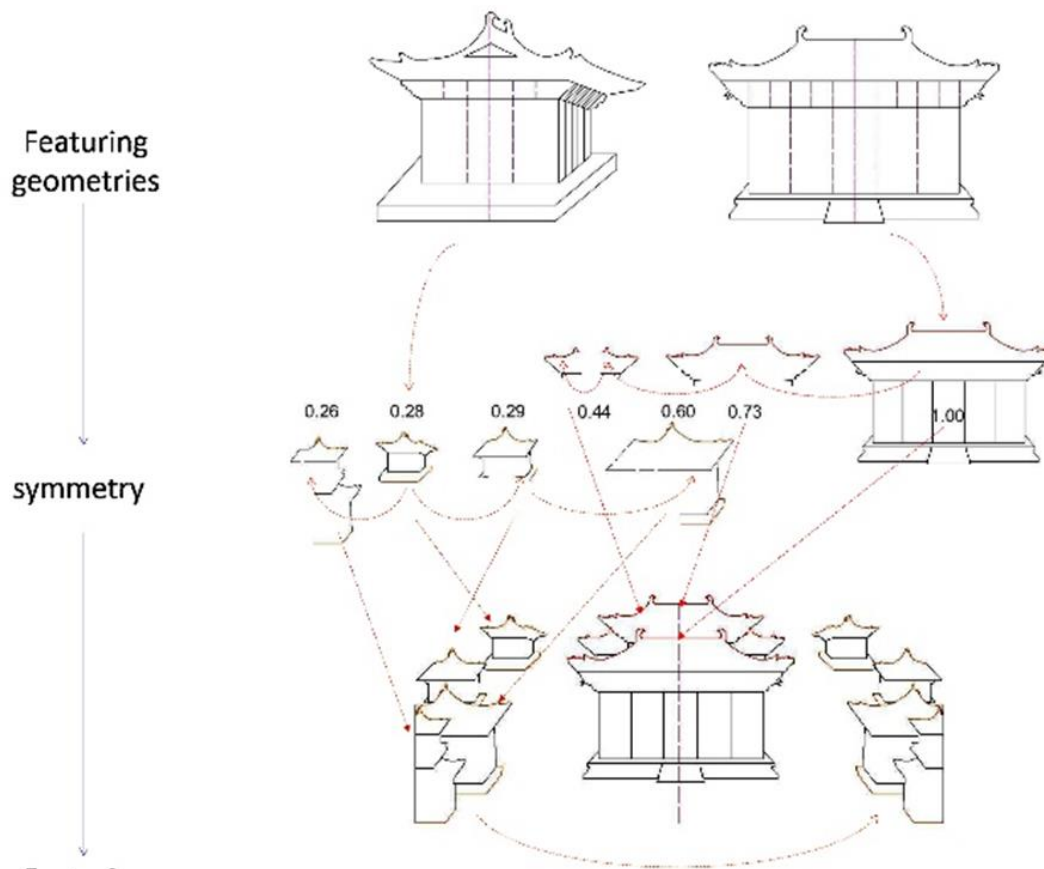


Figure 4-17. The building prototype and the methods of scaling and positioning for generating the architectural complex in figure 4-1. Diagram by author.

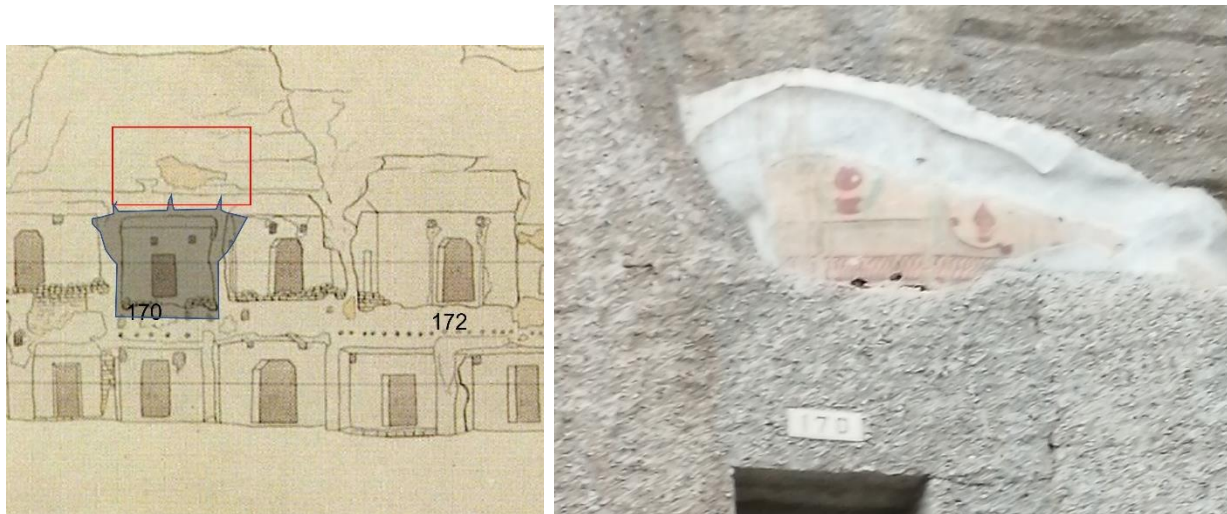


Figure 4-18. Open-air mural above Cave 170. a) location of the mural (in red rectangular frame) in Oldenburg's 1914–15 rendering, Gosudarstvennyi Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 4; b) a recent photograph. Photo by author, August 2019.



Figure 4-19. A detail of a *Meditation Sūtra* painting showing a two-level pavilion as the backdrop of a Buddha preaching scene. Silk painting, ninth or tenth century. Discovered in Mogao Cave 17. In the collection of the Guimet Museum (MG 17673). Digitized and made available by the International Dunhuang Project (IDP: <http://idp.bl.uk/>).

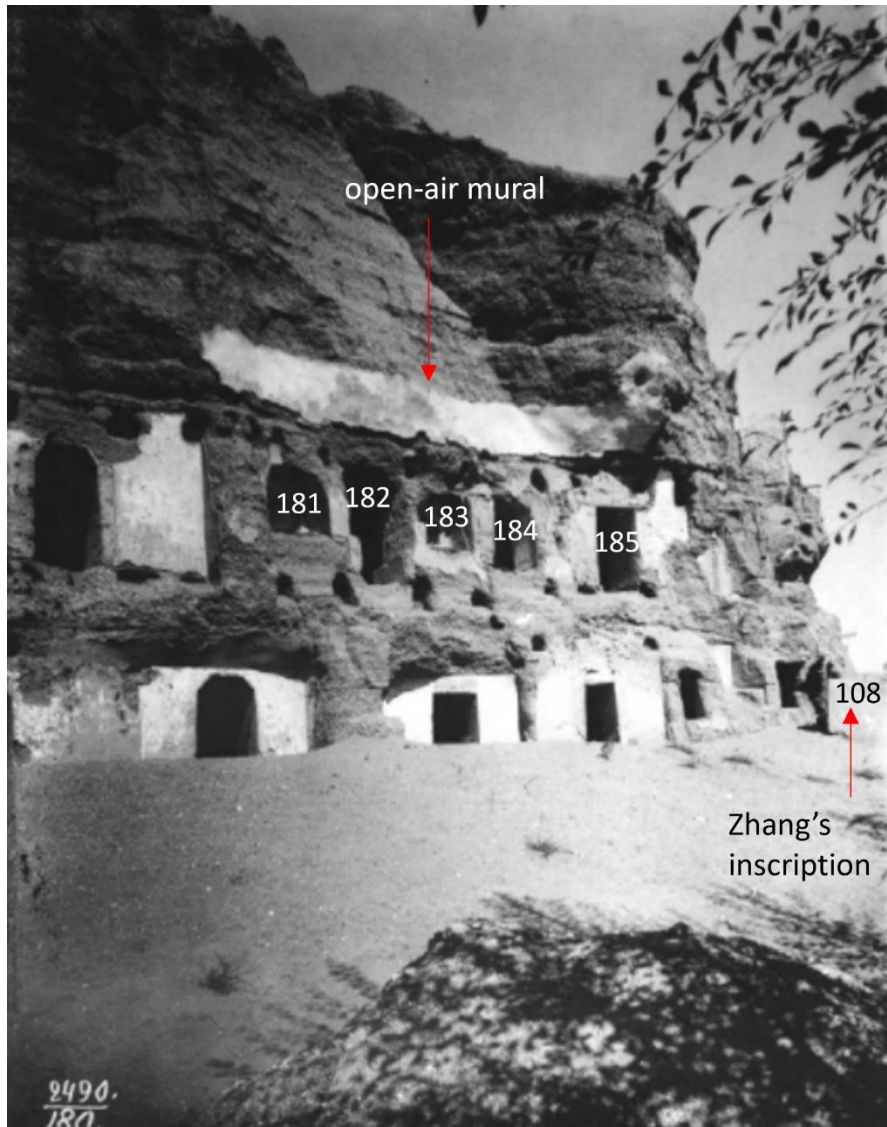


Figure 4-20. A stripe of open-air mural remaining above the antechambers of Mogao Caves 181–85. Photo by Oldenburg expedition team, 1914–15. After Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 3:13.



Figure 4-21. Measurements and location of the open-air mural above the ante-hall of Mogao Cave 94. Base image after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotated by author.



Figure 4-22. The ante-hall and the open-air mural of Mogao Cave 94. Cave made in the 880s, mural painted in circa late-tenth century, ante-hall reconstructed in the early twentieth century. Photo by author, March 2022.



Figure 4-23. The open-air mural above the ante-hall of Mogao Cave 94, circa late-tenth century. Photo by author, March 2022.



Figure 4-24. Author's trace-copy line drawing of the open-air mural above the ante-hall of Mogao Cave 94. Drawing by author.



Figure 4-25. Author's theoretical reconstruction of the open-air mural above the ante-hall of Mogao Cave 94. Drawing by author.



Figure 4-26. Antechamber west wall, Yulin Cave 21, Five Dynasties (907–60). After Sun and Sun, *Shiku jianzhu juan*: 196–97, fig. 156.

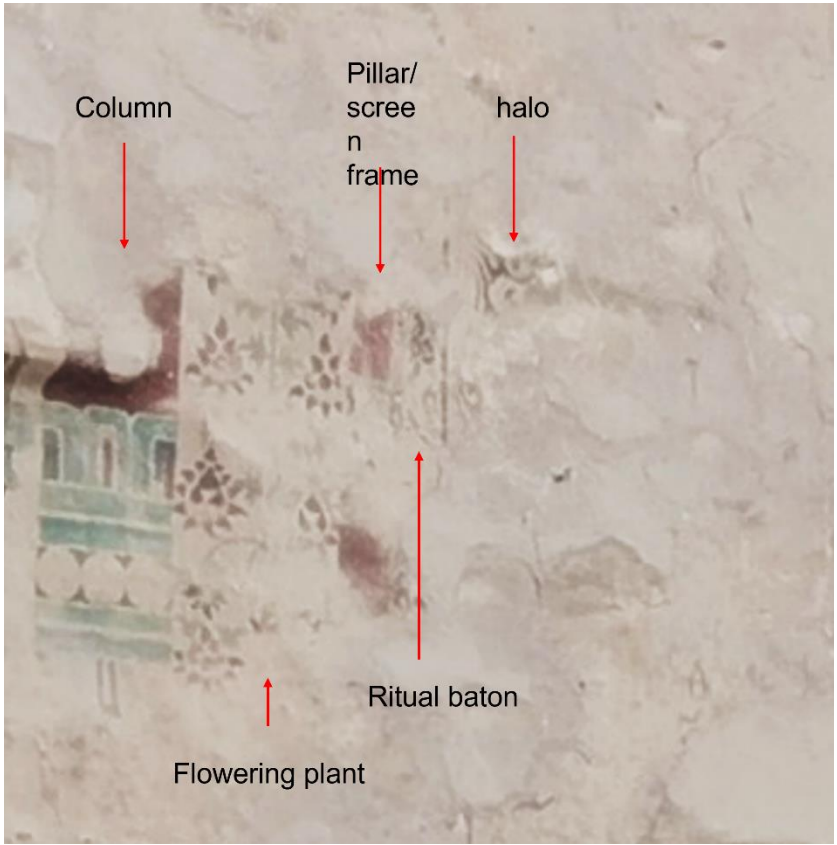


Figure 4-27. Details in the central bay of the pictorial hall in figure 4-23. Photo and annotation by author.

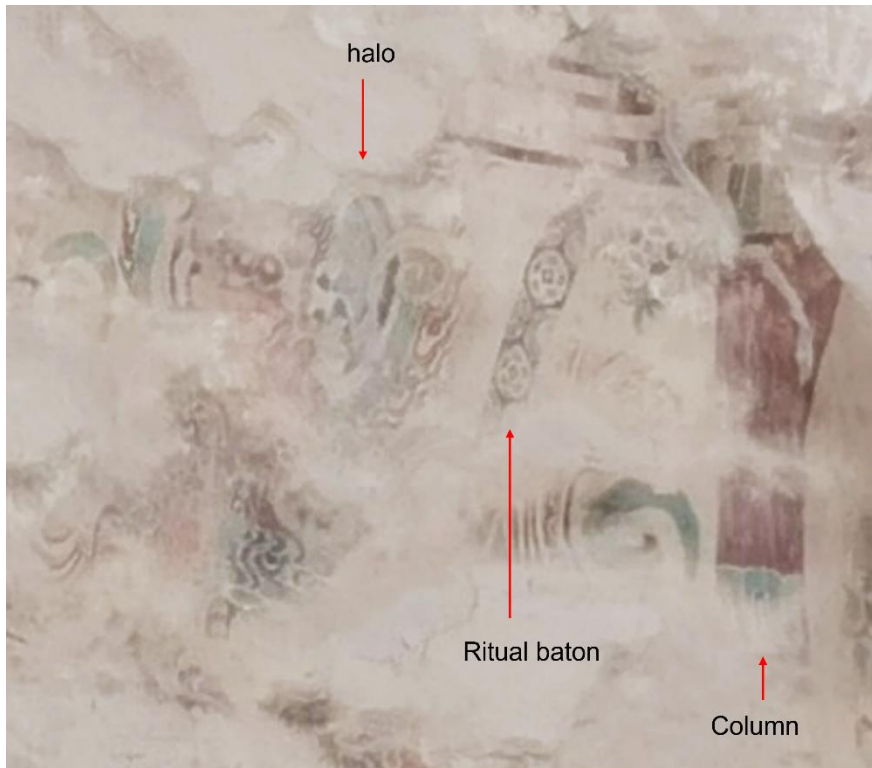


Figure 4-28. Details in the north bay of the pictorial hall in figure 4-23. Photo and annotation by author.

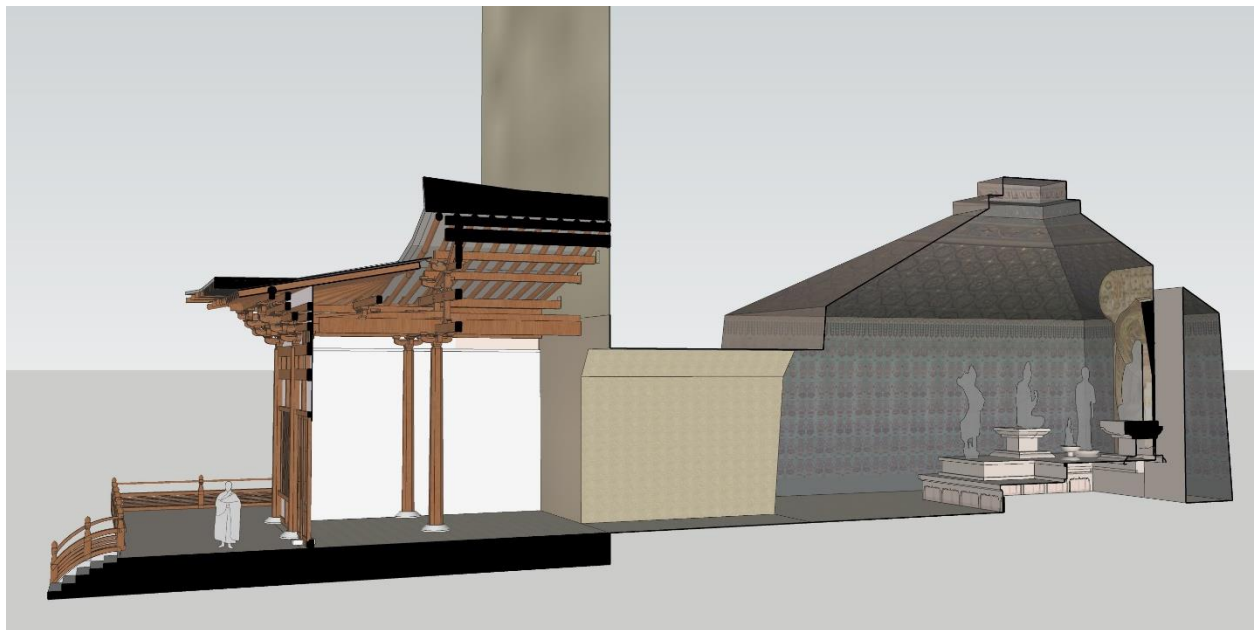


Figure 4-29. Sectional perspective of Cave 94 with the late-medieval ante-hall as reconstructed by author. Drawing by author.



Figure 4-30. Author's theoretical reconstruction of the late-medieval ante-hall of Cave 94 with the open-air mural above. Drawing by author.



Figure 4-31. Remaining open-air mural on the cliff face to the north of Cave 96 and above Caves 228–29. *Left*, photo by author, March 2022. *Right*, trace-copy line drawing (black lines) and theoretical reconstruction (gray lines) by author.



Figure 4-32. Author's theoretical reconstruction of the open-air mural between Caves 96 and 231. Photo collage by author.

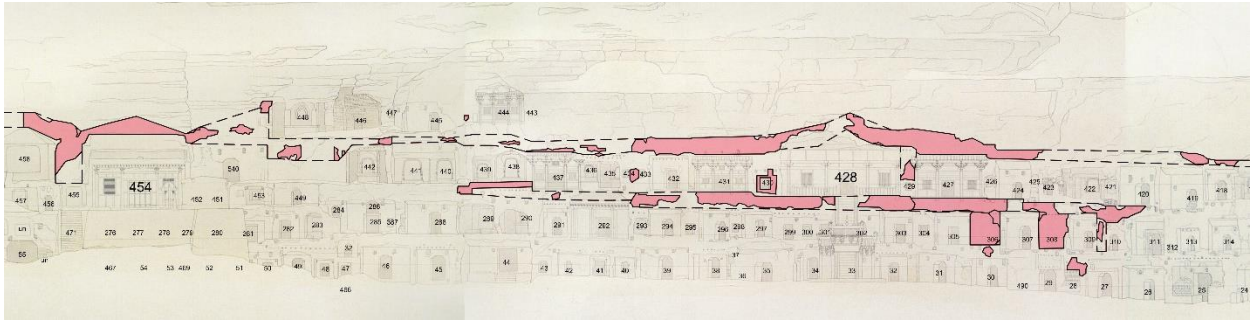


Figure 4-33. Distribution of open-air mural near Caves 428 and 454. Solid lines indicate the remaining murals as documented in 1914; dotted lines indicate the areas of open-air mural stripe. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotation by author.



Figure 4-34. A recent photo of the area around Cave 428. The decorative gateway was constructed in the Qing dynasty, the roof that shelters the open-air murals added in the 1950s, and the concrete passageways in the 1960s. Photo by author, March 2022.



Figure 4-35. The timber-structured façade and open-air mural of Mogao Cave 428. A Qing or modern reconstruction with old timber members from the tenth century. Photo by author.



Figure 4-36. Theoretical reconstruction of the timber-structured porch and open-air mural of Mogao Cave 428. Drawing by author.



Figure 4-37. The timber-structured façade and open-air mural of Mogao Cave 431 overlapped with trace-copy line drawings and reconstructed ridge ornaments. Photo and drawing by author.



Figure 4-38. A group of figures on the pictorial roof of the canopy-shaped niche showing a mythical bird standing on a lotus flower and flanked by Kalaviṅka dancers and baby musicians on the sides. West ceiling slope, Mogao Cave 359, mid-Tang period. Photo courtesy of Dunhuang Academy.



Figure 4-39. A buddha preaching scene in the *Avatamsaka Sūtra* transformation tableau showing a mythical bird standing in the center of the roof a buddha hall. North ceiling slope, Mogao Cave 85, late-Tang period. Photo by author with permission of Dunhuang Academy.

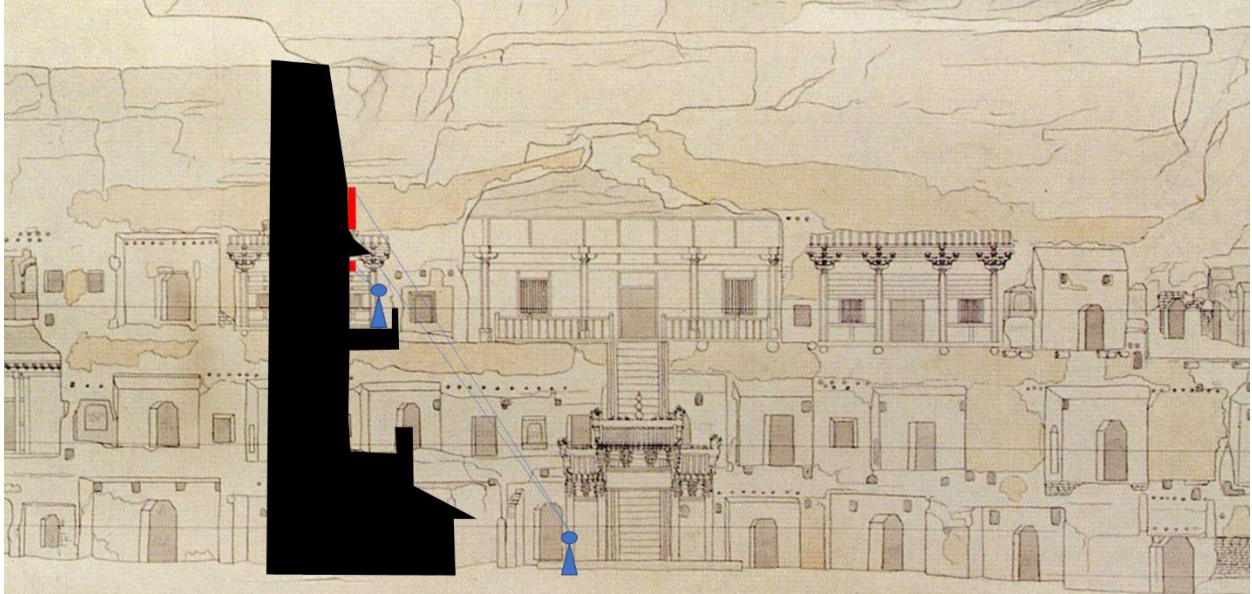


Figure 4-40. A diagram of the viewing angle design for the open-air mural and painting on the façade of Cave 431. Drawing by author.



Figure 4-41. Two layers of open-air mural between Caves 428 and 427 and above 429 showing an under layer that bears the image of a monk facing Cave 428 and an upper layer that bears the image of a monk facing Cave 427. Photo by author, September 2021.

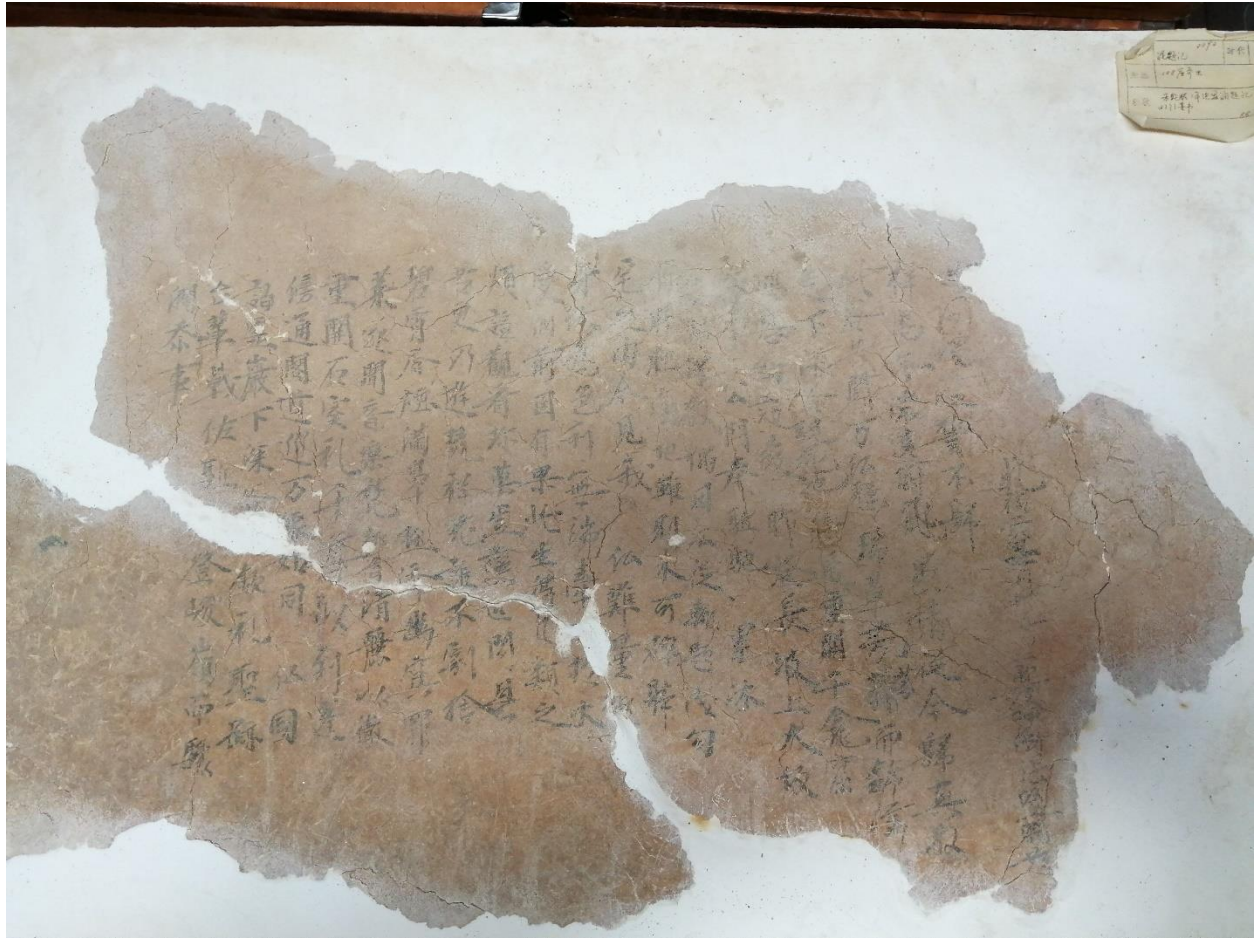


Figure 4-42. Zhang Yingrun's inscription on a wall of the ante-hall of Cave 108, dated 939 CE. Removed from the wall during archaeological excavation and now preserved in the collection of Dunhuang Academy. Photo by author with permission of Dunhuang Academy, August 2019.



Figure 4-43. Dong Shubin (b. 1968, China). Borderless, installed in the Gobi Desert of Guazhou County, Jiuquan City, Gansu Province, China, October 15, 2018. 60 m (l) \times 21 m (h) \times 40 m (w). white steel tubes and joints. Photograph courtesy of Dong Shubin.

5. Renewing the Old District

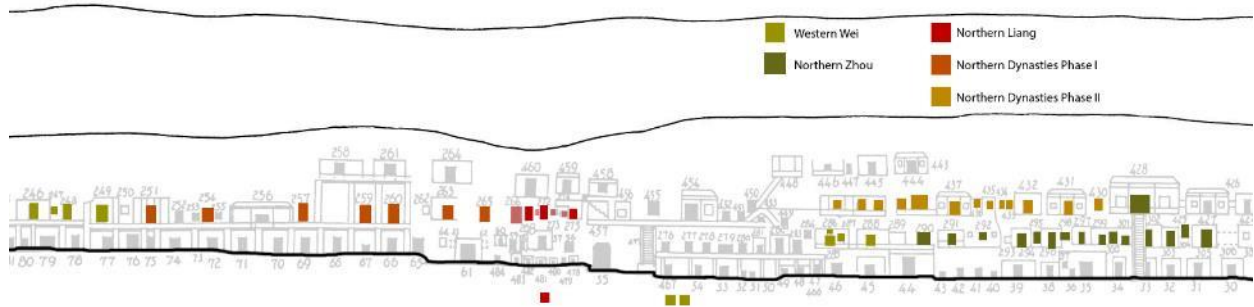


Figure 5-1. “The old district” of the Mogao complex where caves were constructed during the Northern dynasties, based on Ma De’s studies. Drawing by author.

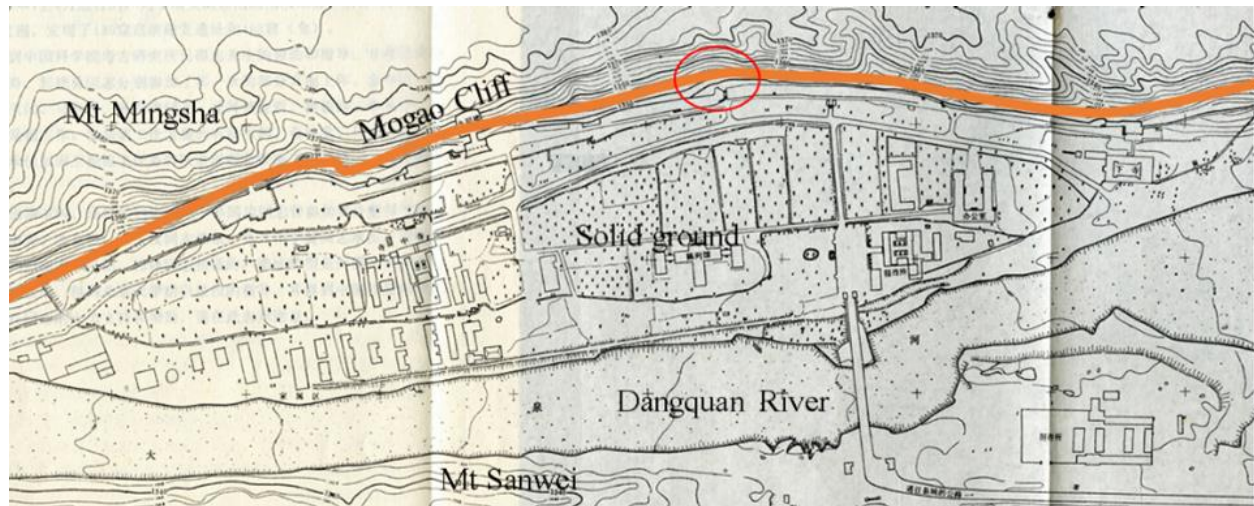


Figure 5-2. Master plan of The Mogao caves showing “the old district” in the red circle. After Pan and Ma, *Mogao ku kuqian diantang yizhi*, plate 2. Annotation by author.

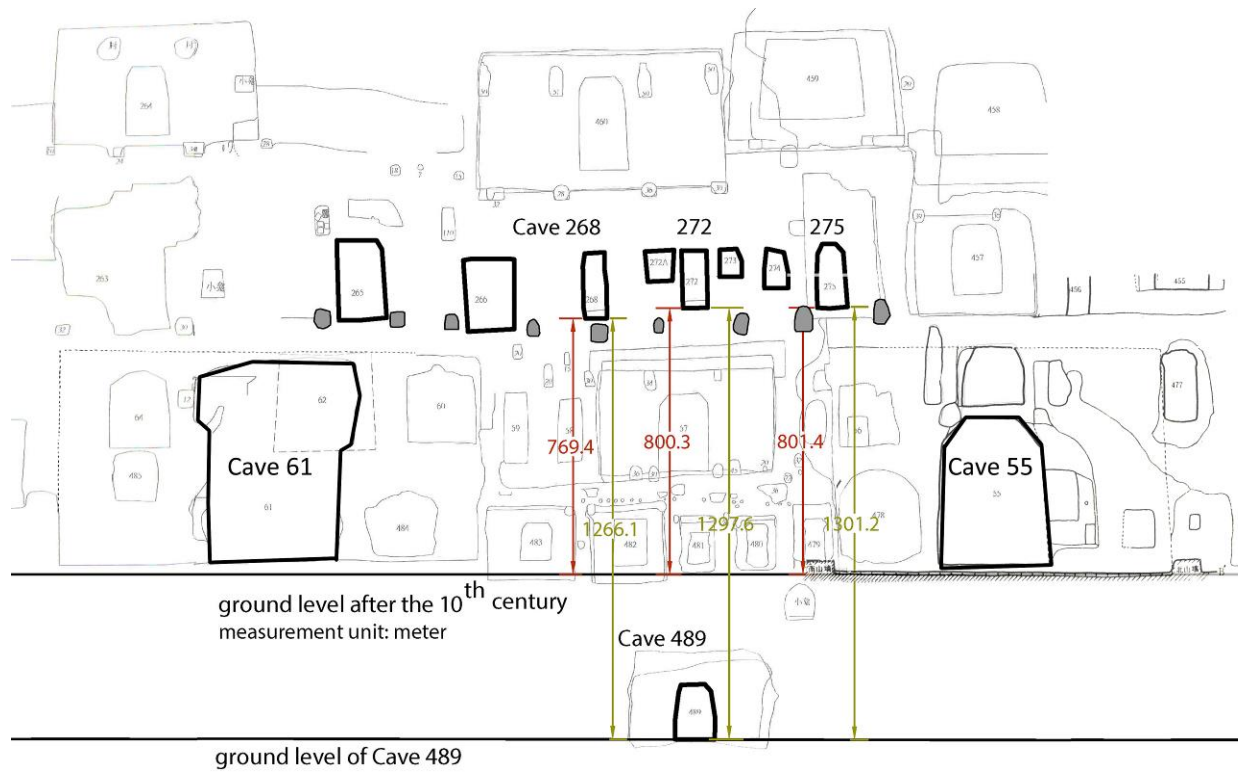


Figure 5-3. The location of Mogao Caves 268–75 on the cliff face and their heights above the ancient and modern ground levels. Modified after Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 22, fig. 5 and Pan and Ma, *Mogao ku kuqian diantang yizhi*, figs. 22, 27. Annotation by author.



Figure 5-4. The major cross-legged bodhisattva statue and four side-niches with bodhisattva statues in Cave 275. Wu, *Spatial Dunhuang*, 119, fig. 3.14.

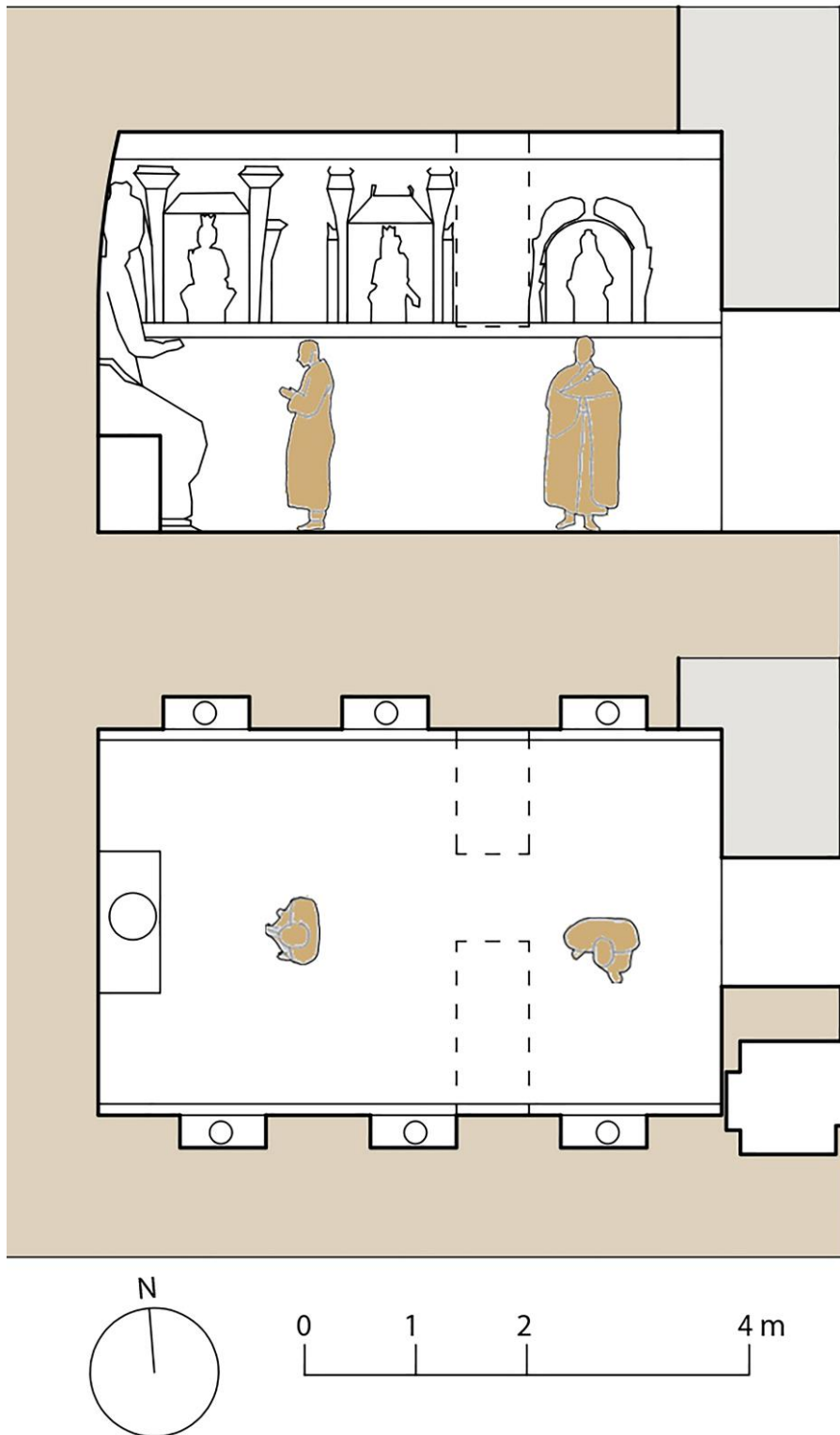


Figure 5-5. Plan and section drawings of Cave 275. Dashed lines indicate the partition wall added in the tenth century and removed in 1991. Drawing by author.

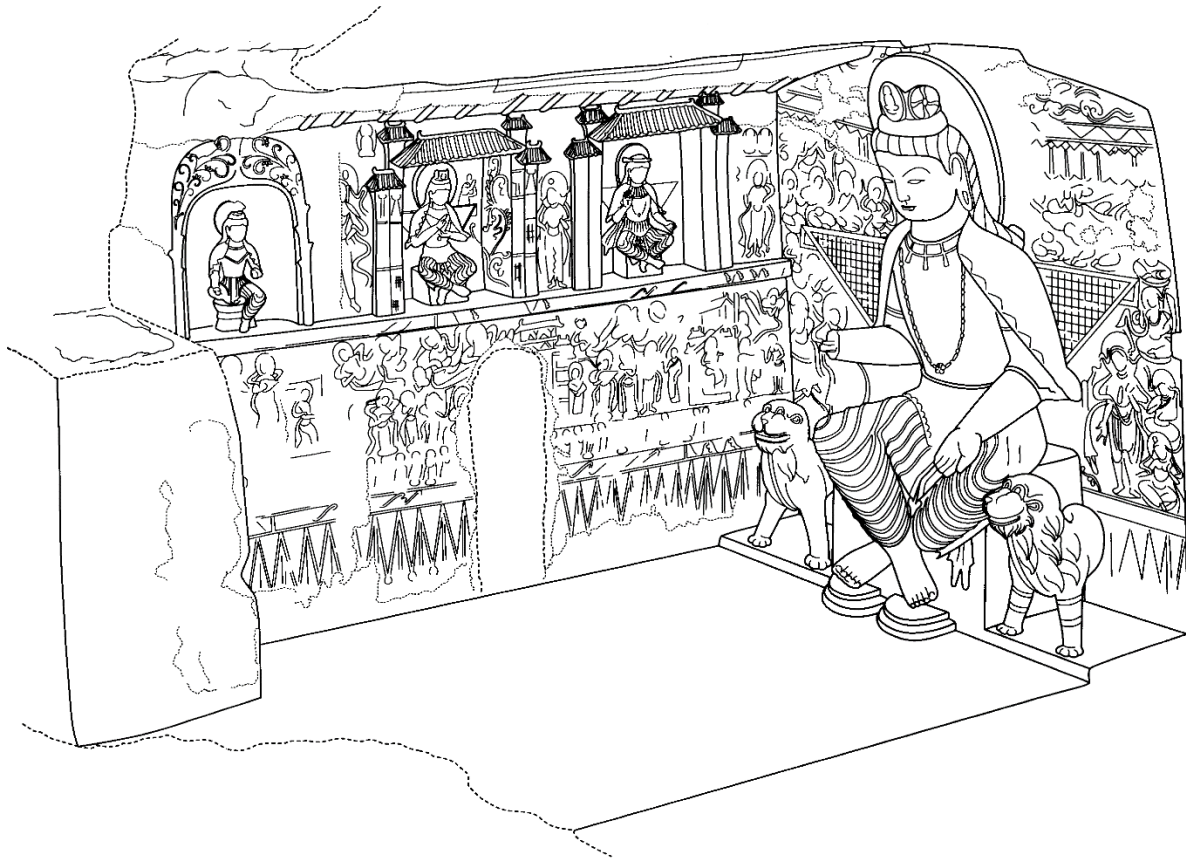
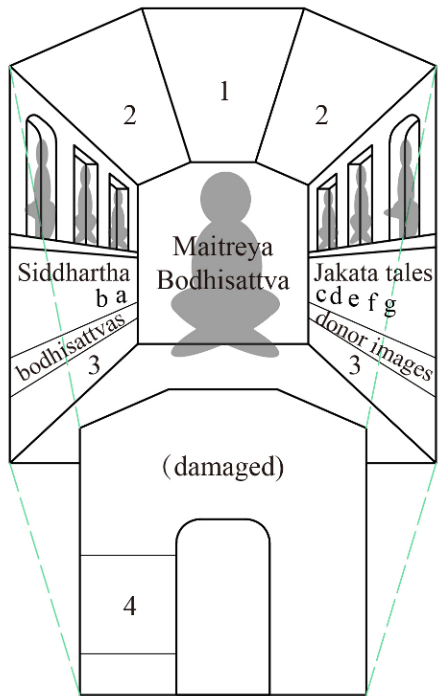
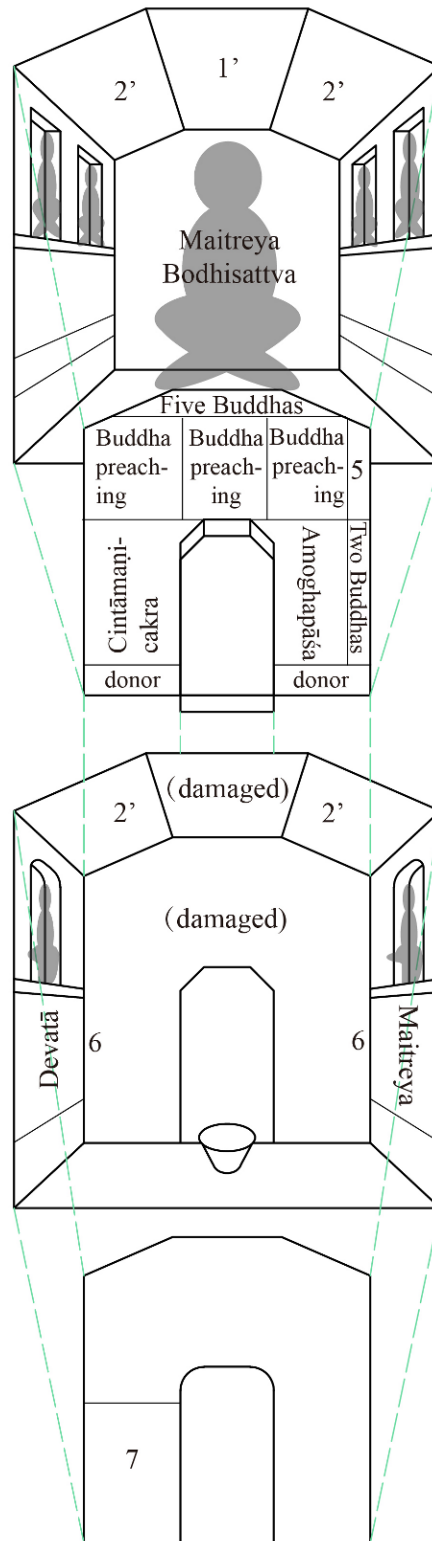


Figure 5-6. Perspectival drawing of Mogao Cave 275 showing the west and south walls. After Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 153, fig. 107.

**Original Status
(with first-time refurbishment)**



**Tenth-century Status
(i.e. second-time refurbishment)**



Legend:

1. Superimposed quadrilaterals | 1'. Square canopies
 2. Rafter patterns | 2'. Rafters & thousand-buddhas
 3. Draperies patterns
 4. Scene of a monastic gathering in a mountain monastery (first layer of repainting)
 5. Bodhiattvas
 6. Remains of decorative borders
 7. Remains of thousand-buddha motifs
- Prince Siddhartha's Excursion to Four City-gates:*
- a. Encountering an old man
 - b. Encountering a monk
- Jakata tales:*
- c. A king punctured by one thousand nails
 - d. A King lighted one thousand lamps on his wounds
 - e. King Sibi offered his flesh to save the life of a pigeon
 - f. Moonlight King gave his head to Raudraksa
 - g. A king gave his eyes to a blind Brahman

Figure 5-7. Distribution of iconographic motifs in Mogao Cave 275. Drawing by author.

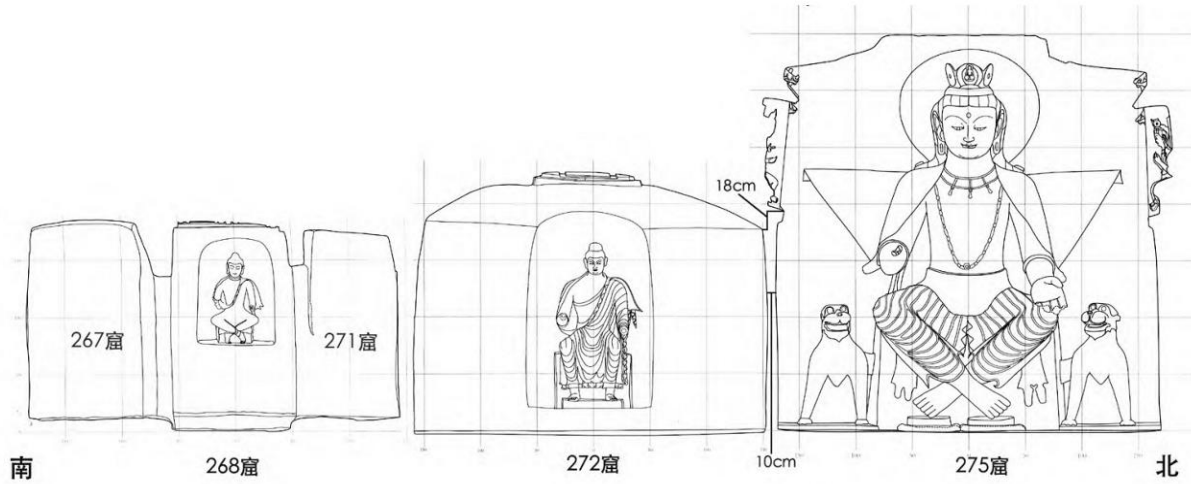


Figure 5-8. Cross-section of the initial group comprising Caves 268, 272, and 275. After Zhao, “Dunhuang Mogao ku beiliang sanku kaizao cidi lunshu,” 77, fig. 12.

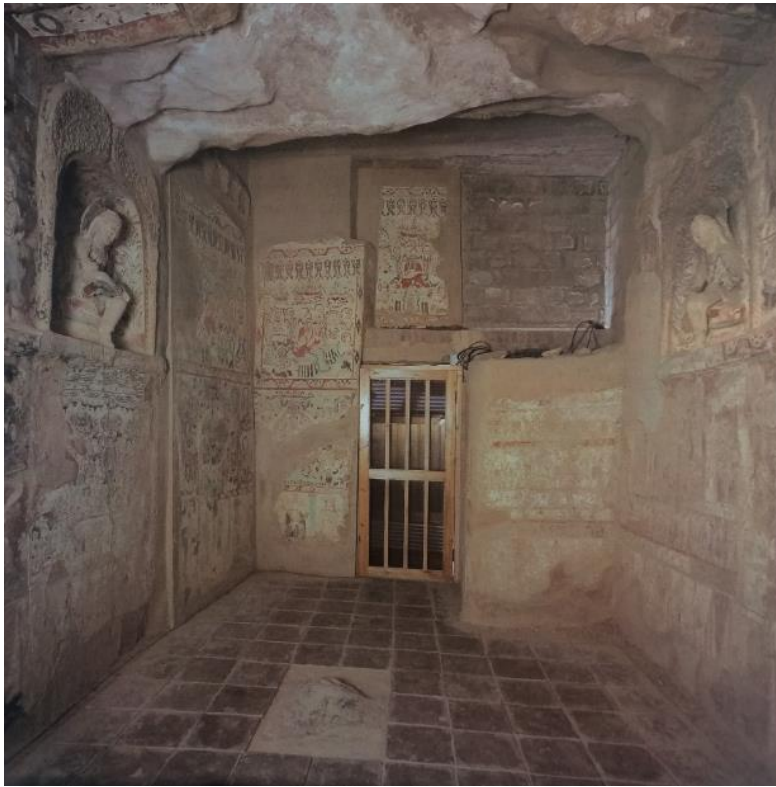


Figure 5-9. The east side of Cave 275 showing tenth-century murals at the southeast corner that were originally placed on the west-facing side of the partition wall and, in the foreground, traces of an offering platform made in the tenth century in the antechamber of Cave 275. After Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, vol. 2, plate 172.

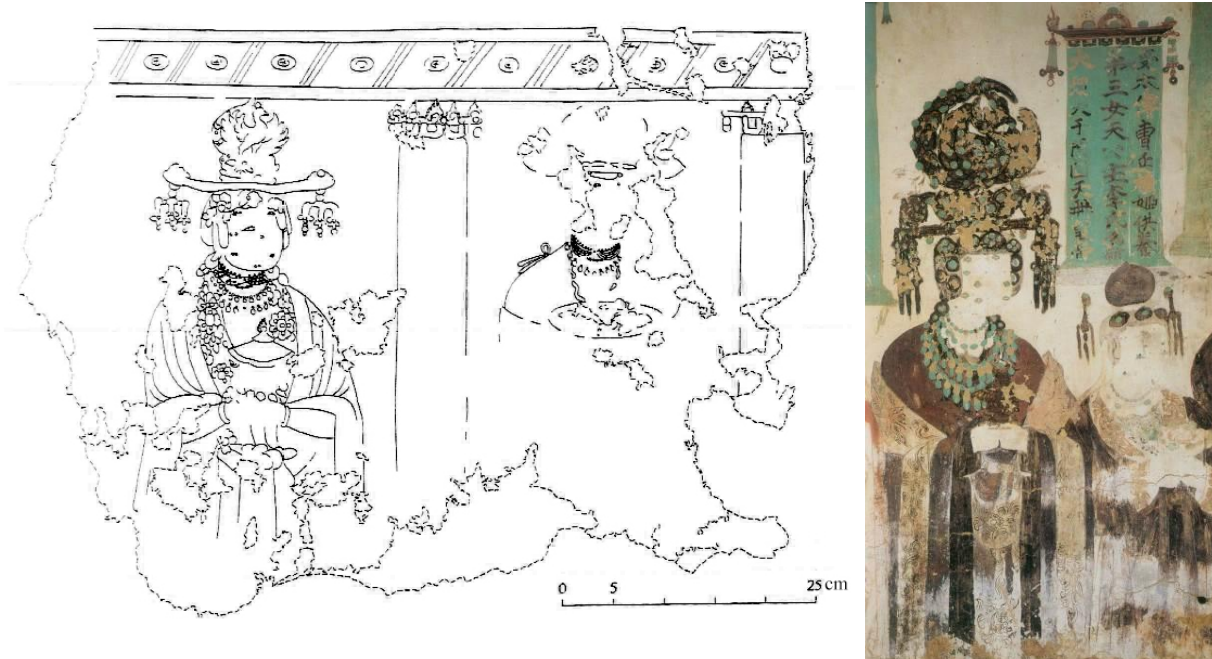


Figure 5-10. Donor portrait on the northern wall bottom part of Cave 275 (left), in comparison to the Uyghur Princess portrait from Cave 61 (right). After Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 225, fig. 164; Gao, “Dunhuang Mogao ku di 55 ku yanjiu,” 46, fig. 2-8.

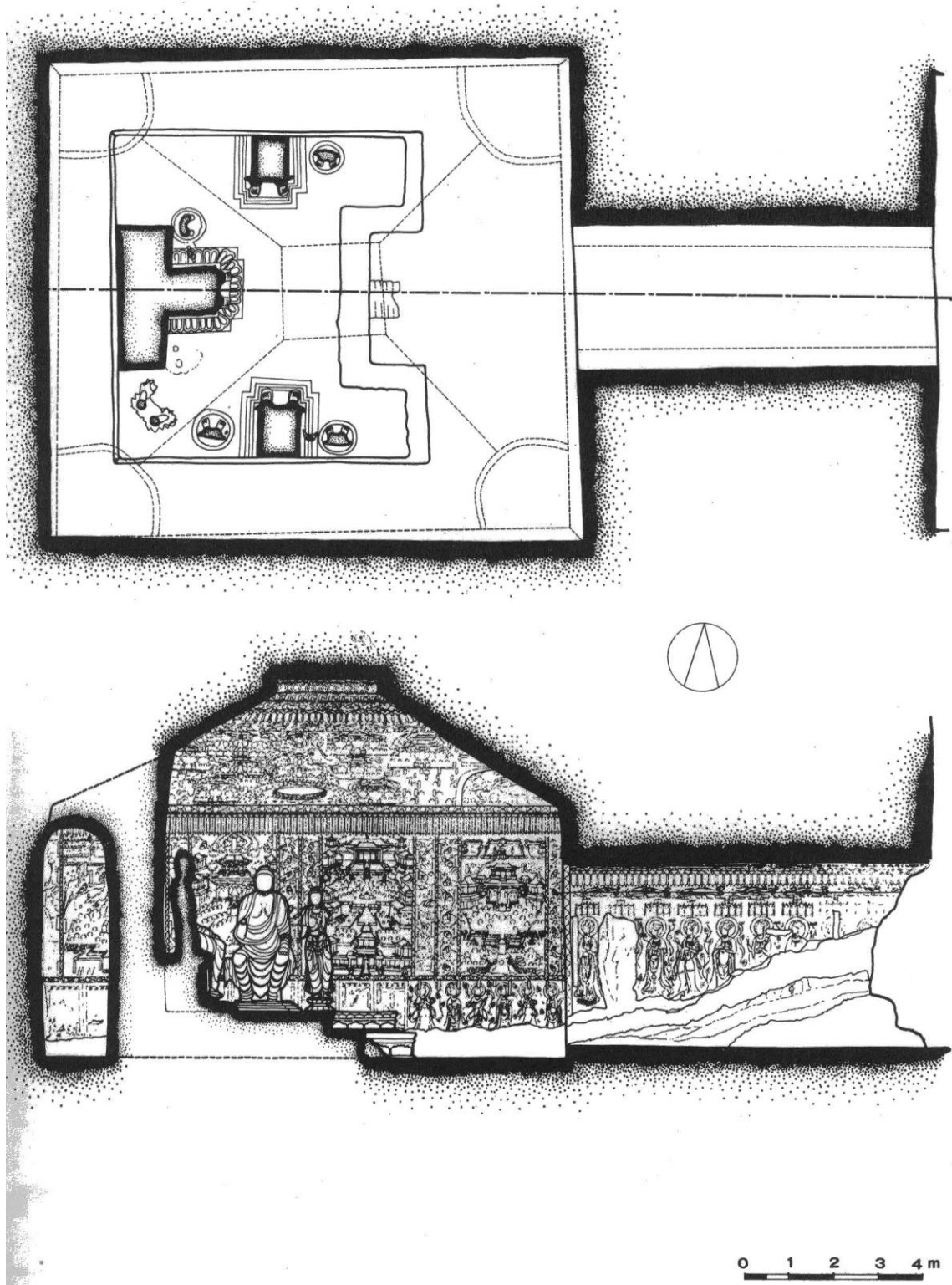
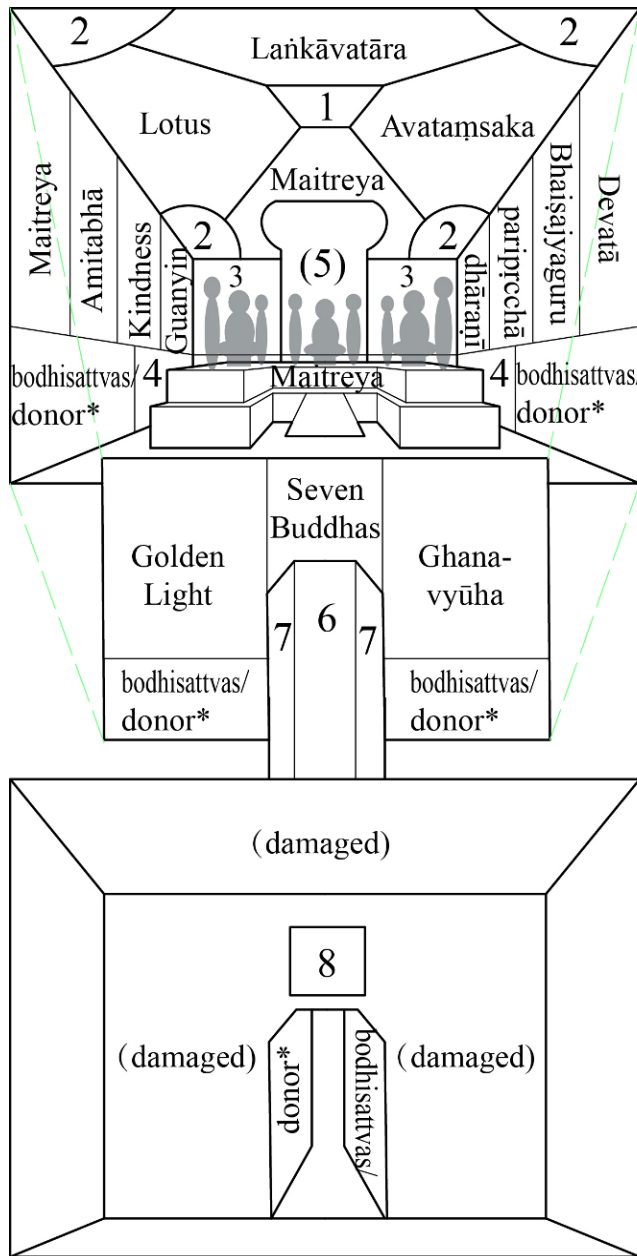


Figure 5-11. Plan and section drawings of Mogao Cave 55. After Dunhuang wenwu yanjiu suo, *Dunhuang Mogao ku*, 5:233.



Figure 5-12. The front view of the statue set on the backscreened altar in Cave 55. Photo courtesy of Dunhuang Academy.



Legend:

1. Coiled twin dragons in lotus
 2. Four Heavenly Kings
 3. Magic Competition
 4. Sutra of the Wise and the Foolish
 5. Liangzhou Miraculous Image (back side)
 6. floral pattern (repainting)
 7. draperies pattern (repainting)
 8. niche
- *. bodhisattva images are repainting and donors are original paintings

Abbreviation:

dhāraṇī: Uṣṇīṣa-vijaya-dhāraṇī
 pariprcchā: Viśeṣacinta-brahma-pariprcchā
 Guanyin: Guanyin (Avalokiteśvara) Chapter
 in Lotus Sutra
 Kindness: Repaying Kindness

Figure 5-13. Distribution of Iconographical motifs in Mogao Cave 55. Diagram by author.

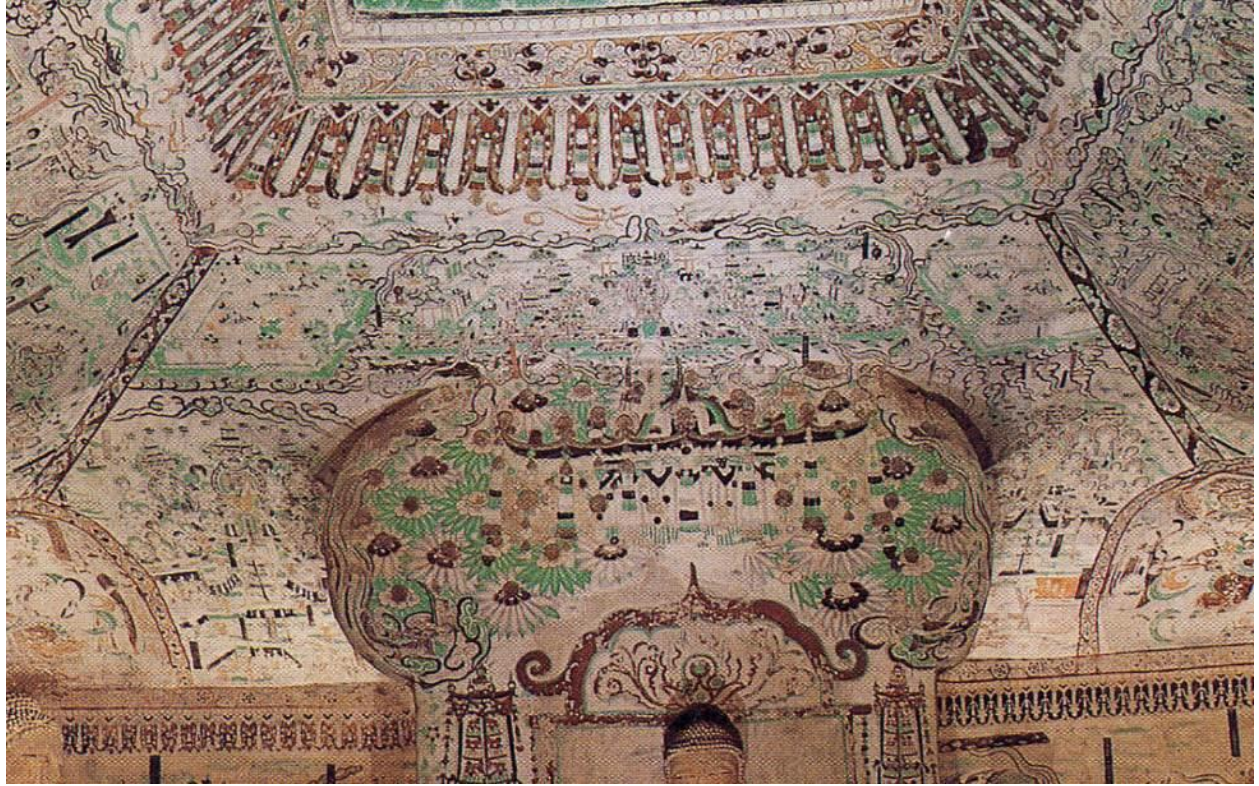


Figure 5-14. Maitreya transformation tableau on the west slope of Cave 55. After Dunhuang wenwu yanjiu suo, *Dunhuang Mogao ku*, vol. 5, plate 87.

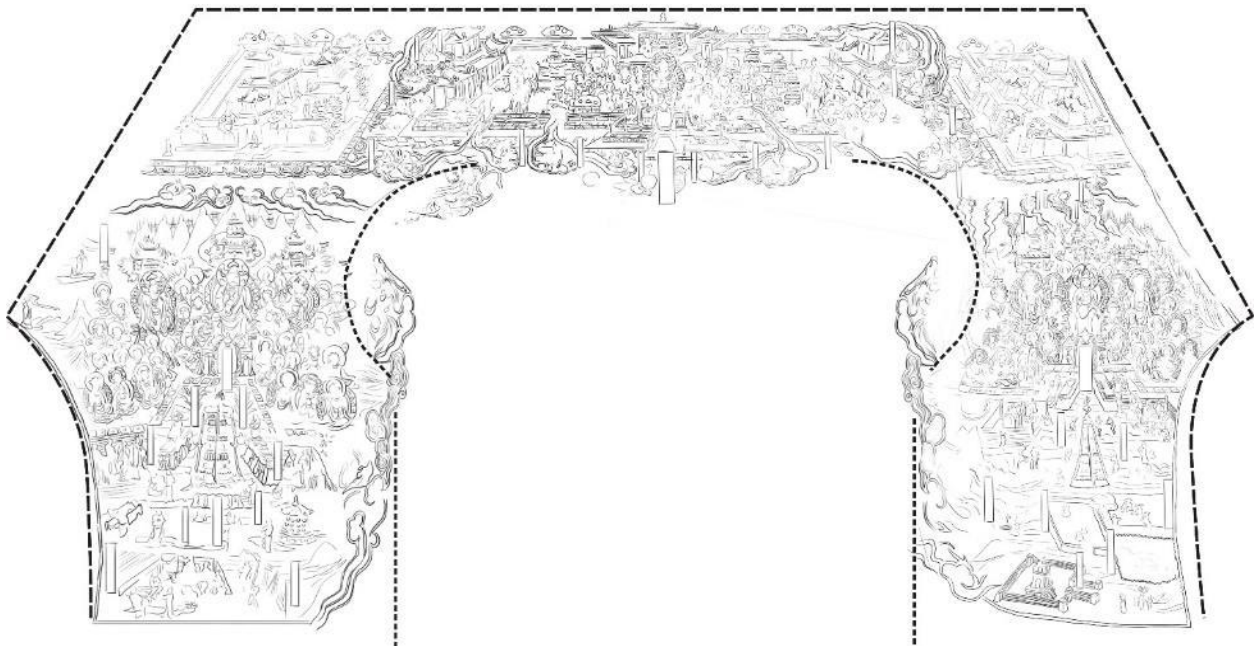


Figure 5-15. Line-drawing copy of the Maitreya transformation tableau on the west slope of Cave 55. After Gao, "Dunhuang Mogao ku di 55 ku yanjiu," 81, fig. 3-10.

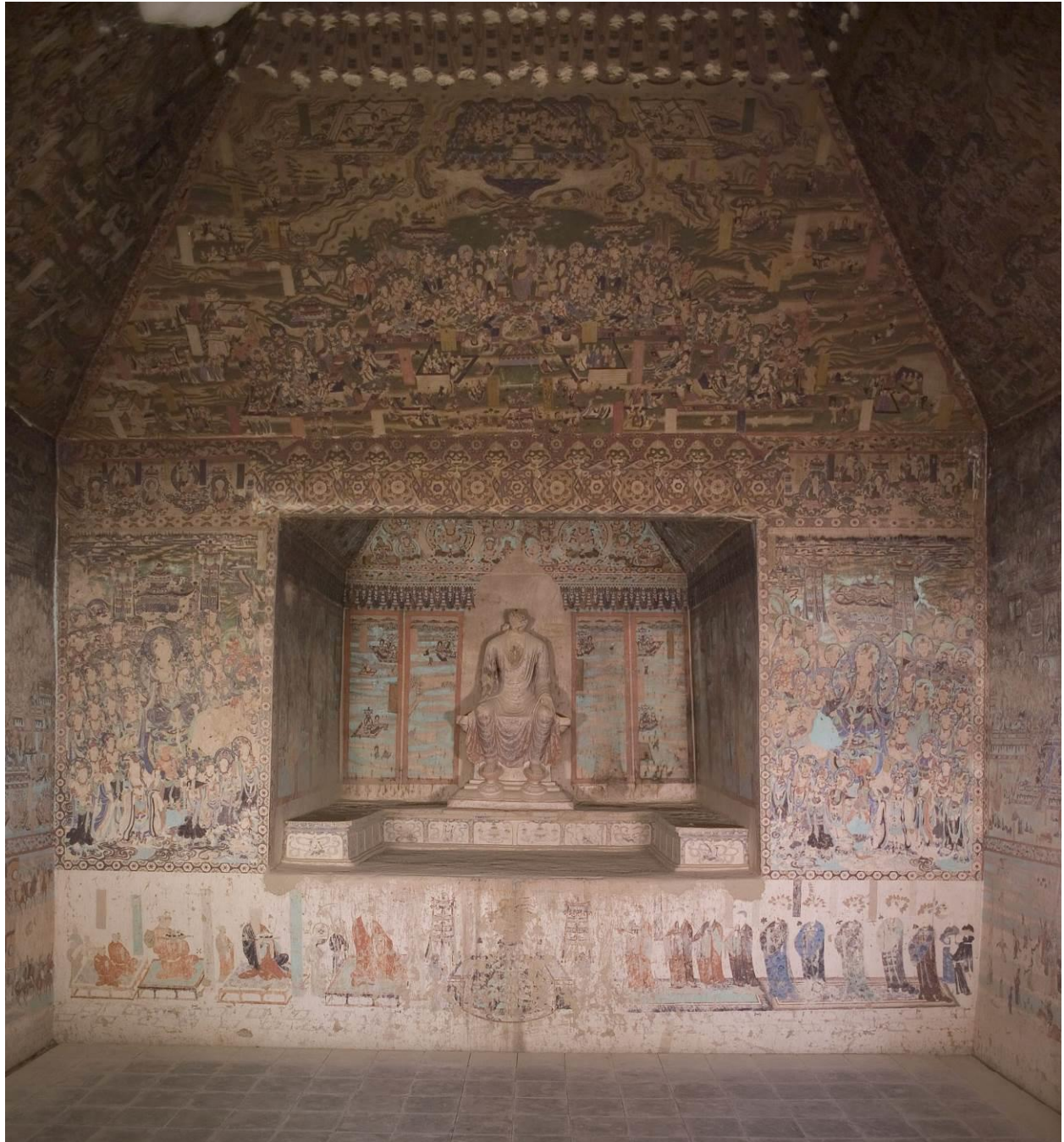


Figure 5-16. Interior view of Mogao Cave 156, late-Tang period. Photo courtesy of Dunhuang Academy.



Figure 5-17. Trace-copy line drawing of the Maitreya transformation tableau on the south wall of Cave 55. After Gao, "Dunhuang Mogao ku di 55 ku yanjiu," 154, fig. 5-1.

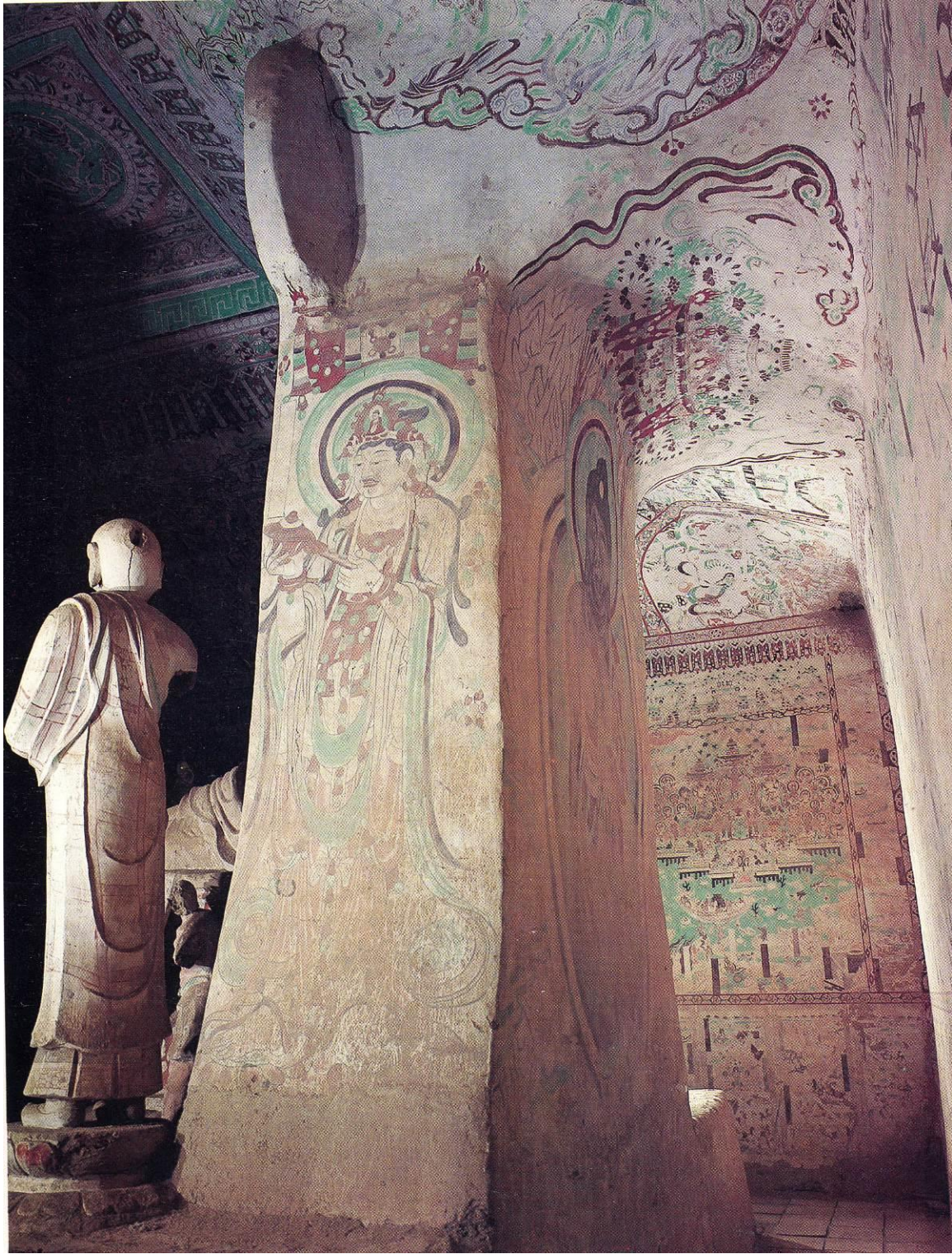


Figure 5-18. West- and north-facing sides of the backscreen in Cave 55 showing a row of *apsaras* flying from the bottom of the west ceiling slope to the east-facing side of the backscreen. After Dunhuang wenwu yanjiu suo, *Dunhuang Mogao ku*, vol. 5, plate 88.



Figure 5-19. Front view of the statue-set under the ceiling. After Dunhuang wenwu yanjiu suo, *Dunhuang Mogao ku*, vol. 5, plate 87.

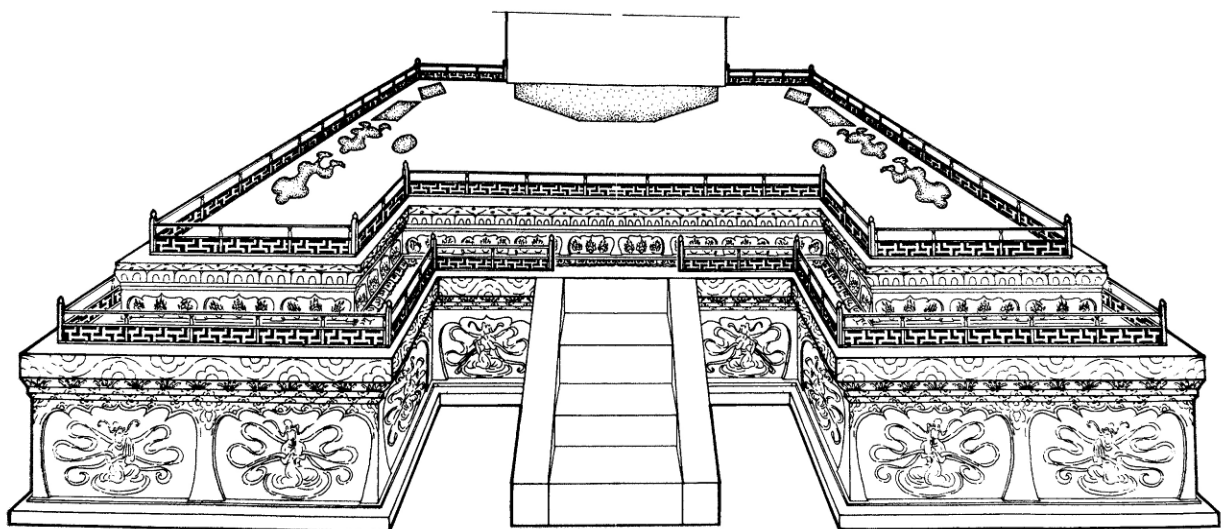


Figure 5-20. Theoretical reconstruction of the miniature wooden railings on the central altar in a typical central-altar cave. After Sun and Sun, *Shiku jianzhu juan*, 143–4.



Figure 5-21. Maitreya transformation tableaux under the twin-tree niche on the north wall of Cave 275. Photo courtesy of Dunhuang Academy.

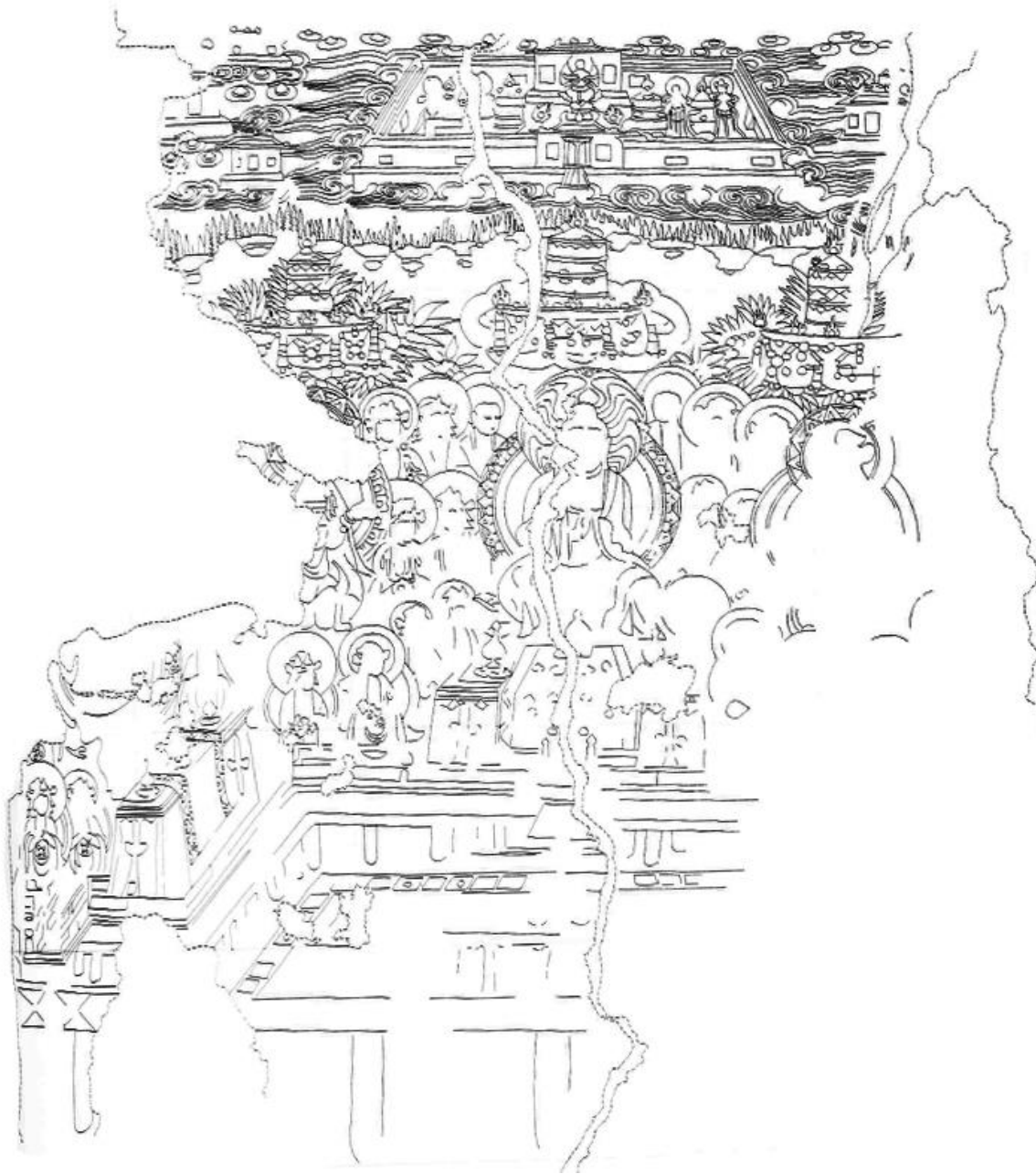


Figure 5-22. Line-drawing copy of the Maitreya transformation tableau in Cave 275. After Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 231, fig. 170.



Figure 5-23. Two lion images beside the pedestal of the main Buddha statue in Cave 55. Photo by author with permission of Dunhuang Academy, November 2022.



Figure 5-24. The offering platform in Cave 274. Photo in 1965. Aftr Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 330, fig. 36.

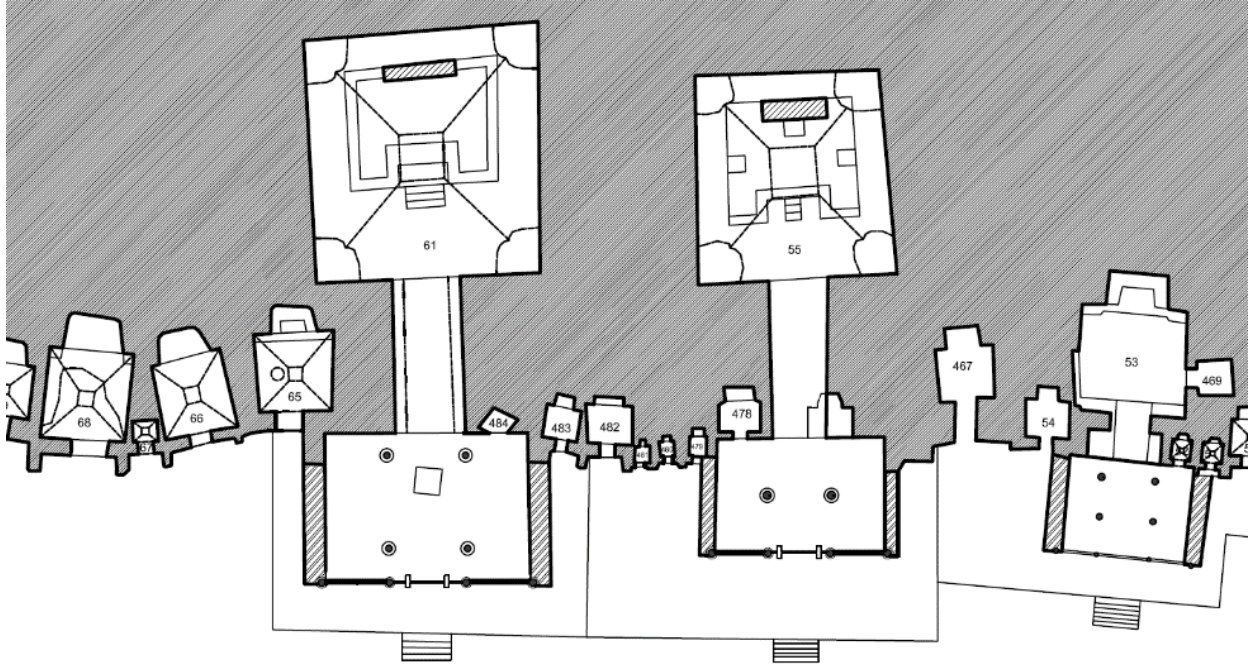


Figure 5-25. Plan of the ground level caves in the vicinity after the construction of Cave 55. Based on data from Pan and Ma, *Mogao ku kuqian diantang yizhi* and Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5. Drawing by Author.

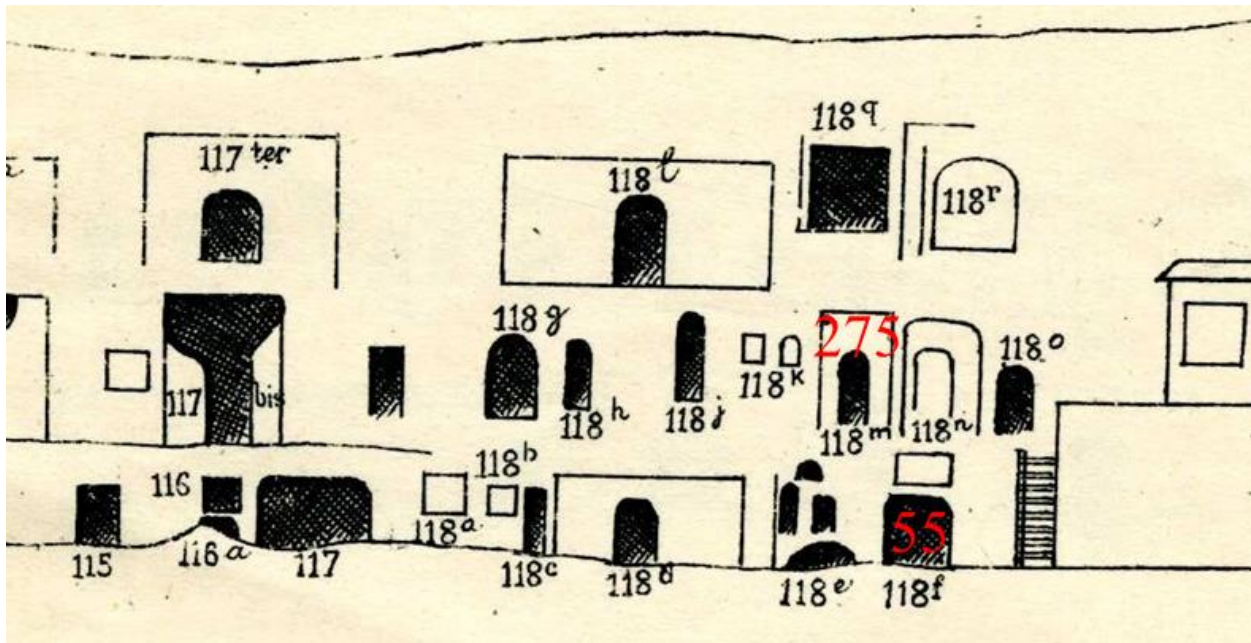


Figure 5-26. Paul Pelliot's cave numeration and cliff drawing of the vicinity of Caves 275 and 55. After Pelliot, *Grottes de Touen-houang carnet de Notes de Paul Pelliot*. Annotation by author.



Figure 5-27. Oldenburg's expedition team's cave numeration and cliff drawing of the vicinity of Caves 275 and 55 showing the staircase on north side of Cave 55. After Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 2.

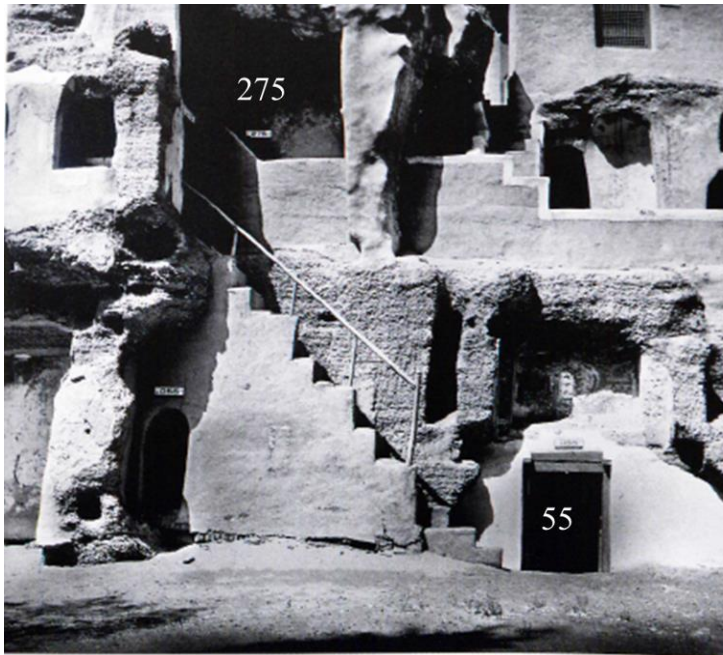


Figure 5-28. Cliff section around Caves 275 and 55 (connected by the stairs) in 1956. After Fan, Cai, and Huang, *Mogao ku di 266-275 ku kaogu baogao*, 320, fig. 7.

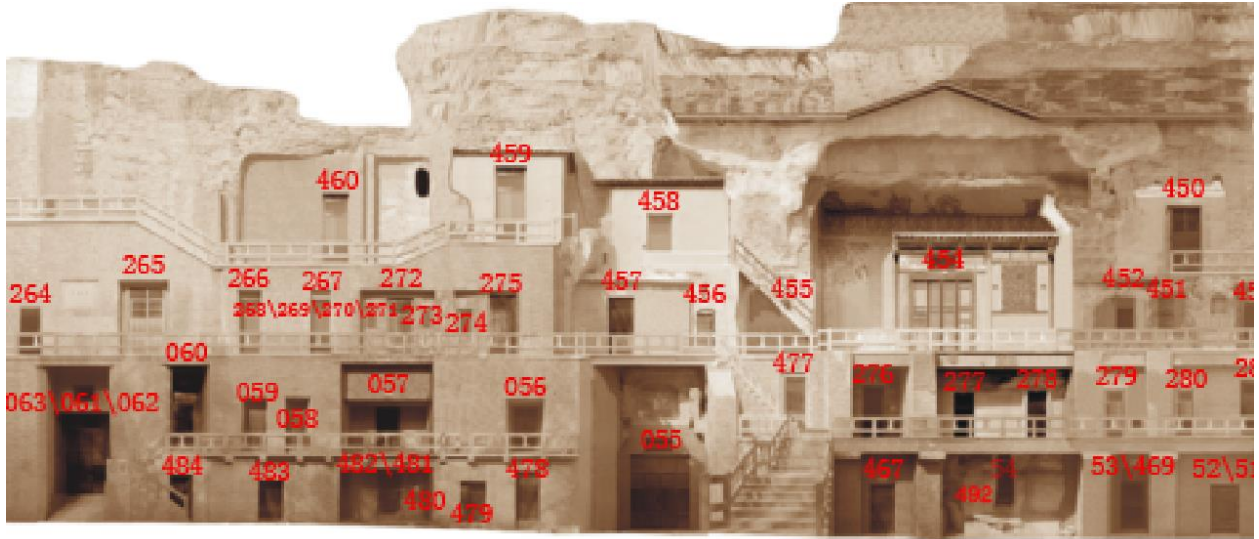


Figure 5-29. Current-day site condition of vicinity of Caves 275 and 55 showing a stairway on the right (north) of Cave 55 to the third level where Cave 275 is located. Photo courtesy of Dunhuang Academy.

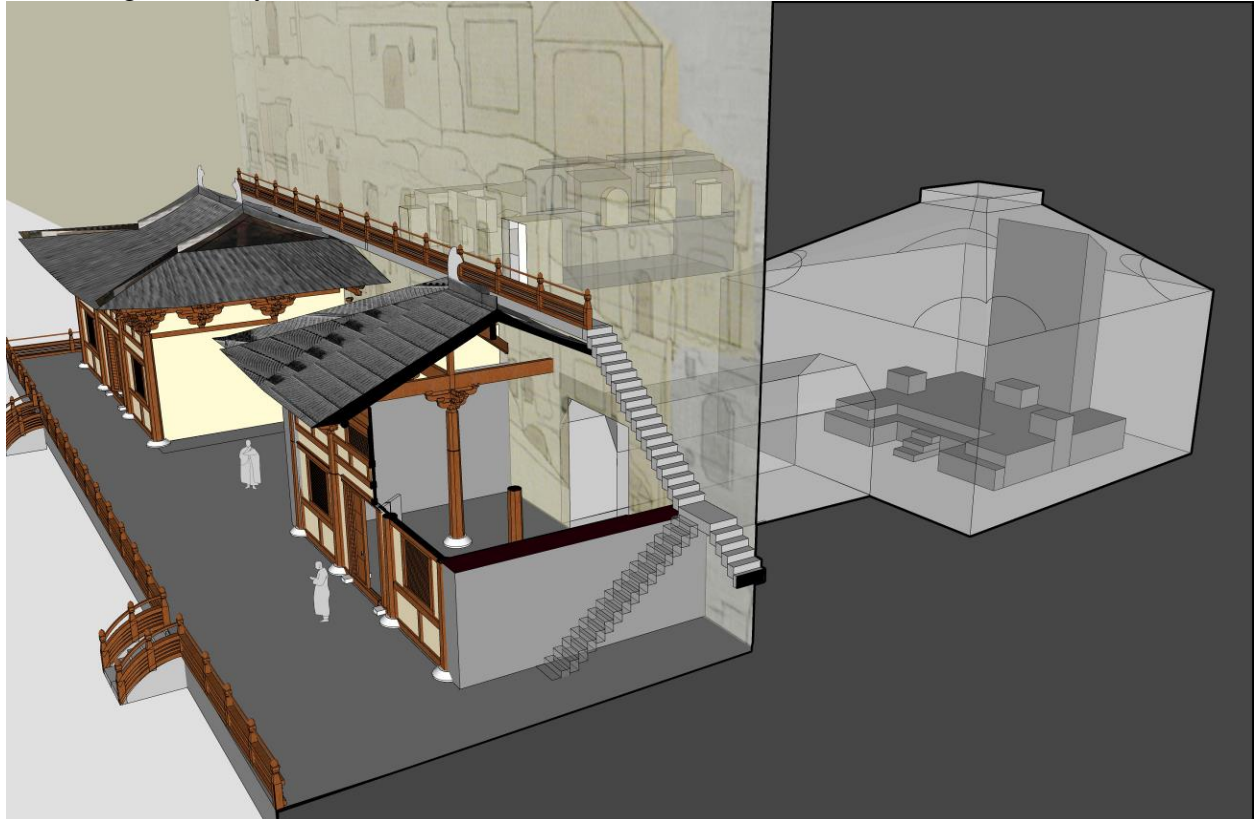


Figure 5-30. Author's theoretical reconstruction of the stairways connecting the ground and upper levels near Caves 55 and 275 in history. Drawing by author.



Figure 5-31. Archaeological remains in front of Mogao Caves 467 and 53, highlighting a built-in stairway on the south side behind the west wall of the antechamber of Cave 476. After Pan and Ma, *Mogao ku kuqian diantang yizhi*, plate 32-1. Annotation and cave numbers added by author.



Figure 5-32. Model of the site of Cave 55 after the archeological excavation and before cliff reinforcement showing a stairway on the upper right corner of the antechamber of Cave 55 and passing in front of Cave 477. Model made by He E in 1963–66, in the collection of the Dunhuang Academy. Photo by author.



Figure 5-33. A tunnel to north of Cave 234 for vertical circulation at the Mogao caves, with modern renovation of the stairs. Photo by author, 2021.

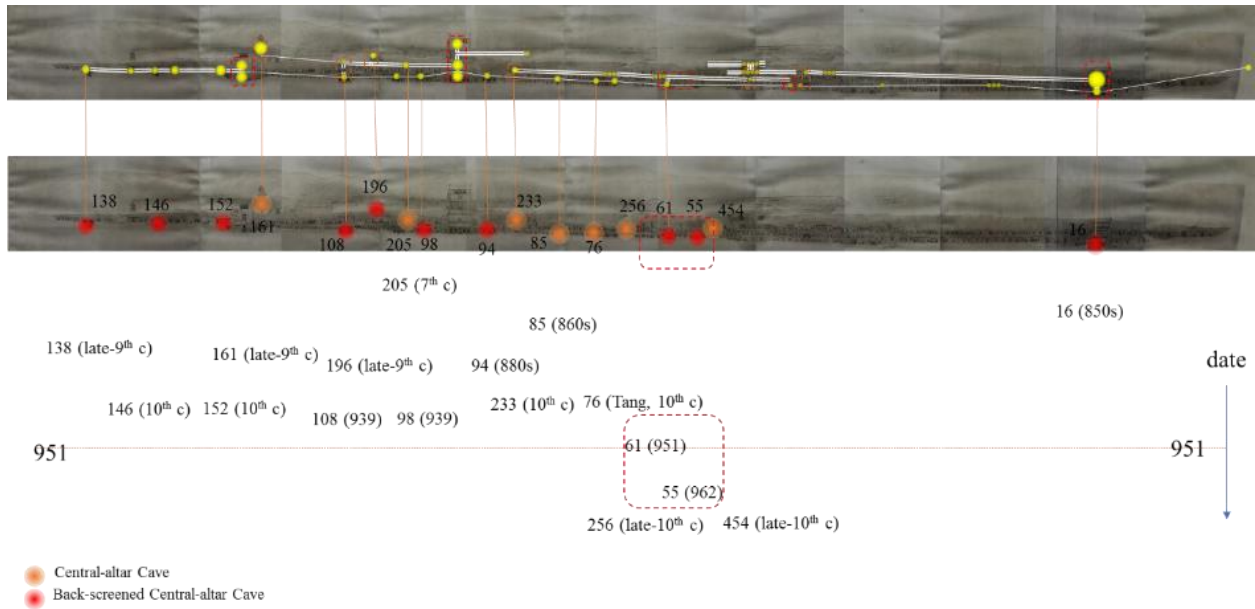


Figure 5-34. Overview of the location, construction date and types of the central-altar caves at Mogao. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Diagram by author.

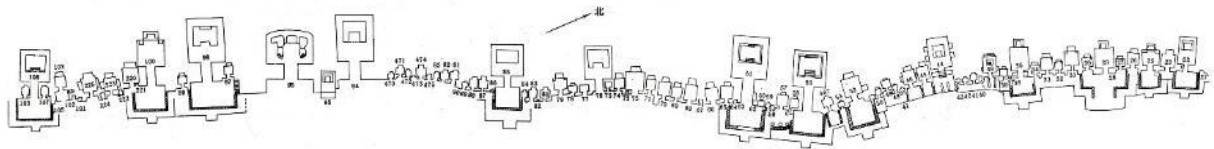


Figure 5-35. Plan of the ground-level caves at Mogao. After Pan and Ma, *Mogao ku kuqian diantang yizhi*, 9, fig. 7.

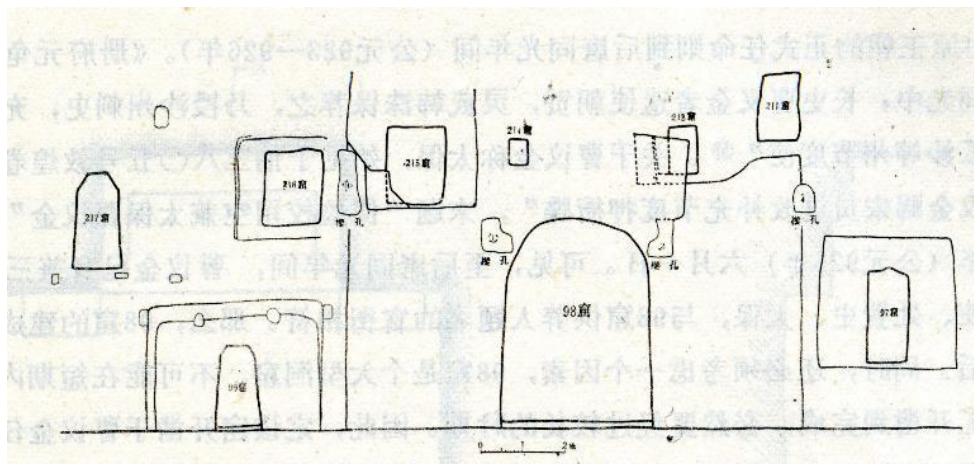


Figure 5-36. Elevation drawing of Cave 98 and neighboring caves. After Pan and Ma, *Mogao ku kuqian diantang yizhi*, 13, fig. 9.



Figure 5-37. Interior of Cave 98 in 1943–44. James and Lucy Lo Photograph Archive.



Figure 5-38. South ceiling slope of Cave 98. James and Lucy Lo Photograph Archive.

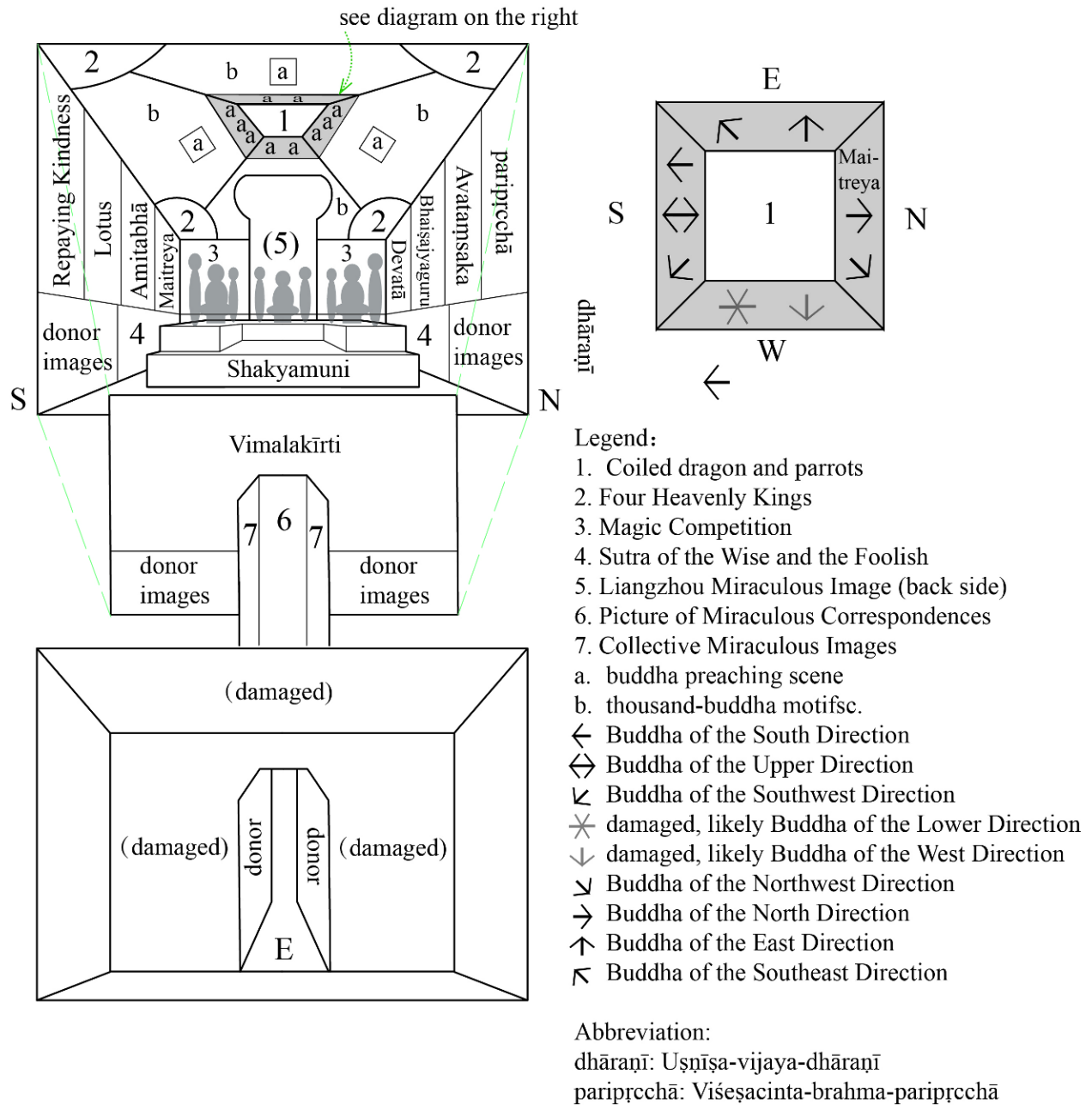


Figure 5-39. Distribution of iconographical motifs in Mogao Cave 98. Diagram by author.

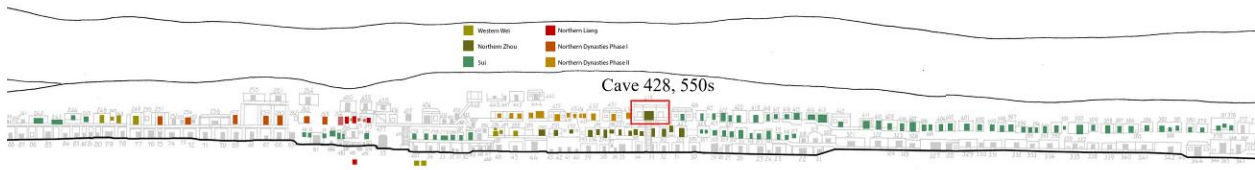


Figure 5-40. The neighboring area of the “old district” where more caves were built as its horizontal extensions during the Sui dynasty, based on Ma De’s studies. Diagram by author.

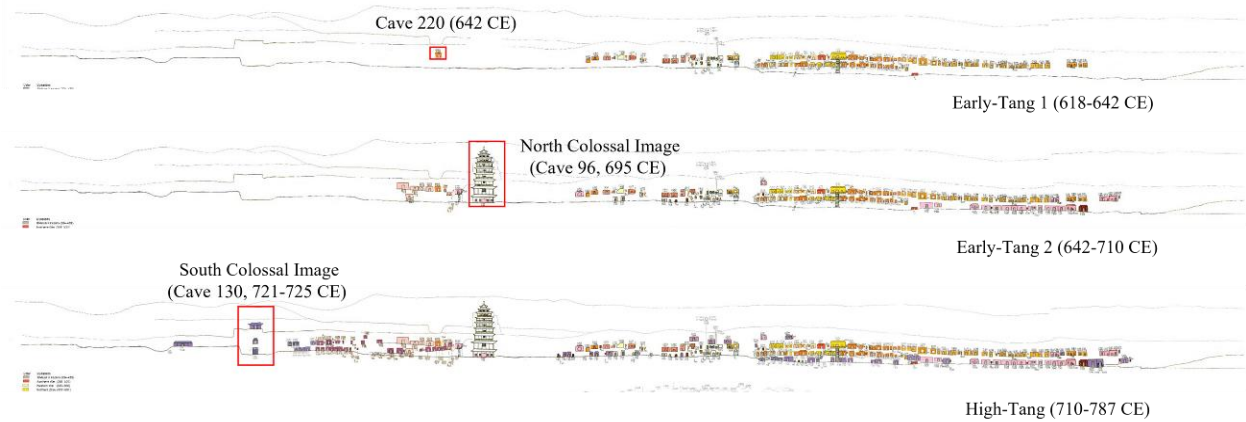


Figure 5-41. The development of the new “centers” of the Mogao caves in the early- and high-Tang periods. a) at the time of the construction of Cave 220; b) at the time of the construction of Cave 96; c) at the time of the construction of Cave 130. Base map after Shi, *Mogao ku xing*, vol. 2, fig. 6. Diagram by author.

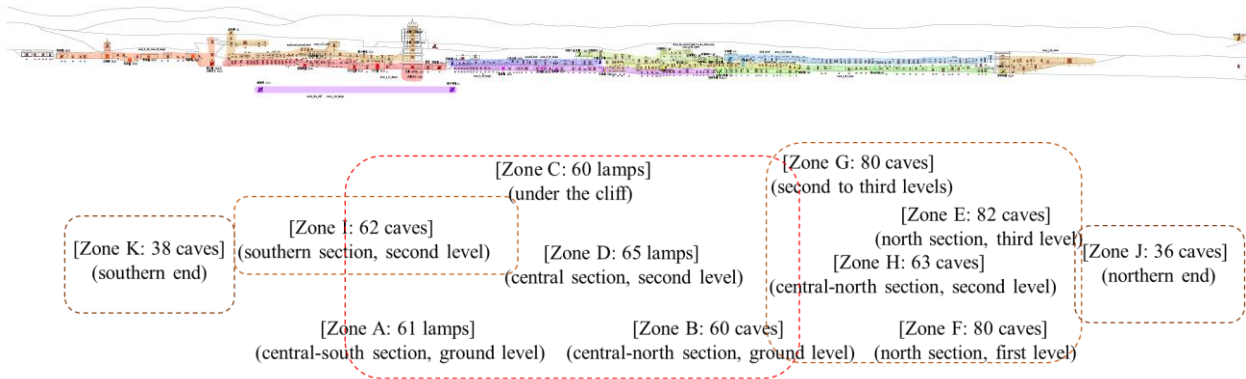


Figure 5-42. Zones of the Mogao complex according to the lantern distribution manuscript. a) the location of the zones on Mogao cliff; b) five super-zones as grouped by author. Diagram by author.

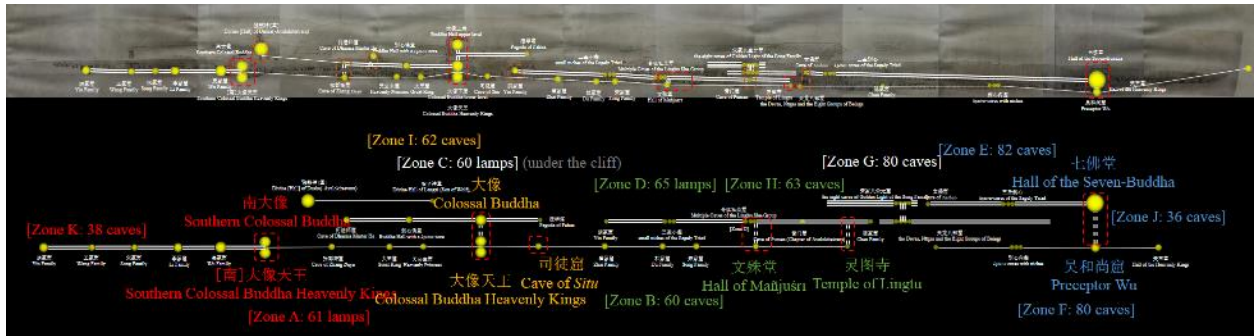


Figure 5-43. Connectivity of the zones according to the lantern distribution manuscript, highlighting the conjunct spots of the zones by dashed red frames. Base map after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Diagram by author.



Figure 5-44. Theoretical reconstruction of the ante-halls of Caves 61, 55, and 53. Drawing by author.



Figure 5-45. Theoretical reconstruction of the ante-halls of Caves 61, 55, and 53 seen from the northeast side. Drawing by author.

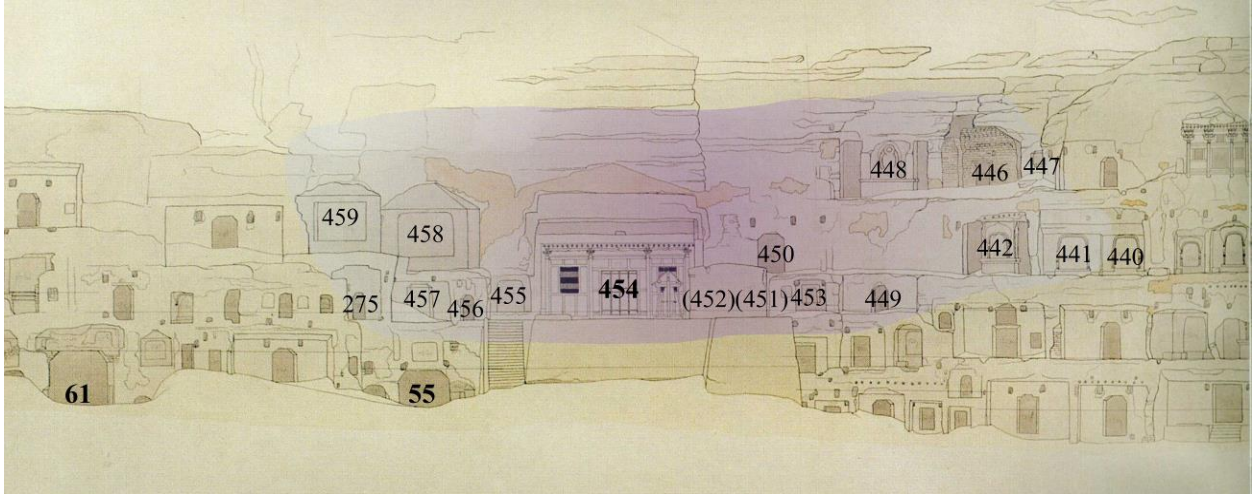


Figure 5-46. Author's estimation of the collapsed area around the old district of the Mogao caves. Base map after Gosudarstvennyi Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, fig. 1. Annotation by author.

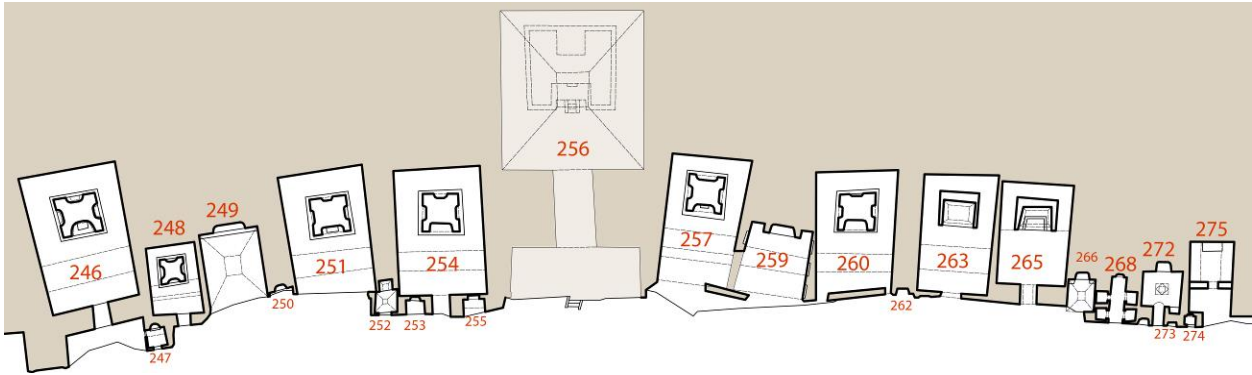


Figure 5-47. The continuous plan between Cave 246 and 275 showing Cave 256 in the middle of early caves. Data from Gosudarstvennyi Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5. Drawing by author.

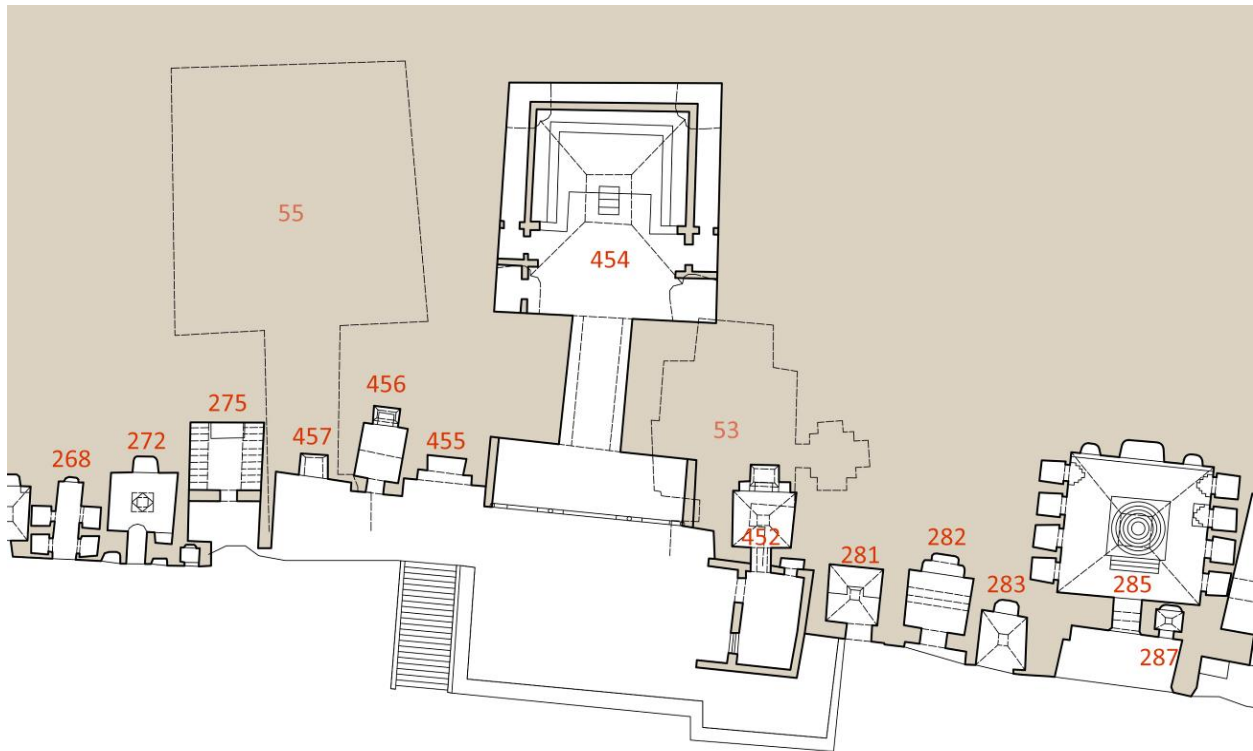


Figure 5-48. The continuous plan between Caves 268 and 285 in 1914–15 showing Cave 454 between the projection of Caves 55 and 53 in dashed lines. Data from Pan and Ma, *Mogao ku kuqian diantang yizhi* and Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5. Drawing by author.

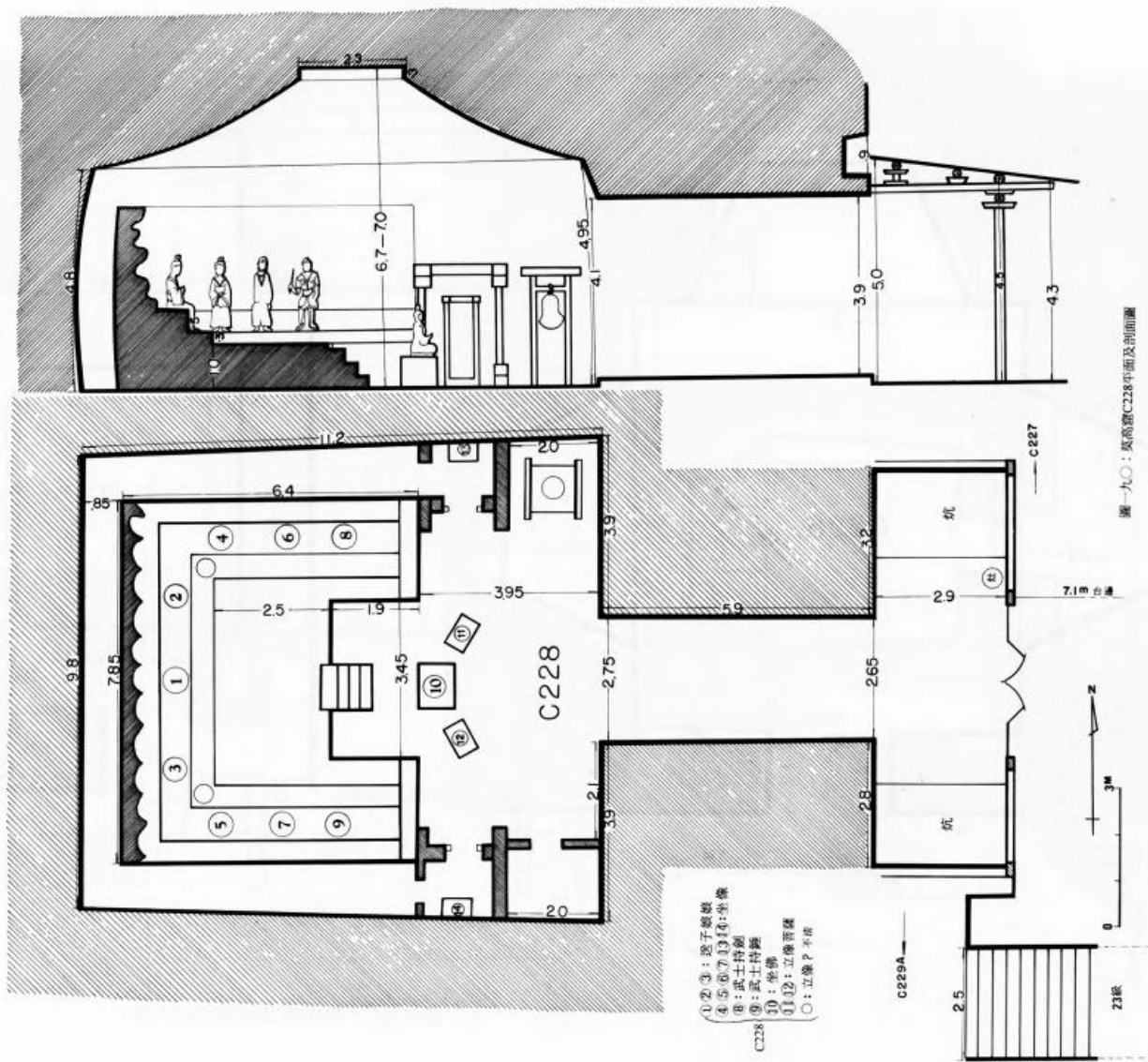
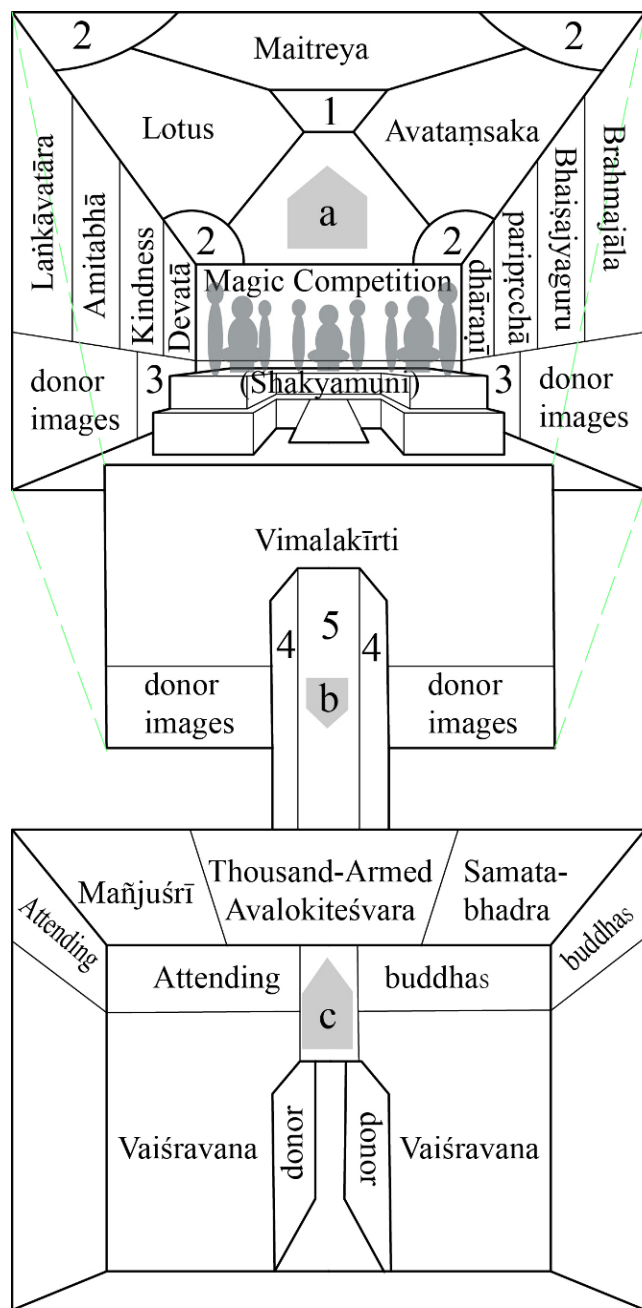


Figure 5-49. Plan and sectional drawings of Cave 454 in the 1940s. After Shi, *Mogao ku xing*, vol. 2, fig. 190.



Legend:

1. Coiled dragon pattern
 2. Four Heavenly Kings
 3. Buddha's life story and jataka stories
 4. Collective Miraculous Images
 5. Picture of Miraculous Correspondences
- a. Many Treasures Pagoda
 b. Pagoda on Ox's-Head Mountain
 c. Pagoda-shaped niche

Abbreviation:

dhāraṇī: Uṣṇīṣa-vijaya-dhāraṇī
 pariṣcchā: Viśeṣacinta-brahma-pariṣcchā
 Kindness: Repaying Kindness

Figure 5-50. Distribution of Iconographical motifs in Mogao Cave 454. Diagram by author.



Figure 5-51. Main chamber of Mogao Cave 454, 974–80 CE, altar refurbished in 1730s. Photo courtesy of Dunhuang Academy.

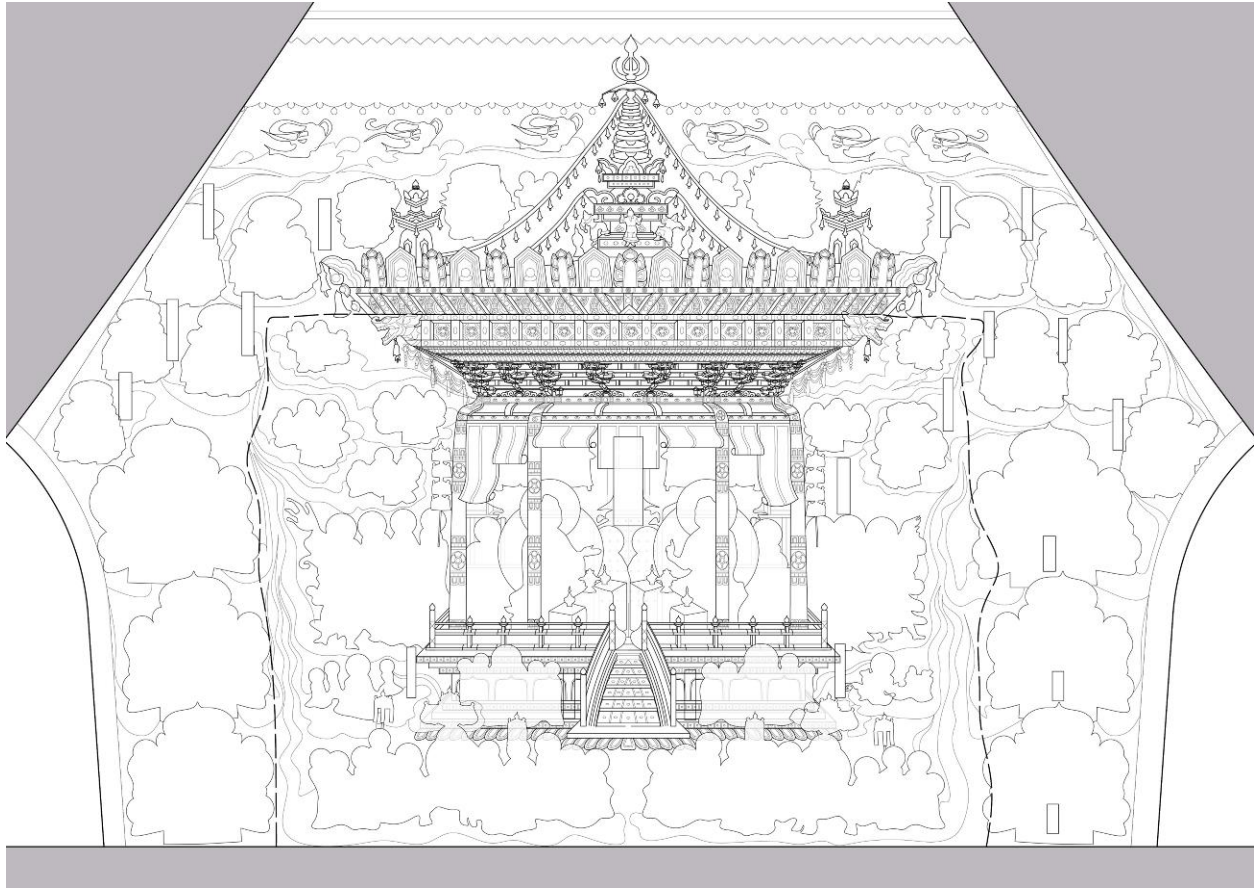
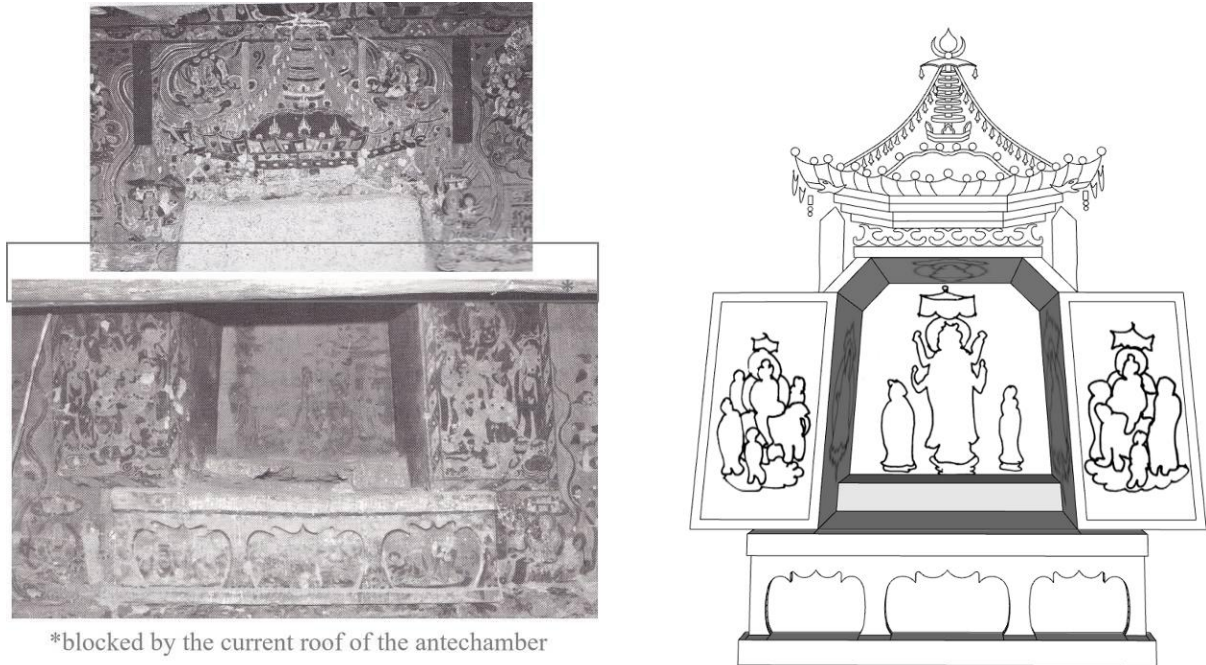


Figure 5-52. Trace-copy line drawing of the mural painting on the west ceiling slope of Mogao Cave 454. Thick dashed lines indicate the repainted area. Drawing by author.



Figure 5-53. The painting of miraculous images on the corridor ceiling of Mogao Cave 454. a) photo of the mural painting, after Sun, *Fojiao dongchuan gushi huajuan*, 98–99, figs. 83–84; b) trace-copy line drawing. Drawing by author.



*blocked by the current roof of the antechamber

Figure 5-54. The pagoda-shaped niche above the entrance in the antechamber of Cave 454. a) monochromatic photo collage, after Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 94, figs. 2-2-2, 2-2-3; collage by author; b) digital model without texture, drawing by author.



Figure 5-55. The Great Stupa, Sanchi, India, circa 3rd-1st c. BCE. Image in the public domain.



Figure 5-56. Ashoka's stupa in the picture of miraculous correspondences, ceiling panel of the corridor of Mogao Caves 340, Five Dynasties period. a) photo of the mural painting, photo courtesy of Dunhuang Academy; b) a reconstruction design of the stupa, model by Ding Shaoheng, rendering by author.



Figure 5-57. Ashoka's stupa in the picture of miraculous correspondences, ceiling panel of the corridor of Mogao Caves 454, Song period. a) photo of the mural painting, from Zhang, *Dunhuang fojiao gantonghua*, 107, fig. 1-4-1; b) trace-copy line drawing. Drawing by author.



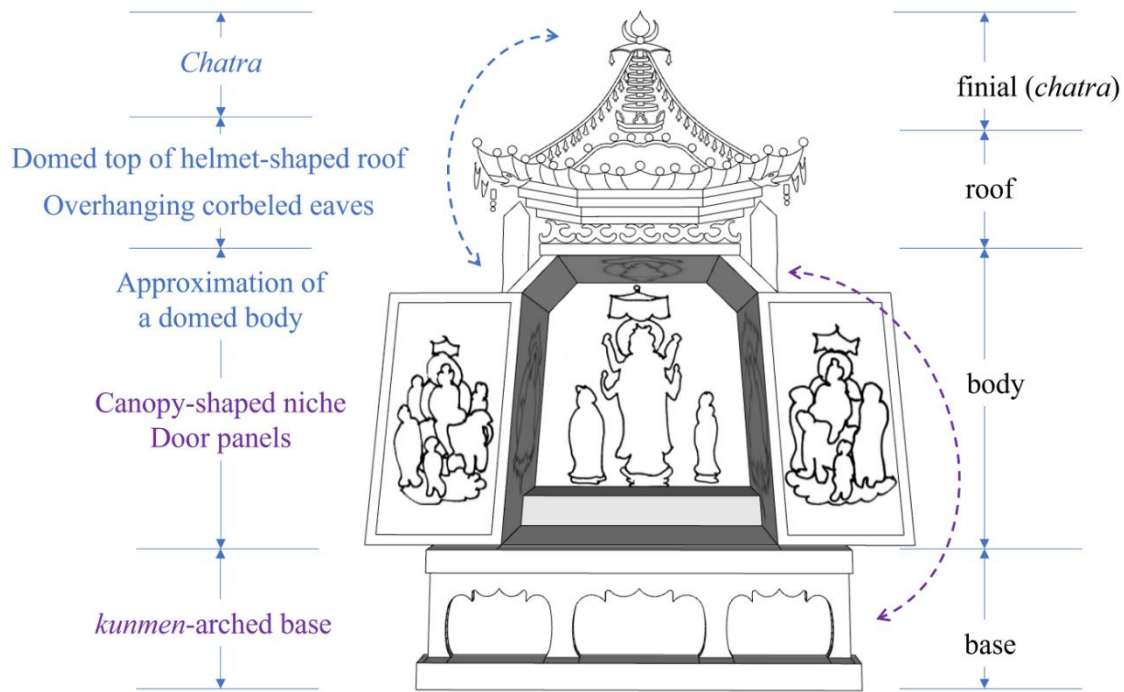
Figure 5-58. An Ashoka's stupa reliquary found in Leifeng pagoda, Hangzhou, commissioned by Qian Chu, King of the Wuyue Kingdom, 977. *Zhejiang sheng wenwu kaogu yanjiu suo, Leifeng ta yizhi*, plate 195.



Figure 5-59. Jeweled canopies as Buddhist reliquaries in the Tang dynasty. a) Qingshan Monastery, Lingtong, Shaanxi Province; b) Famen Monastery, Fufeng, Shaanxi Province.



Figure 5-60. Timber structures built in tenth century Dunhuang. a) an octagonal earthen core pagoda known as Maitreya Pagoda with timber-structured veranda, near the Mogao caves, circa late tenth century; b) timber-structured façade of Mogao Cave 437, 970s. Photo by author.



Legend:
 Blue: formal features of Prototype #1: the Ashoka's stupas
 Purple: formal features of Prototype # 2: the jeweled canopy

Figure 5-61. Analysis of the formal features of the pagoda-shaped niche in Cave 454. Drawing by author.

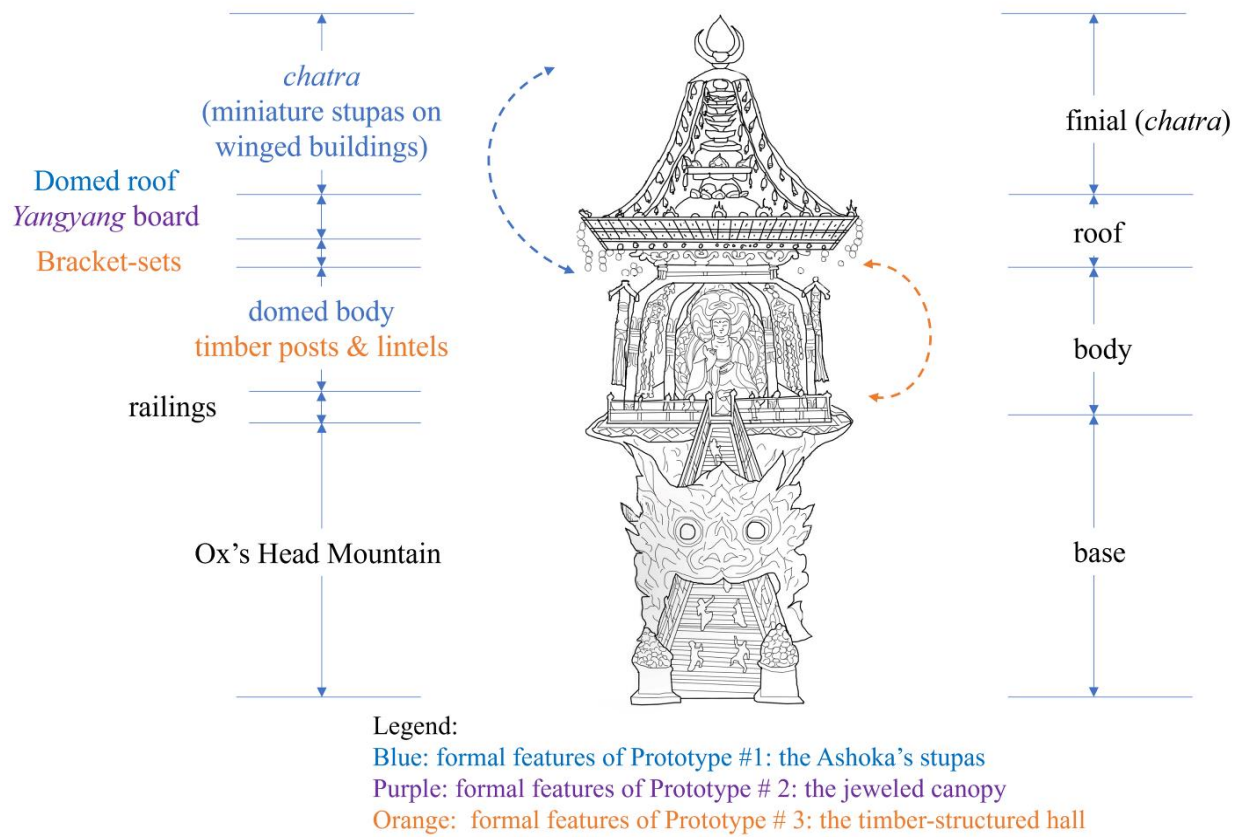


Figure 5-62. Analysis of the formal features of the pagoda of Ox-Head Mountain image in Cave 454. Drawing by author.

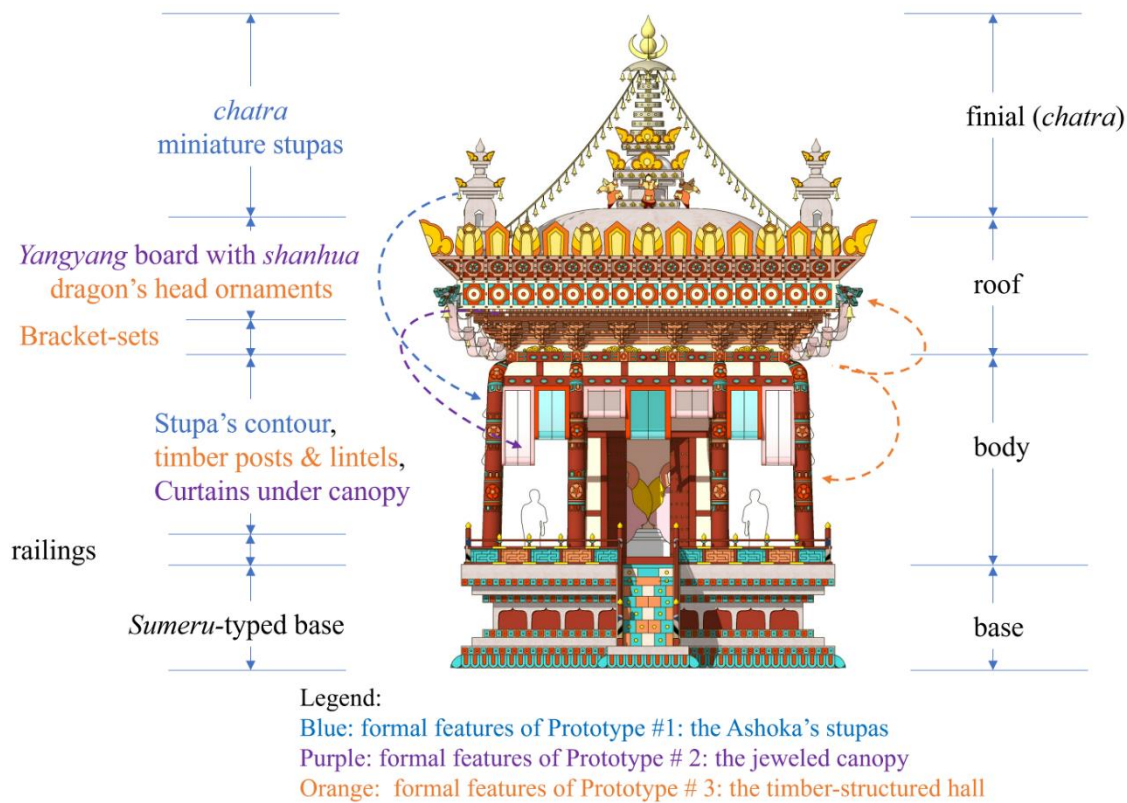


Figure 5-63. Analysis of the formal features of the Many Treasures Pagoda reconstructed from the west ceiling slope mural of Cave 454. Drawing by author.

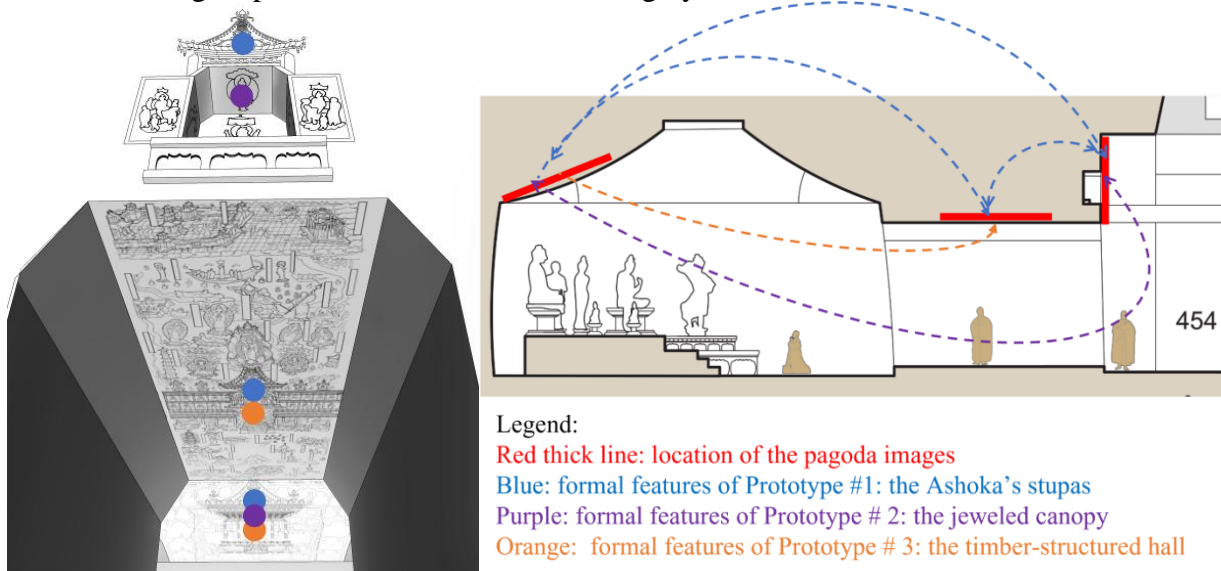


Figure 5-64. Analysis of the formal correspondences among the three pagoda images along the central axis in Cave 454. a) the pagoda images seen from the antechamber; b) sectional drawing. Drawing by author.

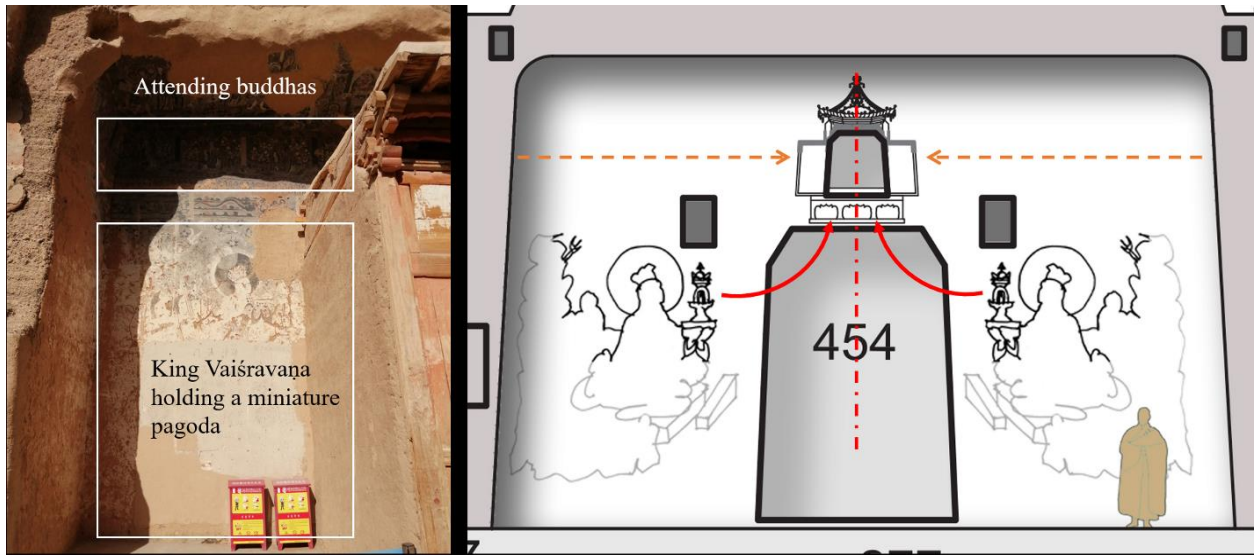


Figure 5-65. Visual analysis of the “Vaiśravaṇa invoking buddhas to enter the pagoda” scenes in the antechamber of in Cave 454. a) photo of the exposed south bay of the antechamber; b) elevation drawing of the antechamber west wall, with black lines indicating the visible lines and gray lines indicating author’s theoretical reconstruction. Photo, drawing, and annotation by author.

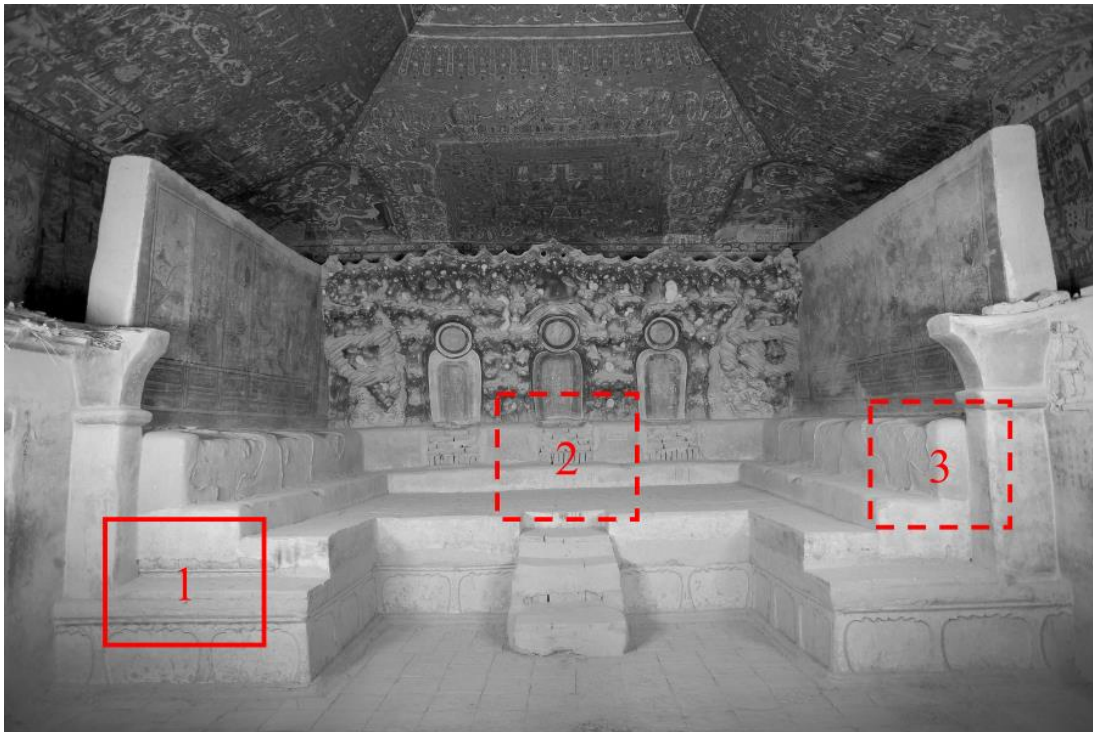


Figure 5-66. Current interior of Cave 454, highlighting the traces of the tenth-century altar in red rectangular frames (front: solid lines; back side: dashed lines). Photo courtesy of Dunhuang Academy. Annotation by author.

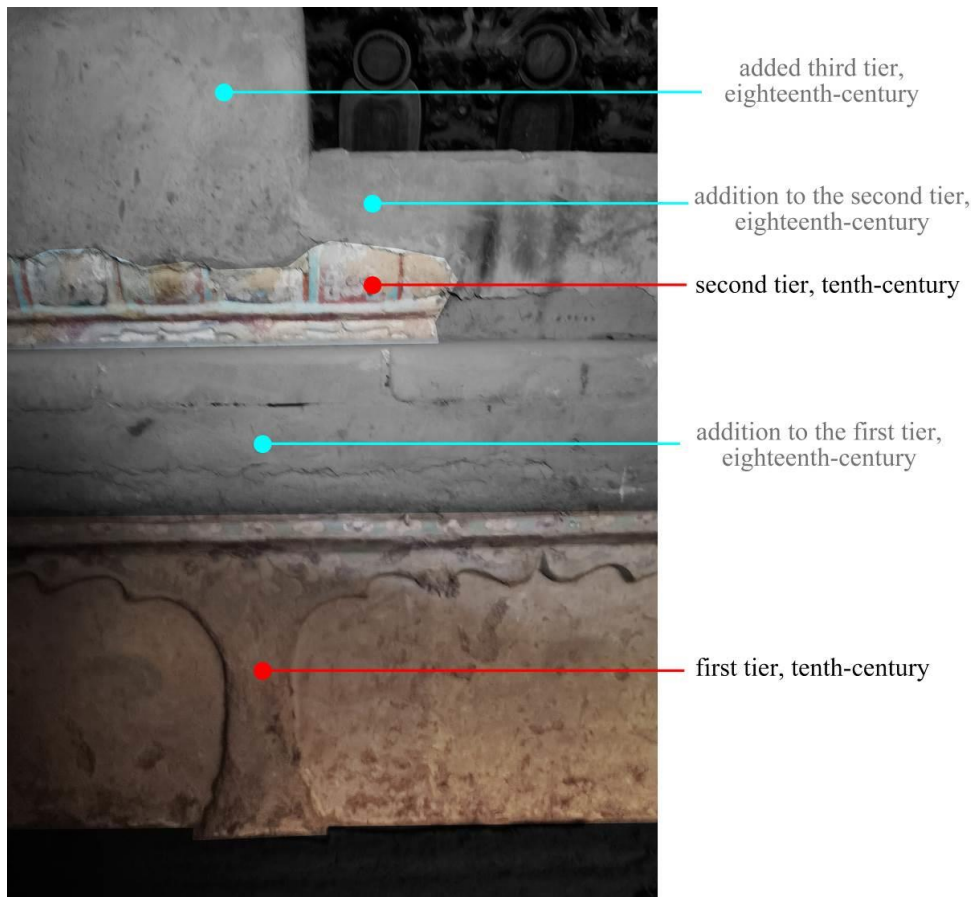


Figure 5-67. Detail 1 in figure 5-66 showing the petal patterns and top part of *kunmen* arches of the second tier of the tenth-century altar of Cave 454. Photo and annotation by author with permission of Dunhuang Academy, July 2021.



Figure 5-68. Details 2 (*left*) and 3 (*right*) in figure 5-66 showing the upturned petal bases of the central (seven petals) and the west pedestals (five petals) on the tenth-century altar of Cave 454. Guo, *Dunhuang Mogao ku di 454 ku yanjiu*, 32, fig. 1-2-1. Photo and annotation by author with permission of Dunhuang Academy, September 2019.

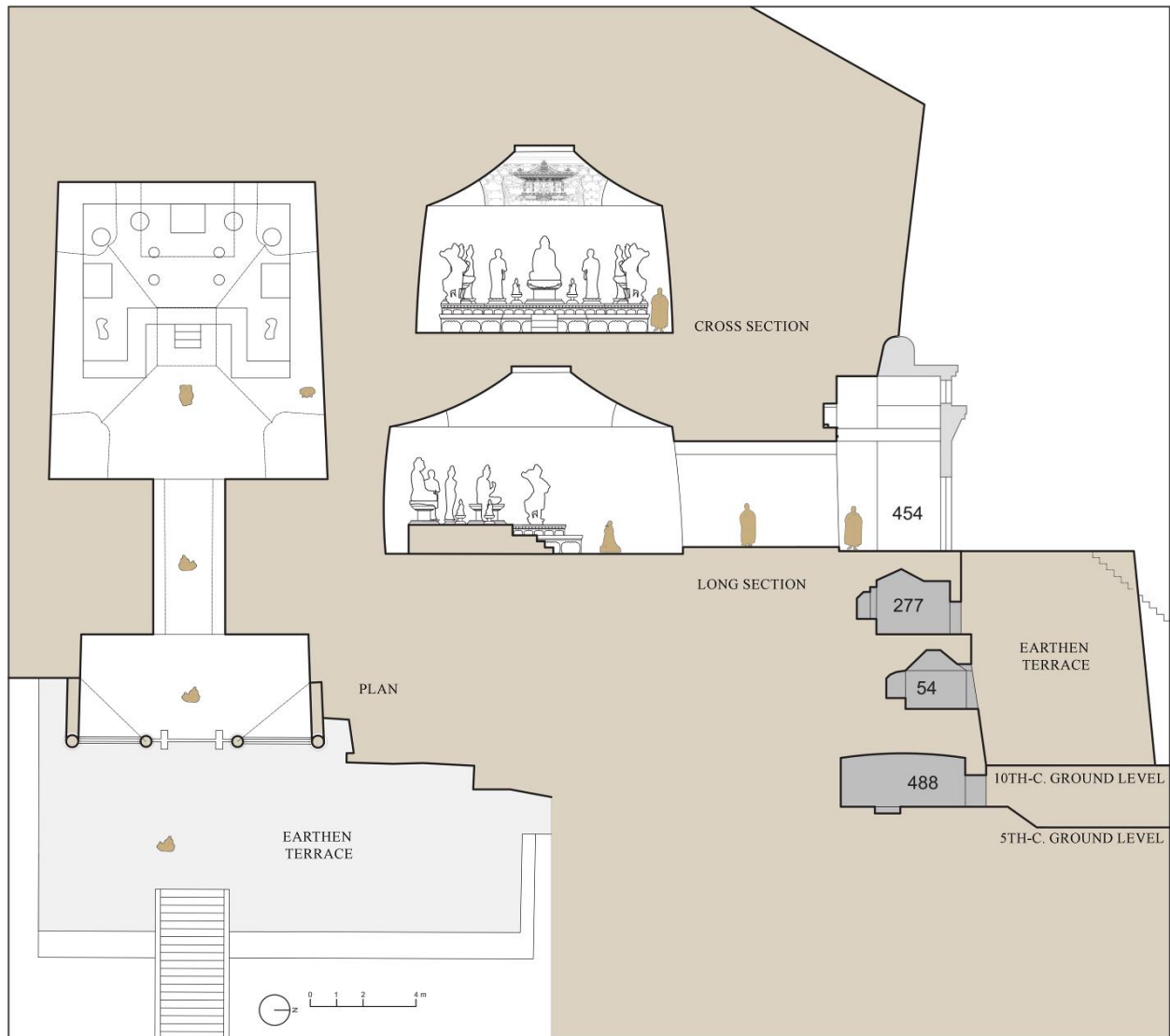


Figure 5-69. Plan and sectional drawings of Cave 454 showing author's theoretical reconstruction of the tenth-century central altar. Drawing by author.

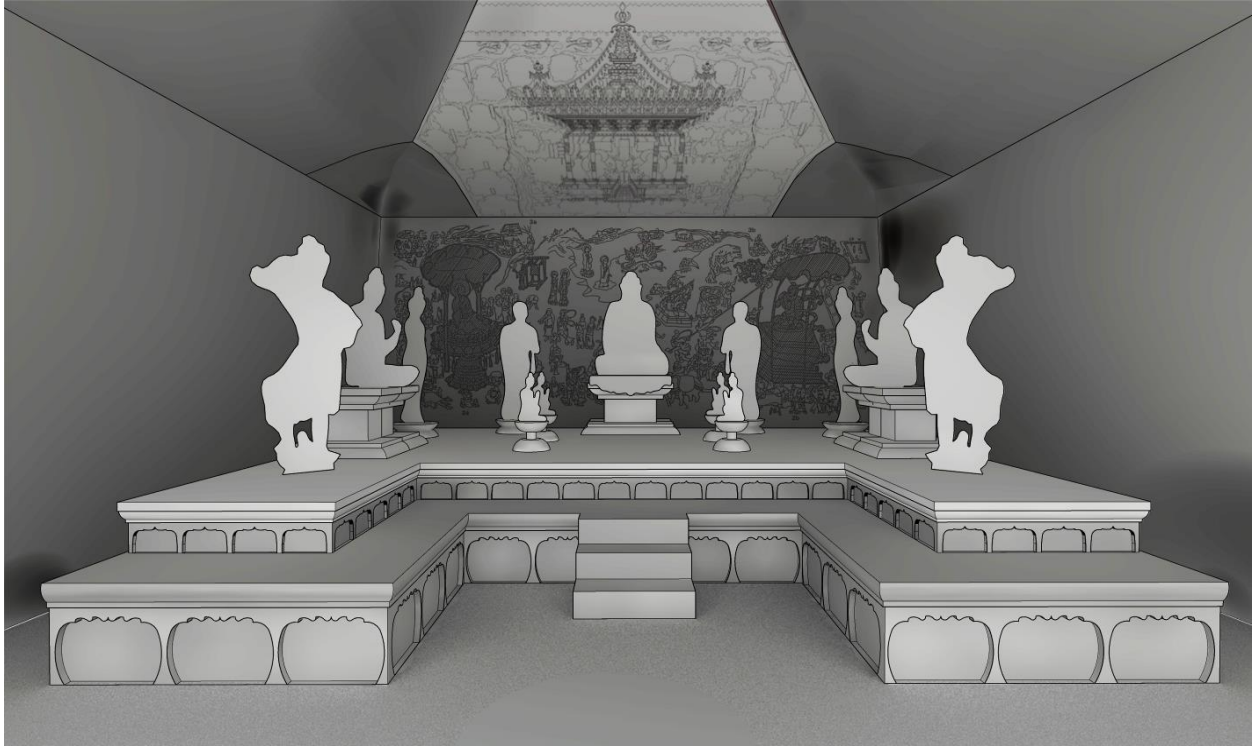


Figure 5-70. Perspective of the interior of Cave 454 showing author's theoretical reconstruction of the tenth-century central altar and murals on the west wall and west ceiling. Drawing by author.

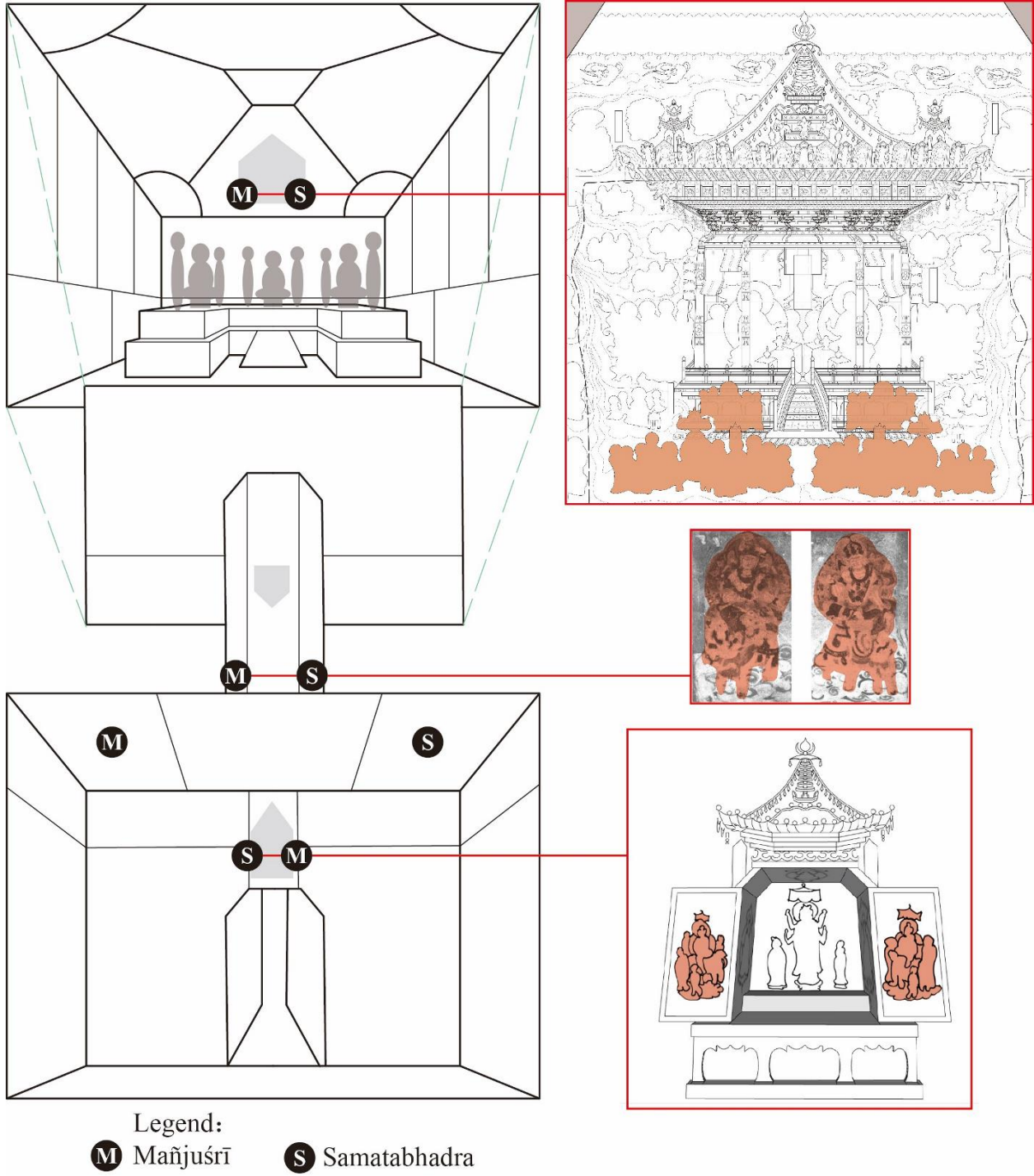


Figure 5-71. The location of Mañjuśrī and Samantabhadra images in Cave 454. Drawing by author.

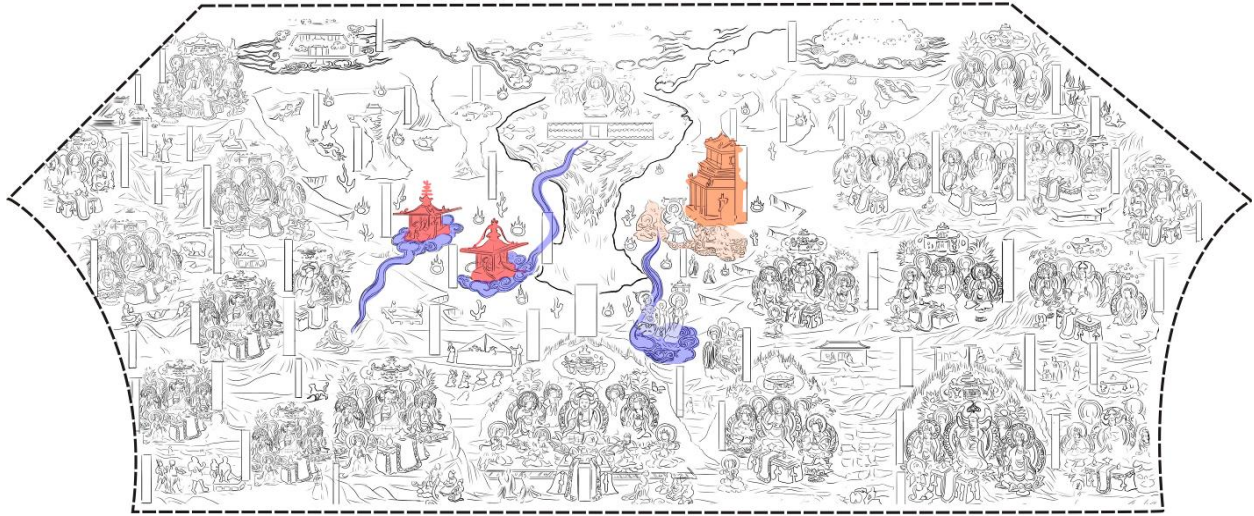


Figure 5-72. Trace-copy line drawing of the *Laṅkāvatāra Sūtra* transformation tableau on the east ceiling slope of Cave 55 highlighting three scenes in colors. The scenes are (*left to right*) King Rāvana invites Shakyamuni Buddha, the Buddha enters Lanka, and the Buddha gives a sermon at the nāgas' palaces. Modified after Gao, "Dunhuang Mogao ku di 55 ku yanjiu," 90, fig. 3-13. Annotated by author.

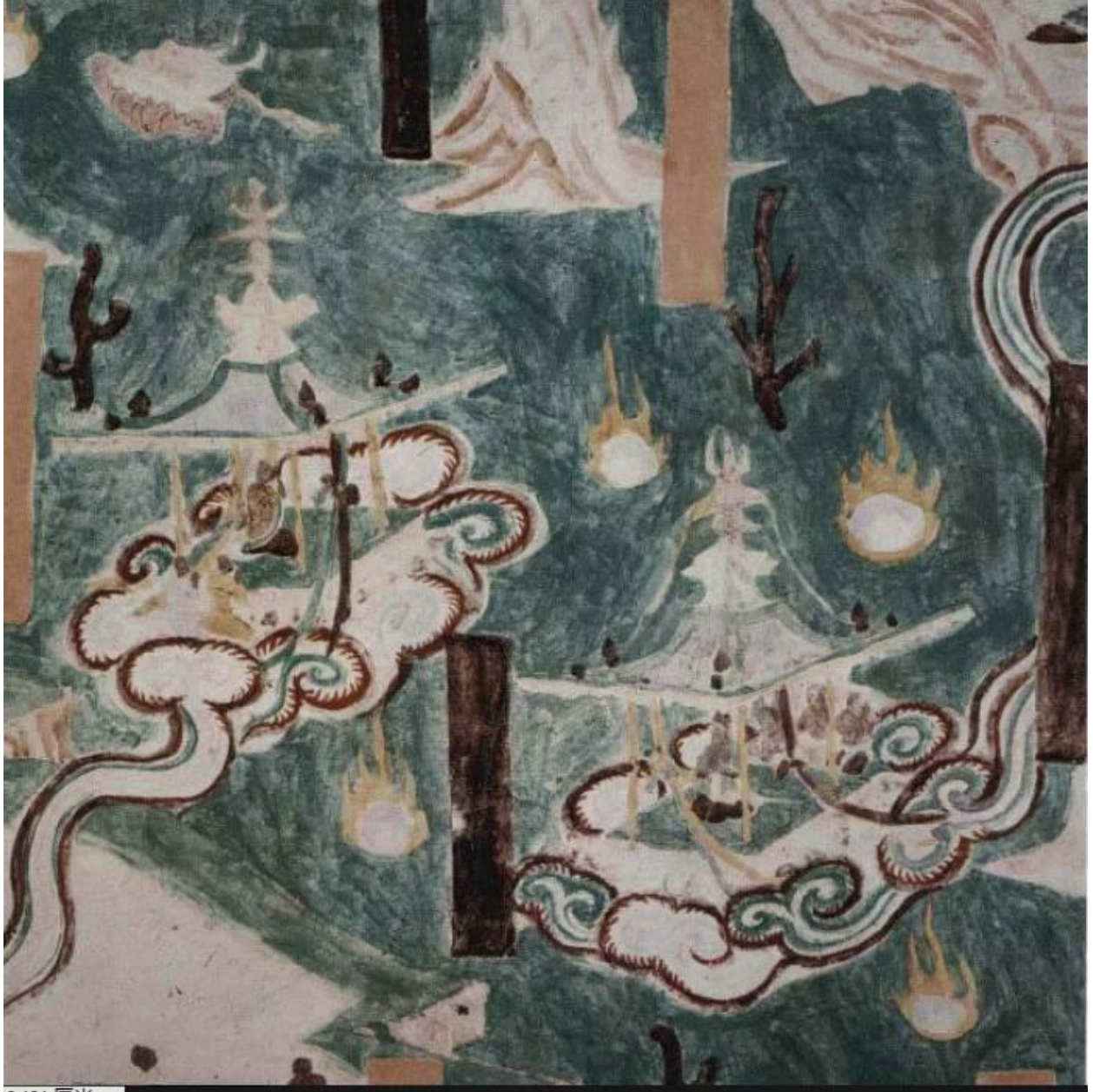


Figure 5-73. Mural details of the pagodas going to (*right*) and coming back from (*left*) from the invitation in the *Laṅkāvatāra Sūtra* transformation tableau, Cave 55. He, *Lengqie jing huajuan*, 42, fig. 28.

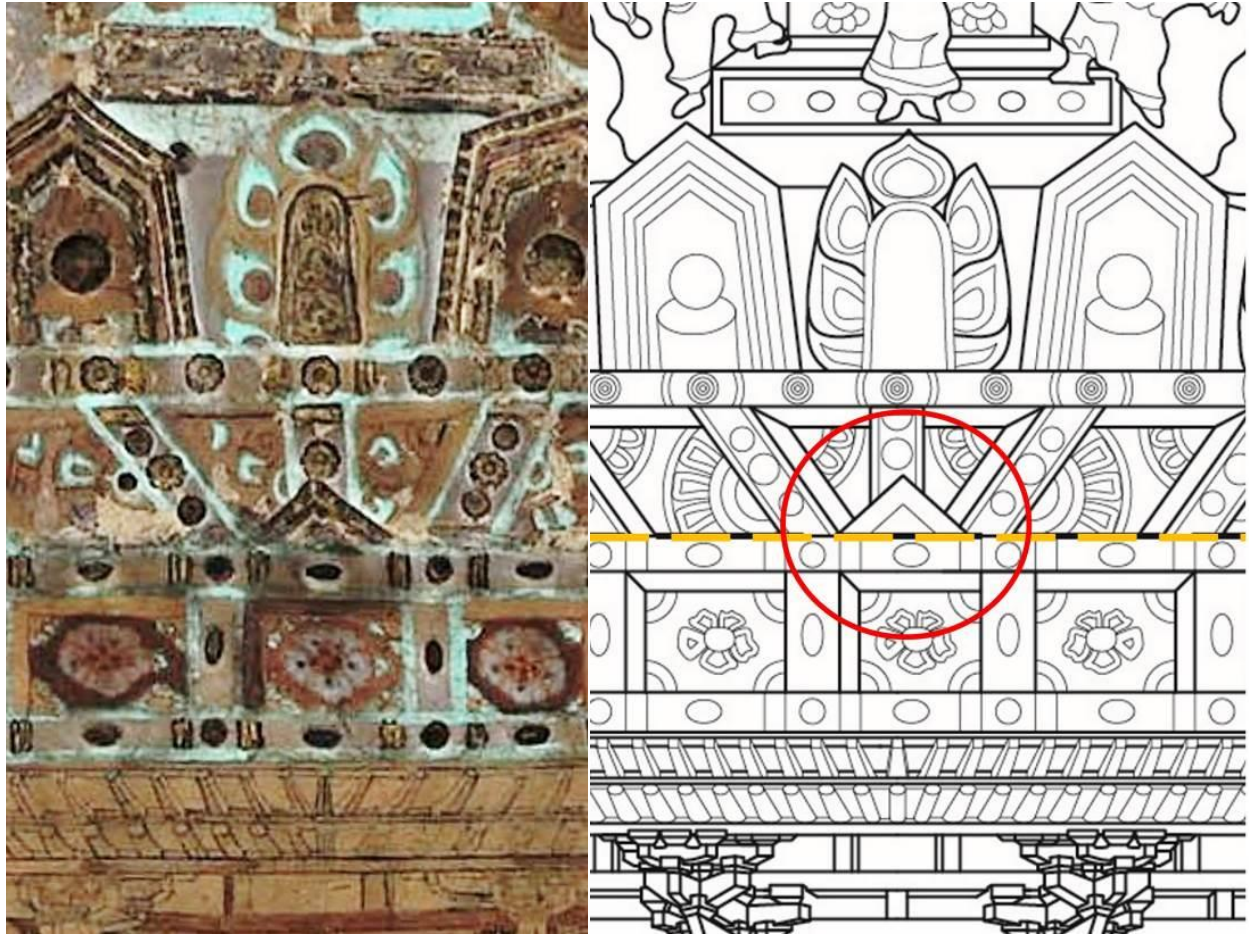


Figure 5-74. A triangular shape depicted right above the repainted area on the west ceiling slope of Cave 454. a) photo of the mural painting, after Sun and Sun, *Jianzhu hua juan*, 258, fig. 259; b) trace-copy line drawing of the painting, highlighting the triangular shape in red circle and the upper border of the repainted area in dashed yellow line. Drawing by author.

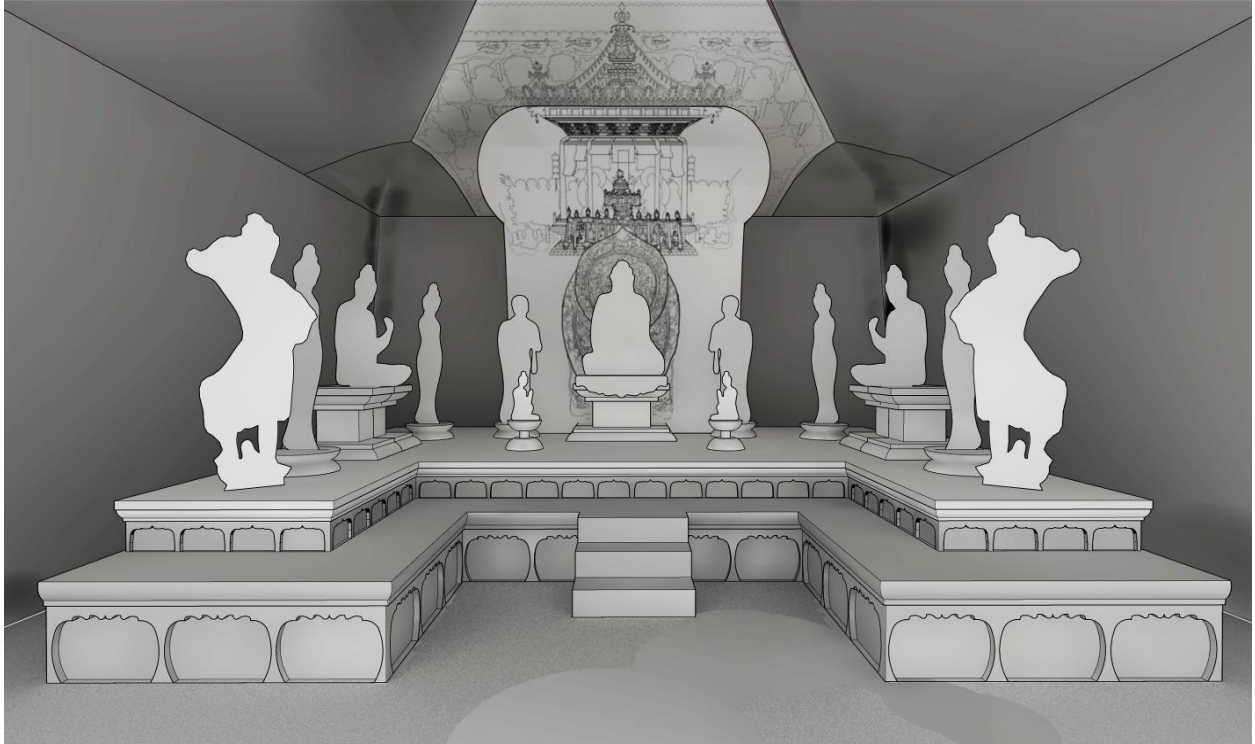


Figure 5-75. Perspective of the interior of Cave 454 showing author's reconstructual design of the backscreened design possibility. Drawing by author.

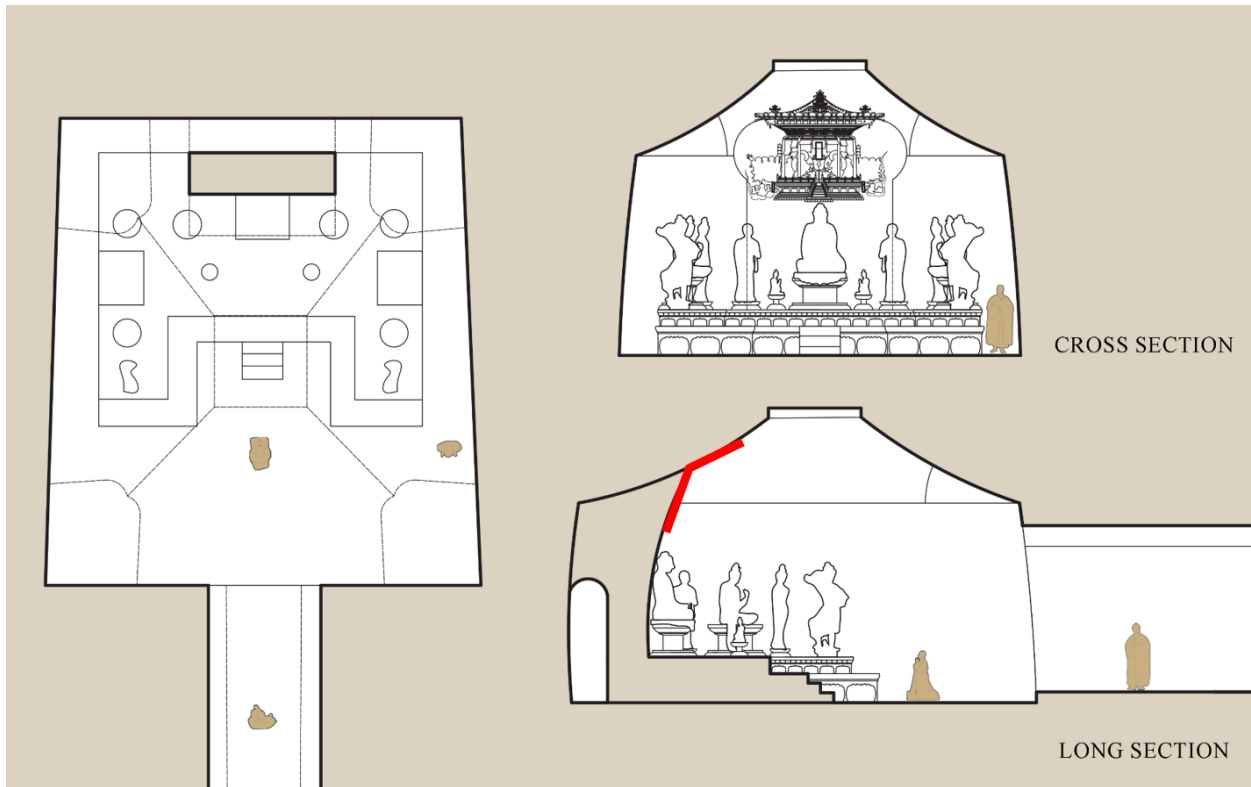


Figure 5-76. Plan and sectional drawings of Cave 454 showing author's reconstructual design of the backscreened design possibility. Red lines highlight the location of the Many Treasures Pagoda painting on the west ceiling slope and the backscreen. Drawing by author.

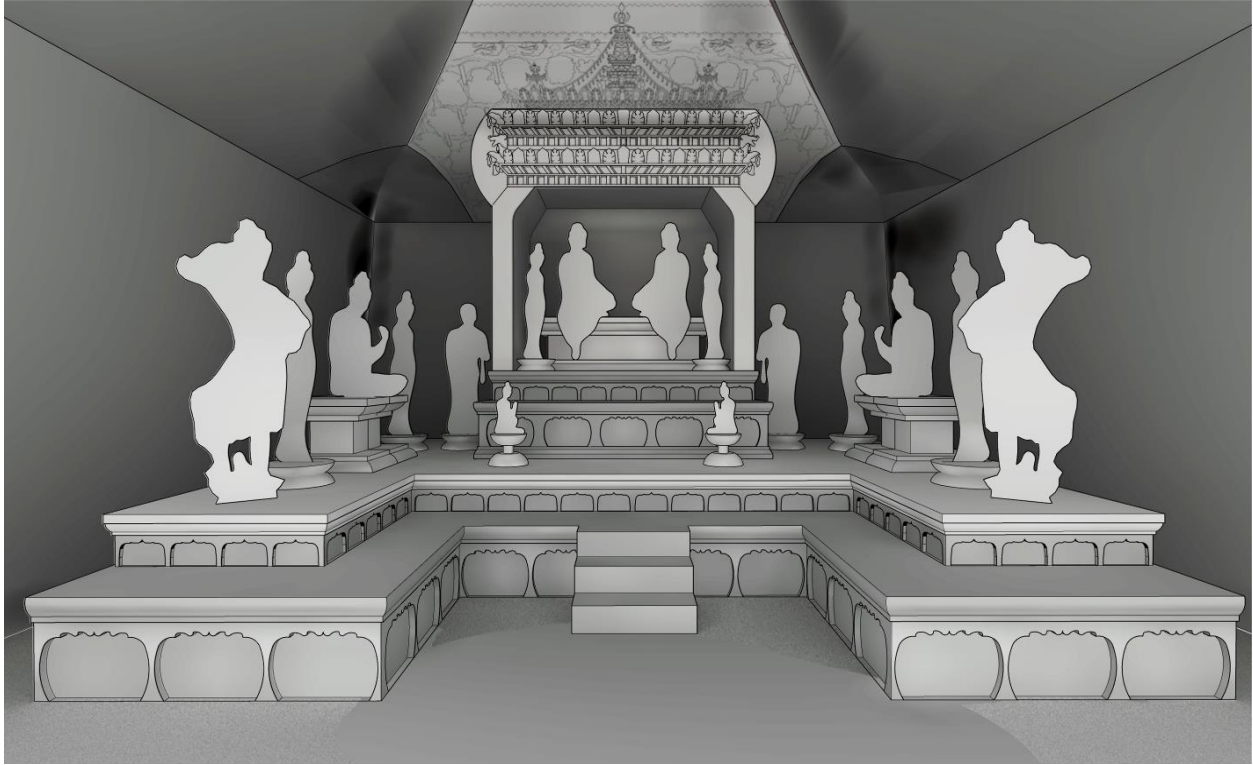


Figure 5-77. Perspective of the interior of Cave 454 showing author's reconstructual design of the central-pillared design possibility. Drawing by author.



Figure 5-78. The central pillar in Cave 246, Northern Wei period, refurbished in the late-Guiyijun or Xixia period. Photo courtesy of Dunhuang Academy.

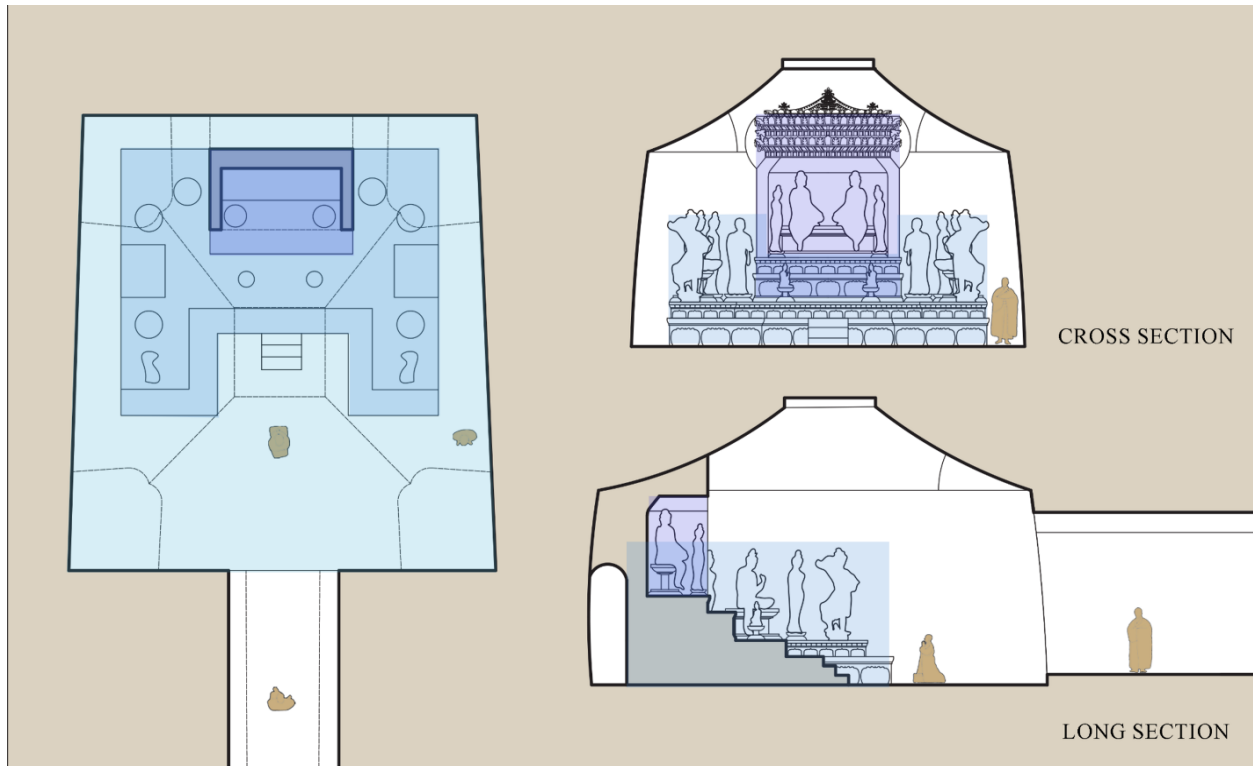


Figure 5-79. Plan and sectional drawings of Cave 454 showing author's reconstructual design of the central-pillared design possibility. Purple, blue, and light blue colors highlight the innermost, the intermediate, and the outermost tiers of space. Drawing by author.

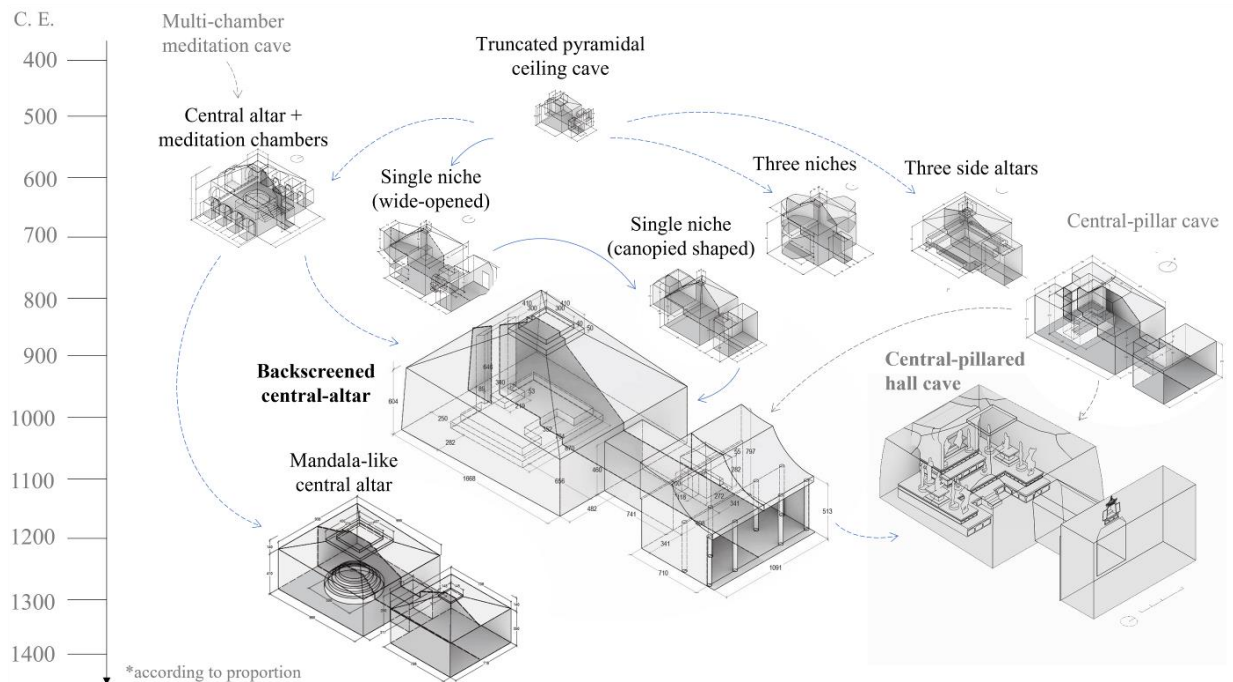


Figure 5-80. Cave space developments of the hall caves in Dunhuang between the fifth and the fourteenth century showing author's reconstruction design of the central-pillared hall cave's position in the spectrum of cave shapes. Drawing by author.



Figure 5-81. The rock form above Cave 454. a) frontal view, photo in 1914–15, after Gosudarstvennyiĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, 3:36; b) frontal-right view, photo in 1952. Chen et al., “Dunhuang shiku kancha baogao,” plate 5.

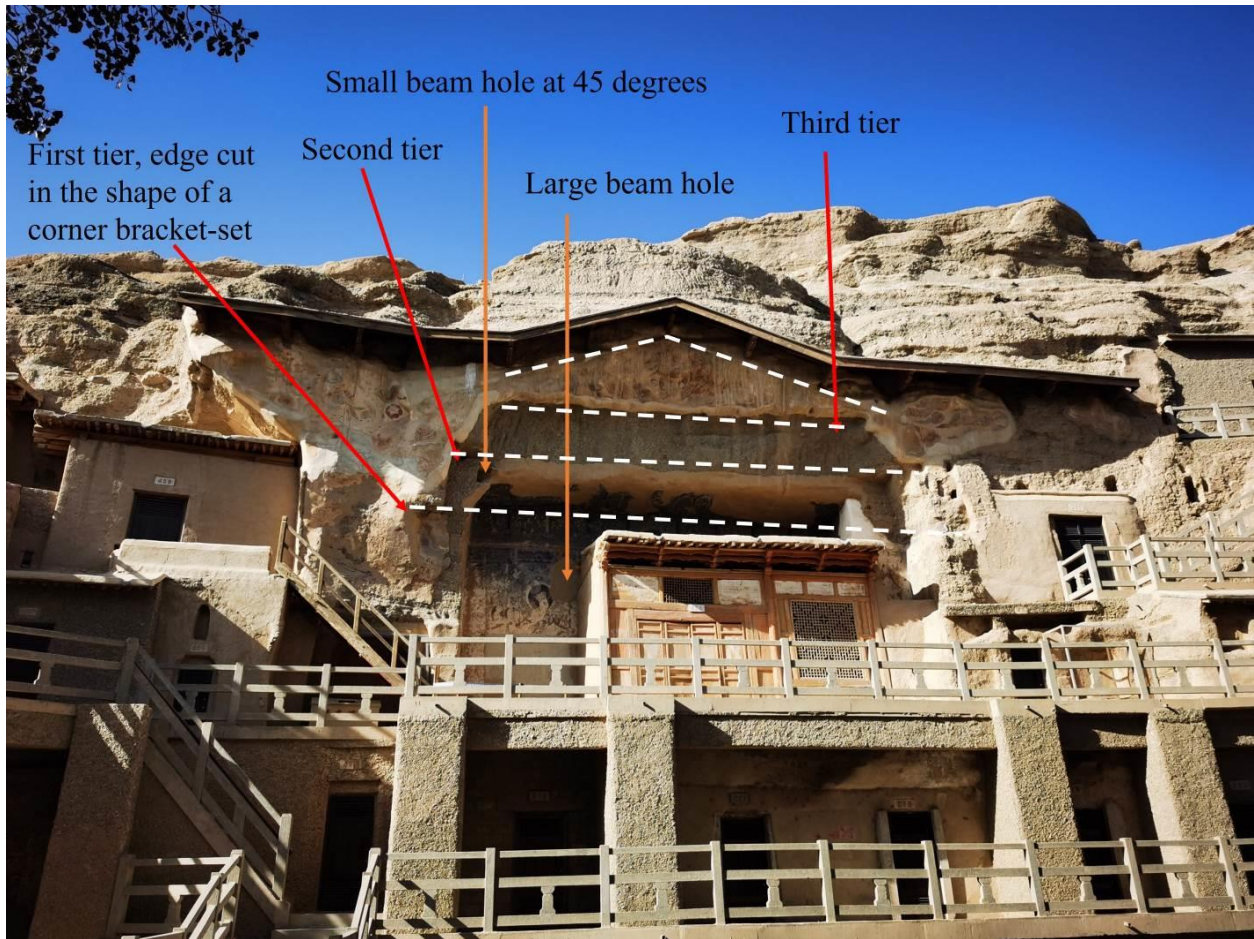


Figure 5-82. The current appearance of Cave 454 showing traces of the tenth-century timber-structured façade. Photo and annotation by author.



Figure 5-83. Author's reconstruction design of the timber-structured ante-hall and elevated terrace of Cave 454 and the rock form above the open-air mural. Drawing by author.

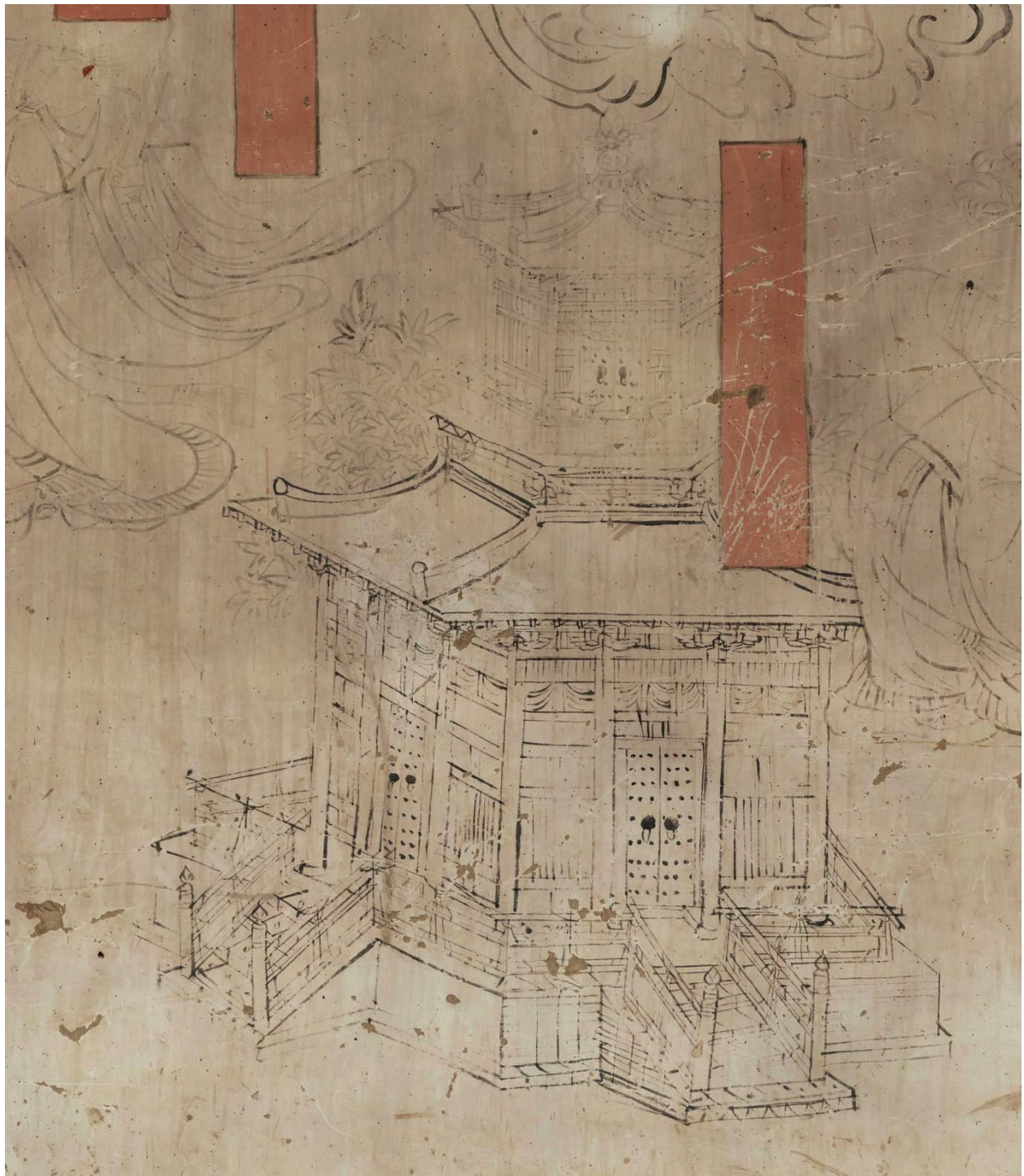


Figure 5-84. Picture of the Bright Hall, mural detail on the west-facing side of the central pillar, Mogao Cave 9, late-Tang period. Zhao, "Mogaoku di 9 ku 'songshanshen song mingtang dianying tu' kao," plate 6.

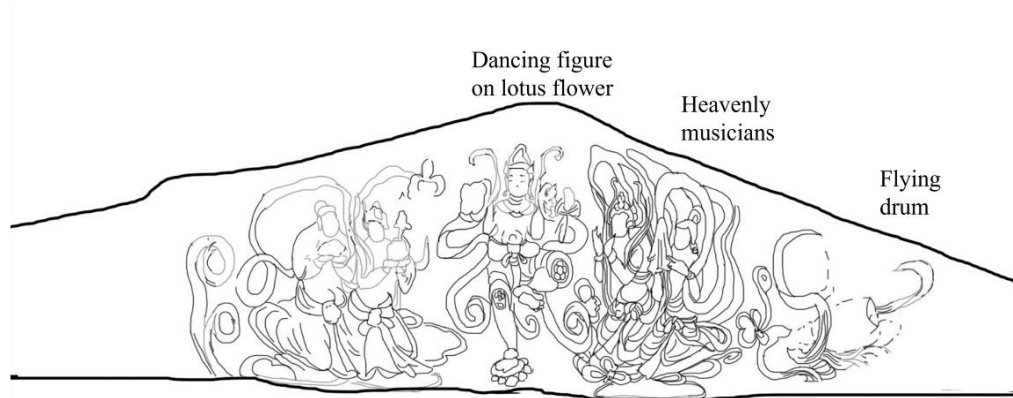


Figure 5-85. Gable-shaped exterior mural of Cave 454, late-tenth century. a) current photo of the entire mural overlaid with line drawing; b) line drawing of the dancing figures. Photo and drawing by author.



Figure 5-86. Dancers and musicians emerged from lotuses, niche lintel of Mogao Cave 249, mid-sixth century. a) the niche lintel and west ceiling slope; b) a detail of the niche lintel. Photo courtesy of Dunhuang Academy.



Figure 5-87. Sogdian dancer on a lotus flower that stems from the chaitya archway, front façade panel of a miniature pagoda, Chinese, circa eighth century. a) view of the façade panel; b) detail view of the *sogdian* dancer; c) diagram showing the location of the façade panel on this kind of pagoda. Nelson-Atkins Museum of Art, Kansas City, Missouri (Object number: 37-17).

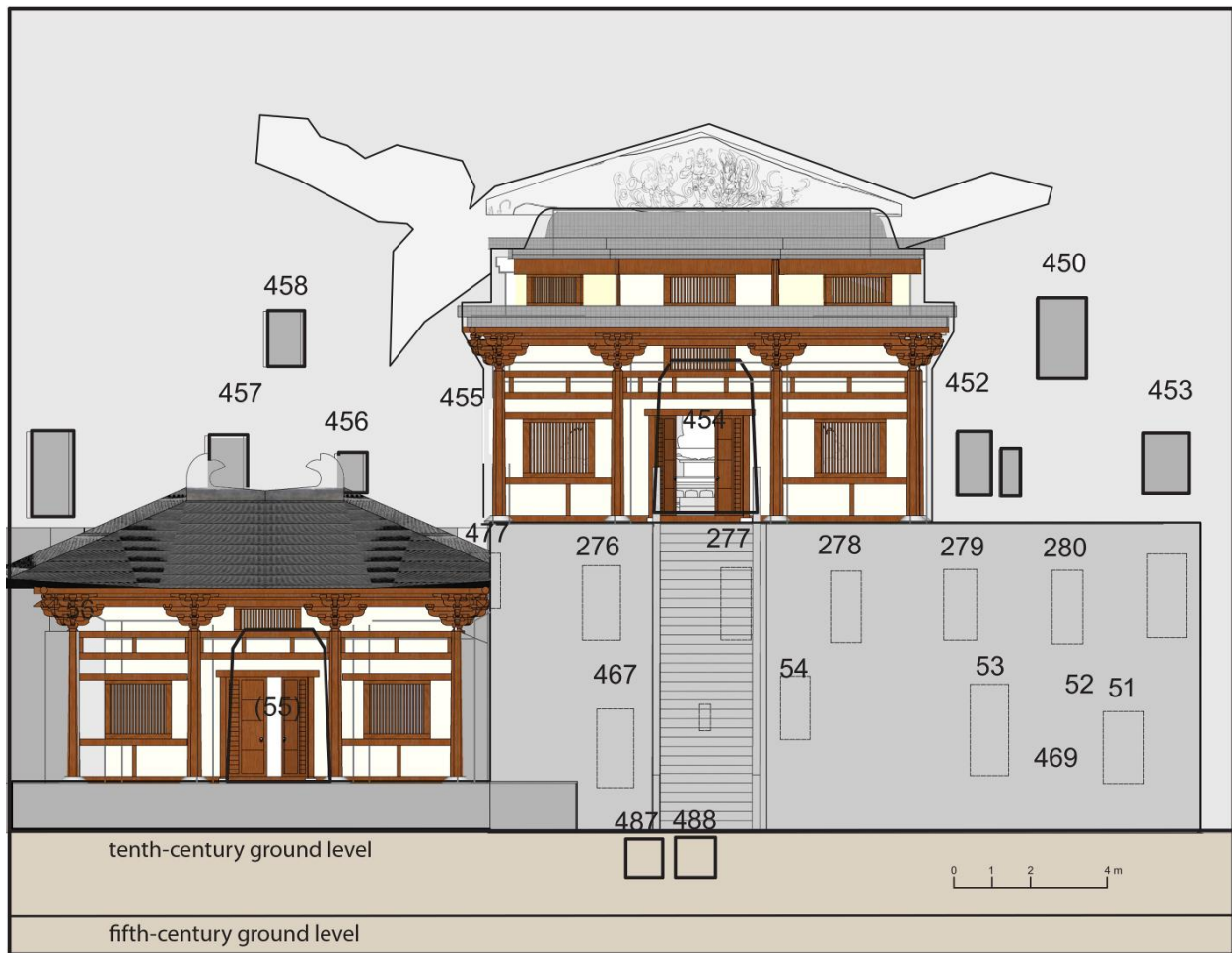


Figure 5-88. Elevation drawing showing author's theoretical reconstruction of the ante-halls and bases, the vicinity of Cave 454. Drawing by author.

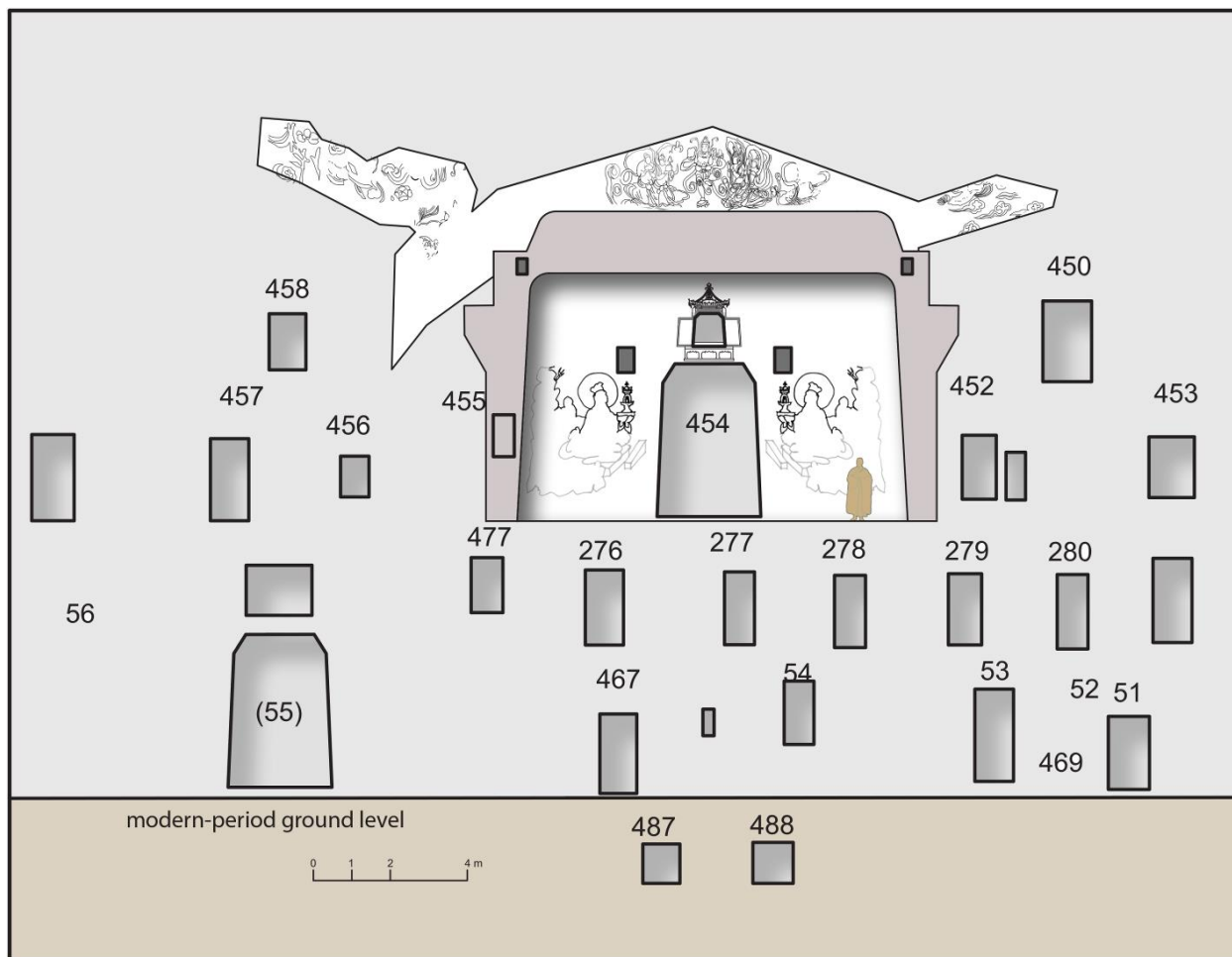


Figure 5-89. Elevation drawing showing the cave openings, the vicinity of Cave 454. Drawing by author.

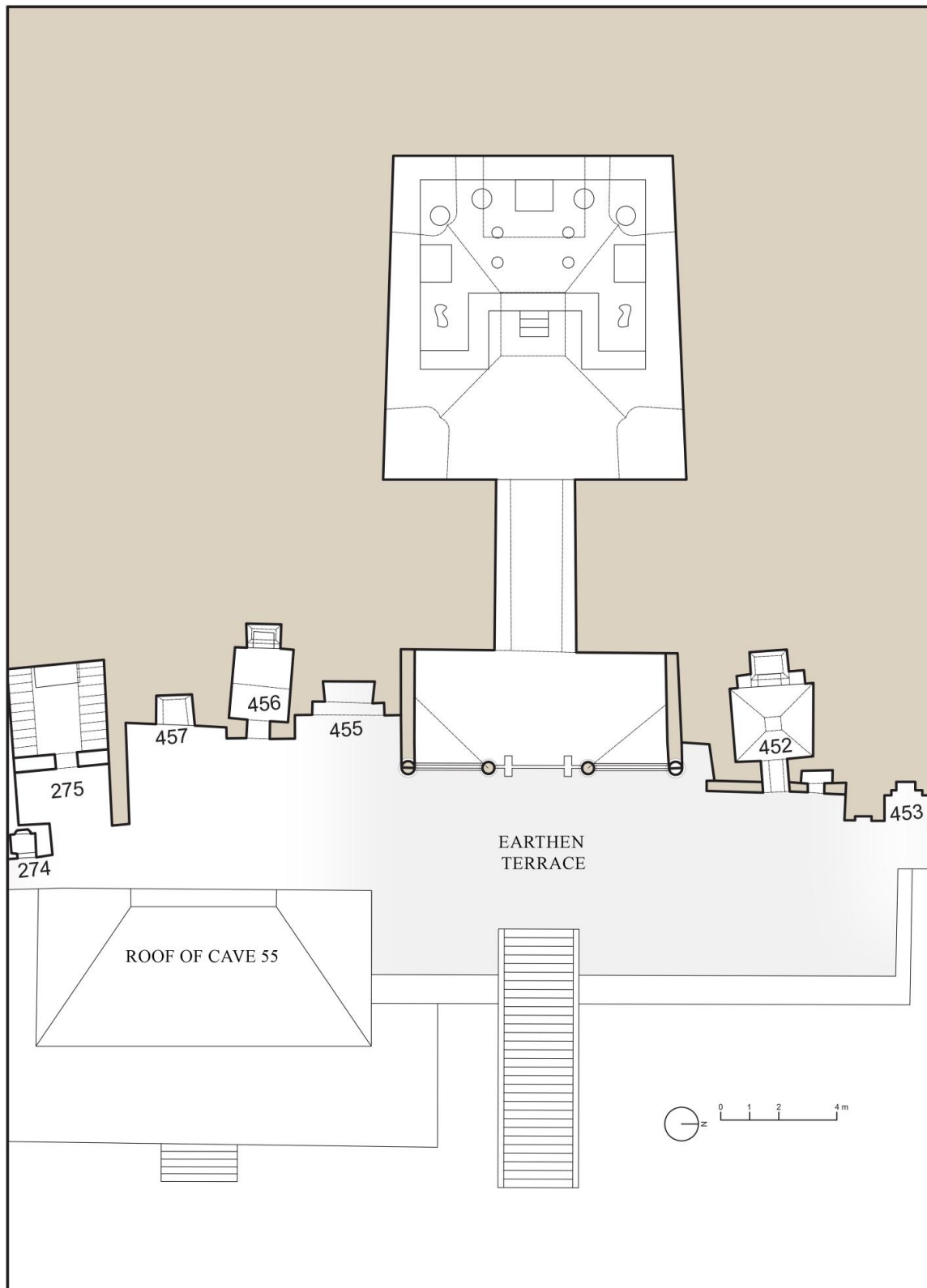


Figure 5-90. Third level plan drawing, the vicinity of Cave 454 with author's reconstruction of the elevated terrace. Drawing by author.

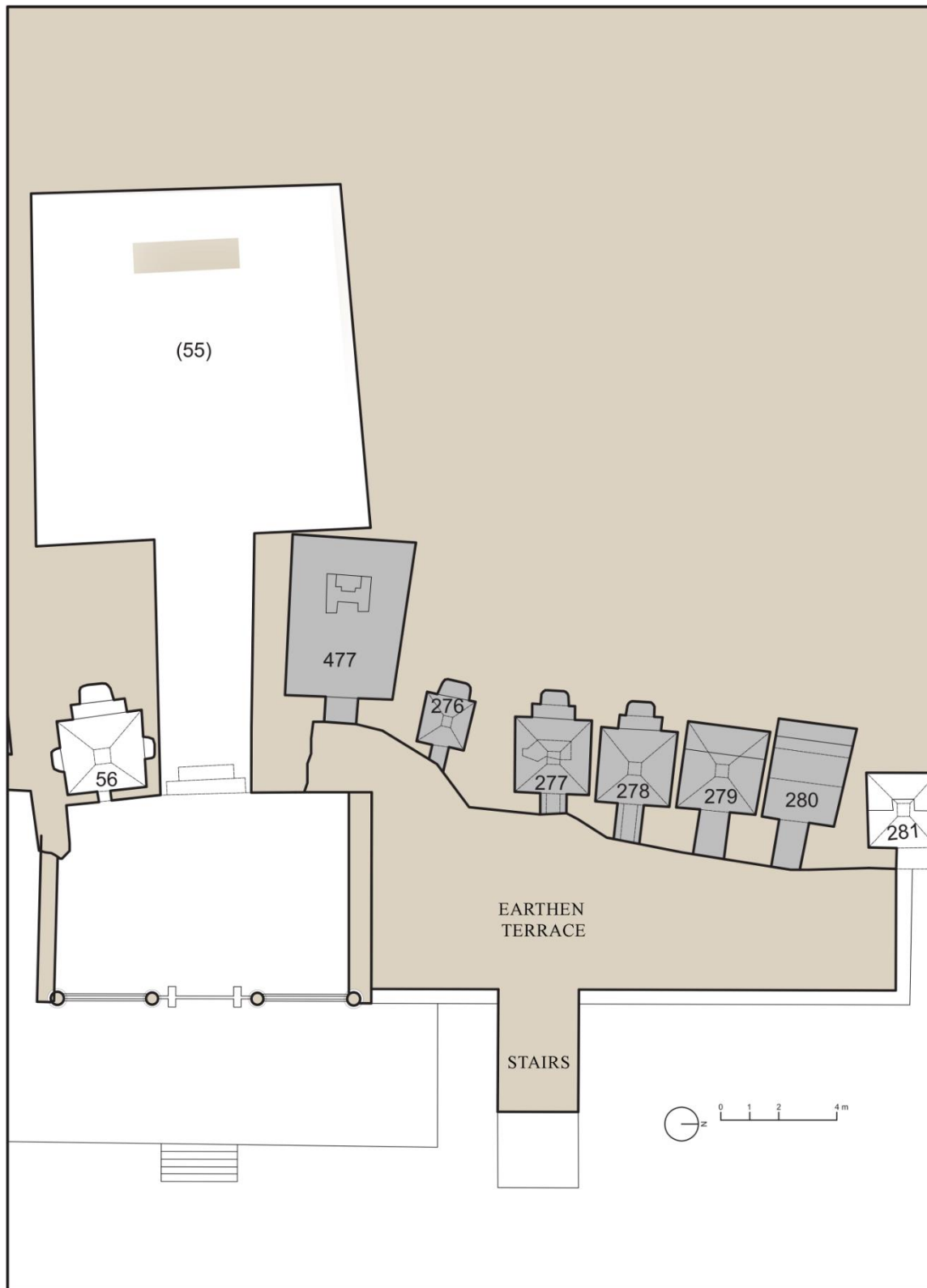


Figure 5-91. Second level plan drawing, the vicinity of Cave 454 in late-tenth century. Sealed caves are filled with gray color. Drawing by author.

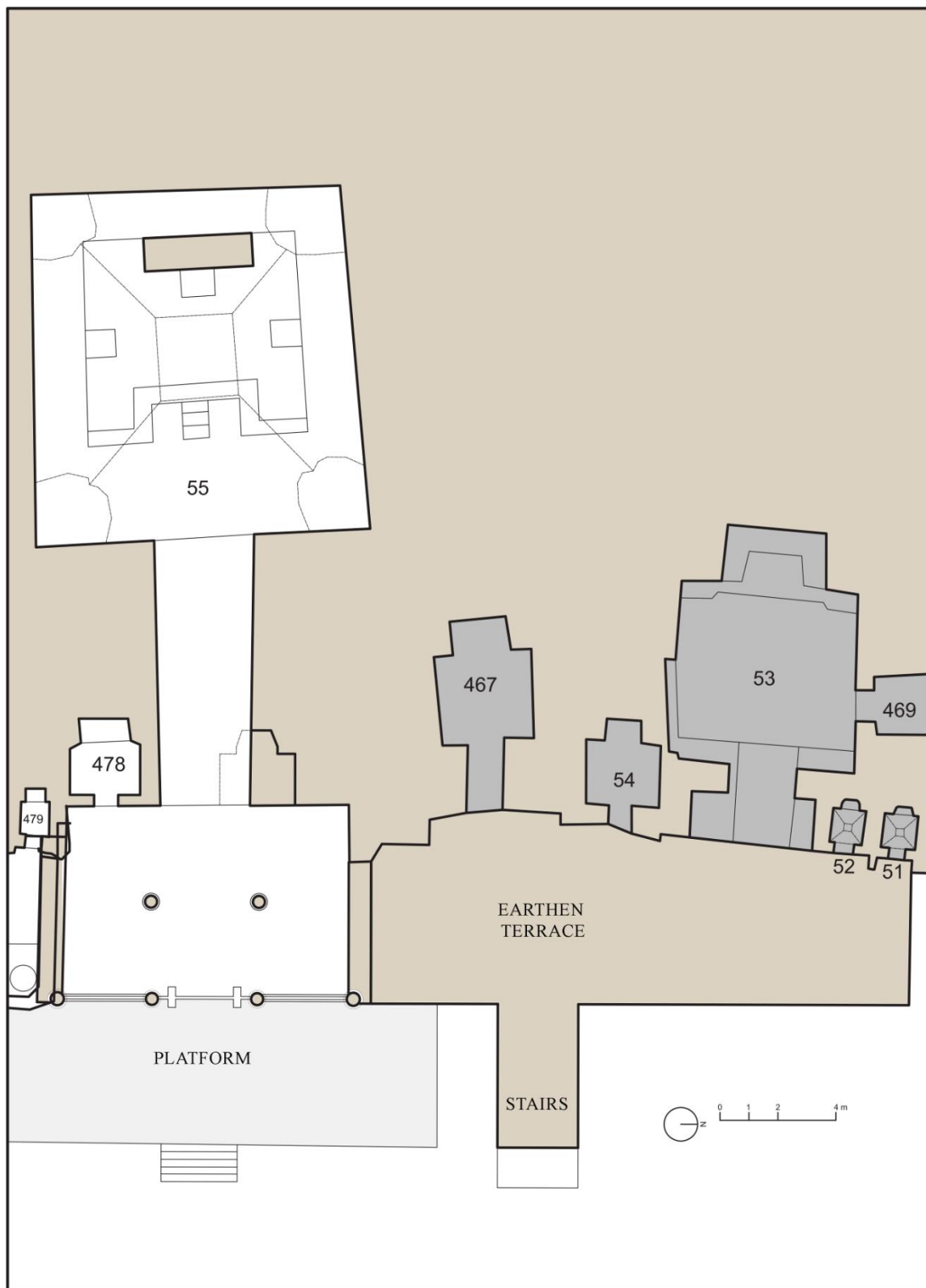


Figure 5-92. First-level plan drawing, the vicinity of Cave 454 in late-tenth century. Sealed caves are filled with gray color. Drawing by author.

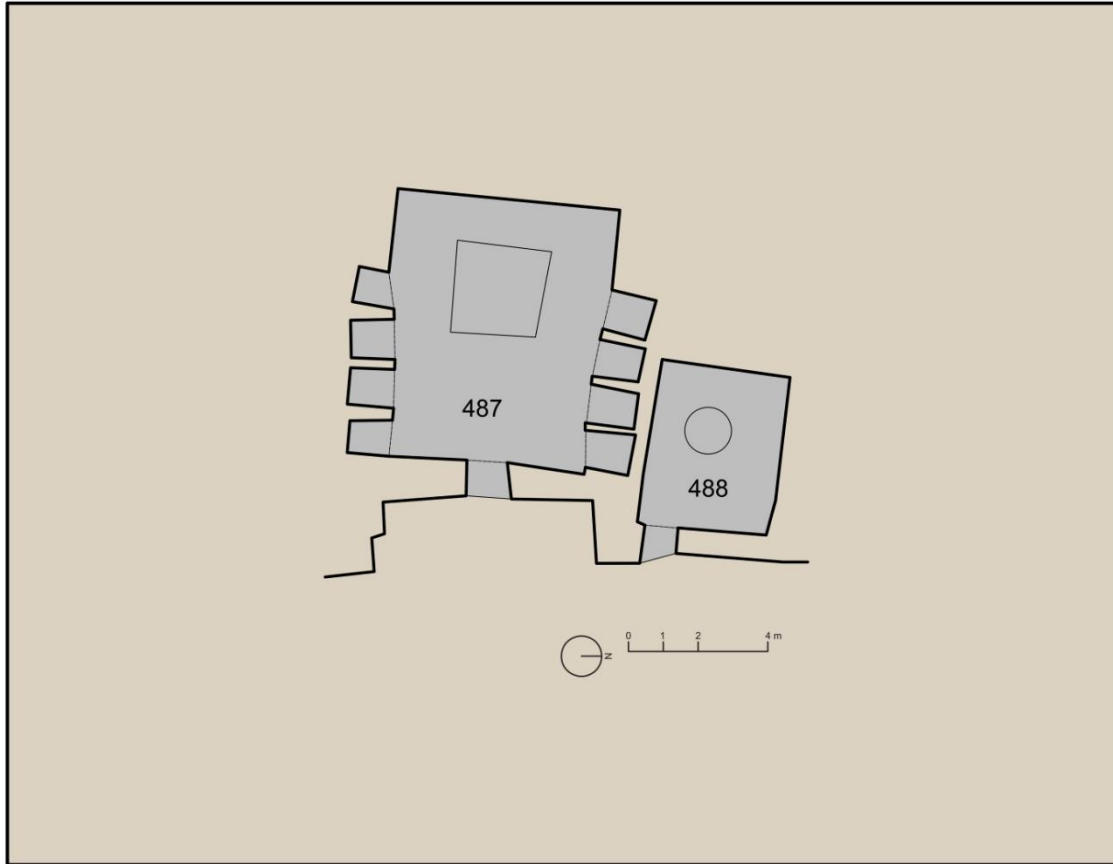


Figure 5-93. Underground level plan drawing, the vicinity of Cave 454 in late-tenth century. Sealed caves are filled with gray color. Drawing by author.

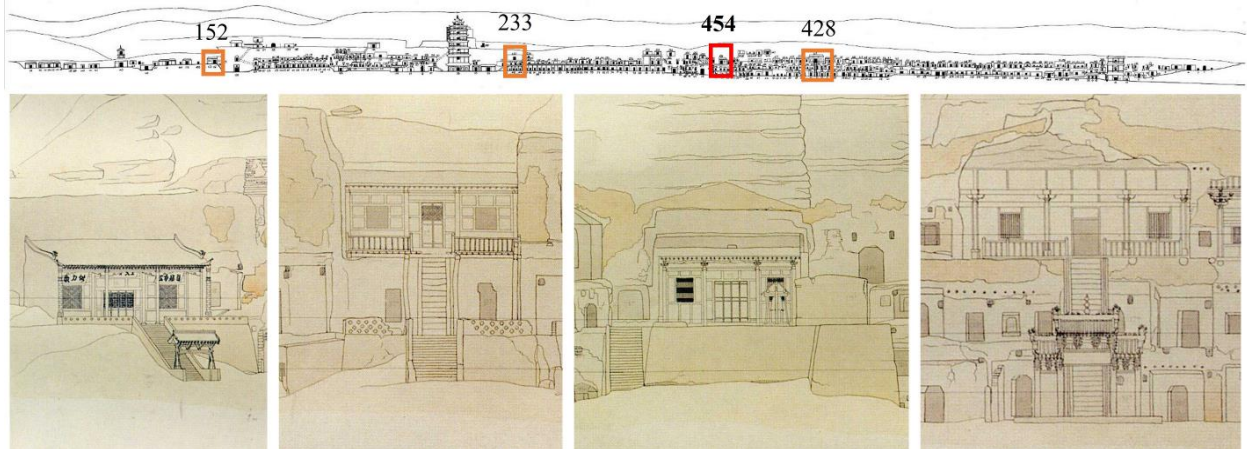


Figure 5-94. Three examples of a central stairway in front of a large cave on the upper levels at Mogao and Cave 454. a) Cave 152; b) Cave 233; c) Cave 454; d) Cave 428. All refurbished in the Qing period. Image after Gosudarstvennyĭ Ėrmitazh, *Eluosi guo li Ai'ermitashi bo wu guan cang Dunhuang yi shu pin*, vol. 5, plate 1. Annotation by author.

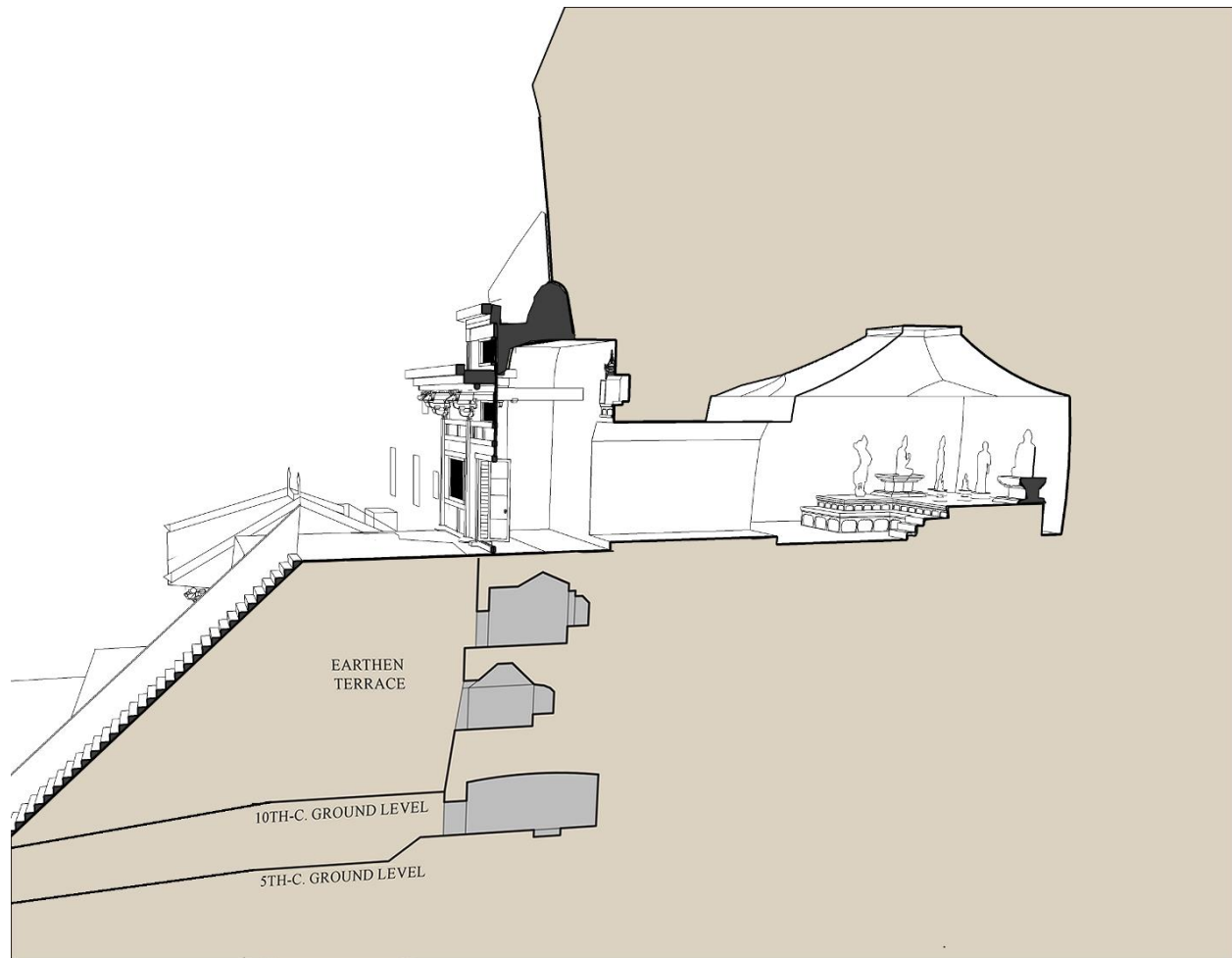


Figure 5-95. Sectional perspective of the Cave 454 vicinity in late-tenth century. Sealed caves are filled with gray color. Drawing by author.



Figure 5-96. A niche on the rear (north) wall of Cave 469 showing the inscription on the left side outside the niche. Photo by author with permission of Dunhuang Academy, July 2022.

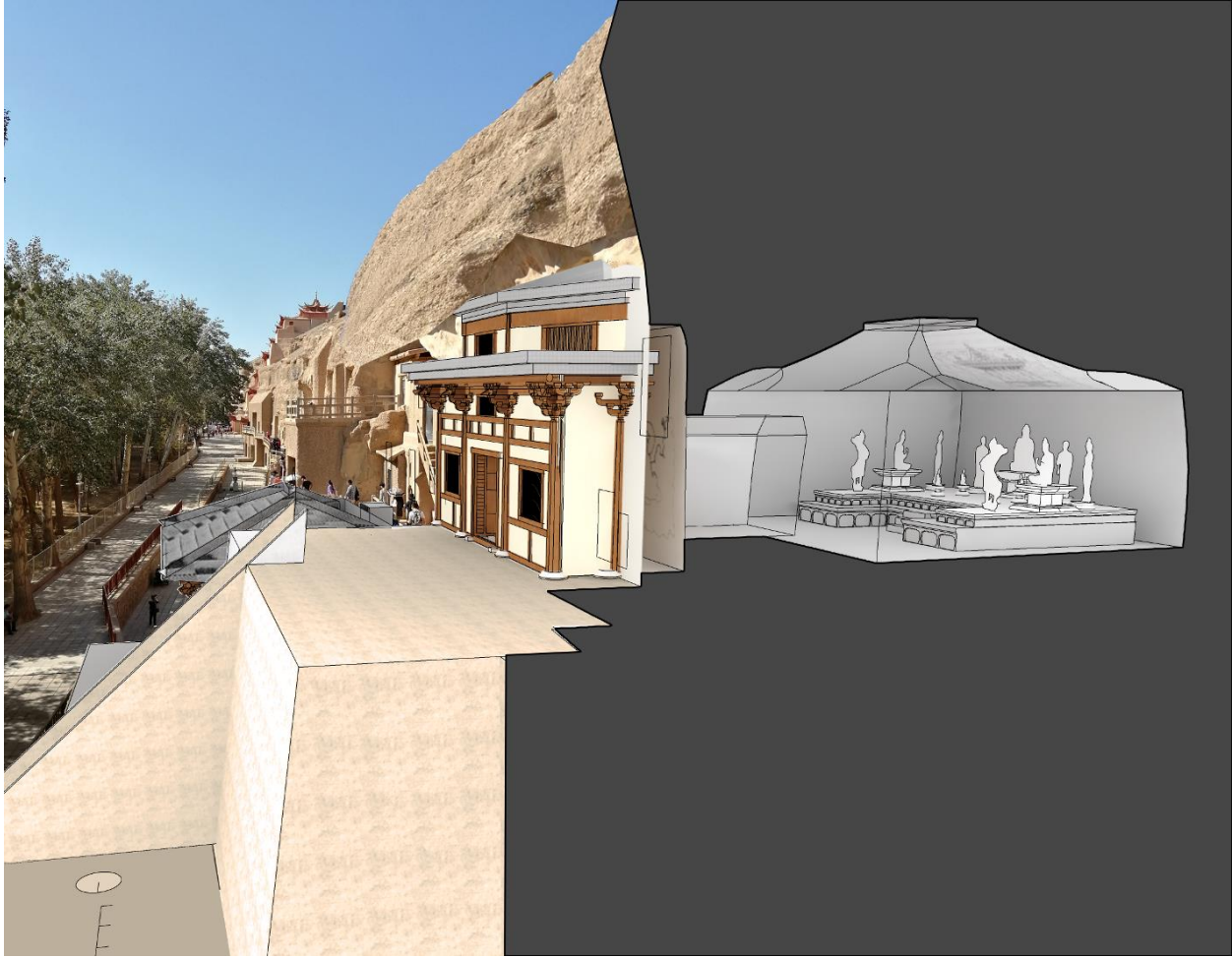


Figure 5-97. Sectional perspective of Cave 454 with façade. Drawing by author.

6. Conclusion

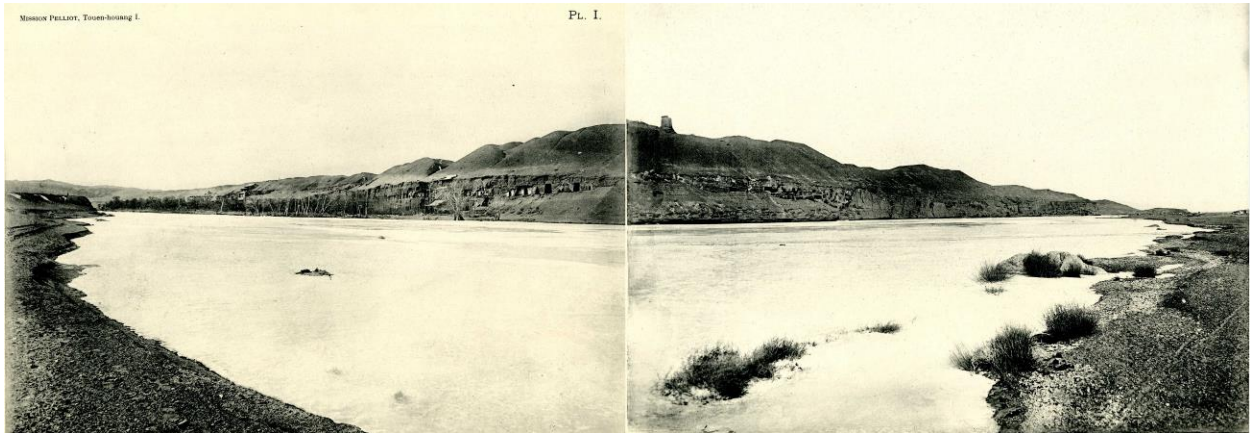


Figure 6-1. The south and north sections of the Mogao caves, showing the cave numbers in the Dunhuang Academy's numbering system. Pelliot, *Les grottes de Touen-houang*, vol. 1, plates 1 and 2; photo collage by author.



Figure 6-2. The Hall of Yue Zun and a historical stupa on a peak of Mount Sanwei (right) overlooking the oasis of Mogao (left). Photos by Yin Bo, October 6, 2022; collage by author.



Figure 6-3. The interior of the Hall of Yue Zun, showing a statue of Yue Zun with two attending monks. Photos by author, October 6, 2022.