

A STUDY ON GLASS PAGODAS FROM THE PALACE MUSEUM, BEIJING

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ABSTRACT

This paper examines the glass pagodas produced in the Qing imperial palace for Tibetan Buddhist rituals. Drawing from archival and material evidence, it explores the innovative techniques of the Imperial Glass Workshops in creating these intricate, multi-component objects. Combining glassblowing, casting, and cold-working methods, the pagodas showcase exquisite craftsmanship and the symbolic significance of glass in Buddhism. The study situates these artifacts within the broader context of Qing Buddhist culture, revealing the esteem for glass as one of the Seven Treasures in Buddhism and its multifaceted roles. By analyzing their production, decoration, and contexts, the research illuminates the intersections of art, religion, and imperial patronage embodied in these artifacts. It contributes insights into Qing material culture and the esteem for glass in Buddhist practice.

Glassware played a significant and understudied role in Tibetan Buddhism and influenced Buddhist practice at the Qing dynasty imperial court. To date, only a few articles focusing on Qing dynasty glass ritual objects have been published. “Glass from China for the Land above the Clouds” by Emily Byrne Curtis examines some of the attendant paraphernalia associated with Lamaist temples and halls of worship.¹ The most recent research by Liu Lihong on transparent glass containers used in Buddhist contexts at the Qing court shed light on the material agency and medial efficacy of the containers more generally.²

This paper examines the use of glass in the Qing imperial palace for religious purposes, with a focus on glass pagodas (*boli ta* 玻璃塔). It investigates glass pagodas mentioned in the Qing palace archives, along with objects formerly enshrined in the Linxi Pavilion of the Cining Palace Garden (*Cining gong hua yuan Linxi ting* 慈宁宫花园临溪亭) and glass pagodas displayed in the Fori Building of the Ningshou Palace (*Ningshou gong Fori lou* 宁寿宫佛日楼). The study explores their craftsmanship,

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1 Curtis 2004.

2 Liu 2021.

decorative elements, and religious significance. The research reveals the innovative techniques employed in creating glass pagodas and their role in Qing Buddhist culture. The findings highlight the importance of glass in religious practices and showcase the craftsmanship of glass artisans. Overall, this study contributes to our new understanding of the use of glass in the Qing Palace and its significance in Qing Tibetan Buddhist culture.

GLASS PAGODAS (*BOLI TA* 玻璃塔) FROM THE PALACE MUSEUM

The Palace Museum in Beijing (PM) houses a diverse collection of Tibetan Buddhist artifacts, primarily categorized into five classes: sculptures, thangkas, ritual instruments, scriptures, and archival materials. Among these, there are approximately 20,000 artifacts from original Buddhist halls, with the storage facilities containing over 8,600 copper sculptures and more than 7,000 ritual instruments.³

Among the objects currently housed in the Antiquity Department, PM, are two glass pagodas (**Fig. 1**), tower-shaped artifacts made entirely of glass and used for enshrining Buddha statues and relics. These two objects exemplify the typical style of the Tibetan Buddhist pagoda and represent exquisite examples of large-scale, intricately crafted, and highly complex glass artifacts from the Qing dynasty. Their exquisite craftsmanship, radiant brilliance, and exceptional use of glass represent outstanding achievements in Qing Palace glassmaking and stand as masterpieces of that era, unique and precious beyond comparison.⁴ These glass pagodas strikingly



FIG 1. (a) Glass pagoda. Qianlong period (1736–1795). H. 86 cm. The Palace Museum, Beijing, 故 00107598; (b) Detail of niche with Buddha. (Photos: The Palace Museum, Beijing)

3 Ma 2015, 173.

4 Zhang 2005, 294.

resemble the White Pagoda at Yong'an Temple (*Yong an si* 永安寺) in Beijing, which was constructed in the eighth year of the Shunzhi 顺治 emperor (1651).

The pagoda in [Figure 1a](#) is composed of 26 components,⁵ including the finial (*ta cha* 塔刹), body (*ta shen* 塔身), and base (*ta zuo* 塔座).⁶ The pagoda's crown is adorned with symbols—the sun and moon—and precious jewels representing the realms of *vajra* in Buddhism.⁷ The proceeding part is a parasol (*san gai* 伞盖) and 13 layered spires (*shisan xianglun* 十三相轮), symbolizing the 13 heavens of Buddhist cosmology. These components are assembled with metal finial rods (*cha gan* 刹杆) ([Fig. 2](#)). The most distinctive feature of the Tibetan Buddhist Pagoda is its inverted bowl-shaped body (*fubo shi* 覆钵式) with a niche open at the front, housing a copper-gilded statue of the Buddha of Infinite Life (Amitayus 无量寿佛) ([Fig. 1b](#)). Below the pagoda body is an inverted circular lotus base on top of a four-step square base, and on bottom a two-layered, waist-constricted square base (*xumi zuo* 须弥座), embellished with carved-gold cloud patterns and lotus-petal patterns. The design of each part has multiple levels of meaning and symbolizes the five paths to enlightenment (accumulation, preparation, insight, cultivation, and no-more-learning).⁸ The pagoda was originally enshrined on the northern side of an altar inside the Linxi Pavilion (*Linxi ting* 临溪亭,



FIG 2. Components of the disassembled pagoda in Figure 1. (Photo: The Palace Museum, Beijing)

⁵ Liu 2021, 122.

⁶ The names of each part of the pagoda are listed in [Figure 6](#).

⁷ The term *vajra* (*jīngāng* 金刚), which directly translates to “diamond” or “thunderbolt,” refers to a five-pronged ritual object and spiritual symbol used in Buddhist practice; it represents the indestructible state of a Buddhist who has reached full enlightenment.

⁸ Wong 2014, 13–15.



FIG 3. Gold pagoda inlaid with precious stones. Qing dynasty (1644–1911). H. 82 cm. The Palace Museum, Beijing, 故 00010451. (Photo: The Palace Museum, Beijing)

Pavilion by the Stream) of the Cining Palace Garden (*Cining gong hua yuan* 慈宁宫花园, Palace Garden of Kindness and Peace). In addition, in the original layout of the Fori Building (*Fori lou* 佛日楼, Pavilion of Buddha's Light) in Ningshou Palace (*Ningshou gong* 宁寿宫, Palace of Tranquil Longevity), glass pagodas were also present.⁹ Pagodas made of other materials similar in shape to the pagoda in **Figure 1** can also be found in the PM, such as a gold pagoda inlaid with precious stones (**Fig. 3**) and a pagoda made of lapis lazuli and inlaid with pearl and jade (PM故00009887).

GLASS PAGODAS IN THE PALACE ARCHIVES

The earliest record of the glass pagoda (*boli ta* 玻璃塔) discussed in this paper is a mention in *Huoji dang* 活计档 (Work archives of imperial workshops), from the records dating to the 21st year of the Qianlong 乾隆 period (1736–1795). On December 13, 1756 (archives of the Glass Workshop), a *boli ta* was presented to the emperor, who ordered, “Make another one of the same size, measuring two feet six inches in height [二尺六寸高 *er chi liu cun gao*; 76.2 cm], following the same design as the one presented. A sample should be made and exhibited for approval.” One year later, on May 4, 1757, two glass pagodas were presented. Due to their large scale and the quadrilateral corners

⁹ The Palace Museum 2005, fig. 5; Qing Aftermath Committee 1927, 1/10. The Qing Aftermath Committee was the predecessor of the Palace Museum, and its backbone became the backbone of the museum. In the 1920s, the Committee conducted a thorough investigation of the items in the Palace and compiled the Palace Museum Inventory Report (*Gu gong wu pin dian cha bao gao* 故宫物品点查报告).

of the bases, the glassmakers could not use blown glass for the entire structure. Their solution for presentation was to assemble blanks of various parts and at the same time to submit wooden samples and drawings for inspection. The emperor approved the production proposal. On July 14, 1757, Assistant Supervisor Jin Hui 金辉 presented two completed glass pagodas for display in the Fengsanwusi Hall (*Fengsan wusi dian* 奉三无私殿) in Yuanmingyuan (圆明园, Old Summer Palace).¹⁰ This archival record offers valuable data, enriching our understanding of the object in terms of its comprehensive manufacturing date, process, techniques, challenges, and intricate details, and also reveals important information about the pagoda's structure, dimensions, and the intended location to place the pagodas for veneration. The description aligns with the style seen in [Figure 1](#).

From the existing glass pagodas in the PM and the content of this archival document, we learn that the craftspeople initially attempted to create a 76.2 cm tall glass pagoda of blown glass. However, attempting to blow such a large-scale object as a whole likely resulted in multiple failures, especially with the square shapes. With molten glass, it is easier to achieve spherical shapes, and obtaining the thick, square glass bases depicted in the illustration may not have been possible with blowing techniques. As an alternative, the artisans blew the bell-shaped body, cast liquid glass into blocks, and then completed the production of various components by cold working. Finally, they assembled the components to “construct” the pagoda. This pioneering approach resulted in a magnificent glass pagoda of large size and complex shapes.

Qing Emperors often gave glassware as gifts to Dalai Lamas and Panchen Lamas. The glass pagodas and glassware from the Imperial Glass Workshops¹¹ served as both display supplies and presents, though gifts of the scale and artisanship of a glass pagoda were not common. Rare records can be seen in a list of gifts to the Dalai Lama in 1756, which included various glass items such as red glass vases, a three-colored glass vase, and a *liang bai* 亮白 (literally, “bright white”) glass pagoda.¹² It is worth noting that the term “bright white (glass)” in the records refers to colorless and transparent glass, as evidenced by the surviving artifacts.¹³

References to glass pagodas in archival records increased from the 1750s onward. In the 22nd year of the Qianlong period (1757), an edict ordered the installation of a glass pagoda in the Jiyun Building (*Jiyun lou* 吉云楼) of the Jianfu Palace (*Jianfu gong* 建福宫), accompanied by incense tables.¹⁴ The Qing Palace Display Archives¹⁵ (*Qing gong chen she dang* 清宫陈设档) reference a glass pagoda displayed in the Jiyun Building from the Daoguang 道光 and Xuantong 宣统 reigns that corresponds to this information.¹⁶

10 Chinese University of Hong Kong and First Historical Archives 2007, 21:717–718.

11 For more information about *Boli chang* (glass factory) and *Boli zuo* (glass workshop), see Xue 2023. These two names both refer to imperial glass workshops.

12 Chinese University of Hong Kong and First Historical Archives 2007, 22:279–280.

13 Due to the metal oxides in the glass formula, these colorless and transparent glass towers, especially those with thick bases, appear yellowish green in color.

14 Chinese University of Hong Kong and First Historical Archives 2007, 22:659.

15 Qing Palace Display Archives is the general term for the inventory of items used in various halls of the Qing Dynasty. In addition to the inventory of the actual displayed items of each hall, it also includes a list of accounts such as appreciation, storage, new collection, etc., which are important components of the Qing palace archives.

16 Qing Palace Display Archives, Religious relics (*Zong jiao wen wu* 宗教文物), Buddha Hall of Rushi Room in Jinyun Building (*Jiyun lou rushi shi fo tang* 吉雲樓如是室佛堂), Chen173, June 1839, 15/63, and Chen198, June 1915, 33/114.

In 1759 a pair of pagodas was made in the style of the white glass pagoda at the Jiyun Building. Furthermore, two Buddha statues were ordered to be placed inside the pagodas and then sent to Hanjing Hall (*Hanjing tang* 含经堂).¹⁷ In 1777, once again, a pair of glass pagodas, each measuring 76.2 cm in height with a base of 35.6 cm square, were produced in the style currently displayed in Jinglian Hall (*Jinglian zhai* 静莲斋). These pagodas were then presented for the Cuishang Building (*Cuishang lou* 萃赏楼) in Jianfu Palace.¹⁸

In 1782, eight small, white glass pagodas (*xiao bai boli ta ba zuo* 小白玻璃塔八座) were recorded as being displayed in the Xian Building (*Xian lou* 仙楼) of the Rain Flower Pavilion (*Yuhua ge* 雨花阁).¹⁹ They are consistently recorded in the display archives of the Daoguang and Guangxu 光绪 periods.²⁰ The small, white glass pagodas referred to are likely small-sized glass pagodas, with examples measuring 9 cm in height and 7.4 cm in width at the base, housed in the PM (资祭00005437-5442).

The glass pagodas mentioned in these archives exhibit a consistent form and size; all were crafted for the court Buddhist halls with the direct involvement and by command of the emperor. The increase in their number suggests not only the ongoing consolidation of activities related to Tibetan Buddhism in court life but also that it reached its zenith during the Qianlong period, reflecting the pinnacle of glass artisanship achieved by the Imperial Glass Workshops during this time and marking a flourishing period for glass production in the mid-Qianlong era.

GLASS PAGODAS FROM THE FORI BUILDING, NINGSHOU PALACE

In the eighteenth-century Qing court, Tibetan Buddhism played a significant role in the religious and cultural landscape. The Qing emperors, especially during the Qianlong era, showed great interest in Tibetan Buddhism. This interest was not only spiritual but had political motivations. As has been mentioned, the emperors bestowed titles and gifts upon the Dalai Lama and the Panchen Lama, aiming to secure their allegiance and support. This engagement with Tibetan Buddhism was part of the broader strategy to consolidate the diverse territories under Qing rule. The interest in Tibetan Buddhism also manifested in the commissioning of religious artworks, manuscripts, and artifacts.

This cultivation of Tibetan Buddhism resulted in the construction of over 40 Buddhist halls within the Forbidden City. These halls served as spiritual sanctuaries for imperial worship and were adorned with Buddha statues, ceremonial objects, scriptures, altars, and offering tables. The Qing Palace Display Archives mention the dedication of glass pagodas in prominent locations, such as the Hanjing Hall and Jiyun Building in the Forbidden City.

Fori Building, known as the Buddha's Sun Pavilion, was constructed in 1722, after the Jiyun Building in Ningshou Palace (Palace of Tranquil Longevity), during the reign of the Qianlong emperor (Fig. 4). It served as a dedicated Buddhist hall for the emperor's personal practice in his retirement. The two-story pavilion symbolized the emperor's desire to attain enlightenment and be illuminated by the wisdom of the Buddha.²¹

17 Chinese University of Hong Kong and First Historical Archives 2007, 24:153.

18 Chinese University of Hong Kong and First Historical Archives 2007, 40:532.

19 Qing Palace Display Archives, Religious relics, Yuhua Pavilion (*Yuhua ge* 雨花阁), Chen240, 1782, 51–79.

20 Qing Palace Display Archives, Religious relics, Yuhua Pavilion, Chen229, July 1835, 39/66, and Chen230, 1876, 39/65.

21 Wen 2008.



FIG 4. Exterior view of Fori Building.
(Photo: The Palace Museum, Beijing)

The building is well preserved, with its Qing Dynasty interior intact. The first floor is dedicated to the three major esoteric Buddhist deities and the Five Dhyani Buddhas. On the central altar of the second floor, there are statues of Shakyamuni Buddha and Green Tara, presented by the sixth Panchen Lama as a tribute to the Qianlong emperor's 70th birthday in 1779 (Fig. 5).²²

The original furnishing of the Fori Building included four glass pagodas, with their production dating back to the 39th year of the Qianlong emperor's reign (1774). The Imperial Glass Workshop (*Boli zuo* 玻璃作) was asked to create two pairs of glass pagodas following the style of the existing ones in the Jiyun Building. This indicates that the glass pagodas in the Fori Building were made in accordance with the style of that mentioned in earlier records from the 22nd year of the Qianlong period (1757).²³

Another record from the Treasury of the Imperial Household Department (*Zao ban chu qian liang ku* 造办处钱粮库) reveals the cost of producing four bright-white glass pagodas for the Fori Building. It required nearly a thousand taels of silver for materials and labor expenses.²⁴

²² Wen and Zhang 2020.

²³ Chinese University of Hong Kong and First Historical Archives 2007, 37:207.

²⁴ Chinese University of Hong Kong and First Historical Archives 2007, 40:5. As a point of comparison, the annual salary of top-ranking officials in the Qing Dynasty was 180 taels of silver and 90 stone of rice; see Zhao and Yang 1997, 150.



FIG 5. Interior view of the second floor, Fori Building. (Photo: after Wen 2008, figure 2)

In addition, the display archives of the 18th year of the Daoguang period (1838) provide detailed information on the placement of these four glass pagodas and the arrangement of other glass offerings. It also lists the Buddha statues enshrined in each pagoda and their decorations, which is valuable for reconstructing the original form of the glass pagodas (Table 1).²⁵

In the display archives of the 12th year of the Guangxu period (1886), the four glass pagodas are listed once again in the Fori Building. There are slight changes in their placement compared to the Daoguang period, but the four Buddha statues enshrined inside the pagodas remained the same from the time of their completion, during the Qianlong period. These glass pagodas are still displayed in the Fori Building today.²⁶

The original glass pagodas in the Fori Building (Fig. 6) were observed to have double banners and were gilded silver with red-glass inlays. There are small holes around the parasol for hanging ornaments. The upper part of the bell-shaped body features clouds in silver gilding on the shoulders, hanging ornaments, and glass pendants, along with gilded silver niche doors. The glass pedestal of the lotus base has small holes, suggesting the presence of inserted components such as gilded silver lions, Hercules,²⁷ and lotus. Relatively speaking, the glass pagoda in Figure 6 is better preserved, while the decorative elements on the top and body of the glass pagoda in Figure 1 are missing. It is inferred that glass pagodas from the Antiquity Department and the Fori Building very likely share similar decorations.

Decorating the Buddhist pagodas is not only an act of offering, but also a tribute to the attainment of ultimate Nirvana. Various decorative methods can be applied

25 Qing Palace Display Archives, Fori Building and Fanhua Building (*Fori lou Fanhua lou fo tang dang* 佛日楼梵华楼佛堂档), Chen416, 1838, 1/81.

26 Qing Palace Display Archives, Fanhua Building (*Fanha lou* 梵华楼), Chen412, 1886, 40–50/68.

27 Archive recorded as *kang shen* 扛神; similarities can be found in parallel objects made of other materials. Chinese University of Hong Kong and First Historical Archives 2007, 21:717–718.

West side of the west room, Fori Building				
No. 121	A pair of filigrana glass offering cups (<i>Fazhan</i> 法盞)	With red flower, in the box		
Northside				
No. 141	1 glass pagoda	A copper statue of Maitreya Bodhisattva 大利益番铜璃玛弥勒菩萨	Adorned with gilded silver ribbons, cloud-shaped shoulder ornaments, pendant corners, and decorative door panels. weighing a total of seven tael of silver, □ <i>qian</i> and five cents 柒两□钱伍分	Probably 故00200490
No. 152	1 glass pagoda	A copper statue of the Mother of Salvation, Maitreya Bodhisattva 大利益番铜璃玛绿救度佛母	The upper section is adorned with gilded silver float-ing ribbons, cloud-shaped shoulder ornaments and hanging pendants. Weighing a total of seven tael of silver, □ <i>qian</i> , five cents and four li 柒两□钱伍分肆厘	Probably 故00200486
Southside				
No. 157	1 glass pagoda	A copper statue of Lima Shakyamuni Buddha 大利益番铜旧璃玛释迦牟尼佛		Probably 故00200489 or 故00200491
In the middle				
No. 165	3 blue glass vases	In a box		
No. 172	1 glass pagoda	A copper statue of Lima Shakyamuni Buddha 大利益番铜旧璃玛释迦牟尼佛		Probably 故00200489 or 故00200491

TABLE 1.
Arrangements of Glass Offerings and Pagodas in Fori Building

to glass objects, including gilding, engraving, and enamel painting. The surviving glass pagodas from the PM primarily feature transparent glass, with red, white, and blue glass used for the top finial and parasol. The parasol and pedestal are adorned with engraved motifs of clouds and lotus petals, while other intricate decorations of different materials are added to the glass surface. Overall, the decorations are relatively simple compared to pagodas made of other materials. They primarily consist of shaping intricate blown-glass finials and combining components to create the layered structure of the substantial square base. These elements create a striking contrast with the sleek body.

HISTORICAL CONTEXT

The pagoda (Sanskrit *stupa* स्तूप, literally meaning “heap”) originated in ancient India and was initially constructed to house and enshrine the relics of the Buddha. With the spread of Buddhism into China, it took on various meanings such as “gathering,” “manifesting greatness,” “square tomb,” “round burial mound,” and “sacred shrine.” After the Buddha’s Parinirvana, the stupa containing his relics became a symbol of his presence and a spiritual focal point for people. Building stupas serves the purpose of

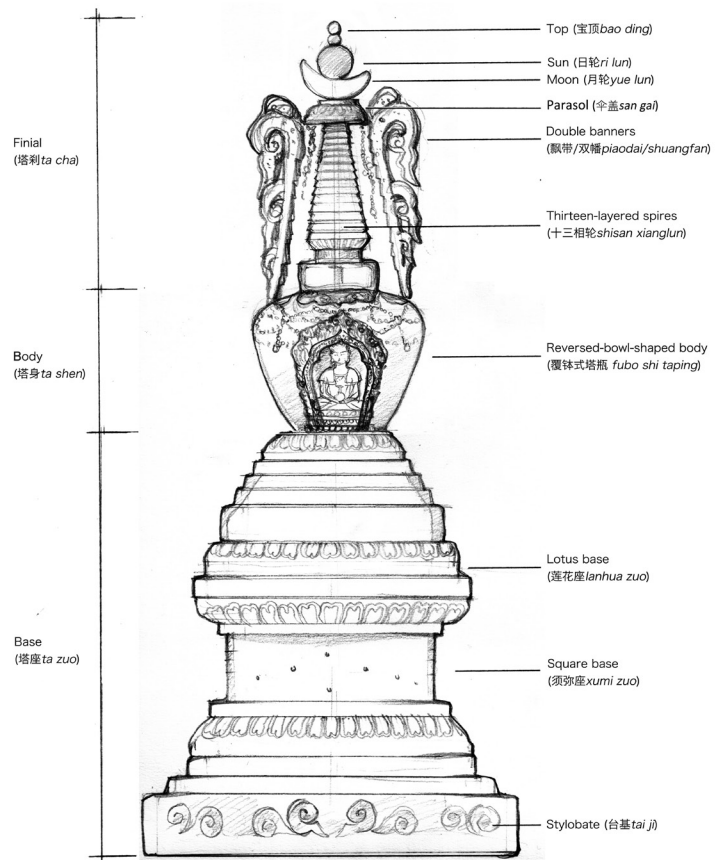


FIG 6. Sketch of the glass pagoda from the Fori Building and its structure. (Drawing: Yu Minggao)

commemorating the Buddha's greatness, inspiring faith, and expressing gratitude.²⁸ Construction of the stupa is a ritual in itself.²⁹

As the practice of Buddhism developed in China, various styles of pagodas emerged, including inverted bowl-shaped pagodas, pavilion-style pagodas, multiple-eave pagodas, pavilion-temple pagodas, and diamond-throne pagodas. These pagodas have evolved to serve the purpose of housing and preserving Buddhist scriptures, relics of eminent monks, and precious religious artifacts. Moreover, they have been crafted using a wide range of valuable materials, such as metals, enamel, pearls, agate, jade, porcelain, and glass. This has led to the creation of small-scale Buddhist pagodas used for religious activities like worship, which share similar architectural characteristics with their larger counterparts.³⁰

In China, the style of the inverted bowl-shaped pagoda first appeared in the Yungang Grottoes (*Yugang shi ku* 云冈石窟) carved during the Northern Wei period (386–534), and was introduced to Tibet in the eighth century. During the Yuan dynasty (1271–1368), with the rise of Tibetan Buddhism, the style—also referred to as *Lama ta* 喇嘛塔 (Lamaist pagoda)—saw extensive construction on the mainland.³¹ The Qing impe-

28 Dai 2014, 21–24.

29 Wong 2014, 4.

30 Shun 2022.

31 Sun 2009; Suonan 2003, 88.

rial family held a deep reverence for Tibetan Buddhism, leading to the widespread practice of enshrining this kind of pagoda in various materials throughout the Imperial Court. Concurrently, the advanced glass craftsmanship of the Imperial Workshops allowed for the production of such large-scale and highly complex glass pagodas.

GLASS AS ONE OF THE SEVEN TREASURES (QIBAO 七宝) OF BUDDHISM

Glass—known as *liuli* 琉璃, *liuli* 瑠璃, *yaoyu* 药玉, and *liaoqi* 料器—in ancient China played a significant role in the offering and creation of reliquary containers and sacred realms within Chinese ancient Buddhist practices.³² The term *liuli* is the Chinese transliteration of the Sanskrit word *vaidūrya* (वैदूर्य). Renowned for its purity, transparency, and rarity, *liuli* became one of the seven treasures (*qibao* 七宝) in Buddhism, possessing physical properties and connotations that align closely with Buddhist doctrines. The seven treasures usually comprise gold (*jin* 金), silver (*yin* 银), glass (*liuli* 琉璃), coral (*shanhu* 珊瑚), conch shell (*chequ* 砗磲), carnelian (*chizhu* 赤珠), and agate (*manao* 玛瑙).³³ Various scriptures³⁴ may differ in their interpretations, with some including crystal, amber, and pearls, but *liuli* is consistently one of these treasures. In archaeological discoveries of documents at Buddhist sites since the Wei and Jin dynasties (220–420), *liuli* commonly denotes glass. However, within Buddhist scriptures of those periods, the semantic connotation of *liuli* continues to encompass the meaning of precious gemstones.³⁵

In the first year of Renshou's reign (601), the emperor of the Sui Dynasty (581–618) personally used a seven treasures box to offer 30 sacred relics: "Take 30 gold bottles and 30 glass bottles. Use glass bottles to hold the gold bottles. Place the sacred relics inside."³⁶ Sacred relics (*she li* 舍利), being the most significant objects of veneration and holiness in Buddhism, are believed to possess unparalleled spiritual qualities. The use of glass bottles with their thin and transparent walls allowed the faithful to reverently observe the true nature of the sacred relics, emphasizing their divine and mysterious aspects. This significance is further exemplified by the Tang dynasty poet Bai Juyi 白居易 (772–846) in his poem "You Wuzhen shi si" 游悟贞寺诗 (Visiting Wuzhen monastery), where he vividly portrayed the advantages of glass as a container for sacred relics: "Paired bottles of white glass, their color resembling the chill of autumn water. Through the glass, the sacred relics are seen, their form round and rotating like golden pellets."³⁷

32 Cui 2018.

33 "Amitabha Sutra," Baidu, accessed December 1, 2023, https://baike.baidu.com/item/%E4%BD%9B%E8%AF%B4%E9%98%BF%E5%BC%A5%E9%99%80%E7%BB%8F/448678?fr=ge_al.

34 The seven treasures in the Ratnakuta Sutra are: gold, silver, pearls (*zhenzhu* 珍珠), lapis lazuli or glass (*liuli* 琉璃), conch shell, carnelian (*chizhu* 赤珠), and ruby (*hong baoshi* 红宝石). The seven treasures in the Mahāratnakūṭa Sūtra are gold, silver, pearls, lapis lazuli or glass, crystal (*shuijing* 水晶), red coral (*chi shanhu* 赤珊瑚), and rubies. It is important to note that these variations may reflect regional or doctrinal differences within Buddhism. The symbolic significance of the treasures often remains consistent, representing spiritual wealth and virtues rather than mere material riches.

35 Yu 2018, 87–88.

36 Shi [n. d.] (from the Tang dynasty, 618–907).

37 *Shuang ping bai liuli, se ruo qiu shui han, ge ping jian she li, yuan zhuan ru jin dan* 双瓶白琉璃, 色若秋水寒。隔瓶见舍利, 圆转如金丹 (Bai and Zhu [rev.] 1988, 340); translated by Shelly Xue.

FIG 7. Stone, bronze, gold, and silver coffins and glass bottles unearthed from the tower base of Dayun temple in Jingchuan, Gansu province. Tang dynasty (618–907). (Photo: Dayun Temple, Gansu Province)



Archaeological finds highlight the significance of glass in Buddhist culture, such as the discovery of the stone relic container in the foundation of Dayun Temple (*Dayun si* 大云寺) in Gansu Province (from the first year of the Yanzai period, 694 CE), which contained nested reliquaries and a glass bottle among 14 sacred relics (Fig. 7). Another example is the famous excavation of 20 glass objects used for veneration in Famen Temple (*Famen si* 法门寺), buried there by Emperor Xizong of the Tang dynasty in 874.³⁸ These discoveries offer compelling evidence of the profound esteem for and sacredness attributed to glass in the context of Buddhist art and rituals.

In addition, glass in various forms was also used for Buddhist offerings and veneration, such as glass fruits, glass eggs, and glass flowering trees—for example, the glass flowers unearthed from the tomb of the Tang dynasty in the southern suburb of Guyuan County, Ningxia (*Ningxia Guyuan xian* 宁夏固原县),³⁹ and the glass grapes unearthed from the underground chambers of Jingzhi temple in Ding County, Hebei Province (*Hebei Ding xian Jingzhi* 河北定县静志寺) (Fig. 8). Glass grapes, symbolizing Bodhi (the final Enlightenment that ends transmigration and leads to Nirvana), serve as evidence of how glass material was utilized to create objects that represented devout Buddhist beliefs and expressions of reverence.

The term *qibao ta* 七宝塔 (seven treasures pagoda) frequently appears in ancient Buddhist scriptures, referring to a pagoda adorned with seven treasures. One example is a precious 1 m high seven treasures pagoda (Liao dynasty, 916–1125) with gold, silver, glass, crystal, amber, coral, shell, tourmaline, and other materials, unearthed in Beita Temple in Chaoyang City, Liaoning province (*Liaoning sheng Chaoyang shi Beita tian gong* 辽宁省朝阳市北塔天宫).⁴⁰ However, based on current evidence, pagodas entirely made of glass materials only emerged during the Qing Dynasty.

OTHER RELIGIOUS GLASSWARE IN THE QING PALACE

The Qing palace archives record various glass ritual objects aside from the glass pagodas and items mentioned above. These include glass altar sets (*wugong* 五供),⁴¹ begging bowls (*bo* 钵), incense burners, flowers, fruit offerings, lanterns, sutra (scrip-

³⁸ Fufeng Famen Temple Archaeological Team 1988.

³⁹ Yu 2018, 90–91.

⁴⁰ Wang 2010.

⁴¹ The altar sets are the most common offerings containers, consisting of five offerings: one incense burner, two candlesticks, and two vases.



FIG 8. Grape clusters unearthed from the underground temple of the pagoda in Jingzhi Temple. Song dynasty (960–1279). (Photo: Jingzhi Temple, Hebei Province)

ture) boxes, and prayer beads, among other items. These objects were produced primarily by blowing, while items like sutra boxes and prayer beads were hot cast and cold worked. They exhibit vibrant colors, intricate decorations, and innovative forms.⁴² For example, there is a record from the ninth year of the Qianlong period (1744) stating that a glass altar set was enshrined in the Kunning Palace (*Kunning gong* 坤宁宫, Palace of Earthly Tranquility).⁴³ Examples of these can be found in the PM (**Fig. 9**), as well as red-to-white cameo-carved glass incense burners and candlesticks in the Bristol Museum & Art Gallery, United Kingdom (N4675–N4677), and a pair of blue-to-white cameo-cut glass candlesticks in the Corning Museum of Glass (86.6.2) (**Fig. 10**).

Sutra boxes serve to store and safeguard sacred Buddhist texts, symbolizing deep reverence for teachings and a steadfast commitment to preserving sacred knowledge, and are prominently featured in ceremonies highlighting the central role of scriptures in Buddhist practice. In 1752, a silver-edged aventurine glass sutra box (*jinxing boli jing xia* 金星玻璃经匣) was presented to the imperial court.⁴⁴ This corresponds to several examples of sheet glass made entirely of aventurine glass, intended for use as the inlay of a box, from the PM (故00107323). Another example is a cobalt-blue glass sutra box from the Palace Museum, Taipei (故藏 000155), which contains aventurine glass particles mixed into cobalt-blue glass background creating a shimmering effect resembling a starry sky.⁴⁵

From February 18 of the 20th year of the Qianlong emperor (1755), there is information about gifting “yellow-glass incense burners” to the Dalai Lama and Panchen Lama.⁴⁶ Subsequently, in the records of 1781,⁴⁷ 1783,⁴⁸ and 1789,⁴⁹ there are mentions of gifting a “yellow-glass incense burner” to the Dalai Lama. These records correspond

42 Wang 2021, 278–288.

43 Chinese University of Hong Kong and First Historical Archives 2007, 12:313–314.

44 Chinese University of Hong Kong and First Historical Archives 2007, 18:650–651.

45 Zhang 2017, fig. 182.

46 Chinese University of Hong Kong and First Historical Archives 2007, 21: 446.

47 Chinese University of Hong Kong and First Historical Archives 2007, 44:539–541.

48 Chinese University of Hong Kong and First Historical Archives 2007, 46:662–664.

49 Chinese University of Hong Kong and First Historical Archives 2007, 51:268–270.

FIG 9. Glass altar set (wugong 五供).
The Palace Museum, Beijing,
故 00106203. (Photo: The Palace
Museum, Beijing)



FIG 10. Pair of candlesticks from glass altar set.
Imperial workshops, China, Qianlong period
(1736–1795). Each: H. 24.3 cm, Diam. 12.4 cm.
Corning Museum of Glass, 86.6.2 A, B.
(Photo: Corning Museum of Glass)



to the yellow-glass double-eared incense burner found in the collections of the Potala Palace (*Budala gong* 布达拉宫), the winter palace of the Dalai Lama.

The display archives of the Jingshan Shouhuang Hall (*Jingshan Shouhuang dian* 景山寿皇殿, Longevity Hall) mention the presence of three vessel with filigrana, a pair of glass bottles and a bowl, which were recorded as offerings in the central niche of the hall's altar from 1781 to 1869.⁵⁰ An existing filigrana glass bowl from the PM (故 00107108) offers insights into the glass described in these records.⁵¹

Furthermore, there are several noteworthy glass artifacts of Buddhist implements in the PM, including a begging bowl in imitation of lapis lazuli (故00106484), a yellow-glass *bumpa* kettle (*benba* 奔巴; 故00107172), and reverse painted-glass fruit offerings (Fig. 11). The *bumpa* kettle is a tool in Tibetan Buddhism to hold holy water (water infused with saffron) and used for holding water, worshipping Buddha, and offering sacrifices. Fruit offerings—both real fruit and representations of it—symbolize gestures of generosity, gratitude, and the transient nature of material wealth, their dedication serving as a devotional act expressing humility while providing spiritual nourishment through the essence or energy believed to be consumed by deities. In addition, plate glass imported from the West was commonly used for the doors of pagodas, windows in Buddhist buildings, and lanterns in Buddhist halls.

Interestingly, the Qing court transformed Western glass forms into Buddhist religious artifacts. For example, a pair of late eighteenth-century engraved glass goblets with arms of Dutch counties (Gelderlant and Groeninge) were listed as offerings and inventoried with 32 small Buddhas and a pair of glass cups in a Buddha shrine in the Yongshou Palace (Fig. 12).⁵² The Qing court abandoned the original function of Western glass goblets for drinking and toasting and endowed them with new interpretations and connotations.



FIG 11. Glass fruit offerings. Qianlong period (1736–1795). The Palace Museum, Beijing, 故 00107166-5/8. (Photo: The Palace Museum, Beijing)

50 Qing Palace Display Archives, Jingshan Shouhuang Hall (*Jingshan Shouhuang dian* 景山寿皇殿), Chen382, November 7, 1781, 40/52, and Chen337, 1869, 40/53.

51 Xue 2021.

52 Qing Aftermath Committee 1926, inv. no. 金 1011.

FIG 12. Glass goblets, engraved with Dutch County names.
Late eighteenth century.
H. (left) 20.1 cm, (right) 19.9 cm.
The Palace Museum, Beijing,
故 00107420, 故 00107421. (Photo:
The Palace Museum, Beijing)



CONCLUSION

In summary, the glass pagodas discussed in this study were inspired by the Tibetan Buddhist Lamaist pagoda. They were mainly produced during the mid-Qianlong period and crafted by the Imperial Glass Workshops. These pagodas, measuring around 76.2 cm in height, showcased a unique style and were limited in quantity due to their intricate production process and high cost. By combining glass with other materials, the decorative elements of the pagodas overcame the limitations of glass and pioneered the use of glass as the main material. These large-sized glass pagodas reflected the esteemed status of glass in Qing Palace Buddhist culture, and the consistent role of glass in Chinese Buddhist culture.

The glass pagodas and other glass offerings in the PM collections demonstrate the court's appreciation for the craftsmanship and aesthetic appeal of glass. The innovative production of these objects involved techniques such as glassblowing, hot casting, engraving, and combining glass with other materials, like gilded silver. Beyond their ornamental purpose, these objects hold sacred significance, serving as tangible manifestations of devotion to the Buddhist faith. They represent a unique fusion of Tibetan Buddhist influences and Chinese craftsmanship within the Qing court. Moreover, the incorporation of Western glass forms into the court showcased a creative adaptation of Western forms to the court's aesthetic sensibilities. Overall, Qing imperial glass-making for religious purposes exemplifies the intersection of art, religion, and artisanship, highlighting the court's appreciation for artistic expression and spirituality.

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