# Liuli in Buddhist Rituals and Art in Medieval China 中古中國佛教儀式與藝術中的琉璃

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Keywords: *liuli*, *poli*, Seven Treasures, Buddhist rituals, religious practices

DOI: https://dx.doi.org/10.15239/hijbs.01.02.09

Abstract: In Buddhist texts, *liuli* was considered as one of the Seven Treasures (*qibao* 七寶). The author investigated all kinds of materials concerning glass: Buddhist scriptures, historical records, Chinese poetries and literatures, stone inscriptions, manuscripts and paintings from the Dunhuang Library Cave, mural paintings in Gansu and Xinjiang, archaeological relics from terrestrial palaces of Buddhist pagodas, tombs and cellars, and focuses on the relationship between *liuli* and other unearthed remains in a holistic approach to the Seven Treasures, and in the context of Buddhist offerings (treasure offering and perfume offering) and sacred utensils.

The author hopes to cast some new light on the religious function and symbolic meaning of *liuli* in Buddhist ritual practices, trace the origin of this concept and examine its demonstration in text and art. This paper is a case study intended to develop a comprehensive understanding of ritual texts and religious practices in the using of sacred objects and to rethink the role of material culture in Buddhist history and natural history in Medieval China.

# Liuli 琉璃 in the Buddhist Concept of 'Seven Treasures'

Buddhist monasteries in medieval China can be considered local depositories of knowledge and cornucopia for treasures. They are the centers of belief and scholarship, as well as concentrated sites of material culture.¹ The detailed records from *shiwu li* 什物曆 (inventories of provisions) and *shiru shu* 施入疏 (donation records) found in Dunhuang enable us to develop a detailed understanding of the structure and sources of monastic wealth in medieval China.

Hou Ching-lang's research on the Longxing si shiwu li 龍興寺什 物曆 (Inventories of Provisions of Longxing Monastery) shows the value and prospects of research on these types of texts.<sup>2</sup> Through analysis of these records, it is clear that various jewels and precious objects constitute an important component of the monastic wealth in Dunhuang. The presence of gold and silver utensils, gemstones and pearls continually draws attention from numerous scholars. Not long after Hou's study, Tang Geng'ou 唐耕耦 and his colleagues offered a critical edition of these two types of texts.<sup>3</sup> Their work became the foundational source that subsequent researches are grounded upon. Even now, the critical edition remains an essential reference for the study of those two types of documents. Jiang Boqin 姜伯勤 also discussed liuli, chalcopyrite, coral, emerald, pearl, amber, and turquoise.4 Zheng Binglin 鄭炳林 traced their origins and classified these precious substances as imported commodities in Dunhuang marketplaces during the period of the late Tang and Five Dynasties.<sup>5</sup> Later, Rong Xinjiang 榮新江 extensively examined foreign objects among

<sup>&</sup>lt;sup>1</sup> Rong, 'Yutian huazhan yu sute yinpan', 246.

Hou, 'Trésors du monastère Long-hing à Touen-houang', 149–68.

<sup>&</sup>lt;sup>3</sup> Tang, et al., eds. *Dunhuang sehui jingji wenxian zhenji shilu*, 1–109.

<sup>&</sup>lt;sup>4</sup> Boqin Jiang has previously discussed Dunhuang and the 'incense and medicine road', 'pearl road', and '*liuli* road' from Persia, among which the idea of the '*liuli* road' is quite novel but has yet to be developed. See Jiang, *Dunhuang tulu-fan wenshu yu sichou zhilu*, 64–69. Jiayao An has expanded on this idea, see An, 'Boli zhilu', 21–27.

<sup>&</sup>lt;sup>5</sup> Zheng, 'Wantang wudai Dunhuang maoyi shichang', 72–76.

the donations to medieval Dunhuang monasteries. Not only did his research show the influence of foreign culture on Dunhuang Buddhism from Khotan, Sogdiana, Uyghur and elsewhere, it also investigated the views of both the monasteries and the donors about these donated foreign objects in order to discuss their value and significance. Compared with previous studies, the significance of Rong's paper is in his emphasis on the intersection between material culture and spiritual culture. The explanations Rong developed about the relationships between the two levels of monastic wealth and donated foreign objects are strikingly refreshing and have methodological significance.

The contributions of previous scholars provide a great deal of inspiration for further study. However, the majority of previous studies departs from the point of view of the history of the exchange between China and foreign countries or the history of social economics. Because of this, scholars over-emphasize the commodity nature of the precious substances involved. We must also consider why there were so many of these treasures amassed in Dunhuang monasteries. If we understand these as merely accumulated monastic wealth or objects which have come via silk road trade, but do not comprehend them through the Buddhist notion of *qibao* 七寶 (seven treasures), we will be unable to provide a convincing explanation.

Buddhist *vinaya* codes regulate against monasteries from seeking the accumulation of wealth and declare that monks and nuns should cultivate 'few desires and contentment' and not hoard gold or silver.<sup>7</sup> It is for this reason that Binglin Zheng experienced some difficulties when considering the nature and function of precious objects in a monastery. When discussing emerald (瑪瑙), Zheng stated:

Places where emeralds are recorded in Dunhuang texts are few, and this shows that it was inappropriate for monasteries to store precious substance such as emeralds. All cases of monasteries keeping this type of precious substance are due to local devotees' donations to the monasteries.

<sup>6</sup> Rong, 'Yutian huazhan yu sute yinpan', 246–60.

<sup>&</sup>lt;sup>7</sup> Kieschnick, The Impact of Buddhism on Chinese Material Culture, 2–14.

In addition, when discussing coral (珊瑚), he said: 'That Dunhuang monasteries already stored coral is sufficient to demonstrate that coral was more commonly seen in Dunhuang markets of the time'.8 Admittedly, the development of Buddhism in Chinese society produced a massive monastic economy. Monks and nuns often held disputes about wealth and property, which they could not resolve without seeking legal means beyond vinaya codes. The social lives of Dunhuang monks and nuns had an increasingly secular tendency. Within Dunhuang literature, there are many cases where it is evident the lifestyle of the monasteries' monks and nuns directly contradicts the regulations in the vinaya codes and monastic rules. 10 If we bear this in mind, the frequent appearance and significant quantities of emeralds, pearls, and other precious substances in the Dunhuang shiwu li texts do not seem as strange. However, the fundamental nature of these objects may not necessarily be as commodities or wealth. No precious substances, such as emeralds, have ever been seen in economic contracts, official documents of the Guiyi jun 歸 義軍 (Return to Righteousness Army) regime, or the like, yet they appear in monastic inventories and records of donations. This shows that they were not commodities or market priced items in general circulation, nor were they from government treasuries or the wealth of the aristocracy. Rather, they were religious artifacts. That being the case, it is necessary to consider the religious sources and functions of such objects. They likely have some connection with the Buddhist notion of the 'seven treasures' and the practice of using precious objects as adornments.

The specific precious substances included in the 'seven treasures' were not at all standardized across different historical periods and Buddhist texts.<sup>11</sup> The *Fanyi mingyi ji* 翻譯名義集 (Compilation of Translated Terms), fascicle 3, states that there are two types of the seven treasures: 'One, seven types of precious treasures. Two, seven

<sup>&</sup>lt;sup>8</sup> Zheng, 'Wantang wudai Dunhuang maoyi shichang', 73, 74.

<sup>&</sup>lt;sup>9</sup> Yan, Fojiao jielü yu zhongguo shehui, 194-206, 449-68.

<sup>&</sup>lt;sup>10</sup> Hao, Tang houqi wudai songchu, 2-4.

<sup>&</sup>lt;sup>11</sup> See Sadakata, 'Shichihō', 84–91.

types of royal treasures'. The first type of 'seven treasures' is explained in four different ways according to the following texts:

The Fodi lun 佛地論 (Commentary on the Stages of a Buddha) states: 'First, Gold; second, silver; third, \*vaidūrya (吠琉璃); fourth, \*sphatika (頗胝迦); fifth, \*musāragalva (牟呼婆羯洛婆), which is cornelian; sixth, \*aśmagarbha (遏濕摩揭婆), which is emerald; and seventh, red pearl.'

The Wuliangshou jing 無量壽經 (Sūtra of the Buddha of Infinite Life) states: 'Gold, silver, liuli, \*sphațika, coral, emerald, and cornelian.'

The Hengshui jing 恒水經 (Sūtra of the River Ganges) states: 'Gold, silver, coral, pearl, cornelian, bright moon pearl, and mani pearl (摩尼珠).'

The Dalun 大論 (Great Commentary [on the Perfection of Wisdom]) states: 'There are seven types of treasures: gold, silver, \*vaidūrya, \*sphatika, cornelian, emerald, and red pearl.'12

《佛地論》云,'一金、二銀、三吠琉璃、四頗胝迦、五牟呼婆羯洛婆 (當硨磲也)、六遏濕摩揭婆(當瑪瑙)、七赤真珠.'《無量壽經》云," 金、銀、琉璃、頗梨、珊瑚、瑪瑙、硨磲.'《恒水經》云,'金、銀、珊 瑚、真珠、硨磲、明月珠、摩尼珠.'《大論》云,'有七種寶:金、銀、 毘瑠璃、頗梨、硨磲、碼碯、赤真珠.'

The notion that the seven treasures are used as Buddhist adornments is in general related to the common practice typified in the Foshuo Amituo jing 佛說阿彌陀經 (Sūtra on Amitābha Buddha, spoken by the Buddha):

The Land of Infinite Bliss has ponds composed of the seven treasures which are filled with water of eight merits. The bottom of the ponds is spread with gold sand, and the paths on all four sides are made of gold, silver, liuli and sphațika. Above these are towers which are adorned with gold, silver, *liuli*, *sphațika*, cornelian, red pearl and emerald.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Fanyi mingyi ji, T no. 2131, 54: 1105a19–26.

<sup>&</sup>lt;sup>13</sup> Foshuo Amituo jing, T no. 366, 12: 346c16-437a4.

極樂國土有七寶池,八功德水充滿其中,池底純以金沙布地。四邊 階道,金、銀、琉璃、頗梨合成;上有樓閣,亦以金、銀、琉璃、 頗梨、車**栗**、赤珠、馬瑙而嚴飾之。

Furthermore, in the *Qishi jing* 起世經 (Sūtra on the Origin of the World), translated by Jñānagupta 闍那崛多 and others in the Sui Dynasty, it states:

The top part of Mt. Sumeru, King of Mountains, is a peak. From this, the four sides stand forth reaching down to the sea, each seven hundred *yojanas* in height, most spectacular and lovely, and composed of the seven treasures. That is, ornamented with gold, silver, *liuli*, \*sphatika, pearl, cornelian, and emerald.<sup>14</sup>

須彌山王,上分有峯,四面挺出,曲臨海上,各高七百由旬,殊妙可愛,七寶合成,所謂金、銀、琉璃、頗梨、真珠、車**栗**、瑪瑙之所莊挍。

Apart from the above-mentioned descriptions, there are other lists which include amber and sapphire among them. Regardless of what explanation is given, *liuli* is the most commonly listed. From the preceding analysis we can see that the reason *liuli* is highly regarded in Buddhism is not just due to its preciousness and rarity, but also because of its important connection as part of the larger notion of the 'seven treasures'.

As one of the seven treasures, the questions of what *liuli* (also written as 瑠璃, 瑠瓈, 流離, and *qiulin* 璆琳) is, whether or not it is the same as *poli* 頗梨 (or 頗黎), or whether it is just the ancient term for glass, *boli* 玻璃, has been a matter of dispute for a long time. Berthold Laufer believes that in medieval China, *liulu* and *boli* were two distinctly different things. In his examination of 'jade *liuli*' (壁琉璃), he cited Duan Yücai's explanation in his *Shuowen jiezi zhu* 說文解字注 (Commentary to Explaining Words and Analyzing Char-

<sup>&</sup>lt;sup>14</sup> *Qishi jing*, *T* no. 24, 1: 310c20–23.

<sup>&</sup>lt;sup>15</sup> Onoda, 'Kodai garasu', 27–30.

acters), believing that the source of this word is from some kind of Central Asian language. He took it a step further by conjecturing that it is possibly from the Tungusic language. He thought that liuli refers to colored glazed ceramics, such as liuli tiles, whereas boli indicates 'glass'. 16 Laufer claimed that the Chinese term liuli is considered a transliteration of the Sanskrit word 'vaidūrya' (Pāli: veluriyam), which in Buddhist texts refers to beryl (綠柱石) or lapis lazuli ( 青金石).17 Poli was first seen in the 'Records of the Western Regions' of Wei shu 魏書 (Book of Wei) as follows: 'The nation of Persia, ... the ground is flat and even, and it produces gold, silver, chalcopyrite, coral, amber, cornelian, emerald, many large pearls, poli, liuli, crystal, sapphire, diamond, huoji, ... orpiment, and other such materials'. 18 Within this description, three items—poli, liuli and crystal—are separately listed, rather than taken as one thing. Generally, scholars regard poli as the Chinese transliteration of the Sanskrit word sphatika. Early Chinese translations of Buddhist texts also use the already existent Chinese term shuijing 水精. Poli is a naturally occurring transparent precious stone, whereas liuli is man-made boli [glass]. Junko Miyajima's 宮島純子 examination mainly is based on Buddhist texts. She claimed that China originally used liuli (流離 or 琉璃) to refer to boli [glass], in particular glass which was brought in from the Western regions of Central Asia. When Buddhist scriptures began to undergo translation, they used liuli (琉璃) to translate green colored gems and used shuijing (crystal) to translate transparent gems. This continued up until Kumārajīva in the Later Qin Dynasty, when he started to use the transliteration word poli (頗梨) to translate crystal. However, due to China's use of shuijing to refer to colorless, transparent crystal, the translation term *poli* was also used to stand for col-

<sup>&</sup>lt;sup>16</sup> Laufer, *Jade*, 110–12. Laufer's ideas represent the mainstream opinion of his time. However, they are in need of a reappraisal due to new discoveries of archeological evidence and textual sources.

<sup>&</sup>lt;sup>17</sup> Laufer raised this idea based on his contemporary's Buddhological and Indological researches. See Laufer, *Jade*, 111. This point of view was later inherited by Edward Schafer. See Schafer, *The Golden Peaches from Samarkand*, 230–34.

<sup>&</sup>lt;sup>18</sup> Weishu, 2270.

ored, transparent gems. Even though *liuli* in Buddhist texts refers to a gemstone, the usual understanding in secular society was as another term referring to *boli* [glass]. This situation continued all the way to the middle of the Tang Dynasty, as manifested in the *Yiqie jing yinyi* 一切經音義 (Sounds and Meanings [of Terms] in the Scriptures). Although at that time Buddhist scriptures chose to use the word *poli*, whether or not ordinary people also used this term to refer to glass is not clear. Despite this, we can surmise there is a very high possibility that under the influence of the definitions in the earliest Chinese translations of Buddhist scriptures, the term was understood to refer to a colored, transparent gem stone. <sup>19</sup>

Miyajima's distinction between the meanings of related terms in Buddhist scriptures and those of non-Buddhist understanding is extremely significant. However, it is common to see either the same name or different names refer to the same thing in medieval China. Objects were also easily conflated in other historical periods and textual contexts. Untangling the threads of meaning is not an easy task. Because translated words in Buddhist texts do not only appear in single scriptures, nor are they translated by just a single person, it is not surprising that a plethora of ambiguities occurred.

The actual usage of terms outside of texts often became more complicated and requires a comprehensive analysis. Literary works in the Tang Dynasty, such as Wei Yingwu's Yong Liuli 詠瑠璃 (Ode to Liuli), state: 'Colored like winter's ice, clear it blocks the finest dust; Cannot be seen on an ivory banquet seat, how can one entertain a beautiful lady?'<sup>20</sup> It is evident this is a description of something that should be a highly transparent man-made glass object. However, in the Tang Dynasty, there were also examples where objects and items composed of somewhat transparent materials were generalized as liuli. In the Hejia Village Hoard found in Xi'an, a silver pot with a lotus petal pattern and handle was found. Inside the lid of this pot was a record written in ink by someone from the Tang Dynasty of the various types and quantities of objects in the hoard. The list and

<sup>&</sup>lt;sup>19</sup> Miyajima, 'Kanyaku butsenten', 365–80.

<sup>&</sup>lt;sup>20</sup> Wei jiangzhou ji, 515.

the actual items match completely. In the list, there is 'one each of *liuli* cup and bowl' (琉璃盃椀各一). The matching items are a glass cup with raised design and a shallow crystal vessel with eight lobes. Whereas, 'sixteen *poli* {unreadable text}' (頗黎十六□) corresponded to sixteen pieces of gemstones.<sup>21</sup> The glass cup was determined to be a glass vessel from Sassania based on the manufacture technique.<sup>22</sup> The vessel shape and the manufacture technique of the shallow crystal vessel with eight lobes are exactly the same as a shallow white jade vessel with eight lobes featuring a honey-suckle design that was excavated at the same time. It is very likely that these were produced as an imitation of Sassania style by Chinese craftsmen of the latter half of the seventh century.<sup>23</sup>

The written list described the shallow crystal vessel as a liuli bowl, which may have been an error due to inaccurate scrutiny, or it may be possible that at the time such distinctions were not as strict. This shows that, up until the mid to late Tang Dynasty, objects made of glass and crystal still were both called *liuli*, whereas the term *poli* was used to refer to gemstones, continuing the early tradition of Chinese Buddhist translation. The *Shōsōin* collection in Nara, Japan, includes a glass plate with a high base, which, according to the display records, is 'a white liuli tall vessel'. This object from the Tang Dynasty was added to the collection in the year 752 and is a clear and fairly tall sodium-calcium glass vessel. It may have been imported from West Asia, or it may have been made in the Tang Dynasty.<sup>24</sup> The phrase 'white *liuli*' comes from a generic Tang appellation, which explains why Tang people also called colorless, transparent glass 'white liuli'. Among excavated objects from Buddhist sites from the Wei-Jin period onwards, the term *liuli* appearing on inventory lists or engraved on steles commonly refers to glass. On the contrary, in Buddhist scriptures, the meaning remains to be a kind of gemstone. The discussion in this paper makes a distinction based on the different contexts involved.

<sup>&</sup>lt;sup>21</sup> Shaanxi lishi bowuguan, et al., eds. *Huawu datang chun*, 214–15.

<sup>&</sup>lt;sup>22</sup> Huawu datang chun, 101.

<sup>&</sup>lt;sup>23</sup> Huawu datang chun, 97.

<sup>&</sup>lt;sup>24</sup> Nara kokuritsu hakubutsukan, *Shōsōin ten (heisei gonen)*, plate 49.

# *Liuli* in Buddhist Belief: Its Function and How It was Expressed in Buddhist Art

In the Yaoshi liuliguang benyuan jing 藥師琉璃光本願經 (Sūtra of the Liuli Radiance of the Medicine Teacher), it reads:

When I attain bodhi in the next life, I aspire to have a body like *liuli*: clear both inside and out, pure without flaws.<sup>25</sup>

願我來世得菩提時,身如琉璃,內外明徹,淨無瑕穢。

The passage above is often quoted by scholars to explicate how *liuli*, as a symbol of clearness and flawlessness, was perceived in the Buddhist tradition.<sup>26</sup> This interpretation is undoubtedly correct in a general sense. However, more specific aspects of *liuli* are frequently neglected. For example, Buddhist followers associated *liuli's* translucence with Buddha nature, which is likewise without any defilements. Subsequently, we can see how these followers' understanding of Buddha nature was reflected in ritual practices. Because of this, the Dunhuang *yuanwen* 愿文 (prayers) are particularly valuable since they serve as evidence to show how Buddhist belief was expressed in practice. For example, in S.5639 and S.5640 of the \*Wangwen fanben deng 亡文範本等 (\*Protocols of Prayers for the Deceased and More) preserved in the British Library, the following words are found:

[As for] the wish for meditation practice: may the mind be at rest, and (perceive) the truth and form as one; may the three certainties and five fetters [be] practiced. For *vinaya*, may the precedent sages' names be praised, and the wind of *vinaya* be ubiquitous in the cosmos; may the moon of precepts hang very high [in the sky], just as [the monk in the story of] the goose and gem. As for *dharma*,

<sup>&</sup>lt;sup>25</sup> Yaoshi liuliguang benyuan jing, T no. 450, 14: 405a11–12.

<sup>&</sup>lt;sup>26</sup> Zhao, 'Lun weijin zhi songyuan shiqi fojiao yicun zhong de boliqi', 62–63.

may the virtuous words become majestic, and the ocean of truth be vast and deep; may the speech produce lotus flowers, and be as pure as the sound created by gently touching [two pieces of] beautiful jade. As for monks, may they penetrate the three kinds of awareness; may the five aggregates support their body; may the four kinds of cognition become fully illuminated, and may they realize the perfect enlightenment very soon. Also, may the goose gem shine eternally, and also the moon of precepts; may [the monks] always be at ease under the Buddha, and always be reborn in good realms. In the world of silver, may thusness always be realized, and may the gathering of *liuli* expel the contaminated. As for nuns, may their mind be like a jeweled mirror, which is intrinsically flawless in nature; may their mind be as bright as pearl, which is always luminous and pure.<sup>27</sup>

Furthermore, the *Wang zhuangyan* 亡莊嚴 (Adornment of the Deceased) in the same manuscript reads:

I humbly pray in the *liuli* hall that I will walk around by stepping on fragrant stairs, and pick flowers in the grove of jewel-trees to offer the Buddha. Also, that may I receive a prediction of future enlightenment next to the jade-green water, may red lotus be born spontaneously; may the water of dharma nourish [my] mind, and the scented wind touch [my] consciousness.<sup>28</sup>

In P.2044 of the *Wen Nanshan jiang* 閩南山講 (Hearing Lectures of Nanshan), *liuli* is directly used as a symbol for a pure-minded person's search for the *dharma* when it says:

An excellent person's mind-water is as pure and clear as *liuli*; his sense-field is redolent with the scent of sandalwood. The wholesome roots have been planted in his previous lives, [so in this life] he was born knowing repentance. Therefore, he bid farewell to his parents

Huang and Wu, *Dunhuang yuanwen ji*, 213.

<sup>&</sup>lt;sup>28</sup> Huang and Wu, 215.

and left his country, carrying a trunk on his back, and went searching for a teacher.<sup>29</sup>

As one of the 'seven treasures' in the Buddhist tradition, *liuli* as a symbol of clearness and purity was a belief deeply rooted in people's minds thanks to the transmission of Buddhist scriptures and ritual practices. Its popularity also spread all over China through other literary genres, such as books on herbal medicine, the primer (on Chinese classics), encyclopedia, poetry and prose, and so on. For example, in the *Bencao shiyi* 本草拾遺 (Supplements to Materia Medica), composed in Tang by Chen Cangqi 陳藏器, we found:

It is recorded in the *Nanzhou yiwu zhi* 南州異物志 (Records of Extraordinary Objects of Southern Prefectures) that *liuli* is a type of stone...exactly like agate and cornelian, it belongs to the category of jade; it is a very precious type of jewel in the Western regions. In Buddhist texts, it says, 'the so-called seven treasures are gold, silver, *liuli*, agate, cornelian, glass and pearl; or coral and amber'.<sup>30</sup>

In the twenty-seventh fascicle of the *Chuxue ji* 初學記 (Records for Beginning Learners), the Section on Treasures (*Zhenbao bu* 珍寶部), a passage from the *Guanling neizhuan* 關令內傳 (Inner Biography of the Gatekeeper), is quoted:

Laozi 老子 and Yinxi 尹喜 ascended the Mount Kunlun. (There are) golden pavilions, jade buildings, and palaces (adorned with) the seven treasures. They radiate brightly regardless of day or night; this is where the four Heavenly Kings travel and visit. (Also), there are beds (adorned or made by) seven treasures such as jade and pearl.<sup>31</sup>

While there are many other texts with similar content to what are quoted above, they must be read in combination with archaeological

<sup>&</sup>lt;sup>29</sup> Huang and Wu, *Dunhuang yuanwen ji*, 148.

<sup>30</sup> Bencao shiyi, 24.

<sup>&</sup>lt;sup>31</sup> Chuxue ji, 646.

evidence in order to see how a religious idea like this is reflected in the material culture. In other words, archaeological evidence is crucial in showing the religious function and the symbolic meaning of the objects used in Buddhist offerings and rituals.

The earliest glass artifacts found in China are the so-called 'dragonfly-eye glass beads'. These polychrome eye-beads were excavated in modern Shanxi Province and date back to the early Spring and Autumn Period. They were likely imported from West Asia through land routes. These 'dragonfly-eye glass beads' were believed to be amulets in the past that were able to exorcise evil influence. This belief is rooted in Ancient Egypt, the country where such beads were initially made and whose people believed these beads were the eyes of God. Wang Binghua's 王炳華 research shows that the gemstone known as langgan 琅玕 in literary sources is, in fact, the dragonfly-eyed beads.<sup>32</sup> Thus, it is fair to say that the glass has been bestowed with a religious meaning for a very long time. However, when it was first brought to China, the religious implication was not necessarily understood and accepted.

During the Han Period, variegated glass beads became popular. They were typically used for making necklaces or inlaid on jewelry. For example, a Han glass beads necklace was found in the Shanpula 山普拉 tomb no. 1 in Luopu 洛浦 County; and a Han/Jin gold and silver earrings with inlaid glass was excavated from the Yingpan 營盤 tombs in Yuli 尉犁 County, Xinjiang.<sup>33</sup> Furthermore, the number of glass bottles and bowls increased substantially since the Han and their provenances can be traced to both Rome and Central Asia. Among these, the most exquisite piece is a second-century long neck Roman bottle, excavated from the Later Han Tombs located in the eastern suburbs of Luoyang, Henan Province.<sup>34</sup> Until this time, glassware had not yet been associated with Buddhism.

In China, the oldest glassware found in a Buddhist site is a piece

Wang, Xiyu kaogu wencun, 225-37.

<sup>&</sup>lt;sup>33</sup> Zhonggu lishi bowuguan, Xinjiang weiwuer zizhiqu wenwu ju, eds. *Tianshan gudao dongxifeng*, 279–82.

<sup>&</sup>lt;sup>34</sup> Daiko, ed. Chūgoku, bi no jūji ro ten, 134.

of glass fragment with carved, stripe-shaped relief on the surface. The object was excavated from the Tokuzsara 脫庫孜沙來 ruins in Maralbexi 巴楚縣, Xinjiang. It is believed to have been imported from the Sassanid Empire in the fourth or fifth century CE.<sup>35</sup> In China proper, the oldest Buddhist glass artifact was found in a Northern Wei relics pagoda in Ding County 定縣, Hebei Province. The pagoda was constructed in 481 CE as a result of a vow by Emperor Xiaowen 孝文帝 of the Northern Wei. A stone casket was also found in the rammed earth at the pagoda's foundation. Inside the casket, there were various objects made of gold, silver, bronze, jade, glass, cornelian, crystal, pearl, shell, coral, and so on; as well as coins such as the Wuzhu gian 五銖錢 and Sassanian silver coins.36 Among the glass objects, there was one alms bowl, two bottles, three gourd-shaped bottles, one base of a fragmental object, two ring-shaped ornaments and twelve columned string ornaments. These objects manifest features of Roman and Sassanian glass making techniques. Nonetheless, the shapes are simple, and the quality is below average. Thus, they were likely made locally in China.<sup>37</sup> In addition, there are about two thousand pieces of glass beads of various colors. It is notable that objects made of glass were excavated together with other types of jewels. This shows that glass, or liuli, was perceived as one of the seven treasures by people of that time and was used as an offering to the Buddha's relics. It also highlights how the concept of seven treasures are represented materially. Glass was accepted by the Chinese Buddhist tradition when the idea of seven treasures was brought to China, and the acceptance was subsequently reflected in making ritual offerings.

There was a considerable number of glassware excavated from Buddhist sites dating back to the Sui and Tang periods. Zhao Yong 趙永 systematically collected and categorized these excavations and classified them into three groups: perfume bottle, offering vessel and relics reliquary. He then analyzed the usage and function of glass ves-

<sup>&</sup>lt;sup>35</sup> An, 'Beizhou lixianmu chu tu de boliwan', 175.

<sup>&</sup>lt;sup>36</sup> Hebei sheng wenhuaju wengwu gongzuodui, 'Hebei dingxian chutu beiwei shihan', 252–59; Xia, 'Hebei dingxian taji shelihan', 267–70.

<sup>&</sup>lt;sup>37</sup> An, 'Zhongguo de zaoqi boli qimin', 423–24.

sels in Buddhism.<sup>38</sup> Zhao gathered a substantial number of historical sources, but his discussion on the glass vessels' religious meaning is scant, especially regarding how they are represented in Buddhist belief and rituals as religious offerings. Therefore, I shall elaborate on this point in the following passage.

The six glass balls excavated from the relics pagoda of the Qingshan Monastery 慶山寺, located in Lintong 臨潼 County of Shaanxi Province, draw the most attention. The body of the balls is very thin, about 0.1 cm, and they are empty in the middle. Their diameters range from 2 to 3.5 cm. One has a milky white color, two are brownish, and three are green. They were found in two three-colored plates in front of the curtains, hanging in front of the stone statues. Apparently, they were used as offerings. Some assume these balls are offering-fruits, whereas others think they could be used as a symbol for the attainment of the realization of 'non-returner' (Anahan guo 阿那含果).39 However, I believe they are the suigiu 隨求 (wish fulfilling), and were made under the influence of Tang esoteric Buddhism and mandala rituals, in particular, the transmission of the Da suigiu tuoluoni jingzhou 大隨求陀羅尼經咒 (Skt. Mahāpratisarāvidyārājñī). The excavations can attest my assumption from the underground chamber of the Famen Monastery 法門寺 in Fufeng 扶 風 County. There were two crystal balls found there, whose shape is similar to the ones excavated from the Qingshan Monastery. These two balls are made of natural, well-polished crystal. Their color is slightly yellowish. The diameters are 3.9 cm and 5.2 cm, respectively, and they weigh 79 g and 196 g. The stone-inscribed inventory reads: '(there are) six suigiu, weighing twenty-five liang 两 in total'. The two excavated crystal balls should belong to the group of six.<sup>40</sup> As mentioned above, the Hejiang village hoard shows that regardless of whether it was a glass or crystal cup with eight lobes, they were formally named as liuli cups. In the same way, both crystal and

<sup>&</sup>lt;sup>38</sup> Zhao, 'Lun weijin zhi songyuan shiqi fojiao', 44–65.

<sup>&</sup>lt;sup>39</sup> See Zhongguo meishu quanji bianji weiyuanhui, ed., *Zhongguo meishu quanji*, plate no. 228.

<sup>40</sup> Shaanxi kaogu yanjiusuo, Famen si kaogu fajue baogao, 228–48.

glass balls were called 'liuli' balls' in the Tang Dynasty, regardless of the actual material of production. As some scholars already pointed out, the Famen Monastery chamber was designed according to the esoteric Buddhist tradition, which was highly revered by the Tang imperial court. The whole layout is modeled on the representation, ritual practice and meditative visualization of a maṇḍala. From a practical perspective, suiqiu is not an object of particular importance in the maṇḍala ritual, but it plays a significant role in the maṇḍala related belief system and rituals. Therefore, its functional meaning deserves to be reconsidered.

Flowery-trees and fruit offerings made of glass belong to another category that has been rarely studied. From the Tang tomb of the Shi Hedan 史訶耽 couple in Guyuan 固原, Ningxia, about ten glass trumpet flowers were found. The flowers are aquamarine and some have gilded, yellow stamen in the middle. Besides these, archaeologists found five yellow glass buds and many glass flowers in fragmental pieces. Similar glass fragments were also found in the tomb of Shi Tiebang 史鐵棒. Chemical analysis showed they are made of lead glass. Archaeologists believe these flowers are decorative, although their precise function is still obscure. Presumably, their appearance is related to the identity of the tomb owner: Shi Hedan. He was of Sogdian descent and for a long period he served the imperial court as an interpreter and translator for important events and occasions.<sup>42</sup> I would suggest that these glass flowers found in burials are also related to Buddhism and its eschatology. Religious beliefs among Sogdians was highly diversified: Zoroastrianism, Christianity, Manichaeism, Buddhism, Islam, and Shamanism all flourished and were followed. For the Sogdians who lived in the Tang Dynasty, Buddhism was quite influential. Until now, we have discovered about one hundred Sogdian tombs from the Northern Dynasties to the Tang Dynasty; among which, at least six tomb owners were once Buddhist followers. 43

<sup>&</sup>lt;sup>41</sup> Wu and Han, Famensi digong tangmi mantuluo zhi yanjiu.

<sup>&</sup>lt;sup>42</sup> Luo, ed. Guyuan nanjiao suitang mudi, 62, 82, 235–39.

<sup>&</sup>lt;sup>43</sup> Chen, 'Tangdai ruhua suteren', 87–94; Bi, *Xinyang kongjian de wanhuatong*, 49–56.

Neither of the epitaphs of Shi Hedan and Shi Tiebang reveals explicit evidence of their devotion to Buddhism. Despite this, the glass flowers could have been used in Buddhist rituals. When a deceased person was buried, flowers were scattered as if they were strewn alongside the pathway that leads to the Pure Land.

A number of artifacts were excavated from the Jingzhi Monastery 靜志寺 relics pagoda, dated between the Northern Wei to the Song Dynasty. There are thirty-seven glass artifacts, which include a very rarely found cluster of glass grapes. The size of each grape varies. The diameters are between 1.3 and 1.82 cm, and the lengths are between 1.4 and 2.15 cm. They are empty in the middle, and the glass body is extremely thin. The color is mainly brown, but some are white or green. Many locally produced, small-sized glass vessels were also found at the same site. They are believed to provide strong evidence that glass production techniques had been advancing quickly since the Late Tang period in China. The glass grape cluster is a valuable artifact not only because of its production technique, but also because this exquisite piece was made as offerings to express the followers' devotion to Buddhism.

Dunhuang documents also need to be taken into account. The record of *liuli* bottles are often seen from the monastic documents. For example, entries such as 'one *liuli* bottle' can be seen in the P.2613 Longxing si changzhu wu dianjian li 龍興寺常住物點檢曆; P.2567V Liantai si sanshi li 蓮臺寺散施曆; S.5899 Bingyin nian shi'er yue shisan ri changzhu shiwu jiaoge dianjian li 丙寅年 (906?) 十二月十三日常住什物交割點檢曆; and P.3638 Xinwei nian zheng yue liu ri shazhou jingtu si shami shansheng lingde li 辛未年 (911) 正月六日沙州淨土寺沙彌善勝領得曆, 47 which are all inventories of monastic property. Studies of the history of science show that glass production appeared in China around the sixth century BCE, at the

<sup>&</sup>lt;sup>44</sup> Hebei sheng wenhuaju wengwu gongzuodui, 'Hebei dingxian faxian liang zuo songdai taji', 39–51.

<sup>45</sup> See Wenshi yuekan 文史月刊, cover photo no. 3.

<sup>&</sup>lt;sup>46</sup> Su, 'Dingzhou gongyi', 36–47.

<sup>&</sup>lt;sup>47</sup> Tang, et al., eds. *Dunhuang sehui jingji*, 10–15, 71, 117.

beginning of the Eastern Zhou, but the technique of glassblowing was not known to the Chinese until the Sui Dynasty. Vessels made of lead silicate and potash silicate glass are productions exclusive to ancient China.<sup>48</sup> If the bottles recorded in the Dunhuang documents were locally made, they should be made of the abovementioned materials. However, it is also very likely that they were brought to Dunhuang from the Western regions, such as Kucha.<sup>49</sup>

The glass vessels excavated from Tang or Song sites are mainly used as relics reliquaries. The bottles from Dunhuang could either be ordinary offering containers or relics containers.<sup>50</sup> Unfortunately, the written source is too succinct to extrapolate the precise function of these bottles. Dunhuang documents do not attest the existence of any other types of glassware, but we do have silk paintings that depict bodhisattvas holding glass alms bowls and other objects.<sup>51</sup> This implies that, apart from the glass bottle, other types of glassware were also used as religious implements in Dunhuang. It is noticeable that the glass alms bowl in the silk painting resembles the glass bowl excavated from the tomb no. 107 in the south of Datong 大同, in Shanxi Province, dated no later than the mid-fifth century CE. 52 Other artifacts from this tomb also demonstrate strong 'foreign' elements. 53 In the past, many scholars believed this is a bowl of superior quality, initially made in the Sassanian Empire.<sup>54</sup> However, recently, Ma Yanxin 馬艷新 argued that its shape, color and technique demonstrate a great extent of similarities to the art style of the northern Black Sea region during the third or fourth century CE. Its oval-shaped decorative

<sup>&</sup>lt;sup>48</sup> Gan, 'Zhongguo gudai boli de qiyuan he fazhan', 187–93.

<sup>&</sup>lt;sup>49</sup> For the objects imported from Kucha during the Han and Tang Dynasties, see Yu, *Zhonggu yixiang*, 294–332.

<sup>&</sup>lt;sup>50</sup> Gan, Zhongguo gudai boli jishu de fazhan, 128-40.

<sup>&</sup>lt;sup>51</sup> See Whitfield, ed. *Sei'iki bijutsu*, Vol. I, illustrations 55-1, 55-2 and 56-2. For research related to the topic, see An, 'Mogaoku bihua shang', 425–64.

<sup>&</sup>lt;sup>52</sup> Daiko, ed. *Chūgoku*, bi no jūji ro ten, 136.

<sup>&</sup>lt;sup>53</sup> An and Liu, 'Datong diqu de beiwei boliqin', 37–46.

<sup>&</sup>lt;sup>54</sup> Wang and Wang, 'Datong nanjiao beiwei muqun', 143–62; Wang, 'Beichao shiqi sichouzhilu', 68–83.

pattern is known to have prevailed only in the fourth century CE in Chernyakhov culture, which flourished in the northern Black Sea area at that time. Therefore, this glass bowl should be dated to mid to late fourth century CE and was transported from the northern Black/Caspian Sea regions to Pingcheng 平城 of the Northern Wei through Xinjiang.<sup>55</sup>

In addition to Dunhuang documents, historical sources on the tributary relationship between Chinese dynasties and Western regions also require attention. In the eighth volume of the *Taiping yulan* 太平御覽 (Imperial Readings of the Taiping Era), the seventh chapter of the Section on Treasures (*Zhenbaobu qi* 珍寶部七), the record of an event from the *Tang shu* 唐書 (Book of Tang) is quoted:

In the twelfth month of the second year of the Shangyuan 上元 era of Gaozong 高宗, the king of Bahanna 拔汗那 dedicated jade green (aquamarine) glass and limonite (*shehuang* 蛇黃). The Kuchean King Suji 素稽 dedicated golden glass.<sup>56</sup>

The country, Bahanna, is called Dayuan 大宛 in *Han shu* 漢書 (Book of Han). It was located in current-day Ferghana, Kyrgyzstan. Its technique of making polychrome glass were brought to China during the Northern Wei period. In the entry of *Da yuezhi guo* 大月氏國 of the *Xiyuzhuan* in the *Wei shu*, it says:

During the time of Shizu 世祖, when the people of [Da Yuezhi] were trading in the capital city, they said that they could make the glass of five colors out of stones. Therefore, they went into the mountains and mined, [after returning to the capital] they made [the glass of five colors]. When the glass was made, its luster is more beautiful than those from the west. [The emperor then] ordered [the glass to be] sent to the palace for short stays, which could hold more than one hundred people. The luster and color [of the glass] illuminate and penetrate [the whole palace]. Upon seeing it, every person was

<sup>55</sup> Ma, 'Datong chutu beiwei mohua liuli boliwan yuanliu', 96–100.

<sup>&</sup>lt;sup>56</sup> Taiping yulan, 3592.

deeply astonished, thinking it must be made by gods. Henceforth, the Chinese glass became despised and was no longer appreciated.<sup>57</sup>

From the Western Gate of Yongning 永寧 Monastery of the Northern Wei in Luoyang, as many as 150,000 variegated glass beads in red, blue, yellow, green, and black were excavated. 58 These beads should be the aforementioned 'glass of five colors' produced by the Central Asian technique. 'Jade green' is one of the five colors. Although its manufacture techniques were known to the Tang craftsmen, it was still Central Asian produced glassware that was cherished and seen as the highest in quality. Thus, the King of Bahanna could offer jade green glass as his tribute. There is no textual record for the golden glass' shape and manufacture techniques. Nonetheless, there are three possibilities: (1) glassware dyed or decorated with liquid gold, which was dedicated to the court and valued in China for its brightness and radiance; (2) a piece of glass jewelry with gold leaf; (3) gold jewelry with glass inlays. For the first two, for example, triangle and diamond glass fragments with gold leaf filled inside were found in two tombs in Xi'an.<sup>59</sup> The tombs are dated between 9 to 25 CE. Analysis of the chemical composition revealed that they are made of barium-lead glass and were created locally in China. They could belong to a jade burial suit or mask; thus, they were used as substitute for jade. Alternatively, perhaps they are the inlays of burial objects.<sup>60</sup> Furthermore, broad, bean shaped glass beads decorated with birdshaped golden leaf were excavated from a late Eastern Jin tomb near the Mufu 幕府 Mountain in Nanjing.61 As for the third possibility, we know that gold jewelry with glass inlays began to appear between the Jin and Southern and Northern Dynasties. Its style is overwhelm-

<sup>&</sup>lt;sup>57</sup> Wei shu, 2275.

<sup>&</sup>lt;sup>58</sup> Zhongguo shehui kexueyuan kaogu yanjiusuo, *Beiwei luoyang yongning si*, 136.

<sup>&</sup>lt;sup>59</sup> Xi'an shi wenwu baohu yanjiusuo, 'Xian caizheng ganbu peixun', 3–39.

<sup>&</sup>lt;sup>60</sup> For the classification and their composition and functions, see Zhang, 'Xi'an M33 boli yanjiu', 62–67.

Nanjing bowuguan, 'Nanjing mufushan dongjin mu', 46.

ingly West Asian. They were popular in the Sui and Tang period and were called 'painted glass jewelry'. This type of glass artifact was found in the tomb of Shi Shewu in Guyuan, Ningxia; and in Hejia village hoard in Xi'an.<sup>62</sup>

Despite its exquisiteness, the golden glass should not be seen merely as an exotic novelty. As a renowned Buddhist Kingdom, the Kuchean King's offering of golden glass must have a religious connotation that related to the Buddhist ideology of the 'seven treasures'. In Chapter fifty-eight of the *Zhengfa nianchu jing* 正法念處經 (Skt. *Saddharmasmṛṭyupasthānasūtra*), it reads:

[He] then entered the pond of maṇi-jewel. [There is] the glass of pure gold, which color is delicate, and the touch is soft. There are five kinds of softness, without water covers. The sound of various birds is clear, quiet, deep, and profound.<sup>64</sup>

復入摩尼寶石之池,真金頗梨,色触柔軟,五种柔軟,無有水衣, 眾鳥音聲,澄靜淵深。

This 'glass of pure gold' should be the so-called 'celestial golden glass' found in the thirty-first chapter of the Fozu tongji 佛祖統紀 (The Complete Chronicle of the Buddha and Patriarchs):

The palace of *Sūrya* is made of *tianjin* (celestial golden) glass. Its width is fifty-one *yojanas*. Its shape is square like [the shape of] a mansion; but when looking from a distance, its shape is seemingly round. It travels by the blowing of five kinds of wind, and its marvelous chariot is made of gold from the river between the *Jambū* trees. [The chariot] is sixteen *yojanas* in height and eight *yojanas* in width.

<sup>&</sup>lt;sup>62</sup> Guan, Zhongguo gudai boli, 70.

<sup>&</sup>lt;sup>63</sup> In my previous works, I proposed a preliminary discussion on how glass functioned, as one of the seven treasures, in Dunhuang monasteries in the Tang and Song Dynasties, and how it was related to the esoteric Buddhist offerings; see Yu, 'Dunhuang fosi suocang zhenbao', 140–51.

<sup>&</sup>lt;sup>64</sup> Zhengfa nianchu jing, T no. 721, 17: 345c8–10.

The *Sūrya* and his family reside in the middle [of the palace], enjoying the heavenly five desires.... The palace of *Cāndra* is made of celestial silver *liuli*. Its height is sixteen *yojanas* and width is eight *yojanas*. The *Cāndra* and various goddess reside in this chariot, enjoying the heavenly five desires.<sup>65</sup>

日天宫殿,天金頗梨所成。縱廣五十一由旬,正方如宅,遥看似圓,有五種風吹轉而行,閻浮檀金以爲妙輦,高十六由旬,方八由旬。日天子及眷属居中受天五欲。......月天宫殿,天銀青琉璃成。高十六由旬,廣八由旬。月天子與諸天女在此輦中受天五欲。

In this passage, the celestial golden glass is parallel to the celestial silver glass, and both are the materials that the gods' heavenly palaces are made of. The prefix *zhen*  $\not\equiv$  (real) or *tian*  $\not\equiv$  (celestial) is possibly an indication of the superiority of the celestial glass in the purity of the color and the supreme quality. In brief, the offering of golden glass by the Kuchean King can be seen as another example of the influence of Central Asian Buddhism on China.

# Liuli and Buddhist Manuscript Culture

In the Buddhist tradition, the most peculiar and uncommon method of using *liuli* was to make the roller (of a scroll) and scripture container boxes. In the eighth chapter of the *Fahua zhuanji* 法華傳記 (Biographical Stories of the *Lotus Sūtra*), it reads:

Daocheng, with the surname Xiao was the Emperor Gao of Southern Qi. He was a zealous and devoted follower of Buddhism, and thus he built two monasteries: the Zhiqi and Zhiguan. On the eighth day of the fourth month, he always cast a golden statue. On the fifteenth day of the seventh month, he prepared the *Ullambana* basin and made offerings to three hundred monks of the monasteries. He mixed scented water with ink and made five copies of the *Fahua jing* 

<sup>65</sup> Fozu tongji, T no. 2035, 49: 306b25-c8.

(Lotus Sūtra) and two copies of the Fahua jing with golden ink. All were placed in the five-fragrance cabinet and held by four treasures. During quiet nights and fine dawns, when eating purely and following the path, every day [the scriptures] would emit golden lights to illuminate the hall. As the dukes and ministers had concreted, they raised their minds even more and said: 'We twenty-eight people, each of us should copy one chapter to adorn the extraordinary'. On the fifteenth day of the seventh month, they arrived at the Zhiguan Monastery to pay homage and make offerings. On that very day they came to make the offering, auspicious rain fell as if mica falling down, and the *liuli* roller radiated and illuminated more than one *li*. [Upon seeing this], the mass was delighted.<sup>66</sup>

齊太祖高帝道成,姓蕭,偏崇重佛,故造陟屺止觀二寺。四月八日,常鑄金像。七月十五日,普寺造盆供僧三百。自以香汁和墨, 手寫《法華經》八部,金字《法華》二部,皆五香廚,四寶遂盛。 靜夜良辰,清齋行道,每放金色光,照耀殿內。諸侯皆共視,倍 更發心。相議:'我等結二十八人,各各造一品,莊嚴奇麗。'七 月十五日,就止觀寺,須供養禮拜,即如僉議。當於供日,天雨細華,如雲母而下,琉璃軸放光,照一里餘。眾皆歡喜。

The above passage provides a lot for discussion, such as the image of the Emperor Gao of the Qi in the historical writing, the creating of political legitimacy, the manuscript culture of the *Lotus Sūtra*, and so on. Here, we will only focus on the details concerning the *liuli* roller. If this passage reveals any historical facts, then it is the earliest evidence of using the *liuli* roller in Buddhism in history. Although, it is also likely to be a retrospective imagination by Huixiang 慧祥 according to the social reality in Tang Dynasty. The most reliable source of a *liuli* roller is attested in the *Jingji zhi* 經籍志 (Bibliographic Treatise) of the *Suishu* 隋書 (Book of Sui):

When Emperor Yang [of Sui] 煬帝 was enthroned, each book collected in the Secret Chamber (Mige 秘閣) was allowed to have

<sup>&</sup>lt;sup>66</sup> Fahua zhuanji, T no. 2068, 51: 87b18-27.

fifty copies at most. They were categorized into three classes [when mounting]: the best ones used the red *liuli* rollers; the average ones used the dark red *liuli* rollers; and the ones of lower quality used the lacquer rollers. [They also] built houses at the eastern and western wings of the Guanwen 觀文 Palace in the east capital to store them. The sections *Jia* and *Yi* were stored in the east house, and the *Bing* and *Ding* in the west. ...<sup>67</sup>

It appears that decorating books with rollers in different colors was closely related to the establishment of the four categorizations of important Chinese literary works. In the Sui period, the common practice was to classify the four sections using different scrolls, ribbons and bookmarks. This practice was improved later in the Tang Dynasty. In the *Tang liudian* 唐六典 (Six Institutions of the Tang Dynasty), we find such a record:

As for the books of the four sections, there is a copy of each in both of the two capitals. In sum, there should be one hundred and twenty-five thousand and nine hundred and sixty fascicles. They are all written on hemp paper from Prefecture Yi. For the royal collection in the Jixian Academy, to differentiate: for Classics (jing 經), use decorated white ivory roller, yellow ribbon and red bookmark; for Histories (shi 史), use decorated cyan ivory/bone roller, nattier blue ribbon and green bookmark; for Masters (zi 子), use carved red sandalwood roller, purple ribbon and aquamarine bookmark; for the Collections (ji 集), use green ivory/bone roller, red ribbon and white bookmark.

The decoration of books according to the section they belong in is described by Wei Shu 韋述 in the *Jixian zhuji* 集賢注記 (Notes on the Academy of Assembled Worthies) as follows:

Old books from the Sui Period are the finest, they are all written on hemp paper from Guangling and calligraphed in Xiao Ziyun's style.

<sup>67</sup> Suishu, 908.

<sup>&</sup>lt;sup>68</sup> Tang liudian, 280.

The calligraphy is marvelous and adorable. There are also signatures and comments made by assistant librarian Liu Diao, Cui Junru, Ming Yuqing, Dou Wei, Zhangcun Weide, and so on, as well as critical notes made by Kong Deshao, Peng Jizhang, Li Wenbo, Yuan Gongzhi, and so on. [They are all mounted] by liuli rollers of blue and red with silk ribbon of five colors, and [stored in] bamboo bookcases with purple ribbon. The yellow sheets are embroidered with characters as 'royal original copy' or 'royal additional copy'. However, since it is age-old, the paper's color has become dark, the red roller has also become yellow... From these, new books were produced and outnumbered the Sui books, and all were categorized into the four sections... the Classics were to be bound using the white-colored wooden roller, and the ribbons should be red and yellow; for the Histories, aquamarine wooden roller and nattier blue ribbon; for the Masters, red sandalwood roller and purple ribbon; and for the Collections, green wooden roller and scarlet ribbon...<sup>69</sup>

On the topic of the history of book collecting by the Jixian Academy, Ikeda On 池田溫 made a thorough investigation. Wei Shu was considered the most prominent scholar and book collector that lived in the Kaiyuan 開元 era of the Tang dynasty. His Jixian zhuji sheds light into Tang intellectual history. However, we cannot confirm whether all of the quoted passages are from the original version of the Jixian zhuji. For example, its description of the Sui books as '... age-old, the color of paper has become dark, the red roller has also become yellow' is not found in the Tang liudian and the Jingji zhi in Suishu. The sodium-calcium glass does not tend to discolor with age, so if what is described is correct, the material used for making rollers in the Sui and Tang Dynasties would also be the locally produced lead-barium glass.

From the Dunhuang documents, we also found instances of

<sup>&</sup>lt;sup>69</sup> Zhiguan fenji, 175.

<sup>&</sup>lt;sup>70</sup> Ikeda, 'Shengtang zhi jixianyuan', in his *Tang yanjiu lunwen xuanji*, 190–242.

<sup>&</sup>lt;sup>71</sup> Yu, 'Tang liudian xiuzhuan kao', 1161–200.

using the seven treasures, including *liuli*, to decorate offerings. The Taitō City Calligraphy Museum in Japan holds a manuscript named *Weimojiejing yanshuo tiji* 維摩詰經閻碩題記 (The Colophon to the *Vimalakīrtinirdeśasūtra* by Yanshuo), it reads:

For the deceased parents and ancestors of seven generations, [I], the disciple, humbly made one copy of the *Weimo jing* and one volume of the *Huayan shi'e jing* (The Chapter on Ten evilness of the *Flower Adornment Sūtra*). I burned the incense and requested the scribe Zhu Lingban to observe the precept with piety. [The scribe] bathed in scented water, put on clean clothes, stayed in a quiet room and practiced the way for all hours of the day and night (lit. six periods of the day). After the texts had been copied, they were well adorned, (stamped with) a gold seal and (bound with) a jade roller, together with the seven treasures such as *liuli*...

On the fourteenth day of the third month in the third year of *Anle* 安樂, disciple Yan Shuo 閻碩 made the offering with reverence.<sup>72</sup>

奉爲亡考亡妣、七世先靈,敬造《維摩經》一部、《華嚴十惡經》一卷。弟子燒香,遠請經生朱令辯用心齋戒:香湯洗浴,身著淨衣,在於靜室,六時行道。寫經成就,金章玉軸,琉璃七寶,莊嚴具足。......

安樂三年三月十四日寫訖,弟子閻碩供養

Most manuscripts found in the library cave in Dunhuang are decorated with a wooden roller. Very few have jade roller or *luodian* 螺鈿 as adornment. It is very unusual to have an entire roller made of *liuli* or to use *liuli* as decoration. For example, the manuscript BD00657 is the sixth volume of the *Jinguangming zuishengwang jing* 金光明最 勝王經 (Skt. *Suvarṇaprabhāsa-uttamarāja-sūtra*). It is currently held in the National Library in Beijing and is dated back to the Tibetan Empire period. Its original roller is extant today: its knobs are carved into the shape of a seedpod of a lotus, inlaid with *luodian* flower

<sup>&</sup>lt;sup>72</sup> Isobe, ed. *Nakamura Fusetsu kyūzō*, 67.

<sup>&</sup>lt;sup>73</sup> Lin and Saren, 'Guojia tushuguan cang dunhuang xieben', 183-91.

pedals.<sup>73</sup> Although scarce, there is archaeological evidence for the existence of a *liuli* roller in history. The fragment of the Dunhuang manuscript, the *Dafangbianfo baoen jing* 大方便佛報恩經 (*Great Skillful Means Sūtra on the Buddha's Repayment of Kindness*), labelled SCM.D.29122 and collected by the Sichuan Museum, has its *liuli* roller extant today.<sup>74</sup> The *liuli* (crystal) roller was not exclusive to books, but also for the mounting of paintings. In the third fascicle of the *Lidai minghua ji* 歷代名畫記 (Records of Famous Paintings through History) by Zhang Yanyuan 張彥遠, it reads:

[For the material for making rollers' knobs], the best is the Indian sandalwood. It is scented; therefore, it expels worms. For smaller rollers, the best choice is white jade, the second choice is crystal, and the last choice is amber. For larger rollers, fir wood with painted knobs is the best because it is both light-weight and round. Previous dynasties mostly used miscellaneous treasures to decorate, but they are easy to rot and be peeled off. Since the *Zhenguan* era to the mid *Kaiyuan* era, the Indian sandalwood roller with red sandalwood knobs and purple ribbon is the standard for mounting the paintings collected by the imperial inner court.<sup>75</sup>

In the Dunhuang document P.3085, the *Hexi jiedushi taifu qiyuan-wen* 河西節度使太傅啟願文 (Prayer of the Commander of Hexi and Grand Mentor), it reveals that a text container made of *liuli* once existed in Dunhuang:

Thus, the scripture should be written (lit. the scripture should begin and finish) in golden ink and decorated with a jade roller. Then it should be well placed in the *liuli* box and returned to the palace of dragons for restoring.

是以金經罷啟,玉軸還終;再收於琉璃匣中,卻復於龍宮藏內。

<sup>&</sup>lt;sup>74</sup> Lin and Dong, 'Sichuan bowuguan cang dunhuang', 45–56.

<sup>&</sup>lt;sup>75</sup> Lidai minghua ji, 47–48.

A wooden scripture container with *luodian* decoration was found in the Ruiguan 瑞光 Monastery in Suzhou. The Shōsōin collection holds another similar box in Japan. However, a box made of *liuli* has yet to be found anywhere. I am looking forward to future archaeological excavations providing material evidence for the existence of such a scripture container.

#### Conclusion: Treasures and Esoteric Buddhism

In the *Renwang bore tuoluoni shi* 仁王般若陀羅尼釋 (An Explanation of the Wisdom Dhāraṇī of a Humane King) translated by Amoghavajra (Bukong 不空), a 'treasure' is defined as follows:

[The word] 'treasure' has six meanings: 1. it is difficult to obtain; 2. it is pure, without defilements; 3. it has awe-inspiring power; 4. it adorns the world; 5. it is the most excellent; 6. it is not subject to change. 'It is difficult to obtain' just like it is extremely difficult to see a Buddha when he abides in the world. 'It is pure' because [someone] practices according to the teaching and realizes the *bodhi*, which is pure and without defilements. It has 'awe-inspiring power' just like [someone] has six supernormal powers and manifests omnipotence. It 'adorns the world' because it adorns one's body and mind with the three kinds of bodhisattva precepts. It is 'the most excellent' because the realization of the supreme enlightenment is most distinguished in the three realms. It is 'not subject to change' because the realization of unsurpassed enlightenment is not subject to any changes."

寶義有六:一者難得故;二者淨無垢故;三者有大威德故;四者莊嚴世間故;五者殊勝無比故;六者不變易故。一難得者,如來出現於世間甚難逢遇故;二淨無垢者,依教修行證得菩提淨無垢故;三大威德者,具六神通變現自在名大威德故;四莊嚴世間者,以三種

<sup>&</sup>lt;sup>76</sup> Yu, 'Material Culture, Reading Performance, and Catalogue System'.

<sup>&</sup>lt;sup>77</sup> Renwang bore tuoluoni shi, T no. 996, 19: 522a22-b2.

菩薩律儀戒嚴飾身心故; 五殊勝無比者, 證得無上菩提三界特尊殊 勝無比故; 六無變易者, 證得究竟無上菩提不變易故。

Although it was not treasure in a material sense that was discussed in the text, it nonetheless offers an insight into how an object can be perceived as a 'treasure'. As we know, treasures are placed in a crucial position in esoteric Buddhist rituals. Amoghavajra was an essential figure in the process of spreading esoteric Buddhism in Dunhuang. <sup>78</sup> Su Bai 宿白 pointed out that Amoghavajra spent many years on the Western borders to preach, which could have directly contributed to the flourishing of esoteric Buddhism in Dunhuang. Since the high-Tang period, an augmented number and variety of esoteric Buddhist figures began to appear in the Mogao Grottoes, and this trend lasted for a long period of time. This is also likely a result of Amoghavajra's preaching career in this region. <sup>79</sup>

This paper studied and discussed *liuli's* specific role and function in medieval Chinese Buddhism. On the textual side, I looked into the Dunhuang documents combining both Buddhist scriptures and Chinese historiographies. On the material side, I presented a few archaeological excavations and paintings and examined them in detail. Here, I shall make clear that although some Dunhuang documents are not explicitly dated, most of them were composed during the reign of the Tibetan Empire. By bringing this up, I wish to point out that what is illustrated from the Dunhuang texts, in regard to the use of *liuli* and its representation, is closely associated with esoteric Buddhism. However, this argument requires another paper for further detailed discussions.

<sup>&</sup>lt;sup>78</sup> On Amoghavajra's life, his translations and ideas, see Chou, 'Tantrism in China', 284–307.

<sup>&</sup>lt;sup>79</sup> See Su, *Zhongguo shikusi yanjiu*, 282; also see his 'Dunhuang mogaoku mijiao yiji dazha ji (I)', 33, 45–53; and 'Dunhuang mogaoku mijiao yiji dazha ji (II)', 68–86.

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#### **Abbreviations**

T Taishō shinshū daizōkyō 大正新修大藏經. See Bibliography, Secondary Sources, Takakusu and Watanabe, eds.

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