# **BEADS: Journal of the Society of Bead Researchers**

Volume 29 (2017)

Article 7

1-1-2017

# Mainland Chinese Export Beadwork

Valerie Hector

Follow this and additional works at: https://surface.syr.edu/beads

Part of the Archaeological Anthropology Commons, History of Art, Architecture, and Archaeology Commons, Science and Technology Studies Commons, and the Social and Cultural Anthropology Commons

## **Repository Citation**

Hector, Valerie (2017). "Mainland Chinese Export Beadwork." *BEADS: Journal of the Society of Bead Researchers* 29: 59-75. Available at: https://surface.syr.edu/beads/vol29/iss1/7

This Article is brought to you for free and open access by SURFACE at Syracuse University. It has been accepted for inclusion in BEADS: Journal of the Society of Bead Researchers by an authorized editor of SURFACE at Syracuse University. For more information, please contact surface@syr.edu.

## Mainland Chinese Export Beadwork

## **Cover Page Footnote**

I would like to thank the Beads-L listserve for posting a notice about the beaded lantern at Nanzenji Temple and Deborah Zinn, co-moderator of Beads-L, for her recent help locating the original 2004 post; the Bead Study Trust for a Guido Grant in 2006 to study in person the lantern at Nanzenji and the calligraphic panel at the Tokyo National Museum; Patrick Kirby for his 2017 communications on my behalf with officials at Nanzenji Temple, Kyoto National Museum, Bijutsu-in and Tokyo National Museum; Nanzenji Temple for sending me a color printout of Atelier Suzuran's discussion of the lantern and a DVD-ROM of the lantern's restoration process; Kaori Stearney for interpreting the DVD-ROM's Japanese narrative; Hwei-Fe'n Cheah for sharing aspects of her research with me, referring me to Cai Xiang-Yu's dissertation, and making excellent suggestions on a draft of this paper; Bonnie Corwin, Erik Baark, Liu Zhiwei, Siu-Woo Cheung, and May Bo for their advice about documenting beadwork production in opera costume workshops in the Zhuangyuan fang neighborhood of Canton/Guangzhou during the late 19th and early 20th centuries; Han Zhang for translating and annotating passages in Zhou Mi's Wulin Jiushi; Frida Grundström for Swedish translations; Sandra Whitman for facilitating Jamey D. Allen's and my examination of an early-Qing-dynasty bead embroidery in a private collection; Laure Dussubieux of The Field Museum's Elemental Analysis Facility for her analyses of several glass beads and for many patient e-mails; and Karlis Karklins for advice on interpreting chemical compositions and for meticulous editing.

## MAINLAND CHINESE EXPORT BEADWORK

## Valerie Hector

For centuries China has exported its products around the world. Chinese export porcelain, silverware, lacquerware, glassware, furnishings, textiles, and paintings have been documented in countless publications. Other categories are less well documented. Thanks to Peter Francis and other researchers, we know that China has been exporting glass beads for centuries as well. Little is known about Chinese export beadwork, a category that did not formally exist until 2007, when Hwei-Fe'n Cheah hypothesized that, in the late 19th or early 20th century, China exported beadwork to Southeast Asia's Peranakan Chinese market. Here I expand the scope of this emerging field of research by first exploring possible historical precedents dating to the Ming (1368-1644) and early Qing (1644-1911) dynasties and then discussing seven examples of Chinese export beadwork found in Europe and North America. Most of the pieces feature glass beads. Where possible, the results of chemical compositional analysis are provided. Five of the pieces are marked "China" or "Made in China" which establish a definitive origin.

## **DEFINING CHINESE EXPORT BEADWORK**

"Chinese export beadwork" may be defined as a class of beaded objects made in China and shipped to other countries. By "beaded objects," we mean objects composed of or embellished with beads that are strung, embroidered, netted, plaited, twined, or woven, typically with thread, string, or wire. In most cases, we assume, such objects were produced in quantity and sold for profit through merchants, traders, workshop operators, or others motivated by a desire to appeal to foreign markets. According to this definition, beaded objects carried in small quantities from China to other countries by individuals not affiliated with manufacture or trade would not qualify as "export beadwork." This definition is subject to refinement as research proceeds.

#### POSSIBLE HISTORICAL PRECEDENTS

We begin with three pieces of beadwork that bespeak China's long history of contact with other countries. The beads are made of glass whose chemical composition has apparently not been studied. Although the pieces cannot be regarded as examples of Chinese export beadwork per se unless more information comes to light, they are worth describing here because they illustrate the aesthetic and technical sophistication of China's beadwork in centuries past while establishing relatively early precedents for its appearance in foreign countries. It is not known whether the three pieces are one-of-a-kind curiosities or tokens of widely circulated types, culled from China's burgeoning Ming- and Qing-dynasty markets for luxury goods catering to newly affluent merchant families aspiring to imitate the object acquisition and display practices of high-ranking elites (Brook 1998:76-76, 78) using "culturally prestigious goods to make social statements about themselves" (Clunas 1991:104). "The Pearl Sewn Shirt," an anonymous fictional story composed during the Ming dynasty, explicitly connects at least one merchant family with a memorable piece of luxury beadwork (Birch 1958:39-96).1

#### **Early Examples in Japan**

Two early Chinese beadwork pieces were discovered in Zen Buddhist temples in Japan. Both are composed largely or wholly of what scholars believe are Chinese glass beads and attributed to the Ming dynasty, which was nearly coeval with Japan's Muromachi (ca. 1336-1573) and Momoyama (1573-1615) periods. How the pieces came to Japan is not known. The intricacies of Sino-Japanese maritime trade in the 14th-17th centuries lie beyond the reach of this paper, but several developments should be noted. In 1401, Japan resumed its tribute trade with China, sending Japanese products on Japanese ships to China, later to return carrying Chinese goods. Between 1401 and 1547, "as many as 20 trade missions traveled from Japan to China," each being "headed by a Zen Buddhist monk from one of the 'five great Zen Buddhist temples of Kyoto," among them Tenryū-ji, which will be mentioned again shortly (Wikipedia 2017b). It stands to reason that the monks' positions of authority might

have conferred access to Chinese luxury goods or contact with Chinese patrons of Buddhism, already accustomed to donating gifts or funds to Buddhist temples within China. Alternatively, pieces of Chinese beadwork could have been transported to Japan on Chinese imperial ships or on Chinese merchant vessels flouting the ban on maritime trade first imposed in 1371 by Zhu Yuanzhang, China's Hongwu emperor and founder of the Ming dynasty. The ban was not lifted until 1567.

#### **Calligraphic Panel**

The first piece, a rectangular panel of netted or plaited glass beads,<sup>2</sup> was found in a box at the Horyuji temple in Nara, Japan.<sup>3</sup> It is now housed at the Tokyo National Museum where it is considered Important Cultural Property (Blair 1973:398) and dated to the 14-17th centuries (Tokyo National Museum 2017: pers. comm.). The panel measures ca. 61 cm long by 9.7 cm wide (Figure 1). The beads are small, about 2 mm in diameter, with visible bubbles, "corrugated bodies," and "long, irregular projections where the glass source was drawn away." These are common visual characteristics of Chinese wound glass beads, also known as "coil beads" (Francis 2002: Fig. 8.1). The panel's color scheme expresses Ming dynasty tastes, favoring rose reds and greens (Tokyo National Museum 2017: pers. comm.). The presence of an inscription is also consistent with Ming era material and visual culture. As historian Craig Clunas (2007:84-111) notes, "Ming space contained writing to an unprecedented degree," visible on cloth banners, paper scrolls, banknotes, metal ingots, silk clothing, furnishings, and other surfaces. Illiterate or semi-literate viewers might "believe that characters had a quasi-sacred value."

The seven Chinese (or Japanese *kanji*) characters that flow vertically down the panel are written in running script, a style often used to convey personal or emotional subject matter. Together they form a sentence which may represent a line from a poem or poetic couplet: *kan chu dan qing chang bing*, which may also be transliterated as *kan chu dan qing chang yong yong*. At least three translations are possible: 1) To look upon a work of art brings endless longing, 2) Let us look upon this painting/work of art, eternally luminous, and 3) To look upon this painting/work of art brings endless happiness.

Whatever its intended meaning, the line evokes an aesthetic experience; e.g., looking at a work of art – or something that can be likened to a work of art. The Chinese literary or historical connections of the line, if any, are difficult to retrieve. Several of the scholars I consulted during



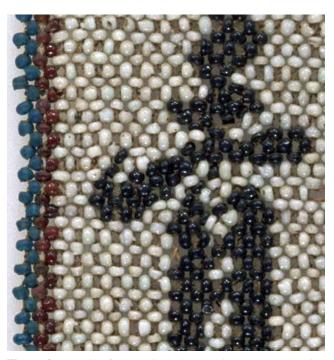
Figure 1. Calligraphic beadwork ornament for a portable shrine, Ming dynasty,  $69 \times 10$  cm (courtesy of The Tokyo National Museum, cat. no. N-129).

initial research for this paper wondered whether the beaded panel had originally been part of a pair, with a mate that also bore a seven-character line complementing the meaning of the first (Jonathan Chaves 2007: pers. comm.; Kenneth J. DeWoskin 2002: pers. comm.; Jeffrey A. Keller 2007: pers. comm.; Cary Y. Liu 2007: pers. comm.; Anthony C. Yu 2005: pers. comm.; Xue Lei 2007: pers. comm.). Prototypes in other media are not hard to find, especially given the beaded panel's vertical orientation. *Thriving Southern Capital*, a ca. 1600 Chinese painting on silk depicting scenes from the then-capital of Nanjing (Clunas 2007: Fig. 66) illustrates vertical calligraphic banners inscribed in a more prosaic script style befitting the banners' street-side locale.

As it happens, Japanese scholars believe that the beaded panel may have been one of four calligraphic panels attached to the corners of a ceremonial *mikoshi*, a portable shrine used to carry the bones of the Buddha or the statue of Prince Shōtoku (574-622) (National Institutes for Cultural Heritage 2017). A fervent devotee of Buddhism, Prince Shōtoku was made regent of Japan in 593; he is traditionally credited with founding Hōryūji temple in 607 (Blair 1973:63-64). Assuming this interpretation is correct, the panels may have suffered considerable wear and tear over time, sufficient to warrant disposal in three cases.

This diminutive panel represents a significant achievement in the history of beadwork as it employs a rectilinear beading technique - a right-angle net or plait with four beads per cell - to render a series of highly curvilinear calligraphic characters.<sup>4</sup> No doubt the small size of the beads helped mediate the incongruity between technique and motif, but occasional anomalies - five or six beads per cell, instead of four - demonstrate that the beadworker had to make adjustments to delineate the characters as accurately as possible (Figure 2). For the most part, the execution is masterful, the characters vivid, the strokes correct. As the earliest surviving example of Chinese characters executed in beadwork,<sup>5</sup> the panel is splendid. The limitations of such an undertaking, however, are apparent in the inscription's final two bing bing (or yong yong) characters. At least three interpretations are possible, corresponding to the three translations provided above.6 Had the beading technique and script style been better aligned, the ambiguity might have been reduced or eliminated. Technique and inscription are far better suited in several smaller Qing-dynasty examples (see National Palace Museum 1986: Figures 154-156, 315, 324; Palace Museum 1992: Figure 233).

The two Chinese art forms represented in the calligraphic panel are similarly incongruous, insofar as beadwork – a minor craft form occupying a low position in the Chinese hierarchy of arts – is made to express



**Figure 2.** Detail of the shrine's beadwork ornament showing wound glass beads ca. 2 mm in diameter, united in a net or plait that inclines beads at right angles.

calligraphy, traditionally considered the highest art form in China, a veritable "embodiment of civilization's values" (Clunas 2007:93). The temporalities of the two practices are also incongruous. While seconds were spent to compose in ink the inscription that likely served as a template for the beadwork panel, hours or days were devoted to transposing the inscription into beadwork; in the process, "an elite untrammeled spontaneity" is "constrained in a technology of painstaking care and artisanal know-how" (Clunas 2007:109). Indeed, while the ability to compose characters in running script entails a level of literacy requiring many years and much education, beadwork - in China as elsewhere - requires neither much training nor even basic literacy, only a detail-oriented mind, fine motor coordination, and in this case, a high degree of embodied skill, the result of years of experience. Further, a calligrapher who writes in running script traditionally composes from the soul; it is a deeply subjective practice yielding a tangible "heart print" (Fu et al. 1977:127). The artisan(s) who beaded the inscription may have worked from a more practical impulse, perhaps one as simple as earning a living or pleasing a patron. Two final points of contrast between beading technique and subject matter emerge when we compare the elegant curves of the running script characters with the larger, clumsier curves of the foliate wirework motifs edging the bottom of the panel, and the simple bilateral symmetry of the wirework motifs with the characters' subtler asymmetries.

#### **Multicomponent Lantern**

A second possible historical precedent for Chinese export beadwork is an enormous lantern (Figure 3) measuring 128 x 105 cm and comprising an estimated 150,000 multicolor wound glass beads embellishing nested iron or bronze wire frameworks (Tokyo National Museum 2004:284). Blackened by centuries of smoke from oil lamps or candles, the lantern was discovered hanging in the great hall of Nanzenji, a Zen Buddhist temple in Kyoto. According to old texts found at Nanzenji, the lantern, known as Ruritou in Japanese (ruri: glass, lapis lazuli; tou: light, lantern) (Patrick Kirby 2017: pers. comm.), originated in Mingdynasty China during the 14th-17th centuries and originally hung in the mausoleum of the Japanese Emperor Kameyama (1249-1305) who helped found Nanzenji in 1291 following his entry into the Zen Buddhist priesthood in 1289. In 1704, the lantern was donated to Nanzenji by Tenryūji, another Zen temple previously mentioned, which opened in Kyoto in 1345 (Tokyo National Museum 2004:284).



**Figure 3.** *Ruritou*, a multicomponent lantern, Ming Dynasty, 128 x 105 cm; collection of Nanzenji Temple, Kyoto (courtesy of Kyoto National Museum and Nanzenji Temple).

In 2004, an illustrated discussion commemorating the lantern's restoration at the Bijutsu-in Institute in Kyoto was posted on a Japanese beadworkers' website (www. suzuranart.com). Three technicians at the Bijutsu-in devoted

700 hours to the project over the course of one year (Patrick Kirby 2017: pers. comm., per Bijutsu-in staff member). All of the beadwork components were cut apart and reworked. Batch by batch, the beads were cleaned ultrasonically which revealed their true color (pers. obs.). Being monochrome, wound, and fairly small, averaging from 2 x 3 mm to 3 x 4 mm (Patrick Kirby 2017: pers. comm., per Bijutsu-in staff member), the beads may well be the successors of "the earliest identifiable Chinese glass beads found outside China," which "flooded the [Asian maritime] market just as Indo-Pacific beads were disappearing in the twelfth century" (Francis 2002:76-77). As the restoration process continued, 7,000-8,000 beads were made to replace those that had cracked or crumbled, requiring months of difficult trial and error (Kaori Stearney 2017: pers. comm.). When completed, the lantern was returned to its customary place at Nanzenji.

The lantern's outermost structure is octagonal in shape, with an equatorial band divided into eight rectangular niches surmounted by a dome divided into eight triangular niches. All of the niches are filled with panels of beads plaited on wire, reproducing the original single-thread plaiting techniques (Patrick Kirby 2017: pers. comm., per Bijutsu-in staff member).7 While the rectangular niches are worked in a hexagonal plait using beads that appear to be oblate in shape and relatively smooth (Figure 4), the triangular niches are worked in a technique that is difficult to discern, using beads that appear to be somewhat larger and rougher, possibly double-coil beads or two single beads stitched as one (pers. obs.). It might make sense to use larger, rougher beads in the triangular niches at the top of the lantern because the latter are largely hidden from view. Portions of the wire frame between the niches are wrapped with tiny glass beads



**Figure 4.** Detail of *ruritou* showing reconstructed panel of hexagonal bead plaiting in one rectangular niche (courtesy of Kyoto National Museum and Nanzenji Temple).

strung on wire; some of them may be as small as 1 mm in diameter (Patrick Kirby 2017: pers. comm., per Bijutsu-in staff member).

Small bead-and-wire pendants, themselves bedecked with pendants and tassels, are suspended from eight gilded, hooked wire arms that ornament the frame between the rectangular niches. The arms appear to be strung with oblate wood beads, re-gilded during the restoration process (Kaori Stearney 2017: pers. comm.). A gilded wood finial in the shape of a gourd, a symbol of fecundity in China, tops the dome of the octagonal outer framework, while many long, single-strand bead tassels ending in gilt pendants hang from its lower edge. The lantern's hemispherical middle structure is also subdivided into niches of various shapes, beaded in large, open, free-form star or flower motifs (Figure 5) strikingly reminiscent of beaded elements on headdresses of noblewomen in certain Ming-dynasty paintings (Gao 2001: Fig. 478; cf. Hong Kong Heritage Museum 2002: Fig. 80). Long beaded tassels accent the lower edge of the lantern's middle structure as well. The small innermost structure, while difficult to see, appears to consist of a rectangular wirework cartouche, sparingly beaded in geometric motifs,



**Figure 5.** Detail of *ruritou* showing beaded wirework motifs (courtesy of Kyoto National Museum and Nanzenji Temple).

which either supports or formerly supported a small plate for holding a candle. Rectangular beaded wirework cartouches may have ornamented women's headdresses in the Tang dynasty (618-907) (*see* Gao 2001: Fig. 478; Hong Kong Heritage Museum 2002: Fig. 34). The form seems to have been quite tenacious; it appears again, albeit in a larger scale, in an early-20th-century Chinese bead seller's shop sign (Francis 1986: Fig. 3).

Viewed as a whole, the lantern seems to integrate opposing forces with ease, balancing monumentality and delicacy; opacity and transparency; negative and positive space; stasis and movement; plane and line; complexity and simplicity; and so on. The lantern also orchestrates diversity in its application of beadwork technique, blending netting (or plaiting) with wireworking, wrapping, and tasselling in ways both obvious and ingenious. That a single object could so gracefully unite such diverse modalities advances the notion that mainland Chinese beadwork was highly developed by the Ming dynasty, if not before. The beaded lantern genre was also highly developed. Zhou Mi (1232-1298), a 13th-century Chinese retired government official turned writer, noted that "bead lanterns" on display during the yearly Lantern Festival in his home city of Lin'an, then the capital of China's Southern Song dynasty (1127-1279), were fitted with "nets woven with multi-colored beads and... decorated with fringe pendants. Some of the lanterns depicted stories involving dragon boats, phoenix carriages or pavilions" (Zhou 1956:372).8 Lin'an is the modern city of Hangzhou in Zhejiang province, not far from Suzhou, a city in Jiangsu province which apparently produced many lanterns in Zhou's era, bedecked with glass beads and pendants (Francis 1986:14).

#### An Early Example in Europe

A Swedish royal inventory of 1719 mentions a miniature bamboo pagoda measuring 86 x 30 cm that once belonged to Hedvig Eleanora (1636-1715), Queen of Sweden from 1654 to 1660 (later regent) and the founder of Drottningholm Palace, a residence for the Swedish royal family near Stockholm. Octagonal in shape, with nine stories topped by a spire, the pagoda is covered with white, blue, and green glass beads that were either stitched or glued to the pagoda's tiered eaves, doorways, roof, and base (Figure 6). The railing around the second story is beaded with wirework star or floral motifs not unlike those on the beaded lantern discussed above. Costumed human figures stand in most of the pagoda's niches, gesturing or gazing outwards (Setterwall et al. 1974:187). Believed to have been made in China during the reign of Emperor Kangxi



**Figure 6.** Miniature beaded pagoda, Qing Dynasty (ca. 1650-1700), 86 x 30 cm (courtesy of Chinese Pavilion, Drottningholm Palace, cat. no. FE 199/HK 350; photo by Erik Liljeroth).

from 1661 to 1722 (Setterwall et al. 1974:309), the pagoda constitutes a third possible historical precedent for Chinese export beadwork.

Long before the Swedish East India Company was formed in 1731 to send ships directly from Gothenburg, Sweden, to Canton (modern-day Guangzhou) in China, other European nations had been active in the China trade by the 16th century, notably Portugal, Spain, and Italy, followed by Britain and the Netherlands in the early 17th century. We may speculate that the pagoda was given to Hedvig Eleanora as a gift from another nation, from the Chinese imperial court, or from another source. In any event, the pagoda can be seen as a harbinger of the fascination with things Chinese that swept Europe in the 17th and 18th centuries, culminating in the faux-Chinese decorative style known as "Chinoiserie." In some cases, European aristocrats commissioned European architects to emulate Chinese architectural structures. Fittingly, the beaded pagoda is now displayed in one such structure, the Chinese Pavilion at Drottningholm Palace. Built from 1753 to 1769 at the behest of Adolf Fredrik, King of Sweden from 1751 to 1771, the Chinese Pavilion was furnished with Chinese porcelains, lacquerwares, silks, and other luxury goods transported on Swedish ships (Wikipedia 2017a).

The pagoda is displayed in a glass vitrine. While the beads are difficult to see, they appear to be made of wound glass with irregular contours. The white beads appears to have a pearl-like coating, perhaps in imitation of real pearls (pers. obs.).

#### CHINESE EXPORT BEADWORK: ca. 1875-ca. 1949

While beadwork produced in China for the indigenous market still turns up in antique or curio shops in cities such as Beijing, beadwork produced in China for export generally does not (pers. obs.). In the following paragraphs we examine seven pieces offered for sale in European or American antique shops or on global e-commerce platforms such as eBay. We will address pieces made for display first, followed by pieces of personal adornment. Most of the pieces feature glass beads; five carry origin marks. Where possible, chemical composition analyses of the beads are included, courtesy of Laure Dussubieux of The Field Museum's Elemental Analysis Facility, Chicago.

#### **Export Beadwork for Interior Display**

Two pieces fall into this category: a netted or plaited beaded panel with a paper "CHINA" label and a beadembroidered panel stamped "Made in China."

#### Netted or Plaited Panel with "CHINA" Label

A complex beading technique was used to create the first piece, a rectangular panel of glass bead netting or plaiting measuring 56 x 54.3 cm (Figure 7). It was acquired from Sarajo Gallery in New York City. Apparently unknown outside China and published here for the first time, the



**Figure 7.** Panel of wound glass beads united in an unusual netting or plaiting technique, ca. 1890-1910, 56 x 54.3 cm; private collection (this and all subsequent photos by Jezrel White).

technique creates a complex grid of squares and diamonds by connecting units of four and five beads with simple pairs of beads (Figure 8). The same technique was used to create the straps of long beaded ornaments made for use within late-Qing-dynasty China. Examples suspended from lanterns at



Figure 8. Detail of the panel in Figure 7 showing the beading technique.

a monastery in Zhejiang province may be seen in a ca. 1906-1909 photo in Boerschmann (1982:144). A related technique appears in the trefoil-shaped niches of a valance attributed to early-20th-century Perak State, Malaysia (Cheah 2014: front cover), home to many peoples including immigrants newly arrived from China, descendants of Chinese immigrants who had arrived long ago, and native Malay.

The panel is suspended from a length of bamboo. Seventeen gourd-shaped, gilt-wood finials sporting red silk tassels edge the bottom of the panel; some of these elements may be missing. A small white paper label measuring 4.5 x 12.5 mm still clings to one of the larger wood finials. It reads CHINA stamped in faint red ink (Figure 9). Origin marks of this nature stemmed from regulations imposed in the late 19th century by Britain and the United States on imports of foreign goods (Cheah 2007:80). In Britain, the Merchandise Marks Act of 1887 "required certain goods made outside of Britain to bear an origin label." In the United States, the McKinley Tariff Act of 1890 "required origin labels on all imported goods to be placed in conspicuous positions in legible English words" (Cheah 2007:79-80).<sup>9</sup> Thus, a credible date range for the panel might be ca. 1890-1920.



**Figure 9.** Paper label bearing a CHINA stamp on one of the tassels of the beaded panel in Figure 7.

It should be noted that Chinese manufacturers also used origin marks, written not in English but in Chinese characters. Eng-Lee Seok Chee (1989:78) published such a chop stamped on the cotton backing of a pair of beaded pillow end panels attributed to Palembang, Sumatra. The chop might identify a manufacturer or dealer in China or in Southeast Asia. Soon, we will encounter two bilingual Chinese chops that juxtapose English letters and Chinese characters.

In shades of translucent green and red, plus opaque yellow and white, the panel's glass beads exhibit the bubbles, coil marks, and other irregularities typical of the winding process that was common in China for centuries (Francis 2002:76-78). The beads range from 3.5 mm in diameter by 3 mm in length to 5 mm in diameter by 4.5 mm in length. A yellow bead tested by LA-ICP-MS (laser ablation-inductively coupled plasma-mass spectrometry) proved to be a lead-potash glass (PbO=55.99%;  $K_2O=7.25\%$ ) (Laure Dussubieux 2017: pers. comm.), a composition consistent with Chinese origin at certain places and points in time (Francis 2002:72-75; cf. Burgess and Dussubieux 2007:65-70). The coloring agent may have been lead stannate (Laure Dussubieux 2017: pers. comm.).

#### Beaded Panel Marked "Made in China"

Our second example, also likely intended for interior use, consists of a rectangular panel of bead-and-thread embroidery on silk measuring 59.4 x 24.8 cm. Two stock motifs of Chinese iconography enliven the panel's stark black background, pairing embroidered branches of a flowering prunus tree or shrub (Prunus mume) with an embroidered white crane captured in mid-flight (Figure 10). Symbolic associations add meanings beyond the merely referential, linking the flowering prunus with notions of perseverance, purity, longevity, or spring renewal, and the flying crane with elevated social rank or longevity (Bartholomew 2006:107, 212), among other possible connotations. Averaging 2 mm in diameter, the beads of coral and seed pearls are sparingly stitched atop the embroidered motifs, imparting luxury, tactility, delicacy, and depth (Figure 11). Such a panel may have satisfied the tastes of many Western housewives in the opening decades of the 20th century, eager to bring a bit of the fashionable Orient into their homes. The presence of indigenous Chinese bead materials such as coral and pearl may have heightened the panel's perceived authenticity.

"Made in China" is stamped in black on the panel's red cotton or linen backing (Figure 12). Enclosed in an oval frame measuring 31 x 18.5 mm, the three words are flanked on the left by the Chinese character for "mouth" (kou) and on the right by what may be the Chinese character for "earth, land" (tu) or the character for "scholar" or "respected person" (shi). The latter interpretation makes more sense in that combining the morphemes shi and kou produces the character ji, meaning "lucky" (Hwei-Fe'n Cheah 2017: pers. comm.), a very good name for a manufacturer. "Made in China" origin marks may have appeared first in the 1920s, thereby postdating "China" origin marks, or "been introduced unevenly" with the two versions in use simultaneously (Cheah 2007:80). Cheah (2007:79; cf. Cheah 2010:167-169) observed both versions on 14 of the Peranakan Chinese beaded belts, slippers, pillow ends, and purses she studied at The Field Museum in Chicago which accessioned them in 1926 and 1936 (Cheah 2007:75, 79;



**Figure 10.** Embroidery panel with crane above flowering prunus branches, ca. 1920s, 59.4 x 24.8 cm; private collection.



Figure 11. Detail of the panel in Figure 10, showing pearl and coral beads stitched atop motifs worked in silk-thread embroidery.



**Figure 12.** Detail of reverse of panel, showing a "MADE IN CHINA" origin mark flanked by two Chinese characters.

cf. Cheah 2010:167-169). A plausible date for the panel in Figure 12 would be the 1920s-1930s, although it could be earlier or later.

#### **Export Beadwork as Personal Adornment**

We now turn to our second category of Chinese export beadwork: items of personal adornment. Two subcatagories are discussed here: handbags and jewelry.

#### **Beaded Handbags**

Beaded handbags are represented by three examples. They have various characteristics in common, such as identical beading on both sides, perimeters edged with sawtooth motifs, paired ring handles, and silk linings. Many are hexagonal, with six straight sides; others are shaped like bottle gourds. The examples shown here date to the late 19th-early 20th centuries or ca. 1890-ca. 1930s, although some may be earlier or later. For the most part, the bags are easily distinguished from those made in Europe and the Americas during this period (*see* Haertig 1990; Schürenberg 1998).

#### Bag with Dragon or Centipede Motif

The bag in Figure 13 is one of many measuring approximately 26.2 x 17.1 mm that have been listed on eBay in the last decade. On this bag, a creature resembling a dragon winds its way through cloud-like motifs that periodically obscure its torso from view. The Chinese character ri (sun, day, or date) floats between the creature's horns or antennae. Along with the *yue* (moon) character, the ri character also appears on pieces of ca. 1920s-1930s mainland-Chinese beadwork made for domestic use (pers.



**Figure 13.** Hexagonal handbag featuring dragon or centipede motif, ca. 1920s, 26.2 x 17.2 mm; private collection.

obs.) and on other pieces made for export, such as a ca. 1920s-1930s bead-embroidered belt evincing a Peranakan Chinese aesthetic with a leather backing stamped "Made in China" (Cheah 2017:231). In China, the sun evokes yang or masculine energy, as does the color red, the bag's assertive background hue. Dragons also embody the yang principle while signifying power, high rank, and fertility (Bartholomew 2006:43). A second interpretation is also viable, according to which the motif represents not a dragon but a centipede (or a snake), two of the Five Noxious Creatures that emerge from hibernation on the fifth day of the fifth lunar month, secreting poisons believed to be strong enough to "counteract pernicious influences" (Bartholomew 2006:281). Depictions of the Five Noxious Creatures on clothing or accessories served talismanic ends, "combating poison with poison" (Bartholomew 2006:281). According to the second interpretation, the ri character and red background color call to mind the heat of summer or the toxins themselves.

A tiny "Made in China" stamp measuring approximately 5 x 11 mm can still be discerned on the pink silk lining of

the bag near one of the ring handles. The ink that remains is so faded that the words may one day disappear. All of the glass beads are of drawn manufacture averaging 1.0-1.75 mm in diameter; they appear to be European (Figure 14). They lend themselves well to being strung on strands that are couched at frequent intervals to a fabric ground, as on this bag. One red bead analyzed using LA-ICP-MA consists of a soda glass (Na<sub>2</sub>O=16.49%) "with significantly high concentrations of potash (K<sub>2</sub>O=7.2%)" plus 3.4% lime, 1% lead, 2.8% zinc, and 650 ppm of cadmium. Interestingly, zinc and cadmium are part of a pigment that began to be used around the 1920s to color red glass (Laure Dussubieux 2017: pers. comm.). It is not possible to conclude that this bead originated in Europe on the basis of chemical composition analysis alone, because not enough comparative data exist (Laure Dussubieux 2017: pers. comm.); the bead does not correspond to information provided in Burgess and Dussubieux (2007). Thus, until further research is undertaken, we may tentatively date the dragon/centipede bag to the 1910s-1930s.



**Figure 14.** Detail of the hexagonal handbag showing (European?) drawn glass beads measuring 1.0-1.75 mm in diameter.

If these are European drawn glass seed beads, how did they come to be used in China? Three 20th-century texts are worth mentioning. The first would carry more weight if credible sources had been cited. Nevertheless, its references to "foreign merchants" with "imported foreign beads and equipment" count as anecdotal evidence, as does its provision of an inception date of 1875.

As early as 1875, opera costume stores and workshops in the *Zhuangyuan fang* district of Guangzhou made and sold beaded headbands, beaded slippers, beaded flowers, beaded hair ornaments and beaded aprons.... With the introduction of advanced foreign technology, arts and crafts technicians in Guangzhou started making purses and tobacco bags with foreign beads. By 1910, some foreign merchants imported foreign beads and equipment in a larger scale to China to make bead handbags. Local Chinese arts and crafts technicians combined the western and Chinese techniques and made large quantities of Western-style bead hand bags to export to all parts of the world (Lin 1988:196).<sup>10</sup>

A second account describes beadwork being produced in quantity in south China during the late 19th and early 20th centuries without mentioning where the beads originated. The author is Lida Scott Ashmore (1852-1934), an American Baptist missionary who, in the 1880s, began introducing Western needlework techniques to Chinese Christian women in the Chaozhou region of eastern Guangdong province (Ashmore 1920:94; Cai 2012:153-155). Several decades on, as Ashmore's workshops flourished and the items produced were sold abroad to benefit the mission and the Chinese women who made them, the technical repertoire expanded; by ca. 1920, it included "embroidering, beading, making tassels, making bead bags, crocheting" (Ashmore 1920:94; Cai 2012:159). Missionaries of other religious affiliations, also eager to engage the Western export market, set up needlework workshops in the region and, like Ashmore, arranged through personal contacts or professional intermediaries to export the results to the United States and Europe (Cai 2012:159).

Equally sketchy, a third account consists of an entry entitled Bead Embroidery (zhu xiu) in a Chinese encyclopedia published in 1991. Without referencing sources, Hong Shouzi (1991:666-667), the author of the entry, states:

Glass bead embroidery was first seen during the reign of Emperor Guanxu of the Qing dynasty (1875-1908). At that time, many Chinese residents in Luzon (now the Philippines) brought back to Fujian province sandals and slippers made of glass bead embroidery (popularly known as "Luzon slippers"). Later, craftsmen in the Zhanzhou area of Fujian made Luzon slippers with imported glass beads and sold them in the open port city of Xiamen. Around 1920, the "Huoyuan" Trading Firm of Xiamen imported glass beads for production of bead embroidery... some embroidery products are also made into hanging scrolls and other artistic pieces.

Although attempts to locate and correspond with Hong Shouzi failed, with further research it may be possible to substantiate such statements or learn more about the Huoyuan Trading Firm and whether, for instance, it sourced beads from any of the European glass bead suppliers identified by Waltraud Neuwirth (1994:484 ff.) as exporters of beads to China or the "Orient" ca. 1892. That companies in Xiamen, a city in Fujian province formerly known as "Amoy," used "imported glass beads" should not be surprising, since from 1842-1912, Amoy was a British-run treaty port, frequented by many foreign traders. For that matter, European drawn glass beads could have entered China through other Britishrun treaty ports such as Canton (Guangzhou) in Guangdong province or Ningbo in Zhejiang province, to name but a few.

#### Bag with Pomegranate, Chime, and Vase Motifs

A second beaded handbag with paired ring handles (Figure 15) reflects the diversity of the genre. No origin mark is present. The rounded oval shape of the bag is rare. Once again, the motif is wholly Chinese: a pair of pomegranates bursting with seeds, signifying abundance and "a wish for numerous progeny" atop a stone chime evoking the Chinese words for "celebration" and "auspicious happiness" poised on a vase tied with string, which may encode wishes for a long peaceful marriage or a life full of blessings (Bartholomew 2006:29, 57, 76, 248). In Chinese art, compositions containing multiple motifs can sometimes be read as rebuses or verbal puns conveying wishes for happiness, prosperity, longevity, or other desirable attributes;



**Figure 15.** Oval handbag featuring pomegranate, jade chime, and vase motifs, ca. 1890-1920; private collection.

if a rebus is intended here, it may be obscure. The glass ring handles are more typical of the genre than the silk-threadwrapped wood handles of the dragon/centipede bag. In fact, during the late 19th and early 20th centuries, China exported glass rings as a commodity unto themselves (Fenstermaker and Williams 1979: Plates XXVI-XXIX). Dual-language chops were sometimes stamped on the rings' packaging (Figure 16).



**Figure 16.** Pink glass ring 88 mm in diameter with packaging bearing a dual-language origin mark, late 19th-early 20th centuries; private collection.

Whereas the workmanship of the dragon/centipede bag in Figure 13 is smooth and even, reflecting the relative uniformity of the drawn glass beads, the workmanship of the pomegranate bag looks rough because the beads are irregular in shape and size, an artifact of the winding process by which they were made, probably in China (Figure 17). A turquoise-blue bead from the bag analyzed by LA-ICP-MS manifests the characteristics of lead-soda glass (PbO=33% and Na<sub>2</sub>O=10%). It contains 0.8% copper as well as slightly higher than average zinc and lead concentrations (Laure Dussubieux 2017: pers. comm.). Unfortunately, the origin of the bead cannot be determined based on the chemical composition alone because, once again, not enough comparative data exist. The bead's visual characteristics, however, are consistent with a Chinese origin.

#### Bag with Auspicious Chinese Characters

The export beaded handbag genre of the late 19th and early 20th centuries also includes netted or plaited



**Figure 17.** Detail of the oval handbag in Figure 15, featuring wound glass beads whose irregular sizes and contours make them difficult to couch evenly.

bags, such as the example in Figure 18. It measures 38.2 x 15.5 cm. Old paper wrappings still encircle the glass ring handles, suggesting that the bag was never used. There is



**Figure 18.** Hexagonal handbag featuring large Chinese character in a hexagonal frame, ca. 1890-1925, 38.2 x 15.5 cm; private collection.

no origin mark. This is one of many such bags bearing large Chinese characters extending auspicious wishes. In this case, the character *ji* (lucky) is enclosed in a speckled white hexagonal frame that echoes the bag's hexagonal outlines. All of the beads are wound and irregular, averaging 2-3.5 mm in diameter and 1-2 mm in length (Figure 19). The beading technique creates the diagonal pattern common to many pieces of mainland-Chinese netted or plaited beadwork produced during the late 19th to early 20th centuries (pers. obs.; *see* Hector 2005:15, 24) depositing 12 beads per cell. Three eight-strand beaded tassels, each topped by a pink wound glass bead measuring 12 mm in diameter by 8 mm in length, join with a series of single-strand tassels to animate an otherwise static composition. Sawtooth motifs accent the upper and lower perimeters of the bag.



Figure 19. Detail of hexagonal handbag showing irregular wound glass beads netted or plaited in a technique that creates an opendiamond pattern.

#### **Mainland Chinese Export Jewelry**

Another locus of beadwork lies in Chinese export jewelry. We consider two examples in which beadwork is combined with base metal.

#### Beaded Dress Clip with Origin Marks

The first item is a dress clip, 51 x 43 mm, made of a yellow metal such as brass and bearing four bezel-set cabochons of stone or glass on a ground of filigree rosettes around a central hexagonal panel of beadwork (Figure 20). The beads are translucent eggshell white glass but have a pale green tint due to green corrosion products on the underlying metal. With smooth edges and regular contours averaging 1.74 mm in diameter by 1.0-1.5 mm in length, the beads appear to be made of carefully wound glass; it seems fair to assume that they were made in China. If so, they demonstrate that certain classes of wound beads



Figure 20. Dress clip set with stone or glass cabochons, wirefiligree rosettes, and a panel of glass beads, ca. 1900-1925,  $51 \times 43$  mm; private collection.

were very finely finished indeed, rivaling in perfection the best European glass seed beads. A panel of glass bead embroidery in a private collection also appears to be worked in Chinese coil beads of a similarly fine size and high degree of regularity (pers. obs.). It is believed to date to the early Qing dynasty (ca. 1650-1700) (Sandra Whitman 2005: pers. comm.). Other specimens of fine Chinese glass seed beads may be sought in hair ornaments and other items made in imperial workshops (*see* National Palace Museum 1986: Figures 146, 161; Palace Museum 1992: Figures 77, 149).

The technique used to connect the beads is a net or plait that disposes beads at right angles, building four beads per cell; this bead pattern was noted earlier in the Ming-era calligraphic panel (Figure 1). Oddly, the reverse of the clip carries two different origin marks in two differing type fonts. One, on the armature's back plate reads "madeinchina" (Figure 21, top). The other, near the end of the long clip arm, which appears to be made of a different yellow-metal alloy, reads "CHINA" (Figure 21, bottom). Possibly, the dress clip was made in a workshop that employed a componential method to streamline production, whereby parts were made separately and later assembled in varying configurations. As Lothar Ledderose (2000) has shown, this method is ancient in China. In any case, the finished clip can tentatively be dated to ca. 1910-1930, with the understanding that certain parts may have been assembled before others.

## Charm Necklace with Beadwork

Our final example of what could be called Chinese export beadwork is a filigree charm necklace 53 cm in length. It is made of a yellow, brass-like metal embellished



Figure 21. The back of the dress clip showing two origin marks.

with glass and coral beads (Figure 22). Of the seven metal charms, three have "CHINA" stamped on their undersides (Figure 23). The clasp is not marked. Four of the charms may symbolize abundance as baskets overflowing with produce or carts laden with goods. One depicts a bell, which may connote harmony; another a flower, connoting beauty or purity. To the Western eye, the central charm (Figure 24) may look like a heart, but it almost certainly represents the peach of immortality carried by Shoulao, the Chinese God of Longevity. The peach is one of the most popular motifs found in Chinese art (Bartholomew 2006:190, 204). Here it is worked in tiny coral seed beads averaging 2 mm in diameter by 1 mm in length, creating a peach measuring 16.5 mm wide by 20 mm high. The bead netting or plaiting technique conjoins cells of four beads inclined at right angles - a pattern identical to that on the dress clip and calligraphic panel described above.

The coral beads on the other six charms are larger, averaging 3 mm in diameter by 2 mm in length, and set on tiny wires that are connected to the metal armatures. Conceivably, the names of the charms might form a rebus with an auspicious meaning which, while lost on the necklace's Western owner, may have been plain to its Chinese makers. At the very least, the charms embody positive attributes that most humans desire.



**Figure 22.** Seven-charm necklace accented with beads of glass and coral, ca. 1900-1925, 53 x 30 cm; private collection.

## CONCLUSION

Sufficient evidence exists to constitute Chinese export beadwork as a distinct category whose scope and diversity have yet to be determined. Incontrovertible examples dating to the late 19th and early 20th centuries are difficult to find; "their rate of survival" may stand in "inverse proportion



Figure 23. "CHINA" origin mark on one of the charms.



**Figure 24.** Composed of tiny coral beads, the necklace's central charm likely represents the peach of immortality.

to their ubiquity" (Clunas 2007:93). The paucity of origin marks is regrettable. Many have probably worn off or faded to invisibility; in some cases, pieces may not have been marked before export. Fortunately, the Chinese textual record affords intriguing insights; further research is needed. The English textual record also merits further examination. As Hwei-Fe'n Cheah (2007:83) concludes, traces of Chinese export beadwork are almost impossible to detect in British and American import records of the late 19th and early 20th centuries because Chinese beadwork was likely classified not as a category of its own but as part of the large category of export needlework. Nevertheless, missionaries' accounts of their lives in China have proven fruitful in at least one instance, providing first-hand evidence of Western involvement in the production of beadwork for export.

Many questions remain. Who oversaw the designing of pieces for export during the late 19th and early 20th centuries? What percentage of pieces carry classic Chinese motifs such as the dragon/centipede, pomegranate/chime/vase, or auspicious characters? Was it assumed that such motifs would appeal to Western women, eager for a taste of the Orient? Or have we got it wrong - were the pieces designed for Chinese women living in the West? How did motifs and pieces change over time? Did Chinese manufacturers ever seek to emulate Western motifs or adjust their products to more closely approximate Western tastes? What else can be learned about beadwork workshops in the Zhuangyuan fang neighborhood of Guangzhou during the late 19th and early 20th centuries? Through what avenues were Chinese beaded objects sold in Western - or Eastern - countries? Did images of Chinese export beadwork appear in American mail-order catalogs, and how did Western audiences respond? How many of the bead curtains or valances shown in early retail catalogs originate in China? Can photos be found showing Chinese export beadwork displayed in homes or worn on bodies?

What about the three early pieces discussed at the beginning of this paper, dating to the Ming and early Qing dynasties? If the pieces had been made or exported under imperial auspices, would the beads be made not of glass but more costly materials such as pearls, coral, or gemstones? Would the surfaces of the glass beads be smoother, the shapes more regular? How were glass beads viewed during the Ming and Qing dynasties? Do more examples of beadwork from the imperial era still survive in public or private collections and if so, where are they?

Lastly, the pieces we have discussed here bear witness to China's rich history of producing beadwork for export using diverse materials, techniques, formats, and styles to serve diverse purposes. Origin marks provide reliable evidence of the kinds of pieces exported from the late 19th century on. For the centuries preceding the imposition of origin marks, we must build our narratives on other kinds of evidence by culling from the textual, pictorial, and anecdotal records, and staying alert to possibilities not previously considered. Although the history of Chinese export beadwork can be researched separately from the history of Chinese domestic beadwork, much might be learned by enlisting the one to illuminate the other.

#### ACKNOWLEDGEMENTS

I would like to thank the Beads-L listserve for posting a notice about the beaded lantern at Nanzenji Temple and Deborah Zinn, co-moderator of Beads-L, for her recent help locating the original 2004 post; the Bead Study Trust for a Guido Grant in 2006 to study in person the lantern at Nanzenji and the calligraphic panel at the Tokyo National Museum; Patrick Kirby for his 2017 communications on my behalf with officials at Nanzenji Temple, Kyoto National Museum, Bijutsu-in and Tokyo National Museum; Nanzenji Temple for sending me a color printout of Atelier Suzuran's discussion of the lantern and a DVD-ROM of the lantern's restoration process; Kaori Stearney for interpreting the DVD-ROM's Japanese narrative; Hwei-Fe'n Cheah for sharing aspects of her research with me, referring me to Cai Xiang-Yu's dissertation, and making excellent suggestions on a draft of this paper; Bonnie Corwin, Erik Baark, Liu Zhiwei, Siu-Woo Cheung, and May Bo for their advice about documenting beadwork production in opera costume workshops in the Zhuangyuan fang neighborhood of Canton/ Guangzhou during the late 19th and early 20th centuries; Han Zhang for translating and annotating passages in Zhou Mi's Wulin Jiushi; Frida Grundström for Swedish translations; Sandra Whitman for facilitating Jamey D. Allen's and my examination of an early-Qing-dynasty bead embroidery in a private collection; Laure Dussubieux of The Field Museum's Elemental Analysis Facility for her analyses of several glass beads and for many patient e-mails; and Karlis Karklins for advice on interpreting chemical compositions and for meticulous editing.

## **ENDNOTES**

- 1. Since the word for bead, *zhu*, can mean a pearl or a bead of any other material in Chinese, the "pearl sewn shirt" described in the Ming story was not necessarily embellished with pearls. For an idea of what beaded shirts of the late Qing dynasty may have looked like, there is one embellished with glass beads in Han Han (1998:88) and one with bamboo beads in Hector (2005:24).
- 2. For the distinction between bead netting and plaiting, *see* Hector (2016:68 ff.).
- 3. The panel was found at Höryūji Temple in "a storage box that reads 'Ornament for the Palanquin of the Retired Emperor Shirakawa' who retired in 1086" (Blair 1973:398). Blair further states that the 1086 date is far too early for the panel. Rather, the panel was probably stored in a repurposed box.
- 4. In netted or plaited beadwork, a "cell" is a twoor three-dimensional unit symmetrical in shape, composed of beads, which shares some of its beads with neighboring cells (Hector 2016:70). On several objects made for imperial use during the Qing dynasty, nets or plaits with cells aligned at right angles are discernable (National Palace Museum 1986: Figures 111, 119, 315; Palace Museum 1992: Figures 80, 143, 149, 157; Palace Museum and Art Gallery 1987: Figure 61). Whether or to what extent glass beads may have been used in China's imperial workshops has not been documented.
- 5. Dating to ca. 1279, the earliest surviving intact example of netted or plaited beadwork in China appears to be a hair ornament of the late Southern Song dynasty (1127-1279). It is beaded with tiny pearls depicting neither motif nor inscription (Hector 2016:75). The ornament is worked in a technique that juxtaposes hexagonal and diamond-shaped cells (pers. obs.).
- 6. "To look upon a work of art brings endless longing" posits heart radicals in the *bing bing* characters. "Let us look upon this painting/work of art, eternally luminous" posits fire radicals in these characters. "To look upon this painting/work of art brings endless

happiness" posits heart radicals in *yong yong* (instead of *bing bing*) characters.

- 7. For information about single-thread plaiting techniques, *see* Hector (2016:68-69).
- 8. According to translator Han Zhang, the exact wording Zhou uses in this passage is *zhū zi dēng zé yĭ wŭ sè zhū wéi wăng* "the bead lanterns used the nets woven with multi-colored beads" (Zhou Mi 1956:372). Zhou seems to be referring to freestanding panels of beadwork, meaning that the beads, in combination with the threads, form a fabric unto themselves (*see* Hector 2016:68). Whether the motifs he mentions (dragon boats, phoenix carriages, and pavilions) were depicted in or on the beaded panels is not clear.
- 9. Cheah (2007:79) poses an important question: were origin marks attached immediately after pieces were made or later, by dealers engaged in reselling them.
- 10. In 2006, in the Zhuangyuan fang neighborhood of Guangzhou, women could be observed sitting in small groups on stools outside of shops, doing commercial bead embroidery (pers. obs.). Not far away, shops within and around Liwan Plaza were selling all manner of beads as well as finished jewelry.

## **REFERENCES CITED**

#### Ashmore, Lida Scott

1920 The South China Mission of the American Baptist Foreign Mission Society: A Historical Sketch of its First Cycle of Sixty Years. Methodist Publishing House, Shanghai.

#### **Bartholomew, Terese Tse**

2006 *Hidden Meanings in Chinese Art*. Asian Art Museum, San Francisco.

#### Birch, Cyril

1958 Stories from a Ming Collection: Translations of Chinese Short Stories Published in the Seventeenth Century. Compiled by Feng Menglong. Translated by Cyril Birch. Grove Press, New York.

#### **Blair, Dorothy**

1973 *A History of Glass in Japan*. Kodansha International, Tokyo, and the Corning Museum of Glass, Corning.

#### Boerschmann, Ernst

1982 Old China in Historic Photographs. With a new introduction by Wan-go Weng. Dover Publications, New York.

#### **Brook**, Timothy

1998 The Confusions of Pleasure: Commerce and Culture in Ming Dynasty China. University of California Press, Berkeley and Los Angeles.

#### Burgess, Laurie E. and Laure Dussubieux

2007 Chemical Composition of Late 18th- and 19th-Century Glass Beads from Western North America: Clues to Sourcing Beads. *Beads: Journal of the Society of Bead Researchers* 19:58-73.

#### Cai Xiang-Yu

2012 Christianity and Gender in Southeast China: The Chaozhou Missions, 1849-1949. Ph.D. thesis. Leiden University.

#### Cheah, Hwei-Fe'n

- 2007 'Made in China'? A Case Study of Nonya Beadwork. *Textile History* 38:59-91.
- 2010 Phoenix Rising: Narratives in Nyonya Beadwork from the Straits Settlements. National University of Singapore Press, Singapore.
- 2014 Historical Descriptions of Malay "Beadwork." *Beads:* Journal of the Society of Bead Researchers 26:3-8.
- 2017 Nyonya Needlework: Embroidery and Beadwork in the Peranakan World. Asian Civilizations Museum, Singapore.

#### Clunas, Craig

- 1991 Superfluous Things: Material Culture and Social Status in Early Modern China. University of Hawai'i Press, Honolulu.
- 2007 Empire of Great Brightness: Visual and Material Cultures of Ming China, 1368-1644. University of Hawai'i Press, Honolulu.

#### **Eng-Lee Seok Chee**

1989 *Festive Expressions: Nonya Beadwork and Embroidery.* The National Museum, Singapore.

#### Fenstermaker, G.B. and Alice T. Williams

1979 The Chinese Bead and the Romance of the Bead-Jewelry Trail. Archaeological Research Booklets XV. Lancaster, PA.

#### Francis, Peter, Jr.

- 1986 *Chinese Glass Beads: A Review of the Evidence.* Occasional Papers of the Center for Bead Research 2. Lake Placid, NY.
- 2002 Asia's Maritime Bead Trade, 300 BC to the Present. University of Hawai'i Press, Honolulu.

# Fu, Shen C.Y., Marilyn W. Fu, Mary G. Neill, and Mary Jane Clark

1977 *Traces of the Brush: Studies in Chinese Calligraphy.* Yale University Art Gallery, New Haven, CT.

#### **Gao Chumming**

2001 Zhongguo fushi mingwukao (Study of Chinese Dress and Personal Adornment). Shanghai wenhua chubanshe, Shanghai.

#### Haertig, Evelyn

1990 More Beautiful Purses. Gallery Graphics Press, Carmel, CA.

#### Han Han (Luo Yuan Yuan)

1998 *Zhongguo gu boli* (Chinese Antique Glass). Yishu jia chubanshe, Taipei.

#### Hector, Valerie

- 2005 The Art of Beadwork: Historic Inspiration, Contemporary Design. Watson-Guptill Publications, New York.
- 2016 Bead Netting and Plaiting Techniques in the Peranakan World. *Beads: Journal of the Society of Bead Researchers* 28:66-91.

#### Hong Kong Heritage Museum

2002 Zhong guo li dai fu nü xing xiang fu shi (Images of Women in Chinese History). Leisure and Cultural Services Dept., Hong Kong Heritage Museum.

#### Hong Shouzi

1991 Zhuxiu (Bead Embroidery). In Zhongguo da baike quanshu (Great Chinese Encyclopedia) 71:666-667. Xinhua shudian Shanghai faxing suo faxing, Shanghai. Unpublished English translation by International Language and Communication Centers, Inc., Chicago.

#### Ledderose, Lothar

2000 Ten Thousand Things: Module and Mass Production in Chinese Art. Princeton University Press, Princeton.

#### Lin Mingti (ed.)

1988 *Guangdong gongyi meishu shiliao* (History of Arts and Crafts in Guangdong Province). Guangdong Arts and Crafts Association, Guangzhou. Unpublished partial English translation by Licheng Gu.

#### National Institutes for Cultural Heritage

2017 Ornament for Portable Shrine. e-Museum, http://www. emuseum.jp/detail/100706?x=&y=&s=&d\_lang=en&s\_ lang=ja&word=&class=12&title=&c\_e=&region=&era= &cptype=&owner=&pos=185&num=8&mode=detail&ce ntury=, accessed October 27, 2017.

#### **National Palace Museum**

1986 *Catalogue of the Exhibition of Ch'ing Dynasty Costume Accessories.* National Palace Museum, Taipei.

#### Neuwirth, Waltraud

1994 Perlen aus Gablonz: Historismus, Jugendstil/Beads from Gablonz: Historicism, Art Nouveau. Self published, Vienna.

#### **Palace Museum**

1992 Jewelry and Accessories of The Royal Consorts of Ch'ing Dynasty. Forbidden City Publishing House, Beijing.

#### Palace Museum and Art Gallery

1987 *Qing dai Guangdong gong pin* (Tributes from Guangdong to the Qing Court). The Palace Museum, Beijing, and The Art Gallery, Chinese University of Hong Kong.

#### Schürenberg, Sabina B.

1998 *Glasperlarbeiten: Taschen und Beutel: von der Vorlage zum Produkt.* Hirmer Verlag, Munich.

#### Setterwall, Åke, Stig Folgelmarck, and Bo Gyllensvärd

1974 *The Chinese Pavilion at Drottningholm*. Allhems Förlag, Malmö.

#### **Tokyo National Museum**

2004 *Treasures of a Great Zen Temple: The Nanzenji.* Asahi Shinbunsha, Tokyo. Unpublished partial English translation by Patrick Kirby.

#### Wikipedia

- 2017a Chinese Pavilion at Drottningholm. https://en.wikipedia. org/wiki/Chinese\_Pavilion\_at\_Drottningholm, accessed 2 October 2017.
- 2017b Japanese Missions to Ming China. https://en.wikipedia. org/wiki/Japanese\_missions\_to\_Ming\_China, accessed 2 November 2017.

#### Zhou Mi

1956 *Wulin Jiushi* (Ancient Matters from the Wulin Garden). In *Dongjing menghua lu* (*wai si zhong*) 2. Shanghai gudian wenxue chubanshe, Shanghai. Unpublished partial English translation by Han Zhang.

> Valerie Hector Independent Researcher Wilmette, IL valeriehector@sbcglobal.net