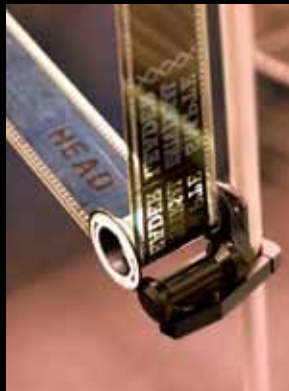




Hong Kong Museum Journal

香港博物館期刊

VOLUME 1 期





Hong Kong Museum Journal

香港博物館期刊

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編者的話



博物館匯聚人類文明知識的豐富遺產，肩負收藏、保育及研究的使命。因為工作需要，博物館人員經常有機會接觸及編整許多寶貴知識，我們覺得，如果能把這些知識有系統地整理結集，與同道分享，會是多麼美好。所以，我們在策展、行政、教育種種日常事務之外，再鞭策自己，定期出版有關博物館專業工作的期刊，為文化知識承傳盡一分力。

由是，《香港博物館期刊》，這份由康樂及文化事務署轄下「文物及博物館事務科」（文博）同事合力出版的刊物面世了。我們以謙虛卻懷有抱負的態度，渴望藉此小小刊物開始建構與本地以至海外同業交流的平台，分享專業經驗。這本薄薄的期刊內容將集文化、藝術、歷史、科學、修復等領域之學術文章及研究報告於一身，供同業參考省覽。為了兼顧大眾文博愛好者，我們盡量摒棄艱澀的專業辭彙，以清簡的行文表述工作所得，希望藉此促進交流，讓普羅大眾分享文博樂趣。

我要在此衷心感謝文博同事為《香港博物館期刊》創刊號，提供八篇頗堪細讀的文章。從中國外銷畫看「錯誤」與「反思」、從孫中山先生降受三次驅逐令看香港如何孕育他的革命思想、從二次大戰 Betsy 和 Niki 姊妹戰機失散流離的故事了解文物保育的重重波折、從數碼球幕節目製作認識科技與文博的嶄新結合、從私營博物館的營運得知博物館業界的發展及挑戰等等，讀者可按各自的興趣獲取文博範疇的專業知識和心得。

我們熱切期待本期刊能發揮果效，讓大家了解更多香港的文博蘊藏。文章除刊登於印行本外，亦會上載於香港公共博物館網站（www.museums.gov.hk）供大眾瀏覽。最後，我們更希望你能提供寶貴意見，讓我們不斷改善期刊的質素，謝謝。

陳承緯

陳承緯

助理署長（文博）
康樂及文化事務署

Editor-in-Chief's Note

Museums are dedicated to collection, conservation and research of the legacy of human civilisation, alongside knowledge convergence. They offer a reservoir for an amalgamation of learning that transcends space and time, which could otherwise be lost without the dedication and determination to pass this knowledge on from generation to generation.

With an aim of preserving and sharing valuable learning, the Heritage and Museums team of the Leisure and Cultural Services Department has launched the publication *Hong Kong Museum Journal* to sow the seeds of knowledge and museum curatorial experience so that the fruit of today's work will yield in the future.

Hong Kong Museum Journal is the first ever museum journal produced by the Leisure and Cultural Services Department, and is tasked to serve as an exchange platform for sharing museum curatorial and research experience. It will carry academic papers and research reports covering a broad array of subjects including culture, arts, history, science and conservation, to promote exchange among local and overseas professionals in the heritage and museums sector.

In this debut issue of the Journal, there are eight lively and arresting articles telling fascinating stories of heritage and museums, carefully crafted by our Heritage and Museums team. Interesting subjects include the study of China trade paintings to demystify misconceptions and breakthrough conventional wisdom; the footsteps of Dr. Sun Yat-sen during the three banishment orders served on him to explore how Hong Kong nurtured his revolutionary ideals; the story of the two warplanes, Betsy and Niki, to understand the importance of conservation; the production of sky shows to illustrate the integration of technology and museum; and the examination of the growth and challenges faced by the development of private museums within the museum industry.

It is hoped that, in the long run, the Journal will inspire you and foster the growth of the heritage and museums speciality. In addition to publishing hardcopies, the Journal's articles will also be posted on the Hong Kong Public Museums' website (www.museums.gov.hk). We welcome your suggestions and comments on ways in which we can improve our Journal.

Chan Shing-wai

CHAN Shing-wai

Assistant Director (Heritage and Museums)
Leisure and Cultural Services Department

絕妙的錯誤—香港藝術館的中國外銷畫突破性研究

Excellent Errors—Breakthrough Research into China Trade Paintings in the Hong Kong Museum of Art

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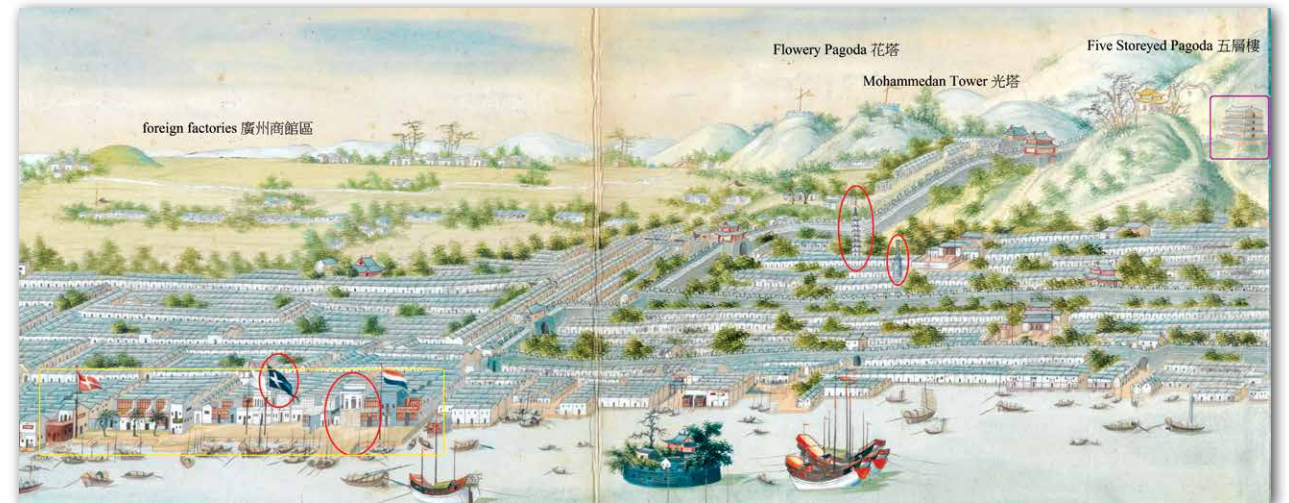


① 廣州鳥瞰圖 | 約 1771 年 | 中國畫家 | 水粉紙本 | 41.5 x 66.5 厘米

香港藝術館館藏 AH2013.0022

Canton (Guangzhou): a bird's eye view of the city | ca.1771 | Chinese artist | Gouache on paper | 41.5 x 66.5 cm

Hong Kong Museum of Art AH2013.0022



② 圖 1 之局部
Detail of Fig. 1

摘要

十八至十九世紀，在中外貿易黃金時期的背景下，出現了一種以西方市場為銷售對象的畫作，經廣州大量運銷海外——這就是中國外銷畫。在過去，這些出自中國畫家之手的作品，一直被認為是以流水作業的模式生產而成的，有時甚至被歸類為粗製濫造的紀念工藝品。然而近年的研究提出新的看法。最新的研究結果證明外銷畫——特別是 1822 年之前以廣州商館為主題的作品，其描繪精準可信，跟歷史文獻的記載甚為吻合。本文將以香港藝術館在 2013 年入藏的一幅外銷畫上的種種發現，進一步引證上述新觀點。作者透過從地圖和歷史檔案之中發掘所得的新資料，破解了這幅畫中令人費解的「錯漏」，並揭示以往為人忽視，或不為人知的風格特徵和畫家作業模式。通過深入研究這些作品，畫中令人存疑的細節有望得到正視，而不再被當成畫家粗心大意的錯誤。外銷畫日益被受藝術史學者和歷史學家重視，本文的發現可以帶動日後的研究，加深對這種別樹一格的藝術的了解。

非比尋常的一幅畫

2013 年，香港藝術館購藏了一幅十分特別的中國外銷畫①。① 那是一幅水粉畫，年代約為 1771 年，是以廣州商館區為題材的畫作中年代最早的其中一幅。商館又稱「行」②（圖②黃格所示），位於廣州西南隅城郊，專供當時來華經商的外國人租住。在為期四至五個月的貿易季度內，隨着各國商船駛至及

Abstract

Produced in large quantities mainly in Canton (Guangzhou) throughout the eighteenth and nineteenth centuries, during the golden era of the China trade, China trade or Chinese export painting is a genre of painting produced for the Western market by Chinese artists. In the past, these works have long been thought to be assembly line productions, sometimes even classified as careless and casual souvenir art. Latest research has shown the contrary, particularly in the case of pre-1822 foreign factory scenes of Canton. New findings have proven that they are painted with accurate and reliable details, matching very closely with the written historical records. This paper will substantiate this new understanding with discoveries on a painting acquired by the Hong Kong Museum of Art in 2013. With new materials found on maps and archival records, the author has decoded some inexplicable “discrepancies” in these paintings, unveiling neglected or unknown traits and artistic practices. Through in-depth research in these paintings, doubtful details will hopefully no longer be cast away as a careless mistake of the artist. They will serve as pointers to spur further research and better understanding of this very special genre of export art that has gained increasing attention among art historians and historians.

An Atypical Painting

In 2013, the Hong Kong Museum of Art acquired a very special China trade painting ①. ① It is a gouache on paper dated ca. 1771, which makes it one of the earliest paintings that shows the city of Canton with the foreign factories, or hongs² (boxed in yellow in ②). These were living quarters specifically designated for foreigners who conducted trade in Canton. These houses at the southwest suburbs of Canton, outside the city walls, were leased to the foreign traders on a seasonal basis for four to five months,³ while their ships were in port. In late eighteenth century, most

- 3 從珠江河面眺望廣州城景色
十九世紀初 | 佚名
水粉絹本 | 40 x 70 厘米

香港藝術館館藏 AH1964.0162.004

View of the City of Guangzhou from Pearl River | early 19th Century
Anonymous artist
Gouache on silk | 40 x 70 cm

Hong Kong Museum of Art AH1964.0162.004



泊碇，外國商旅會到商館暫住。³ 在十八世紀末，大多數歐洲國家都透過所屬的東印度公司跟中國進行貿易，而這些公司每年都大多租用同一所商館。當來自不同國家的商人每年抵達廣州，他們都會在商館前升起所屬國家的國旗，正如此畫所示。這幅水粉畫罕見而珍貴，同時充滿謎團，因為當中有一些難以想像的錯誤（圖2紅圈所示）。最容易察覺的一項，是瑞典國旗上的十字竟不是黃色而是白色。另外，其中一棟建築物的外牆看起來像未完成的畫稿。而當地兩個地標花塔和光塔⁴的位置亦畫錯了。這兩座塔常見於中國外銷畫中，如作品的取景角度從南方向北方眺望，九層八角型的花塔通常置於畫面右邊，而平頂圓柱型的光塔則在左邊（圖3）。

但這幅水粉畫最令人疑惑的或許是它的構圖。它並未描繪整個廣州城，在右上方的五層樓⁵（又名鎮海樓）被推到畫的邊緣（圖2紫色方框所示），彷彿畫家在處理空間布局時失準。把五層樓如此重要的地標擠到一旁似乎並非恰當的決定，至少對於外銷畫來說不應如此。比較典型的做法是將該地標放於畫中央遠景的位置，如圖3。在圖1中，商館區位於最左邊，而非中央，也並非如其

European countries conducted China trade through their East India companies, and would mostly rent and return to the same factories every season. When the chief officers arrived at Canton each year, they raised their national flag in front of their factory, clearly visible in this work. Very rare and valuable, this gouache is also a very puzzling work, for it seems to bear the most unthinkable errors. Among them, the most easily discernable ones (encircled in red in 2) are a Swedish flag painted with a white instead of a yellow cross on blue, a building whose façade looks like an unfinished sketch, and two important landmarks—the Flowery Pagoda and the Mohammedan Tower⁴—in the wrong positions. These two pagodas are often portrayed in Chinese export paintings, with the nine-storey octagonal Flowery Pagoda normally placed on the right, the flat-topped cylindrical Mohammedan Tower on the left, corresponding to their actual location if seen from the south (Fig. 3).

But perhaps what is most disturbing about our gouache, on the whole, is its composition. The painting does not offer the entire city of Canton, on the upper right (boxed in purple in Fig. 2), the Five Storeyed Pagoda⁵ (also known as Zhenhai Tower) has been pushed to the edge, as if the artist had a miscalculation of space. This does not seem to be an eligible decision for a landmark as important as the Five Storeyed Pagoda, at least not for export paintings. A more typical scene such as Fig. 3 shows this landmark at centre, in the far background. The foreign factories are on the far left, not at centre, and not in frontal view as seen in more typical examples. This strange layout leaves the centre



- 4 廣州商館 | 1806 年 | 佚名 | 油彩布本 | 19.5 x 26 厘米
香港藝術館館藏 AH1964.0029

Guangzhou Factories | 1806 | Anonymous artist
Oil on canvas | 19.5 x 26 cm

Hong Kong Museum of Art AH1964.0029

他典型的例子一樣被置於正前方。這個奇怪的安排令畫作的中心焦點落在一組相對不重要、看似一模一樣、只有簡單白色立方體輪廓的房子上。這幅畫的構圖之所以如此不尋常和相對不吸引，其中一個原因可能是我們現在看到的，其實只是一幅更大或更長的作品的一部分，例如是從一幅卷軸畫裁下來的一段。

但是，若仔細觀察畫作邊緣的話，便可以排除上述可能性。這幅水粉畫四方鑲以薄薄的藍色裱邊。畫的表面有一些皺摺，其中最為明顯的一道位於中央，這些皺摺從畫心延伸到裱邊之上，因此可推斷裱邊並非新近添加之物。沿著邊緣觀察，某些位置清楚地顯示出筆觸在裱邊前便停下，而某些位置則可看到筆尖劃過裱邊表面。如果這幅水粉畫是由另一幅大畫裁下來的話，應該不可能出現這種情況。所以，這表示此畫是一幅完整的作品，其構圖是刻意地別樹一格。

從高處俯瞰的視點

這幅水粉畫以鳥瞰角度，俯瞰城內和城外西郊商館區一帶。極高的視點令觀者可以盡情

of the painting, i.e. the focal point of the whole picture to a cluster of relatively unimportant, almost identical houses, so unimportant that they are just given a simple silhouette of a white cube. One possible reason of this unusual and rather unattractive composition could be that we are looking at a cropped part of a larger or a longer work, such as a scroll. If this painting did belong to a scroll, then this extant section must have been cut off at a time earlier.

However, a closer look along the edges might eliminate this possibility. This gouache on paper is mounted with a thin piece of blue binding on all four sides. A few creases on the surface, including the most noticeable one at centre, continue from the painted surface onto the binding, indicating that the binding is not recently added. Along the edge, several areas show clearly that the paint brush had been stopped right before it reached the binding, whereas in some other areas, the painting went over the binding. This would not be possible if the gouache is a cropped version of a larger work. So that means we still have an atypical composition.

The High Vantage Point

This gouache takes a very high vantage point—a bird's eye view. Overlooking the city within the city gates and the western suburbs, primarily where the foreign factories were located, the viewer is offered the advantage of altitude, a feast of the interesting interior of the city behind the factory quarter. Unlike the numerous extant paintings

¹ 在 1757 至 1842 年間，在清代 (1644-1911) 一口通商的政策下，外商輻湊的廣州出現一種別樹一格的畫科，大量運銷海外—這就是中國外銷畫，又有中國貿易畫之稱。一如其名，這些畫作銷售對象為海外市場而非本地市場，畫家在廣州開設畫室、作坊，繪製這類作品。後來，同類外銷畫室亦在香港和上海出現。品種多樣，常見的包括港口風景畫、地誌畫、人物肖像、花鳥、船舶和市井風物等小品。

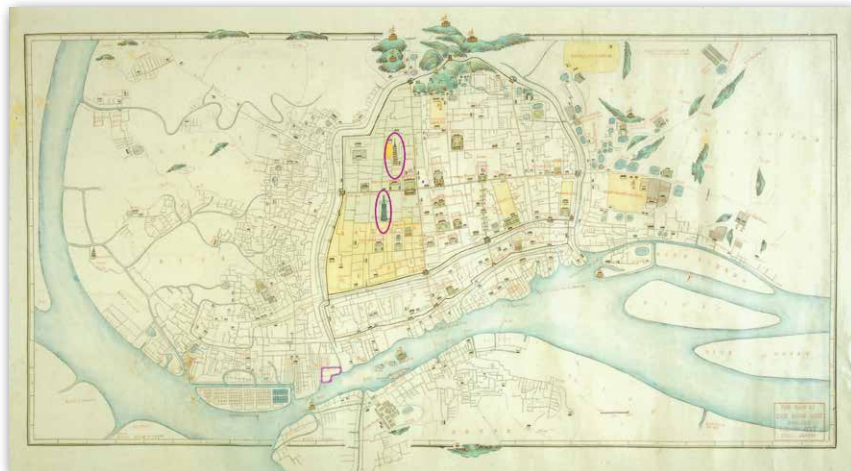
China trade paintings, also called Chinese export paintings, were produced in large quantities in Canton (now Guangzhou), when the city was the sole port of access to China from 1757 to 1842 for foreign trade as a consequence of the control the Qing (1644-1911) government wished to exert over Sino-Western trade. As its name indicates, these paintings catered to a market in the West and were produced by Chinese artists working for studios in Canton, and later in Hong Kong and Shanghai. Meant for “export”, these paintings were never intended for the local market. Popular types include port scenes, topographical subjects, figures and portraits, birds and flowers, boats and street scenes, in general.

² 在中外貿易史中，「商館」或「行」，又即夷館，英文雖稱 Factory，但實際上並不是工廠而是供洋人商住兩用的行館。

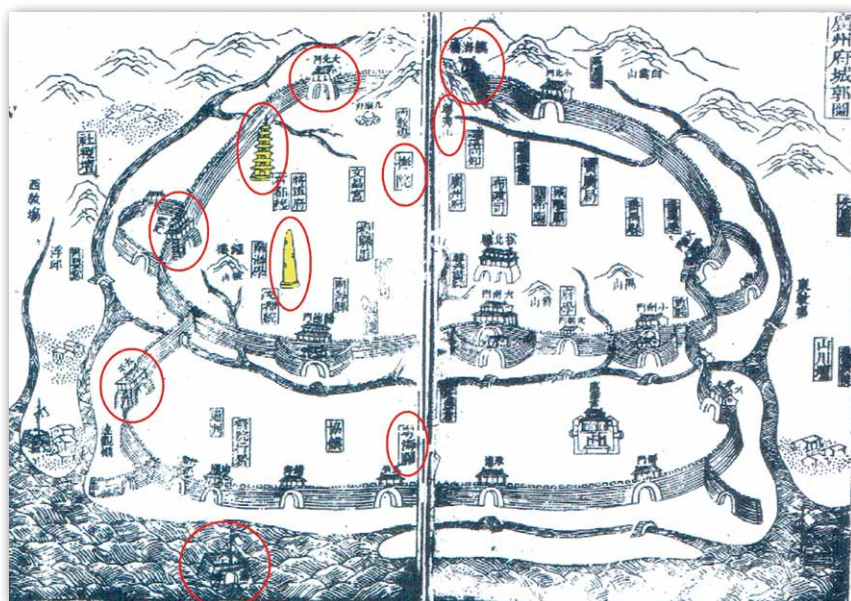
In China trade history, the term “factory”, or *hong* in Chinese, actually stands for premises or an agency in Canton for trading and commerce; it is not a manufacturing plant.

³ 大部分的商船順應季候風的風向，每年在六月至九月之間抵達，在十一月至翌年二月之間離開。

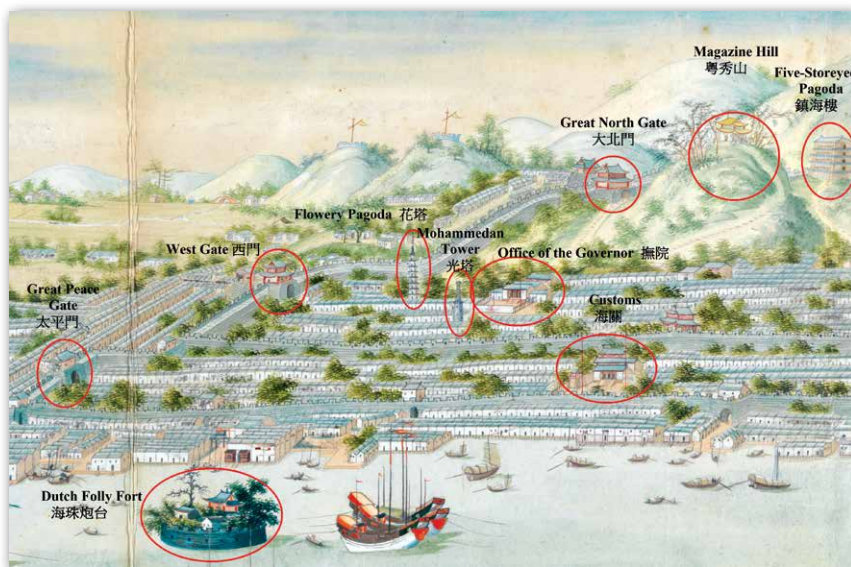
Most of the ships arrived and departed with the change of the monsoon winds each year. They arrived between June and September and departed between November and February of the following year.



5 廣州地圖 | 1860 年代初
墨水及水彩紙本 | 44.5 x 80 厘米
倫敦馬丁·格里高利畫廊提供
Plan of Canton | early 1860s
Pen and ink and watercolour on
Chinese paper | 44.5 x 80 cm
Courtesy of the Martyn Gregory Gallery, London



6 廣州府城郭圖
載於沈廷芳編《廣州府志》(卷二·廣州, 1759)
Guangzhou Fu Chengguo Tu
(Map of the City of Canton)
in Shen Tingfang ed. 1759. *Guangzhou Fu Zhi*
(Gazetteer of the Prefecture of Guangzhou),
juan 2, Guangzhou



7 圖 1 與圖 6 配對的地標
Detail of Fig. 1 with landmarks
matching Fig. 6

飽覽商館區後方城內勝景。現存為數眾多的外銷畫所採用的典型視點一如圖 4 所示，並非鳥瞰圖，只見商館建築。只有小部分的外銷畫採用這種鳥瞰全景圖的格式（下見圖 11、12 和 13 之討論）。跟圖 4 不同，所有鳥瞰全景圖均在商館區以外，繪以極為密集的小屋。雖然這些房屋（有時充其量只是屋頂）的描繪略欠精細，但它們龐大的數量仍能夠給廣州勾勒出一個人煙稠密、喧鬧繁華的印象。當典型的畫作只著眼於商館區的時候，全景圖則同時以商館區和廣州城作為賣點。如果我們考慮到畫家這個目的，那麼就比較容易理解圖 1 的構圖和畫中繪以大量的盒形小房子的處理手法了。

迄今所知，所有鳥瞰全景圖都把花塔和光塔的位置搞錯。圖 5 是一張 1860 年代初的地圖，圖中以形象化和搶眼的圖像標示兩座塔的實際位置（如圈中所示），透過對照圖 5，可引證鳥瞰全景圖上明顯的錯誤。利用這張十九世紀的地圖來作比較，主要有兩個原因。首先，它提供了實用的地理資料，清晰地顯示出商館區（紫圈所示區域）和其他地標的位置，可以用來跟畫作做對比考證；其次，一如同期的地圖，它的質素較佳，準確性亦較高。事實上，它標示兩座塔的位置跟現代地圖相符，顯示花塔在右邊，光塔在左邊，如同圖 3 所描繪的一樣。當市場正出售其他如圖 3 一般的作品，那些將兩個地標位置倒轉的畫作竟然仍找到買家，實在令人費解。

鳥瞰全景圖涵蓋大量建築物及幾乎整個城市，構圖無疑是複雜的。此外，由於當時沒有航空技術，畫家無法在空中速寫。假設畫

adopting the typical view, exemplified by Fig. 4, to date, only a small number of export paintings belong to this high vantage panorama category (which we will discuss later in Fig. 11, 12, 13). All of these high vantage panoramas present an overwhelming number of tiny little houses along with the foreign factories. Although most of these houses, or in some cases only their roofs, are not painted in the most refined manner, they are rendered in multitude to highlight a densely populated, bustling, prosperous Canton. While the typical views are focused on the foreign factories, panoramas offer both the factories and the city as the selling point. If that was the intention, then the seemingly strange composition and the impressive number of crowded little block-shape houses in Fig. 1 are not so strange after all.

All of the works known to us to date under this high vantage panorama category contain the two tall landmarks, i.e. the Flowerly Pagoda and the Mohammedan Tower in erroneous positions. The obvious error can be checked against Fig. 5, a map from the early 1860s showing the correct location of the two pagodas drawn in a figurative and eye-catching way (as encircled). This nineteenth-century map was used for comparison because first of all, it provides practical geographic reference that shows clearly the location of the factory quarter (area encircled in purple) and the other landmarks, all of which can be cross-checked against these paintings; and secondly, because this map, like many produced by this time, is of better quality and accuracy. In fact, its indication of the two pagodas tallies with a modern map, showing the Flowerly Pagoda on the right and the Mohammedan Tower on the left, just like what is depicted in Fig. 3. It is incomprehensible that works containing an obvious error with the two landmarks swapped would survive the market, especially when other works such as Fig. 3 were on sale.

A high vantage panoramic view is no doubt a complicated composition, encompassing a great deal of buildings and almost the entire city. Also, without modern aviation technology, the artist could not have made a sketch from

4 六榕寺花塔建於南北朝 (420 - 589) 年間，於十一世紀重建。懷聖寺光塔由穆斯林商人於唐代 (618 - 907) 興建（曾，2013，頁 54 至 55）。

The Flowerly Pagoda of the Six Banyans Temple was constructed during the South and North Dynasties (420 - 589) and rebuilt in the eleventh century. Erected in Huaisheng Mosque, the Mahammedan Tower was built by Muslim traders during the Tang dynasty (618 - 907) (Zeng, 2013, 54 - 55).

5 在洋人回憶錄和遊記裡五層樓一直被稱為五層塔，雖然它並非一座塔型建築。This edifice has always been known as the Five Storeyed Pagoda in memoirs and travelogues, although it was not a pagoda.

6 有趣地，畫家並沒有仿照地圖把海珠炮台畫成長方形。炮台在地圖上的形狀是對是錯，有待日後研究。如同大部分外銷畫，很多中國地圖上的海珠炮台均為圓形，參看曾，2013，頁 39、113、115 及 116，插圖 7 及插圖 14。香港藝術館所藏一幅由約翰·紐荷芙作於約 1665 年的廣州鳥瞰圖亦見一長方形的海珠炮台。這幅版畫的圖片可以在藝術館的網上藏品資料庫中找到，網址為：http://www.lcsd.gov.hk/CE/Museum/Arts/zh_TW/web/ma/collection08a.html，館藏編號為：AH1967.0029。

Curiously the rectangular shape of the Dutch Folly fort on the map was not copied to the painting. Whether the shape of the fort on the map is a mistake requires further research. Similar to most export paintings, many Chinese maps show a circular fort, see Zeng, 2013, 39, 113, 115, 116, plate 7, plate 14. But there are other images of a rectangular fort. A print by John Nieuhoff depicting the Canton city ca. 1665 in the Hong Kong Museum of Art collection shows a rectangular fort. An image of this print can be found in the Collection databank on the museum website at http://www.lcsd.gov.hk/CE/Museum/Arts/zh_TW/web/ma/collection08a.html, object Accession No. AH1967.0029.

家沒有為筆下的建築物，或者沒有為所有建築物作寫生稿，那麼除了結合過往的印象和有限的觀察，他或許需要參考一些其他圖像資料。事實上，以這幅水粉畫為例，畫家並非純粹靠回憶、觀察或猜測，他可能參考了圖 6，一幅廣州地圖。此地圖刊印於 1759 年《廣州府志》。圖中前述兩座塔的位置皆被倒轉（見圖中黃色的部分），一如畫中的錯誤。

如前所述，畫中大部分的房屋和建築都是清一色的小立方體，寥寥幾筆，描繪不見精準。但有些房子卻畫得較為精細，例如商館和某些重點建築。這些建築物描繪特別細緻，體積特別大，在其他平凡、倒模般的立方體之間顯得甚為突出。有趣的是，這些重點建築跟地圖上的某些建築物互相配對。圖 6 和圖 7 清楚地顯示這些建築全都位於相同的位置，除了前述兩座塔之外，沿著城牆的有五層樓、大北門、西門和太平門；城內包括粵秀山、撫院和海關（地圖上寫「粵海關」），和下方的海珠炮台。⁶

在畫中，除城門、塔和地標之外，畫得最顯眼和細緻的兩幢建築物，分別是撫院和海關。畫家特別強調這兩所官署是能夠理解的，因為撫院和海關監督（或戶部）皆是掌管貿易的要員，⁷ 他們的官銜對西方商人，也就是這幅畫的買家來說有一定意義。將畫和地圖作對比，幾個城門的位置幾乎完全一樣，而地圖雖然並未具體畫出上述兩所官署，而是用文字標示其位置，但所有這些重要地標和建築的位置跟畫作上相符。同時，所有在西方人眼中具重要性的地標和建築，都位處五層樓以西的城西部分，因此這張地圖為這幅畫的不尋常構圖提供了一個解釋。畫家大概以此地圖作參考，發現只需採用地圖上半個廣州城便夠了，其餘部分可以省略。若地圖上兩塔的錯誤位置沒有轉移到畫

the sky. Assuming that the artist was not checking his painted objects, at least not all of them on site, apart from a combination of memories from past visits and limited observation, he might need to consult some other visual references. Indeed in this case he might have. The artist was not simply remembering, or observing, or guessing, he was probably looking at Fig. 6, a Chinese map of the city. It was printed in the *Guangzhou Fu Zhi* (《廣州府志》Gazetteer of the Prefecture of Guangzhou) in 1759. The two aforesaid pagodas are drawn swapped on the map (as highlighted), the same error as found in the painting.

As mentioned earlier, most of the houses and buildings are identical little cubes, rendered with minimum details and apparently not accurately depicted, but some houses in the painting are painted with more refinement than others, such as the factories and a few other key edifices. Given detailed rendition and a considerable size, they stand out together among the other mediocre identical cubes. Curiously these edifices correspond to some of the buildings marked in Chinese characters on the map. Fig. 6 and 7 show clearly that all of these buildings are in matching positions. They include, besides the two pagodas, the Five Storeyed Pagoda, the Great North Gate, the West Gate, the Great Peace Gate or Tai-Ping-Moon along the city walls, and within the city, the Magazine Hill, the Fuyuan (office of the governor) and the Haiguan (the customs superintendent, written 粵海關 on the map), and down below the Dutch Folly Fort (Haizhu Paotai).⁶

In our gouache, apart from the city gates, the pagodas and the landmarks, two other buildings that are given highly visible and elaborate appearance are the Fuyuan and the Haiguan. The emphasis on these two offices are comprehensible since the governor and the customs superintendent or Hoppo are two of the important Chinese officials who controlled trade,⁷ and would have mattered to the Western traders, who were buyers of this painting. When compared with the map, the gates are almost identical, while the two offices were not drawn on the map but written in characters to indicate their location. The location of all these important landmarks and buildings matched with those in the painting. The map is the answer to the unconventional layout of the gouache, because all of the landmarks and buildings important to the Western clientele are found

⁷ 總督亦是相當重要的官員，但圖 1 似乎不見總督的官邸。

The Tsontuck (Zongdu) is also an important official, but Fig. 1 seems to have left out the Tsontuck's residence.

⁸ 這種現象並不局限於廣州地區和清代的作品 (Siggstedt, 2001)。

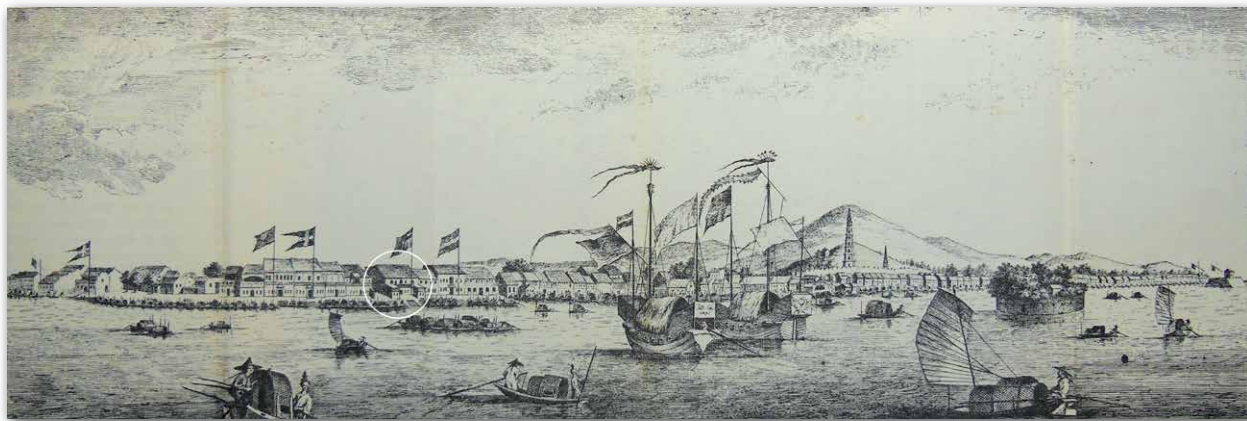
This phenomena is not restricted to works of the Guangzhou region and of the Qing period (Siggstedt, 2001).

⁹ 十九世紀末之前，在中國並有沒有專業或專門製作地圖的人。文人和（或）畫家會接受委託製作地圖 (Smith, 1996, 頁 2)。徐揚（約 1712 - 1779）在成為宮廷畫家之前是一位製圖師，曾負責繪製《蘇州府志》之地圖（馬，2008）。

Before late nineteenth century, there were no professional or specialist map-makers in China. Scholars and/or artists would be commissioned to make maps, see Smith, 1996, 2. Xu Yang (c. 1712-1779) was known to have made maps before he became court painter. He was commissioned to produce maps in the *Suzhou Fu Zhi* (Gazetteer of the Prefecture of Suzhou) (Ma, 2008).

¹⁰ 參看 Ekeberg, 1970, 頁 100。

See Ekeberg, 1970, 100.

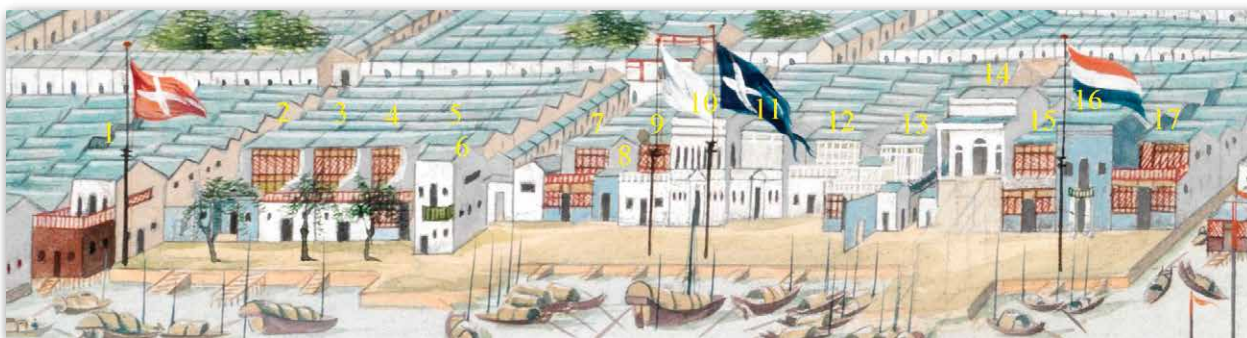


8 廣州（局部）。白圈中為保和行

載於 Ekeberg, Carl Gustav. 1970. *Capitaine Carl Gustav Ekebergs Ostindiska Resa, Åren 1770 och 1771*. Stockholm: Henr. Foug. 1773, Facsimile reprint, Stockholm: Rediviva

Detail of *Utsigt af Canton* (View of Canton), with the New British factory encircled

in Ekeberg, Carl Gustav. 1970. *Capitaine Carl Gustav Ekebergs Ostindiska Resa, Åren 1770 och 1771*. Stockholm: Henr. Foug. 1773, Facsimile reprint, Stockholm: Rediviva



9 圖 1 之局部：17 間商館

Detail of Fig. 1 showing the 17 factories

作上，又或畫作沒有在簡單的立方體房子羣之中突顯某幾幢重點建築的話，兩者相似之處，兩者之間的連繫亦可能不被發現。

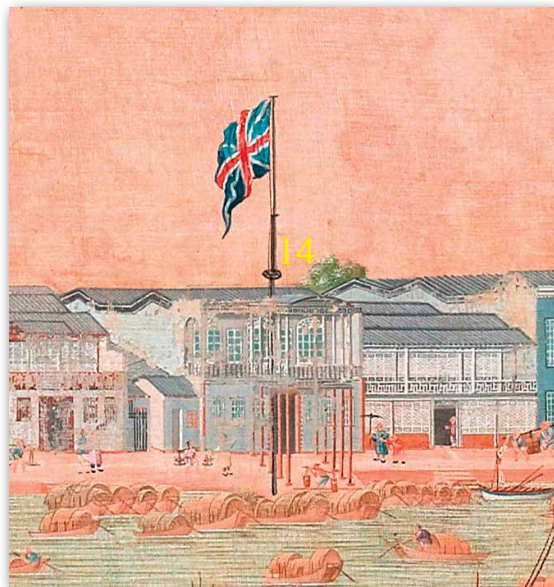
中國地誌畫一向與地圖有不少相通的特質，意味畫家和製圖師之間互為影響。⁸ 在中國，士人或畫家有時也負責繪製地圖，所以上述畫作的畫家有可能對這張地圖熟悉，或認識其製圖師，甚或有可能本身就是那位製圖師。⁹ 如果這張地圖的年代不是比這幅畫早了 12 年，我們甚至不能斷言一定是畫作參考地圖，因為製圖師亦有可能反過來參考地誌畫。雖然我們不完全掌握這相互參考的實際情況，但毫無疑問畫作和地圖是有關連的。

可惜的是，這張中國地圖之上沒有商館區，所以不能為這幅畫上有關瑞典國旗和看似未完成的建築物兩個問題提供線索。國旗的錯誤的確令人費解，但該幢未完成的建築物其實並非無法解開的謎。對一般觀眾來說，該幢商館彷彿尚未畫好，乍看似是個錯處，但其實這個細節正是鑑定此畫年代的關鍵因素。

in the western half of the city, to the west of the Five Storeyed Pagoda. So the artist, possibly taking reference from the map, figured that he only needed half of that map to compose his painting, and hence omitted the rest of the map. Had the error of the pagodas not been transferred onto the painting, and had the painting not been filled with plain cube-like houses that accentuate the few key edifices, the resemblance would not be as blatant, and the connection to this Chinese map could have been overlooked.

Chinese topographical paintings have been known for their map-like quality, suggesting a mutual influence between painters and cartographers.⁸ Chinese cartographers were sometimes scholars or artists. It is quite possible that the artist knew about this map, or was acquainted with the cartographer, or could even be the cartographer himself.⁹ Had the map not been published twelve years before the painting, we cannot even assert that the artist was copying from the map and not vice versa. Although we do not have a clear picture of how the borrowing took place, these works are no doubt related.

Unfortunately for this study, the Chinese map does not contain the foreign factories, and therefore cannot account for the two problems in that part of the painting: namely



⑩ 珠江和廣州（局部），保和行新貌
約 1771 年末 | 佚名 | 水彩絹本
荷蘭阿姆斯特丹國家博物館藏 NG-1052
Detail of *View of the Pearl River and Canton*,
showing the New British factory facade
ca. late 1771 | Anonymous artist
| Watercolour on silk
Courtesy of the Rijksmuseum, Amsterdam No. NG-1052

這幢商館是保和行。在埃克伯格 (Carl Gustav Ekeberg) 1770 年的繪畫中^⑧，^⑩ 保和行前門左右有兩道長廊。及後該館經過重建，拆去兩道長廊，前門加建一座兩層高的門廊。該門廊的位置，就是圖^①所畫的狀況似臨時支架的地方，這大概表示該門廊正在興建中。畫中河畔一整列建築羣可考年代為 1770 年至 1772 年之間。圖^⑨把所有商館都按順序以 1 至 17 號標示，以便參考。^⑪ 黃旗行 (1 號) 和瑞行 (11 號) 外牆的裝修是新的，約於 1769 年完工。兩館外觀與前述埃克伯格的繪畫相同，該畫應為埃克伯格在 1770 年秋天暫居廣州時所作之圖象記錄，即表示在 1770 年下旬兩館未有再改建。16 號住的是荷蘭東印度公司的人員（門前豎荷蘭國旗），而英國人則住在東面兩戶之距的 14 號，即保和行。在荷蘭東印度公司的檔案有如下記錄：1772 年 1 月 4 日，荷蘭人表示他們想興建一個新的兩層高有蓋陽台，就像他們的鄰居英國人的一樣。^⑫ 這表示在 1772 年 1 月前，英國人已經完成保和行的改建工程。在荷蘭阿姆斯特丹國家博物館收藏的一幅卷軸中^⑬，這個新建的兩層高門廊清晰可見。該卷年代為 1771 年底，而由於藝術館的水粉畫記載了門廊未完成的模樣，其年代應早於 1771 年底，^⑬ 但按前文分析，又不可能

the Swedish flag and the sketchy façade. The error on the flag remains incomprehensible, but the façade is not just another inexplicable question. This unfinished façade, as much as it may look like an error to an average viewer, is in fact a crucial factor to a more approximate dating of this work. This façade belong to the New British factory. This building had enclosed hallways extending out, as shown in Carl Gustav Ekeberg's 1770 drawing ^⑧.^⑩ The hallways underwent a renovation to become a double-storied open portico. In the place of this double-storied portico, what was painted in Fig. ^① is in fact a sketch of an incomplete construction that appears vaguely like a scaffold; it could be an indication that the portico was under construction. The rest of the quay bears markers to a post-1770 and pre-1772 dating. Fig. ^⑨ has all of the factories marked in a sequence of 1-17 for easy reference.^⑪ Both the Danish factory (No.1) and the Swedish factory (No.11) show a newly-renovated façade, finished around 1769. These features are captured in the above-mentioned drawing by Ekeberg, in which he recorded what he saw during his stay in Canton in the autumn of 1770. Officers of the Dutch East India Company lived in No. 16 (indicated by their flag), just two doors to the east of the British who lived in No.14, i.e. the New British Factory. The Dutch East India Company's records shows that on January 4, 1772, the Dutch wrote that they wanted to build a new doubled-storied roofed balcony just like their neighbor, the British,^⑫ which indicates that the British had already completed the rebuilding before January 1772. This newly built doubled-storied portico is shown in a scroll, dated late 1771, in the collection of the Rijksmuseum ^⑬. Hence the sketchy structure nails down our gouache to a

^⑪ 由 1770 年代至 1822 年大火期間，商館區內共有十七間夷館。1822 年火災重建後，商館數目只有十三間。此轉變亦見於其後的畫作。By 1770s up to the fire of 1822, there were seventeen distinct houses in the foreign factory district. After the fire and the subsequent extensive reconstruction, there would be thirteen house instead. This is also recorded by later paintings.

^⑫ 在 1774 年，荷蘭人的願望實現了，其商館加蓋了一座陽台 (Van Dyke & Mok, 2015, 頁 9 至 10)。
The wish of the Dutch came true in a new additional balcony completed in 1774 (Van Dyke & Mok, 2015, 9-10).



⑪ 廣州 | 約 1770 年 | 水粉絹裱 | 99 x 179.2 cm 厘米
© 大英圖書館藏 Maps.K.Top.116.22.2.TAB
View of Guangzhou (Canton) | ca. 1770 | Gouache on mounted silk | 99 x 179.2 cm
© The British Library Board Maps.K.Top.116.22.2.TAB



⑫ 中國廣州 | 約 1780-1781 年 | 墨水紙本 | 39 x 55.3 厘米
斯德哥爾摩海事博物館藏 S6095
View of Canton | ca. 1780-1781 | Ink on rice paper | 39 x 55.3 cm
Courtesy of the Sjöhistoriska Museet, Stockholm S6095

早過 1770 年末。由於迄今仍未發現有關這個門廊改建日期的文字記錄，這幅水粉畫不但有助將該項改建考證到 1771 年初，而且是該項改建的唯一圖像證據，保存了一段稀有而珍貴的歷史。撇除瑞典國旗的錯誤，這幅水粉畫上所有看似錯誤的地方其實都是別具意義的資訊。

其他鳥瞰全景圖的錯誤是否可以同樣拆解？試看同一類別的三幅作品¹¹¹²¹³，它們似乎全都把兩座塔畫錯了，這是否代表所有鳥瞰全景圖都參照同一份中國地圖？圖¹¹似乎跟該地圖甚為相似，也畫下了整個城市。但跟地圖和圖¹不同，圖¹¹所畫的城牆是扭曲變型的，就像有人刻意將整座城市逆時針地扭了一下。更仔細的審視圖¹¹的話，會有意想不到的發現。若隨意一瞥，兩座塔似乎擺放在「錯誤」位置，但由於此畫視點極高，街道清楚可見，顯示兩座塔其實位於正確的地點，近六榕路與中山六路之間¹⁴。這件作品並非把地圖的資料盲目照搬過來。塔的位置並沒有出錯，但看起來卻像調換了位置，為什麼？答案就在以下線索之中。

這個線索就是位於畫面最左方的西炮台，除了長卷軸之外，甚少外銷畫會畫上這個炮台。同樣地，只有少數的繪畫如此精細地描繪商館區以西市郊一帶景物。在這郊區西端，河的對岸，是另一個炮台，稱為紅炮台¹⁴（又名鰲洲炮台）¹⁴。紅炮台位於對岸的河南，是一個大島，在那邊可以眺望商館區。在前景繪有河南的外銷畫甚稀有，至今只發現六幅，這是其中一幅。¹⁵ 在六幅畫作中，只有三幅畫出現位於岸上最西面的紅炮台。如果地圖不是這件作品的參照對象，或者不是唯一的參照對象，那麼紅炮台是否一個線索，透露畫家曾實地考察以完成構圖的位置，例如說，他可能就是從河南那邊眺望商館區？

在其他繪有河南的外銷商館畫中，往往見一條橫跨小溪的小石橋，名為漱珠橋。如果畫家或是他的觀眾站在河南漱珠橋的附近，從左至右眺望對岸，就能依次序看到商館區、光塔、花塔，然後是粵秀山，最後則是五層樓，而背景就是白雲山，其視線一如上述 1860 年地圖中的藍線¹⁵。亦即是說，畫家會

dating slightly earlier than late 1771.¹³ This gouache is by far the only pictorial evidence of the renovation underway in early 1771. No written documentation of the exact date of this renovation has been found. This painting is thus a rare and precious record of that very short period in history when the British factory was under renovation. With the exception of the wrong Swedish flag, all items that appear to be erroneous are giving us meaningful information.

Have we found the answer to all errors of our high vantage panoramas? If we take a look at the other three works in the same group¹¹¹²¹³, they seem to have made the same errors with the pagodas, does that mean all high vantage panoramas are copying the same Chinese map? Fig. 11 seems to bear some resemblance of the Chinese map, and offers the entire city, but unlike the map and Fig. 1, the city walls in Fig. 11 are warped, as if someone has turned the city anti-clockwise. A more careful look at Fig. 11 might give us some rather surprising insights. At a glance, its pagodas seem to be in the “wrong” position, yet because the vantage point is high enough to show the streets, it reveals that the pagodas are in fact in the correct locations close to the street today known as Liurong Lu, with Zhongshan Liulu between them¹⁴. This work does not copy blindly from the Chinese map. The pagodas look as if they are swapped when their positions are not mistaken. Why? The answer lies in the next clue.

The next clue is the West Fort (Xi Paotai) on the far left of the canvas, very few export paintings, with the exception of the long scrolls, include this fort. Similarly, very few paintings show the suburbs to the west of the factories in such great details. Overlooking this western tip of the suburbs across the river is another fort known as the Red Fort¹⁴ (Hong Paotai, also known as Aozhou Paotai)¹⁴ on Honam (Henan). Honam is a large island across the shore, overlooking the foreign factories. This is one of the six rare export paintings that include Honam in the foreground.¹⁵ Out of those, only three paintings show the Red Fort on the far western side of the shore. If the Chinese map is not the source of this work, or at least not the single source, could the Red Fort be a clue as to where the artist made his composition onsite, say, overlooking the factories from Honam?

In other factory paintings where Honam is included, it often shows a small stone bridge crossing the creek called the Shuzhu Bridge. If the artist, or his intended audience, was standing on Honam near the Shuzhu Bridge, he should see from left to right across the shore: the factories, the Mohammedan Tower, the Flowery Pagoda, then Magazine Hill, and finally the Five Storeyed Pagoda, with the White Cloud Mountains in the background as indicated by tracing a blue line on the above-mentioned 1860 map¹⁵. That means he would see the Mohammedan Tower on the left,

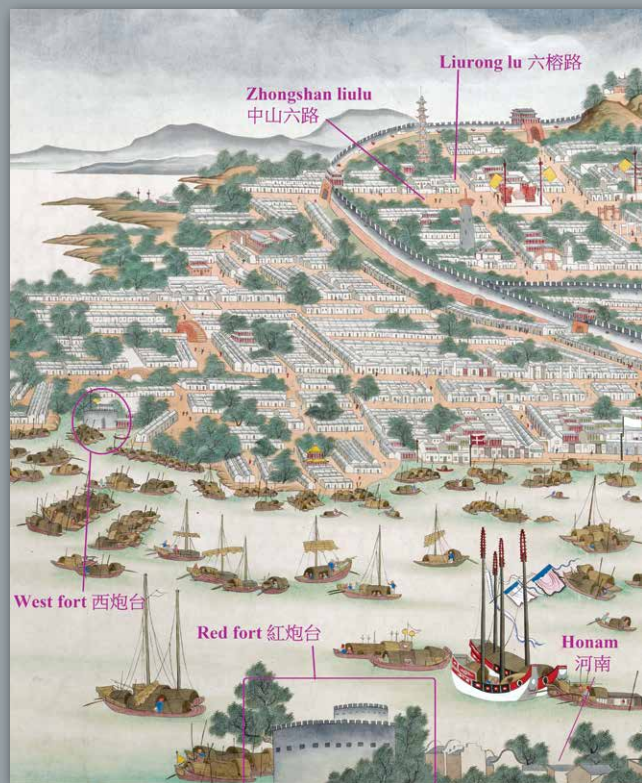


¹³ 廣州 | 約 1806 年 | 中國畫家 | 水彩水粉紙本 | 60.8 x 118.1 厘米

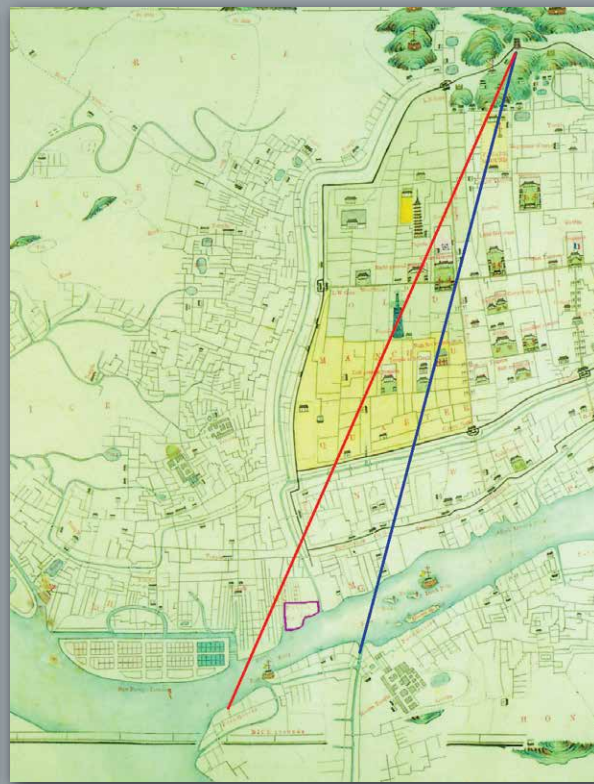
美國皮博迪艾塞克斯博物館藏 E79708

View of Canton | ca. 1806 | Chinese artist | Watercolour and gouache on paper | 60.8 x 118.1 cm

Courtesy of the Peabody Essex Museum, Salem, Massachusetts E79708



¹⁴ 圖 11 之局部
Detail of Fig. 11



¹⁵ 圖 5 之局部
Detail of Fig. 5

¹³ 參考 1770 年代畫作年代鑑定的資料 (Van Dyke & Mok, 2015, 第 1 及 2 章)。

With reference to data and sources on the dating of works of the 1770s (Van Dyke & Mok, 2015, Chapter 1 and 2).

¹⁴ 兩座炮台的位置清楚地記錄在中國地圖上，參看《明清廣州城及方志城圖研究》之插圖 8 (曾，2013)。

The locations of these two forts are clearly indicated on a Chinese map, see plate 8 in *Ming Qing Guangzhou cheng ji fang zhi cheng tu yan jiu* (Zeng, 2013).

看到光塔在左邊，而花塔則在右邊，如圖③所示。但如果他站在河南西端、靠近紅炮台的位置，那麼他看到的地標是否仍然依相同的次序，在同一位置出現？這個問題可從圖⑮中的紅線找出答案。出人意料的是，若畫作中的視點是取自河南之西，那麼上述所有地標都會呈一條直線地排列在商館區後方。甚至出現花塔似乎在這條線的左邊，而光塔則在右邊的情況。事實上，如果圖⑪的視點是源自西面，那就能夠解釋扭曲的城牆，以及兩座塔的位置了。

藝術史學家從未討論過這從西面遠眺廣州城的視點，但這的確是一個關鍵，能夠解釋圖⑫和圖⑬那兩座倒轉位置的塔。這兩件作品中的廣州城有不同的構圖布局，也沒有如圖①或地圖那樣突出一些地標建築。如果它們並非參照前述的地圖或圖①，那麼兩座塔的「錯誤位置」又源自何處？圖⑫同樣見西炮台和紅炮台，它跟圖⑪與大多數外銷畫不同，所有商館均不是從正面取景，而是以側面示人，這表示畫家採用了西面的視點。畫中的地標連成一線，這令我們想起圖⑮的紅線。如果畫家真是採用了這個不為人知的西面視點，那麼畫中「錯誤」的那兩座塔其實並非畫錯，而只是視點與角度的問題。

圖⑬同樣見兩塔位置「錯誤地」倒轉。構圖中並沒包括河南，但就如圖⑫，位於中景的五層樓、粵秀山和兩座塔均在商館區後方列陣在一條直線上。顯然，圖⑫和圖⑬皆採用了相同的視點，但在圖⑬中的商館區，包括保和行則以正面示人。如果採用西面視點的話，這種安排不能反映現實的情況。那麼這會不會真的是個錯誤？若果忽視前述種種所謂「錯誤」背後的啓示，我們可能會把這當作中國外銷畫又一粗疏的例子。但如今在破解這些早前的問題時，我們應當理解到外銷畫其實並不粗疏，所以我們應以嚴肅的態度判斷畫家的動機，他可能是刻意改變商館的方向。不管是為了什麼原因，他採用這西面的視點，將城市的景物如實表達，但在繪畫那些非常特別的商館時，卻決定不應該完全如實地描繪，而是以有利於銷售為前提，他決定將所有商館都順時針方向地「轉」過

the Flowery Pagoda on the right as in Fig. ③. But if he was standing on the west tip of Honan, near the Red Fort, would he still see the same sequence and the landmarks in the same position? This may be answered by another line in red in Fig. ⑮. Surprisingly, it shows that if the view was taken from the far west of Honam, then all the above landmarks seem to fall along a straight line right behind the factories. It is even possible that the Flowery Pagoda appears on the left, and the Mohammedan Tower on the right of this line. Indeed if Fig. ⑪ is a view taken from the west, then it explains the warped city walls, and the positions of the two pagodas.

This vantage point from the west was never discussed by art historians before; it is the key to the other views with two swapped pagodas in Fig. ⑫ and ⑬. These two works do not have the same layout of the city, and do not highlight the same landmarks as Fig. ① or the Chinese map. And if they are not copying from the Chinese map, or not from the earlier Fig. ①, where do their “erroneous” pagodas come from? Fig. ⑫ shows also the West Fort and the Red Fort. Unlike most other export scenes, but similar to Fig. ⑪, none of the factories in Fig. ⑫ are in frontal view, they are all shown in side view indicating a vantage point from the west. Its major landmarks fall more or less along the same line, reminding us of the red line in Fig. ⑮. If the artist has actually based his composition on this previously neglected viewpoint from the west, then the “erroneous” pagodas are not an error. It is just a matter of perspective.

Fig. ⑬ shows exactly the same pagodas “mistakenly” swapped. It does not include Honam in its composition, but similar to Fig. ⑫, the position of the Five Storeyed Pagoda, the Magazine Hill, the two pagodas in mid ground are aligned behind the factories. Apparently both works in Fig. ⑫ and Fig. ⑬ share the same vantage point, but in Fig. ⑬ the factories are shown facing the viewer, with the British factory in full frontal view. This arrangement cannot be a realistic representation if a vantage point from the west was applied. So perhaps this is an error? Had we not discovered all the new information hidden in the aforesaid “errors”, we might just add another item on the list of careless mistakes in Chinese export painting. But because these earlier questions can be deciphered, this time it is not imprudent to see this frontal view as a deliberate distortion by the artist. He, for whatever reason, had chosen to use this viewpoint from the west. While being truthful to the location of the objects he saw from that part of the city, he decided that the factories should not be just entirely truthfully portrayed, a painting could be more salable with a frontal view of this very special factory quarter, so he decided to “turn” all these houses clockwise, just as he decided to pull the Dutch Folly Fort closer to the centre of the picture than it should be in reality,

來。如同他將海珠炮台拉到畫作中央，雖非忠於現實，但這樣便可以設計出一個更平衡的構圖。

錯誤帶來啟示

從本研究所知，一些中國外銷畫中最明顯的錯誤其實殊不簡單，不容忽視。有問題的構圖和地標都不是輕率的錯誤，相反，它們揭示中國外銷畫家並非僅僅模仿、抄襲西方的作品和版畫，他們也有參考其他圖像資料，甚至可能進行實地考察。這與學界一般認知不同。在缺乏航空技術之下，畫家以地圖作參考，採用更富挑戰的視點去追求筆下圖象的準確性，認真地克服各種困難。新發現的西面視點，更意味畫家有作實地考察，並不馬虎了事。這些新發現對外銷畫的研究亦是一種啟發。外銷畫的確有不少難以理解的問題，過去，我們一直漠視，又或者將其歸類為錯漏，因為這些畫被認為商品藝術，因此認真研究的人不多。但是，這些「錯誤」加深我們對中國外銷畫的創意和創作過程的了解，足證別具更深層的意義。

〔本文引用七幅以商館為主題的外銷畫，其年份按最新的年代鑒定研究 (Van Dyke & Mok, 2015) 更新修定。有關年份可能跟作品收藏機構的記錄有所不同。本文出自作者中山大學博士論文的部分研究。〕

so that a more balanced composition could be achieved.

Errors Seen in New Light

This study tells us that some of the most apparent errors in these Chinese export paintings are not what we think they are. The problematic composition and the problematic landmarks are not careless mistakes, rather, they are telling us that Chinese export artists were not merely copying from Western works and prints, as it is widely believed among art historians, they were also consulting other pictorial reference and very likely conducting onsite observations. To resort to a map suggests the difficulty the artist faced in order to achieve accuracy while trying out a more challenging perspective without aviation technology. The newly discovered vantage point from the west not only suggests onsite observations, it also reviews how seriously the artists worked, and how often we take these problems in Chinese export paintings for granted. We often either ignore them, or classify them as errors, because we used to think these paintings are commodity art, and therefore seldom took them seriously. Yet, by telling us more about the creative and the production process of Chinese export painting, these “errors” have proven to be more meaningful than they might seem.

[The seven factory scenes in this article have been given a new date with reference to latest research (Van Dyke & Mok, 2015). These dates as indicated in the text and in the captions may differ from those in the records of their respective institutions. This study is part of the author's doctoral research at the Sun Yat-sen University.]

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¹⁵ 迄今為止，作者只見過六幅外銷商館畫的前景中出現河南，或者更準確而言只是河南島北岸。在十九世紀中後期，河南成為獨立的主題，畫家以正面視點呈現河南整片河畔景物，沒有加入任何商館。這類河南風景畫屬另一獨立類別，並不包括上述六個例子。

To date, the author has seen only six factory paintings that have included Honam, or more precisely parts of the northern shore of the Honam Island, in the foreground. At a later period in mid-nineteenth century, Honam would be used as an independent subject with its shoreline presented in full frontal, taking up the entire canvas without any depiction of the factories. Those views are a different genre and are not included in the six examples.

孫中山在驅逐令下的香港行踪考證

Tracing Dr Sun Yat-sen's Footsteps While Under Banishment Orders in Hong Kong

陳成漢 CHAN Shing-hon, Osmond

館長(特別職務) | 香港歷史博物館
Curator (Special Duty) | Hong Kong Museum of History



二十世紀初流亡海外的孫中山

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Dr Sun Yat-sen in exile during the early 20th century

© National Archives and Records Administration, USA

自孫中山(一八六六年至一九二五年)於一八九五年十月在廣州策動首次起義,至一九一二年一月中華民國成立並就任臨時大總統前後共十六年間,他曾九次乘坐客輪途經香港,並以香港作為策劃革命的根據地;然而,孫先生在香港政府的驅逐令下,只曾兩次在港登岸,¹其餘時間藉香港四通八達的航運網絡,在船上會見革命黨人,令香港的革命機關報(例如《中國日報》)及革命組織(例如中國同盟會香港分會和南方支部)在孫先生的遙控下仍能發揮作用。

香港政府對孫中山頒佈的三個驅逐令,每次都處於被動,而且每次在驅逐令期滿與重申之間都有空檔期。雖然這並不代表港府縱容孫中山在港逗留,卻可以從一個側面反映港府對革命運動的容忍態度。

廣州首義的失敗

孫中山於一八九四年十一月二十四日在夏威夷成立興中會,展開反清的革命大業。一八九五年一月二十二日,孫中山乘「中國號」(*China*)客輪離開夏威夷,經日本橫濱至二月十一日抵達香港。²回港後,孫先生召集陳少白、陸皓東、鄭士良及楊鶴齡等人組建香港興中會總會,獲楊衢雲為首的輔仁文社成員答允支持。二月二十一日,香港興中會總會成立,以中環士丹頓街十三號的「乾亨行」作掩護籌劃起義。十月十八日,孫中山於廣州城內策劃在二十六日重陽節起義。不過,由於密謀敗露,起義計劃流產,孫中山與鄭士良逃往澳門,二十九日轉抵香港。十一月一日,兩廣總督譚鍾麟照會英國駐廣州領事,要求香港政府引渡孫中山等人。³為了逃避清政府的通緝,孫先生於十一月二日登上日本客貨船「廣島丸」(*Hiroshima Maru*),船隻清關後翌日離港赴日,繼而在十一月二十六日在橫濱乘「北

Hong Kong had been a strategic revolutionary base for Dr Sun Yat-sen (1866-1925). In the 16 years between the first Guangzhou Uprising in October 1895 to the time when Dr Sun took on the role of Provisional President of the Republic of China in January 1912, he had travelled on passenger ships and passed through Hong Kong nine times. However, under the banishment order served on him by the Hong Kong Government, he only actually went ashore twice.¹ Capitalising on the accessibility offered by Hong Kong's extensive transport network, he met with fellow revolutionaries onboard. Hence Dr Sun still held de facto control and influence over Hong Kong's revolutionary newspapers such as the *China Daily* and revolutionary organisations including the Hong Kong branch and southern bureau of the Tongmenghui (Chinese Revolutionary Alliance).

The Hong Kong Government, though playing a passive role in this matter, had promulgated three banishment orders on Dr Sun Yat-sen. In between each banishment order, there was a time gap. Although this did not mean that Dr Sun was officially allowed to stay in Hong Kong, it reflected the tolerance of the Hong Kong Government towards revolutionary activities.

Failure of the First Guangzhou Uprising

Dr Sun Yat-sen established the Xingzhonghui (Revive China Society) in Hawaii on 24 November, 1894 and put his anti-Qing revolutionary cause into full swing. On 22 January, 1895, Dr Sun took the passenger ship "China"; left Hawaii and arrived in Hong Kong via Yokohama on 11 February.² He then convened a meeting with Chan Siu-pak, Lu Haodong, Zheng Shiliang and Yeung Hok-ling to set up the Xingzhonghui headquarters in Hong Kong, and his revolutionary fervour was kindled by the leader, Yeung Ku-wan, and members of the Foo Yan Man Ser (Furen Literary Society or Chinese Patriotic Mutual Improvement Association). On 21 February, the Xingzhonghui headquarters was formally established, under the cover of the Kuen Hang Club located at 13 Staunton Street, Central. On 18 October, Dr Sun conspired to stage an uprising within the city of Guangzhou during Chung Yeung Festival on 26 October. However, the conspiracy was brought to light and the uprising had to be aborted. Dr Sun and Zheng Shiliang fled to Macau and then Hong Kong

¹ 一八九五年廣州首義失敗後,香港政府於一八九六年三月四日對孫中山頒下首個驅逐令,及後在一九〇二年一月三十日及一九〇七年六月十一日重申禁令,令孫先生無法在香港居留或上岸活動。其間孫中山曾九次乘船途經香港,當中只有一九〇二年一月二十八日及一九一一年十二月二十一日兩次登岸。

After the failure of the first Guangzhou Uprising in 1895, the Hong Kong Government promulgated the first banishment order against Dr Sun Yat-sen on 4 March, 1896, and the order was renewed on 30 January, 1902 and 11 June, 1907, prohibiting Dr Sun from residing or staying within Hong Kong territory. In between the orders, Dr Sun passed through Hong Kong nine times, landing just twice, on 28 January, 1902 and 21 December, 1911.

² 夏威夷一八九五年一月二十二日「中國號」船期表。
Sailing schedule of "China", 22 January, 1895, Hawaii.

³ 英國殖民地部檔案 C.O. 129/271, 頁 437-447。
British Colonial Office Records, C.O. 129/271, pp. 437-447.

❶ 香港政府於一八九六年三月四日禁止孫中山五年內來港及居留的首個驅逐令。

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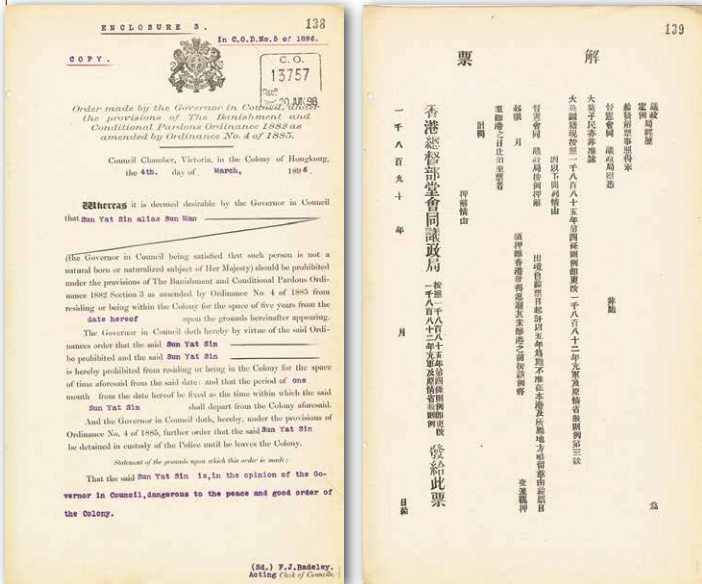
The first banishment order prohibiting Dr Sun Yat-sen from landing or residing in Hong Kong for a period of five years was promulgated by the Hong Kong Government on 4 March, 1896.

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京城號」(*City of Peking*)，至十二月六日抵達夏威夷。⁴ 所以當香港政府於一八九六年三月四日對孫中山頒下第一個為期五年的驅逐令時❶，孫先生已遠離香港。⁵

香港政府的驅逐法例與孫中山首個驅逐令

香港政府對孫中山頒發的首個驅逐令在一八九六年三月四日起生效，與廣州起義相隔超過四個月。香港政府在廣州首義後並沒有對革命黨人趕盡殺絕，並根據一八八九年通過的法例，聲明中國政治犯不在引渡之列，斷然拒絕了譚鍾麟引渡孫中山的要求。⁶ 及至一八九六年三月，粵、港兩地相繼流傳革命黨再次起義的消息，⁷ 英國駐廣州領事璧利南 (Byron Brenan) 更收到情報，指身處夏威夷的孫中山正四處籌募革命經費，即將返粵起義。⁸ 面對流言四起，兩廣總督立



on 29 October. On 1 November, Tan Zhonglin, Viceroy of Guangdong and Guangxi, sent a note to the British Consul in Guangzhou, requesting the Hong Kong Government extradite Dr Sun.³ To avoid being arrested by the Qing Government, Dr Sun boarded the Japanese ship “Hiroshima Maru” on 2 November, and after clearing customs the next day, departed Hong Kong for Japan. He switched ships to the “City of Peking” on 26 November in Yokohama and reached Hawaii on 6 December.⁴ Thus when the Hong Kong Government issued the first five-year banishment order against Dr Sun❶ on 4 March, 1896, he was already away from Hong Kong.⁵

The Expulsion Law of the Hong Kong Government and the First Order of Banishment Served on Dr Sun Yat-sen

The first order of banishment served on Dr Sun was effective from 4 March, 1896, four months after the Guangzhou Uprising. The Hong Kong Government did not eradicate the revolutionaries following the first Guangzhou Uprising, and pronounced that in accordance with the law passed in 1889, Chinese political criminals were beyond the

即向香港政府施壓，要求捉拿潛伏在港的革命黨人。雖然港府再次拒絕清廷的要求，但面對孫中山可能歸國策劃起義的風險，港府不得不作出相應的行動：對孫中山頒下首個為期五年的驅逐令。

香港政府對孫中山頒佈的驅逐令，是在不違反英國國際法的大前提下，回應清政府引渡孫中山的要求。根據國際法的基本原則，英國不會引渡政治犯到其他國家。⁹ 然而驅逐孫中山出境，既可免除外交上的麻煩，亦杜絕香港成為顛覆清廷的革命基地，以免對殖民地政府帶來政治衝擊。由此可見，香港政府對孫中山發出驅逐令，是在外交和政治考量下的折中辦法。

香港政府對孫中山頒發的驅逐令，按照香港法例《一八八二年充軍及原情省赦則例》第三條 (The Banishment and Conditional Pardons Ordinance 1882 Section 3) 予以生效。¹⁰ 該法例賦予「香港總督會同議政局」(Governor-in-Council) 行使「行政權力」，對危害殖民地和平及秩序的非英國公民發出驅逐令，押解相關人士出境，及在生效日起五年內不得在香港居住或停留。又根據一八八五年對相關條例的修訂 (Amendment Ordinance No.4 of 1885)，若被逐人士仍居於香港，香港警察可在港督的授權下合法地予以拘禁，直至對方離境。孫中山的首個驅逐令是由時任香港總督羅便臣爵士 (Sir William Robinson) 會同議政局 (今行政會

realm of extradition and resolutely refused Tan Zhonglin's request to extradite Dr Sun.⁶ It was not until March 1896 that rumours of a second attempted uprising began flying around Guangzhou and Hong Kong.⁷ Byron Brenan, the British Consul stationed in Guangzhou, collected information about Dr Sun's activities to raise funds in Hawaii for his revolutionary attempts upon his imminent return to Guangzhou.⁸ In view of the rising rumours, the Viceroy of Guangdong and Guangxi pressured the Hong Kong Government to arrest all revolutionaries lurking in Hong Kong. Although it rejected the Qing Court's request a second time, in view of the imminent threat of Dr Sun's coup, it had to act accordingly and promulgated the first five-year banishment order against him.

Under the premise of not breaking British international law, the banishment order served on Dr Sun was the Hong Kong Government's response to the Qing Government's request to extradite Dr Sun. According to the basic principles of international law, Britain would not extradite any political criminals to other countries.⁹ The expulsion of Dr Sun from Hong Kong offered the best of both worlds. On one hand it could avoid diplomatic disasters, while on the other, helped to avoid Hong Kong becoming a pivot for a coup d'état against the Qing Court and eliminate the political shock to the colonial government. The expulsion order against Dr Sun was therefore a compromise of the diplomatic and political considerations by the Hong Kong Government.

It was in accordance with the “Banishment and Conditional Pardons Ordinance 1882 Section 3” that the Hong Kong Government's expulsion order served on Dr Sun took effect.¹⁰ This ordinance endowed the Governor-in-Council to exercise “administrative power”, to issue expulsion orders against non-British citizens who endanger and disturb public peace and order, to deport them under escort, banning them from residing or staying in Hong Kong for five years from the date the order was effective. Furthermore, according to a related ordinance – the “Amended by Ordinance No. 4 of 1885”, if the expelled person remained in Hong Kong, under the authorisation of the Hong Kong Governor, the police could take the person in custody until they were deported. The first banishment order served on Dr Sun was promulgated by Hong Kong Governor Sir

⁴ 參見孫中山於一八九六年六月一日的夏威夷登記紀錄。*Certificate of Registration No. 923, National Register of the Republic of Hawaii.*

See the entry made by Dr Sun Yat-sen in the Hawaii register on 1 June, 1896 in *Certificate of Registration No. 923, National Register of the Republic of Hawaii.*

⁵ 有關香港政府於一八九六年三月四日頒下對孫中山的第一個驅逐令，見英國殖民地部檔案 C.O. 129/283，頁 138-139。

For the first banishment order issued by the Hong Kong Government against Dr Sun Yat-sen on 4 March, 1896, see *British Colonial Office Records*, C.O. 129/283, pp. 138-139.

⁶ 英國殖民地部檔案 C.O. 129/272，頁 300-312。
British Colonial Office Records, C.O. 129/272, pp. 300-312.

⁷ 英國殖民地部檔案 C.O. 129/271，頁 61-63。
British Colonial Office Records, C.O. 129/271, pp. 61-63.

⁸ Chan Lau Kit-ching. 1990. *China, Britain, and Hong Kong 1895-1945*. Hong Kong: The Chinese University Press, pp. 34-35.

⁹ 政治犯不引渡 (Political Offence Exception) 是各國公認的一項國際法原則，於在其境內的某一外國人因民族、種族、國籍、宗教、參加某一政治團體或具有某種政治觀點而遭受其本國或居住國通緝、審判或判刑而給予庇護，並拒絕將該名外國人交給其本國或經常居住國。

Political Offence Exception is a principle of international law recognised by all nations, whereby any foreign person who is arrested, put on trial or sentenced because of his/her ethnicity, race, nationality, religion, political affiliation or holding of a particular political view should be granted asylum and the request to extradite the related person to his/her country or country of habitual residence should be declined.

¹⁰ 同註 5。
See note 5.

議）於一八九六年作出決定，¹¹ 理由是「孫中山危害殖民地的和平與秩序」，¹² 事前未有徵詢英國殖民地部或外交部的意見。

孫中山對港府驅逐令的反應

一八九六年三月四日港府對孫中山發出首個驅逐令時，孫中山正身處夏威夷；同年六月三日，孫中山乘「澳洲號」(*Australia*) 輪船前往美國西岸舊金山（今三藩市）；九月再乘「麥竭斯的號」(*Majestic*) 從美國東岸紐約到達英國利物浦，十月在倫敦發生了轟動一時的「倫敦蒙難」事件，使孫中山的革命事跡廣為人知。一八九七年八月十六日，孫中山經加拿大抵達日本橫濱後，始得知香港政府對他頒下驅逐令。

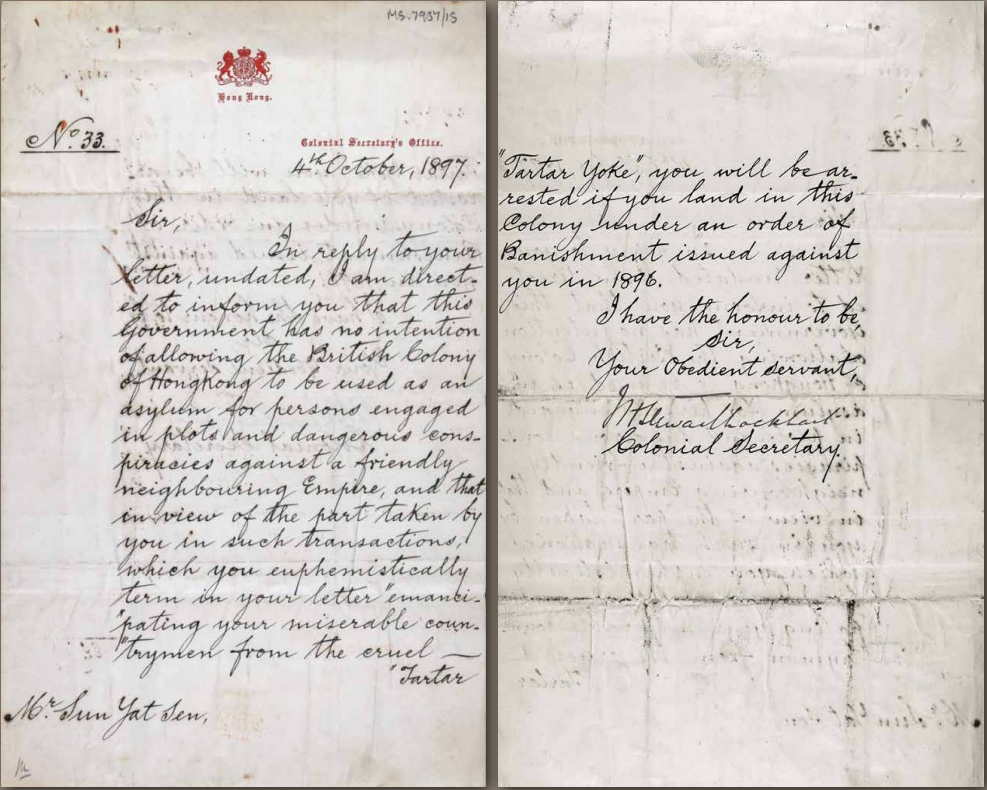
根據孫中山一封寄給時任香港輔政司駱克（Sir James Haldane Stewart Lockhart）、沒有日期的信件中顯示，孫中山獲友人告知，香港政府因他「試圖從殘暴的異族枷鎖中解放可憐的同胞」¹³ 而驅逐他出境。孫中山在信中直接向駱克查詢驅逐令的真偽；並警告若果屬實，他會訴諸英國輿論及文明世界。¹⁴ 由於此信是從橫濱馮鏡如經營的「文經活版所」寄出，¹⁵ 可推斷此信寫於一八九七年八月十六日孫先生抵達橫濱以後；駱克於同年十月四日回信²，明言孫中山危害殖民地的

William Robinson, in conjunction with the Executive Council in 1896,¹¹ justified as “Sun Yat Sin is dangerous to the peace and good order of the Colony”.¹² Neither the British Colonial Office nor the British Foreign Office was consulted prior to the decision.

Dr Sun Yat-sen’s Response to the Hong Kong Government’s Banishment Order

When the first banishment order was served on Dr Sun Yat-sen on 4 March, 1896, he was away in Hawaii. On 3 June, Dr Sun boarded the steamship “Australia” to San Francisco on the West coast of the US. In September, Dr Sun again travelled by sea, taking the ship “Majestic” from New York on the East coast of the US to Liverpool, England. In October, the Kidnap of Dr Sun in London spread his reputation far and wide. It was not until 16 August, 1897 when Dr Sun reached Yokohama of Japan via Canada that he was made aware that the Hong Kong Government had promulgated a banishment order against him.

According to an undated letter that Dr Sun wrote to the then Hong Kong Colonial Secretary Sir James Haldane Stewart Lockhart, he was informed by his friend that he was expelled from Hong Kong because of his “attempt to emancipate his miserable countrymen from the cruelty of Tartar yoke (the Qing Government)”.¹³ In his letter, he enquired about the authenticity of the banishment order and warned that if it was genuine, he would appeal to Britain and the civilised world.¹⁴ As the letter was mailed from Wenjing Shop (Kingsell & Co), Yokohama, a shop managed by Fung Kingsell,¹⁵ it could be concluded that



² 一八九七年九月，孫中山致函香港輔政司駱克查詢一八九六年驅逐令一事。駱克於十月四日覆函並重申港府立場，表示孫中山若貿然在港登岸，將予以逮捕。

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In September 1897, Dr Sun Yat-sen wrote a letter to Hong Kong Colonial Secretary Sir James Haldane Stewart Lockhart to inquire about the banishment order issued in 1896. In his reply on 4 October, Lockhart reiterated the standpoint of the Hong Kong Government that Dr Sun would be arrested if he landed in Hong Kong under a banishment order issued against him.

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¹¹ 一八九六年的議政局成員包括香港總督羅便臣、駐港英軍司令陸軍少將布力 (Major-General Sir Wilsone Black)、輔政司駱克 (Sir J.H. Stewart Lockhart)、首席檢察官葛文 (Sir William Meigh Goodman)、庫務司密徹爾·因斯 (Norman Gilbert Mitchell-Innes)、工務司谷柏 (Francis Alfred Cooper) 以及警察司伍德豪斯 (H. E. Wodehouse)。當中密徹爾·因斯於一八九五年至一八九七年休假，議政局的位置由署理庫務司譚臣 (Alexander MacDonald Thomson) 兼任。Hong Kong Government 1896. *Hong Kong Blue Book for the Year 1895*. Hong Kong: Noronha & Co., p. H2.

The members of the Executive Council of 1896 included Sir William Robinson, the Governor of Hong Kong; Major-General Sir Wilsone Black, the Commander of British Forces in Hong Kong; Sir James Haldane Stewart Lockhart, the Colonial Secretary of Hong Kong; Sir William Meigh Goodman, the Attorney General of Hong Kong; Norman Gilbert Mitchell-Innes, the Colonial Treasurer of Hong Kong; Francis Alfred Cooper, the Director of Public Works, and Henry Ernest Wodehouse, the Captain Superintendent of Police. As Mitchell-Innes was on leave between 1895 and 1897, his role on the Executive Council was substituted by Alexander MacDonald Thomson, who held a concurrent post as the Acting Colonial Treasurer. See Hong Kong Government. 1896. *Hong Kong Blue Book for the Year 1895*. Hong Kong: Noronha & Co., p. H2.

¹² 檔案原文為「Sun Yat Sin is, in the opinion of the Governor in Council, dangerous to the peace and good order of the Colony.」同註5。The original record states “Sun Yat Sin is, in the opinion of the Governor in Council, dangerous to the peace and good order of the Colony”. See note 5.

¹³ 原文是「I was told by some good authority that the Hong-Kong Government have outlawed me on account of my attempt to emancipate my miserable countrymen from the cruelty of Tartar yoke.」英國殖民地部檔案 C.O. 129/283，頁 136。

The original sentence reads “I was told by some good authority that the Hong-Kong Government have outlawed me on account of my attempt to emancipate my miserable countrymen from the cruelty of Tartar yoke.” *British Colonial Office Records*, C.O. 129/283, p. 136.

¹⁴ 同上註。
Ibid.

¹⁵ 信上的「文經活版所」又名「文經商店」，由革命黨人馮鏡如開設，英文地址為「F. Kingsell & Co., 53 Main Street, Yokohama, Japan」。同上註。
The “Kingsell & Co.” referred to in the letter was also known as “Wenjing Shop” which was opened by Fung Kingsell with the address in English of “F. Kingsell & Co., 53 Main Street, Yokohama, Japan”. Ibid.

安全與和平，香港政府為保持與中國的良好關係，遂驅逐孫先生出境，並在文末指孫先生一旦在港登岸，將予以逮捕。¹⁶ 面對香港政府和駱克的強硬回應，孫中山只好等待驅逐令期滿後再臨香江。

雖然孫中山無法令香港政府改變初衷，但由於他在一八九六年「倫敦蒙難」後已聲名大噪，香港政府的驅逐令引起英國輿論的關注以及英國國會的辯論。面對下議院（House of Commons）議員達維特（Michael Davitt）的質詢，英國殖民地部大臣張伯倫（Joseph Chamberlain）於一八九八年七月十八日陳述驅逐孫中山的法理依據，並指出孫中山在驅逐令發出時已離開香港。¹⁷ 張伯倫的回覆代表英國政府亦認同港督羅便臣驅逐孫中山出境的做法。

孫中山登岸與第二個驅逐令

在首個驅逐令生效期間，孫中山一直遵循香港法例，兩次乘船途經香港時均沒有登岸，只是利用船隻泊岸的短暫空檔，與革命黨人在船上會面或籌劃革命。¹⁸

this letter was written after 16 August, 1897, when Dr Sun arrived in Yokohama. Sir Lockhart replied on 4 October² and explicitly pointed out that Dr Sun was dangerous to the peace and good order of the colony. In order to maintain a good relationship with China, the Hong Kong Government decided to deport Dr Sun, and at the end of the letter, Sir Lockhart reiterated that he would be arrested if he were to land in Hong Kong.¹⁶ Faced with the unyielding response from the Hong Kong Government and Sir Lockhart, Dr Sun could only return to Hong Kong after the expiry of the banishment order.

Although Dr Sun could not alter the situation, he was made famous overnight after the “Kidnapped in London” incident in 1896. The banishment order from the Hong Kong Government culminated in a rise in public concern within Britain and led to debate motioned in the British Parliament. On 18 July, 1898, interrogated by Michael Davitt, a Member of Parliament from the House of Commons, Joseph Chamberlain, Secretary of State for Colonial Affairs, stated the legal basis for the expulsion of Dr Sun and that he had not been in Hong Kong while the banishment order was promulgated.¹⁷ Chamberlain’s reply represented the British Government’s consensus of Hong Kong Governor, Sir Robinson’s expulsion of Dr Sun.

Dr Sun Yat-sen’s Landing in Hong Kong and the Second Banishment Order

While the first banishment order was in effect, Dr Sun remained law-abiding, journeying through Hong Kong twice

首個驅逐令於一九〇一年三月三日屆滿，然而香港政府沒有即時重申禁令，讓孫中山可利用驅逐令屆滿且未及重申的「真空期」，於一九〇二年一月二十八日由橫濱乘日輪「八幡丸」（*Yawata Maru*）抵達香港，與革命同志會面，並處理上一年楊衢雲遇刺的善後問題。¹⁹

據日本駐香港領事野間政一向日本外務大臣小村壽太郎的匯報，孫中山與同伴暫時居於士丹利街二十四號《中國日報》報館樓上。²⁰ 然而，隨着孫中山的行踪被傳媒披露，港府採取了相應行動。時任署理香港總督陸軍少將加士居爵士（Major-General Sir William Julius Gascoigne）²¹ 會同議政局於一九〇二年一月三十日²²（即孫中山訪港的第三天），對孫中山頒下第二個為期五年的驅逐令，還派出英籍警長勸諭孫先生離境。根據法例，香港政府有權在驅逐令生效後拘禁孫中山，所以孫先生決定盡快離港，在二月四日乘英輪「庫柏蒂克號」（*Coptic*）返回日本。²³ 第二個驅逐令的有效期至一九〇七年一月二十九日，其間孫中山曾乘船途經香港三次，²⁴ 均沒有登岸。

without landing. He only made use of the brief moment while berthing to meet with revolutionaries or discuss their plans onboard.¹⁸

The first banishment order served on Dr Sun expired on 3 March, 1901, with the Hong Kong Government not immediately promulgating a new order. Therefore Dr Sun could take advantage of this window of opportunity to return to Hong Kong from Yokohama on the Japanese ship “Yawata Maru” on 28 January, 1902 to meet with fellow revolutionaries and deal with the aftermath of the previous year’s assassination of Yeung Ku-wan.¹⁹

According to a report from Masaichi Noma, the Consul of Japan in Hong Kong to Komura Jutaro, Japanese Minister for Foreign Affairs, Dr Sun and his fellows were temporarily living upstairs above his office at the newspaper *China Daily* on 24 Stanley Street.²⁰ However, after his whereabouts were disclosed by the media, the Hong Kong Government had to take appropriate action. Major-General Sir William Julius Gascoigne, the then acting Governor of Hong Kong,²¹ in conjunction with the Executive Council, promulgated the second five-year banishment order on 30 January, 1902²² (the third day of Dr Sun’s visit to Hong Kong), and at the same time, sent a British sergeant to advise him to leave Hong Kong. According to the law, the Hong Kong Government could legitimately detain Dr Sun after the banishment order had come into effect. Hence Dr Sun decided to make an imminent exit, taking the British ship “Coptic” to return to Japan on 4 February.²³ While the second banishment order was in effect until 29 January, 1907, Dr Sun travelled through Hong Kong three times without going ashore.²⁴

¹⁶ 英國殖民地部檔案 C.O. 129/283，頁 137。

British Colonial Office Records, C.O. 129/283, p. 137.

¹⁷ 張伯倫的原文為「No application was made by the Chinese Government for his banishment, and he left the colony prior to the issue of the order; but there seems to have been no doubt that he was implicated in a conspiracy against that Government, which made and makes his presence in Hong-kong undesirable. I see no reason to interfere with the temporary prohibition of his residence in Hong-kong.」“SUN YAT SEN”, HC Deb 18 July 1898 vol. 62 cc76-7.

The original statement made by Joseph Chamberlain reads “No application was made by the Chinese Government for his banishment, and he left the colony prior to the issue of the order; but there seems to have been no doubt that he was implicated in a conspiracy against that Government, which made and makes his presence in Hong-kong undesirable. I see no reason to interfere with the temporary prohibition of his residence in Hong-kong.” “SUN YAT SEN”, HC Deb 18 July 1898 vol. 62 cc76-7.

¹⁸ 兩次途經香港的日期和所乘搭的輪船，分別為一九〇〇年六月十七日至十八日的「煙迪斯號」（Indus），以及一九〇〇年七月十七日至二十日的「佐渡丸」（Sado Maru）。

The two steamships that Dr Sun took and the dates on which he passed through Hong Kong were the “Indus” between 17 and 18 June, 1900 and the “Sado Maru” between 17 and 20 July, 1900.

¹⁹ 章開沅，羅福惠，嚴昌洪，《辛亥革命史資料新編》第六冊（武漢：湖北人民出版社，2006），頁 107-108。

Zhang Kaiyuan, Luo Fuhui, Yan Changhong. 2006. *Xinhai Geming Shi Ziliao Xinbian*, Vol. 6. Wuhan: Hubei People’s Press, pp. 107-108.

²⁰ 同上註，頁 107。

Ibid., p. 107.

²¹ 香港總督卜力爵士（Sir Henry Arthur Blake）於一九〇二年一月四日至同年九月八日休假，總督一職由加士居署理。Government Notification No.1, *The Hong Kong Government Gazette Extraordinary*, 4 January 1902.

Sir Henry Arthur Blake, the Hong Kong Governor, was on leave between 4 January and 8 September, 1902, and the post was taken up by Major-General Sir William Julius Gascoigne as Acting Governor. See Government Notification No. 1, *The Hong Kong Government Gazette Extraordinary*, 4 January, 1902.

²² 當日與會的議政局成員，包括署理香港總督的陸軍少將加士居爵士、輔政司駱克、首席檢察官葛文、署理庫務司馬斯德（C. McIlvaine Messer）、船政司林士（Robert Murray Rumsey）、工務司漆咸（William Chatham）以及非官守成員遮打爵士（Sir Catchick Paul Chater）和占士·渣甸·貝·伊榮（James Jardine Bell-Irving）。其中馬斯德是暫代休假的庫務司譚臣（Alexander MacDonald Thomson）。英國殖民地部檔案 C.O. 131/31，頁 289-290。

The members of the Executive Council who participated in the meeting on that day included Major-General Sir William Julius Gascoigne, the Acting Governor of Hong Kong; Sir James Haldane Stewart Lockhart, the Hong Kong Colonial Secretary; Sir William Meigh Goodman, the Attorney General of Hong Kong; Charles McIlvaine Messer, the Acting Colonial Treasurer of Hong Kong (on behalf of Alexander MacDonald Thomson); Robert Murray Rumsey, the Harbour Master; William Chatham, the Director of Public Works, and ex-officio members Sir Catchick Paul Chater and James Jardine Bell-Irving. *British Colonial Office Records*, C.O. 131/31, pp. 289-290.

²³ 同註 19。

See note 19.

²⁴ 第二次驅逐令期間，孫中山於一九〇二年十二月乘「煙迪斯號」、一九〇五年十月乘「加利都尼亞號」（Caledonien）以及一九〇六年四月乘「波利尼西亞號」（Polynesien）途經香港。

While the second banishment order was in effect, Dr Sun Yat-sen passed through Hong Kong on the steamship “Indus” in December 1902, the “Caledonien” in October 1905 and the “Polynesien” in April 1906.

華南邊陲起義與第三個驅逐令

孫中山於一九〇五年在日本成立中國同盟會，並於一九〇七年三月起以法屬安南（今越南）為革命基地，多次在華南邊陲起義。一九〇七年五月底，孫中山派同盟會成員許雪湫等人於潮州策動黃岡起義；六月二日，鄧子瑜等革命黨人奉孫中山之命，於惠州七女湖策動起義，以響應黃岡義舉。上述兩次武裝起義均告失敗，鄧子瑜經香港逃亡南洋。

在第二次驅逐令的限期屆滿（一九〇七年一月二十九日）後，香港政府也沒有即時重申禁令。孫中山乘坐德國輪船「比連思士亞孺士號」（*Prinzess Alice*）於一九〇七年三月四日從日本經香港前往法屬安南，在當地設立革命機關。該船於三月十三日至十四日停泊香港，然而孫先生沒有登岸。及後黃岡和七女湖起義相繼爆發，清政府便在六月十二日聯絡英國駐華公使朱爾典（John Jordan），要求後者協助緝拿和引渡潛逃香港的革命黨人鄧子瑜。事實上，香港政府擔心革命黨人以香港為基地，早已於五、六月間派警察在港四處搜尋孫中山的下落。由於孫中山途經香港時沒有登岸，並且早於三月十八日抵達法屬安南，香港政府當然一無所獲。其後朱爾典於六月十七日回覆清廷，表示已對孫中山和鄧子瑜發出為期五年的驅逐令。²⁵ 這個驅逐令由署理港督梅含理爵士（Sir Francis Henry May）會同議政局於六月十一日通過生效。²⁶

辛亥革命期間孫中山途經香港返國

第三個驅逐令的有效期至一九一二年六月十日，然而一九一一年十月十日爆發的武昌起義為中國帶來巨變。當時孫中山正在美國各

Uprisings in Southern China Borders and the Third Banishment Order

Dr Sun Yat-sen founded the Tongmenghui in Japan in 1905. In March 1907, he used French Annam (now Vietnam) as a revolutionary base, and instigated a series of uprisings in the southern China borders. At the end of May 1907, Dr Sun assigned Xu Xueqiu, together with fellow members of the Tongmenghui, to stage the so-called Huanggang Uprising in Chaozhou. He subsequently sent revolutionaries including Deng Zhiyu to lead the Huizhou Qinhuh Uprising on 2 June. Both of these armed insurrections failed and Deng fled to Nanyang via Hong Kong.

After the expiry of the second banishment order on 29 January, 1907, the Hong Kong Government again did not immediately issue a new one. Dr Sun boarded the German ship “Prinzess Alice” on 4 March, 1907 to depart Japan for French Annam via Hong Kong, with the plan to set up a revolutionary organisation there. The ship berthed in Hong Kong between 13 and 14 March, but Dr Sun did not go ashore. Soon following the outbreak of the Huanggang and Qinhuh uprisings, the Qing Government liaised with John Jordan, British Minister Plenipotentiary to China, on 12 June, demanding him arrest and extradite the revolutionary Deng Zhiyu, who had absconded to Hong Kong. In fact, with the fear of the territory being used as a revolutionary base, the Hong Kong Government had already issued a police search warrant for Dr Sun in May and June of that year. However, since Dr Sun had already reached French Annam on 18 March and did not go ashore during his previous journeys to Hong Kong, the Hong Kong police returned empty-handed. On 17 June, John Jordan sent a reply to the Qing Court that five-year banishment orders had been served on both Dr Sun and Deng Zhiyu.²⁵ The orders were authorised by the Hong Kong Acting Governor Sir Francis Henry May in conjunction with the Executive Council on 11 June.²⁶

Dr Sun Yat-sen Returned to China via Hong Kong during China's 1911 Revolution

The third banishment order would expire on 10 June 1912. However, the Wuchang Uprising that broke out on 10

²³ 一九一一年十二月二十一日，孫中山乘英輪「地雲夏號」回國時途經香港，與胡漢民（前坐左三）和陳少白（前坐左五）等革命友人在船上合照。

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On 21 December, 1911, the day when Dr Sun Yat-sen passed through Hong Kong onboard the British liner “Devanha” that he took to return to China, he was photographed with his fellow revolutionaries, including Wu Han-min (first row, third from the left) and Chan Siu-pak (first row, fifth from the left).

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埠籌募革命經費。當他得知革命的消息後，便轉赴英、法兩國進行外交活動，十一月二十四日啟程回國。

孫中山在十一月十日晚抵達倫敦，原打算與英國外交大臣格雷爵士（Sir Edward Grey）會面，但沒有成果。孫中山遂透過英國維克斯兵工廠總經理道生爵士（Sir Trevor Dawson）作中介人，把附有孫中山及其軍事顧問荷馬李簽名的外交計劃轉交英國外交部。道生更親自與格雷爵士會面。格雷雖然始終沒有會見孫中山，²⁷ 卻允許孫先生在港府驅逐令仍然生效的情況下，「路經」英國在遠東的殖民地返國。²⁸

一九一一年十二月二十一日上午九時，孫中山乘坐英國郵船「地雲夏號」（*Devanha*）抵達香港海面²⁹，廖仲愷、陳少白等人到船上謁見。船上還有由港督盧吉爵士（Sir

October, 1911 brought drastic changes to China's political scene. Dr Sun was on a nationwide tour in the US raising funds for his revolutionary activities. When he heard the news of the Wuchang Uprising, he headed to Britain and France to gain the two countries' diplomatic support and started his return journey to China on 24 November.

Dr Sun Yat-sen reached London on 10 November. He planned to meet with Sir Edward Grey, British Foreign Secretary, but to no avail. Sir Trevor Dawson, Managing Director of Vickers Ltd. in Britain, acting as an intermediary, helped Dr Sun pass the diplomatic plan, bearing the signatures of Dr Sun and his military adviser, Homer Lea, to the British Foreign Office. Sir Dawson went as far as to meet with Sir Edward Grey in person. Although Dr Sun did not meet with Sir Edward Grey ultimately,²⁷ the latter allowed him to pass through Hong Kong, a British colony in the Far East, to return to China, at a time when a banishment order was still served on him.²⁸

At 9 a.m. on 21 December, 1911, Dr Sun arrived in Hong Kong waters onboard the British liner “Devanha”²⁹, where he held an audience with revolutionaries such as Liu Chung-

²⁵ 英國外交部檔案 F.O. 371/229/17030/25176，頁 44-48 以及 F.O. 371/229/17030/26899，頁 98-104。
British Foreign Office Records, F.O. 371/229/17030/25176, pp. 44-48 and F.O. 371/229/17030/26899, pp. 98-104.

²⁶ 當日與會的議政局成員，包括署理港督梅含理、署理輔政司譚臣、駐港英軍司令陸軍少將樂活（Major-General Robert George Broadwood）、署理首席檢察官岡珀茨（H. H. J. Gompertz）、署理庫務司馬斯德、工務司漆咸、首席醫務官阿特金森（Dr. John Mitford Atkinson）以及非官守成員遮打爵士。當日非官守成員休伊特（Edbert Ansgar Hewett）缺席會議。第十三任香港總督彌敦爵士（Sir Matthew Nathan）於一九〇七年四月二十日任滿離港，該職由輔政司梅含理署理，直至下任總督盧吉爵士（Sir Frederick Lugard）於同年七月二十九日抵港為止。英國殖民地部檔案 C.O. 131/35，頁 515。

The members who attended the meeting that day included Sir Francis Henry May, the Acting Hong Kong Governor; Alexander MacDonald Thomson, the Acting Colonial Secretary; Major-General Robert George Broadwood, the Commander of British Forces in Hong Kong; Henry Hessey Johnston Gompertz, the Attorney General of Hong Kong; Charles McIlvaine Messer, the Acting Colonial Treasurer; William Chatham, the Director of Public Works; Dr John Mitford Atkinson, the Principal Medical Officer, and ex-officio member Sir Catchick Paul Chater. Another ex-officio member, Edbert Ansgar Hewett, was absent. Sir Matthew Nathan, the 13th Governor of Hong Kong, had departed Hong Kong at the end of his term of office on 20 April, 1907, and the role of governor was taken up by the Colonial Secretary Francis Henry May until the next Hong Kong Governor Sir Frederick Lugard arrived Hong Kong on 29 July. *British Colonial Office Records*, C.O. 131/35, p. 515.

²⁷ 一九一一年十一月十五日，道生兩度致函格雷並指出孫中山很快便會成為共和國的新總統，故此從英國的利益出發，應讓孫中山途經香港回國。英國殖民地部檔案 C.O. 129/385，頁 197-198；同年十一月二十日，道生再應孫中山的要求，向格雷提出希望可以經海峽殖民地（檳城和新加坡）返國。英國殖民地部檔案 C.O. 129/385，頁 199。

On 15 November, 1911, Sir Trevor Dawson wrote to Sir Edward Grey twice, pointing out that Dr Sun would soon become the President of a new Republic. Therefore in the best interest of Britain, they should let Dr Sun return to China via Hong Kong. *British Colonial Office Records*, C.O. 129/385, pp. 197-198. On 20 November of the same year, Dawson raised Dr Sun's request with Grey, asking him to let Dr Sun return to China via the Straits Settlements of Penang and Singapore. *British Colonial Office Records*, C.O. 129/385, p. 199.

²⁸ 格雷與香港總督作內部討論後，於一九一一年十一月二十九日下達允許孫中山可途經香港的命令，但條件是不能居留，並嚴禁把香港用作中國的政治或軍事行動基地（a base for political or military operations in China）。英國殖民地部檔案 C.O. 129/385，頁 196。

After the internal discussion between Sir Edward Grey and the Hong Kong Governor, an order was issued on 29 November 1911 permitting Dr Sun to pass through Hong Kong, on the condition that he was not allowed to reside in Hong Kong and was strictly prohibited from using Hong Kong as a base for political or military operations in China. *British Colonial Office Records*, C.O. 129/385, p. 196.

Frederick Lugard) 派來、知會孫中山可以登岸的香港警察。約上午十時，孫先生等人轉往廣東都督胡漢民乘坐來港的「江固號」(*Kiang Ku*) 軍艦會商；十二時半，孫先生返回「地雲夏號」與宮崎寅藏等日本友人會面。稍後孫中山一行人乘「廣州號」(*Kwong Chow*) 小輪至上環三角碼頭(又名永樂街碼頭)登岸，於下午三時在蘭室會所(Lan Sat Chinese Club)出席歡迎會，與粵省七十二行、九大善堂和香港總商會等代表會面。孫中山並於會上公佈胡漢民將隨他前往上海，廣東都督一職由陳炯明暫代。下午四時三十分，孫先生乘坐「順利號」(*Shun Lee*) 小輪重返「地雲夏號」，離開香港前往上海。孫中山此行在港逗留僅八小時。²⁹

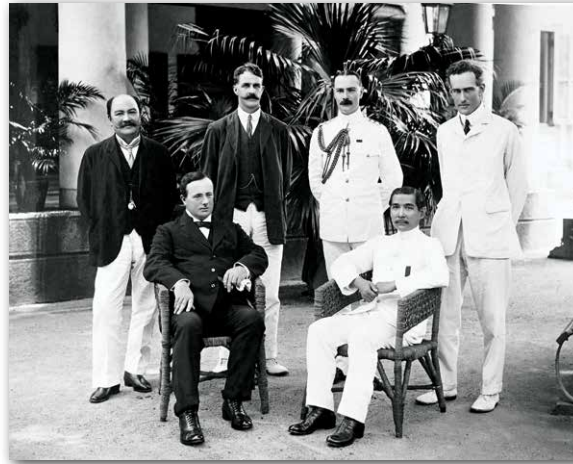
孫中山在民國成立後的香港行踪

孫中山於一九一二年一月一日在南京就任中華民國臨時大總統，至四月一日正式解除職務。在第三次驅逐令屆滿(即一九一二年六月十日)前，孫先生亦曾在港登岸活動。一九一二年五月十八日，孫先生由廣州乘九廣鐵路來港，入住中環的香港大酒店。³⁰ 他在往後兩天曾接受《南清早報》(*South China Morning Post*，今《南華早報》)、³¹ 《士蔑西報》(*The Hongkong Telegraph*)³² 及《孖刺西報》(*Hong Kong Daily Press*) 的記者訪問。³³ 二十日中午，孫先生在港督府與署理港督施勳(Claud Severn)進行非官方的私人會談，並與施勳、署任輔政司金文泰(Cecil Clementi)及定例局議員何啟等人合照⁴。³⁴ 五月二十二日，孫先生結束了為期四天的訪問，離港前往澳門。

hoi and Chan Siu-pak onboard the liner. The Hong Kong police, sent by Sir Frederick Lugard, the Governor of Hong Kong, were also on the liner to inform Dr Sun that he was allowed to go ashore in Hong Kong. At around 10 a.m., Dr Sun and his fellows then moved to the cruiser “Kiang Ku” which the Military Governor of Guangdong, Wu Han-min, took to travel to Hong Kong, and held a conference on board the cruiser. Dr Sun returned to the “Devanha” at 12.30 p.m. and met with his Japanese acquaintances, including Miyazaki Torazo. Soon Dr Sun and his fellows took the steam launch “Kwong Chow” and went ashore the Triangle Pier (also known as Wing Lok Street Pier) in Sheung Wan. At 3 p.m., he attended the welcome party at the Lan Sat Chinese Club and met representatives of the “72 Guilds” of Guangdong Province, the Nine Charitable Halls and the Hong Kong General Chamber of Commerce. During this meeting, Dr Sun announced that Wu Han-min would go to Shanghai with him and Chen Jiongming would become the acting Military Governor of Guangdong. At 4.30 p.m., Dr Sun took the steam launch “Shun Lee” to board the liner “Devanha” and depart Hong Kong for Shanghai. His stay in Hong Kong had lasted just eight hours.²⁹

Dr Sun Yat-sen's Footsteps in Hong Kong after the Establishment of the Republic of China

Dr Sun assumed the Provisional Presidency of the Republic of China from 1 January to 1 April, 1912. Before the expiry date (i.e. 10 June, 1912) of the third banishment order, Dr Sun did go ashore in Hong Kong. On 18 May, 1912, Dr Sun took the Kowloon-Canton Railway to travel from Guangzhou and stayed at the Hong Kong Hotel in Central.³⁰ Within two days upon his arrival, he was interviewed by *South China Morning Post*,³¹ the *Hongkong Telegraph*³² and the *Hong Kong Daily Press*³³. At noon on 20 May, Dr Sun held an unofficial private discussion with Claud Severn, the acting Governor of Hong Kong in Government House and was photographed with Claud Severn, Acting Colonial Secretary Cecil Clementi and Member of the Legislative Council Ho Kai⁴.³⁴ On 22 May, Dr Sun finished his four-day visit in Hong Kong and departed for Macau.



⁴ 一九一二年五月二十日，孫中山(前右)在訪港期間，在總督府與署理香港總督施勳(前左)進行非官方的私人會談。後排左一為定例局議員何啟，右一為署理輔政司金文泰。

◎ 香港歷史博物館

On 20 May, 1912, when Dr Sun (front row, on the right) was on a visit to Hong Kong, he held an unofficial private meeting with Claud Severn (front row, on the left), the acting Governor of Hong Kong in the Government House. In the back row, the first from the left is Ho Kai, member of the Legislative Council and the first from the right is Sir Cecil Clementi, Acting Colonial Secretary of Hong Kong.

◎ Hong Kong Museum of History

在第三個驅逐令屆滿後，孫中山又曾七次途經香港，其中四次登岸，包括一九二三年二月二十日在香港大學演說⁵，道出他的革命思想源自香港。一九二四年十一月孫中山乘船經香港北上共商國是，翌年三月十二日在北京病逝，與港人和國民永別。



⁵ 一九二三年二月二十日，孫中山在香港大學大禮堂(今陸佑堂)演說後與港大師生及教育團體代表共四百餘人合照。

◎ 香港大學馮平山圖書館

On 20 February, 1923, after a speech delivered by Dr Sun Yat-sen at the Great Hall of the University of Hong Kong (now Loke Yew Hall), he was photographed with over 400 people, including teachers and students of the University of Hong Kong and representatives from educational organisations.

◎ Fung Ping Shan Library of the University of Hong Kong

After the expiry of the third banishment order on 10 June, 1912, Dr Sun had passed through Hong Kong seven times, during which he went ashore four times, including for the speech he delivered at the University of Hong Kong on 20 February, 1923⁵, where he announced that his revolutionary ideals had originated in Hong Kong. In November 1924, Dr Sun travelled via Hong Kong to Beijing to discuss national affairs. On 12 March, 1925, he died of illness in Beijing, parting from the people of Hong Kong and his fellow countrymen forever.

²⁹ 《德臣西報》，一九一一年十二月二十二日。
The China Mail, 22 December, 1911.

³⁰ 《士蔑西報》，一九一二年五月二十日。
The Hongkong Telegraph, 20 May, 1912.

³¹ 《南清早報》，一九一二年五月二十日。
South China Morning Post, 20 May, 1912.

³² 《士蔑西報》，一九一二年五月二十一日。
The Hongkong Telegraph, 21 May, 1912.

³³ 《孖刺西報》，一九一二年五月二十一日。
The Hong Kong Daily Press, 21 May, 1912.

³⁴ 一九一二年三月十五日，港督盧吉任滿離港，而接任的梅含理要到七月四日才就任，其間由施勳任署理港督，金文泰任署理輔政司。Hong Kong Government 1913. *Hong Kong Blue Book for the Year 1912*. Hong Kong: Noronha & Co., p. 12. 另見《德臣西報》，一九一二年五月二十日；《士蔑西報》，一九一二年五月二十一日。

The Hong Kong Governor Sir Frederick Lugard departed Hong Kong on 15 March 1912 at the end of his term of office, but his successor, Sir Francis Henry May, was not scheduled to arrive in Hong Kong until 4 July. Claud Severn therefore served as the Acting Governor of Hong Kong, while Cecil Clementi acted as the Colonial Secretary. Hong Kong Government. 1913. *Hong Kong Blue Book for the Year 1912*. Hong Kong: Noronha & Co., p. 12. Also see *The China Mail*, 20 May, 1912; *The Hongkong Telegraph*, 21 May, 1912.

翱翔天際・凌空歸航—— 創新技術保存珍藏飛機

From Soaring to Suspending— Preserving Aircraft Collection with Innovation and Technology

謝志遠 TSE Chi-yuen, Jonathan

一級助理館長(金屬品) | 文物修復辦事處
Assistant Curator I (Metals) | Conservation Office

曾芝皓 TSANG Chee-ho, Alice

館長(立體文物) | 文物修復辦事處
Curator (3D Objects) | Conservation Office



經歷時代洗禮的 DC3 Betsy

The historic DC 3 Betsy

摘要

Betsy 及 Niki 原為戰機，在第二次世界大戰期間，負責運載物資前往危機四伏的戰地，曾經完成多項充滿挑戰性和歷史性的飛行任務。在全球衝突結束後，這兩架 DC-3 型航機改裝為商用，於 1946 年投入運作，成為國泰航空公司創始機隊的主將。爾後航空公司採用著名的波音 7 系列航機，兩機才先後於 1955 和 1961 年遭轉售。國泰航空公司於 1980 年代初回購 Betsy，並在 1989 年將它捐贈予香港科學館，讓它得以長期保存。而一直下落渺然的 Niki，亦於 2006 年獲仿製重置。

DC-3 Betsy 於香港科學館內偌大的頂部空間位置，展示飛航英姿，俯瞰館內的遊人，並以鮮明形象向參觀者細訴其輝煌的歷史。Betsy 於館內擔當航空文物的新角色，其新生意義不凡，但與此同時 Betsy 作為香港科學館最巨型的展品，對於館方修復團隊而言，在技術方面帶來了重大的挑戰。隨著科技日益進步，在一羣本地專家，包括修復人員、工程師、學者和科學家的跨範疇合作下，大家同心協力將這架傳奇航機的檢測及保養維修策略，邁進更可靠、成本效益更高和可持續發展的層面。

帶着傳奇色彩的 Betsy，是 1942 年製造的舊式道格拉斯 DC-3 航機，擁有逾四萬小時的飛行紀錄，自 1991 年起，一直懸吊在香港科學館展覽廳的天花，恰如其分地展示居高妙曼的英姿，讓公眾參觀。

在 1989 年 11 月的一個午夜，國泰航空捐贈予康樂及文化事務署的 Betsy，被送進當時尚未平頂和建成外牆的香港科學館，成為該館首個展品。館長和修復人員興奮地迎接具有獨特和豐富歷史價值的 Betsy 加入博物館大家庭，亦從此肩負任重道遠的保育重責。

Abstract

Originally built as war-planes to deliver necessities to the dangerous battlefields of World War II, Betsy and Niki accomplished numerous adventures and eventful flying assignments before they were converted to commercial flying DC-3 after the global conflict, and formed the backbone of the pioneer fleet of Cathay Pacific when the airline commenced operation in 1946. With the rise of the renowned Boeing 7-series in later years, the siblings were sold by the airline in 1955 and 1961. While Betsy could be recovered in the early 1980s, Niki could never be re-located. In 1989, Cathay Pacific donated Betsy to the Hong Kong Science Museum for her long term well-being and in 2006, Niki was replicated.

Exhibiting in an in-flight position overlooking the patrons of the Hong Kong Science Museum, DC-3 Betsy adds drama to her own display and leverages on the potential of the voluminous overhead space to unfold her stories in a narrative perspective to visitors. While embarking on a meaningful stage of her second life with a new role in the museum as an aviation heritage, safeguarding Betsy, the largest display at the Hong Kong Science Museum, has posed significant technical challenges to museum conservators in the course of conservation. With the evolution of technology over time and support from local expertise, the cross-disciplinary collaboration and concerted efforts from a wide range of professionals including conservators, engineers, scholars, scientists, have brought a new dimension to the inspection, maintenance and repair strategy for the legendary aircraft in a more reliable, cost-effective and sustainable way.

Commanding in the air where she belongs, Betsy, a 1942 vintage Douglas DC-3 legendary aircraft, has been on display in a suspending position from the ceiling of the exhibition gallery at the Hong Kong Science Museum since it was opened for public viewing in 1991, with more than 40,000 hours in her flying logbook.

Donated to the Leisure and Cultural Services Department (LCSD) by Cathay Pacific, Betsy was manoeuvred into the Hong Kong Science Museum as the first artifact during one midnight in November 1989 when the Museum was yet to be roofed and completely wall-bounded. Given Betsy's uniqueness and immense historical importance, curators and conservators were thrilled to be entrusted with the long-term conservation responsibilities as they welcomed her into the museum family.

Betsy

1942 年 C-47 空中火車 (No.41-18385) 於美國長灘製造
1942 C-47 Skytrain (No.41-18385) born in Long Beach, USA

1945 年 Roy Farrell Export-Import Co. 購入並命名為「Betsy」
1945 Bought by Roy Farrell Export-Import Co. and named as "Betsy"

1946 年於香港登記為 VR-HDB，首次直航服務往返香港與悉尼
1946 Registered in HK as VR-HDB and operated first direct flight between HK & Sydney

1949 年右舷引擎於緬甸損毀，需更換機翼
1949 Starboard engine damaged in Burma requiring a replacement wing

1955 年以港幣 \$320,000 售予巴布亞新幾內亞萊城 Mandated Airlines
1955 Sold to Mandated Airlines of Lae, New Guinea for HK\$320,000

1983 年經 5 日航程由悉尼回歸香港
1983 Returned to Hong Kong after a 5-day flight from Sydney

1986 年進駐香港大會堂，慶祝國泰航空成立 40 周年
1986 Barged to City Hall to celebrate 40th anniversary of Cathay Pacific

1974 年售予 Bush Pilots Airways Pty Ltd
1974 Sold to Bush Pilots Airways Pty Ltd



1989 年置放於香港科學館成為永久展品
1989 Installation at Hong Kong Science Museum for permanent display

1946 國泰航空成立
Founding of Cathay Pacific

1950-60s 送別 Betsy & Niki
Farewell Betsy & Niki

1989 Betsy 重返香港
Betsy back home

1947 年 Niki 用作貨機，首航往澳門
1947 Niki operated the first cargo flight to Macao

1961 年香港民航處取消飛機登記
1961 Deregistered by HK Civil Aviation

2005 年國泰航空購入 C-47 空中火車 (No. RP-C1101)，並重置為新一代「Niki」
2005 Cathay acquired C-47 skytrain (No. RP-C1101) and assigned as the New "Niki"

1946 年於香港登記為 VR-HAD，並於 12 月服務國泰航空首航新加坡
1946 Registered in HK as VR-HAD and operated inaugural flight of Cathay to Singapore in December

2006 年新一代「Niki」於國泰城展出，為航空公司 60 周年紀念誌慶
2006 New "Niki" on display at Cathay City marking 60th anniversary of airline

1946 年 Roy Farrell Export-Import Co. 於四月購置另一 C-47 空中火車 (No.44-76659) 並命名為「Niki」
1946 Roy Farrell Export-Import Co. bought another C-47 skytrain (No.44-76659) and named as "Niki" in April

Niki



1 Betsy 和 Niki 發展時序
A timeline of Betsy and Niki

2 國泰城外的新 Niki

New Niki stands outside Cathay Pacific City



Betsy and Niki 雙機傳奇

Betsy 和 Niki 是由前道格拉斯飛機公司建造的 C-47 空中火車戰機 (DC-3 的軍用本)，為二戰時的軍用運輸機，用作運送或空投物資到烽煙四起的戰場。Betsy 與姊妹戰機 Niki 在二戰服役期間，曾參與無數驚險戰役和完成重要任務 (Young, 2009)。

翼展近 30 米的 Betsy 和 Niki，為雙引擎單翼機，淨重七公噸，在引擎機艙和尾翼均配有以液壓操作的伸縮起落架，機體採用半硬殼設計，鋁金屬外殼鉚接在縱橫交錯的機架上 (FAA, 2012)。

1946 年大戰剛結束，國泰航空公司購入兩機改裝作商業航行的 DC-3，成為始創機隊的一員。自此兩機先後完成多項精彩的飛行任務，直至國泰航空因業務長足發展，引入性能較二戰時代 DC-3 更優越的波音 -7 系飛機，並分別於 1955 年和 1961 年出售 Betsy 和 Niki (CX, 2006) (Eather, 2008)。

1980 年代國泰航空得悉 Betsy 已輾轉成為服務澳洲內陸的貨機，決定將她的第一個孩子帶回家；亦同時積極尋找姊妹機 Niki 的下落，惟未能成功。有消息指 Niki 已不復存在，國泰航空遂於 2006 年公司 60 周年時決定以另一架 C-47 航機替代 Niki。現時位處國泰航空總部國泰城入口的新一代 Niki 2，於 2006 年 8 月進駐時，成為國泰機隊在香港國際機場的第 100 架航機 (CAD, 2006)。

A Tale of Two Siblings — Betsy and Niki

Originally built by the former Douglas Aircraft Company as C-47 Skytrain war-planes (the military version of DC-3) to deliver necessities to the dangerous battlefields of World War II, Betsy and her sister, Niki, had performed numerous adventurous journeys and accomplished eventful tasks during the War (Young, 2009).

With a wingspan of nearly thirty metres and a net weight of seven tonnes, Betsy and Niki are twin-engine monoplanes with hydraulically operated retractable landing gear under each nacelle and the empennage. Their fuselages are in semi-monocoque design, consisting of transverse frames and longitudinal members covered with aluminium skins riveted to the frames and stringers (FAA, 2012).

It was in 1946 when the global conflict just ended, the siblings were acquired by Cathay Pacific as part of the pioneer fleet of the airline and reborn as commercial-flying DC-3. Since then, the duo continued with various amazing aviation tasks until Betsy was sold in 1955 and Niki in 1961 as the business of Cathay Pacific developed tremendously with the rise of the Boeing 7-series that outperform the much-loved World War II-era DC-3s (CX, 2006) (Eather, 2008).

The rediscovery of Betsy in the 1980s flying cargo around the Australia outback sparked Cathay Pacific's decision to bring her first child back home. At the same time, the airline was also in active pursuit of her sibling, Niki, but unfortunately to no avail. As sources had indicated that Niki no longer existed, Cathay Pacific decided at its 60th anniversary in 2006 to identify another C-47 as a replacement for the original Niki. The new Niki 2, which now stands at the entrance of the airline's headquarters complex, Cathay Pacific City, marked the arrival of Cathay Pacific's 100th aircraft at the Hong Kong International Airport as it first rolled out in August 2006 (CAD, 2006).



3 Betsy 於 1989 年進駐香港科學館
Betsy entering the Hong Kong Science Museum in 1989



4 香港科學館內的 Betsy
Betsy at the Hong Kong Science Museum

由於 Betsy 在其最後的服務歲月轉作貨機用途，1983 年回歸香港時，她的狀況殘破不堪，所有旅客座椅和相關裝置均被拆除，不再適合航行 (Swire, 1983)。惟念及 Betsy 過去彪炳的貢獻，國泰航空認為須為她安排一個永久的安居之所，讓她能「從此過着愉快的生活」³。經多番商討後，Betsy 於 1989 年進駐香港科學館這個新家園。

香港科學館展出 Betsy

1989 年，香港科學館仍在興建，是收藏 Betsy 的絕佳時機。Betsy 遂成為本地博物館首架兼唯一的航機藏品，為突顯其獨特和輝煌的成就，館方決定在極為有限的空間，但當眼的位置展示 Betsy，讓參觀者在四面八方都能輕鬆欣賞⁴。

由於參觀者常被觸目的展品吸引，館方最終決定採用懸吊方式展示，盡用館內天花偌大的空間娓娓述說 Betsy 的故事，為大家締造饒富意義和可親的體驗。這亦與英國博物館與藝廊委員會倡議的方法相近，以典型的飛航狀態展示航機，為展示效果加添色彩 (Ball, 1990)。

參考了 DC-3 的技術規格並經過精準的工程運算，科學館於 1990 年代製訂方案，以下列系統懸吊 Betsy：

- 在展館天花安裝三個強鋼套環，成為負載 Betsy 重量的錨錠
- 裝置懸索，連接天花與 Betsy 機身原裝的預設組件（位於引擎機艙和尾翼）

As Betsy had been used as a cargo plane in her last serviceable years, she was in a dilapidated condition with all passenger seats and related facilities dismantled, and did not possess much airworthiness when she returned to Hong Kong in 1983 (Swire, 1983). By virtue of her distinguished contribution in past services, Cathay Pacific reckoned that a permanent home had to be identified for Betsy where she could “live happily ever after”³. Following much discussions and negotiations, Betsy was finally brought into her new domicile at the Hong Kong Science Museum in 1989.

Displaying Betsy in The Hong Kong Science Museum

It was a perfect moment for collecting Betsy in 1989 while the construction of the Hong Kong Science Museum was still underway. Being the first and only aircraft collection in the local museums and in combination with her exclusive and distinctive merits, the Museum decided that Betsy should be exhibited at a prominent location that would allow easy viewing by visitors from all sides yet sacrificing little space for the display of the object⁴.

While visitors are often drawn to visually striking objects, the Museum finally adopted the suspension mode of display to leverage on the potential of the voluminous overhead space to unfold Betsy's stories in a narrative perspective that can constitute meanings and accessible experience for visitors. This display approach is also in line with the concept as put forward by the Museums and Galleries Commission of UK that suspending an aircraft in a typical in-flight attitude adds drama to the display (Ball, 1990).

Taking reference from the technical specifications of DC-3 followed by critical engineering calculations, Betsy was suspended according to the methodology worked out in the 1990s via the following system:

以往保養 Betsy 的方法

館方遵從《工廠及工業經營規例》內指明「所有使用的鏈帶、纜索及起重裝置必須在使用前六個月內經一名合格檢查員徹底檢查並發出認可的證明書聲明該裝置安全。」（勞工處，2014）的規定安裝和保養 Besty 的懸吊系統，並每年更換懸吊裝置兩次，以確保系統操作正常。雖然這種做法符合本地法例要求，但並不具成本效益，尤其是拆換下來的組件，可能仍是安全可用。同時，大家只集中注意懸吊裝置組件，卻從來沒有技術資料顯示 Betsy 結構的穩定性，因此對修復員而言，幾近無法認知展品整體的安全狀況。

事實上，這個早年的更換安排十分艱巨，不但須暫時關閉 Betsy 機底下的展區達兩星期之久，更須搭建大型棚架直達天花的錨錠和 Betsy 的懸吊裝置組件。搭建大型棚架和採購新懸吊裝置都涉及大筆開支，亦增加因工人在高空（棚架上）工作時，錯誤使用工具而損毀 Betsy 的情況。機翼上的洞孔，與及機身不同位置的劃痕和壓痕，佐證過往不斷發生這類不當閃失。

破舊立新

過往的模式存有缺點，驅使大家為能長遠保存歷史文物 Betsy 而探索更務實的方案。自 2009 年起，文物修復人員及館長展開研究，規劃新的方式來監察及保存 Besty。最終在 2009 年底，不同範疇的專家包括結構工程師、飛機專家、修復人員和館長，攜手合作進行新計劃。

監測結構狀況的新方案

結構健康監察技術 (SHM) 在土木和結構工程領域上獲廣泛應用，來持續監察大型建築物和大樓大廈的結構安全，修復人員於 2011 年與香港理工大學的結構健康監測研發部合作，利用這項技術，為 Besty 度身研發結構健康監測系統，確保懸吊系統的安全 (Kiremidjian, 1998)。監測系統分為三個主要部分：(i) 高效能感應器；(ii) 數據傳輸及接收器；(iii) 數據可視化；管理及分析系統；讓安裝在 Betsy 懸索上的感應器所收集的數據，透過精準的感應器網絡傳送至數據管理系統；進行分析⁵。

- Installation of three high-tensile steel eye-rings to the ceiling of the gallery as anchors to take the weight of Betsy;
- Attachment of suspension wires from the ceiling to the original, pre-designed structural fittings (located at the nacelles and empennage) of Betsy.

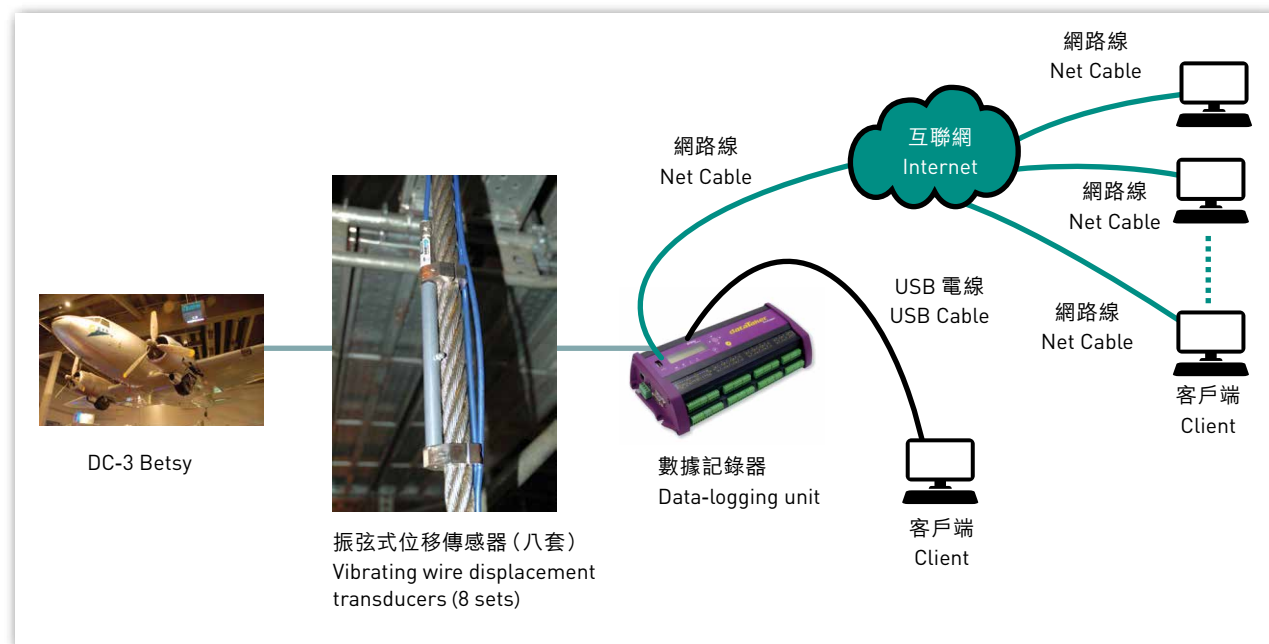
The Former Approach in Maintaining Betsy

Following the installation of Betsy and in compliance with the Hong Kong Factory and Industrial Undertakings Regulations which stipulates that “each chain, rope and lifting gear in use shall be thoroughly examined by a competent examiner in the preceding six months before it is used and a certificate in the approved form in which the competent examiner had made a statement to the effect that it is in safe working order had been obtained” (Labour Department, 2014), the Museum would replace the suspension gears twice every year to guarantee the system was in functional order. Though the practice could fulfill the local legislative requirements, it was not cost-effective to take care of the display of Betsy in such a manner; in particular the replaced devices might still be in good condition. In parallel, whilst every care had been focused on the suspension gears, no technical information indicating the structural stability of Betsy was ever available and therefore the safety of the overall display was almost unknown to the conservators.

As a matter of fact, such replacement practice in the early days was painstaking, as the gallery underneath Betsy had to be closed for around two weeks to facilitate the exercise. In addition, a large-scale scaffold had to be erected for full access to all ceiling anchorages and suspension gears of Betsy. Alongside the high cost incurred from the erection of the scaffold and procurement of new gears, the risk of Betsy getting damaged by workers' mishandling of tools at height (from the scaffold) was high during the work process. The holes on the wings with scratches and indentations at various locations of the fuselage are strong evidences of repeated incidents of undesirable mishaps from the past.

The Transition from Old to New

The considerable inherent shortcomings associated with the old approach necessitated the mapping out of a more pragmatic plan to safeguard the long term interest of historical Betsy. Since early 2009, conservators and curators have commenced a research project and planned for a new approach in looking after her. With professional input from various specialists including structural engineers, aircraft experts, conservators and museum curators, a cross-disciplinary collaboration was finally initiated in late 2009.



5 Betsy 結構健康監測系統配置布局
Schematic configuration of the Structural Health Monitoring system for Betsy

i 高效能感應器

在懸吊 Betsy 的懸索上 (圖 6 的 WR、WL 和 WT 位置) 安裝八套振弦式位移傳感器。任何時候，如懸索出現變形都會影響其張力，傳感器可以即時準確測量拉緊力的變化，評估實際的變形程度。

ii 數據傳輸及接收器

結構健康監測系統配備線路網絡，把由感應器收集的數據傳輸至數據記錄器儲存。

iii 數據可視化、管理及分析系統

將電腦伺服器連接至數據記錄器，用以提升系統配置，進行數據分析處理。系統亦包括網上的數據可視化程式，讓工程師、館長和修復人員可以監察所有感應器的實時數據，查察讀數有否出現不正常的情況。數據可視化程式配備了易用的互動界面，方便繪製圖象展示實時數據。

監測結果

自 2011 年持續監測 Betsy 的結構健康系統啟用後，收集所得的數據隨着展覽廳的溫度變化，構成典型的溫度變化模式。這些變化

A New Approach with Structural Health Monitoring (SHM)

Making use of the SHM technique which has been widely developed and applied in civil and structural engineering for continuous structural assessment of mega-structures and high-rise buildings, conservators collaborated with the SHM Division of the Hong Kong Polytechnic University in 2011 to tailor-devise a health monitoring system aimed at ensuring the proper functioning of all suspension gears for Betsy (Kiremidjian, 1998). The specific SHM programme comprises three major modules (i) high-performance sensors; (ii) data transmission and acquisition device; and (iii) data visualisation, management and analysis system, whereby data information detected from sensors mounted on the sling wires of Betsy will be transmitted to a data management system for analysis via a well-defined sensor network 6.

i High-performance sensory system

Eight sets of vibrating wire displacement transducer were installed onto all of the sling wires suspending Betsy (as labelled under WR, WL and WT in Fig. 6). Any deformation on the slings will affect their tension and the actual extent of change can be determined accurately by measuring the change of strain via the transducers.

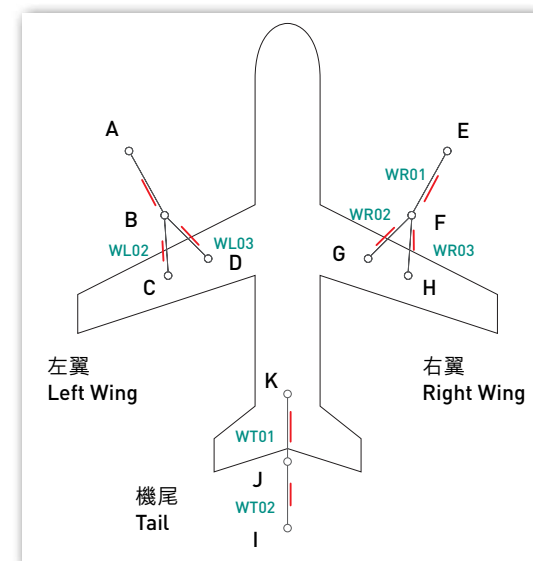
其實與懸索的鋼物料屬性吻合，在靜止的展示模式，及組件的動態負載微不足道的情況下，懸索的應變讀數因應溫度上升而下降。據此，館方引入數據標準化程序，處理數據，從而測量懸索因懸吊 Betsy 而產生的實際變形程度。

數據經過標準化處理和分析後，顯示 Betsy 的懸吊系統極度穩定，沒有任何結構退化或損傷的早期迹象。連同每六個月對其他部件（如鈎環、蓋螺栓、錨板）進行目測的結果，館方現時有信心，確保整體組件的結構安全。

加護 Betsy

Betsy 是香港科學館其中一項永久藏品，其結構完整程度一直以來受到館方高度的關注。由於 Betsy 與國泰航空之間的連繫和關聯，館方可借助國泰工程團隊提供的技術支援，為退役的 Betsy 製訂分區檢查計劃。該計劃參考國泰航空 747-400 航機的維修時間表和 DC-3 的技術規格而製訂，包括一個為期 20 年的分區檢查方案，每五年為 Betsy 的結構狀況進行檢測。

國泰航空工程師於 2011 年（第零年）為 Betsy 於相關的內部和外部範圍，進行首度航機檢測，集中深入檢查所有結構組件，包括降落架、機身、引擎機艙、引擎和機翼等。檢測發現機身內出現小範圍、輕微而穩定的鏽蝕，但 Betsy 的整體結構狀況可說是滿意的。



ii Data transmission and acquisition system

The SHM system is equipped with a cable network for transmission of data as well as a data-logging unit to capture and store all technical data collected from all sensors.

iii Data visualisation, management and analysis system

A PC server is connected to the data logging unit to facilitate system configuration, data interpretation and analysis. An on-line data visualisation module has been devised so that the engineers, curators and conservators are able to observe the real-time performance of all sensors and examine if there is any anomaly on the readings. The data visualisation module is equipped with a user-friendly interactive interface showing the real-time data in form of graphical plotting.

Results and Findings

Since the commencement of the continuous SHM programme for Betsy in 2011, it was observed that the data collected had varied with the temperature of the gallery resulting in a typical temperature variation pattern. The variation is in fact in line with the material properties of the steel sling wire that, under a static mode of display with minimal dynamic loading introduced by the structure, strain reading decreases when temperature increases. Hence, a data normalisation process was introduced to uncover the actual degree of deformation of sling wires due to the genuine change of suspending Betsy.

Based on the analysis and interpretation of the readings after data normalisation, it can be concluded that the suspension system of Betsy is extremely stable without any early sign of structural failure. In conjunction with the visual inspections of other accessories (e.g. shackles, cap bolts, anchor plates, etc.) conducted every six months, the Museum is now confident about the overall structural stability of the gears.

6 監測 Betsy 的傳感器位置 (WL01-03 在左翼，WR01-03 在右翼，WT01-02 在機尾)
Location of transducers monitoring Betsy (WL01-03 for left wing, WR01-03 for right wing and WT01-02 for tail)

邁向新紀元

失去 Niki 已是無法挽回的事實，亦為許多航空專家、業界人士和飛行專家帶來遺憾，特別是與國泰航空一起成長，見證其發展的朋友。踏入 21 世紀第二個十年，隨着現代生活的所需和創新，社會持續現代化和科技不斷進步，但與此同時，許多歷史文物均遭時間洪流淘走，雖然令人心碎，卻是意料之內。縱使現已複製 Niki，她卻不盛載舊日難忘旅程的回憶，亦不是 Betsy 的真姊妹。

這酸楚的體驗促使香港科學館館長和修復人員努力不懈地保存這件年逾古稀的文物，除展示她本身的歷史外，也呈現她在香港航空歷史上所留下的特殊地位。毫無疑問康樂及文化事務署自始以來一直竭盡所能保存 Betsy，否則她將隨時間消逝，步其姊妹 Niki 的後塵。投放在 Betsy 的管顧，充分反映了康樂及文化事務署對文化保育傳承的長遠承擔和付出。香港科學館自 2011 年 1 月起推行積極主動的管顧 Besty 方案後，喜獲轉變所帶來的得益，包括提升 Betsy 整體穩定程度，無須妨礙參觀，省卻零件的更換，從而節省了不必要的開支。

Betsy 現時在香港科學館俯瞰以交通為主題的展區，於博物館擔當新角色，展開意義非凡的新生。「博物館藏品擁有聯繫不同時空的人和事的潛能」（Herle, 2012），Betsy 不單可以重拾其黃金歲月，延續過去的傳奇，亦成為所有參觀者連繫香港航空業的輝煌歷史的重要聯繫和憑證。

縱使在保存過程中湧現連串複雜的技術問題，跨範疇的合作讓不同界別的專業人士，如復修人員、工程師、學者、以及科學家同心協力，為這架傳奇航機的檢測、保養維修策略創造新的一面，規劃更可靠、符合成本效益及可持續發展的方案。

Additional Care to Betsy

As a permanent collection item of the Hong Kong Science Museum, Betsy's overall structural integrity is always of prime concern to the Museum. With the connectivity and subtle relationship between Betsy and Cathay, the Museum is privileged to be able to tap technical support from Cathay's engineering team for the formulation of a zonal inspection programme specifically designed for decommissioned DC-3 aircraft. The programme is established with reference to Cathay Pacific's Boeing 747-400 Aircraft Maintenance Schedule (AMS) as well as the technical specifications of DC-3, which includes amongst others, a 20-year cycle zonal inspection to be conducted every 5 years for monitoring Betsy's structural condition.

Focusing on all structural members on-board including landing gears, fuselage, nacelles and engines, wings, etc., the first aircraft inspection for Betsy was conducted by Cathay's engineers in 2011 (i.e. Year 0) with detailed inspection of both interior and exterior of the concerned areas. While small areas of minor yet stable corrosion was noted inside the fuselage, the overall structural condition of Betsy was found to be satisfactory.

Into the New Era of the Century

The irrecoverable loss of Niki is indeed regretful to many aviation buffs, aircraft gurus or flight specialists, in particular to those who have grown up with Cathay Pacific and witnessed its development. Though somewhat heartbreaking, the story is not unpredictable as many kinds of historical objects have been wiped away in the torrent of times as the world steps into the second decade of the 21st century when social modernisation and technological advancement are prevailing and have responded to contemporary needs and late innovations. Notwithstanding that Niki is now replicated, it is never the sister of Betsy, never the Niki which had embedded in it a large amount of memorable journeys in the bygone era.

In light of the sour experience, curators and conservators at the Hong Kong Science Museum have all along been pressing ahead with the preservation of the septuagenarian beyond her present as a heritage showcasing not only the history of her, but also what she has penned into the aviation history of a Hong Kong based airline company. It is beyond shadow of a doubt that LCSD has thrown in every chip to safeguard Betsy since the very start, or she would have followed the footsteps of her sibling, Niki, with the passage of time. The provision of care invested on Betsy has indeed reflected on the commitments and obligations that LCSD has undertaken in the long journey of cultural heritage conservation. With the implementation of the proactive approach since January 2011, the Science Museum has been able to reap the benefits arising from the transition of the approach in caring for Betsy, which includes: enhancement of Betsy's overall stability, causing

現時許多人並不認同博物館收藏和展示實物，錯覺地以為可以透過閱讀書籍、網上搜尋或欣賞歷史圖片就學習到歷史。事實上「在參觀者面前展示實物，絕對是強而有力的工具，展示其社會價值，讓參觀者直接感受，從而跟歷史產生緊密溝通」（Lowenthal, 1985）。

大家如有機會到訪香港科學館，請抬頭欣賞 Betsy，她的體積、外貌、特色、以至引擎的氣味都在訴說非筆墨所能描繪的故事。大家可以近距離沉醉在 Betsy 的魔力之中！

no disturbance to visitations and saving of unnecessary expenses on replacement items.

Now overlooking a zone themed on transportation in the Hong Kong Science Museum, Betsy has embarked on a new meaningful stage of her second life with a new role in the museum. While “artefacts in museum collections have the potential of connecting people and events over time and space” (Herle, 2012), Betsy is not only being able to recapture its golden age and mythical past, but also serves as a testimony and an important tangible link to Hong Kong's glorious past in aviation industry for all visitors.

Despite the surge of a series of complex technical problems in the course of conservation work, the multidisciplinary collaboration and concerted efforts from a wide range of professionals including conservators, engineers, scholars, scientists, have brought a new dimension to the inspection, maintenance and repair strategy for the legendary aircraft in a more reliable, cost-effective and sustainable way.

While many people nowadays challenge the need of collecting and hence displaying real objects in museums, and have an illusion that history can be learnt through reading books, web-searching or browsing historical photographs, “the display of a real object in front of visitors will absolutely be a piece of powerful tool to demonstrate its social value and provide an unmediated impression so that visitors will be able to have very close communication with history” (Lowenthal, 1985).

Next time when you visit the Hong Kong Science Museum, please raise your head and look up, Betsy's size, appearance, features on-board and even the smell from the engines will have more than the linear use of conversational words can tell. Draw near, immerse and feel the magical power of Betsy for yourself!

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從香港藝術館所藏的五幅歷史繪畫看饒宗頤教授的「五重證據法」

Professor Jao Tsung-I's "Quintuple Evidence Method" — Based on a Collection of Five Historical Pictures of the Hong Kong Museum of Art

劉鳳霞博士 Dr LAU Fung-ha, Lesley

總監 | 藝術推廣辦事處
Head | Art Promotion Office

饒宗頤教授 (1917 -) 是華學研究的巨擘，在文史哲、宗教、古文字學、敦煌學、方志、中外文化關係等等，以及書畫藝術和古琴音律不同領域中，皆成就卓著或自成一家，而其中較少被提及的還有饒教授別樹一幟的研究方法學「五重證據法」。筆者有幸親炙饒師門下，面聆警欬，受老師「五重證據法」的啟發，嘗試以此方法學的框架，套入圖像歷史研究之中，以豐富研究內容的層次感及維度。本文嘗試透過香港藝術館所藏的五幅「歷史繪畫」作為引子，並對比中西文獻資料，從而探究近代中國的通商口岸文化及歷史。本文不揣譾陋，偏頗之處，誠望方家斧正。

Professor Jao Tsung-I (1917-) is world renowned master in Chinese classical studies, covering epigraphy, etymology, historiography, paleography, Dunhuang studies, archaeology, history of religion, and the study of local gazettes, sino-foreign cultural relations etc., as well as other areas such as Chinese calligraphy and painting and Guqin temperament. One of the areas less mentioned is his unique research methodology of “Quintuple Evidence”. I am fortunate to learn from Professor Jao as his student and inspired by his “Quintuple Evidence Method”. I attempted to apply the framework of this methodology on the research of pictorial history to substantiate the layers and dimensions of my own research content. Perhaps this essay may tend to be shallow. My attempt is to explore the history of China’s trade port culture in the modern era through introducing five pieces of historical pictures in the collection of the Hong Kong Museum of Art and contrasting Chinese and Western documentary information.

五重證據法

國學大師王國維 (1877 - 1927) 於 1920 年代中為古史論證研究提倡了「二重證據法」，饒教授其後逐步推演至「三重證據法」及「五重證據法」。而饒教授的「五重證據法」主要是針對甲骨文及金文等文字學的研究。五重證據法首先分為「直接證據」和「間接證據」兩個部分，直接證據再分為「文獻」及「實物」兩類；而第一至三重證據法歸直接證據部分，第四及五重證據法歸間接證據部分。概括而言，第一重證據法及第二重證據法是指文獻中的「經典材料」及「甲骨金文材料」，第三重證據法是指實物中的「考古學資料」，第四重及第五重證據法分別指「民族學資料」和「異邦古史資料」。所謂「五重」就是三重直接證據法加上兩重間接證據法，「三重證據法」以直接證據為重點，範圍是直接相關的研究材料，研究結果聚焦在縱向性的中軸線上；然而，加上兩重的間接證據，便把研究範圍橫向擴闊。

多重的證據法旨在令研究可從更寬廣的角度去發掘主題重心和旁及的資料，比較同時代的本國及異邦文獻與文化的異同與互動。饒教授這套研究方法原為推動及深化古文字學等重大領域的研究方法，筆者斗膽借用其精神及方向，試用於早期近代口岸文化歷史及中國外銷畫的研究上，雖不能完全依據原本的五重證據法對古史研究的處理，但仍然以「直接證據」和「間接證據」作為框架，輔以西方同期的資料作比較及導向。以下粗略地選了一些例子，特別是透過香港藝術館所藏的兩幅由廣東畫匠所繪的外銷畫及另外三幅洋人的版畫，旨在說明中外圖像資料與文獻歷史如何互補。

Quintuple Evidence Method

Wang Guowei (1877-1927), the master of Chinese culture, proposed the methodology of “Double Evidence” for research on ancient history in mid 1920s. Professor Jao made furtherance on this basis to propose “Triple Evidence Method” and “Quintuple Evidence Method”. Professor Jao’s “Quintuple Evidence Method” mainly focuses on academic research of oracle bone script and ancient bronze inscriptions. “Quintuple Evidence Method” is first divided into two parts: “direct” type of evidence and “indirect” type of evidence. Direct evidence is further divided into two kinds: “paper sources” and “underground sources”. The single to triple evidence belong to direct evidence, while the Quadruple to Quintuple Evidence Method belong to indirect evidence. Overall speaking, the single evidence and double evidence refer to “classic materials” and “oracle bone script and bronze inscription materials” of documents, and triple evidence refers to the “archaeological materials” of underground sources, while the Quadruple and Quintuple Evidence Method refer to “anthropological sources” and “ancient historical sources of other countries” respectively. The so-called “Quintuple Evidence Method” combines three levels of direct evidence and two levels of indirect evidence. The first three Methods are centred around direct evidence which are directly related research materials. Together with the last two Methods of indirect evidence, the scope of research and findings hence expands extensively through this methodology.

The aim of multiple evidences is to enable the discovery of the theme of a research and related information from a broader perspective, and to compare the similarities, differences and interactions between ancient Chinese and foreign documents and cultures of the same era. This research methodology of Professor Jao originally aims to promote and deepen the research methods for major areas such as palaeography. I boldly borrowed his spirit and direction and attempted to apply it on the research of port culture in the modern era with Chinese export paintings. Despite that I am not processing the ancient historical research in this essay, I have still used “direct evidence” and “indirect evidence” as a framework for comparison and orientation complemented with western information of the same era. Some examples have been roughly selected below. By particularly viewing two Chinese export paintings of Guangdong painters and three prints by Westerners from the collection of the Hong Kong Museum of Art, I attempted to explain how Chinese and Western pictorial information and documentary history are mutually complementary.

一、「直接證據」中的本土文獻材料： 廣州十三行外貿與手工藝商品

清初嶺南文人屈大均 (1630 - 1696) 在其《廣東新語》中已提及廣州 (Canton) 海貿之盛，稱之為「天子南庫」。¹ 至乾隆二十二年 (1757)，清廷頒令「一口通商」政策，進一步使廣州成為一個繁華的通商口岸，這個濱海城市帶動近代中國與西方世界接軌，並成為洋人來華經商、傳道、以至行軍的集中地。當時廣州依靠外貿為生的人口為數極多，時任兩廣總督的慶復於乾隆七年 (1742) 二月初三曾呈上奏摺：

廣東一省地窄民稠，環臨大海。小民生計艱難，全賴海洋貿易養贍資生……就粵而論，藉外來洋船以資生計者約計數十萬人……粵東一省，舵水萬人，皆食外域米糧，各謀生計……²

既然有數十萬人力以海貿營生，可以推斷有關的外銷商品亦種類繁多。廣州是「海上絲綢之路」及「海上瓷路」始發港之一，除絲綢及瓷器外，還有大量茶葉及外銷工藝美術品。清廷把廣州城外珠江邊一片小土壤闢作歐美商人的商館區，名曰「十三行」，規限夷商不能到其他地方活動。

按梁廷枏 (1796 - 1861) 所修的《粵海關志》之〈歷年夷船來數附〉所記，自康熙至道光年間 (約 1685 - 1838)，來華的商船是數以千計之驚人數量，³ 可以想像出口外銷貨物之多。在此期間，廣州十三行這片錨地及夷館區，華洋雜處於市井闐闐間。「一口通商」維持了八十多年直至鴉片戰爭，而十三行後期的景況可見欽差大臣林則徐在道光十九年 (1839) 的描述：

照得省城十三行夷樓，建於乾隆年間，從前原止在澳夷人，偶因貿易事宜來省

1. Local Documentary Materials of “Direct Evidence”: Foreign Trade and Handicraft Commodities of the Foreign Factories of Canton

During the early Qing dynasty, scholar Qu Dajun (1630-1696) had already mentioned the thriving seaport trading of Canton (present-day Guangzhou) in his work *Guangdong Xinyu*, calling Canton “the Emperor’s treasury in the South”.¹ In the 22nd year of Qianlong period (1757), the Qing court implemented the “Canton System” policy, which further facilitated Canton to become a prosperous foreign trading port. This port city drove the interconnection between China and the Western world, and became the centre for Westerners to come to China to trade, having missionary work and even military endeavours. At that time, foreign trade supported the livelihood of many people. Qing Fu, the Viceroy of Guangdong and Guangxi at the time, submitted a report to the Emperor on the third day of the second month in the seventh year of Qianlong period (1742) that:

*Guangdong Province occupies a small area with dense population and is located near the sea. Making a living is difficult for the citizens, but by seaport trading they could make a living. In Guangdong, about several hundred thousand people make a living through foreign trade...*²

Since there were thousands of people making a living by seaport trading, inference can be made that there was a wide range of foreign trading commodities. Canton was one of the originating ports of the “Maritime Silk Road” and the “Maritime Porcelain Road”. Apart from silk and porcelain, there were also a lot of tea trade and crafts for export. The government set a small piece of land by the waterfront of the Pearl River outside the city wall for European and American traders to set up trading halls called “factories”. These foreign factories, known as the “Thirteen Hongs” in Chinese, restricted foreign traders to trade only there.

According to the description in “Statistics on foreign sea vessels” in *Yue Haiguan Zhi* of Liang Tingnan (1796-1861), during Kangxi and Daoguang period (around 1685-1838), an astonishing number of thousands of traders’ vessels came to Canton³ which meant that the volume of goods for foreign trading was massive. During this period, Canton became the

暫住。嗣是夷船日益增多，各夷人常川在省，與民人交易往來，逮至鴉片盛行，奸宄謀利營私，弊端百出，以致夷館開有後門，四通八達。其前門，舊有柵欄，禁止漢人不准進內，自回祿後，不復再建。且附近之新豆欄、同文街、聯興街、靖遠街等處，市廛稠密，闐闐雲連，外以售賣各項貨物為名，實則勾串奸夷，恣為不法，如窩口及寫字、快蟹等館，皆在其中，晝伏宵行。形同鬼魅……⁴

二、「直接證據」中的實物材料： 中國外銷畫與洋畫的「圖像歷史」

中國外銷藝術品依附歐美的東方海貿而發展，鼎盛期為十八至十九世紀，其中包括大量由廣州畫匠所繪製的外銷畫，⁵ 中國外銷藝術品是一種工藝性很強的商品，主要是專為當時西方人的口味而製作。若從藝術質量去評價，因為是坊間畫匠所作，故一般水平不高。可是，外銷畫的題材卻包羅萬有，包括民間風俗、山川風光、各行各業，以及神話宗教等等，這種圖像紀錄正是傳統水墨畫所沒有的。此外，當時不少來華洋人亦藉著寫生把沿途風光地貌及風土人情記錄下來。而很多這些中外圖畫仍然保存於世界各地的圖書館、資料檔案庫、博物館及私人收藏中。香港藝術館的「歷史繪畫」皮藏亦有幸藏有過千幅這段時期的外銷畫、洋畫及地圖等，其中外銷畫及洋畫的主題亦是種類繁多，為亞洲區最重要的相關收藏之一。

only centre for sino-foreign exchange. The “Canton System” policy lasted over 80 years until the breakout of the Opium War. As to the later scenes of the foreign factories, reference can be made according to the description by the Imperial Envoy, Lin Zexu, in the 19th year of Daoguang period (1839):

*The Thirteen Hongs at the provincial capital were built during the Qianlong period, where foreigners who stayed in Macau occasionally stayed temporarily in Canton to trade. Later the arrival of number of foreign vessels increased, and more foreigners stayed in Canton and exchanged with local traders. When opium became popular, they profited with their sleazy business and malpractice, so there were backdoors leading to various directions in these factories. In the front door, there were originally fences to prevent Chinese people from entering. However, after a burnt down, the fences were no longer rebuilt. Hog Lane, New China Street, Lianxing Street, Old China Street were interwoven, which was a bustling area famous for selling all kinds of goods, but in fact people were making unlawful deals with foreigners in places... They seemed normal during the days but haunted at nights...*⁴

2. Actual Object Materials of “Direct Evidence”: “Pictorial History” of Chinese Export Paintings and Western Paintings

Chinese export art developed along the trade with Europe and America. It was thriving during the 18th and 19th centuries. Voluminous works of Canton painters were exported.⁵ Chinese export art was commodities of fine craftsmanship, pinpointing the preferences of Westerners that time. Judging by their artistic quality, as works were produced by common painters, the quality was generally not very high. However, there was a variety of themes of export paintings, including folk customs, geography and natural scenery, various trades and businesses, as well as legends and religion, etc. These paintings recorded what conventional Chinese paintings did not. In addition, many foreigners who came to China captured the natural scenes and local conditions through sketching. Many of

¹ 《廣東新語》提及廣州外貿之盛：「……歲不下十餘舶，豪商大賈各以其土所宜相貿，得利不貲，故曰金山珠海，天子南庫」。見（清）屈大均：《廣東新語》卷十五《黷貨》（北京：中華書局，1985 年 1 版 4 刷），頁 432。

In *Guangdong Xinyu*, the thriving foreign trade in Canton was mentioned, “...there were no fewer than a dozen vessels. The traders trade with goods they brought and make profits. Therefore Guangdong was called ‘Gold Mountain Jewel Sea’, and ‘the Emperor’s treasury in the South’.” See Qu Dajun: *Guangdong Xinyu*, Volume 15 “Loans” (Beijing: Chung Hwa Book Co. Ltd., 1985, 1st Ed, 4th printing edition), p. 432.

² 《史料旬刊·朝外洋通商案·慶復摺》（北平：故宮博物院文獻館，1930-1931），頁天 803 一天 804。

Historical materials bi-weekly - Cases on business with foreign traders – Submitted by Qing Fu, (Beiping, Literature Library of the Palace Museum, 1930-1931), pp. Tian 803-Tian 804.

³ （清）梁廷枏：《粵海關志》卷 24 《市舶》。

Liang Tingnan: *Yue Haiguan Zhi*, Volume 24 “Ships”.

⁴ （清）林則徐：〈諭十三行附近應築牆設柵妥議稟辦札〉，《林則徐集》（北京：中華書局，1963），頁 98。

Lin Zexu: “Discussion paper calling for the building of fences near the Thirteen Hongs”, *Lin Zexu Collections* (Beijing: Chung Hwa Book Co. Ltd., 1963), p. 98.

⁵ “Export Painting” 譯作「外銷畫」，“Trade Painting” 譯作「貿易畫」，兩者均由英文翻譯而成。意思是這類中國畫是專門外銷出品或因為 “China Trade”（「中國貿易」）而引起的，所以叫「貿易畫」。而 “Export Painting” 專指中國畫匠的商業畫，“Trade Painting” 則包括洋畫。

These paintings are usually called “export painting” or “trade painting”. The former was produced specifically for export and particularly referred to commercial paintings by Chinese painters. The latter, including Western paintings, named as “trade painting” because of China trade of that time.

香港藝術館藏有五幅《剃頭匠》，⁶ 分別由十九世紀的中西畫家所繪畫。兩幅外銷畫傳由著名廣州外銷畫家庭呱⁷（約 1809 - ?）所繪，描寫一位剃頭匠小販扛著工具的模樣^{1 2}。而另外三幅由洋人所製的版畫，⁸ 第一幅畫類似庭呱的《剃頭匠》，剃頭匠扛著工具沿街叫賣，背後的路旁還有另一個剃頭匠正在為客人理髮³。原畫由著名英國來華畫家托瑪斯·丹尼爾（1749 - 1840）及威廉·丹尼爾（1769 - 1837）兩叔姪所繪。其餘兩幅為同一畫家及版畫家所製，第一幅畫中有四個剃頭匠同時為坐在小凳上的客人理髮，陣容頗見鼎盛⁴！第二幅中有一位剃頭匠正為客人理髮，看似另一個客人則在旁等候⁵。兩幅畫後見帆光塔影，說明是珠江河岸旁的景色。此組畫由巴厘亞（生卒不詳）所畫，法國版畫家布賴（活躍於十九世紀）製成設色石版畫。

這五幅畫基本上為廣州當時的路邊頭匠提供了圖像歷史。只是，清代男性依滿族習慣剃髮留辮，剃頭是平凡百姓的日常生活事物而已，為甚麼中西畫家均描繪剃頭匠呢？

三、「直接證據」中的實物材料： 外銷畫上的「文字歷史」

中國外銷畫的題材廣泛，在攝影術未帶到東方以前，外銷畫不啻是十分珍貴的「圖像歷史」。除圖像以外，頗多外銷畫畫上均帶有中文及外文的題識，以解釋圖中事物；中文一般以墨書寫，英文解釋則多用鉛筆書寫。

these Chinese and foreign pictures are still being kept in libraries, archives, museums and private collections all over the world. The Historical Pictures collection of the Hong Kong Museum of Art also consists of over a thousand export paintings, Western paintings, drawings, prints and maps from that period. These works done by Chinese and Western painters are of various themes and it is one of the most significant collections in this field in Asia.

The Hong Kong Museum of Art has five paintings and prints of *The Barber*,⁶ done by Chinese and Western artists in the 19th century. Two export paintings said to be painted by the famous painter of export paintings in Canton, Tingqua (around 1809 - ?),⁷ portrayed a barber who carried his tools around.^{1 2} The other three are prints made by Westerners.⁸ The first one looks similar to Tingqua's *Barber*. The barber was carrying his tools on the street while another barber behind him was serving a customer.³ The original work was painted by a famous British painter who came to China, Thomas Daniel (1749-1840) and his nephew William Daniel (1769-1837). The other two prints were made by the same artist. In the first print, it was an interesting scene when four barbers were serving their customers who sit on small stools.⁴ In the second picture, a barber was serving a customer while another was waiting aside.⁵ At the background, there were sails and a pagoda which proved that it was a waterfront scene of the Pearl River. This set of paintings was done by Barrier de L (years unknown), and a version of coloured lithograph was made by a French printer Auguste Bry (active in the 19th century).

These five paintings and prints basically provide pictorial history of the barbers working along the roadside in Canton during that time. However, in the Qing dynasty, men were still used to the Man ethnic habit of shaving their heads and keeping a braid. Therefore, it was common as a daily activity. What a coincidence that both Chinese and Western artists of that time chose barbers as their subject.

⁶ 這五幅畫的藏品編號是 AH1980.0004.011、AH1975.0015、AH1964.0109.001、AH1964.0109.003 及 AH1964.0420.021。

The accession numbers of the five paintings are: AH1980.0004.011, AH1975.0015, AH1964.0109.001, AH1964.0109.003 and AH1964.0420.021.

⁷ 庭呱為當時歐美最著名的中國外銷畫家咁呱的弟弟，原名關聯昌，又名廷呱、聽呱、關廷高。外國人稱呼其為「Tingqua」，咁呱別為「Lamqua」。

Tingqua is the younger brother of a painter of Chinese export paintings, Lamqua, who was famous in Europe and America. Tingqua's real name is Guan Lianchang, with aliases as Tingqua, and Guan Tinggao. Foreigners of that time called him Tingqua, and his elder brother Lamqua.

⁸ 原畫應為素描或水彩，其後印製為版畫。製成版畫的原因一般是作廣泛流傳之用，例如作為報紙書刊的插圖，而銅版及石版正是當時歐洲印刷出版圖像所普遍採用的技術。

The original painting should be a sketch or watercolour painting. The reason for rendering it into a print was generally for wider circulation, for example, to be used as an illustration for newspapers or periodicals. Etching and lithograph were common techniques for printing in Europe that time.



¹ 庭呱（關聯昌）
十九世紀 | 水粉紙本
香港藝術館藏 AH1975.0015
圖片鳴謝：香港藝術館
Tingqua (GUAN Lianchang)
19th Century | Gouache on paper
Hong Kong Museum of Art, AH1975.0015
Image courtesy of the
Hong Kong Museum of Art



² 庭呱（關聯昌）（傳）
十九世紀中期 | 水粉紙本
香港藝術館藏 AH1980.0004.011
圖片鳴謝：香港藝術館
Tingqua (GUAN Lianchang)(attributed)
Mid 19th Century | Gouache on paper
Hong Kong Museum of Art, AH1980.0004.011
Image courtesy of the
Hong Kong Museum of Art



³ 托瑪斯·丹尼爾，威廉·丹尼爾
約 1810 | 設色飛塵蝕刻版
香港藝術館藏 AH1964.0420.021
圖片鳴謝：香港藝術館
DANIELL Thomas, DANIELL William
Circa 1810 | Coloured aquatint
Hong Kong Museum of Art, AH1964.0420.021
Image courtesy of the Hong Kong Museum of Art



⁴ 巴厘亞（畫）
⁵ 布賴（刻印）
1841 | 設色石版
香港藝術館藏 AH1964.0109.001 & AH1964.0109.003
圖片鳴謝：香港藝術館
Barrier de L. (drawn);
Auguste Bry (lithographed)
1841 | Coloured lithograph
Hong Kong Museum of Art,
AH1964.0109.001 & AH1964.0109.003
Image courtesy of the Hong Kong Museum of Art

倫敦大英博物館中藏有一套十八世紀的中國外銷組畫，主題是《珠江水道》，此組畫中頗多是一個構圖分繪成兩幅一樣的畫，只是一幅為白描⁶，另一幅為著色⁷，而白描畫下以中文墨筆題識，而著色畫下則以鉛筆英文書寫。其中一對畫描繪一艘中國船，遠方岸邊有一塔，白描畫下以中文墨筆題識為「爬州塔西瓜扁」，⁹ 著色畫下以鉛筆英文書寫“A Chop Boat”⁸及“Saw Whampao Pagoda in background”。¹⁰ 圖文說明圖中船隻中文叫「西瓜扁」，而英文稱“chop boat”。這兩幅畫解決了當時對這種廣州船的中英文翻譯問題。可是，「西瓜扁」與“chop boat”¹¹ 兩詞亦未免有點風馬牛不相及，為甚麼當時如此稱呼這種船？

四、「間接證據」中的本土民族資料： 以中國古籍文獻解讀外銷畫

清代文人筆記中，《浮生六記》十分著名，記載了蘇州人沈復（1763 - 1825）經商時的所見所聞，其中一段是記他在乾隆五十九年（1794）在廣州獲友人邀請遊河觀妓，有如下的描述：

正月既望，有署中同鄉三友拉余游河觀妓……於是同出靖海門，下小艇，如剖分之半蛋而加篷焉。先至沙面，妓船名花艇，皆對頭分排，中留水巷以通小艇往來。¹²

當時的廣州水道縱橫，交通運輸及日常活動依靠各類船隻進行，作為接駁之用的「小艇」形「如剖分之半蛋而加篷」，想正是外形像一片西瓜皮扁扁的蓋在小艇之上的「西瓜扁」。

3. Actual Objects Materials of “Direct Evidence”: “Text History” on Export Paintings

Chinese export paintings covered a wide spectrum of themes. Before photography was brought into the East, export paintings were no doubt a very precious “pictorial history”. Apart from pictures, quite a number of export paintings carried Chinese or foreign language inscriptions to explain the picture. The Chinese explanation was usually written in Chinese ink, while the English one mainly in pencil. In the collections of the British Museum, there is a set of Chinese export paintings from the 18th century entitled *Pearl River Waterway*. In this set of paintings, quite a number of them were painted as two versions upon the same composition. One is a sketch and the other coloured. ⁶⁷ There is a Chinese ink inscription beneath the sketch, and an English inscription in pencil beneath the coloured painting. A pair of paintings portrayed a Chinese boat and a pagoda on the shore far away. Underneath the sketch, the Chinese ink inscription says “Pazhou pagoda, xigua boat (爬州塔西瓜扁)”,⁹ while the English inscription in pencil says: “A Chop Boat”⁸ and “Saw Whampao Pagoda in background”.¹⁰ The Chinese inscription described the boat as a “xigua boat (西瓜扁)” while the English one was a “chop boat”. These two paintings resolved the problem of Chinese-English translation of this kind of boat in Canton. However, “xigua” (literally means watermelon in Chinese) and “chop”¹¹ seem totally unrelated, so why was the boat called those names at that time?

4. Local Ethnic Information of “Indirect Evidence”: Explain Export Paintings with Ancient Chinese Literature

Among the notes of Qing scholars, *Chapters from a Floating Life* is very famous. It recorded the trading experience of a Suzhou scholar, Shen Fu (1763-1825). In one of the sections, he was invited by a friend to a boat ride in Canton in the 59th year of the Qianlong period (1794) which he portrayed as follows:

On the sixteenth of the first month, when the moon was full, I happened to meet three friends from my home district who were now officials at the local yamen.

⁹ 「爬」為錯字。應指黃埔港附近的琶州，而琶州塔是當時中外船隻駛入廣州必經的地標，古代羊城八景之一便有「琶洲砥柱」。

The Chinese word “Pa (爬)” is wrong and should be referring to Pazhou (琶州) near Whampao. The Pazhou Pagoda was a landmark at the time when all vessels entering Canton should be able to see. “Pazhou Pillar” was one of the eight scenes of Canton.

¹⁰ 兩幅畫的藏品編號為 1877.7.14.962 和 1877.7.14.963，1877 年入藏大英博物館。

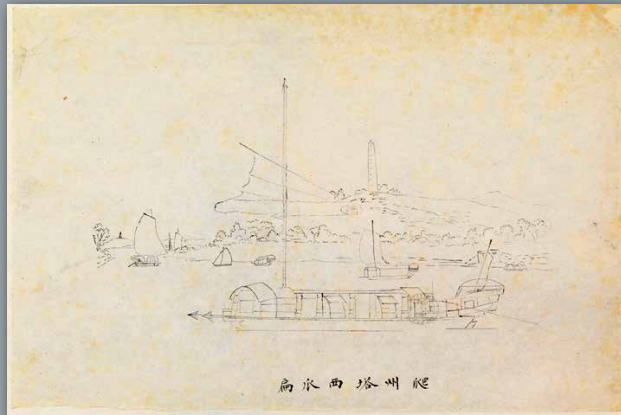
The accession numbers of these two paintings are 1877.7.14.962 and 1877.7.14.963, collected by the British Museum in 1877.

¹¹ “Chop” 一詞一般只解作印鑑或砍剝的動作。

“Chop” generally refers to a seal or the action of chopping.

¹² (清) 沈復：《浮生六記》卷四（上海：上海古籍出版社，2000），頁 96- 97。

For an English translation, see Shen Fu, *Chapters from a Floating Life*, trans Shirley M. Black. (London: Oxford University Press, 1960), p. 41.

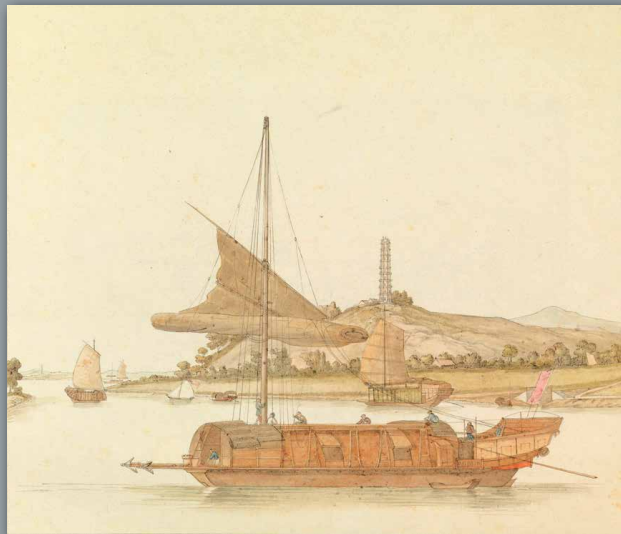


⁶ 畫家佚名
十九世紀 | 水墨設色紙本
大英博物館藏 1877.7.14.962
圖片鳴謝：大英博物館

Artist unknown

19th Century | Ink and colour on paper

The British Museum 1877.7.14.962
Image courtesy of The British Museum

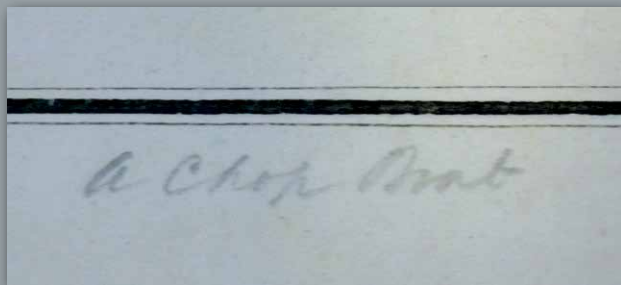


⁷ 畫家佚名
十九世紀 | 水墨設色紙本
大英博物館藏 1877.7.14.963
圖片鳴謝：大英博物館

Artist unknown

19th Century | Ink and colour on paper

The British Museum 1877.7.14.963
Image courtesy of The British Museum



⁸

五、「間接證據」中的異邦歷史資料：以西方文獻解讀外銷畫及洋畫

美國東岸小鎮塞勒姆的菲力浦圖書館，內藏很多早期美國與清廷海貿的手稿及文獻，包括航海日誌、遊記、貿易單據、往來信件、航海地圖，甚至訂貨的布料樣本等。當時有一艘美國商船“Canton”的大班布萊恩·帕洛特·蒂爾登(1781-?)在1815至1819年間曾數次到廣州進行貿易，並寫下一本長達379頁的航海日誌。蒂爾登對在廣州目睹的一切均興致勃勃，並鉅細靡遺地紀錄下來，¹³例如剃頭匠，在其日誌第128頁中這樣記載：

剃頭匠……攜帶架在竹架上的工具及櫟子，散落在街上每處。這些小伙子為了引人注目，會拍打他們細小的鉗子等，發出劈啪聲響……我們每天均看見數以百計在街上營生。

蒂爾登在日誌第247頁亦提及協助交易的廣州翻譯英語水平很低，結果發展出一套獨特的中式「商業英語」。而他對“chop”這個英文字，亦有提及在廣州貿易中的經常被廣泛應用：

“Chop”這個字有很多不同的解釋。“go chop chop”是快點或直接的意思，“go catche chop”指取得批文，“good chop or bad chop”代表好或壞的質量，“put on chop”指裝箱記號，“No. 1 First chop……”指頂級的質量，“chow chow chop”指由廣州去黃埔的最後一艘貨船，內裝零星雜物及行李箱，準備出境時要申請“The Grand Chop”，“Chin Chin or chop stick dinner”代表中式晚宴，還有其他中式新創詞。

*They insisted on taking me down to the river to see the prostitutes... After going out through the Ch'ing Hai Gate, my friends and I stepped into a little boat like an egg cut in half, covered over with a roof of matting, and went first to Shameen, where the floating brothels, called “flower boats”, were tied in two parallel rows, with a clear lane of water down the middle so that small boats could pass back and forth.*¹²

At that time, the structure of water passageways in Canton was like a labyrinth. Transportation and daily activities relied on various types of boats, and the small boats for transferring to flower boats were described as “like an egg cut in half, covered over with a roof of matting”. So the reader can imagine that it was like a piece of flat watermelon skin covering the boat. Thus, the boat is named as “xigua (watermelon) boat”.

5. Foreign Historical Information of “Indirect Evidence”: Explain Export Paintings and Western Paintings with Western Literature

In the Philips Library of Salem, a small town at the East coast of the U.S., there is a good collection of manuscripts and literature about sea trading between the U.S. and China in early times, including logbooks, journals, travelogues, bills and receipts, correspondence, nautical maps and even samples of fabrics for ordering. At that time, Bryant Parrott Tilden (1781-?), the supercargo of an American trading vessel, “Canton”, sailed several times to Canton to trade between 1815 and 1819, and authored a logbook of 379 pages. Tilden was excited about everything he saw in Canton and recorded them in detail,¹³ such as things about barbers. On page 128 of his logbook, he wrote:

Barbers...who carry their shaving apparatus & bench stools, slung on bamboo poles in all directions through the streets...These chaps give notice of their near approach by snapping of their small and...pincers, or sneezers, producing a sort of narrow &...sound...We see hundreds shaved thus in the streets every day.

On page 247 of his logbook, Tilden also mentioned that the standard of the English level of the Canton translators who assisted with trading was low. Consequently, a unique set of Pidgin English was developed. On the English word “chop”, he mentioned that it was widely used in trading in Canton.

蒂爾登的日誌由其親筆書寫，藏在故紙堆中的手稿從未被整理或出版，真實可信性極高。中國人的日常小事，是外國人眼裡的異國風情，趣味盎然，值得大書一筆。其日誌指出了滿街剃頭匠是十三行每日的景象，進一步解構了藏在香港藝術館的五幅《剃頭匠》的內裡含義。而為何「西瓜扁」小艇是“chop boat”，其日誌亦揭示了端倪。

結論

若以中國藝術史的角度去評介外銷畫，也許稍欠可觀，亦略輸水平。然而，套入多重證據互補的框架下，反而梳理出其重點。饒宗頤教授茹古涵今，治學範圍廣博，旨在追求融通之境。表面看似無關之事物，也許暗藏牽繫。香港藝術館所藏的五幅歷史繪畫雖非鎮館之寶，但小品卻具大意義。歷史長河涓涓不壅，每一代學人均戮力重構歷史的原貌。本文粗疏闕漏，祇望拋磚引玉，為嶺南口岸文化的研究補上一小塊拼圖。

Chop, this word has a variety of meanings as go chop chop! Go quick or directly. Go catche chop, To go for a permit, or Custom house order. Good chop or bad chop, Refers to quality. Put on chop, To mark packages, signature & No. 1 First chop...Superior quality excellent, etc. chow chow chop, means what is sent to Whampoa in the last cargo boat for canton, being a mixture for odds & ends, trunks & and when ready for sea we apply for The Grand Chop...Chin Chin or chop stick dinner. Chinese dinner festival & many more such Chinese coined words.

Tilden's logbook was written by himself, and the manuscripts stashed in piles of paper have neither been tidied up nor published. Therefore the content should be highly authentic. Daily activities of Chinese people were exotic and interesting for Westerners, and so they were worth writing about. As pointed out in his logbook, it was a daily scene that barbers were everywhere on the streets outside the foreign factories. This further explained the inherent meaning of the five Barber paintings in the collection of the Hong Kong Museum of Art. As to why Westerners called the small boats “chop boat”, his logbook also disclosed a hint.

Conclusion

Valuing export paintings from the artistic view of Chinese art history may not be much to offer. However, under the framework of mutually complementary layers of evidence, the significance of evaluation can be worked out. Professor Jao is a true scholar with rich knowledge covering a broad spectrum of areas from the ancient to the modern times, and he seeks to integrate knowledge from various fields of study. What looks like trivia may carry profound meaning. The five historical pictures of the Hong Kong Museum of Art may not be its prime pieces. However, they can be significantly meaningful to the study of port culture of South China if examine through the approach of “Quintuple Evidence Method”.

¹³ 菲力浦圖書館手稿編號 656 1815C。原稿為英文，中文為作者的翻譯。
Philip Library manuscript number is 656 1815C.

保育香港具歷史價值的紅磚外牆

Conservation of Historic Red Brick Facades in Hong Kong

伍志和 NG Chi-wo

館長（歷史建築）| 古物古蹟辦事處
Curator (Historical Buildings) | Antiquities and Monuments Office

劉永聰 (MHKICON, MHKIS, ACP, RPS) Sr LAU Wing-chung, Alvin (MHKICON, MHKIS, ACP, RPS)

建築文物保育師 / 建築測量師
Architectural Conservationist / Building Surveyor



摘要

在近百年間，香港經濟發展迅速，不少高樓大廈相繼落成，形成香港現有的城市景觀。儘管如此，我們仍可從「石屎森林」中找到不少建於殖民地時期，並極具歷史價值的紅磚建築物。紅磚外牆是 19 世紀後期至 20 世紀中期，其中一種市區最常採用的外牆設計。

本文將從歷史、技術和理論層面，概述這些具歷史價值紅磚外牆的保養問題，以及歷年來保育方法的範式轉變。我們以前九龍英童學校於 2015 年修復紅磚牆的個案為例，闡釋不恰當的干預如何影響了歷史磚作，並延伸討論在保育歷史磚作外牆所面對的挑戰。希望本文可引起大家對欣賞和保育歷史建築物，特別是磚作外牆的興趣，這對保留香港市區多元的街區景觀尤為重要。

1. 紅磚建築文物行

讓我們先漫步於香港的殖民地歷史，探索紅磚外牆的實例。我們以座落於香港公園的香港視覺藝術中心為起點，橫過花園道至前法國外方傳道會大樓，沿街信步至藝穗會（舊牛奶公司倉庫），再到訪中區警署建築群。

往西走的話，可到香港中華基督教青年會和舊病理學院，繼續西行就是甘棠第和香港大學（馮平山樓和本部大樓）；下山抵達堅尼地城的前西區消防局，再到西邊街欣賞英皇書院和舊贊育產科醫院；返回上環時可途經西港城。

橫渡維多利亞港抵達尖沙咀，可造訪前九廣鐵路鐘樓和舊九龍消防局主樓；再到九龍公園內的舊威菲路軍營建築物，沿彌敦道往聖安德烈堂和前九龍英童學校（古物古蹟辦事處）。

繼續沿彌敦道北走可參觀九龍佑寧堂和加士居道的舊南九龍裁判署（現為土地審裁處）。如此趣味盎然的「紅磚建築文物行」，以在油麻地戲院附近的舊抽水站工程師辦公室（紅磚屋）作結。

Abstract

Over the past centuries, following the rapid economic development of Hong Kong, its urban landscape was shaped by multifarious skyscrapers. Nevertheless, Hong Kong still retains many examples of historic colonial red brick buildings, which was one of the most popular types of facade design in urban areas during the late 19th to the mid 20th centuries.

This paper gives an overview of the maintenance problems and paradigm shift in conservation practice of historic red brick facades from historical, technical and theoretical perspectives. The conservative repairs to the red brick walls of the Former Kowloon British School conducted in 2015 is adopted as a case study to exemplify one of the conservation approaches and techniques applied to historic brickwork with improper interferences and to indicate challenges in sustaining a historic brickwork facade. It is hoped that this paper will stimulate interest in the appreciation and conservation of historic brickwork facade of other alike historic buildings, which is of vital importance in maintaining the varied streetscape of urban Hong Kong.

1. Red Brick Heritage Walk

Let us take a walk through Hong Kong's colonial past, to look for good examples of red brick facades, starting at Hong Kong Park with the Visual Arts Centre, then across Garden Road to the Former French Mission Building, then along to the Fringe Club (the Old Dairy Farm Depot), and move to the Central Police Station Compound.

From here we can go west to Chinese Y.M.C.A. of Hong Kong and the Old Pathological Institute; then further west to the Kom Tong Hall and The University of Hong Kong (Fung Ping Shan Building and the Main Building). Going downhill, we come to the Ex-Western Fire Station in Kennedy Town; then return to the Western Street, to see the King's College and Old Tsan Yuk Maternity Hospital. Going back to Sheung Wan, we then pass the Western Market.

Now crossing the Harbour to Tsim Sha Tsui, where we can check out the Former Kowloon-Canton Railway Clock Tower and Old Kowloon Fire Station. Move along to the Old Whitfield Barracks blocks in Kowloon Park, and over to Nathan Road, where the St. Andrew's Church and Former Kowloon British School (Antiquities and Monuments Office) can be seen.

Going north along Nathan Road we can visit the Kowloon Union Church and Old South Kowloon District Court (now the Lands Tribunal) in Gascoigne Road. The interesting and varied "Red Brick Heritage Walk" would finish at the Engineer's Office of the Former Pumping Station (Red Brick Building), close to the Yau Ma Tei Theatre.

大家可藉此賞析香港豐富多樣的紅磚建築，並了解不同磚作的狀況。

2. 清水磚作的保養

清水磚作是香港其中一種殖民地時期建築物的外牆結構，常見於 1890 至 1950 年期間，可惜現時不少相類的建築已隨時間消逝。自 1960 年代起，公眾對保存香港文物的意識開始萌芽，香港政府於 1976 年制訂《古物及古蹟條例》，藉此保護香港最具文物價值的古蹟。古物古蹟辦事處成立後，許多富文物價值的歷史建築先後被列為法定古蹟，或獲古物諮詢委員會納入歷史建築評級名單，而它們的保養狀況亦受到關注。

儘管如此，在保養本地歷史建築物時，往往因為經費或時間限制、缺乏熟練的工匠，或未有委聘文物專家監工等問題，導致在施工時沒有經常恪守文物維修的慣例。因此，採用不相容的建築物料或以不恰當的方法保養清水磚作外牆的情況亦甚常見，這些保養方法不但沒有改善磚作的狀況，反而會對它們造成損壞。

本文旨在介紹清水磚作的基本保育知識。

3. 保養清水磚作技術的轉變

在二十世紀初之前，雖然當時已開始流行使用波特蘭水泥 (Lynch, 1994)，但石灰仍是砂漿的主要黏合劑。為了加快建築工程進度和減省聘請工匠，以及在水泥公司的積極推廣下，石灰和傳統砂漿技術漸趨式微。

1920 年代，普通波特蘭水泥快乾和較穩固的特性，正好配合本地建造業的迅速發展。業內人士廣泛使用它來修補已損毀的磚作結構，保育問題亦因而衍生：當原有石灰質的填縫物料（犧牲性的填縫物料）因日久而需要被去除，再以非犧牲性的普通波特蘭水泥砂漿填縫物料取代，便會減弱這些磚作的「透氣度」，阻礙當中的水分蒸發。

磚作中的鈉、硫酸鹽、鉀鹽會慢慢地在水中溶解，並逐漸滲至磚面，然後蒸發；同時，在磚面和磚面下結晶的鹽會導致柔軟的磚塊表面朽壞、開裂，及至剝落。

You may now begin to appreciate the wide extent of our red brick buildings in Hong Kong, and you would also have noted the various brickwork conditions of these buildings.

2. Maintenance of Fair Face Brickwork

Fair face brickwork was one of the most popular types of facade for colonial buildings in Hong Kong, especially between 1890 and 1950. A good proportion of such buildings are now slowly but inexorably disappearing. Since the 1960s, public awareness in heritage preservation of Hong Kong began in its embryonic form, and in 1976, the Hong Kong Government enacted the Antiquities and Monuments Ordinance, to ensure that the best examples of Hong Kong's heritage are protected. With the establishment of the Antiquities and Monuments Office, many buildings of outstanding heritage values have been declared as monuments or included on the list of graded historic buildings by the Antiquities Advisory Board and their maintenance condition is being closely observed.

Unfortunately, recommended conservation principles are not always strictly followed in our local heritage building maintenance practices, perhaps due to funding or time constraints, a lack of skilled craftsmen or non-employment of expert supervision. Therefore, incompatible building materials and inappropriate methods are often applied on fair face brickwork facades. Such maintenance practices might worsen the condition of the historic facade, rather than improve it.

The focus of this paper is to introduce a basic understanding of the conservation of fair face brickwork.

3. Changes in Maintenance Techniques of Fair Face Brickwork

Before the early sector of the 20th century, lime remained the principle binder for mortars, although Portland cement was gaining popularity (Lynch, 1994). With the desire for faster construction, employment of less knowledgeable artisans and aggressive marketing by cement companies, these all contributed to the decline in the use of lime and traditional mortar techniques.

With the rapid development of Ordinary Portland Cement (OPC) and its wide use in the local building industry in the 1920s, damaged brickwork was often patched up by use of OPC mortar, which set more quickly and stronger. When the original lime-based pointing (sacrificial pointing) eventually became defective after long use, it was racked out and replaced instead by OPC mortar pointing, which was non-sacrificial in nature and prevented the brickwork from proper 'breathing' and evaporation of trapped moisture.

The sodium, sulphates and potassium salts trapped in the brickwork slowly dissolve in the moisture and seep up to the exposed surface of the bricks for evaporation in the

現時，大多數的大廈維修工程均按照《2012 年版建築物的一般規格》(General Specification for Building, 2012) 進行。該規定建議用作黏合磚牆的砂漿混合物，包括普通波特蘭水泥 + 砂，和普通波特蘭水泥 + 石灰 + 砂，而非僅石灰 + 砂。可是，這些砂漿混合物只是為需達至指定最低抗壓強度的現代磚塊而度身訂造，並不適用於古建築常用的本地低密度紅磚 (Ellis, 2002)。因此，我們仍需確保所使用的砂漿強度必須較磚塊低，好讓砂漿發揮「犧牲性耗損」的作用。

4. 建議採用的保養方法

對磚作結構最常見的一種自然破壞，是「結晶化」（「鹽化」）。當持續不斷的雨水將藏在磚塊和砂漿內的可溶解鹽沖出至磚塊表面，含鹽的水分會在磚面蒸發，導致磚面形成鹽的結晶。

磚作亦會因以下情況受到污染：

- 已存在於磚塊或砂漿成分中的鹽；或
- 外來的鹽，例如上升的地下水或充滿鹽分的環境（如污染或海浪花）

磚塊能否抵抗鹽結晶，是取決於磚塊的硬度和孔隙率 (Richardson, 2001)。但是，即使是最硬的磚塊（例如：工程磚）在同樣的情況下，也可能會在磚面出現白色的鹽粉末斑塊（「鹽花」）。雖然結構上不算已遭損壞，但外觀的影響仍是不容忽視的。

由於我們無法完全阻止鹽在磚作結構中出現，現時我們仍需要採用能發揮「犧牲性耗損」功能的物料，亦即石灰砂漿，以「控制」磚塊朽壞的問題。基於其「透氣度」，石灰砂漿率先吸收具破壞力的鹽，避免附近的磚塊受污染，讓磚塊維持良好的狀態。

當然，石灰、水分和不同的鹽之間會產生不同的化學反應，石灰砂漿最終亦會隨時日慢慢降解、崩碎，最後被沖刷離開磚縫。屆時，保育人員便需要去除殘留在磚縫的舊石灰砂漿，並填補新的石灰砂漿，以延續整個犧牲性耗損過程。

outside air; the crystallisation of the salts, both on and just below the brick surface, cause the soft brick surface to decay, crack and finally flake off (defoliate).

Now, local maintenance projects are mostly carried out in accordance with the General Specification for Building (General Specification for Building, 2012) which includes recommended mortar mixes for bonding brick walls, namely: OPC + sand, as well as OPC + lime + sand, but not for lime + sand only. However, these mortar mixes are tailored for modern hard bricks that are required to meet a minimum compressive strength, rather than the softer local red bricks that were frequently used for old buildings (Ellis, 2002). Care is therefore still required to ensure that the type of mortar specified is weaker than the composition of the bricks being used, so that it can act as the 'sacrificial' material.

4. Recommended Maintenance Approach

The commonest form of natural damage to brickwork is the prolonged action of rainwater leaching out the soluble salts from the bricks and mortar and then evaporating on the surface. This sets up a decay mechanism with salt crystallisation (salination) on the surface of the exposed brick skin.

Brickwork becomes contaminated by:

- salts already within and originating from either the original composition of the bricks or mortar; or
- salts from external sources, such as rising ground water or salty atmosphere (e.g. pollution or sea spray).

The resistance of bricks to salt crystallisation damage depends on their hardness and porosity (Richardson, 2001). However, even the hardest bricks (e.g. Engineering Bricks), if subject to the same conditions, may develop patches of white salt powder on their exposed surfaces (i.e. "efflorescence") which is not damaging but is unsightly.

Because it is difficult to entirely prevent salts occurring in brickwork, it is now necessary to 'manage' the brick decay problem by the introduction of a sacrificial building material, namely lime mortar. Due to its open texture and composition, the lime mortar will absorb the troublesome salts and leave the surrounding bricks uncontaminated and in a sound condition.

Eventually of course, due to the different chemical reactions set up between the lime, the moisture content and the various salts, the lime mortar will slowly decompose, crumble and finally wash out of the joints. It will then be necessary to rake out the remains of the old lime mortar and reinstate the joints with new lime mortar. This will enable the whole sacrificial process to continue for another cycle.

When inappropriate cement mortar jointing occurs in a historic facade, it is necessary to hack-out the existing jointing and replace with lime mortar joints that matches the

若具歷史價值的外牆曾以水泥砂漿填縫，我們便需要移除現存的填縫物料，並使用與該外牆顏色、質感和外觀相容的石灰砂漿填縫物料取替。(SPAB, 2016)

5. 防水塗層

時至今日，為了防水和方便日後維修保養，不少已損壞的清水磚作外牆都被髹上油漆塗層。可是，這些塗層卻阻止水和空氣滲透（即不透氣），令已存在於磚牆內的水氣無法釋出 (Constantinides, 1995)。塗層之下最後會出現間質凝固，形成難看的氣泡、鹽沉積（鹽花）、以至油漆開裂或剝落。更甚者，這些「高科技」塗層極為堅硬，在要移除塗層而不損毀磚塊脆弱表面的大前提下，往往需要動用專門的壓力噴霧或蒸氣清潔器材。

至 1980 年代中期，本港常見的塗層加入了聚丙烯。此物料令塗層更易於應用，改良了塗層與基底部分的接合和減低開裂程度，廣泛地影響了磚作外牆的保養維修方法。

同時，水硬石灰的運用使波特蘭水泥漿更廣泛地用作塗蓋，並使混入顏料的白色水泥更普及地用作飾面。部分水泥和礦物顏料具適當的滲透性，使滲入或凝結積聚在塗層下的水分可逐漸蒸發消散。

由於現代的不滲透性油漆塗層使磚作的濕氣無法消散，鹽分亦會積聚於塗層下。這些積存在不滲透塗層下的水分會導致鹽結晶，對磚作表面造成損壞。

6. 流行的保養方法

潮流會隨著時間和地點而變更，而保育方式亦如潮流般不斷演化。例如，為了「活化」磚牆的外觀和改善防水功能，香港於 1960 至 1980 年代時興以水泥批盪掩蓋被視為「過時」的紅磚牆。

過去十多年，市場又出現了一種具環氧特性的磚塊維修系統，目的是恢復個別已受損清水磚塊的「原貌」。但目前普遍的文物保育理念是「現狀保存」，即保留原物料及防止衰壞。

colour, texture and profile of any surviving contemporary brickwork lime pointing (SPAB, 2016).

5. Weatherproof Coatings

Until recently, a common maintenance practice was to apply a paint coating on top of the defective fair-faced brickwork facade, for waterproofing purpose and supposed easy future maintenance. Unfortunately, these coatings were impervious to both water and air (i.e. “non-breathable”) and any moisture vapour present in the brick wall would be trapped (Constantinides, 1995). This ultimately caused interstitial condensation beneath the paint coating, resulting in unsightly bubbles, salty deposits (efflorescence), cracking and flaking of the paint. Adding to the remedial problem, the composition of these “high-tech” coatings was extremely hard and they required specialist pressure spray or steam cleaning to remove, without damaging the soft skin of the bricks.

By the mid-1980s, the addition of acrylic polymers resulting in a coating which is easier to apply, better bonded to the substrate and more resistant to crazing were also commonly supplied in the local market which widely affected the maintenance approach on brickwork facade.

In the same period, experience with hydraulic lime naturally prompted the use of Portland cement slurries as masonry paints, and eventually the development of more decorative finishes using white cement with pigments. Some cement and mineral-based paints are reasonably permeable, and any penetration or condensation moisture accumulating beneath the coating is able to disperse slowly by evaporation.

The substitution of modern impermeable paint coatings can cause deterioration, as many do not allow dampness trapped within the brickwork to dry out and salts can accumulate behind the coating. Moisture trapped behind the impermeable coating causing salt crystallisation thus disrupting the surface of brickwork.

6. Fashionable Maintenance Approaches

Conservation is not immune to the vagaries of fashion — fashion that varies with both time and place. For example, it was fashionable in the 1960s to 1980s to cover up “unfashionable” red brick walls with a cement-based rendering in order to “revitalise” the external appearance and also improve waterproofing.

In the past 10 years, the introduction of proprietary brick repair systems involving epoxies, can enable individual decayed fair face bricks to be “restored” to almost their original appearance. By contrast, a current heritage philosophy is to “conserve as found”, i.e. to keep the original material and prevent any further deterioration as far as practicable.

It is noteworthy that some fashionable maintenance

值得注意的是，一些時興的保養方法可能對歷史構件造成長遠的不良影響。

7. 比較不同修復原則的保養方法

「巴拉憲章」和「中國文物古蹟保護準則」是有關文物保育的國際憲章，提供哲學性的框架及指引，作為保育及管理具文化價值地點之用。這兩份憲章均在本地的保育項目中被廣泛應用。

保育概念是應該貫徹於歷史建築物的維修保養過程中，對建築構件的干預必須按照保育原則審慎進行。有關保育憲章的決策標準撮要如下：

- 原真性－歷史構件的設計、物料和工藝的真實性；
- 最少干預－盡量減少對歷史構件的干預是最具經濟效益的維修方法；
- 可還原性－這些干預應該可以還原，讓歷史構件回復舊貌；
- 犧牲性耗損－維修物料應比歷史物料更快耗損；及
- 可辨認性－容易辨認所有維修或更換工程。

但是，大部分的文物保育憲章和理念均偏重理論，未必能就個別情況提供充足的實踐指引。因此，我們還需要參考由國際文化財產保護與修復研究中心、國際古蹟遺址理事會及英國文化遺產等組織所撰寫的技術文件。

approaches may adversely affect the condition of the historic fabric in the long run.

7. Comparison of Maintenance Approaches under Various Restoration Principles

The Burra Charter and the Principles for the Conservation of Heritage Sites in China are useful international conservation charters providing philosophical frameworks and guidance for the conservation and management of places of cultural significance. Both charters are widely adopted in local conservation projects.

Conservation concepts should be well observed throughout the lifelong maintenance process of historic buildings. Physical intervention in the fabric should be managed meticulously by those fundamental principles. Decision-making criteria linked to the conservation charters are summarised as the following:

- Authenticity - The truthfulness of historic fabric in terms of design, material and craftsmanship;
- Minimum intervention - Minimum interference into the historic fabric has the advantage of being the most economical way of carrying out the repair work;
- Reversibility - Interventions should be reversible as they were capable of being withdrawn leaving the fabric as it was;
- Sacrificiability - Repair mixes were created to decay faster than the historic material; and
- Identifiability- All repair/replacement work should be easily identified.

However, most heritage conservation charters and philosophies are very theoretical and may not provide sufficient practical advice for guidance in individual cases; then we need to turn to the technical papers produced by International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM), International Council on Monuments and Sites (ICOMOS), English Heritage, etc.

以下表列將比較不同磚作的維修方法 (Lau, 2010)：

An example table for comparing different repair approaches to brickwork is as follows (Lau, 2010):

好 Good					差 Poor						
1		2		3		4		5		6	
保存原則 Conservation Principles	六種常見的維修方法 Six common repair approaches										
	小塊填補 Patch-up Repair	重砌 / 以新的磚塊更換 Re-build/Replace by New Bricks			油漆塗層 Paint Coatings		以磚粉改善外觀 Re-profile by Brick Powder		破磚切片更換 Slice Replacement		局部鑲嵌復修 Dentist Piece-in Repair
原真性 Authenticity	5	5			5		3		3		2
可還原性 Reversibility	5	5			3		5		5		2
最少干預 Minimum Intervention	6	6			3		3		6		1
犧牲性耗損 Sacrificiality	6	6			6		6		4		1
可辨認性 Identifiability	4	4			6		1		4		1

8. 個案研究：前九龍英童學校
(現為古物古蹟辦事處總部)

8.1 前九龍英童學校的歷史

位於尖沙咀彌敦道 136 號的前九龍英童學校（下稱「此建築物」）現為古物古蹟辦事處的辦公室。這座維多利亞式紅磚建築物是尖沙咀的地標。

此建築物於 1902 年 4 月 19 日正式啟用提供小學教育，以應付隨著移居香港的外籍人士日增的教育需求，直至 1923 年改名為「中央英童學校」，並開始招收中學生，其後於 1920 至 1930 年代擴建，以增加課室。此建築物於 1936 年 9 月關閉，學校則遷往位於何文田的新中學校舍，並易名為「英皇佐治五世學校」。

二次世界大戰後，香港家庭福利會曾以此建築物為會址，至 1957 年由尖沙咀街坊福利會租用，為社區提供免費教育。尖沙咀街坊福利會於 1991 年遷往新大樓，此建築物再度空置。

此建築物於 1991 年 7 月 19 日列為法定古蹟。1992 進行全面修復工程，工程竣工後改為古物古蹟辦事處總部，沿用至今。

8. Case Study: Former Kowloon British School
(Currently Head Office of Antiquities and Monuments Office)

8.1 History of the Former Kowloon British School

Located at 136 Nathan Road, Tsim Sha Tsui, the former Kowloon British School (the “Building”) now houses the Antiquities and Monuments Office; it is a landmark red brick building of Victorian style in Tsim Sha Tsui.

The Building was constructed to cope with the growing need of schools for foreign nationals settling in Hong Kong and was officially opened on 19 April 1902. It served as a primary school until 1923, when it was then renamed the “Central British School” and began taking in secondary students. The Building was expanded with additional classrooms being added during the 1920s and 1930s. In September 1936, the Building was finally closed on completion of a much larger purpose-built secondary school in Ho Man Tin, which was later named “King George V School”.

After the Second World War, the Building was occupied by the Hong Kong Family Welfare Society and then in 1957 was leased to the Tsim Sha Tsui District Kaifong Welfare Association to provide free schooling in the neighbourhood. In 1991, the Association moved to new premises, leaving the Building vacant once more.

The Building was declared a monument on 19 July 1991 and after major restoration work in 1992, it has been used as the headquarters for the Antiquities and Monuments Office ever since.



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8.2 勘測結果及保養的歷史

此建築物外牆以軟身的清水紅磚建造，配以石灰質填縫物料，而外牆曾被數層油漆塗蓋¹。2009 年勘測時發現一些以水泥砂漿的局部維修痕跡，磚塊表面出現許多鹽結晶，導致磚作結構有大量的片狀剝落，顯示有嚴重的鹽化問題。

相片紀錄顯示此建築物約於 1950 年代已髹上油漆，相信是為了美化當時可能已損壞的磚牆。勘測後得知磚牆曾被塗上一層傳統的石灰水，這種物料具滲透性，保護磚牆之餘亦可透氣和保持乾爽。石灰水作為「犧牲性耗損」的物料，需要定時翻髹。

勘測後亦發現損毀的磚作曾被含水泥成分較多及堅硬的普通波特蘭水泥砂漿修補，是不恰當的修補方法。原來的石灰砂漿磚縫亦被突出於磚面的普通波特蘭水泥磚縫取代。普通波特蘭水泥砂漿引致嚴重的鹽化問題，使較脆弱的紅磚外牆嚴重損毀。

我們保留了遊廊東南角落一小部分未經修復的外牆，以展示過去不同年代曾塗上的油漆塗層²，作為日後研究這一個案的參考。

8.2 Survey Findings and Maintenance History

The external walls of the Building were built in fair-face soft red brick with lime-based pointing. The facades had been coated with several layers of decorative paint coating¹. Local patch repairs with cement mortar were also observed during our survey in 2009. There was extensive salt crystallisation on the brick surface, which also caused patches of defoliation damage to the historic brickwork and indicated that a serious salination problem exists.

Photo records reveal that decorative painting was initially introduced to the building in around the 1950s; presumably to improve the appearance of the brickwork, which had already at that time probably shown signs of decay. From inspection, it appears that a traditional coating of lime wash was used; this material is permeable and protects the wall while still allowing it to breathe and dry out. It is also “sacrificial” and needs to be re-applied periodically.

Inspections also showed that damaged brickwork had been patched-up by hard OPC mortar with high cementitious content, which was proving unsuitable for such locations. Also, the original lime mortar pointing had been replaced with inappropriate OPC “strap” pointing, which projected out from the brick face. The use of the OPC mortar, set up a serious salination problem which has caused severe damage to the soft red brick external walls.

A small portion of unrestored facade, showing the various layers of paint coatings applied over the years, is preserved at the south-east corner of the verandah², so as to serve as a reference for future studies into this case.

8.3 試驗與監察

試點修復工程於2009年起在北立面（面向聖安德烈堂）展開，通過這些試驗的結果，可幫助我們選擇保育磚作的最佳方案^③。

我們自2009年開始密切監察試驗範圍內的磚牆狀況，磚塊和新置的石灰砂漿均狀態良好。同時，試驗範圍內的舊油漆被清除，原有的填縫物料則被保存，證明沒有油漆遮蓋的原清水磚作結構反而能保存得更好。

8.4 清除表面塗層

修復工程的第一個步驟是勘測已損壞的物料，以確定維修問題的成因。首先，我們需從舊有磚作結構清除一部分不透氣的表面塗層，讓原磚面外露，以便研究磚塊和砂漿的成分。經勘測後發現，磚塊為相對軟身的紅磚，而砂漿含有大量十分堅硬的普通波特蘭水泥。在這個案中，雖然透過目測亦不難得知砂漿明顯比磚塊堅硬，但以混凝土測試槍¹進行的測試可再次確定磚塊和砂漿兩者的相對堅硬度。



8.3 Trials and Monitoring

Trial restoration work has been carried out to the north facade (facing St. Andrew's Church) since 2009. These trials served as mock-ups to guide the final decision in choosing the best approach to conserve the brickwork^③.

The condition of the brickwork in the trial areas has been closely monitored since 2009, and it was observed that both the bricks and the new lime mortar remained in a good condition. Also, in view that on the test zone where the old paint coatings had been removed but the exiting pointing retained, this demonstrated that the original fair face brickwork could survive better without painting protection.

8.4 Removal of Surface Coating

The first task of restoration projects is to inspect the defective materials to ascertain the causes of the repair problem. This required the removal of a section of the non-breathable surface coating from the old brickwork, in order to expose the original surface. The composition of the bricks and the mortar could then been investigated, which showed that the bricks were of soft red composition and the mortar was of a high OPC content and very hard. Although in the present case it was visually obvious that the mortar was much harder than the bricks, a scientific test by means of a Schmidt Hammer¹ can also be made to confirm both the relative hardness of the bricks and of the mortar.

我們隨即研究最佳的方法以清除表面塗層，並再度在試驗範圍的磚牆進行測試，需考慮因素如下：

- 潔淨程度；
- 塗層、污物或泥土的性質及其黏結的緊密程度；
- 甚麼產品可以溶解或分開這些塗層、污物和泥土；
- 外牆的建造方法，即有否生鏽的金屬附屬物；及
- 環境和健康的因素。

為了盡量減少對磚作的干預，我們在選擇清除油漆塗層的方案時特別小心，亦採用了不同方法清潔磚面：

- 以清水清潔－以清水和刷子清潔對磚牆表面造成最少的破壞，是最合適的方法。可是，單憑自來水水壓並不足以清除污跡，但增加水壓又可能令水滲入和浸泡磚塊，將污物也因在磚作內；
- 化學溶劑－殘餘的水泥可用化學溶劑清除。雖然酸鹼度 pH5.5 以下的酸性清潔劑可以清除部分已鹽化的表面，但化學物可能會與年代久遠的石灰填縫砂漿或與已存在於磚作結構當中的鹽分產生副作用，形成更多可溶解的鹽和引致更嚴重的鹽化問題。因此，我們並不建議此清潔方法；
- 打磨或機械性衝擊－在進行打磨和機械性衝擊時，透過控制噴霧壓力來防止磨損磚面是一大重點，因此只可由富經驗的工人操作。與傳統的噴霧槍相比，採用綫切打磨法去除油漆塗層更為合適，原因是其輕柔綫切動作可以盡量減低破壞磚塊表面；及
- 脫鹽－據現場觀察所得，大量的鹽晶積聚在已呈剝落的磚塊表面，亦積聚在磚面的水泥修補物料上^④。為免磚作繼續衰壞，進行脫鹽以減低磚作內可溶解鹽的含量是必要的措施。我們使用包含黏土、紙漿或纖維素醚的敷泥為磚作脫鹽。過程是要溶解藏在磚作內的可溶解鹽，並以紙黏貼劑將鹽分抽出。^⑤

The best method for removal of the surface coatings was then considered and again trials on sample areas of façade were carried out, taking into account the following factors:

- The extent of cleanliness;
- Nature of coating, dirt or soil and how tightly is it adhering;
- What products can dissolve or detach this coating, dirt and soiling;
- How the facade is constructed, i.e. any rusty metal attachment; and
- Environmental and health concerns.

We took special precautions in the selection of cleansing options in removing the surface paint coatings, also adopting various approaches to clean the surface so as to minimize disturbance to the brickwork:

- Water Cleansing - Water and brush cleansing poses minimal damage to the brick wall surface and is found most appropriate. However, cleansing under tap water pressure is inadequate to remove the stains. The increase in pressure may saturate the substrate and trap dirt in the historic brickwork;
- Chemical Solvent - Cement residues could be removed by chemical solvent. However, acidic cleaner below pH5.5 is not recommended though it may remove part of surface efflorescence. The disadvantage is that the chemical may react with the historic lime-based joint mortar and also react with the existing salts in the brickwork resulting in the formation of soluble salts and further salination. This cleansing approach was therefore not recommended;
- Abrasive or Mechanical Blasting - Control of mist pressure to prevent possible abrasive damage caused to the brick surface has to be highlighted. Only experienced workers have been engaged in such operation. In comparison with the conventional mist blasting, tangential abrasion method to remove the paint coating by abrasion is found more appropriate as the gentle tangential actions could minimise the damage to the brick surface; and
- Desalination - Extensive salt crystals deposit has been observed at the delaminated brick surface and also accumulated behind the cementitious repair material applied on the brick surface^④. Desalination to lower the level of soluble salt in the brickwork would be necessary to minimise further deterioration of historic brickwork. Desalination of brickwork was attempted through the use of poultices, which consist of clay, paper pulp, or cellulose ethers. The process was done by dissolving the soluble salt within the brickwork and extracting the salt to a paper paste^⑤.

¹ 混凝土測試槍是一種手提儀器，用作現場測試各種固體建築物料的硬度，但不會對物料造成破壞。

The “Schmidt Hammer” is a hand-held instrument used for the non-destructive testing of the hardness of various solid building materials in-situ.

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8.5 傳統建築技術和物料的運用

8.5.1 以砂漿修復

石灰砂漿比較含大量水泥的砂漿更具彈性，亦能在不出現裂縫的情況下容許輕微的結構移動。真正的石灰砂漿包含水硬石灰或非水硬石灰。這兩種石灰雖然較水泥的凝固時間慢，但在缺乏水泥成分的情況下仍可凝固。從技術角度看，水硬石灰和非水硬石灰可同時並存，但較可取的保育方法是使用水硬石灰以保留其原工藝。

但是，我們現已很難在香港採購如生石灰這些傳統建材，因此，我們需從廣東省的石灰窯訂購。生石灰在進行石灰熟化和石灰脹裂的程序後，便可混入本地的砂和水，混成砂漿，在經過硬化後會變回碳酸鈣。這個過程產生一種與原石灰岩同樣穩定的物料（Holmes & Wingate, 2002）。

8.5.2 重新填縫

從接縫中耙走填縫物料，至約 20 毫米深，並以石灰質的填縫物料取代所有後加的水泥填縫物料。

接著，徹底清潔牆壁，並在重新以乾身混合物料填縫前以水浸泡。需確保沒有填縫物料塗抹在磚作表面；以及批出略呈凹陷的防雨刮縫 6。

8.5.3 局部鑲嵌修復

基於最少干預原則，這個修復項目採用了局部鑲嵌修復的維修方法。若原磚塊只是一面受毀，我們會小心地將磚塊抽出，清除附着的砂漿後，再反轉砌回牆身原來的位。如磚塊兩面均損壞，則選擇取自建築物內部或搜集類近強度、體積、顏色和生產年代的舊磚代替 7。較原磚塊柔軟的石灰質砂漿會用作接合磚塊，而替代的砂漿或填縫混合物應盡量與原物料相同。在確定現存磚塊和砂漿強度後，擬採用的砂漿混合物必須是強度較低的物料。

8.6 前九龍英童學校紅磚外牆的演變

磚牆在 1980 年代完全被白色油漆覆蓋，相信是灰水或乳膠漆 8。

8.5 Adoption of Traditional Construction Techniques and Materials

8.5.1 Mortar Restoration

Lime-based mortar is more elastic than cement-rich mortar and can accommodate minor structural movement without cracking. True lime mortar contains hydraulic lime or non-hydraulic lime. These two types of lime do indeed set without cement, albeit more slowly than that of cement. Technically, there is no reason that hydraulic and non-hydraulic lime cannot co-exist, but it is a better conservation practice to keep it original, i.e. hydraulic lime.

However, sourcing traditional building material, such as quicklime, is extremely difficult nowadays in Hong Kong and has to be delivered from flare kiln at Guangdong Province. Quicklime was taken through a process known as “slaking” or “blowing” off site. The slake lime was then mixed with the local sand and water to form a mortar which, upon hardening, returned the lime to calcium carbonate. This process produced a material that was as stable as the original limestone (Holmes & Wingate, 2002).

8.5.2 Re-pointing

All later added cement-based pointing has been replaced by lime-based pointing mortar. Joints were raked out to a depth of about 20 mm.

The wall was then thoroughly cleaned and saturated with water before neatly re-pointed with a fairly dry mix. Ensure no pointing has been spread over the surface of brickwork; slightly recessed joint such as weather-struck joint 6 is required.

8.5.3 Dentist Piece-in Repair

Under the principle of minimum intervention, dentist piece-in repair is adopted for this conservative repair projects. Original bricks with one face damaged were reversed by carefully cutting it out, cleaning off the mortar and placing it in reverse position back in the wall. If both sides were damaged, internal bricks or salvaged historic bricks with similar strength, size, colour and period will be chosen for replacement 7. Bricks were re-fixed with soft lime-based brick mortar with strength lower than the original bricks. The replacement mortar/pointing mix has respectively followed the original lime mortar/pointing mix and original pointing as far as possible. With the confirmation of the strength of existing bricks and mortar, the strength of proposed mortar mix has to be weaker than the original bricks.

8.6 Evolution of the red brick facade of the Former Kowloon British School

Brickwork facades have been fully covered by white paint coatings in the 1980s. Possibly lime wash or emulsion paint 8.

2009 年，磚牆全被紅色油漆塗層遮蓋⁹。

於 2015 年進行的外牆修復工程，在移除油漆塗層和水泥砂漿填縫物料，以及進行脫鹽後，磚作的原貌得以重現¹⁰。

9. 維持歷史磚作外牆的挑戰

部分香港殖民地時期的清水紅磚外牆原貌已被灰泥批盪和（或）油漆飾面塗層遮蓋，須及時訂定合適的保育方案以保存這些外牆。這個決定應先取決於磚作外牆的現狀，亦即是有否存在明顯的損毀，例如油漆或批盪是否已剝落。

如表面已出現明顯的損壞，就需如上述的個案般先進行基本勘探和樣本測試。

如沒有呈現衰壞跡象，我們應從保育角度認真考慮須要採取的措施：即是繼續保存後加和非原來的塗層，或展開如以上個案研究所述的大型修復工程。可是，後來添加的塗層是否又已經成為建築物歷史的一部分呢？位於灣仔石水渠街的「藍屋」便是一例。

前九龍英童學校磚作的保育維修可視為保育香港同類紅磚建築物的「技術」範例。值得一提的是，每幢歷史建築物都是獨一無二，而保育理念似乎亦在迅速轉變，這都為保育團隊不斷帶來挑戰和滿足感。

Brickwork facades were completely covered by red paint coatings in 2009⁹.

The honesty of the original brickwork is now revealed after removal of paint coatings, cement-rich mortar joints and desalination during the facade restoration in 2015¹⁰.

9. Challenges In Sustaining a Historic Brickwork Facade

Some original fair-face red brick facades of colonial historic buildings in Hong Kong have been covered up with plaster rendering and/or decorative paint coatings, and in time, a decision will need to be made as to the appropriate conservation approach to preserve these facades. The decision should firstly be based upon the existing condition of the brick facade, namely, whether there is any obvious visible damage, such as flaking of paint or plaster failure.

If there is already obvious deterioration of the exposed surface, then it will be necessary to carry out the basic investigation and trial samples, as per the Case Study above.

Nevertheless, if no signs of decay are obvious, then serious consideration should be given as to the proposed course of action from a conservation viewpoint: either to retain the later-added and non-authentic coating or to carry out a major restoration project as per the Case Study above. However, has the new coating and its appearance now become part of the history of the building, in which case should it be preserved? The “Blue House” at Stone Nullah Lane, Wanchai is a case in point.

The conservative repair of the Former Kowloon British School brickwork can hopefully serve as a case study for the “technical” approach for similar red brick conservation projects in Hong Kong. It is worth mentioning that no two historic buildings are the same and conservation philosophy seems to shift quite rapidly, which all helps to make the subject so rewarding and challenging to those involved.

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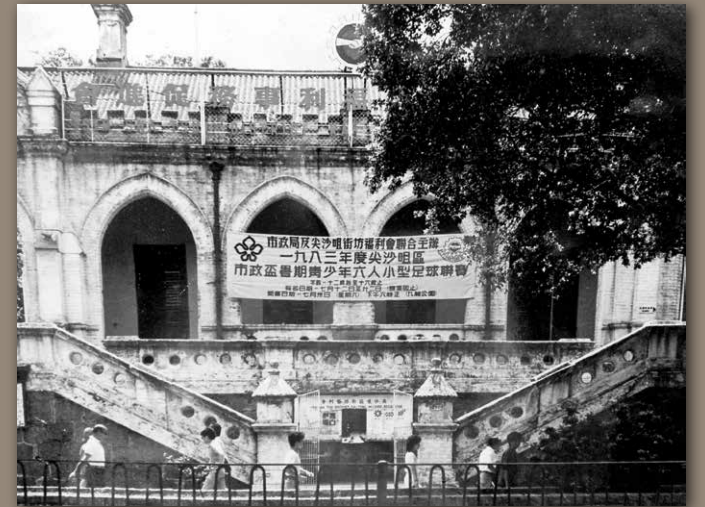
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10

粵劇的社會角色

The Social Roles of Cantonese Opera

吳雪君 NG Suet-kwan, Judith

館長 (特別職務) | 香港文化博物館
Curator (Special Duties) | Hong Kong Heritage Museum



《倫敦畫報》插圖：「香港的唱戲表演」

1857 年 8 月 15 日

從這份插圖可見觀眾聚攏在戲台下，觀看戲曲演出。除了本地民眾外，圖的左下方可見表演亦吸引外籍人士欣賞。

香港文化博物館藏 1995.90.2

“*The Illustrated London News*” featured Hong Kong opera singing on 15 August, 1857, with an illustration showcasing audiences around the stage appreciating the performances. Other than local people, foreigners can be seen enjoying performance appeared on the bottom left of the illustration.

Hong Kong Heritage Museum 1995.90.2

引言

1845 年 9 月，《香港紀錄報》報導了一則警察搜查賭窟的事件，而這間賭窟正位於一竹棚搭建的歌樓旁 (*Hong Kong Register*, 1845)。這篇報導反映香港開埠初期已有臨時搭建的戲棚，為華人提供唱曲之類的娛樂活動。1850 年代初開始，受國內太平天國戰事影響，不少廣東一帶的居民紛紛湧至香港；1855 年，香港人口增至七萬多，聚居在維多利亞城的華人約佔四萬 (*Hong Kong Blue Book*, 1855)。隨着香港社會發展，經濟活動漸趨活躍，市民對消閒娛樂的需求亦越加殷切。在華人主要聚居的上環區，娛樂事業更為興旺，戲曲演出不單在臨時搭建的戲棚進行，專門演出粵劇的戲園¹ 亦開始出現。

從報章資料所見，1852 年太平山區荷李活道口已有一所為華人而設的戲園 (*The Friend of China and Hong Kong Gazette*, 1852)。1865 年至 1870 年間，有三間粵劇戲園在上環一帶落成—分別是昇平戲園²、同慶戲園³ 和高陞戲園。⁴ 這些戲園的設施較戲棚完善，不時在報章刊登廣告，遂成為華人的重要娛樂場所。

粵劇除為華人提供日常娛樂，或在神功戲時酬神娛賓外，還有沒有其他社會功能？名伶、戲班和戲園在社會上又可以擔當甚麼角色呢？1972 年 6 月 18 日，持續暴雨導致山泥傾瀉，九龍觀塘翠屏道寮屋區及香港島半山區旭龢大廈先後發生山泥傾瀉及大廈坍塌意外，造成百多人死亡，震撼全港。災後，

Introduction

In September 1845, *Hong Kong Register* published a report on the police search of a gambling den adjacent to a sing-song mat-house (*Hong Kong Register*, 1845). This story shed light on the existence of temporary bamboo shed theatres during the early days of British colonial rule in Hong Kong, which offered Chinese the opportunity to enjoy entertainment activities such as Cantonese opera. Since the 1850s, in the hope of escaping the turmoil of the Taiping Heavenly Kingdom, many residents living in the Guangdong region flocked to Hong Kong. By 1855, the population of Hong Kong increased to more than 70,000, of which about 40,000 resided in the City of Victoria (*Hong Kong Blue Book*, 1855). Along with the social development and economic prosperity of Hong Kong, there was a significant growth in the demand for leisure and entertainment. The entertainment business particularly thrived in Sheung Wan where most Chinese resided. Not only were Cantonese opera performances conducted in temporary bamboo shed theatres, but purpose-built Cantonese opera theatres¹ also began to emerge.

According to newspapers, as early as 1852, there was a Cantonese opera theatre specifically for Chinese audiences, on Hollywood Road in the Tai Ping Shan District (*The Friend of China and Hong Kong Gazette*, 1852). Between 1865 and 1870, three Cantonese opera theatres were erected in Sheung Wan, namely Sing Ping Theatre², Tung Hing Theatre³ and Ko Shing Theatre⁴. They had much better facilities than the bamboo shed theatres and were advertised frequently in newspapers, growing rapidly to become important entertainment venues.

In addition to being a form of daily entertainment for Chinese and ritual worship, did Cantonese opera perform other functions in society? What other social roles could veteran Cantonese opera artists and troupes, as well as Cantonese opera theatres have played? On 18th June, 1972,

¹ 從十九世紀的舊報章及照片所見，香港的粵劇戲園均使用「戲園」一詞，故本文基本以「戲園」一詞貫穿全文。20 世紀初，太平戲園漸改用「太平戲院」作宣傳，而其捐贈給香港文化博物館的文物內，部分亦寫有「太平戲院」，故本文在涉及太平戲園的藏品而藏品內容以「太平戲院」描述時，則採用「戲院」一詞。

Based on the newspapers and pictures in the 19th century, the Chinese term for Cantonese opera theatre was “戲園”. Hence, in the Chinese version of this article, the term “戲園” is used throughout. However, at the beginning of the 20th century, the Chinese name of one of the Cantonese opera theatres, Tai Ping Theatre, was renamed “太平戲院” for publicity purposes. Hence when referring to the artefacts donated to Hong Kong Heritage Museum carrying the words “太平戲院”, the term “戲院” is used instead of “戲園”.

² 昇平戲園位於荷李活道 168 號，與墳墓街（後改名為普仁街）交界，於 1865 年建成，1872 年重建，約 1877 年改名普樂戲園，1886 年停業。

Situated at the junction of 168 Hollywood Road and Fun Mo Street (subsequently named as Po Yan Street), Sing Ping Theatre was built in 1865, redeveloped in 1872 and later renamed as Po Lok Theatre in around 1877. The theatre was then closed in 1886.

³ 同慶戲園位於街市街（後改為普慶坊）76、78、80 號與墳墓街（後改名為普仁街）之間，於 1865 年建成，1892 年重建改名重慶戲園，約 1913 年停業。

Tung Hing Theatre was located between 76, 78 and 80 Market Street (later renamed as Po Hing Fong) and Fun Mo Street (later renamed as Po Yan Street). Established in 1865, Tung Hing Theatre was redeveloped and renamed as Chung Hing Theatre in 1892, before ceasing operations in around 1913.

⁴ 高陞戲園位於皇后大道西 115 號，於 1870 年落成，1928 重建，1971 年結業。

Located at 115 Queen's Road West, Ko Shing Theatre was completed in 1870, redeveloped in 1928 and closed in 1971.



❶ 「屢勸善舉」牌匾

1917 年

源碧福女士捐贈，香港文化博物館藏 2006.49.1583

Plaque of Gratitude

1917

Donated by Ms Yuen Bik-fook, Beryl, Hong Kong Heritage Museum 2006.49.1583

香港各界紛紛發起籌款賑災工作，6 月 24 日無線電視發起籌款活動，邀請粵劇名伶連同全台藝員及歌手，進行 12 小時馬拉松式籌款，在一夕通宵之間，籌得 700 萬港元善款，打破香港開埠以來的賑災紀錄（華僑日報，1972）。粵劇紅伶任劍輝和白雪仙於節目中演唱《帝女花》、麥炳榮和鳳凰女演唱《鳳閣恩仇未了情》及新馬師曾粉墨登場演唱《萬惡淫為首》的片段，相信不少讀者仍記憶猶新。粵劇似乎是不少慈善服務團體進行賑災籌款工作時的重要一環，肩負起重大的社會責任。本文嘗試利用香港文化博物館的藏品及昔日報章文獻等資料，與讀者探討粵劇在娛樂以外的社會角色。

慈善角色

香港開埠初期，政府為華人提供的社會福利不多。1872 年，東華醫院落成啟用，為貧苦市民提供免費中醫藥服務。東華醫院位於上環普仁街，毗鄰同慶戲園，經濟來源主要來自商人商號的捐獻。1877 年，東華醫院刊行的《徵信錄》，記錄了東華醫院存放於同慶戲園的「緣簿」（捐款冊），是年收到八個戲班的捐款。1878 年的《徵信錄》，記載普樂、同慶、高陞三所戲園都有戲班捐獻（容世誠，2015）。這些《徵信錄》是現時香港文獻所見，粵劇戲班最早參與慈善工作的記錄。

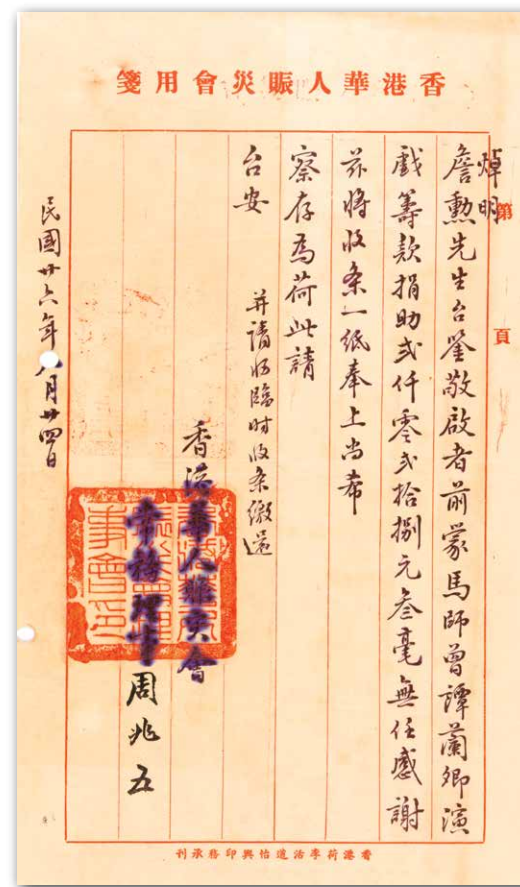
there was continuous heavy rain leading to severe landslides. More than 100 people died in the landslides and collapses that occurred in the shelter home clusters on Tsui Ping Road in Kwun Tong, Kowloon and Kotewall Court Building at Mid-Levels district on Hong Kong Island. This incident shocked the people of Hong Kong. Various sectors of society initiated fundraising activities for disaster relief. On 24 June, Television Broadcasts Limited invited renowned Cantonese opera veterans to join hands with its full team of staff, pop singers and artists to run a 12-hour marathon fundraising programme. HK\$7 million was raised overnight and broke the then Hong Kong disaster relief fundraising record (華僑日報，1972). Renowned Cantonese opera artists Yam Kim Fai and Pak Suet Sin performed “Princess Cheung Ping”; Mak Bing Wing and Fung Wong Nui sang “The Favours and Grievances of the Phoenix Boudoir and the Love that Never Ends”, while Sun Ma Sze Tsang played the “Lust is the Worst Vice”, all receiving critical acclaim. Many charity organisations relied to lesser or greater extent on Cantonese opera as a critical fundraising initiative for disaster relief, hence shouldering mounting social responsibilities. By studying the collections of the Hong Kong Heritage Museum and archival newspapers and documents, this article attempts to explore the social roles of Cantonese opera, other than purely as a form of entertainment.

Charity Roles

During the early days of Hong Kong, the government provided minimal social benefits for Chinese residents. Tung Wah Hospital, which was completed in 1872, offered free Chinese medical services for the underprivileged. Located at Po Yan Street, Sheung Wan and adjacent to Tung Hing Theatre, the hospital was mainly financed by donations from the commercial sector. The “*Statement of income and expenditure*” of 1877 published by Tung Wah Hospital

從文化博物館的藏品中，亦見經營粵劇戲園的紳商積極參與社會公益事業、進行社會救濟、以至支援抗日戰爭籌款等活動。1904 年落成的太平戲園，⁵ 其園主源杏翹是一位樂善好施的殷商，經營戲園之餘，不忘回饋社會，立下「取諸社會 用諸社會」的原則。館藏數幅表彰太平戲院廉收院租，讓粵劇團體義演，為香港四醫院、孔聖會和英國紅十字會籌募經費的大牌匾，正是源氏積德行善的歷史見證❶。

太平戲園第二代園主源詹勳亦秉承其父樂善好施的精神，除向慈善機構廉收院租外，在抗日戰爭爆發期間，亦以不同形式救濟國內同胞，捐輸救國，例如報效院租、戲金、開放戲園讓救國團體於園內募捐、捐助募製寒衣活動以慰勞國內前方將士等。戲園旗下的「太平劇團」台柱馬師曾、譚蘭卿及一眾職員也不時義演勸助，捐款救國❷。



recorded an entry where the “*Donation list*” kept at Tung Hing Theatre indicated that donations from eight Cantonese opera troupes were received. The “*Statement of income and expenditure*” of the following year, 1878, also recorded donations made by the three Cantonese opera troupes at Po Lok, Tung Hing and Ko Shing Theatres (容世誠，2015). Theses archive materials such as statements of income and expenditure offer important information on the earliest charitable contributions made by Cantonese opera troupes.

Hong Kong Heritage Museum artefacts also highlight how owners of Cantonese opera troupes actively participated in charity activities, rendering assistance to the needy and supporting fundraising campaigns for the War of Resistance Against Japan. Philanthropic merchant Mr Yuen Hang-kiu, owner of the Tai Ping Theatre, built in 1904⁵, pledged himself to the principle “From Society, For Society” and contributed to the community while operating his theatre. The Museum collected several plaques commending Tai Ping Theatre of rent concession for charity performances, as well as fundraising activities for the then four hospitals in Hong Kong, the Confucian Society and the British Red Cross Society. All these hold historical records and bear witness to Yuen’s good deeds❶.

Mr Yuen Jim-fan, successor to the Tai Ping Theatre, continued the giving spirit of his father. In addition to offering rent concessions for charity organisations, various forms of support were rendered to Mainland Chinese, greatly aiding the nation during the outbreak of the War of Resistance Against Japan. These included donating theatre rental and performance fees, as well as opening the theatre to fundraising rallies organised by national salvation groups and supporting the production of winter clothes as relief for Mainland Chinese troops at battlefronts. From time to time, principal performers of Tai Ping Opera Troupe, Ma Sze Tsang and Tam Lan Hing, as well as staff of the theatre, ran charity performances in order to make contributions for the benefit of the national salvation❷.

❷ 香港華人賑災會致太平戲園園主源詹勳的信函，感謝馬師曾及譚蘭卿演戲籌款。

1937 年

源碧福女士捐贈，香港文化博物館藏 2006.49.368

Disaster Relief Association of Hong Kong Chinese dedicated a letter of appreciation to Mr Yuen Jim-fan, owner of Tai Ping Theatre, for the fundraising performances featuring Chinese opera stars Ma Sze Tsang and Tam Lan Hing.

1937

Donated by Ms Yuen Bik-fook, Beryl, Hong Kong Heritage Museum 2006.49.368

⁵ 太平戲園位於炮台山街（今皇后大道西），1904 年落成，1932 年重建啟用，1981 年停業。

Tai Ping Theatre was located at Battery Hill Street (Now Queen’s Road West), built in 1904, redeveloped in 1932 and closed in 1981.

國難當前，另一位早已退出舞台的粵劇花旦蘇州妹，亦再御歌衫，登台義演。蘇州妹原名林綺梅，年僅 14 歲已隨戲班到美國演出，嶄露頭角。1918 年，16 歲的蘇州妹被太平戲園園主源杏翹羅致旗下，組織香港首個粵劇全女班「鏡花影」於戲園演出，大受觀眾歡迎（申報，1921）。除在香港演出外，蘇州妹亦不時到廣州、澳門及上海演出，芳踪所至，均客座常滿。可惜，蘇州妹於 1921 年結婚後旋即退出舞台，一直未有再踏台板。直至 1938 年，已離開粵劇舞台十多年的蘇州妹，為支持廣東籌募國防公債，挺身組織「綺梅劇團」，再度粉墨登台，與靚就、葉弗弱、伊秋水及任劍輝等名伶於利舞台義演三天籌款，並灌錄《送寒衣》、《貂蟬拜月》等唱片義賣，呼籲市民踴躍捐輸，賑濟國難同胞³。而利舞台院主亦同時報效院租，支持救國工作。

抗戰期間，不少粵劇紅伶積極參與救國活動，其中關德興更獲「愛國藝人」的美譽。他除於香港各戲園演出、捐獻戲金勞軍外，更組織「粵省粵劇救亡宣傳團」，足跡行遍粵桂兩省，宣傳救國、義演勞軍，鼓舞前線將士殺敵衛國，感動不少軍民（大公報，1940）。後又遠赴菲律賓和美國，募捐支持抗日，為抗日工作籌募不少經費⁴。

從上文所見，粵劇名伶、戲班和戲園在香港不單為市民提供娛樂，更肩負重要的社會責任。

香港文化代表

粵劇是既高雅又普及的中國傳統藝術，是香港的文化代表，深受華人歡迎和重視。從 1857 年《倫敦畫報》的插圖所見，當時粵劇已吸引一些外籍人士欣賞。粵劇的觀眾群，已不單單指向華人，每當有重要外賓訪港時，華人團體更會安排他們到戲園欣賞粵劇，藉機向外賓推廣這門傳統藝術。

1869 年 11 月，愛丁堡公爵訪港，華人團體在同慶戲園設宴歡迎，飯後更安排戲班演出《六國大封相》及《亞蘭賣豬》，增添氣氛（*The China Mail*, 1869）。1890 年 3 月，干諾公爵伉儷訪港，港中紳商團體於 4 月 2 日在高陞戲園設宴招待，並且安排戲班演出《八仙賀壽》、《跳加官》、《天姬送子》等傳

Faced with national crisis, another renowned Cantonese opera lead actress, Soo Chou Mui, came out of retirement and returned to the stage in the name of charity. Formerly named Lam Yee-mui, she had joined a tour of the US at just 14 and subsequently took on a glamorous onstage career. At 16 she was recruited by the owner of Tai Ping Theatre, Mr Yuen Hang-kiu, when Kan Fa Ying Women's Troupe was established in 1918. The performances of this first ever all-female Cantonese opera troupe won tremendous applause (申報，1921). Other than performing in Hong Kong, Soo Chou Mui toured frequently, performing in Guangzhou, Macau and Shanghai, enjoying full house at virtually every show. She stepped out of the spotlight following her marriage in 1921, returning after more than a decade to team up with Cantonese opera veterans Lang Chou, Yip Fut Yuek, Yee Chou Shui and Yam Kim Fai in 1938, establishing the Yee Mui Troupe and putting on a three-day performance at the Lee Theatre to raise public funds to support the national defence. In addition, two songs were recorded, “Giving Warm Clothes”, and “Lady Diu Sim Worships the Moon”, with proceeds also going towards the national crisis³. At the same time, the owner of Lee Theatre donated its rental income towards the cause.

Many renowned Cantonese opera artists actively participated in national salvation activities. Among them, Kwan Tak-hing was especially honoured as the “patriotic artist”. In addition to performing at various opera theatres and donating his income to the army, Kwan organised a Cantonese opera propaganda group in Guangdong province to support national salvation and deliver voluntary performances to boost army morale while defending the country (大公報，1940). With great acclaim from members of the army and the public, the patriotic group toured the Philippines and the US and raised considerable funds for the War of Resistance Against Japan⁴.

All these examples go to indicate the importance of Cantonese opera veterans, troupes and theatres in Hong Kong as more than just entertainment providers, but members of an industry shouldering significant social responsibilities.

Representing Cultures of Hong Kong

Cantonese opera is an elegant and popular traditional Chinese art form, treasured by many Chinese as a cultural icon and emblematic for Hong Kong. As in the illustration published by “*The Illustrated London News*” in 1857, expatriates also appreciated Cantonese opera. With a view to promote this traditional Chinese art form, many Chinese associations would arrange visits for overseas VIPs coming to Hong Kong to enjoy performances.

In November 1869, a Chinese organisation hosted a welcome banquet for the Duke of Edinburgh at Tung Hing Theatre. To add ambience to the event, performances entitled “Instalment of So-tsun with the Honour of Premier to Six States” and “Alan Selling his Pigs” were presented



3 香港各界送贈林綺梅的紀念錦旗

1938 年

馬超奇先生及家人捐贈，香港文化博物館藏 2004.3.13

Memorial silk banner dedicated to Lam Yee-mui from various sectors of Hong Kong

1938

Donated by Mr Ma Chiu-kei and his family
Hong Kong Heritage Museum 2004.3.13



4 抗戰勝利後，關德興首度回港，在尖沙咀火車站受到民眾熱烈歡迎。

1945 年

關漢泉先生及關照洋先生捐贈

香港文化博物館藏 2012.22.3

A heartfelt welcome at Tsim Sha Tsui railway terminus at the first return of Kwan Tak-hing to Hong Kong after the victorious War of Resistance Against Japan.

1945

Donated by Mr Quan Hon-chuen, David and Mr Quan Chiu-yeung, Leo
Hong Kong Heritage Museum 2012.22.3



5 「粵劇紅伶大會串」特刊

1958 年

「粵劇紅伶大會串」是星島日報和虎報舉辦的新年濟貧運動項目之一，1958 年 2 月 8 日在高陞戲院演出。

許釗文先生捐贈，香港文化博物館藏 1996.44.92

Special Issue for an All-Star Cantonese Opera

1958

Performed at the Ko Shing Theatre on 8 February 1958, it was one of the fundraising programmes held by Sing Tao Daily Newspaper and The Standard.

Donated by Mr Hui Chiu-man
Hong Kong Heritage Museum 1996.44.92



6 《歡迎瑪嘉烈公主和斯諾敦伯爵伉儷蒞港粵劇義演大會》特刊

1966 年

許釗文先生捐贈，香港文化博物館藏 1996.44.82

Special Issue for Cantonese Opera in Honour of Her Royal Highness The Princess Margaret Countess of Snowdon and The Earl of Snowdon

1966

Donated by Mr Hui Chiu-man
Hong Kong Heritage Museum 1996.44.82



7 麥炳榮、鳳凰女、梁醒波三人代表大會獻贈公主伉儷一對象牙雕刻的公主附馬像紀念品。

1966 年

許釗文先生捐贈，香港文化博物館藏 1996.44.83

Mak Bing Wing, Fung Wong Nui and Leung Sing Bor represented the host and presented souvenirs for Princess Margaret Countess of Snowdon and the Earl of Snowdon, including a pair of ivory carvings of the royal couple.

1966

Donated by Mr Hui Chiu-man
Hong Kong Heritage Museum 1996.44.82



8 昇平戲園，約 1870 年代。

香港文化博物館藏 1994.91.196

Sing Ping Theatre in the 1870s.

Hong Kong Heritage Museum 1994.91.196

統例戲 (*Brief Account of the Visit of their Royal Highnesses*, 1890)。1922 年 4 月，英皇太子愛德華八世訪港，華人紳商假座太平戲園設宴及安排「環球樂班」上演《蝴蝶夢》一劇，此劇由羅旭龢特別撰寫。當晚皇太子由港督司徒拔爵士陪同到達太平戲園，華人代表劉鑄伯、周壽臣及值理等則在戲園門外恭迎。皇太子對是晚粵劇表演出非常投入，欣賞時眉飛色舞，還表示該劇令其心悅神怡（香港華字日報，1922）。皇太子事後還表示訪港的印象中，他對三件事最感有趣，其中一項便是首次看到戲服最華麗，音樂最響亮的戲劇。1966 年 3 月，瑪嘉烈公主和夫婿斯諾敦伯爵來港，華人紳商亦於當時最豪華的利舞臺安排粵劇團義演《平陽公主》一劇，以表歡迎^{6 7}。

除了華人團體以粵劇款待外賓，當時的港督亦會邀請外賓到戲園欣賞粵劇。1872 年 3 月，位於荷李活道的一所舊戲園—昇平戲園—正在重建，預計於 5 月重新啟用。報章引述重建後的昇平戲園將較當時的同慶戲園和高陞戲園更為寬敞舒適，且通風較佳，樓高三層 (*The China Mail*, 1872)。從圖⁸所見，昇平戲園是該區一間頗標緻及具代表性的建築物。同年 9 月，俄國皇子阿列克謝大公訪港，時任港督堅尼地爵士便特意安排皇子到新落成的昇平戲園觀劇。當時戲園上演的劇目包括《八仙賀壽》和《六國大封相》，對於《六國大封相》的演出，俄國皇子還非常欣賞 (*The China Mail*, 1872)。1936 年 3 月，英國政府財政顧問李滋羅斯爵士來港，時任港督郝德傑爵士也安排他於太平戲園欣賞馬師曾演出《王寶釧》一劇，而華人代表羅旭龢爵士及其夫人更協助傳譯劇本內容。

從上文可見，無論是紳商或政府，都透過粵劇向外賓展示香港的生活文化及藝術，反映粵劇是香港的文化代表，具有重要的社會意義。

after dinner (*The China Mail*, 1869). In March 1890, the Duke and Duchess of Connaught visited Hong Kong and were greeted by merchant groups of Hong Kong and Mainland China at the banquet held at Ko Shing Theatre on 2 April. During the banquet, Cantonese opera troupes staged traditional set pieces including “The Congratulations of the Eight Genii”, “Promotion” and “The Fairy Wife” (*Brief Account of the Visit of their Royal Highnesses*, 1890). Crown Prince Edward VIII visited Hong Kong in April 1922 and was treated to a rendition of the “Butterfly Dream” at Tai Ping Theatre, performed by Wan Kao Lok Opera Troupe. The repertoire was written by Sir Robert Hormus Kotewall for the occasion. Accompanied by Governor Sir Reginald Edward Stubbs, the Crown Prince was greeted by Chinese representatives John Lau Chu-pak, Sir Shouson Chow and directors at the entrance of the opera theatre. He was apparently enraptured by the performance (香港華字日報，1922), and later revealed in an interview that one of the three fondest memories he had of his visit to Hong Kong was the amazement he felt towards the glamorous costumes and resonant music of Cantonese opera. In March 1966, Chinese merchants arranged a Cantonese opera performance “Princess Ping Yang” at the luxurious Lee Theatre to welcome Princess Margaret and her husband, the Earl of Snowdon, for their visit to Hong Kong^{6 7}.

As well as Chinese organisations hosting Cantonese opera performances as part of hospitality extended to foreign guests, the Governor of Hong Kong offered the same cordiality when receiving his own foreign visitors. In March 1872, an old opera theatre, Sing Ping Theatre was under redevelopment and expected to be re-opened in May. It was reported that after redevelopment, the three-storey Sing Ping Theatre would become more spacious and comfortable, with improved ventilation, when compared to Tung Hing Theatre and Ko Shing Theatre (*The China Mail*, 1872). Fig. 8 shows that Sing Ping Theatre featured exquisite architecture and was notable landmark of the district. In September that year, Russian Prince Alexei Nikolaevich visited Hong Kong and Sir Arthur Edward Kennedy, the then Governor, invited the Prince to appreciate Cantonese opera at the newly completed Sing Ping Theatre. The repertoires on show included “The Eight Genii” and “State Installation of Soo Chun”, both of which left a deep impression on the Russian prince (*The China Mail*, 1872). Chief Economic Adviser to the British Government Sir Frederick William Leith-Ross visited Hong Kong in March, 1936. He was also invited by the then Governor of Hong Kong Sir Andrew Caldecott to Tai Ping Theatre for a Cantonese opera performance of “Lady Precious Stream” starring Ma Sze Tsang. Chinese representatives Sir Robert Hormus Kotewall and his wife assisted in the translation of the scripts.

Based on this, we can see that merchants and the government presented the art and culture of Hong Kong by inviting their overseas guests to Cantonese opera performances. This demonstrated the significance of Cantonese opera as a cultural icon of Hong Kong and proof of its indelible impact on society.

結語

2009年9月30日粵劇成功列入聯合國教科文組織人類非物質文化遺產代表作名錄，顯示粵劇藝術得到聯合國充分的肯定和認同，是粵港澳三地的文化代表。另一方面，粵劇團體及紅伶亦一直支持社會的慈善活動。《歡樂滿東華》是東華三院與電視廣播有限公司合辦的一個長壽慈善籌款活動，在2015年的《歡樂滿東華》活動中，東華三院在其網頁內宣傳該活動的內容時，粵劇名伶演出仍是重點之一。該次籌款突破一億，打破香港開埠慈善紀錄，粵劇名伶演出應記一功。隨著不同娛樂媒體的出現，雖然粵劇只是芸芸大眾娛樂中其中一員，但從社會慈善及香港文化代表兩方面來看，粵劇仍肩負重要的角色和功能。

Conclusion

Cantonese opera was inscribed onto the UNESCO Representative List of Intangible Cultural Heritage on 30 September, 2009, an indisputable endorsement and recognition by the United Nations that the art form represents the culture of Guangdong, Hong Kong and Macau. History also shows us that renowned Cantonese opera troupes and artists offered their staunch support for charity initiatives on behalf of the community. The Tung Wah Charity Gala is a long-running charity fundraising programme jointly organised by Tung Wah Group of Hospitals and Television Broadcasts Limited which still includes performances by renowned Cantonese opera artists as a highlight when publicising the gala. Raising HK\$100 million, 2015's event broke all Hong Kong fundraising records, with much of the credit owed to Cantonese opera celebrities. Despite the flourishing of many different entertainment forms, of which Cantonese opera is just one, it continues to play a critical role in both community charity activities and as an icon of Hong Kong culture.

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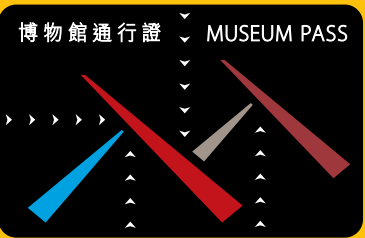
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數碼球幕節目製作

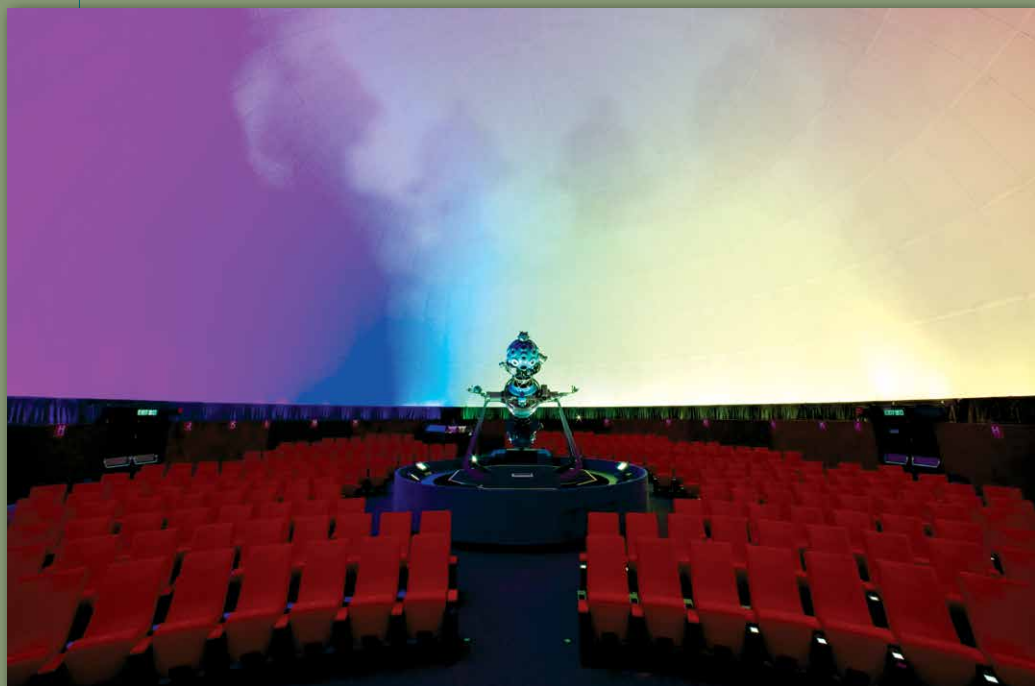
Production of Digital Dome Shows

劉啟業 LAU Kai-ip, Patrick

一級助理館長(公眾節目) | 香港太空館
Assistant Curator I (Public Programme) | Hong Kong Space Museum

張穎珊 CHEUNG Wing-shan, Gloria

二級助理館長(遙控天文台及天文公園) | 香港太空館
Assistant Curator II (iObservatory & Astropark) | Hong Kong Space Museum



天象廳在數碼化之前所採用的光學星象儀

The optical star projector used before the digitisation of the Space Theatre

① 採用干涉濾鏡技術的立體眼鏡

The 3D glasses which use
interference filter technology



天文館在推動天文科普方面一直扮演著重要角色。天文館的發展已有超過百年歷史。1923年世界第一座設置球型屏幕及配備第一代光學星象投影儀的現代化天文館在德國建立。自此以後，天文館在世界各地開始紛紛落成。現時的天文館不單能投影星空及模擬天象，也可作為影院播放球幕電影或立體電影。

香港太空館在1980年啟用。太空館天象廳設有直徑23米的半球型銀幕，並且配置東半球首座全天域電影(OMNIMAX)放映系統及當時最先進的蔡司(Zeiss)VIA型星象儀。星象儀由百多件光學和機械組件組合而成，能夠透過光學系統將8,000顆恆星的影像投射到球幕上，模擬出非常像真的星空，讓觀眾能穿梭古今及不受天氣影響，在室內享受仰觀星空的樂趣。至於放映天象節目，則是透過自行發展的影音控制電腦系統，利用程式操控星象儀、數百部特技效果放映機、音響及燈光系統等，令不同的視覺及音響效果互相配合，這是世界上第一個全自動天象節目控制系統。

隨著數碼投影科技不斷演進，太空館於2009年為天象廳設施進行更新，更換一套全新的SKY SKAN數碼天象投影系統，以及安裝配備多語言互動系統的座椅。2012年再將數碼投影系統升級，增設三維立體球幕投影設備用以播放立體球幕影片。觀眾只要戴上特製的眼鏡，便體驗到被立體影像所包圍，非一般的臨場震撼感覺①。

Since the first appearance of planetariums 100 years ago, they have been tasked with popularising astronomy among the general public. The first modern planetarium, equipped with a dome screen and the first generation of optical star projectors, was established in 1923 in Germany. Planetariums then started to spring up around the world. Nowadays planetariums are more than projectors of starry sky and astronomical simulations, they are also theatres of dome shows and 3D movies.

The Hong Kong Space Museum made its debut in 1980. Commanding a hemispherical screen of 23 metres in diameter, the Space Theatre of the Hong Kong Space Museum is the first planetarium in the Eastern Hemisphere to be equipped with OMNIMAX projection system and the then most advanced Zeiss Via star projector. Comprised of more than 100 optical and mechanical parts, the star projector is capable of simulating vivid images of 8,000 stars for projection on the dome screen so that visitors can enjoy starry skies indoors, regardless of visibility or weather conditions outside. The Museum has developed the world's first fully automated audiovisual computer system for projecting sky shows. Computer programmes were developed to control the star projector, with hundreds of special effect projectors, and sound and light systems combining seamlessly to create a broad array of visual and audio effects.

With the advent of digital projection technology, the Museum renovated its Space Theatre facilities in 2009, incorporating a new SKY SKAN digital planetarium projection system, and installed chairs embedded with multi-language and interactive system. In 2012, the digital planetarium projection system was further upgraded to include projection facilities for 3D dome shows. Visitors wearing specially designed goggles will find themselves immersed in the unparalleled experience of virtual reality①.



2 數碼天象投影系統能夠模擬更多天文現象
The digital planetarium projection system can simulate more astronomical phenomena

現時數碼投影系統由八部 SXRD 超高清影像投影機及 32 部高效能電腦構成，可放映解像度高達 1,600 萬像素的立體影像。立體影像系統採用「干涉濾鏡技術 (interference filter technology)」，它有別於一般電影院或電視所採用的主動快門式 (active shutter) 或偏光式 (polarisation) 立體技術，是專為配合曲面銀幕的特性而設，可提供優質的視覺效果。

除了播放影片之外，這套系統也可以用 SKY SKAN 公司的 DigitalSky 2 軟件投射模擬星空作天象解說，取代傳統的光學星象儀。該軟件以實時模擬 (real-time simulation) 方式，帶領觀眾自由地穿梭於宇宙中任何時間及任何地點、漫遊某個恆星或其他天體、查看其相關軌道與座標等資訊，亦可一探各太陽系天體的最新立體面貌，甚至到達可見宇宙的邊緣，窺探宇宙的宏觀結構。星體的資料以美國太空總署及歐洲太空總署等的數據庫為依據，包含了全世界具代表性的天文機構的最新觀測成果，是現時最精確的「宇宙地圖集」2。

The current digital projection system consists of eight SXRD ultra-high resolution projectors and 32 high-performance computers, offering 3D images with a resolution as high as 16 million pixels. Different from the active shutter or polarisation 3D technologies commonly adopted by cinemas and television, 3D image systems adopt interference filter technology to create quality visual impact for curved screen projection.

In addition to movie projection, the system also supports SKY SKAN DigitalSky 2 software to project a simulated starry sky, replacing traditional optical star projectors in narrating its cosmic stories. The software's real-time simulation mode takes audiences on a journey through the universe that spans time and space, travelling between stars and other celestial objects, accessing information on their orbits and coordinates, and offering the latest 3D views of the solar systems, reaching the far edge of the visible universe to explore its macro structure. This information is derived from the databases of NASA and the European Space Agency, as well as the latest observations gathered by some of the world's leading astronomical organisations. It is currently the most sophisticated "Atlas of the Universe"2.

天象廳設施主要更新項目
Renovated facilities at the Space Theatre

1980	正式啟用 Officially opened
1983	首次安裝多語言系統，使每個節目皆可同時提供四種語言 (粵語、普通話、英語及日語) 旁述 For the first time, a multi-lingual system can deliver narrations in four languages (Cantonese, Putonghua, English and Japanese) for each show
1993	為全自動天象節目控制系統升級 Automatic control subsystem upgraded to an interactive system
1995	安裝觀眾互動系統及更換銀幕以改善影像質素 A new projection screen to enhance image quality was installed
1999	為全天域電影放影機安裝新的倒帶機 A new rewinding unit for the OMNIMAX projector was installed
2009	更換全新的數碼天象投影系統，以及安裝配備多語言互動系統的座椅 Replaced the projection system with a brand new digital planetarium projection system and seats with interactive multi-lingual capability was installed
2012	增加三維立體球幕投影設備 3D projection facilities added
2015	推出首個自行製作的天象節目 First sky show produced by the Museum was launched



3 球幕主片
Domemaster

現時天象廳放映三類節目：覆蓋球幕約百分之八十面積的全天域電影 (OMNIMAX Show)、充分利用整個球幕的天象節目 (Sky Show) 及立體球幕電影 (3D Dome Show)。每年太空館會精選國外的影片在天象廳播放，此外亦會製作利用數碼天象投影系統播放的天象節目。

要了解球幕節目技術，首先需認識其解像度。現時業界的標準解像度分為 1k、2k、3k、4k、5k 和 8k 六種。1k 就相當於 1,024 像素。以 4k 影片為例，它是由一系列依次排列，尺寸為 4,096 x 4,096 像素的正方形圖片組成，畫面採用正方位等距投影 (azimuthal equidistant projection)，有效像素為當中最大的圓形。這些圖像稱為「球幕主片 (domemaster)」³。

現時球幕影片的製作主流為 4k，而較低解像度的影片主要供流動或小型天文館使用。球幕主片格式的影片需按投影機的擺放位置及電腦數量進行影片切割 (slicing) 及編碼 (encoding)、再安裝到個別電腦才可以作正式播放。太空館的球幕影像由 8 部投影機合成，而每部投影機由 4 部圖像電腦提供畫面，因此影片必須預先切割成 32 份；而播放三維立體電影時，當中四部投影機的 16 份會組成左眼影像，另外四部投影機的 16 份則組成右眼影像。由於影片是根據每部投影機的位置而進行分割的；當投影機的位置有任何變動，要用這部投影機播放的影片就必須重新切割。

Of the three show categories currently at the Space Theatre, the OMNIMAX Show utilises about 80% of the dome screen, while the Sky Show and 3D Dome Show attain maximal usage of the screen. Every year, the Museum leases films from around the world, as well as producing its own Sky Shows which take advantage of planetarium's digital projection system.

Knowledge of resolution systems and techniques is a prerequisite to understanding dome show technology. Industry standard resolution comes in six categories: 1k, 2k, 3k, 4k, 5k and 8k. 1k is equivalent to 1,024 pixels. Taking 4k as an example, it is a sequence of square images of 4,096 x 4,096 pixels. Azimuthal equidistant projection is applied to the image content and the effective resolution is defined by the largest circle inscribed in the square. These images are known as "domemaster"³.

4k is currently the mainstream resolution in dome shows production, while videos of lower resolutions are adopted by mobile or small-scale planetariums. Videos in domemaster format have to be sliced and encoded according to the placement of projectors and number of computers. The preprocessed videos are then installed in individual computers before they can be played.

The dome show at the Museum is composed of images from eight projectors. The images for each projector are fed by four graphics computers, hence, the show has to be pre-sliced into 32 channels. In projecting 3D movies, 16 channels for four of the projectors will form the images for the left eye, while the other 16 channels for the remaining four projectors will form the images for the right eye. Since the show is sliced according to the position of each projector, whenever the position of any projector changes, the show will have to be sliced again.

除了影像制式不同，製作球幕節目與一般的影視製作相若，當中包括了以下流程：

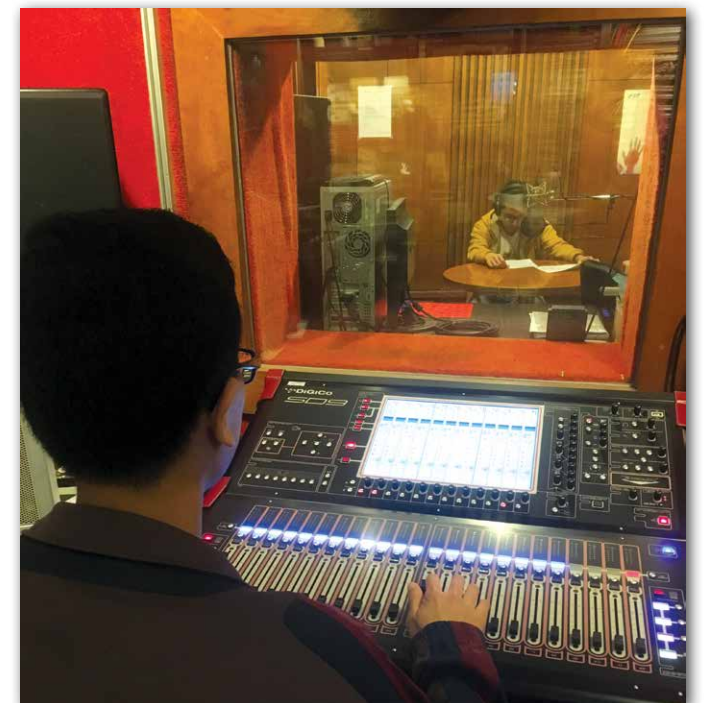
- 撰寫故事大綱
- 撰寫配音稿
- 繪畫分鏡圖
- 配音⁴
- 全景錄像拍攝
- 星象儀程序編寫
- 人物設計
- 三維電腦模型製作
- 電腦動畫動作設計
- 算圖
- 加入視覺特效
- 合成處理
- 配樂及音效
- 影片輸出

但由於每格畫面大小達 4,096 x 4,096 像素，算圖及合成處理等工序的時間會較一般影片長。以算圖為例，一段一分鐘的電腦動畫，利用本館由 10 台運算單元 (nodes) 組成的算圖伺服器群組 (rendering farm) 算圖大約需要 24 小時。此外，球幕節目畫面能夠運用的鏡頭選擇較少，大部分是魚眼或接近魚眼的超廣角，甚少採用特寫鏡頭。而且，構圖亦應運用球幕特性，將各種視覺元素擺放在球幕不同的位置。同時，由於觀眾整個人置身在球幕下，畫面移動速度不能過快，以免造成暈眩感。

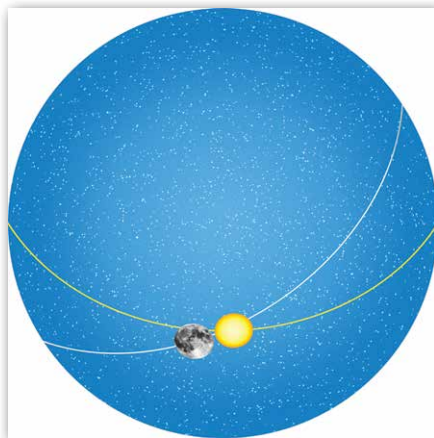
Apart from the difference in image format, the production of a dome show is similar to common video production which includes the following steps:

- Writing the story outline
- Writing the narration script
- Drafting the storyboard
- Dubbing⁴
- Fulldome video shooting
- Digital planetarium programming
- Character design
- 3D computer model production
- Animation
- Rendering
- Visual effects
- Composition
- Music accompaniment and sound effects
- Output

However, as each frame is of 4,096 x 4,096 pixels, processes such as rendering and composition will take a much longer time than normal videos. For example, in terms of rendering, it takes about 24 hours for a one-minute computer animation using the Museum's rendering farm, which is composed of 10 nodes. What's more, the choice of lens for dome shows is limited to super wide angles like fish-eye or near fish-eye lenses. Close-ups are rarely used. Leveraging on the characteristics of domes, visual elements should be placed on different parts of the dome. Meanwhile, as the audience is immersed under the dome, visual movements should not be too fast to avoid creating any disorientation.



4 設於太空館內的錄音室
Recording studio inside
the Space Museum



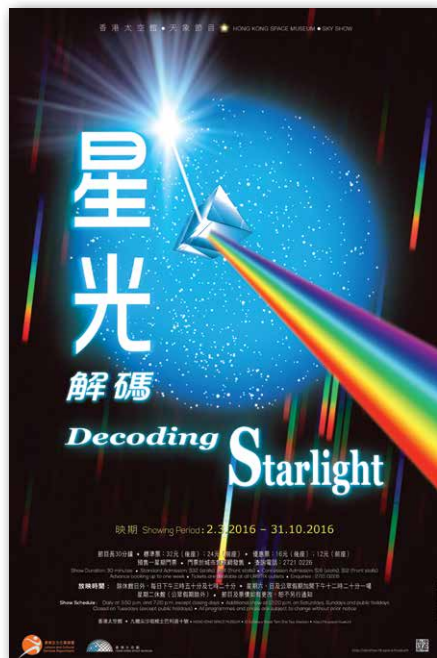
5 《日食傳奇》截圖
A screen capture of
"The Stories of Solar Eclipse"



6 《星光解碼》截圖
A screen capture of "Decoding Starlight"



7 《日食傳奇》海報
Poster of "The Stories of Solar Eclipse"



8 《星光解碼》海報
Poster of "Decoding Starlight"

9 《星光解碼》製作會議
Production meeting of "Decoding Starlight"



自天象廳系統於2009年數碼化後，太空館曾自行製作過15分鐘的球幕短片，加插在當時播放的外購天象節目(Sky Show)內，以累積製作經驗。而2015年3月上映的《日食傳奇》(The Stories of Solar Eclipse)是館方第一個單獨推出的天象節目。節目模擬日全食的壯觀過程，讓觀眾了解日食的成因，以及日食在人類歷史上產生的影響。節目除了利用數碼星象儀內含的天文數據外，更加入二維視覺特效、三維電腦動畫及360度全景錄像，務求令畫面更豐富^{5 6 7}。

有了《日食傳奇》的經驗，太空館於2016年3月推出第二齣天象節目《星光解碼》(Decoding Starlight)。節目介紹歷代科學家如何逐漸得知與恆星的距離和恆星光譜所隱藏的重要資訊⁸。與《日食傳奇》相比，《星光解碼》有以下改進：

1. 首次委託本地動畫製作公司協助製作首尾兩個場景(scene)：由於香港只有太空館設有固定球幕影院作公開放映，球幕影片製作對本地動畫製作公司而言是個新嘗試，本館同事亦在製作過程中，得以認識商業動畫製作的技巧⁹。
2. 到香港以外地方實境拍攝：攝製隊走訪位於深圳大亞灣的中微子振盪實驗(Daya Bay Neutrino Oscillation Experiment)設施進行拍攝。該實驗中的三個子系統(subsystems)由香港中文大學及香港大學負責，這是本港首次參與關於基本粒子物理研究的國際大型合

Since the digitalisation of the Space Theatre in 2009, the Museum has produced several 15-minute complementary dome shows to be screened alongside internationally procured Sky Shows in order to gain relevant experience. "The Stories of Solar Eclipse" launched in March 2015 marked the first standalone Sky Show produced in-house. The show simulated the spectacular stages of a total solar eclipse to enable audience to understand the causes and the impact of solar eclipses on human history. The show not only made use of the built-in astronomical data in the digital planetarium, but also employed 2D special effects and 3D animations, as well as 360-degree panoramic videos to enrich the visuals^{5 6 7}.

With experience obtained from the debut production of "The Stories of Solar Eclipse", the Museum launched its second Sky Show "Decoding Starlight" featuring the pursuit by generations of scientists of the distances to stars and the important information encrypted in stellar spectra⁸. Compared with "The Stories of Solar Eclipse", "Decoding Starlight" exhibits the following improvements:

1. Commissioned for the first time a local animation studio to assist in the production of the opening and closing scenes – Dome show is a new challenge to local animation studios as the Museum is the only venue equipped with a permanent dome theatre for public viewing. The Museum team also acquired commercial animation production skills through this project⁹.
2. Location shooting out of Hong Kong – The video crew visited the facilities of Daya Bay Neutrino Oscillation Experiment in Shenzhen. Three subsystems of the Experiment are jointly managed by The Chinese University of Hong Kong and the University of Hong Kong. This is actually the first time Hong Kong has participated in such a major international collaboration project examining elementary particle physics.

作計劃。360 度全景錄像能讓觀眾仿如置身其境，穿越大亞灣核電廠旁，長達兩公里的山洞隧道到達平日難得一見的實驗大廳 (experimental hall)¹⁰。

3. 改善平面影像 (flat screen images) 的投影效果：平面影像 (例如照片、一般視頻等) 投射到曲面的球幕時，若非身處球幕影院的正中央，所見的影像無可避免會出現幾何畸變。但天象廳中央因安裝了上一代的光學星象儀 (optical star projector) 而不設座位，若影像不作特別處理，其餘座位的觀賞效果將大打折扣。在《日食傳奇》及以前的製作中，本館需要憑經驗預先將影像逆變形 (reverse distortion)，來減輕實際投影時的畸變。影像需按不同大小和位置反覆測試，令製作時間增長。在《星光解碼》，本館採用了 Amateras Dome Player 軟件中的「虛擬幻燈片」(Virtual Slide) 功能取代這個甚花時間的工序，而且效果更為理想¹¹。
4. 設置測試用小型球幕影院：由於平日天象廳於開館時間需播放節目，只能於星期二休館日和其餘日子的早上時段作測試。本館利用小型流動天象廳投影機 (portable planetarium) 和塑料球罩 (acrylic dome)，在地庫設置了一個小型球幕影院，讓同事可快速調試，節省不少時間¹²。日後，本館將考慮添置虛擬實景眼鏡 (Virtual Reality Goggles)，從工作站 (workstation) 直接輸出虛擬球幕影像作測試。

《星光解碼》除了在本館天象廳上映以外，亦曾在西班牙馬德里球幕節 (Immersive Festival Madrid) 及美國費斯克球幕電影節 (Fiske Full Dome Film Festival) 參展，藉此能獲取天文館同業的意見，作為日後製作的參考。

360-degree panoramic videos allow the audience a virtual experience through the two-kilometre cave tunnel adjacent to Daya Bay Nuclear Power Plant, leading to the rarely seen experimental hall¹⁰.

3. Improved projection quality of flat screen images – Flat images (e.g. photos and ordinary videos) will inevitably be distorted when projected on a curved dome screen unless they are viewed from the centre of the dome theatre. However, the centre of the Space Theatre is occupied by the previous generation optical star projector and thus seats are not available in that area. If the images are displayed as-is, they will be much less appealing when viewed from theatre seats. In “The Stories of Solar Eclipse” and other previous productions, the Museum had to reverse-distort the images in advance using rule of thumb, so as to reduce such distortion during the actual screening. Repeated adjustments were required to cater for different image sizes and locations, which lengthened the production lead-time. This time consuming process was later replaced with the virtual slide feature within the Amateras Dome Player software during the production of “Decoding Starlight”, hence saving time and creating much better results¹¹.
4. Construction of a mini-dome theatre for testing purposes – As the Space Theatre is scheduled for public shows during weekdays, scene testing can only be undertaken on Tuesdays when the Museum is closed, and in the morning sessions of other days when no shows are scheduled. To facilitate speedy tests and adjustments, the Museum has constructed a mini-dome theatre with a portable planetarium projector, and an acrylic dome in the basement¹². In the future, the Museum will consider procuring Virtual Reality Goggles to directly feed virtual dome images from workstations for testing.

Besides screening at the Space Theatre of the Museum, “Decoding Starlight” also featured in the Immersive Festival Madrid in Spain and the Fiske Full Dome Film Festival in the United States, to seek views and input from fellow planetarians and foster improvement in future productions.



¹⁰ 實驗大廳內部
Interior of the experimental hall



¹¹ AMATERAS 軟件截圖
A screen capture of AMATERAS



¹² 測試用小型球幕影院
Mini-dome theatre for testing

逆水行舟—— 香港私營博物館的發展

Against all Odds – The Development of Private Museums in Hong Kong

陳己雄 CHAN Ki-hung

總監 (博物館項目與發展) | 項目與發展組
Head (Museum Projects and Development) | Projects and Development Section



香港私營博物館例子：F11 攝影博物館

A sample of private museum in Hong Kong: F11 Photographic Museum

一個地區的文化發展程度，私營博物館的發展是否蓬勃和健康，可以作為一個重要的指標。

在一份討論法國博物館私營化的文章中，Francoise Benhamou 直接指出博物館的商機只是一個幻象，¹ 能夠真正自給自足的博物館實在有如鳳毛麟角。根據美國藝術館館長協會 (Association of Art Museum Directors) 於 2016 年 1 月發表的《藝術博物館 2015 年數據》(Art Museums by the Numbers 2015)，² 美國藝術博物館的每一個觀眾的成本為 US\$55.25，觀眾人均收入則為 US\$8.02 (包括入場費、禮品店及餐廳)，加上其他例如停車場、設施租金等收入，只佔全部收入的 26%，其餘則依靠會費及私人捐獻 (平均 35%)、基金回報 (endowment returns，平均 21%) 及政府資助 (平均 17%) 補足。一般來說，無論香港以至世界各地，博物館能達至 30% 的成本回收率已被視為相當理想。

假若不是對文化充滿熱情，很難想像有人會投入大量的精力，作這種必然虧本的生意。每思及此，筆者皆對這些為香港文化的傳承發展默默付出的人，不能不表達衷心的敬意。

可惜的是，以筆者所知，香港一直以來並沒有人對香港私營博物館的發展，以及對香港博物館的發展環境和遇到的機遇和障礙，作出認真的研究。筆者在此不揣淺陋，對香港的私營博物館作出初步的探討，期望能拋磚引玉，引起更多人對香港私營博物館發展的興趣。

在進一步討論私營博物館之前，我們有需要釐清兩個重要問題：一) 甚麼是博物館？二) 怎樣界定私營博物館？

甚麼是博物館？

香港並沒有官方的博物館定義，亦沒有正式的博物館登記制度，所以文章中將基本上以聯合國屬下的國際博物館議會 (ICOM) 的博物館定義為依歸：

「博物館是一個不追求營利、向公眾開放、為社會和社會發展服務的常設機構。為了研究、教育及娛樂的目的，蒐集、保存、研究和展示藏品及傳播相關知識，藏品可來自自然界或人類的文化遺產。」

在統計香港私營博物館的數目時，很難證實博物館的成立是否以營利為目的 (例如香港

The development of private museums is an important indicator of how mature and advanced the culture of a certain region is.

In the article written by Francoise Benhamou on the privatisation of museums in France, she makes the compelling point that the commercial viability of museums is nothing more than an illusion.¹ Museums that could boast self-sufficiency are really scarce. According to the survey *Art Museums by the Numbers 2015* published by the Association of Art Museum Directors in January 2016,² museums spent approximately US\$55.25 for each visitor, who spent an average US\$8.02 in return. In general, visitor income only accounted for 26% of total museum income and may come from admission fees, spending in souvenir shops and restaurants, and from other sources such as car park fees and venue rental. The remaining income relies on membership fees and private donations (an average of 35% of total income), endowment returns (average 21%) and government subsidies (average 17%). All in all, a museum, whether it is in Hong Kong or overseas, is considered financially thriving if it can achieve a cost recovery rate of 30%.

It is really amazing to see people who are so passionate about culture that they invest tremendous effort and resources into a venture that could hardly be in the black. Whenever I think of this, there are no words that can express my utmost respect for these silent contributors who devote themselves to the conservation and development of cultural heritage in Hong Kong.

Unfortunately, as far as I know, few have ever carried out a proper research on the development of private museums in Hong Kong, let alone a formal study on the local ecology for museum development, as well as the opportunities and obstacles that confront the museums in Hong Kong. I would like to have a preliminary discussion about the current development of private museums in Hong Kong in the hope that it could inspire more concern and interest in this topic.

Before a further discussion on the subject of private museums could proceed, there are two critical questions that we need to address: 1) What is a museum? 2) How to differentiate between private and public museums?

What Is a Museum?

In Hong Kong, there is neither an official definition of museums nor a formal museum registration system. Therefore in this discussion, we are going to employ the definition of museums laid down by the International Council of Museums (ICOM) under the United Nations.

“A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of study, education and enjoyment.”

不少的 3D 博物館)，不少機構並非以博物館為名（例如展覽館、教育中心或文物館等），再加上這些疑似博物館大都規模很小，成立和結束亦不會作甚麼宣傳，實在難以一一追蹤研究，在文章中對私營博物館的統計如有錯漏，還望讀者不吝指正。

如何界定博物館為私營？

根據 Barry Lord 及 Gail Dexter Lord³ 的看法，雖然世界博物館五花八門，但皆可歸類為以下四種主要管治模式，即直接管轄模式（line departments）、間接管轄模式（arm’s length institutions）、非牟利或慈善機構（non-profit or charitable organisations）及私人擁有（private ownerships）^①。

在這篇文章中，私營博物館主要指最後兩種管治模式的博物館。直接或間接管轄模式的博物館，必須為私營機構或非政府機構擁有，假若博物館由政府出資成立，並設立基金或直接以金錢或資產（例如提供物業，以租金收入彌補博物館營運支出）提供營運資金，例子如西九文化區將來的博物館，將不被界定為私營博物館。

Whilst counting the number of private museums in Hong Kong, we find it hard to ascertain whether some have been established for the sake of profit making or not (as may be the case, for example, with some of the 3D museums in Hong Kong). Also, in many cases the word “museum” is simply missing from their official names (such as exhibition centres, education centres or heritage centres). To make things worse, most of these “museums” are difficult to track because of their relatively small size and correspondingly lack of publicity. Thus, feedback from readers is most welcome in the case of any errors in the statistical data on private museums compiled here.

How to Define a Private Museum?

According to Barry Lord and Gail Dexter Lord,³ despite the seemingly rich variety of museums in the world, most of them can still be categorised into four main streams according to their modes of governance: line departments, arm’s-length institutions, non-profit or charitable organisations, and private ownerships^①.

In this article, private museums refer to those that are governed by the last two modes of governance. As for museums governed by line departments or arm’s-length institutions, if they are established by government funds with operating expenses covered either by endowments or direct government provision of cash or capital (for example, operating costs covered by rental income from provision of property), these institutions will not be treated as private museums. A notable example is the museum(s) to be established in the West Kowloon Cultural District.

① 四種管治模式的分別可參考下表：
The four different modes of governance are as follows:

	直接管轄 Line departments	間接管轄 Arm’s-length institutions	非牟利 Non-profit or charitable organisations	私人 Private ownership
所有權 Ownership	政府、大學或所屬機構 Government, university or affiliated institutions	政府、大學或所屬機構 Government, university or affiliated institutions	所屬團體 Affiliated institutions	私人或私人機構 Individuals or private organisations
局或信託 Board or Trust	諮詢 Consultation	管治或諮詢 Management or Consultation	管治 Management	諮詢 Consultation
營運收益資金 Funds	每年財政預算 Annual budget	資助及營運收益 Financial subsidies and operating income	營運收益、資助及基金 (endowment) operating income, financial subsidies and endowment	私人及營運收益 Private funding and operating income
職員 Staff	公務員或大學 / 所屬機構僱員 Civil servants or employees of universities or affiliated institutions	可能是公務員或由博物館自行聘請 May be civil servants or staff employed by museums	所屬團體僱員 Employees of affiliated institutions	公司僱員 Employees of companies

香港私營博物館的數目及發展情況

根據截至 2016 年 6 月的統計，香港的公營博物館數目有 37 間，私營博物館則有 46 間。五年前公營博物館在數量上佔優，現在已被私營博物館迎頭趕上。康樂及文化事務署（康文署）現在管理 17 間博物館，其中包括香港四間規模最大的博物館，即香港歷史博物館、香港文化博物館、香港藝術館及香港科學館。無論是在博物館數目，以及博物館的規模和經費上，康文署都是全港最主要的博物館服務提供者^②。

我們發現一個很有趣的現象，公營博物館的數目，在 2011 年以後再沒有增加，相反私營博物館的數目卻出現長足的進步^③，反證香港社會的文化發展漸趨成熟，無論是機構、公司和個人，對博物館的認識日深，所以有不少人士，選擇以建立博物館的方式，把個人的興趣和收藏與社會共享。

②

	公營博物館 Public Museums	私營博物館 Private Museums
數目 Number	總計：37 Total: 37	總計：46 Total: 46
	政府部門 Government department 康文署：17；民政事務署：2；市區重建局：1；香港海關：2 香港金融管理局：1；香港房屋委員會：1；規劃署：1 香港政府檔案處：1；保安局禁毒處：1；香港懲教署：1 漁農自然護理署：1；香港郵政：1；機電工程署：1 食物環境衛生署：1；香港警務處：1；環境保護署：4 Leisure and Cultural Services Department (LCSD):17 Home Affairs Department (HAD):2 Urban Renewal Authority (URA):1 Hong Kong Customs and Excise Department (C&ED):2 Hong Kong Monetary Authority (HKMA):1 Hong Kong Housing Authority (HA):1 Planning Department (PD):1 Government Records Service (GRS):1 Narcotics Division, Security Bureau (ND):1 Hong Kong Correctional Services (CSD):1 Agriculture, Fisheries and Conservation Department (AFCD):1 Hongkong Post:1 Electrical and Mechanical Services Department (EMSD):1 Food and Environmental Hygiene Department (FEHD):1 Hong Kong Police Force:1 Environmental Protection Department (EPD):4	類型 Genre 歷史：23 (50%) 藝術：12 (26%) 科學：7 (15%) 興趣 / 其他：4 (9%) History: 23 (50%) Art: 12 (26%) Science: 7 (15%) Interests / Other: 4 (9%) 地點 Location 香港島：21 (46%) 九龍：9 (20%) 新界：14 (30%) 離島：2 (4%) Hong Kong Island: 21 (46%) Kowloon: 9 (20%) New Territories: 14 (30%) Outlying Islands: 2 (4%)

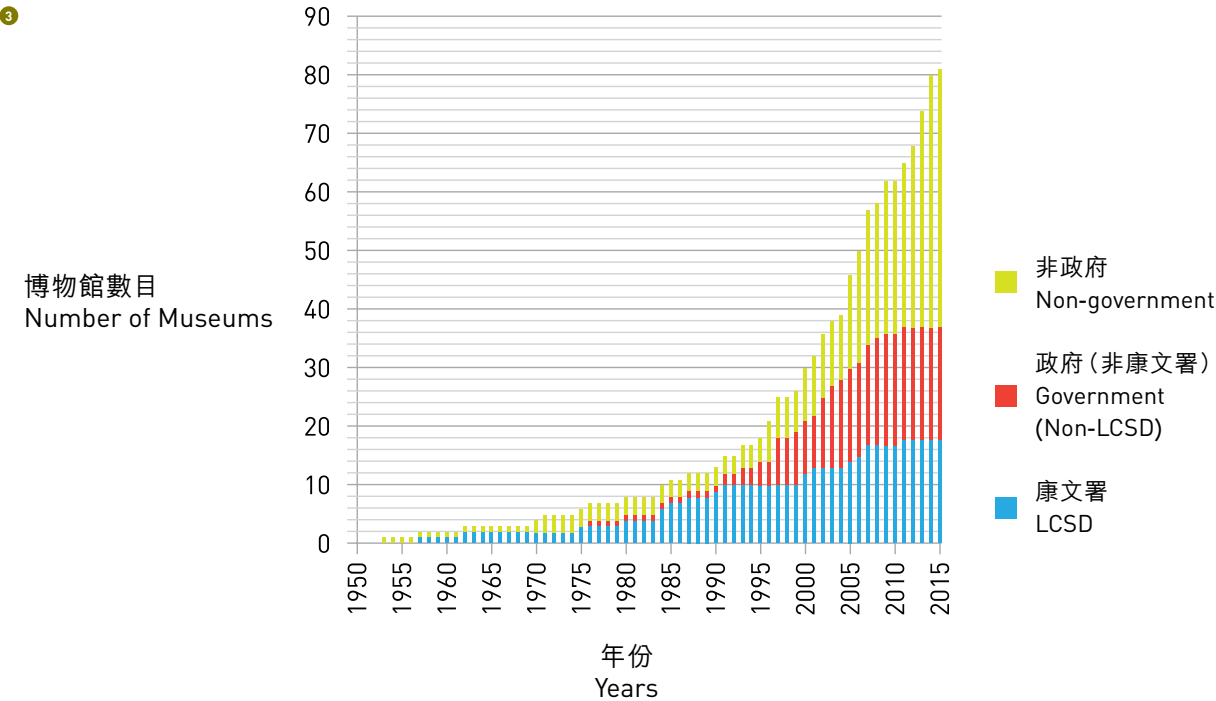
The Number of Private Museums in Hong Kong and Their Development

As at June 2016, there are 37 public museums and 46 private museums in Hong Kong. Five years ago there were more public museums than private ones, but the situation has now been reversed. The Leisure and Cultural Services Department (LCSD) is currently running 17 museums, including the four largest ones in the territory: Hong Kong Museum of History, Hong Kong Heritage Museum, Hong Kong Museum of Art and the Hong Kong Science Museum. In terms of the number and scale of museums and the total amount of funding, LCSD is undoubtedly the major museum service provider in Hong Kong^②.

The bar chart reveals a very interesting phenomenon. Since 2011, the number of public museums has more or less come to a standstill. In stark contrast is the number of private museums has been growing in leaps and bounds during the same time period^③. This is vivid testimony to the increasing maturity in the cultural development in Hong Kong. With a more profound understanding and appreciation towards museums across different walks of life, institutions, companies or individuals are more willing to share their interests and collections with the public through establishing museums of their own.

我們根據這些公私營博物館的創立年份，可以大致勾劃出香港博物館的發展概況：

Using the year of establishment of these public and private museums, we could more or less obtain a rough overview of the local development of museums:



4

國家 / 地區 Country / Region	博物館數目 Number of museums	私營博物館數目 Number of private museums	私營博物館百分比 Percentage of private museums	每多少人有一間博物館 Number of people served by each museum
亞洲 Asia				
中國 China (2014) ⁴	4,164	781	19%	328,482
日本 Japan (2011)	5,747 ⁵	780 ⁶	14%	22,238
南韓 South Korea (2012) ⁷	1,079	562	52%	46,988
台灣 Taiwan (2015) ⁸	477	221	46%	49,266
香港 Hong Kong (6/2016)	83	46	55%	87,952
新加坡 Singapore (2014) ⁹	52	不詳 Unknown	-	105,769
歐洲 Europe				
德國 Germany (2014) ¹⁰	6,375	3,001	47%	12,675
英國 U.K. (2015) ¹¹	1,726	944	55%	37,717
法國 France (2015) ¹²	1,218	158	13%	52,791
意大利 Italy (2011) ¹³	3,847	1,393	36%	16,246
西班牙 Spain (2014) ¹⁰	1,468	466	32%	31,607
荷蘭 Netherlands (2013) ¹⁰	799	735	92%	21,151
美洲 Americas				
美國 U.S. (2009)	17,500 ¹⁴	14,000	80%	18,354

單以比例而論，香港的私營博物館的數量佔整體博物館的 55% ⁴，在西方先進國家中屬中游位置，在亞洲國家和地區中，與南韓和台灣相近，更遠超日本，可見香港的博物館文化並不如很多人想像中冷漠。願意為了推廣文化、分享興趣，不惜出錢出力的人其實並不少。更令人欣喜的是，在過去三年，有多間相當有份量的私營博物館成立，包括皇家博物館(2013)、F11 攝影博物館 (2014)、兩依藏 (2014)、一新博物館 (2015) 等等，這是過去數十年來難得一見的盛況。

但在我們為香港私營博物館的長足發展感到欣慰的同時，亦要知道香港博物館的數量相對仍然落後，平均每 88,000 人才擁有一間博物館，遠遠落後於歐美先進國家，在亞洲地區亦顯得遜色。在考慮了人口基數後，香港博物館數目其實較南韓和台灣少約一半，更僅為日本的四分之一。規模方面，和外國的著名私營博物館相比，例如法國的 Fondation Cartier、中國上海的龍美術館、韓國的三星博物館、荷蘭的 De Pont Museum of Contemporary Art、美國的 Rubell Family Collection、英國倫敦的 Zabludowicz Collection 等等，便知香港博物館的發展，仍然任重道遠。

建立私營博物館的困難與挑戰

在寸金尺土、大眾對文化相對冷漠的香港，再加上營運資金高昂和法例的要求，香港或許是全世界建立私營博物館最困難的地方。

以在美國建立私營博物館為例，就算不是腰纏萬貫，有自己的土地或物業，只要得到社區的支持，便可嘗試與當地的發展商接觸，有可能會得到他們的協助，解決館址的問題。營運方面，除了可以訂定較高的入場費外，亦相對容易得到私人捐獻，亦可以透過申請為數眾多的政府或私人基金，得到部分的資助。在專業方面，更有組織龐大的美國博物館協會，提供有力的專業支援，¹⁵ 以至為博物館作專業認證。¹⁶ 在香港，能得到地產商或商場管理公司的支援而成立博物館可謂寥寥可數，樂富廣場的「香港玩具科學館」（前身為「香港玩具博物館」）實在是難得的成功例子^{5 6}。

With private museums accounting for 55% of all museums⁴, Hong Kong ranks somewhere in the middle among the “advanced West”. In Asia, Hong Kong is on par with South Korea and Taiwan, and even far ahead of Japan. This shows that people in Hong Kong are far from being lukewarm towards museums. Many people have in fact invested enormous amounts of money and resources in promoting culture and sharing their interests. It is gratifying to know that in the past three years, many high quality private museums have come into being. They include the Imperial Museum (2013), F11 Photographic Museum (2014), Liang Yi Museum (2014) and the Sun Museum (2015), to name just a few. This was rarely seen over the past few decades.

However, while we are savouring the significant growth in local private museums, their number still lags far behind Europe and the US, and is relatively low across Asia generally. Hong Kong has an average of one museum per 88,000 people, and in real terms this means our number of museums is only half of South Korea or Taiwan, and only one-quarter of Japan. We could see how far we still have to go by comparing the size and scale of private museums in Hong Kong with those well-known counterparts overseas, for example, the Fondation Cartier in France, Long Museum in Shanghai of China, Samsung Innovation Museum in South Korea, De Pont Museum of Contemporary Art in the Netherlands, Rubell Family Collection in the US and Zabludowicz Collection in London.

Difficulties and Challenges of Establishing Private Museums

Given the exorbitant property prices and rent, the public’s lethargic responses towards cultural appreciation, high operating costs and stringent legal requirements, Hong Kong is probably the most difficult place in the world to establish private museums.

Suppose you want to set up a private museum in the US. The search for museum sites is relatively straightforward. Even if you do not have a huge supply of capital or a piece of land or property at your disposal, as long as local communities support your initiatives, you may still manage to find a suitable museum premises by seeking assistance from local developers. As for the cost of operation, aside from setting higher admission fees, you are more likely to receive private donations or subsidies from government or private endowments. In addition, the American Alliance of Museums provides strong unwavering professional support¹⁵ and accreditation for private museums.¹⁶ On the contrary, few private museums could garner support from property developers or shopping mall management companies in Hong Kong. A notable exception may be the Hong Kong Toy Science Museum (previously HK Toy Museum), in Lok Fu Plaza^{5 6}.



5 位於樂富廣場的「香港玩具科學館」的部分展品
Some of the exhibits on display at the Hong Kong Toy Science Museum in Lok Fu Plaza.



6 除了靜態展示，「香港玩具科學館」更設有互動展品，讓市民在購物之餘，學習玩具的科學原理。

Apart from static displays, there are interactive exhibits at the Hong Kong Toy Science Museum where visitors can learn about the scientific principles of toys besides shopping.

除了一些已訂立博物館法的國家，對博物館的註冊會有特別的要求和規定外，香港跟大部分國家一樣，並沒有獨立的博物館登記制度，例如美國博物館一般會註冊為 501(C) 組織（即非牟利團體）。要在香港營運博物館，則可以根據相關條例，註冊為社團、公司或基金，或根據香港法例而成立的法定機構（例如根據《西九文化區管理局條例》成立的西九管理局，負責營運西九文化區內的文化設施，包括興建中的 M+ 博物館），來開設和營運博物館。有需要的話，更可根據《稅務條例》第 88 條登記成為慈善機構及慈善信託，例子有香港海事博物館有限公司、極地博物館基金有限公司等等。博物館登記為慈善機構後，便可藉公開籌款來獲得經費，而公眾捐款予這些機構更可以申請扣稅。

最簡易合法營運博物館的方法，莫過於根據香港法例第 151 章《社團條例》註冊成為社團，從事宗教、政治或康樂等活動，優點在於申請程序簡便，不用繳費，成立成本非常低，例子有「民間博物館計劃」。但社團條例最關注的只是三合會和政治組織，對一般社團的權利、地位和運作要求並沒有清楚列明，十分含糊，例如會計有甚麼要求？能否聘用僱員？對社團業務有甚麼保障？全都不清不楚，對博物館的營運會造成不利的影響，更重要的是社團負責人需要承擔社團的

Apart from countries that have enacted museum legislation which stipulates special regulations and requirements on museum registration, Hong Kong, like most other countries, does not have an independent museum registration scheme (for example most American museums are registered as “501 (c)” organisations (i.e. non-profit making in US). In Hong Kong, to set up a museum, the organisation can register as a society, a company or an endowment under relevant regulations. Alternatively, the museum can register under Hong Kong law to become a statutory organisation. One such example would be the West Kowloon Cultural District Authority, a statutory body established pursuant to the enactment of the *West Kowloon Cultural District Authority Ordinance* of the Laws of Hong Kong, which is tasked with the management and operation of cultural facilities in the West Kowloon Cultural District, including the M+ museum currently under development. Museums can also be registered as charitable institutions or trusts according to Section 88 of the *Inland Revenue Ordinance*. Examples include Hong Kong Maritime Museum Limited and Polar Museum Foundation Limited, among others. Having registered as charitable institutions, museums can then raise funds from the public. Donations of this kind are eligible for tax deduction.

Perhaps the easiest way to legally operate a museum is to register it as a society under Chapter 151 of *Societies Ordinance* to undertake religious, political or leisure activities. This approach has the advantages of simple application procedures, free registration and low cost of establishment. An example would be the “Community Museum Project”. However, it must be pointed out that triad or local political organisations are actually the prime focus

一切法律和債務風險，所以很難稱得上是營運博物館的理想方法。

以公司或基金方式註冊，擁有獨立的法人地位，在營運和會計上有更清晰的法例可依，實在更為可取，所以大部分香港私營博物館，也是以這種方式註冊運作。

館址，難矣哉！

以實物展示為主要教育途徑的博物館，需要相對大的空間，才能有效展示藏品，並提供舒適的參觀環境。然而，香港是全球樓價最高的地方，租金亦水漲船高，高不可攀，根據 2015 年差餉物業估價署的統計數字，位於香港島、九龍及新界的私人零售樓宇¹⁷ 的平均月租分別為每平方米 HK\$1,599、HK\$1,505 及 HK\$1,273，工廠大廈¹⁸ 的月租則分別為每平方米 HK\$170、HK\$179 及 HK\$125。

換言之，一間 20 平方米（或 200 平方呎）的蚊型博物館，假若租用一般店舖，無論是在香港島、九龍及新界，平均每年便需要超過三十萬港元的租金支出，再加上員工薪酬、展品維護、水電等其他費用，每年五十萬的營運成本支出恐怕已經是最低消費了。

租用較為便宜的工廠大廈又是否可行？同樣一間 20 平方米的蚊型博物館，縱使每年平均租金支出有機會可降至三萬多元，除非工作人員全為義工，否則加上其薪酬或雜項開支，每年的營運費用亦不可能少於二十萬元。

要進一步降低租金支出，只能選擇地區偏遠、環境惡劣或建築維修欠佳的地方設立博物館，結果是更難吸引市民參觀，營運博物館已經是虧本的生意，看見自己苦心經營的博物館，希望與人分享自己的收藏和興趣，結果空有一片熱情，仍是人煙罕至，實在情何以堪⁷。

由於營運成本高昂、覓地建立博物館極度困難，香港的私營博物館，較有規模的不外乎三類，一是國際知名博物館在香港建立分館，例如同是位於山頂的「香港杜莎夫人蠟像館」（Madame Tussauds Hong Kong）及在 2005 年結束營業的「信不信由你奇趣館」（Ripley's Believe It or Not! Odditorium）等，二是由機構設立的博物館，例如「香港

of the *Societies Ordinance*. For societies or clubs in general, there are no clear written requirements about their rights, legal or social status or even management and operations. For example, what are the accounting or auditing requirements? Are they eligible for staff employment? What is the protection offered for the business of these societies? None of these questions have been clearly addressed. Needless to say, this would not be desirable for museum management and operations. The most important concern is that the person in charge of a society is held responsible for all its legal and financial liabilities. This is hardly an ideal way to operate a museum.

It is therefore preferable for a museum to register as a company or endowment, as this provides it with the status of an independent legal entity, and there are clear rules and legislation on operational and accounting requirements for the museum to follow. It is therefore no coincidence that most private museums in Hong Kong are registered as companies or endowments.

Getting a Museum Site is Almost Mission Impossible

As display of objects is one of the principal means for museums to achieve their education objectives, a more spacious environment is highly desirable as it enables the objects to be more effectively displayed and at the same time offers a comfortable environment for visitation. Unfortunately, Hong Kong has among the highest property prices in the world with renting hardly a viable option. According to the Rating and Valuation Department, the average monthly rent per square metre for private retail premises¹⁷ on Hong Kong Island, Kowloon and the New Territories in 2015 was HK\$1,599, HK\$1,505 and HK\$1,273 respectively, while that of factory buildings¹⁸ was HK\$170, HK\$179 and HK\$125.

In other words, a tiny museum of 20 square metres (200 square feet) renting a shop, whether it is on Hong Kong Island, Kowloon or the New Territories, will have to pay an average rent of HK\$300,000 per year. Adding other expenses such as salaries, exhibit maintenance and utility fees, the operational costs will amount to a minimum of HK\$500,000 per annum.

What about renting a space in a factory building which is cheaper to rent? For the same tiny museum of 20 square metres, the average yearly rent could be significantly reduced to around HK\$30,000, but unless the staff are volunteers, the total cost of operation will not be likely to fall below HK\$200,000, after including salaries and miscellaneous expenses.

Obviously, setting up the museum at a more remote location or at places with unfavourable environment or little maintenance seems to be the only viable option to reduce rental expenses. However, siting a museum in such a place is unlikely to attract a steady audience. It is really heartbreaking to see a museum losing money with minimal

大學美術博物館」(University Museum and Art Gallery)、「山頂纜車歷史珍藏館」(Peak Tram Historical Gallery)、「東華三院文物館」(Tung Wah Museum)等，三是著名收藏家開設或有財團或基金支持的博物館，例如「皇家博物館」(簡文樂教授，租用中環聖約翰大廈其中一層作館址)、「香港海事博物館」(香港海事博物館信托基金會 The Hong Kong Maritime Museum Endowment Trust)、「兩依藏」(馮耀輝先生，館址為其私人物業)、「一新美術館」(孫少文基金會，Simon Suen Foundation)、F11 攝影博物館(蘇彰德先生，館址為其私人物業)^⑧等等。其他由私人開辦的博物館，絕大部分規模都很小，地點偏遠，一直在艱苦經營中^⑨。

覓得適當地點設館，也願意以私人積蓄補貼營運經費，是否表示萬事大吉，開張可期？當然不是，原來根據《公眾娛樂場所條例》，所有公眾娛樂場所必須向民政事務局屬下的食物環境衛生署申請公眾娛樂場所牌照，根據相關條例，除了音樂廳、舞池、電影院等外，任何向公眾開放，舉辦一項或多於一項展覽的地方，皆被界定為公眾娛樂場所，以實物展示為主要教育途徑的博物館當然不能倖免而必須領牌。



^⑦ 位於香港九龍油麻地舊樓二樓的「香港國際玩具博物館」(現已閉館)，入口環境很難稱得上吸引觀眾，這是不少私營博物館其中一項難以解決的營運困難。

The Hong Kong International Hobby and Toy Museum, in Yau Ma Tei, Kowloon (now closed). Its entrance was hardly attractive to the public and this was one of the major challenges in operating a private museum.

patronage despite its owner has put in so much passion and effort in sharing his/her collections or interests with the public^⑦.

Due to the high operational cost and difficulty in finding a museum site, private museums in Hong Kong that are larger in scale usually fall into one of the following three categories. The first category includes branches of internationally renowned museums, such as the Madame Tussauds Hong Kong and Ripley's Believe It or Not! Odditorium (closed in 2005) at The Peak. The second category refers to museums established by institutions, such as the University Museum and Art Gallery, Peak Tram Historical Gallery and Tung Wah Museum. The third category contains museums established by famous collectors or funded by financial institutions or endowments, such as the Imperial Museum (established by Professor Paul Kan who has rented a whole floor of St. John's Building in Central for the museum), Hong Kong Maritime Museum (funded by The Hong Kong Maritime Museum Endowment Trust), Liang Yi Museum (established by Peter Fung who owns the property), Sun Museum (funded by the Simon Suen Foundation) and F11 Photographic Museum (established by Douglas So on his own property)^⑧. Other than these three categories, most small private museums are struggling for survival in faraway places^⑨.

Even if a suitable site has been selected for the museum, and the owner is willing to shoulder the operational expenses out of his/her pocket, does it imply that every piece has fallen into place and the museum is ready to set sail? Definitely not – because according to the *Places of Public Entertainment Ordinance*, a licence (called the Places of Public Entertainment Licence) must be applied from the Food and Environmental Hygiene Department under the Home Affairs Bureau for every place of public entertainment. According to the aforesaid ordinance, other than concert halls, dance floors and cinemas, any places open to the public, holding one or more exhibitions would be classified as places of public entertainment. As such, this ordinance is applicable to museums as well.



^⑧ 位於一棟上世紀 30 年代藝術裝飾風格 (Art Deco) 舊建築內的 F11 攝影博物館，是香港近年來成立其中一間最重要的私人博物館。

Housed in an old 1930s Art Deco-style building, the F11 Photographic Museum is one of the most important private museums established in recent years.

上述的牌照會由食物環境衛生署聯同屋宇署、消防處、機電工程署、房屋署及其他相關部門聯合審批。可惜的是，不少場所，特別是工業大廈或商住兩用的舊建築物，根本很難作出改動，以滿足現代消防條例、無障礙通道等要求，結果很多申請最後皆胎死腹中。

只要你細心留意，會發現不少博物館只可預約參觀，除了是人手考慮外，其中一個可能性便是沒有公眾娛樂場所牌照而不能真正對公眾開放。

結語

除了租金高昂，覓地建館難乎其難之外，私人博物館的另一項挑戰，是香港博物館的發展歷史雖然已有超過 50 年，但香港的博物館人才仍主要集中在公營博物館。於 1989 年成立的博物館專業團體「香港博物館館長協會」(Hong Kong Curators Association)，規模仍小，未能如外國的博物館組織，為本地博物館業界提供有力的專業支援。在財政方面，香港並未形成向博物館捐獻的風氣，市民對票價非常敏感，導致門票收益偏低，政府或非政府可供申請資金的渠道亦極為有限。令人洩氣的是，在可見的將來，這些不利香港私營博物館的因素仍會繼續存在，暫仍看不到曙光。



^⑨ 位於新界三門仔新村的「救世軍新界東北區漁民生活文化展覽閣」(Salvation Army North East New Territories Fishermen's Culture Gallery)，雖然以展覽閣為名，已粗具大部分博物館的主要功能。

This is the Salvation Army North East New Territories Fishermen's Culture Gallery in Sam Mun Tsai New Village in the New Territories. Although it is only called a gallery, it already has most of the attributes of a museum.

The approval of these licences involves the Food and Environmental Hygiene Department, Buildings Department, Fire Services Department, Electrical and Mechanical Services Department, Housing Authority and other related departments. Unfortunately, modifying industrial or ageing buildings designated for either business or residential purposes to comply with modern-day fire and barrier-free access requirements proves to be daunting, if not at all impossible. Regrettably, many applications just cannot pull them off.

If you are careful enough, you may come to notice that many museums only allow visits through advance bookings. In addition to the lack of human resources, one of the reasons may be because these museums simply do not have the mandatory Places of Public Entertainment Licence.

Conclusion

Without doubt, high rents have always been posing great difficulties in finding suitable museum sites for would-be museum owners. Another challenge facing private museums is that although it has been more than five decades since the first museum appeared in Hong Kong, most museum professionals are still working in public museums. Established in 1989, the professional organisation "Hong Kong Curators Association" is still limited in scale and the support to the local museum industry is not as strong as its overseas counterparts. Financially, the culture of museum donations is missing and the general populace is inclined to be price sensitive, hence the contribution of admission fees to museum income is still limited. Furthermore, there are few channels for applying government or non-government subsidies. However, perhaps the most disillusioning is that in the foreseeable future, these factors unfavourable for museum development in Hong Kong are unlikely to go away.



10 尖沙咀 K11 商場內的「藝術空間」
“Art space” in K11 Hong Kong Art Mall

和商場或地產商合作，如樂富廣場「香港玩具科學館」的模式，可能是私營博物館進一步發展的突破。位於尖沙咀的 K11 商場，便以藝術和商業結合的模式經營，除了在商場中展示了大量藝術品，商場亦長期預留空間作藝術展覽之用¹⁰。其實不少商場亦需建立獨特的形象和定位，以吸引人流；現代企業亦越來越重視社區參與和回饋社會，以建立正面健康的企業品牌形象。「商場 X 博物館」的合作模式，其實亦不失為一個互惠互利的發展方向。更有創意的博物館營運方式，如羅揚傑先生經營，位於中環結合餐廳和美術館的都爹利會館，或許是另類博物館空間可能性的啟示。

為了香港文化傳承，為了香港未來的博物館的健康發展，假若日後你路過一間私營博物館，請不要吝嗇一點時間和門票價錢，不妨進場參觀，雖然礙於資金，博物館或會稍嫌簡陋，在狹窄的展覽空間，展品陳設亦很難說得上精美，但在信步欣賞之時，在與歷史和藝術對話之際，想想經營博物館的困難，自會感到館主的热情，冰冷的展品自會散發出一種讓人動容的溫暖。

A possible breakthrough in development of private museums may hinge in their collaboration with shopping malls or property developers, such as the case with the Hong Kong Toy Science Museum in Lok Fu Plaza. The K11 shopping mall in Tsim Sha Tsui offers a hybrid mode of operation by combining art and business. In addition to displaying a large quantity of artworks inside the mall, space dedicated to art exhibitions is also reserved in the long run¹⁰. While many malls have been trying to build a unique image and positioning to draw traffic, corporations today are more willing to put sizable resources behind corporate social responsibility programmes to establish a healthy and positive corporate image. This mode of operation between shopping malls and museums is definitely a viable option for development that offers mutual benefits. Other innovative ways of running private museums is Mr. Alan Lo's Duddell's in Central, which is a combination of restaurant and art gallery. This may also be one of the future ways through which private museums can survive.

If one day you pass by a private museum, I would encourage you to spare a bit of time and money to pay it a visit, for the sake of preserving local culture and also of supporting the healthy development of museums here. Due to limited funding, the private museum may be small and unsophisticated, and its exhibits not in perfect conditions, let alone the environment they are in. Nevertheless, whilst appreciating the exhibits and having a dialogue with history and art, you may pause to consider the challenges faced by private museum owners and I am sure that you would be moved by their passion, as the exhibits emanate a touching sense of warmth around you.

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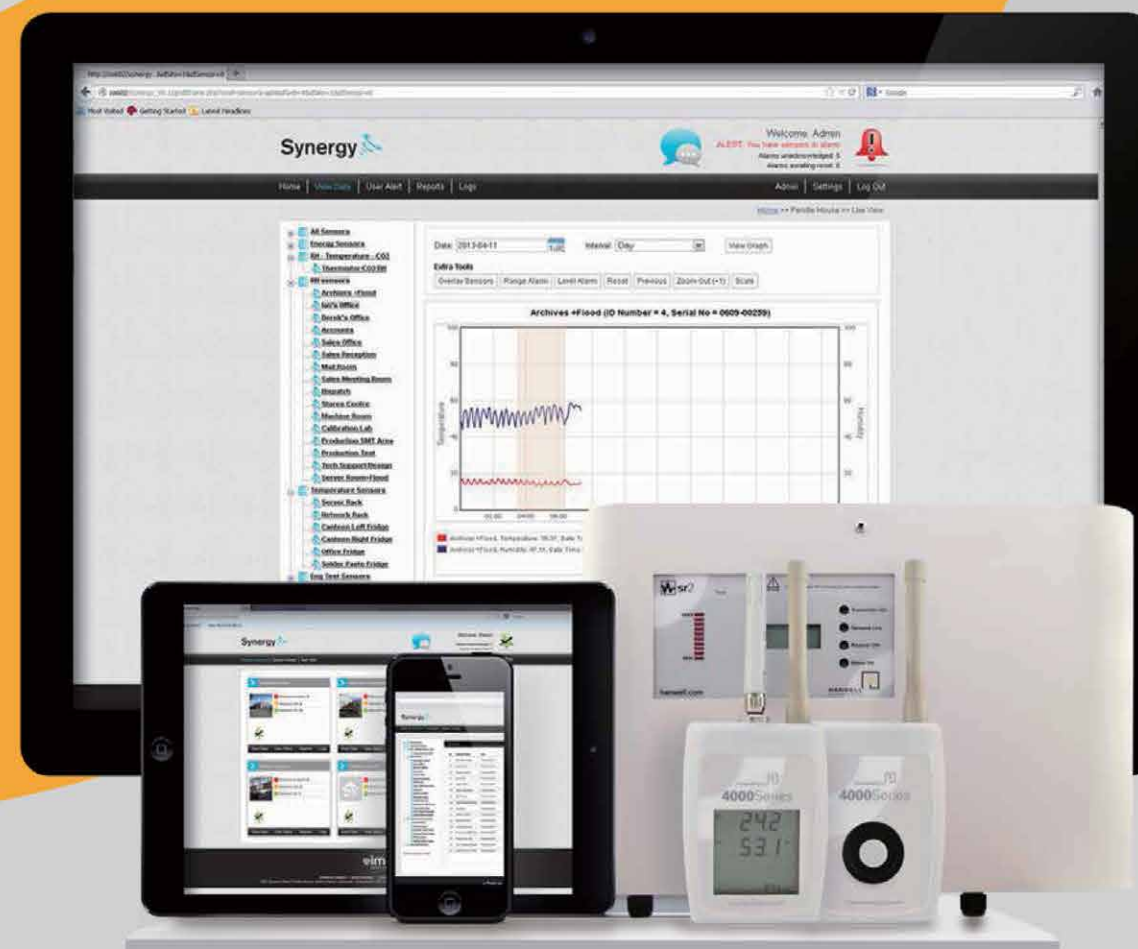


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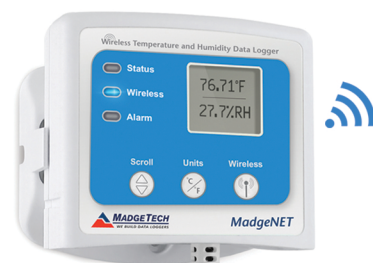
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