

Conservation of an oil portrait of the Empress Dowager Tze Hsi of China

中國慈禧太后肖像油畫的修護

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Introduction

From the 1860s until her death, China's Empress Dowager Tze Hsi (1835–1908) was the dominant political figure of the Qing dynasty (1644–1911). When her reputation plummeted worldwide after the Boxer Rebellion of 1900, the Qing court initiated measures to improve the Empress Dowager's international image. The most visually striking of these projects was a series of mammoth oil portraits of Tze Hsi painted by Western artists. American artist Katharine Augusta Carl (1865–1938) completed four portraits of Tze Hsi, only two of which are extant. One, painted in 1904, is currently in the Smithsonian Institution (SI); the other is in Beijing. Although similar in scale, pose, and style, the Beijing portrait is more intimate and casual. However, a century of exposure to the elements has left the Beijing portrait severely damaged and retouched, limiting a comprehensive comparison with the Smithsonian portrait.

The life-size canvas in the SI was the most famous of Carl's four portraits of Tze Hsi, achieving in its day extraordinary popular and diplomatic prominence. In the portrait, Tze Hsi is seated formally on an intricately carved chair, wearing a luxurious yellow robe richly embroidered with characters indicating longevity, interspersed with narcissus. Behind her is a standing screen decorated with her official seals, plus brightly colored phoenixes bearing the eight auspicious symbols of Buddhism in their beaks. The massive painting, in its elaborately carved, 5 m tall standing frame designed by Tze Hsi herself, dominated the Palace of Fine Arts at the St Louis World's Fair, 1904–1905. For the next 100-plus years, the painting was relocated several times and consequently became

引言

中國慈禧太后（1835–1908年）自1860年代開始直至她離世，是清朝（1644–1911年）的重要政治人物。1900年義和團事件後，她在國際間聲譽下滑，清廷於是展開了提升慈禧太后國際形像的措施。這些措施中，以一系列由西方畫家繪畫的巨型肖像油畫最為矚目。美國藝術家凱瑟琳·卡爾（Katharine Augusta Carl, 1865–1938年）為慈禧太后繪畫的四幅肖像畫現只尚存兩幅。一幅繪於1904年，現由史密森尼學會收藏；另一幅則在北京。雖然兩幅畫作在規模、人物姿勢和風格上均十分相似，現存於北京的肖像畫風較為親切和隨意。然而，經過一個世紀暴露於各種不理想的環境下，北京的肖像畫已出現嚴重損毀和經過多次補色，其狀況難以與史密森尼學會的藏品作比較。

史密森尼學會館藏的慈禧肖像，大小與真人相約，是四幅由卡爾創作的慈禧肖像畫中最著名的一幅，當時大受公眾歡迎，也引起外交關注。畫中慈禧身穿華麗的黃色繡花長袍，上面繡上長壽的字句，並以水仙花圖案點綴，端坐於雕刻精緻的椅子上。她身後放置一幅屏風，以她的禦璽和喙中含着八個佛教吉祥符號、色彩鮮艷的鳳凰作裝飾。這幅巨型油畫裝裱於雕工精美、高5米的站立式畫框內，由慈禧太后本人設計，於1904–1905年舉辦的聖路易士世界博覽會中成為藝術宮中的觸目畫作。其後的百多年間，油畫經歷數度搬遷，並受到時間與搬運的耗損。這幅肖像畫最後於2011年9月被運送到史密森尼學會位於馬里蘭州蘇特蘭的博物館支援中

¹*Pentimento*（複數*pentimenti*）源於意大利語「*pentirsi*」，意思為後悔或改變初衷。*Pentimento* 用作形容藝術家在繪畫過程中作出的改變或修改。

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ravaged by time and travel. Finally, in September 2011, the Empress's portrait was shipped to the SI's Museum Support Center in Suitland, MA, USA where both the painting and its original frame underwent a full-scale technical analysis and examination, followed by extensive treatment (Fig. 1) to repair existing damage, stabilize structural supports, and esthetically integrate inpainting with the original paint.

The painting

When it arrived at the SI, the painting was covered with extensive drying cracks, some merely hairline, and some wide and sharp-edged. The most severe drying cracks appeared on the Empress's face and robe and the garment covering her upper right arm. These cracks may reflect the conventional pressures under which the artist was forced to work during her short stay at the Palace. Carl's book, *With the Empress Dowager* described the considerable interference she met with from the Imperial Court [1, p. 161]:

I was obliged to follow, in every detail, centuries-old conventions. There could be no shadows and very little perspective, and everything must be painted in such full light as to lose all relief and picturesque effect.

Born in New Orleans to a well-to-do family, Carl studied painting in Paris under William-Adolphe Bouguereau (1825–1905). Portable X-ray fluorescence examination of Carl's pigments revealed a palette of typical late nineteenth- to early twentieth-century Western oil paints. In the Tze Hsi portrait, Carl initially emulated the style of Bouguereau, a conservative salon figure painter. However, under scrutiny from the Empress and her Court officials, Carl apparently began reworking areas of the portrait, applying new layers of paint before the base paint was completely dry. The top layers of paint then shrank as they dried, breaking into 'islands'. This reworking is evident in a photograph of the painting taken shortly before its completion, wherein many of the Empress's features are only roughly defined. In the unfinished painting, the face shows evidence of Carl's extensive attempts at modeling and shading, suggesting a broad intention to capture subtle nuances of Tze Hsi's features. In contrast, the face in the final portrait is flat and featureless, a striking visual confirmation of the pressure Carl was under to abandon nineteenth-century Western standards of realism, and accommodate to Qing conventions of more idealized portraiture.

Examination with infrared reflectography revealed (Fig. 2) that Carl had also made alterations to the Empress's eyes, eyebrows, and hairline, and to the placement of her left hand and sleeves. Not surprisingly, drying cracks appear in these altered areas, some



Figure 1 Jia-sun Tsang, Senior Paintings Conservator at SI, Removes Old, Discolored Varnish from the Life-Size Portrait of the Empress Dowager Tze Hsi of China

圖 1 史密森尼學會的高級油畫修復師譚家珊把老化、發黃的光油從真人大小的慈禧肖像油畫上清除。

心，修復人員為油畫及原有畫框進行全面的技術分析和檢測，然後展開大規模的修復處理（圖1）以修補現有的破損、穩定根基底材結構，並為修復部份描色以配合原來顏色。

油畫

當油畫送抵史密森尼學會時，表面佈滿大量乾裂紋，有些只有髮絲般幼細，而有些則較闊而且有突邊。最嚴重的乾裂紋出現在慈禧太后的臉部、長袍和她右上臂的衣服上。這些裂紋可以反映出畫家當

visible under natural light. Analysis of old paintings often reveals *pentimenti*, or changes made by the artist during the painting process, which are hidden beneath subsequent layers of paint. *Pentimenti* may become visible as top layers of paint become transparent over time. In Carl's painting, drying cracks and *pentimenti* confirm her extensive reworking of her subject.

Conservation treatment cannot eliminate drying cracks, but inpainting can make them less distracting and unsightly. Using paints made from pigments ground in polyvinyl acetate (viscosity designation AYAC, <http://www.museumservicescorporation.com>) and watercolor, and formulated to be removable if necessary, SI conservators esthetically integrated barely visible dots of inpainting within cracks in the original paint. After several months of treatment, inpainting restored the palette of brilliant colors favored by Carl, improving the painting's esthetic and clarifying its composition.

The canvas itself had degraded and could no longer support the painting properly. Earlier repairs and fabric patches had created areas of severe deformation that were treated by removing the old repairs and humidifying and flattening the canvas under weight and vacuum. The painting was then lined with Sunbrella® acrylic awning fabric (<http://www.sunbrella.com>) using BEVA® 371 adhesive film (<http://www.conservationssupportsystems.com>). Because the eight-piece wooden stretcher with two vertical and two horizontal crossbars, made by local craftsman using local material, was in excellent condition, the stabilized painting was mounted onto the original stretcher with minor adjustments.

The frame

The original frame, masterfully carved and constructed by local artisans, is integral to the formal presentation of the painting. In her book, Carl wrote that the frame was made of camphor wood, but analysis at the SI suggested that the wood is most likely *Paulownia tomentosa*, an ornamental tree native to much of China, with soft wood that is easily carved. Close examination further revealed that superior craftsmen worked on the formal façade, using widely practiced techniques to carve Chinese designs and motifs, while less competent workers constructed the back of the frame. Structural treatment of the frame included carved wooden in-fills to replace areas of loss, replacement of broken tenons, and the addition of cleats with interlocking dovetailed wooden pins at the top corners of the frame to stabilize the upper section. To maintain the integrity of the original frame, conservators used cottonwood and tulip poplar for any replacements and inserts within the frame, as these Western woods most closely mimic the characteristics of *Paulownia*

時被迫在故宮短暫逗留期間面對的壓力。卡爾在她撰寫的《與慈禧太后》一書中描寫了她在宮中創作時遇到的眾多規範 [1, 頁 161] :

我被迫在所有細節上遵從數百年來承襲的傳統方法，不可以運用陰影，只能使用輕度透視法，而且整幅畫都必須以全亮方式繪畫，以致失去所有立體感和畫意。

卡爾生於美國新奧爾良的富裕家庭，在巴黎跟隨畫家威廉姆－阿道爾夫·布格霍（William-Adolphe Bouguereau, 1825–1905年）學畫。攜帶式X射線螢光分析顯示，卡爾使用的顏料為典型的十九世紀末至二十世紀初的西方油彩。在慈禧太后的肖像畫中，卡爾最初仿照了保守學院派人像畫家布格霍的風格。然而，在慈禧太后和她的朝臣監視下，卡爾明顯地重新繪畫了肖像的不同部份，並在底層油彩未完全乾凝前已塗上新的油彩。頂層油彩在乾凝期間收縮，裂開形成「小島」。這些外加的「物料」可從一幅攝於油畫完成前的照片得以證實，從照片看，當時慈禧的特徵只作粗略繪畫。在未完成的畫作中，可以看到卡爾極力嘗試在慈禧的面部創作不同的造型和陰影效果，以圖捕捉慈禧太后的微妙表情。與此相比，最終的版本卻面容平坦且欠缺特徵，證明卡爾作畫時承受了相當壓力，需要放棄十九世紀西方標準的寫實主義，迎合清廷一貫的理想化肖像繪畫法。

紅外線反射影像顯示（圖2）卡爾也在慈禧太后的眼睛、眉毛和髮線，以及她左手和衣袖的擺放上作出修改。不出所料，這些修改範圍也出現了乾裂紋，有些裂紋在天然光下可以察見。在分析古油畫時，很多時都發現初稿（*pentimenti*），或畫家在繪畫過程中所作的修改，這些修改都隱藏在後補的油彩層下。初稿有機會在經歷一段時間後因頂層油彩變得透明而顯現出來。在卡爾的油畫中，乾裂紋和紅外線反射影像都確認了她對主題曾作多次修改。

修復處理無法消除乾裂紋，但填上顏料可減少其對觀賞畫作的影響。史密森尼學會的修復人員使用可逆性顏料，包括色粉與用聚醋酸乙烯酯（黏合劑名為 AYAC, <http://www.museumservicescorporation.com>）一起研磨製成的顏料和水彩，並採用描點法（肉眼幾乎看不到的小點）修飾裂紋。經過數月的描色，重現卡爾喜歡的鮮艷色彩，改善了油畫的美感，構圖更為細緻。

畫布本身已出現劣化，不能再正常地支撐油畫。早前的修補和補丁布料令部份地方嚴重變形。修復人員先除去舊有修補，再把畫布加濕，然後以重力和在真空下壓平。接着，油畫以Sunbrella® 丙烯酸帆布（<http://www.sunbrella.com>）配合BEVA® 371黏貼薄膜（<http://www.conservationssupportsystems.com>）



Figure 2 Infrared Reflectography Reveals Drying Cracks and the Artist's Alterations to the Empress's Eyes, Eyebrows, and Hairline

圖 2 紅外線反射影像顯示出乾裂紋，以及畫家對慈禧太后的眼睛、眉毛和髮線所作的修改。

tomentosa. The entire frame was intensively dry cleaned, and a new surface coating has restored the wood's soft luster. To mitigate damage from seismic events, a mechanism will eventually be added to secure the frame to a wall.

Such a large-scale project required the collaboration of a team of 56 dedicated craftsmen and technicians, including painting and furniture conservators, conservation scientists, art handlers, a curator and registrar, photographers, fellows, and interns. Begun in September 2011, full restoration was completed in November 2013.

Reference 参考文献

[1] Carl, K.A. 1907. *With the Empress Dowager of China*. New York: The Century Co.

com) 托底。由中國技師以當地物料製作的伸展式內框、其八件木楔，各兩條垂直與橫互支撐的木條，狀況良好，只需輕微調整，便可把修復後的油畫裝回原有內框上。

畫框

原有畫框由當地的工匠以精巧的技術雕刻和製造，是油畫在正式展示時不可或缺的部份。卡爾在她的著作中提及畫框是以樟木製作，但在史密森尼學會的分析卻顯示木材最可能是毛泡桐，一種原產於中國多個地區的觀賞樹木，木身柔軟，容易雕琢。深入的觀察顯示工藝超著的技師於畫框正面施工，使用常用技巧來雕出中式圖案，而工藝水平較低的工匠則負責畫框背面。畫框的結構修復包括以木材重塑缺失部份、更換破爛榫舌，以及在頂部框角加上設有鳩尾榫接的加固角以穩定畫框上半部。為保持原有畫框的完整性，修復人員以棉白楊和鬱金香白楊樹的木材修復畫框，因為這些西方木材的特質跟毛泡桐相似。整個畫框經徹底清潔後，再塗上新的清漆使木材柔和的光澤得以回復。為減低地震對畫件的損害，畫框稍後會加裝一個裝置，把其穩固地掛在牆上。

此大規模的修復項目動員了一個由56人組成的合作團隊，當中包括專業工藝師和技術人員，油畫及傢具修復人員、科學家、藝術品搬運員、一位館長和藏品管理員、攝影師、研究生和實習生。修復工作於2011年9月展開，並於2013年11月完成。

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