The Rising of the Pantheon: Conserving a set of Yao Hill Tribe Paintings

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Images:
Courtesy of Heritage Conservation Centre

The Yao tribe are one of the six major hill tribes found in Northern Thailand that had previously migrated from China to the neighboring borders. Also known as the *Mien*, the Yao currently reside in China, Laos, Myanmar, Vietnam and Thailand[1]. They have two belief system based on the ancestor worship as well as 13th-14th century Chinese Daoism[2]. In the latter, the Yao believes in a 'celestial hierarchy,' also known as the Daoist Pantheon.

The different deities of the Daoist Pantheon are illustrated in ceremonial paintings known as the *Mien Fang*[3]. Commonly displayed during religious ceremonies, the paintings are hung vertically in a sacred place. A complete set comprises 17 paintings, a long 'bridge' scroll, 4-5 small paintings, 4-5 paper masks, and a ceremonial crown[4]. Within the celestial hierarchy, it is inevitable that some characters would be more important than the others. The most important of these are the Three Stars, or Three Pure Ones- *Fu (Blessing), Lu (Prosperity) and Shou (Longevity)*- which are given central positions at the centre of the set. When not in use, the works are carefully stored away, sometimes rolled inside a red or white cloth, inside a special cylindrical rattan basket next to the house *altar*[5].

The conservation of a set of 17 ceremonial paintings of the Yao Hill tribe was recently undertaken by the Paper Conservation team at the Heritage Conservation Centre as a special conservation project. These paintings presented a number of challenges. Due to their multi-layer structure, the seemingly simple procedures of cleaning, flattening and mending became quite complex. One major challenge was to find an effective yet safe way to mount the paintings without causing stress to the paper support, while avoiding damage to the original mounting system. A paper conservator and an intern co-operated to research and formulate the treatment and technical *analysis*[6]. Bringing this project to completion has been truly rewarding. Three of the conserved paintings are currently on display in the Asian Civilisation Museum's South East Asia gallery for the viewing pleasure of visitors.

The visual assessment

In general, all 17 pieces share similar problems, varying only in terms of the extent of damage and stability of paint layers. Most of them had been treated previously for flaking media, and are now in stable condition. Measuring approximately a metre in length and half-a-metre wide, the paper supports of these paintings had many creases and tears, especially along the folded edges. Consequently, multiple weak points had formed along the edges, which had to be stabilised to prevent further damage. These creases and tears are also evidence of frequent use, very likely from the manner of rolling and unrolling.

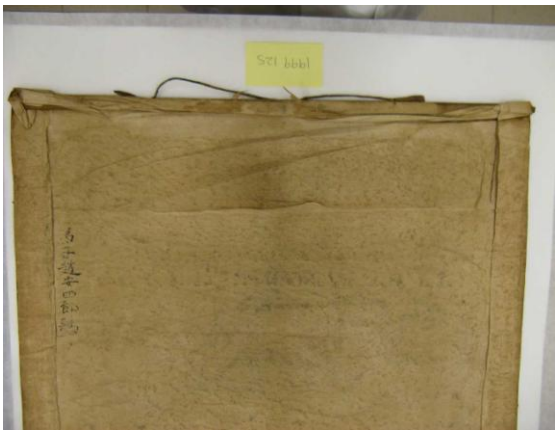
Fig 1. Front and back view of a Yao hill tribe painting.

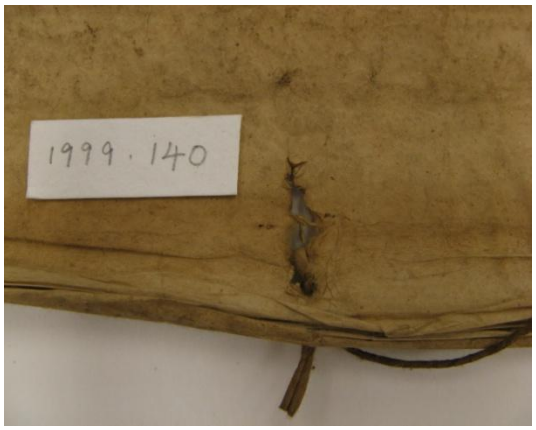
Each painting consists of at least three layers of paper folded towards the back of the painting on all four edges. In many instances, the flaps created by the top and bottom folds are usually heavily creased and torn which required substantial flattening and mending (see Figures 2 and 3 on opposite page). The right and left borders were usually in a better condition. The folded edges on the left and right are adhered together and glued to the back of the painting in various places.

Figs. 2 & 3. These two pictures show the extent of damage from the top fold of the painting on the back.

Fig. 4. Picture depicting the extent of damage at the top fold of the painting from the front.

The folded edge at the top typically holds a wooden stick, with a twisted cotton cord attached to it with knots. This cord pierces through the top edge in two places along the fold and is secured to the wooden rod in square knots, forming a loop for hanging. The frayed and delicate cords are now too weak to support the entire weight of the painting. Thus, the team had to devise a new method to hang the painting without using the original cords.





Figs. 5 & 6: Pictures showing the twisted cord attached to the top of the folded edge of the painting.

The folded edge at the bottom also holds a stick. In several of the paintings, the stick was completely encased in the folded edge, while in others, it extruded from the side of the support. It is common to find both the wooden stick and cord missing from the painting. Missing items such as this had to be reconstructed using conservation materials as they not only serve as a form of support but also preserve the original intent of the artist.

Analyzing the *Tai Wai*

One of the paintings, *Tai Wai*, or the High Constable *of* the Taoist Pantheon, was chosen for detailed assessment in order to find out more about the overall construction and paint layers of the object. Upon closer examination of the paper layers, it was found that each layer is composed of several pieces of the same paper with overlapping joints somewhere in the middle.

Infrared imaging revealed that some areas of the under-drawing differed markedly from the painted layer. In addition, it was discovered that the artist had made notations on the drawing that correspond to the placement of specific colours, as seen in Figures 7 and 8. This suggests a separation of labor between the person who executed the under-drawing and the artist who applied the paint.

Figs.7&8: The painting as seen in reflected lights (upper image) and infra-red imaging (lower image).

Polarized light microscopy[7] and micro-chemical testing were used to analyse small, loose flakes of red media. In the course of the examination, vermilion, and a lead-containing substance such as lead white or red lead were detected. These results agree with pigments found in Thai paintings that have been reported in the literature.

In an attempt to better characterise the type of paper used, a small fibre sample was taken from middle upper edge of the *Tai Wai* painting. Using a polarizing light microscope, the team observed at least two types of bast fibers, including mulberry.

Actual treatment

The first step of the treatment involved surface cleaning, by gently rocking a finely textured latex sponge over the white areas of the painted surface and also the back of the painting. Cleaning was carried out by stroking the paper surface in only one direction, to prevent ruffling up the paper fibres. It is important to remove any surface dirt before carrying out any further treatment since the dirt can act as a substrate for mould and become permanently fixed by materials used in treatment. This step also improves the appearance of the artefact.

Thereafter, the goal was to flatten the heavily creased layers. This involves unfolding the many creases at the top and bottom layer by layer with the help of a soft brush and deionised water. If present, the wooden stick and cord were removed temporarily to provide easier access to the folds and to allow local flattening with a light weight.

In order to unfold the painting without breaking the paper, controlled moisture had to be introduced locally to soften the paper fibres. This made the paper more pliable, aiding the flattening process. Small pieces of paper blotters were placed between the layers as we unfold from the bottom up. This was done to prevent any dirt or moisture from affecting the other layers. Subsequently, weights were placed on those unfolded areas to flatten them. Once the layers had been flattened, the holes or tears would be mended with wheat starch and toned Japanese paper

(see Fig.9). Toned Japanese paper[8] was used so that the mends would not stand out from the original paper support, which would not be aesthetically pleasing.

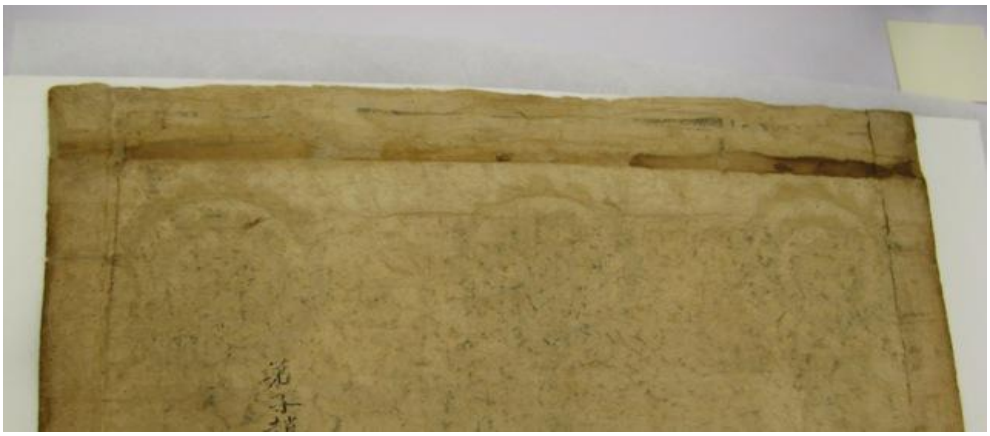


Fig. 9: This picture shows the flattened and mended flap of the top edge of the painting.

After completing the flattening and mending, we reconstructed the sticks and the hanging cords The stick was created by wrapping Japanese paper around a 2mm thick conservation matboard with wheat starch as adhesive. Once the reconstructed stick was dry, it was placed into the fold. (see Fig. 10).

Fig. 10: The reconstructed stick is placed in the valley of the fold.

Similarly, the string was reconstructed by twisting a Japanese paper of a similar colour with wheat starch paste. Once ready, the cord was threaded through the original holes, looped around the stick and tied into a square knot at the top of the fold.

Mounting the artefact

The next few steps involved making a hanging device. “Hinges” made into loops were attached to the back of the painting. Two looped hinges would be placed on top of the left and right folds ending just below the upper edge so that an acrylic bar can be slotted through. This acrylic bar can be mounted onto the wall or be held by wires in the showcase. Thus, the main strength used in hanging the painting comes from the back of the painting and not the original cord. The cord could just rest on a small pin to look as if it were supporting the painting.

Before adding the looped hinges, eight pieces of Japanese tissue paper strips were applied to the upper right and left edges of the back of the painting with wheat starch paste. They serve to reinforce the folded borders.

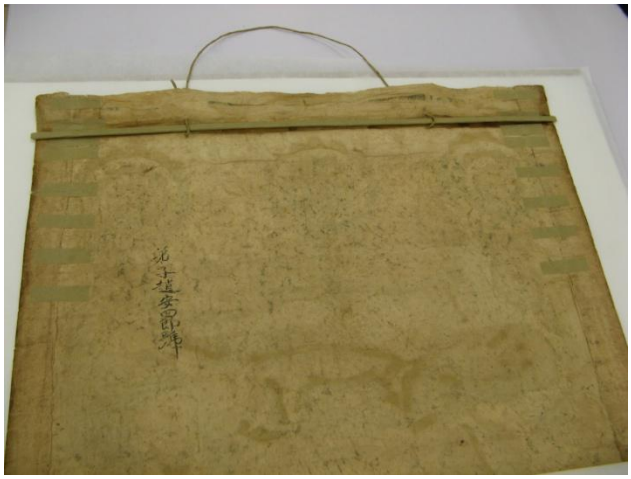


Fig. 11.The cord is tied to the stick through two piercing at the top fold.

Once the reinforcement strips were adhered to support, as seen from Figure 10, the flap would be folded to cover the stick. Japanese paper strips and wheat starch were used to hold the flap down.

The material used for the loop hinges was prepared by lining a thick linen fabric with Japanese paper and wheat starch paste. With the paper side facing outward, strips of this double layered material were looped and secured with adhesive. The paper side of the looped hinges was then pasted onto the left and right borders of the back of the object using thick wheat starch paste. Once dry, the paintings are ready for display in the galleries.

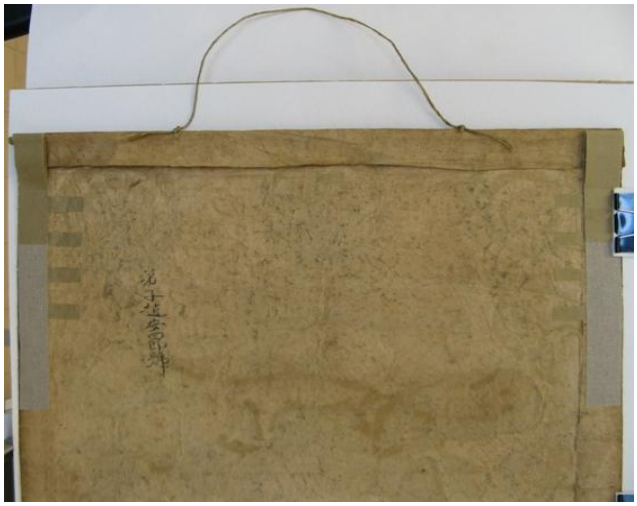


Fig. 12: The top edge of a conserved painting with hinges adhered to the back.

Figs. 13 & 14:.Overall image of conserved painting from the front and the back.

Storing the artefact

One must also not forget the importance of preserving the artefacts' integrity via preventive measures. Since not all 17 paintings will be displayed, the objects that were not exhibited are stored in a stable, cool and dry environment. A tray made of acid free boards was customized to fit the artefacts.

The fragile paintings were stored flat in plan chests. The dimensions of the drawers were taken into the consideration as these trays would eventually be placed in the drawers. Each tray was designed to hold about six drawings, interleaved with glassine[9] and plastic corrugated boards. The boards would aid in safer handling as one do not need to constantly lift the artefacts directly to reach the ones at the bottom of the stack.

Conclusion

With the conservation completed, the Yao hill tribe ceremonial paintings have received a new lease on life. Strengthened with better support and mounting, they are not only aesthetically pleasing, but are safe to be display in the galleries. The entire process of making the paintings come to life was a good learning journey with many challenges. This conservation project also exemplifies the extensive research and rigorous work necessary for the preservation and safe exhibition of our national collections.

Endnotes:

1. *Technical Service Club: Tribal Museum, The Hill Tribes of Thailand (Thailand: Tribal Research Institute, 2004), Pg 25; Edward Anderson, Plants and People of the Golden Triangle: Ethnobotany of the Hill Tribes of Northern Thailand (Oregon: Dioscorides Press, 1993), Pg 29; Jess G. Pourret, The Yao: The Mien and Mun Yao in China, Vietnam, Laos and Thailand (London: Thames & Hudson, 2002), Pg 15.*
2. *Jacques Lemoine and Donald Gibson, Yao Ceremonial Paintings (Thailand: White Lotus Co., Ltd, 1982), chapter 2.*
3. *Jess G. Pourret, The Yao: The Mien and Mun Yao in China, Vietnam, Laos and Thailand, Pg 215.*
4. *Ibid, Pg 215-7*
5. *Ibid, Pg 215*
6. *Konstanze Bachmann has been instrumental in the treatment formulation and Erin Jue, an intern from New York University, for the technical analysis.*
7. *Usually, used by geologists to examine crystalline structures. The microscope is fitted with a polariser that alters the light so that it travels in only one direction.*
8. *Japanese paper that has been tinted with acrylic or water colours.*