

Maintenance of Asian Paintings II: Minor Treatment of Scroll Paintings

ABSTRACT

This paper describes minor or local treatments that can extend the life of Asian scroll paintings, reduce the risk of damage, and minimize further deterioration: repair of creases, small losses, tears, and damaged cords. It is a sequel to a paper presented in 1993, "Maintenance of East Asian Painting (Examination)," published in the *Book and Paper Group Annual*.

INTRODUCTION

Scroll mounting is a unique craft in Asia. Paintings on scrolls represent a narrative literature with pictures and were mounted in traditional formats (religious sutras were traditionally mounted as hand scrolls). Artists and calligraphers created their works expecting them to be in a particular, traditional final format.

Japanese scroll mountings (*hyogu*) were also living, functional objects. In serving their intended function they experience normal wear and tear. In the Asian tradition their functional parts have always been replaced periodically with new, stronger materials. When a scroll starts to have tears and creases, this is the signal for a complete remounting. When border silk or backing/lining paper loses strength and starts to tear, it will be replaced, just like replacing the sound board or strings of a piano, replacing the cover of a book or replacing old moldings or even the original paint of historical houses. Scroll makers will also touch up minor flaws in the art object.

Each time an object is remounted, it is traditional to allow individual taste and the availability of new materials to play a large part in deciding how to remount the work. In Asia, modern conservation is based on this tradition. The practice of completely remounting hanging scrolls

continues, much like rebuilding furniture or musical instruments. Of course we would not rebuild the main parts of paintings or calligraphy, but a fair degree of freedom in remounting is allowed—sufficiently so that I hope that the craft of scroll mounting will come in time to be viewed as an art form in its own right.

The Asian approach to remounting is in some tension with the concept of modern conservation as developed in the West. Modern conservation ethics train conservators (especially those working in museums or other institutions) to keep the original materials as much as possible to preserve historical objects. These conservators recognize, however, that keeping deteriorated or dysfunctional parts may diminish or obscure the real meaning or purpose of the objects.

This paper primarily addresses what I consider a special, but sometimes neglected, class of conservation activities: touch-ups and minor treatments of objects. Minor treatments form a major part of ongoing conservation activity. Minor treatments can also be cost-effective. While some objects may need a complete treatment, often the best approach is minimum minor treatment and a strict monitoring system, to check for further deterioration.

Major conservation always involves some risks. If a painting has been subjected to periodic minor treatments, it is less likely to need a major treatment or the need for a major operation can be postponed, and therefore the risk of significant harm is reduced over the long-term life of the painting.

Since I became a conservator, I have often been called upon to perform minor treatments at various sites. Many Asian paintings in storage and even on display are often neglected, mainly because of the shortage of conservators of Asian paintings. Most minor treatment activities are things I never learned from other people. I developed the concepts and methods on my own, and I would like to share them in this paper. I hope that you will get your own ideas from it and develop your own ways for treating Asian paintings in your collection or your client's.

Presented at the Book & Paper Group Session, AIC 29th Annual Meeting, May 30–June 5, 2001, Dallas, Texas. Received for publication Fall 2001.



Fig. 1. Horizontal creases on a Chinese scroll, recto



Fig. 2. Horizontal creases on a Chinese scroll, verso



Fig. 3. There is one severe crease on this Ming Dynasty scroll

RECOGNIZING DETERIORATION

As I discussed in the first part of this paper ten years ago (Nishio 1993), the following indications of deterioration are commonly found in hanging scrolls: creases, losses, tears, and damaged cords.

CREASES

The most common types of deterioration in scroll paintings are horizontal creases and cracks (figs.1–5). Scrolls are constructed with at least three to four layers of lining or backing paper. The original primary support is usually very thin and supported with multiple layers of Japanese or Chinese paper. If the scroll is kept rolled for a long time the fibers of the paper may break when it is opened, causing creases and cracks. Of course if there are many cracks (fig. 5), it is easier to remove and replace the

whole outer backing layer. This requires a high degree of skill. However, if there are only a few cracks, you can remove the outer layer of the lining locally by cutting and delaminating with scalpels.

Figures 6–7 give schematic diagrams of the layers of a scroll with a crease/crack.

1. Multiple layers of paper in cross-

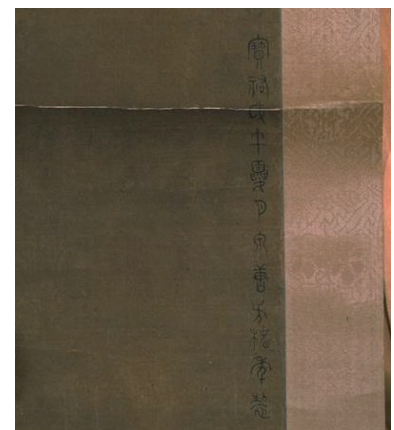
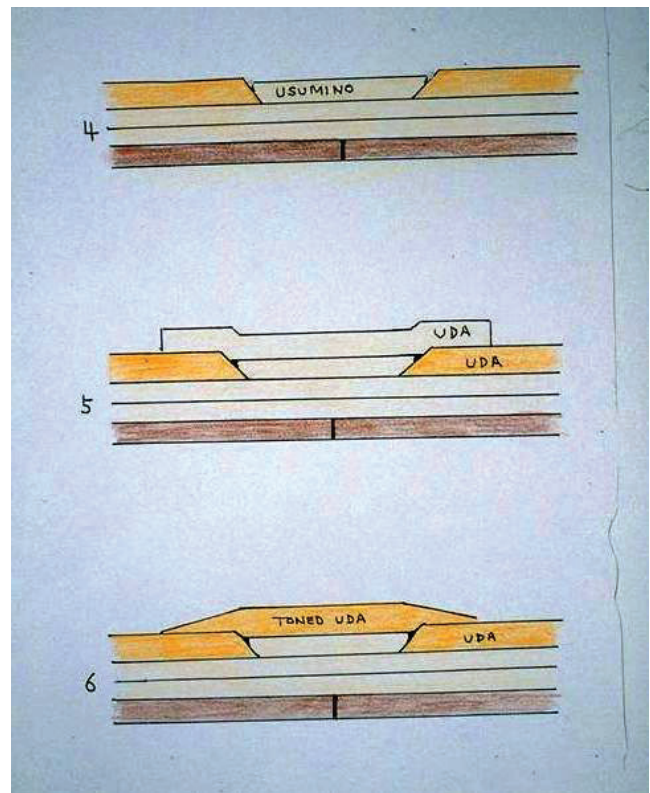
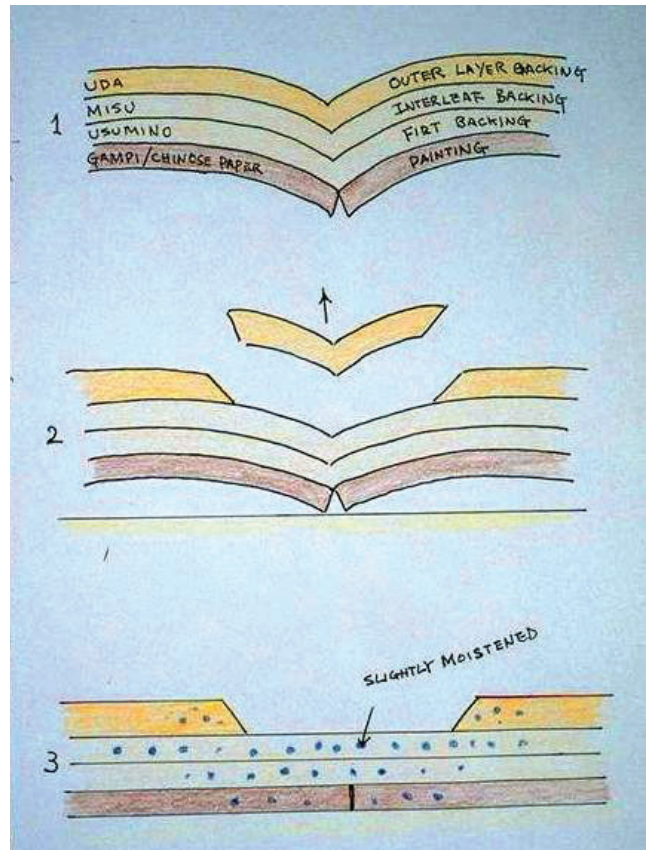


Fig. 4. Detail of the crease on the Ming Dynasty scroll

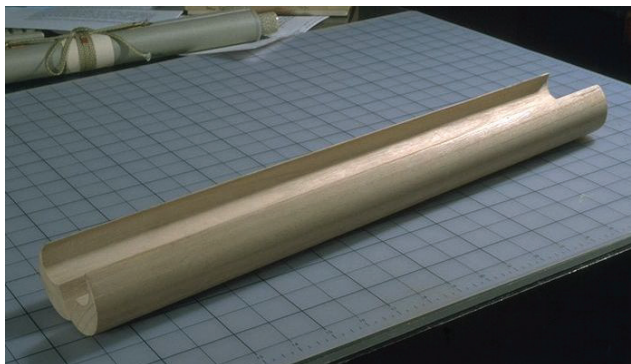
tion. The original primary support is usually very thin *gampi* or Chinese paper supported or lined with multiple layers of *kozo* fiber paper for Japanese hanging scrolls. Chinese lining paper is used for Chinese hanging scrolls. Replacing some of the creased backing layers can eliminate the cracks. However, replacement of all layers can cause unevenness and distortion of the surface. Therefore, I would replace only the outermost layer and apply an additional reinforcement strip of narrow (only one-eighth inch) but strong and flexible *usumino* paper, crossing the fiber direction between the interleaf lining layers and the new outer layer of the *uda* paper. Before doing so the whole painting must be



Fig. 5. Scroll with many creases



Figs. 6–7. Diagrams of the layers of a scroll with a crease/crack; numbers in the margin refer to explication in the text.

Fig. 8. *Futomaki*

- placed on a protecting sheet of non-sticking but moisture-absorbent paper.
2. A narrow area (about one-eighth inch wide) of the outer backing layer along the crease is removed with a scalpel and tweezers.
 3. The crease is moistened lightly with a brush to flatten it and expand it to match the pasted reinforcement strip, so the layers will shrink together when they dry.
 4. A pasted *usumino* reinforcing strip is set in place aiming right in the middle to cover the crack or crease.
 5. Cover the area with *uda* paper using diluted paste and pound with a tiny bristle brush.

The pasted strip and lining paper are always pasted with thinly diluted paste. Since those materials are wet, the crease must be moistened and flattened to match the same shrinkage ratio with the new additional materials. If not, the area will dry in a distorted fashion. I have seen many Western paper conservators using water cut or feather cut paper, but those feathers or “sticking out” fibers tend to hold too much paste and moisture, which will cause unevenness. It is better to use a straight knife-cut strip and keep the overlap to just a hairline. If the overlap is only one millimeter, it is not noticeable and does not cause future creases, because the diameter of the scroll is much larger than the unevenness of the one-millimeter overlap. If you wish to be even more precise, you can always pare the edges of the straight knife cut in the overlapping area with a scalpel.

You must also be careful about the thickness of the paste. Thickly applied paste can cause stiffness, water rings, glossiness, and changes in surface texture. If you ever have to use feather-cut edges, you must remove at least half of the paste or moisture by blotting with other paper.

6. After the application of local reinforcement strips and lining paper, the area has to dry under blotting paper and Plexiglas or on a flat wooden board under a weight for a few days. The sharp edges are shaved and the new *uda* paper is toned and dried some more. Finally, after it is dry, rub or burnish a Teflon spatula or beads, which I use, along the flattened crease to soften the paper.

Fig 9. *Futomaki* used to increase the diameter of a scroll roller

The fact that some creases and cracks occurred is a sign that other areas might crack in the future. To help postpone this, you should use a wider rolling accessory. This device is called *futomaki*, made of pawlonia wood (figs. 8–9). Carpenters can make it with a little study from the real *futomaki*, but if not, you can order it from Japan. Japanese

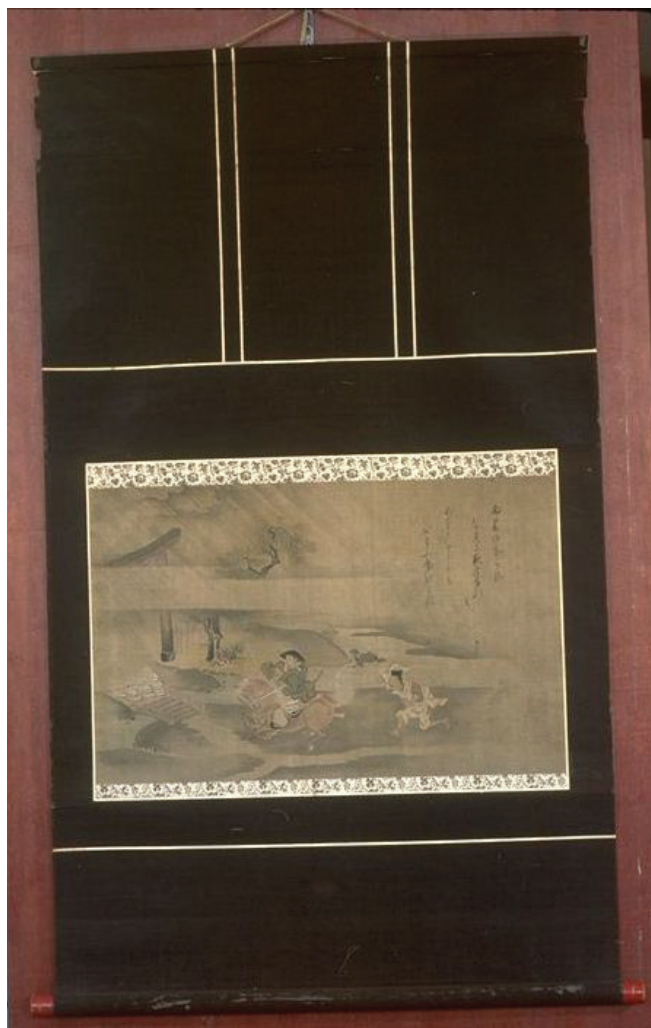


Fig. 10. The upper side edges of this scroll show small losses

paper shops/vendors either in the United States or Japan might be able to fill an order for you.

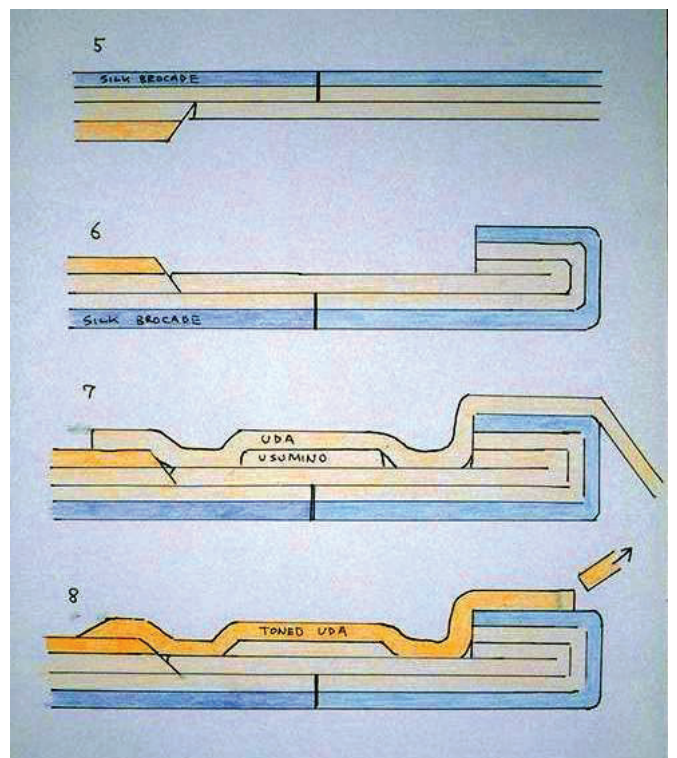
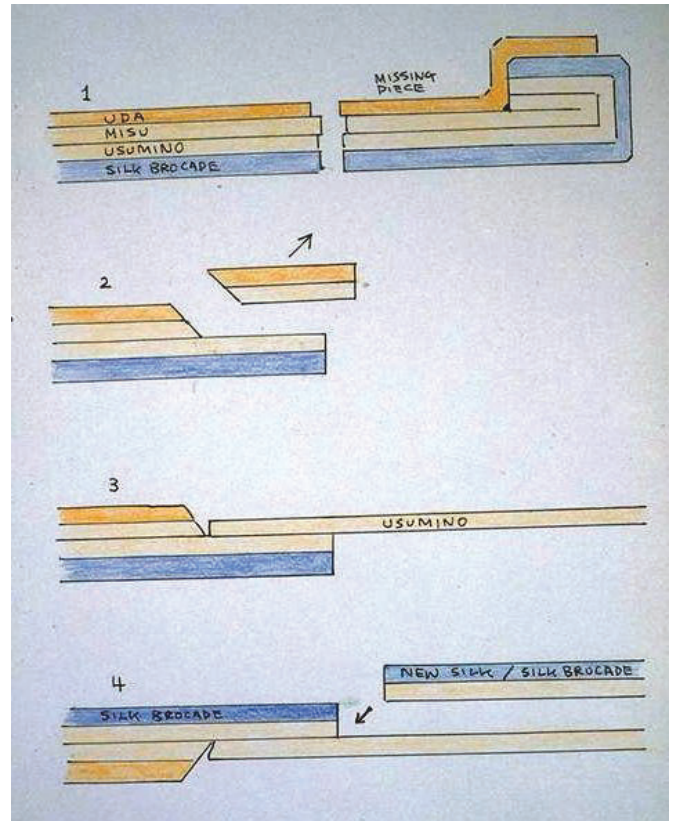
FILLING LOSSES

Figures 10–11 show scrolls with fringes (small losses) at the upper side edges. Figures 12–13 present schematic drawings of a cross-section of scroll with a loss.

1. Because of wear and tear, the edges of a scroll can sometimes become abraded, torn, or lost.
2. The outer layer of *uda* and interleaf of *misu* are removed.
3. *Usumino* paper is inserted and pasted with very diluted paste, and then the whole scroll is flipped face up.
- 4 and 5. New similar brocade or plain silk with backing paper is inserted flush on the level of the existing silk brocade.
6. The painting is turned face down. The edge of the new inserted part is cut and folded just like the rest of the scroll and pasted.
7. Application of one-eighth-inch *usumino* reinforcement strips. (This reinforcement strip is not done if the break is vertical, only if the broken edge is horizontal).
8. *Uda* paper covers the rest of the newly reconstructed area.



Fig. 11. The upper side edges of this scroll show small losses



Figs. 12–13. Diagrams of a cross-section of a scroll with a loss; numbers in the margin refer to explanation in the text.



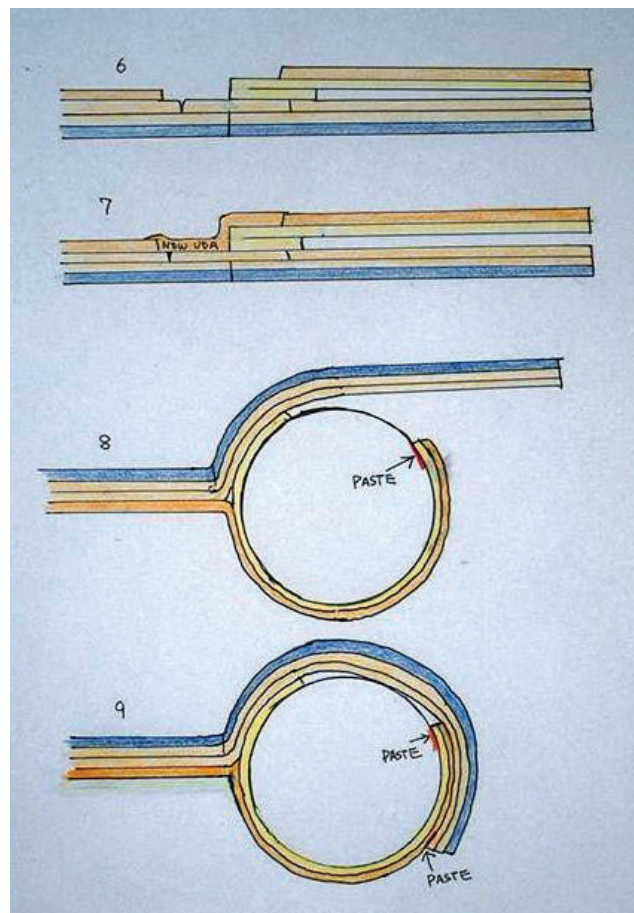
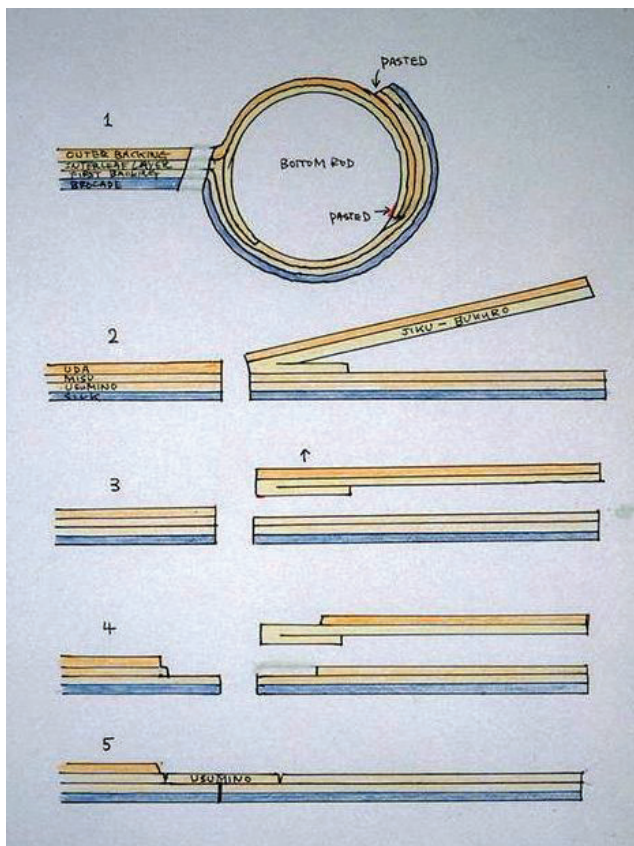
Fig. 14. Chinese scroll with a tear at the bottom

When it is dry, the *uda* paper can be shaved to remove the overlapping edge on the left. The right side of the edge has to be cut straight just like the rest of the scroll. Then toning can be done with watercolor followed by further drying. Again this area has to be burnished with a Teflon spatula or beads.



Fig. 15. Japanese scroll with a tear at the bottom

Figs. 16–17. Diagrams of a cross-section of a scroll with a tear



TEARS

Tears occur always near the bottom and top rods (figs. 14–15). The following procedure is performed (figs. 16–17).

1. Cross-section of rod (layers of paper are actually much thinner compared to the cross-section of the rod than the drawing shows). Remove the bottom rod by using a spatula to separate the two pasted areas. These areas usually have relatively thick paste so you may have to use some moisture.
2. The layers look like this after you remove the rod.
3. The *jiku-bukuro* or envelope is separated from the rest. The tiny area at the arrow marked “pasted” in diagram 1 is sometimes pasted and separated front and back.
4. Parts of the interleaf (*misu* paper) and backing paper (*uda* paper) have been removed.
5. An *usumino* strip is used to mend the tear of the lined silk from verso.
6. The *jiku-bukuro* with partial outer backing paper is reinstalled on the back with dryer paste, about one-eighth inch along the edge.
7. New *uda* paper is installed. The area must then be dried for several days.



Figs. 18–19. The front part of the silk is pasted to cover the rest of the rod



Fig. 20. Before treatment of tear on Japanese scroll



Fig. 21. After treatment of tear on the same scroll

8. Then the rod must be reinstalled. In order to install the rod tightly, both the front side and the back-enveloped area must be moistened slightly, to create a tight seal after the areas shrink on drying. Then the backside of the *jiku-bukuro* is pasted to the rod.
9. The front part of the silk is pasted to cover the rest of the rod (figs. 18–19).

Figures 20–21 show before and after treatment of a tear on a Japanese scroll.

REPLACEMENT OF THE SCROLL'S CORD

By learning how to replace the cord, you may be able to avoid calling a specialist conservator to the site or shipping the art object away for just one hour of work (fig. 22). The cord is made of real silk and Chinese and Japanese scrolls require totally different kinds (figs. 23 and 41). If the cord is the original, and strong enough, the first attempt should be to save and restore the cord. If it is not original and strong it is better to replace the whole cord. A new strong silk cord is safer for the scroll. Japan still produces exactly the same quality silk cord as in the past. The materials can be ordered from any vendor.

The following instructions for tying a cord to a Japanese scroll refer to diagrams 1–7 in figure 24 and to the photographs in figures 25–35.

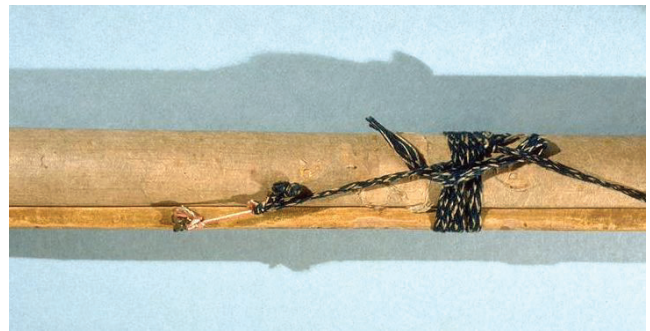


Fig. 22. Broken/weak cord



Fig. 23. Sample of Japanese cord

1. The cord has to go through both metal eyelets (fig.25).
2. Make a loop (fig. 26).
3. The cord goes into this loop, making a second loop. It is not a bow tie, but it is not a necktie either (fig. 27).
4. The second loop covers the metal eyelet when it's tightened (fig. 28).
5. Some people prefer that the second loop not cover the metal eyelet when it is tightened.
6. The other eyelet also has to have a tie. At this time, the whole cord has to be very tight, otherwise it will stretch in the future and the hanging cord will be pressing against the scroll when it is wrapped around the scroll (figs. 29–31).

Text continues on page 25.

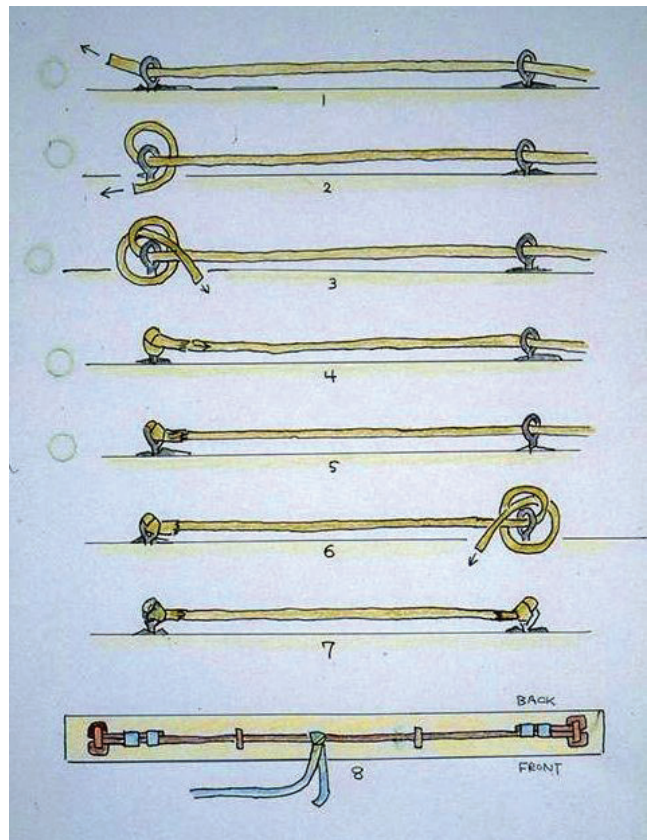


Fig. 24. Drawings 1–7 of cord for Japanese scroll, Drawing 8 for Chinese scroll

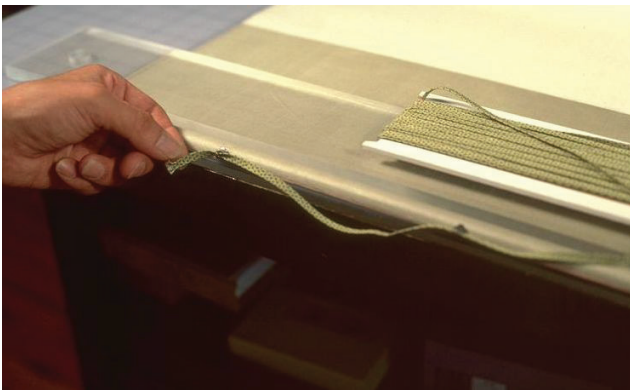


Fig. 25. The cord passes through both metal eyelets



Fig. 26. Make a loop



Fig. 27. The cord end goes into this loop, making a second loop



Fig. 28. The second loop covers the metal when it is tightened

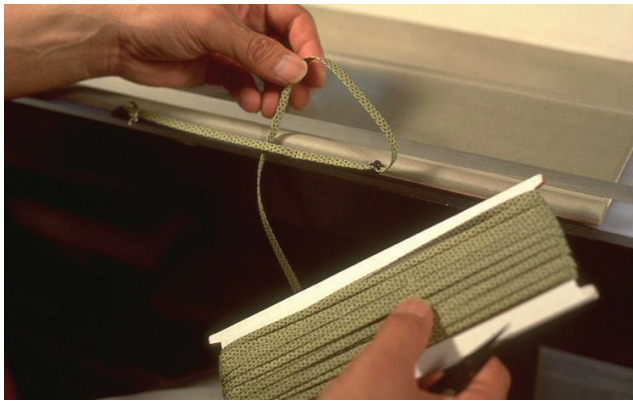


Fig. 29. Tie the cord to the second eyelet



Fig. 30. Bring the end of the cord through the loop



Fig. 31. Slide the loop to cover the metal



Fig. 32. The cord is tightened . . .



Fig. 33. . . . and cut off

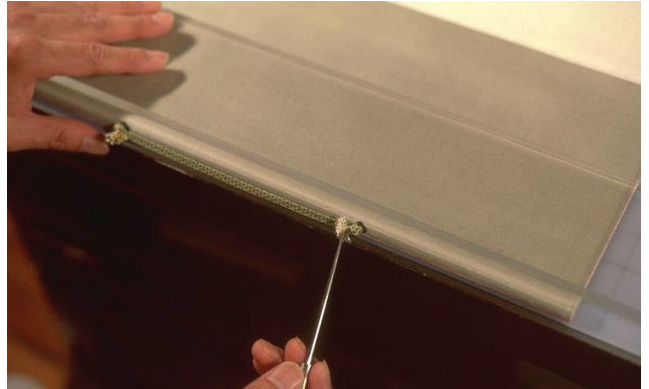


Fig. 34. The tips of the cord are unraveled . . .

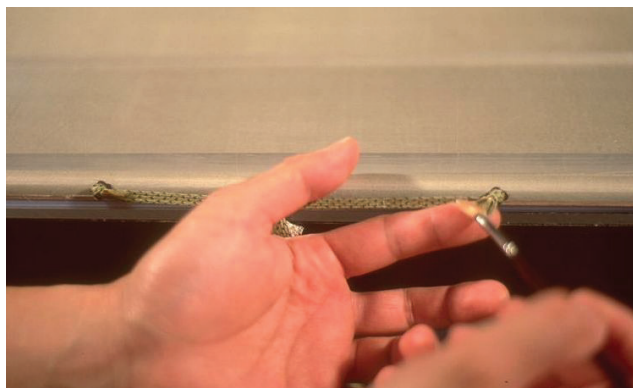


Fig. 35. . . . and pasted

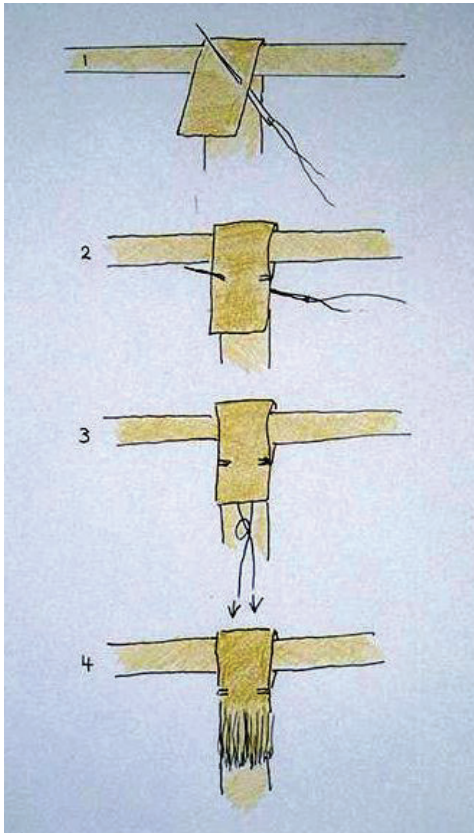


Fig. 36. Diagram of the attachment of the wrapping cord for a Japanese scroll; numbers refer to explanation in the text

7. The cord is tightened and cut off (figs. 32–33). The tips of the cord are unraveled (fig. 34); trimmed and pasted cord will not come apart (fig. 35).

The wrapping cord for a Japanese scroll uses the same material as the hanging cord and is attached to it by sewing a loop (figs. 36–37). The wrapping cord loop slides freely along the hanging cord.

1 and 2. Stitch at least twice.

3. Tie the string as in photograph (fig. 38).

4. Unravel the tip of the cord and paste it down onto the cord.

Wrap around the scroll three times and cut the end of the wrapping cord (fig. 39). It is a good idea to protect the area underneath of the cord with stiff *torinoko* paper (fig. 40).

Figure 41 shows Chinese hanging and wrapping cords. They are different from each other: the hanging cord is braided and the wrapping cord is a silk ribbon. Chinese cord and ribbon are installed on the scroll as shown in diagram 8 of figure 24 and the photograph in figure 42. The silk wrapping ribbon is attached by sewing (fig. 43). Figure 44 shows a Chinese scroll when it is rolled and tied.

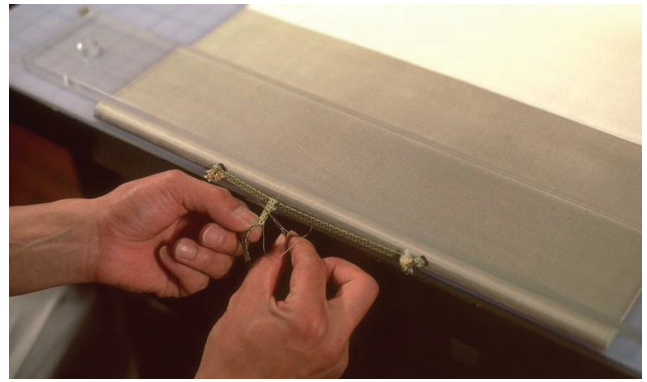


Fig. 37. Sew the wrapping cord onto the hanging cord of a Japanese scroll



Fig. 38. Tie the thread

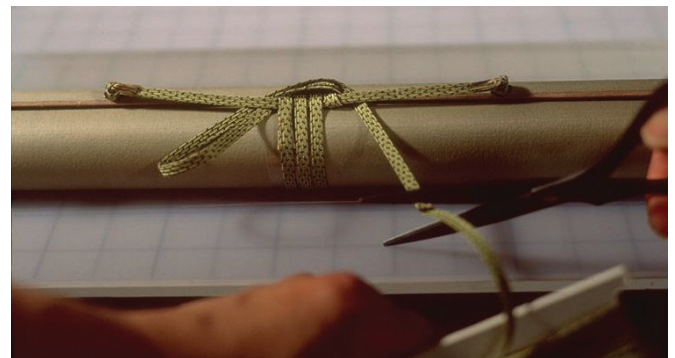


Fig. 39. Wrap the cord around the scroll three times and cut off the end

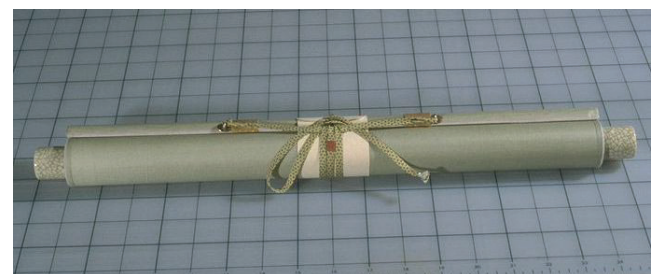


Fig. 40. Protect the area underneath the cord with stiff *torinoko* paper



Fig. 41. Chinese hanging cord (top) and wrapping ribbon (bottom)

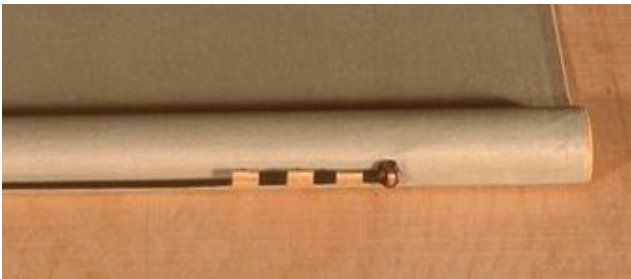


Fig. 42. Detail of installation of a Chinese hanging cord.

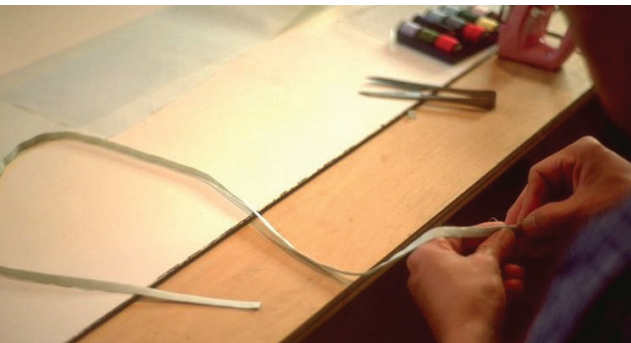


Fig. 43. Sew on the silk wrapping ribbon



Fig. 44. A Chinese scroll, rolled and tied

CONCLUSION

These minor treatments play a large role in maintaining art objects in good condition and preventing further deterioration. I have demonstrated these techniques at many major institutions and to my conservation colleagues during the past decades.

I hope that you will try these treatments or be inspired to try some of your own ideas from this paper. If you have any questions, I will be happy to answer them. Please contact me at Nishio Conservation Studio.

ACKNOWLEDGEMENTS

I would like to thank Mr. Brad Edwards and Mr. Brian Vogel for editing my texts and Mr. Kyoichi Itoh for his demonstrations in the photographs. I would also like to thank Dr. Maritta L. Sackler, Mr. Julius Kaplan, Dr. Frederick M. Ehrlich, Mr. and Mrs. Rodion Cantacuzene, and Mr. Andre Jagendorf for the courtesy of the photographs of their scroll paintings.

REFERENCE

Nishio, Yoshiyuki. 1993. Maintenance of East Asian painting (examination). *The Book and Paper Group Annual* 12:32–35.

YOSHIYUKI NISHIO
Nishio Conservation Studio
Washington D. C.
nishio@ix.netcom.com