

# **A Systematic Approach to Condition Assessment and Treatment of Chinese Handscrolls at the Freer | Sackler**

## **Introduction**

Chinese handscrolls make up a large part of the Chinese painting collection at the Freer Gallery of Art and Arthur M. Sackler Gallery. The number, size, and structural complexity of these functional objects, combined with ongoing exhibition schedules and viewing requests from visiting scholars, make conservation treatment essential to the care of the scrolls. The Freer | Sackler is one of only a handful of museums with full-time conservation staff specializing in Chinese paintings. Xiangmei Gu, senior Chinese painting conservator, has been responsible for the examination, care, and treatment of the handscrolls in the collection for over twenty years. Most museums and institutions with collections of Chinese handscrolls, however, do not have a conservator on staff trained in the conservation and mounting of these objects. As a result, conducting condition assessments and developing treatment proposals can be intimidating. This paper will outline the basic structure of the handscroll and discuss the systematic decision-making process followed by Ms. Gu and the conservators in the East Asian Painting Conservation Studio at the Freer | Sackler when addressing condition problems associated with Chinese handscrolls. This systematic approach can serve as a guide for other conservators and museum professionals who are less familiar with the conservation of handscrolls, in the care of their collections. The decision-making process is as follows: (1) identification of condition problems; (2) ranking of conditions problems by severity and by fragility of the painting; (3) treatment options; and (4) prioritizing treatment solutions that stabilize and ensure the safety of the object over intensely invasive treatments.

## **Background**

The handscroll is one of the most important formats for Chinese painting and calligraphy. The handscroll is a complex structure composed of multiple layers, multiple sections, and different materials. The layers include the paint layer, the painted substrate(s), the first lining, and additional backing linings. The sections include, from right to left: a brocade cover; frontispiece; the painting; and endpiece for titles, inscriptions, and colophons. These sections are divided by wide silk borders and often framed with attached thin, paper borders. The different materials include paper, woven silk cloth, paste, wood, a silken cord, and a jade or ivory toggle. The lining support layers, brocade cover, silk borders, and silken cord are considered part of the mounting. The mounting serves as the overall scroll structure to make a continuous handscroll. All of these components are interdependent and form a single art object.

The handscroll is a functional object designed to be unrolled and rolled. The left end of the handscroll is rolled into a tube with decorative caps inset at the top and bottom. The right edge of the handscroll is reinforced with a thin wooden stave to which a cord and toggle are attached to secure the scroll when rolled. The rolled format allows the painting to be easily handled, transported, and stored.

Although handscrolls are usually exhibited fully unrolled, the handscroll as a personal, functional object requires the viewer to continuously unroll and roll the scroll to reveal lengths of the painting that an individual can manage. The handscroll is an elegant and convenient design, but repeated handling often results in wear and

damage. In addition, the quality of the materials and how the handscroll was originally assembled can also affect its overall balance, flexibility, and long-term stability. Conservators work to identify and treat problems to prevent further damage.

The systematic approach used by the Freer | Sackler involves identifying common condition problems, understanding the cause(s) of each problem, considering and prioritizing treatment options, and determining the potential damage to the handscroll if left untreated.

### **Problem Identification**

Conservators at the Freer | Sackler have experience identifying condition problems and characterizing the weaknesses in the overall structure of the handscroll that give rise to them.

Poor housing and environmental conditions, the use of low-quality materials, and the unsuccessful integration by the mounter of the various complex components of the handscroll lead to common condition problems that include foxing, brittleness, undulation, creases and splits, delamination of the laminate structure, separating joins, and paint loss.

The following condition problems typically occur during storage, when the object is rolled. Sharp vertical creases throughout the handscroll can indicate that the paper and silk are degraded, acidic, and brittle. When creases are primarily located on the section of the painting, weakness is often associated with deterioration of the painted substrate and potential imbalance between the painting and its surrounding mounting. Sharp creases confined to the joins in the mount generally indicate weakness in the structure due to inappropriate width and thickness of the join and a paste layer that is too thick or strong. Minor creases and splits that do not extend to the center of the scroll, but repeat along the edges of the scroll, that appear tight and curl up, indicate damage caused by uneven shrinkage of the borders.

Common condition problems resulting from poor or excessive handling include wear of the cover silk, splits in the mounting attached to the wooden stave, torn cords, and broken or missing toggles. Poor handling can lead to crushed edges and edge splits. Unlike the damage caused by uneven shrinkage of the borders, edge splits caused by poor handling are common to a scroll that appears planar when unrolled.

As a result of the scroll format and the nature of its use, many typical condition problems will repeat across the entire length of a scroll. Identifying condition problems and observing their location and patterns of repetition in relationship to other parts of the scroll can help one to understand the cause(s) of damage and determine appropriate treatment. Depending on the condition issues and their severity, conservation solutions range from minor, localized treatment to complete remounting.

### **Problem Ranking**

After identifying condition problems, conservators determine whether the scroll can be handled and displayed. Condition problems considered high priority are those when the stability of the media and the flexibility of the support layers are compromised during handling or exhibition. Friable paint, delamination, brittleness,

and severe creases and splits should be addressed and treated before further handling.

Some minor problems are also considered high priority if continued use of the handscroll is anticipated because they will lead to further damage if left untreated. Weak edges, tiny tears, minor losses, and crushed edges, combined with repeated and unsafe handling, will lead to large tears in the painting.

### **Treatment Options**

The Freer | Sackler groups conservation treatment of handscrolls into three categories: (1) minor treatment; (2) intermediate treatment including partial remounting; and (3) complete remounting. If possible, minimal intervention should be the first option.

Minor treatment can include minor consolidation of loose paint or ink, surface cleaning, reattaching lifted support layers, strip reinforcements, repair of small tears, infill of lost material on the brocade cover, and repair of lost or damaged cords and toggles. Minor treatment requires sparing use and localized application of water to minimize the potential for distortion of the absorbent paper layers.

Strip reinforcements are used to stabilize creases and minor tears. Different thicknesses of Chinese *XUAN* paper and Japanese *MINO* paper are pre-cut into narrow strips. A narrow strip of paper is pasted and applied to the crease or tear on the backside of the handscroll. Strip reinforcements can be used to temporarily stabilize a handscroll that still requires further treatment, or can be applied as a permanent solution when there are few creases and tears or they are limited to the mount joins. Successful strip reinforcements depend upon the conservator's skillful use of the appropriate papers and paste consistency, otherwise, these repairs may cause additional damage.

Humidifying and flattening handscrolls under weight is a minor treatment for addressing undulations or the upward bowing of scrolls when unrolled. The Freer | Sackler uses a controlled moisture humidifying and flattening technique that is similar to what is known in western conservation as friction drying. Controlled introduction of moisture into the support makes the scroll more flexible, evens out areas where strip repairs were applied, and can restore bonding strength between the mounting layers by softening and reactivating the paste, while minimizing the potential for water-induced stains and distortions.

When minor treatment is inadequate for stabilizing condition problems, partial remounting techniques, which build upon fundamental mounting practices, should be considered. Partial remounting includes reusing or replacing cover silks, repairing major tears, compensating for unevenness and imbalance in the mounting structure, and replacing the final backing layer. For example, severe tears and imbalance in the mounting structure can be addressed with a partial remounting treatment in which sections of the original backing paper are removed and replaced with new backing support. This approach allows serious condition problems to be locally treated without completely dismantling the handscroll. Partial remounting requires the skills used to remount old paintings and should be carried out by a trained specialist.

Complete remounting should be the last treatment option when a handscroll is in poor condition and can no longer be handled and displayed safely. Complete remounting may be necessary when the old mounting and support layers are brittle, severely creased, delaminating, and no longer function to protect the painting.

Specialists trained in traditional methods of conservation and mounting techniques of handscrolls should be consulted to carry out complete remounting.

### **Prioritization of Treatment Solutions**

In most cases, treatment options for handscrolls, from minor treatment to complete remounting, reflect a balance between the needs of the handscroll and the resources available to the conservator. Time requirements for proper treatment, available working space and facilities, appropriate materials, and the expertise of specialists are factors that influence treatment decisions. Minor treatment and partial remounting can be appropriate preservation solutions even for handscrolls in poor condition, when the time, resources, and expertise required for complete remounting are unavailable.

Two Ming (1368-1644) dynasty paintings on silk from the Freer|Sackler collection, *PATRIARCHS OF CHAN BUDDHISM* (Fig. 1-2) and *MAP OF THE YELLOW RIVER* (Fig.3-4), are examples of paintings that would have been completely remounted under the standard of traditional practice, but were successfully stabilized using less invasive treatment methods.

*PATRIARCHS OF CHAN BUDDHISM* was in fair condition except for several severe vertical creases that repeat across the length of the handscroll. It required treatment for safe exhibition, but frequent handling or further display after exhibition was unlikely. Given the time constraints, the fairly stable condition of the primary support, and expected infrequent handling and display following the exhibition, minor treatment was the most appropriate treatment solution. One- or two-layered strip reinforcements were applied to reduce the creases. For shallow creases, one layer of paper provided enough support, but for deep creases, two layers of paper were used to add extra support. After applying the strip reinforcements, the handscroll was humidified and dried under weight to flatten it and make it more flexible.

*MAP OF THE YELLOW RIVER* was in good condition overall, but had a large vertical tear that made handling unsafe. Tears of this degree are often addressed with complete remounting, but a partial remounting treatment was carried out instead because of the painting's overall good condition. In addition, the blue and green paint were thickly applied and could easily be disturbed during complete remounting. The partial remounting treatment included removing the backing layers around the area of the tear using localized application of water, mending the break, integrating new backing papers to achieve the thickness and flexibility of the original support layers, and overall humidifying and flattening. In this case, partial remounting offered a more stable and long-term solution than minor treatment, but avoided the risks of complete remounting.

### **Conclusion**

This systematic approach to assessing the condition of and determining treatment options for handscrolls is used by the conservators in the East Asian Painting Conservation Studio at the Freer|Sackler to successfully manage the needs of the collection while keeping in mind the limitations of time and other resources. Recognizing that many other institutions face additional limitations and do not have conservators who specialize in Chinese paintings, this paper summarizes the most common condition problems of handscrolls and some of the treatment options that are available. It is hoped that this paper will provide basic guidance on the structure

and problems of handscrolls and build awareness for the sound management and preservation of these repeatedly handled objects. Like all conservation treatment decisions, this approach defines the appropriate intervention as a balance between the condition of the handscroll and the conservator's resources. The information presented in this paper can serve as a basis for future discussions on the specific treatments of handscrolls.

**Figures**

Figure 1.



Figure 2.



Figure 3.



Figure 4.





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