

CAMBODIAN PALM-LEAF MANUSCRIPTS Procedures for Conservation

CAMBODIAN PALM-LEAF MANUSCRIPTS: Procedures for Conservation

The manuscripts have been largely stabilized by casing and boxing, with an insect repellent inserted in the box. The manuscripts that have been microfilmed are relatively dust-free. Most of the manuscripts appear to be written by incision, and have a strong image. Some are insect-damaged and broken, particularly at the ends.

The following procedures are designed to clean soiled surfaces, strengthen the image, support damaged areas, impart flexibility, and reduce further insect damage.

1. Fumigation. It is important that, as each group of manuscripts is set aside for conservation treatment, they be removed from their boxes and placed in an airtight container for fumigation. To ensure that each cased manuscript is returned to the correct box, the cases and first leaves of each manuscript should be marked in soft pencil with the box number.

The container (a plastic garbage container with lid, for example) should have an appropriate quantity of para-dichlorobenzene covering the base. The manuscripts in their cases may then be stood on end, supported above the level of the para-dichlorobenzene by bricks or stones, but not jammed in too tightly. The lid should be sealed, and the manuscripts left for no less than one week.

By employing more than one "fumigator," it should be possible to arrive at a workable schedule, coordinating fumigation exposure to conservation treatment time.

2. Cleaning. The manuscripts should be removed from the fumigator and the protective cases one at a time. The leaves should be numbered discreetly in the lower right corner with a soft pencil, and the covers and strings carefully removed.

All the leaves should be lightly dusted with a soft dry brush to remove dust and insect parts. If manuscript fragments are loose, they should be set aside in a polyester envelope bearing the leaf number for future attachment.

After the bench surface has been cleaned, a sheet of polyester film is laid onto it, and a stable container of warm (preferably distilled) water and a lint-free cloth (preferably cheese cloth) prepared. The manuscript should be checked to ensure that the writing is incised and not surface-written (a magnifying glass and a raking light are helpful).

The cloth is dampened, and a small area tested to ascertain the stability of the image. If stable, the leaf is carefully cleaned on both sides, and placed between sheets of blotting paper to dry. The polyester film is wiped, and the next leaf cleaned, until all have been treated.

3. Repair and Support. If the manuscript is damaged (by insects or splits, etc.) it must be repaired at this point. A stable adhesive that does not readily mold is a mixture of methylcellulose and Elvace 1864 polyvinylacetate. This is made as follows:

Place one cup (8 ounces, 1/2 pint, 225 ml.) of water (preferably distilled) in a sealable container.

Sprinkle into the water 1 1/2 teaspoons (7.5 ml.) of methylcellulose and stir until completely blended. After approximately one hour, the solution will attain a jelly-like consistency.

Place 1/2 cup (4 ounces, 100 ml.) of water in a container, such as a paper cup or glass.

Mix into it one teaspoon of full strength PVA, and stir vigorously until completely diluted.

Gradually add diluted PVA to the methylcellulose, stirring until fully integrated. It is best to use only about two thirds of the dilute PVA initially, adding the rest if necessary after which it will be the consistency of thick cream.

Allow the mix to stand for one half hour before use. When not in use, keep the lid sealed and, if possible, refrigerate. A small amount of para-dichlorobenzene or thymol may be wrapped in a square of cheesecloth and taped to the inside of the lid to reduce surface molding.

A piece of Tengujo tissue is torn or water-cut to cover the damaged area, and laid onto a small square of polyester film. The tissue is carefully pasted, the tissue laid into place on the palm leaf, and gently rubbed down through the film with a bone folder. The film is removed, and the repair allowed to dry.

If a significant portion of the palm leaf is missing, a piece of Kitakata paper is carefully torn or water-cut to match the missing area, and tipped into place. It is then supported on both sides by the tissue in the manner noted above. Loose fragments are similarly secured in place in this fashion.

An effective variation of this repair technique is the use of tissue coated with a dry fish gelatin solution. With this technique, the tissue is laid dry over the dampened surface of the damaged palm leaf, and pressed into place with a damp cloth until firmly set. The advantage of this method is that repairs dry quickly, adhesive does not have to be prepared, and adhesion is very strong.

4. Oiling. The oiling of the palm leaf imparts a smooth surface and slight increase in flexibility. If the oil is insect-repellant, the leaf has added protection.

The leaf is laid onto polyester film or glass, and a thin coat of cedarwood oil applied to the entire surface on both sides of the leaf. It will be noted that tissue repairs are not released by the oil, but they blend further into the leaf surface.

Each leaf should be air-dried in a constant air current to avoid molding. A useful method is to secure the leaves to a line by a peg or spring clip.

When dry, the surface should be lightly polished with a soft dry cloth, the manuscript restrung, recased, and reboxed. It is important that the case and box be clean and the insect repellent in place before reshelving.