

SPECIAL REPORT

NOTES ON TEXTILE CONSERVATION by Pat Hilts,
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HOW TO WASH A TEXTILE

Most weavers collect at least a few textiles and are therefore concerned with preserving such fragile objects. Fortunately, a little thought and common sense will go a long way in that endeavor.

"To clean or not to clean" is a question which often confronts the conservator whether amateur or professional. In general, if a piece looks okay, feels okay, and smells okay, it does not need cleaning though it may need pressing if it is wrinkled. Even if a textile does appear to need cleaning, it may not be possible to do so. An amateur should not attempt to clean anything which seems excessively fragile. When in doubt, seek professional help through the nearest large museum or textile chemistry department. In spite of the warning, there is still considerable scope for the amateur conservator. If the item in question is not literally falling to pieces, it can probably be safely cleaned with proper care, even if it is a very old fragment.

Once the decision to clean a textile has been made, there remains a choice of cleaning methods. The first and simplest is with air and mechanical action, that is gentle vacuuming, shaking or brushing. These methods will remove loose dust and dirt and should be employed whenever such soil is present whether or not subsequent cleaning is planned. When vacuuming, use low suction and protect the piece with a wire screen or some nylon netting stretched over a frame. Encrusted soil can sometimes be removed by gentle tapping and scraping with the fingers or other suitable implement.

Naturally, most soils will not yield to such simple treatments, and the conservator must consider further steps. In general there are two options: wet cleaning (water and detergent) or dry cleaning (organic solvent). Each method has its advantages and disadvantages. Wet cleaning does a better job of removing most types of soils but also carries some risk of damaging the fabric. Dry cleaning is less likely to do damage but may not remove certain types of soils. The decision of whether to wet clean or dry clean will be based on an analysis of the nature of the textile fibers, the dyes and pigments used, special finishes such as the glaze on chintz, and the types of soil present. Knowledge of a textile's age and provenance give clues as to the probable fibers, dyes and other materials used. Similarly, a knowledge of the textile's former use (clothing, furnishing, etc.) and its past history (dug up from a grave site, collected by an anthropologist, for example) give clues as to probable stains and soils, some of which may not be removable.

Armed with background knowledge of the textile, the conservator can proceed with some tests, the most important of which is for wash fastness of dyes. Such tests can be rather complex, but for amateurs, a simple and direct one exists. First, wet a cotton-tipped swab

with some plain (distilled) water and moisten an inconspicuous area of the color in question. After a few minutes (two or three) blot or rub the area lightly with a white tissue. If no color shows on the tissue, follow the same procedure using a fairly strong solution (one teaspoon per cup) of detergent and any other agent (Calgon, for instance) chosen for the wash. If no color, as opposed to soil which may come off, appears, the item can be safely wet cleaned.

If wet cleaning proves unfeasible, dry cleaning can still be attempted, but again each color should be tested as some few late 19th and 20th century dyes will bleed in dry cleaning solvent.

For the moment, let us assume that wet cleaning is possible. Now an appropriate detergent must be chosen. Latest intelligence reports that the Textile Museum in Washington, D.C., uses Lemon Joy. However, for the sake of label reading and general information, some discussion concerning the chemical nature of detergents is called for. Synthetic detergents are preferred over true soaps because, unlike soaps, they are little affected by hard water. In addition, detergents will clean satisfactorily at lower temperatures and pH values than will soaps.

However, the detergent picture is somewhat complicated by the existence of three main types: anionic, nonionic and cationic. Sodium lauryl sulphate, sodium lauryl sulphonate and the alkylaryl or alkyl-benzene sulphonates are common examples of anionic detergents. The first mentioned example is favored by conservators for washing wool, and it and closely related compounds may be discovered by careful reading of shampoo and bubble bath labels. Some baby shampoos look like good bets for washing old textiles. Nonionic detergents bear names such as alkyl ethylene oxide and alkyl aryl ethylene oxide. "Lissapol N" is a trade name nonionic detergent, as is "KYRO EO". Both anionic and nonionic detergents are recommended for textile conservation. The cationic detergents are mainly useful as fabric softeners, disinfectants, and dry cleaning detergents. In general, fabric softeners are not recommended for conservation work because they attract dirt. On the other hand, some of the quaternary ammonium salts, which fall into the cationic class may be useful in providing protection against bacteria and fungi.

Once a detergent has been chosen, wet cleaning can begin, but this does not mean throwing the piece into the washing machine. Old textiles, even sound appearing ones, are weak, and all textiles are heavy when wet. Therefore, the textile must be supported lest it tear from its own weight. Small items can be satisfactorily handled by sewing them between two layers of nylon net using fine cotton thread. (Monofilament nylon is a NO-NO as it can cut the threads of the old textile.) Bigger, heavier pieces such as coverlets need much stronger supports and because of their bulk and weight may be beyond the capability of an amateur. Also, distilled water should be used for cleaning, and amounts sufficient for a large item may be unobtainable.

The washing bath itself is made from distilled water and detergent mixed in at the rate of two tablespoons of detergent to one gallon of water. The temperature should be 100°F. For whites which have been grayed by old hard water and soap curds, two tablespoons of sodium hexametaphosphate may be added. Calgon used to be the recommended source for this substance, but recent label reading indicates that the formula now contains calcium carbonate as well. The last named ingredient is undesirable because of its high pH value which is destructive.

continued

The size of the pan and the total amount of washing mixture will depend on the size of the textile. Whenever possible the textile should lie flat and have at least two inches of water.

When all is ready, the textile is lowered gently into the bath and allowed to soak one or two hours, during which time it should be moved about gently at intervals to allow fresh water and detergent to come in contact with it.

After soaking, the textile must be thoroughly rinsed in distilled water and then dried quickly. (Slow drying allows the fabric to oxidize and become yet more brittle.) To aid drying, excess moisture can be blotted up with clean towels. If a gentle flow of warm, dry air can be provided, so much the better. Be sure, however, that the air is free from dust. Once the textile is dry, its cleaning is complete and it is ready for any subsequent procedures.

Pat's articles on textile conservation originally appeared last year in the newsletter for the Madison Weavers Guild. Part II on storage and display will appear in the March issue of the Weaver.

SEEK & FIND

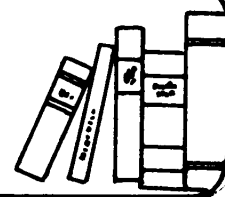
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Instructions: Hidden words below appear forward, backward, up, down or diagonally. Find each and box it in.

Card	Jack Type	Counter-balance
Dobby	Jacquard	Fly-shuttle
Inkle	Back-strap	Horizontal
Folding	Tapestry	Warp-beam

BOOK REVIEWS



reviewed by Karen Searle

Sling Braiding of the Andes by Adele Cahlander with Elayne Zorn and Ann Pollard Rowe. (Weavers Journal Monograph IV) 96 pages, with color photo, \$11.00.

Slings have been used for hunting and as weapons since long before the time of David and Goliath. In contemporary times they are used in herding by nomadic peoples of the Near East, central Asia and the Andes. Adele Cahlander became interested in the intricate patterns of the Andean sling braids during her travels in Bolivia, researching Andean textiles for *The Art of Bolivian Highland Weaving*, written by Adele with Marjorie Cason. Her studies of woven edgings for the monograph, *Bolivian Tubular Edgings and Crossed Warp Techniques* led her further in the direction of studying complex braids.

Adele has a particular talent for analyzing complex textile structures and diagramming them in a graphic way that makes it easy for others to reproduce them, as her previous books have shown, and *Sling Braiding of the Andes* is no exception. The material presented here, with contributions from ethnographic textile specialists Elayne Zorn of the California Academy of Sciences, San Francisco, and Ann Pollard Rowe of the Textile Museum, Washington, D.C., is enhanced by Adele's ingenious diagrammatic constructions and pattern diagramming systems. The book covers historical and cultural background of sling usage, technical analysis and terminology, and concise instructions for reproducing 52 distinctive braids of 8 to 32 strands. Line drawings by Sue Baiserman, and computer plotted structure diagrams by David Cahlander add to the clarity of the text. Eight pages of color photographs give a sense of the intricate designs and cultural uses of the braids.

The braids presented are three-dimensional structures with multiples of four strands used in their construction. Some of the braids also contain a core from which colors may be exchanged, to add to the intricacy of the braided patterns. The braiding process proceeds from top to bottom, or from bottom to top.

Although these braids have been the subject of much speculation by scholars such as D'Harcourt, most of the braids in this book have never been analyzed before in a way that makes it possible to reproduce them. Therefore, this joint production by textile scholars takes an important place in the technical and anthropological literature on slings, as well as being a source of instruction on an esoteric art form.

Not everyone will want to sit down and braid a sling, so Adele includes a list of possible uses for these decorative braids. She also details the analytical process that led to the diagramming of the braids included in this book, for those who encounter unusual braids that they wish to analyze.

Sling Braiding of the Andes was published by the Colorado Fiber Center, Boulder, Colorado, with the assistance of a grant from the National Endowment for the Arts.

