by Chris A. Paschke, CPF, GCF



Wet Mounting To Last The Test Of Time

the oldest method of adhering paper to a support substrate. Yet today, when wet mounting is mentioned, few people think of the ancient Chinese methods of cooked starch paste that were used to layer rice paper paintings onto silk scrolls for preservation. But indeed the process originated there and is still utilized today.

Thin Sumi ink paintings become crinkled when dry because of the large areas of paint saturation, due to the nature of Sumi colors and lightweight papers. Contemporary Asian artists still have these paintings mounted to a stiffer surface (not necessarily a board) which best enhances the colors and preserves the traditional look—if mounted using traditional methods.

Recently on the PPFA hotline, advice was requested on how to mount an ink painting to heavier paper or silk. The best advice: Don't tackle a project like this yourself. Contact a specialist, someone who really knows the process and has all of the proper tools to achieve a proper bond.

Just as artists in the United States bring completed paintings to a framer to preserve their art, in Japan most artists take their paintings to specialty framers rather than attempt to wet mount their paintings themselves. Even though we are supposed to be the specialists that artists come to for framing or to preserve their art, we must always realize our limitations.

Though the basics of wet mounting a rice paper painting are rather simple, the technique is an acquired skill. There are conservators who specialize in large paper mounting using cooked starch pastes. Always consider all the options and don't attempt to overextend if not familiar with traditional techniques and processes. Traditional Asian wet mounting requires tools and materials not found in every custom frame shop.

Traditional Japanese Mounting Materials

When wet mounting a thin rice paper, use an inexpensive Japanese or Chinese paper as a stiffener (substrate) that is 2" larger all around the painting's edges. Do not use Western papers, which often have a high glue content.

Numerous 5" to 6" wide brushes will be needed for this process. A wide deer hair water brush is used to moisten the back of the painting prior to mounting, and a paste brush made of goat or horsehair bristles to apply paste to backing materials. A harder bristled smoothing brush, and a pounding brush, both made from hemp, are used to press moistened and pasted sheets together or tap surfaces after pasting. The paste itself may be made from wheat or rice starch, cooked, strained, and readied for spreading. Many recipes and cooking procedures are available from conservation sources.

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Mastering Mounting

Brush Application

Place the print face down on a hard surface and spray, or lightly brush, the back of the painting to moisten it. Too much moisture will ripple the paper and could cause the ink to run. With the glue brush, apply cooked paste to the back of the moistened painting, beginning at the center and working to the outer edges. Make certain there is no air remaining beneath the pasted art after spreading the glue.

To glue the support paper to the back of the painting, smooth it onto the art (still face down) with a brush as it is gently unrolled on top of the pasted, face-down art (Diagram 1).

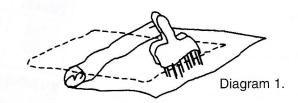
Cover the art with absorbent kraft paper and smooth it again, tapping with a palm bristle brush to absorb additional water residue. Then discard the kraft paper. Apply paste to the unglued back edges (outer 2") of the new backing paper, then gently lift the glued backing (with art attached) from the table and transfer it (art still face-down) to a piece of glass. Beginning at the top edge, paste down only the outer edges leaving one small gap. Insert a drinking straw and blow air beneath the glued art (Diagram 2). This ensures the art will not stick to the board during drying. The art will flatten as it dries over a few days.

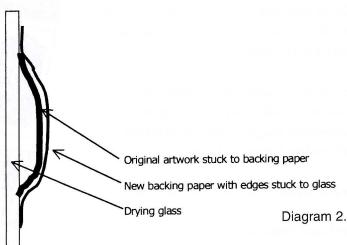
Western Wet Mounting

Western wet mounting is a very different process. The papers and substrates are much thicker than Asian rice papers and the entire mounting process is somewhat reversed. Thick paste or liquid adhesive is evenly applied to the print or substrate before positioning, rather than to the art.

The three elements of mounting to be controlled during wet mounting are time, pressure, and moisture. Temperature, the fourth element, only becomes a notable issue when you are attempting to apply adhesives in an extremely hot, humid, or cold environment. Working in any of these conditions might affect the flow and/or drying time of the selected adhesive. Basic mounting sup-

plies include a soft rubber roller 4" to 5" wide or semistiff brush, commercial adhesive, scrap glass, and two weights of ¼" plate glass or metal. Optional use of a cold vacuum frame will expedite the initial bond of a wet mounting.





Wet Mounting Basics

Begin with a dollop of paste on a piece of glass, then roll the rubber brayer or foam roller across it to even out the adhesive. Using matboard scraps is not advisable, for they will absorb the moisture from the paste, which in turn accelerates the drying and decreases working time.

Now, apply the adhesive to the substrate. The stiffness of the mounting board will more easily tolerate the abuse of a roller. Make certain the glue is evenly applied and covers every square inch of board.

Moisten the back of the print by misting it. This will expand the fibers to match that of the prepared wet substrate. If the paper is not in the same state of moisture

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that the mounting board is in, the surfaces will never be in the same state of flux to unify. The opposition that one dry piece and one moist piece creates is too much variance during the natural expansion and contraction of the pieces. Thus, the bond will be weaker. Since wet glues contain moisture, that moisture must remain present when they are applied to dry surfaces in order to ensure smooth application.

After the substrate has been covered with wet glue, align the print to the substrate across the top edge, gently sliding a hand from the top to the bottom. Target first the center, then extend to the outer edges to position and tack the print. Check the print's alignment to the mount board and correct if necessary. Dwell time should allow for corrections if necessary.

Cover the print with a sheet of clean kraft paper and gently smooth the mounting from the center to the edges to eliminate air bubbles. If the adhesive was applied to the substrate, any exposed adhesive will stick to the kraft it for fiber expaper. Release paper may also be used as a cover sheet, but it will not absorb surplus adhesive, so be careful when boards thick removing the sheet as not to contaminate the print.

Thinner Wet Glues

If the commercial paste or glue is thin enough to brush, it may be applied to the back of the print, working to achieve a smooth, even coat of adhesive in a gridded pattern of both horizontal and vertical strokes. Lay the print, face up, in proper position onto the selected substrate. A dry 3" to 4" hake brush is used to smooth out the print and affix it to the substrate in preparation for weighting and drying. Cover with kraft paper and roller to secure or place in a cold vacuum frame.

Weighting Variations

After the art has been aligned, burnished, or rolled into position, it must be weighted during the drying process.

Lay the substrate and artwork face up on sheet of ¼" plate glass. Layer a sheet of spun nylon (Pelon), then a blotter on top of the art. Then place the second sheet of ¼" plate glass. The Pelon prevents the adhesive from sticking to the blotter, while the blotter absorbs wet adhesive moisture. The glass is both cool and heavy. Dry blotters should replace damp ones every hour or two for the first few hours, then morning and night the next day.

Counter Mounting

When wet mounting

to a board or foam

substrate, warping

This past year I wrote an article on countermounting (*PFM* August 99, "Knowing When To Counter") and explained when wet gluing to a board or foam substrate, warping must be considered. Countermounting is the method of applying the same tension to the back of the substrate by mounting equal paper and moisture to it.

When wet mounting, the additional moisture applied to the art when misting or moistening it for fiber expansion, and the adhesive itself, encourages the mountboard to warp. Make certain to select substrate boards thick enough to support both the size of the art and the added moisture.

Thin X boards are generally suitable for 16"x 20" or less, 3X for larger than 16"x 20" and \(^{\frac{1}{36}}\)" foam for full sized 32"x 40" mounts. The thickness of the substrate will also depend largely on the thickness of the art paper. Even when all moisture problems are taken into account (the substrate is thick enough, the paper art is moistened for fiber expansion, and the project is dried under a weight for 24 hours), warping can still occur.

Mechanical Wet Mounting

Some 50 years ago, Potdevin Machine Company of Brooklyn, New York developed a system of applying wet glues to paper for use in the art world. Special equipment was developed to assist large scale production framers in mounting poster art to backing

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boards, proving that proper application coupled with knowledge allows any mounting process to prevail. This process is still very successfully used today.

Selecting Wet Mounting

When selecting a mounting method, think through the reasoning behind using a wet bonding process. If minor corrections are required, such as flattening folds in the print or replacing torn off pieces, repairs are easier made during wet mounting. It is a very controlled and safe way to handle and mount any item. But it can also be tricky if you are unfamiliar with it.

You should choose a commercial wet paste that allows a fairly long open time and is repositionable. A safe paste selection would be non-toxic, non-staining with age, and have long term bonding ability. Some commercial pastes available from major manufacturers are starch based, neutral pH, non-toxic, buffered, and water soluble for removal.

The manual process of wet mounting, though economical, may be time consuming and messy if unfamiliar with the process. The permanency of successful wet mountings is directly equated to a framer's ability to properly apply an even layer of adhesive, allow for appropriate dwell time, and apply adequate weight during drying (bonding).

Traditional Asian methods of mounting rice papers and silks together to create scrolls are another story. When mounting is being considered, longevity is always an issue. Is there any question that cooked starches applied in a traditional Asian manner will indeed last the test of time?

Still More To Cold Mounting

Wet gluing is only one of the basic methods of cold mounting currently done in the framing industry today. Over the next few months, I will be examining other cold methods of mounting in spray adhesives and pressure-sensitives. Then we'll look closer at the world of heat mounting also known as dry mounting.

Wet glues are much more than an inexpensive way to stick things down. When we talk about mounting in general, it is stressed (and I have said) that anytime a piece of art is stuck down to a support surface it is not a preservation method. But that is not true when referring to traditional Japanese wet mounting with cooked starches. All this brings us back to the concept of thinking through the whole concept before making a judgement.

Resources for this article include: <u>Japanese Ink Painting</u> by Naomi Okamoto; <u>Oriental Painting</u> by Wang Jai nan and Cai Xiaoli; and Hiromi Paper International.

