

THE USE OF FRICTION MOUNTING AS AN  
AID TO PRESSING WORKS ON PAPER

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The friction mounting technique described here is derived from Japanese scroll mounters' method of flattening paper. This technique helps to alleviate various problems encountered in pressing of works on paper. It also enhances subtle textural and three-dimensional quality of paper and its mediums.

Japanese mounters do not normally use a press to smoothen or flatten works on paper. Instead, they employ a technique called mizubari (water mounting, or stretching). Sometimes it is called karibari (temporary mounting, or stretching). The original Japanese technique is a form of stretch-drying employing a drying board (also called a karibari) on which a paper object is temporarily mounted with a false backing until it dries. In this procedure, a paper object is placed face down over a protective tissue on a table surface and moistened and smoothed with a smoothing brush (nadebake). A moistened sheet of mulberry paper (typically a medium-weight mino paper cut ca. 1" larger than the object on each side) is briskly brushed on to the back of the object until a firm enough contact is established between the two sheets. The Japanese paper is thin and porous, so the moisture and friction alone bind the sheets strongly enough to be effective. The unit of object and mulberry paper is turned over so the object faces upward, and a line of paste is applied around the extended

edges of the mulberry paper. Then, the moist unit is placed face inward, with the object facing the board's surface. The pasted edges adhere the unit to the board, and it is left to dry in a stretch-mount fashion. When the unit is dry, it is dismantled from the drying board; and when the false backing of the mulberry paper is removed by peeling it away from the object, the stretch-drying operation is complete.

The traditional mizubari technique just described is of limited use in our usual paper conservation work, but I have found that the "friction mounting", a procedure which combines the use of a false backing with normal pressing, alleviates various problems we encounter in flattening and smoothing works on paper. For example, thin and often dimensionally unstable papers (e.g., tracing paper, gampi and other "moisture-reactive" papers) can be smoothly pressed with this technique. It can also minimize problems of directional curl in machine-made paper and of tension imbalance in paper with residual adhesive or structural disruption from extensive damage. Creases and fold lines straighten with better results when friction mounted, and repairs withstand dimensional alteration in drying with less chance of falling apart. Pressing done by a plate-glass and weights is uneven in pressure distribution and less effective than using a press, but friction mounting helps counteract problems that might arise in this situation.

I use a medium-weight mino paper for friction mounting. However, any long-fibered flexible Japanese paper can be used so long as it is not dimensionally unstable. This method can be used on any work on

paper, not just those on oriental papers. Normally, the friction mounting procedure includes these steps:

1. The object and the friction mounting paper (what I earlier referred to as the "false backing" or "mulberry paper") are gently spray moistened.
2. A wet-strength tissue is moistened and smoothed onto the table surface.
3. The moistened object is placed face down on this tissue and is smoothed out with a nadebake (smoothing brush).
4. The moistened friction mounting paper is brushed onto the back of the object.
5. The unit of object and friction mounting paper is placed between blotting papers with a protective release sheet over the face of the object and put in a press.
6. The blotting papers are changed once or twice and the pressure is maintained until the unit is dry and conditioned.
7. After this period of drying and conditioning, the unit is removed from the press and the friction mounting paper is gently peeled away dry from the object.

The friction mounting paper can be used repeatedly as long as the fibers on the surface are not roughened or rubbed.

By using a press to dry the unit, far less moisture and friction contact are required than in the mizubari procedure: the pressure of the press holds the object and the friction mounting paper together without risk of the separation and resulting warpage that sometimes occur during the stretch-mount drying of the mizubari technique. This allows us to reduce the moisture to a minimum for vulnerable objects; vapor humidification in a chamber or contact humidification between moist blotting paper provides enough moisture for successful friction mounting. With an efficient pressing system, the initial friction contact can either be cursory or entirely dispensed with since the pressure will bond the object and the friction mounting paper sufficiently.

The end result of friction mounting is esthetically pleasing. The object lies flat naturally, and its textural and three-dimensional qualities are enhanced. These are a subtle but important part of the beauty of works on paper. The original surface texture of the paper becomes clearly visible and delicate three-dimensional interplay of the medium with the paper is enhanced, especially on woodcuts, etchings and engravings.

In summary, the technique of friction mounting is very simple, requires no special equipment other than a smoothing brush, and does much to facilitate and improve our daily work in paper conservation.