Preservation Practices

Keeping Photographs "Flat"

by Hugh Phibbs

The problem of keeping paper, boards, and vellum or parchment flat has been with us for as long as these materials have. In both the Orient and the Occident, the expedient of rolling the material into a scroll was used to make a compact structure. Difficulty in handling was the primary drawback of this approach.

While binding the material into volumes kept it beautifully flat and preserved the work executed to the surface, it also limited access. When prints and drawings that had been kept in volumes were unbound and stored as separate sheets, they no longer had the restraining influence of the binding.

No longer adhered to a substrate, many of these began to change shape. When these sheets were unmounted from backings, they could curl significantly if a layer of glue was left on their back sides.

Photographs, which have an emulsion coating on one of their sides, present a similar problem. Most photographs comprise an emulsion layer on their front surfaces, various layers under the emulsions, a paper support layer, and possibly a final plastic layer on the back. This is a most uneven design when viewed from front to back.

If the photo is exposed to changing conditions of relative humidity, the likelihood that the emulsion will expand or contract at a different rate from the paper is quite high. This will lead to buckling or curling of the photograph.

Most framers know the perils of heat mounting photographs of high value. Chris Paschke has thoroughly covered the problems which can occur during the mounting process in her "Master Mounting" column. Customers who want photographs of high value mounted put the framer at risk. These mounting techniques are not completely reversible, and therefore cannot be considered preservationally sound.

Unfortunately, photos framed without overall mounting cannot be expected to stay perfectly flat. Even the most carefully applied vegetable starch and Japanese tissue hinges, or folded paper edge supports, will not restrain the center of the sheet when the frame is exposed to extremes of dampness or dryness.

The best strategy for maintaining a photograph in a frame is overmatting the edges of the photo. If the frame is fitted with glass, and the mat package properly conditioned and sealed with vapor barrier foil and plastic materials to keep the relative humidity in the package the same, the photo may be expected to remain relatively flat. A description of this sealing process can be found in the supplement on the "Science of Preservation Framing" on the *PFM* website—pictureframingmagazine.com.

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Many photographers have chosen to heat mount their photos to conservation-quality four-ply board. This relieves the framer of any need to secure the photo itself, but it can pose problems later on. When the board is secured in the frame, it must be given enough clearance from the edges of the frame so that there is no possibility that the board can expand, push on the sides of the frame, and become warped.

The fact that photographers frequently choose metal frames makes this problem more acute. The way that many types of metal frames are designed provides little rabbet width; therefore allowances must be kept small.

Whether the edges of the board on which the photo is mounted are covered by a window mat or a spacer, there should be a minimum of 1/16" of space all around the board (in other words, an 1/8" allowance) in smaller frames. If the frame is larger than 16"x20", more space should be allotted to avoid warping problems.

When the photographer signs the board on which the photo has been mounted, the problems are then compounded. In this case, even if the board becomes warped or torn, the photo must be left in its place.

Framers who work with photographers can suggest an old answer to this dilemma which will benefit both framer and photographer. Counter mounting, a technique in which materials of equal weight are mounted on either side of a support, or materials of equal design and proportions are mounted back to back, has a long record of success.

Boards which have paper skins on either side of a foamed plastic core are an example of this technique. The photographer Alfred Stieglitz, and other photographers in his circle, would dry mount rejected photographs to the back of those which they chose to display.

The resulting combination had a structure which was physically balanced, with equal emulsion layers on either side. These composites were often secured to larger mount boards and then matted. These photographs are in fine shape today—half a century after they were printed.

Photographers who print their own work can be encouraged to dry mount their rejected prints to the backs of their successful ones. If they print so that the photos have a white border around their edges, they can be framed with overmatting of their margins and folded paper edge supports to minimize risk and maximize success.

Photographs will always pose a challenge to the framer. They are often examined closely by viewers so that any contamination or distortion of their surfaces is likely to be noticed. They can react strongly to changes in humidity and are vulnerable to light and pollution.

Photographers have explored the possibilities of mounting to paper-based board, metal, or plastic sheets with varying results. Here we can look to things that were done correctly in the past and the success of counter mounting of photographic prints, back to back, to improve our future efforts. ■