The Conservation of Limp and Hard Board Parchment Bindings

COVER

A. Clean
1. Mars Plastic erasers
2. Vulcanized Sponges
3. Moistened Q tips or cotton balls, never over writing or gold tooling
   a. thick methylcellulose
   b. saliva

B. Flatten
1. In-situ
   a. damp-pack, wrap text in saran wrap
   c. stabilize
      1. lift pastedown and line board, reuse pastedown
      2. line with Tengujo or Kizukishi (over pastedown)
2. Off book, hard board binding
   a. damp pack or humidity chamber
   b. stabilize as above
   c. leave under weight to dry and reacclimatize
3. Off book, limp binding
   a. damp-pack or humidity chamber
      1. flatten with suction table or clips and pins
      2. dry flat and allow to reacclimatize under weights

C. Mend Cover
1. Materials
   a. parchment
   b. Japanese tissue
   c. conservation cotton
   d. tawed skin
2. Adhesives
   a. PVA Jade 409 403
   b. paste
   c. gelatin
3. Mechanical
   a. parchment strips
   b. linen or silk thread
4. Reback
   a. parchment
   b. tawed skin (large book sewn on cords)
5. Corners
   a. remake
      1. paper
      2. parchment
      3. Japanese tissue

D. Toning
1. Acrylics
   a. in situ
   b. pre tone Japanese tissue
2. Pastels
   a. small areas
3. Dyes
   a. large pieces of parchment
      1. dye bath and pin out to dry
      b. surface tone
4. Colors most useful
   a. burnt siena, raw siena, burnt umber, raw umber, yellow ochre, green ochre, golden ochre, titanium ecru

SPINE

A. Clean
   1. methylcellulose, paste

B. Line
   1. tissue and paste
   2. cotton and PVA
   3. parchment, paste or mixture
ENDBANDS (structural component)

A. Save and Mend
   1. Paste, tissue and conservation cotton liner
   2. Anchor through liner, toned thread
   3. New slips added
      a. tawed or parchment

B. New Endbands
   1. Core
      a. tawed, or parchment
   2. Toned linen thread
      a. generally use a back bead

PASTEDOWNS

A. Lift and remove
   1. methods
      a. dry with spatula and Teflon stick
      b. wet
         1. humidity
         2. methylcellulose
         3. enzymes
         4. through Gore-tex

B. Lift at joint
   1. methods
      a. dry

C. Treat
   1. wash
   2. line with paste and tissue
   3. mend and reuse
SEWING

A. Stabilize
   1. paste and tissue lining spine

B. New Sewing Slips
   1. Materials
      a. tawed leather
      b. rolled tissue
      c. thread
         1. wrapped with tissue
         2. unwrapped
      d. parchment
   2. Methods
      a. whip stitched over original slips
      b. slipped under the existing sewing and over the original slips

HOUSING

A. Boxes
   1. plain, limp bindings
   2. pressure flap
   3. half cover
   4. wrapper, stiff board

B. Slipcases
pinning out (see later). Sticks covered with various grades of sanding paper. These are the only tools peculiar to vellum repair. Any other necessary tools are those normally used by the binder.

Mending
Before humidifying and flattening the vellum leaves, all mending that can be done at this stage particularly tears – should be done, to avoid possible extension of these tears when the leaf is under tension. This includes the consolidation of any old mends which are to be retained. Some slight humidification and flattening may, of course, be necessary before this can be done.

The vellum used for repairs should be similar to that of the manuscript and of a similar weight/thickness. Whenever possible the grain direction of each leaf will have been noted (see Map I) and any patches to be inserted should have their grain direction the same as that of the leaf being mended. The intention behind this is to ensure that any difference in behaviour between the two skins with changes in atmospheric moisture content will thereby be minimised, thus producing less strain/distortion on the mend. In fact, this is not always possible to achieve, as the presence of an adhesive layer often contributing as well to distortion of the area.

It is for this reason that, whenever feasible, mending should be by sewing methods rather than by adhesive. Among non-adhesive methods would be included the Hasznos method (see later). Objections may be made that sewing creates new perforations in the original manuscript. This is true but we feel that the advantages of sewing, in strength, permanence and flexibility of the repairs counteract this objection.

Tears
New repairs
A rosette spur (see figure 2) is used to mark the position of the perforations on either side of the tear. A neater, less bulky sewing will result if the perforations are staggered (figure 2). The distance from the edge of the tear may vary from 2 to 4 millimetres depending upon the thickness of the manuscript parchment in question. A thin delicate parchment will require perforations at a greater distance from the edge of the tear than will a strong parchment. A thin or degraded parchment might tear if the perforations were too close to the edge. A very degraded skin might require reinforcement with collagen e sewing is possible. Now wooden-handled needles which have been modified to a point resembling a tiny chisel are used to make the actual perforations (figure 3). The width of the chisel varies with the width of the strip to be used. A small tear on a small manuscript is mended with strips not wider than 1 mm. (or with thread if very delicate), while a large tear on a large manuscript may be mended with a slightly wider strip. These strips are cut from strong, pliable repair skins with the grain that is up and down the spine of the animal, not across the spine because they would be less resistant (see figure 4). The thickness of the strip should, ideally, be
about half that of the leaf being sewn so that when doubled during the figure of eight sewing it does not create a thick ridge. To facilitate threading/sewing the end can be stiffened with a sizing of PVA (or have contact tape wrapped around) and trimmed to a point or, when possible, the strips can be cut in such a fashion that one end comes from a tougher part of the skin, and this end used for 'sewing' (see figure 4 – shaded areas represent 'tougher' parts).

All tears and slashes are sewn with a figure of eight stitch as shown in figure 2. With a figure of eight stitch the edges butt up against one another but do not overlap. This method is also used for back folds, infilling lacunae and panelled fragments (see figure 5 and later).

Consolidation of old repairs

Vellum makers' repairs, that is, cuts or tears that were sewn while the vellum was still damp, are fairly common. Sometimes they are slightly open, but usually even though the thread has broken down, the edges of the cuts are still adhering well. In these areas unbleached linen thread is used for re-sewing because it is felt to be both strong enough and more in sympathy with the original. When the cut is closed the stitch employed will be dictated by the original holes. If the cut is slightly open then a figure of eight stitch should be adopted utilizing the original holes. When replacing the thread of vellum makers' mends it is best not to use a needle, but rather to size the end of the thread, so avoiding unnecessarily enlarging the original holes (figure 6).

Occasionally, patches are found over the text, placed there for the purpose of correction (though more often mistakes were just scraped out). If loose, these patches are best tacked down with either thread or vellum strips. The choice of thread or vellum will depend on the size and thickness of the manuscript leaf and the patch as well as the type of decoration or writing on the patch. If the patch is part of an illuminated initial, thread is probably best. Tacking rather than sticking down is done:

1 to avoid distortion by adhesive, and
2 because if the writing under the patch has been partially obliterated adhesive might interfere with future visual, photographic or ultraviolet examination.

This latter point should also be kept in mind for areas where the text is slightly perforated through scraping for correction, or with palimpsests. Unless the area in question seems to be in severe danger of falling away and consequently being lost it should be left as it is, or possibly repaired from behind, if no writing is on the reverse. Another solution to this problem – also virtually non-adhesive – is that adopted by Lola Hasznos. In this case a minimum amount of adhesive is applied around the edges or in the areas which do not contain writing, silk or synthetic gauze is lightly tacked on to either side of the fragmented leaf (not laminating) thus permitting movement without stress (figure 7).

Lacunae

When an illuminated letter has been slashed from a page (a form of vandalism frequently encountered) it has been done with little regard for the rest of the page or the book block. That is, the knife used to remove the page or initial often cuts through several adjoining leaves as well. 'Starts' around the lacuna may be either bridged (a) or sewn (b) – see figure 8. Often this type of lacuna is not filled in.

Small irregular lacunae caused by vermin or insects may be mended with new vellum which has been toned, scarfed and glued, or a patch may be sewn. The size, shape, and location of the lacuna
Supplies for Conservation of Limp and Hard Board Parchment Bindings

PVA, Jade 403
Paste, (Zin Shofu), Gelatin, (Photo Grade or Edible Leaf)
Tissue: Sekishu, Kizukishi etc.
Aero cotton (or linen)
Ace bandage
Scalpels
Scissors (small)
Sanding sticks, sand paper
Pastels, Acrylics, Dye
Tweezers
Bone Folders
Brushes for paste and PVA
Lifting knives and spatulas
Mars plastic erasers and Vulcanized Sponges
Series of weights...velvet or cloth flexible ones
Cotton swabs and cotton balls
Remay and blotters
Scraps of parchment
Board scraps
Small backing press (wooden screw type) with wooden sanding platen
Clips/ Pins/ Homesote board (needed only if flattening is appropriate)
Suction table (same as above, optional)
Needle, Thread
Rosette sewing wheel
Custom made pin for making lacing holes in parchment
Pins and dowel handles, drill, cutting pliers