

22nd Standards of Excellence Seminar Minneapolis, Minnesota · September 2002



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22nd Standards of Excellence Seminar September 2002, Minneapolis, Minnesota

The tradition of Foundation Sessions, which started in Chicago in 1999, continued at the 22nd Standards Seminar. "The Foundation Sessions are intended to be comprehensive introductions to broad, general topics, given by instructors teaching in the field."* Foundation Sessions will be published separately and available for purchase.

- Chicago 1999: On Paste, Paper & Cloth, by Betsy Palmer Eldridge
- Salt Lake City 2000: Leather, by Betsy Palmer Eldridge
- Alexandria 2001: *Color: Theory and Practical Tips on How to Make Your Own Paper and Cloth*, by Martha Cole
- Minneapolis 2002: *The History of the Alphabet and Its Influence on Modern Typography*, by Cindy Haller

*Betsy Palmer Eldridge, The Foundation Session, Guild of Book Workers Standards of Excellence Seminar, Chicago, 1999

PAPERMAKING BEFORE AND AFTER: PULP, PAPER AND BEYOND Bridget O'Malley

Bridget O'Malley is co-proprietor with Amanda Degener of Cave Paper, located (deep) below the Campbell Logan Bindery in Minneapolis. The Cave specializes in the production of high quality handmade and dyed flax papers.

Bridget's background is in printmaking. She has an extensive background in handmade paper, having completed a five-year apprenticeship in papermaking at the University of Iowa Center for the Book Paper Facilities with Tim Barrett, refining her production and dying skills before returning to Minnesota to establish the busi-



ness in 1994. One of her greatest joys is spending a day in the studio, and making a mess with black walnut dye and indigo.

Bridget began her lively session with the question, "Can we make handmade paper in a hotel setting?" She encouraged a discussion among the audience, the users of handmade papers and the maker. The choices made from the beginning to the end of the process all affect the final sheet. It is said, " a sheet is made before it even gets to the vat." As she picks up a mould and dips it into the vat, she says, on the one hand there is absolutely nothing to it – there is a sheet of paper – and yet, that simplicity has such a huge range of opportunities, possibilities, choices. "After making sheets for 17 years there are so many areas I know nothing about. Each fiber is a world ripe for exploration. We have chosen flax and within that world of flax we explore the range of its possibilities." The choices before the vat are critical. Essentially we are talking about fiber and water. There are three main types of fiber used in making paper:

- 1. Bast
- 2. Grass
- 3. Leaf

All plants can be used for papermaking as they all contain cellulose. Some plants contain more cellulose than others. In Western papermaking the main fibers are flax, cotton and hemp. In the East, mulberry or kozo, gampi, mitsumata and daphne are used. Papermaking came from the East and techniques changed, adapting to the fibers which were available in a given locale.

Flax is a herbaceous straw-like fiber. The inner portion is strong and stringy, "almost hair-like." It grows well in cold climates such as Canada, Northern Europe and Belgium. It grows up to 7 feet tall stalks. The straw is harvested and left in the field to rot. The bast inner fiber is what is used for papermaking. Cave Paper purchases flax imported from Belgium. Nearly all of the straw or shive is removed. The fiber is fermented in a large container of water for 3-4 months. Bacteria and naturally occurring enzymes help break down the fiber, reducing beating time, which contributes to a softer paper. A whole world opens up with fermentation and variations in processing.

COOKING

Not all fibers require cooking prior to beating, but most do. The fiber is cooked in an alkaline solution. This cook helps dissolve waxes, gums and lignins leaving behind the cellulose. There are three main gradations of cooking solution:

- 1. Lime or calcium hydroxide (weakest)
- 2. Soda ash or sodium carbonate
- 3. Lye or sodium hydroxide (stongest)

The fiber is then rinsed prior to beating.

BEATING

There are several options for beating the fiber. The simplest method is to use a mallet on a hard, flat surface. There are also stampers. A stamper is a mechanically driven pounding device. Mention is made of The Technology of the Medieval Book workshop at Jim Croft's place where they have constructed a water-driven stamper. Blenders, although not efficient for processing large quantities of pulp, can be useful if there isn't a beater available. The ideal tool for the processing of fiber is the Hollander Beater. The Hollander is typically motor-driven, although originally they were wind-powered. This machine has an oval shaped tub. Attached to one side of the base is a stationary bedplate set with dull metal bars or knives. Over this bedplate is positioned a revolving beater roll with corresponding blades. The tub is filled with water and fiber. As the beater roll is lowered the fiber is forced between the blades as it revolves through the tub until it is beaten into pulp.

SHEET FORMATION

The essential tool for making sheets is the mould. Two basic types of mould were shown: a wove mould having a smooth surface, and a laid mould that has a pattern corresponding to the wires used to weave the screen on the mould. The heavier vertical lines are chain and the smaller horizontal lines laid.

The mould has a deckle, which is like a frame that holds the fiber on the surface of the mould when the mould is lifted out of the vat. This is removed before couching the sheet. The irregular edge is a deckled edge. Couching is the laying-off of a sheet onto a dampened felt. Sometimes pellon, a non-woven polyester material, is used instead of felts or in addition to felts. A post or stack of alternating felts and damp paper is then pressed. After pressing, the sheets may be removed from the felts and dried. There are a variety of drying methods which also have an effect on the qualities of the finished sheet. Exposure to air without pressing will give a much more textured, toothier surface and a wilder, "potato chip-like" sheet from irregular shrinking. Restraint drying between blotters and cardboard with weight and air circulation will give a much flatter surface and handle.

At the Cave they will often restack a group of 4 sheets, one on another, then press again. These are lightly restrained while being air-dried, then pulled apart. This produces a sheet with more character than the restraint-dried sheets, but not as wild as air drying individual sheets.

Bridget ended this portion with a selection of slides on papermaking, the Cave Paper studio and her own art works on paper.

COLORING

There are two general categories of colorants for handmade paper:

- 1. Pigments physical pieces of ground color in suspension, need to use a retention aid, more opaque, more permanent.
- 2. Dyes penetrate the fiber, allow for more transparency, can be added at vat or later. Cave Paper dye is very intense. It would be difficult to attain this in the vat.

SURFACE TREATMENT

The second part of the demonstration covered the methods used at the Cave to dye papers. The two main dyes used are Black Walnut Hulls and Indigo. These dyes are used because they do not require a mordant. Mordants fix the dye to the substrate and tend to be acidic. In dying textiles the fabric can be washed and rinsed to remove the residual mordant. Handmade papers will not tolerate this treatment. These two dyes are also the most lightfast of the natural dyes.

Walnut dye

The color intensity can be regulated by the concentration of the dyestuff. The hulls are cooked to extract the dye. You can build up multiple layers for increased intensity as well. The Cave makes two walnut-dyed papers. One is strictly walnut-dyed, a deep, dark chocolate brown color. The other is first pigment dyed red in the vat, then over-dyed with walnut, producing a beautiful brick color. Paint rollers are used to apply the dye rather than dipping when dying full sheets.

Indigo Dye

The Cave uses a synthetic indigo dye vat. It requires less attention and is much more forgiving than the natural dye. Indigo dying is a reduction dying process. The sheet is submerged in the dye vat and it comes out a light green color. It is only when the sheet is removed from the vat and comes into contact with oxygen that the blue color appears.

Solid indigo sheets are dipped except for the corner tips, hung to dry, then rotated and re-dyed. This is repeated until the desired intensity is achieved. These sheets can be over-dyed with walnut to produce Degener Black, a stunning sheet with a blue/purple/black, nearly iridescent sheen. Another technique is to use multiple dips. Before dipping, the sheet is rolled into a tube, cone or other shape, then partially dipped leaving some white, undyed voids. The sheet is dried, then re-rolled in another direction, then re-dyed.

This technique is called Layered Indigo Day. In it one can see abstract landscapes. Layered Indigo Night is the indigo-layered sheet over-dyed with walnut.

O'Malley Crackle is a sheet that requires sizing the sheet with a gelatin size prior to dying. A 2½% solution of photographic-grade gelatin is dissolved in water and heated. The sheet is sized with the solution and allowed to dry for several weeks. The gelatin acts as a resist similar to the wax in batik. The sheet is crumpled, then dipped into the dye. The color penetrates the cracked area creating a veined appearance.

Following the demonstration of the various dying techniques, Bridget showed samples of work of printers and binders that have used Cave Papers.

For additional information contact Cave Paper

Cave Paper Inc. 1334 6th Street, NE Minneapolis, MN 55413 website: www.Cavepaper.com e-mail: BOMalley@cavepaper.com

The Paper Moulds mentioned by Bridget may be obtained from

Tim Moore 14450 Behling Road Concord, MI 49237

Written by Jim Canary

DENNIS RUUD: ILLUMINATION Nancy Ruth Leavitt

In this presentation Dennis Ruud constructed an illuminated page on vellum, using tools and techniques of modern calligraphers, inherited for the most part from pre-Gutenberg scribes and illuminators. Included in the demonstration were quill cutting (and knife vellum making), preparation, writing, gilding on gesso (essentially the Cennino method), and application of color onto a traditional design motif. At the end there was a finished illuminated folio (double page folded opening). Dennis Ruud has studied and

Dennis Ruud has studied and practiced calligraphy for 25 years,



with special interest in the traditional tools and methods. He is the supplier of cut quills to the retail mail order calligrapher suppliers, and has taught many workshops in these areas of study at Minnesota Center for the Book Arts and elsewhere nationally. He has been for 19 years a book conservator working privately out of his home workshop in South Minneapolis, a block from Minnehaha Creek.

The development of an illuminated manuscript page is a slow and laborious task made up of many small, exacting, intense activities. Surrounded by a mass of electrical cords, lights, and tables covered with an electric frying pan, a grinding wheel, egg beater and calligraphic supplies, Dennis Ruud, a South Minneapolis book conservator, calligrapher and teacher, took us on a three-hour whirlwind demonstration of the production of an illuminated page.

Vellum

Dennis began his presentation by showing us how to prepare manuscript vellum for gilding and lettering. Vellum and parchment are made from the skins of calves, goats, and sheep. "Parchment" and "vellum" are interchangeable words; however, vellum has an etymology that would indicate it is the skin of a calf. Although expensive, the advantage of using vellum as a writing surface is its longevity and sturdier surface for gesso gilding and for lettering. Manuscript vellum is thinner, processed to have a finished surface on both sides with even color over the entire surface. Binding vellum is finished on one side only. The skins of newborn calves yield a fine thin vellum. Vellum and parchment are made by first soaking skins in water, then in vats of lime and water to clean off any hair and flesh. The skins are then stretched with cords over a frame and scraped with a knife to further remove grease and oils. Stretching gives the skin its surface characteristic.

Surface preparation

Although most of the grease and hair has been removed from the skin during processing, the vellum is still slightly glossy and slick. Because calligraphers need a nap for writing, it is necessary to abrade the surface of vellum to bring up a velvety nap suitable for lettering. Writing on properly prepared vellum with a quill produces a furrow in the nap which fills with ink. If the skin will not lie flat, it may be put under weight for several weeks or gently humidified in a chamber created out of layers of blotters and pellon. No liquid must reach the skin, as it will cause stretching. Ruud begins his surface preparation by sanding with 220 grit sandpaper wrapped around a small piece of rubber floor mat for a pad. He finds using a block of wood covered in sandpaper not sensitive enough. Placing the vellum on a hard surface, either a piece of glass or Plexiglas, he makes circular motions covering every square inch of the vellum. This can take 40-45 minutes. If there are any rough areas or errant hairs he scrapes them off with a knife. He notes that wearing cotton gloves will prevent getting grease spots on the vellum during sanding. The vellum needs to be lit with a raking light across the working field so you can clearly see the surface changes during sanding. Once the surface has been completely sanded with 220 grit sandpaper, he moves to 400 grit paper and continues sanding. This creates a more desired nap for writing. Some areas may need to be re-sanded to flatten veins. Sanding creates a lot of powder which can be removed by standing the vellum on end and tapping on a surface or brushing it off with a feather. Vellum dust may also be removed by rubbing the surface with ground-up eraser.

After the initial sanding, a skin may be ready for writing. Usually it needs further surface treatment with a pounce. Historically, pumice

was used to prepare the vellum surface and to clean off grease from the skin. Today, powdered gum sandarac is frequently used to prevent the capillary action of ink. Gum sandarac is a brittle resin from the alerce tree (*Calitris quadrivalis*), formerly used as a varnish over wood. When ground and put in a small sack of fabric, it can be lightly pounced in a circular pattern over the entire surface of the vellum before writing. When cut into four quarters and trimmed, a full skin yields four

folios. To get the maximum size pages Ruud measures the skin with a tape measure and marks it with a mechanical pencil before cutting the vellum on a self-healing mat with a knife and straightedge. Ruud doesn't feel the spine direction of the skin hurts folding but says it may affect the visual appearance of the page.



Illustration 1.

Non-arbitrary proportions of page and type area. The secret canon which underlies many late medieval manuscripts and incunabula discovered by Jan Tschihold in 1953. Both text and page have the same proportions, 2:3. The height of the text area is equal to the width of the page. Margin relationships are 2:3:4:6.

Layout and design

Working in the 1950s, Jan Tschihold (1902-1974), a teacher and practitioner of typography, rediscovered the correlation between book page and type area developed in medieval times. He wondered about the beautiful layout and similar appearances of medieval manuscripts. In this method of page design, the page is divided into ninths, creating a 2:3 page proportion with the same corresponding text proportion. Ruud finds this historical layout elegant, beautiful, and useful in his designs. Before marking and ruling up the vellum, he makes a template the same size as the manuscript vellum page on a piece of waste paper. This way he can insure accuracy and quickly mark his points for ruling lines from his paper layout. He uses a constant supply of cut cover paper strips to transfer measurements.

For his demonstration, Ruud adapted his spacing and ruling proportions from the Ramsey Psalter (BL, Harley MS 2904). The familiar lettering in the Ramsey Psalter, produced circa 975 A.D., is round and open and exhibits great legibility. Edward Johnston used this hand as a model in developing his Foundational Hand in the early 1900s. Italian scholars modeled their Renaissance scripts after this hand, which later influenced type design, and much of our modern day type follows the ductus of this script.

Ruling up the lines

Traditionally, holes would sometimes be pricked through several folios or an entire signature at one time and then ruled up. This allowed text on each successive page to start and end at the same place. Historically, scribes have used a wheel with nails embedded in it to mark holes for ruling up. Early scribes used lead instruments, which left a gray line on the vellum, or used a pen and black, brown, or red ink to rule lines. A blunt instrument which makes blind indentations on the vellum was also used. Embossing the surface in this way would have the added benefit of ruling two or more pages simultaneously. Ruud does a rolling fold of the vellum and holds the edges together with the weight of a brick, then pricks holes simultaneously in the two fore-edges of the folio with dividers. He rules up the vertical and head margin lines with a graphite pencil. The tail line is determined by the number of writing lines and the interlinear (spacing between the writing) already worked out on his paper rough. Ruud says that ruling up is a necessary discipline, and does not erase the lines from the vellum after writing. He believes these lines determine the "archeology of the page" and are part of the total design.

Ruud chose to write his Latin text in the round script and the accompanying English translation in italic. In fitting the scale of the lettering to his page, Ruud determines the pen size or width of the quill needed. He measures letter heights with dividers in several places from the Ramsey manuscript copy, pointing out pressure variations noting that the curves are heavier in weight. The x-height of the letterforms used in the body of the Psalter text is $4-4\frac{1}{2}$ pen widths or approximately $\frac{3}{8}$ inches high. The interlinear spacing between the lines is $9\frac{1}{2}$ pen widths. He fits his small italic marginalia within this format by writing two italic lines for every foundational line. Many of these historical hands are beautifully designed, and Ruud says that is important to not simply copy historical letterforms but to modernize them for use in our time. Always, adjustments must be made when fitting in the text and sometimes Ruud simply changes pen sizes to fit text into an area.

Erasing

To correct mistakes, Ruud waits until the paint dries and scrapes it off with the rounded blade of a knife. He then refinishes the scraped off area with gum sandarac. Vellum is a horny material which can withstand erasing, but will wear through if abraded too aggressively.

QUILL PREPARATION

The most responsive writing tool for the calligrapher is the quill. Hollow and light weight quills are made from the first four or five primary feathers found on the leading edge of the wing. The strongest and most useful quills are made from feathers that are shed naturally from birds living in the wild. Large birds of prey yield the strongest quills, but these feathers are illegal to own, even if found in the wild. However, it is permissible to obtain them from legally hunted game. Most quills purchased today are gathered from domesticated goose and turkey feathers. Quills can be adjusted easily and have an extreme degree of nib sharpness. A well-cut quill can create fine lines, tiny sharp writing, can take either ink or paint, and clean easily with water. Ruud says that the sharpness of a quill lasts for half a page or so before it is necessary to make a renibbing cut. The moisture of the gouache affects the quill as does the abrasion of writing.

In order to cut a good quill, one must be able to sharpen a quill or pen knife correctly. Ruud not only sharpens his own knives but makes them as well. A quill knife has a short blade with a flat side for making straight cuts and a rounded side to achieve the scooping cuts necessary to shape a pen. Ruud uses A2 tool steel with chromium and stainless components to make his pen knife blades. He purchases the soft metal in sheet form and has a machinist cut it down into blade-size blanks. He takes it to a metal company who brings it to a hardness of 62. Then Ruud sets the blanks into walnut wooden handles with an epoxy glue for easy handling. This number of hardness is still malleable for shaping but allows the blade to hold a sharpening. The first part of the sharpening is done on a bench grinder. Overheating the blade will take out the hardness, so Ruud runs the bench grinder at a slower speed of 1500 rpm and dips the blade in cold water often to prevent overheating. He uses a white aluminum oxide wheel, as it remains cooler when grinding.* He begins by roughly shaping the rounded side of the knife on the wheel. After rough shaping on the wheel, he sharpens the blade through a variety of

^{* [}See also GBW Journal, Vol. 38, No. 1, "Tool Time" by Bill Minter.]

abrasive materials and levels. This work can be laboriously achieved by hand using an ever increasing fineness of sanding surfaces. Ruud recommends starting with DMT diamond stones. They do not need lubricant but do produce dust which should be blown away occasionally. He repeats the process with ever finer grades of ceramic water stones and recommends #1200 "Bester" and #8000 "Takenoko". Water stones need to be pre-soaked in water for 10 or 20 minutes before use. To prepare the "Takenoko" stone, Ruud rubs a thin paste on top of its wet surface with a "Nagura stone". To shape the cutting edge of the knife, Ruud flat-

tens the straight side first, then rounds the curved side. He finishes by removing the burr created on the blade edge from the sharpening process with a leather strop which has rouge rubbed on it. To maintain a long-lasting razor sharp edge he recommends stropping the knife blade after cutting every few quills. Because the cutting maneuvers are done with a very sharp knife, it is important to hold both the knife and quill correctly. See illustration 2.



Illustration 2.

Cross section of quill knife showing flat and rounded side of blade for right handed cutting and the correct way to hold a knife and quill when making scooping cuts.

Before a feather can be successfully used for a pen, it must be cured and cut. Ruud begins by cutting off the end of the feather barrel and soaking the trimmed feathers overnight in water. Before curing he snaps the water out of the feather and cleans out the papery membrane from inside the barrel. He accomplishes this with an adapted bicycle spoke that has a slightly flattened spoon hammered on its end. This ingenious tool with its long thin handle makes this frustrating task simple. To cure the feather, Ruud heats fine sand to 350-400° Fahrenheit in an electric frypan. He plunges the barrel of the feather into the pile of sand and spoons more of the hot sand up into the shaft or barrel. This process of curing or clarification hardens the barrel of the feather, making it possible to form the slit with a pen knife and allow continual resharpening. The barrel is thermoplastic and gets soft with the application of heat. It changes in opacity from milky white to transparent. Ruud watches for this change to occur before the barrel bubbles and melts. Waiting until the quills are cool, he scrapes off the coating on the outside of the barrel with his pen knife and trims back the barbs at the end of the feather to make a pencil-length writing tool.

"Cutting a quill is like making a tiny sculpture." – Dennis Ruud

- 1. To begin shaping the pen, Ruud uses an adapted toenail clipper embedded in a small wooden "surfboard" to cut away the excess barbs or plume of the feather. If the end is overcooked it may be cut away. Then a cut is made away from the body.
- 2. A slit is made by inserting the end of the pen knife into the barrel and pushing up firmly. The hardened quill makes it possible to get a small slit in the barrel, ¼ inch only, allowing ink to flow down the pen onto the writing surface.
- 3. The first scooping cut is made.
- 4. The bottom of the quill is flattened with shaving cuts to allow the quill to sit squarely on the writing surface.
- 5. The top of the quill is beveled.
- 6. The nibbing cut is made perpendicular to the length of the quill.
- 7. A second scooping cut makes the shoulders of the pen.

Ruud notes that between these operations, further shaping usually needs to be done. He often uses a pocket magnifier with a reticle accurate to the thousandths of an inch, to view the nib width while cutting.



Illustration 3. How to cut a quill.

Reservoirs

Thin pens can hold more ink and will write longer than wider nibs, which exhaust ink supply quickly. To prevent the ink from running out of the pen too quickly, a reservoir may be constructed out of a thin piece of brass inserted into the barrel of the cut quill. The reservoir should stop at the top of the slit in the pen. Ruud recommends against this, finding it better to feed ink from the top of the pen. He fashions his own reservoir by forming a conical tent-shaped brass shim with needle nose

pliers and scissors. He applies E6000 or Goop glue with a toothpick on each flange and attaches it on the back of the quill just over the top of the slit. If he needs to reshape the pen he simply removes the reservoir, recuts and replaces it.



Illustration 4.

Placement of brass ink reservoir inside a quill and a drawing of a conical reservoir attached to the top of a quill.

WRITING

Calligraphers letter on an adjustable slanted surface for ease of working and to see their work more clearly. Also, at the proper level, the slant allows the pen to work at a horizontal level to the writing surface which prevents the ink from flowing out too quickly. A shield helps hold the vellum in place and, most important, keeps any oil from the scribe's hands off the surface. This may be a folded sheet of paper or cover stock paper. Ruud places a waste sheet nearby of the same material as the writing surface to test pen and ink. An ingenious cardboard holder which holds his text to be written is attached to the upper left side of the drawing board.

PAINTS AND BINDERS

Ruud pencils in the initial letter, then mixes his paints. He dilutes colors from tubes of gouache, an opaque watercolor, with distilled water to a slurry. He wants the color thick enough to remain opaque but the right consistency to flow out of the pen. He occasionally adds additional binders to the paint to prevent the rubbing off of color. This is often necessary in books where painted surfaces rest on each other. Glair, the precipitate liquid that settles from whipped egg whites, when added to gouache, acts as a binder. Gum arabic can be thinned and used as an additional binder for watercolor paints as well. Most watercolors and gouache already contain some gum arabic. Ruud uses glair or gum arabic with cool colors. Egg yolk also acts as a binder and because of its yellow color adds warmth to colors. Ruud grinds an ink stick on an ink stone or uses already ground Japanese stick ink in a bottle. He uses the beveled edge of a bamboo skewer to deliver the ink to the quill.

Because gold will stick to paint, it is important to gild first any areas that may be surrounded by paint. However, Ruud is able to begin lettering the body of the text at a distance from any gilding to be done. He fills his quills with gouache dripped from a small blunt-ended Teflon dowel. He notes that the Teflon releases ink or gouache well. Using his waste sheet attached to the edge of his writing board, he coaxes the ink out of the reservoir to begin lettering. If necessary he corrects the wetness of the gouache to make it flow from the pen. He fills two separate quills, one with green and one with blue gouache. He rests his quills flat on bricks when not in use. Holding the stiff vellum down with a bone folder in one hand, he alternates writing back and forth between quills, filling the quills when needed. While writing he quotes Donald Jackson, "Calligraphy is a performance art at the moment of doing it…for this moment the page is evidence of the performance."

CORRECTING

Corrections may be made on vellum by scraping the area with a small knife. Ruud often uses small dental tools as well. He carefully lifts off unwanted paint and ink and then resurfaces the area with small pieces of sand paper.

MAKING GESSO FOR RAISED AND BURNISHED GOLD

The essential process for mixing gesso is as follows:

- 1. Mix and grind gesso ingredients.
- 2. Dry the ground gesso into small drops.
- 3. Reconstitute gesso cake, add other ingredients and mix with water, a bit at a time as needed.
- 4. Apply, let dry and apply gold leaf and burnish.

Ruud prefers to measure his ingredients. His gesso recipe is listed here in parts and also in measured weights:

8 parts slaked plaster (reagent Calcium Sulfate) / causes shininess: 40 grams

3 parts white lead (lead carbonate) / hardens mixture: 20 g

1 part table sugar / draws moisture out of air and gives flexibility: 5 grams

1/2 to 1 part fish glue ("Seccotine" is a brand name, also Kremer's liquid fish glue) / binder: 1 teaspoon

In order for plaster of paris to adhere to the writing surface it must be "slaked" first. Slaking renders the plaster inert. This can be done by soaking plaster of paris in distilled water over a series of weeks. You can purchase slaked plaster already made as "calcium sulfate dihydrate" from Aldrich Chemical. Their contact information is listed in the reference section at the end of this article.

After assembling all of the ingredients to make the gesso for gilding, spray the surface of the glass plate with water. Add all of the ingredients together with a little more water. The surface of the glass muller should be prepared with 220 grit silicon carbide with water before grinding materials. Grind in ½ teaspoon aliquots for 5 minutes to control consistency. Use two hands and keep the leading edge of the muller slightly raised going back and forth. Re-spray if mixture becomes gummy. After grinding, scrape up mixture with a small spatula and drop it in dollops on silicon release paper. The gesso will dry in open air. Collect and store in a dust proof container.

Reconstituting gesso for gilding

Crumble the small cake of gesso into a small dish and gently add water, stirring carefully. As Ruud says, "Air bubbles are the enemy." If air bubbles persist, adding a small drop of alcohol will help. He uses a Teflon spatula to slowly stir the gesso, adding water sparingly until the mixture is the consistency of sour cream. Because gold leaf will stick to paint, gesso and gold leaf is laid before colors are added to the manuscript. The quill is a perfect tool for laying gesso. The viscosity of the gesso is thick enough so the quill can be dipped into the mixture and the gesso will flow easily when touched onto the vellum. The gesso should be laid not in large humps on the surface but thick enough to prevent the texture of the surface from showing through and high enough so it can be burnished. To construct his diaper pattern, Ruud uses a drafting arm set at a 45° to rule out his diaper pattern of diamond shapes before laying the gesso. Ruud uses a ruling pen filled with gesso to outline the diaper pattern. After drying, any irregularities in edges and unwanted craters may be scraped off with a knife. A second layer of gesso may be laid on top of the first if necessary and re-scraping if necessary. He waits for the gesso to be completely dry before applying gold leaf. Because gum sandarac repels moisture, he removes it from the area before laying gesso.

GILDING

Ruud places a leaf of 24k Habberly Meadows loose leaf gold on a gilder's cushion and cuts a piece slightly larger than the area to be covered. He places the vellum with the area of dried gesso over a glass plate. A cool and hard surface will allow the breath to condense better on the gesso. Rubbing "head oil" (from the nose or forehead) on a card or tweezer he picks up a piece of gold, breathes on the gesso only, trying not to humidify the vellum, then swiftly places his gold over the area. He tamps down the gold with a piece of silk wrapped around his finger. He reapplies leaf to any areas missed and tamps down again with the silk, making sure the gold is attached to the gold before burnishing. He burnishes the surface of the gold before adding a second layer and reburnishing. He removes any excess gold with a small brush after the final burnishing. The surface becomes shinier with a second layer of gold.

BURNISHING

Ruud uses a handmade hematite burnisher. Made from a chunk of iron ore, it is shaped and polished to look like a small clothes iron and epoxied to a wooden handle. He finds agates more suitable for gilding on furniture and too hard for work on vellum. Stressing the importance of keeping your burnisher clean, he begins to rub in small circles the



Photo of Ruud's illuminated manuscript.

gilded area, creating a brilliant golden mirror where he has laid his gold.

To finish the decoration Ruud lightens up some green tube gouache with a touch of white for a more dramatic effect. He carefully paints his checkerboard diamond diaper pattern with a small brush, and says that a small quill works well also. The already gilded parts repel the paint. He keeps a spray bottle handy to add moisture to his paints. He finishes up with painting a red letter in the center of the green and gold pattern. Gauffering, or a series of blind marks on the gold, is done after gilding. Ruud places a sheet of Mylar one thousandth of an inch thick over the area and draws dots and lines with another handmade tool, a simple nail on a stick. He carefully draws fine white lines to highlight the painting. For the last step he outlines the outside area of the initial in black ink with a narrowly cut quill and straight edge. The addition of the black line is traditional and serves to crisp up all of the edges. He says, "These tedious repetitive acrobatics make jewel-like effects."

Any one of the multitude of activities necessary to produce an illuminated manuscript could have been a separate three-hour presentation. Dennis Ruud did an admirable job of familiarizing us with each procedure in the time allotted, and made sure we had handouts of techniques, supply lists, and book lists for reference.

Suppliers of materials for manuscript gilding and pen making: *(Comments by Dennis Ruud)*

- Paper & Ink Books, 3 North Second Street, Woodsboro, MD 21795, (301)447-6487, (800)736-7772, www.paperinkarts.com / mail order, general calligraphy supplies, quill knives, cured, uncured and cut quills.
- Daniel Smith, (800)426-6740 / mail order, general artist's supplies, good mullers, powdered pigments such as titanium white, etc.
- W. Habberly Meadows, Ltd., 5 Saxon Way, Chelmsley Wood, Birmingham B37 5AY, England, (441)21-770-0103 / 24 k "Fine Gold Extra Thick" illuminating loose leaf gold.
- Aldrich Chemical Co., Inc. customer service: 1-800-558-9160 / Slaked plaster of paris, calcium sulfate dihydrate, product # 255548.
- Kremer Pigments, New York City, (212)219-2394 / raw materials for making pigments and gesso.
- John Neal Booksellers, www.johnnealbooksellers.com, 1-800-369-9598 / mail order, cut quills, calligraphy books and supplies.
- Bookmakers International, 8260 Patuxent Ridge Rd., Suite C, Jessup, MD 20794 (301)927-7787 / mail order hand bookbinding supplies including gold foil and colored foils.
- Swift & Sons, Hartford, CT, (203)522-1181 / gold leaf (surface or patent).

- Swalef & Son Inc., P.O. Box 3175, Pinedale, CA 93650, (209)439-9602 / *feathers; order "mature goose pointers for calligraphy," may have jumbo or regular sizes.*
- The Japan Woodworker, www.japanwoodworker.com, 10800 (510)537-7820 / ceramic and Japanese sharpening stones, diamond stones, etc.
- George Yanagita, 9025 W. 31st St., St. Louis Park, MN, (612)935-1327 / Ruud's mentor and maker of primo quality quill knives.
- CLAS, Calligraphy and Lettering Arts Society, 50 Park View Road, London W5 2JB, United Kingdom, or greatcalligraphy@ukgateway.net
- Wood Carvers Store and School, 3056 Excelsior Blvd., Minneapolis, MN, (612)927-7491 / wood carving knife to make into quill knife, rouge for strop.
- Seven Corners Hardware, St. Paul, MN, (800)369-9598 / cut quills, calligraphy books and supplies.

Art Essentials, 3 Cross Street, Suffern, NY 10901, (800)283-5323.

Gilding Bibliography

- The Calligrapher's Handbook. Taplinger Press, various editions. Early editions have Irene Base's chapter on gilding; later editions have gilding chapter by Donald Jackson.
- *Cennino. The Craftsman's Handbook.* Translated by D.V. Thompson, in various editions by Dover Publications. *14th century base of much of today's understanding of materials and technique.*
- *The Arte of Limning*, A reproduction of the 1573 edition. Society of Scribes and Illuminators. *Earliest English printed book on manuscript illustration*.
- *Gilded Wood Conservation and History.* Sound View Press, 1991. *Much information on gold and gesso for framers, but illuminators can gain from it, I think.*

NINETEENTH CENTURY PHOTOGRAPH ALBUMS Olivia Primanis

Olivia Primanis was apprenticetrained in bookbinding and conservation by Jean Gunner at Hunt Institute, Carnegie Mellon University in Pittsburgh, PA, where, in 1975, she opened "The Bookbinder," an art and bookbinding supply shop. When she moved to Los Angeles, she continued a private practice in book conservation and teaching bookbinding. Since 1990, she has worked as a book conservator at the Harry Ransom Humanities Research Center, Austin, TX. GBW Newsletter



INTRODUCTION

In 1994, the Conservation Department of the Harry Ransom Humanities Research Center undertook a systematic survey of the Photography Department's Photograph Album Collection. The Ransom Center collection includes only a small sample size relative to the number of albums produced worldwide; even so, a variety of styles are represented. Helmut Gernsheim, a photograph collector and historian, chose the majority of the albums in the collection, which are mainly of nineteenth-century Western European origin.

When the Album Survey project began, little had been published in conservation literature on the binding structures of photograph albums. Ransom Center conservators, with the support of its curatorial staff, interns, and volunteers, recorded details about the materials used to make albums, as well as the operating characteristics of different album structures. They also developed terminology to facilitate discussion of the various album materials and structures. As information is integrated, the Album Survey is emerging as an educational tool for the identification, care, and conservation treatment of photograph albums, scrapbooks, and photographs. As conservators have become more familiar with the various album structures and how they deteriorate, simple and discreet repair techniques that stabilize the deteriorated albums for use have been devised.

The present article summarizes information on album structures and some conservation treatments from the interim report about the Album Survey Project. It is based on the paper that I presented at the joint Session on Photograph Albums and Scrapbooks of the Book and Paper and Photography Specialty Group of the American Institute for Conservation, 1999. My original paper, together with the other two presented in that session, can be found in the publication *Conservation of Scrapbooks and Albums.*^{*i*} They include a description of the different types of album structures and some of the conservation treatments that were devised for the albums, a review of various factors that affect photographs in albums, and a recounting of the process of developing a glossary and an electronic database for recording the survey information.

BACKGROUND

The centuries-old tradition of collecting information and images in blank books is described by the uses of the word "album," found in the Oxford English Dictionary. The word "album" is derived from the Latin *albo*, and referred to a book composed of "edicts and other public notices [which] were recorded for public information; afterwards extended to other lists." In the eighteenth- and early nineteenth-centuries, "album" was used for "A blank book in which to insert autographs, memorial verses, original drawings, or other souvenirs," and in the midnineteenth-century as "A book for reception of photographic cartes and views, or of postage-stamps, crests, or other things which are collected and preserved; a scrap-book." Accounts of late eighteenth- and nineteenth-century England describe the filling of blank books with assorted artifacts as a popular pastime. This resulted in the issue of patents for a variety of album and scrapbook structures between 1860 and the turn of the nineteenth-century (Rutherston, 1996). Books made for holding the various kinds of additions were known, sometimes interchangeably, as albums, commonplace books, and scrapbooks (Colclough, 1998).^{*ii*} It is apparent that during the nineteenth century some books were made solely for use with photographs, but that other types of books were adapted for use as photo albums.

Albums were developed for various markets, and album production paralleled that found in blank book, traditional letterpress, and fine

25

binding establishments.^{*iii*} Albums were commercially mass-produced to be sold "off-the-shelf" in stationery stores, as well as published in small editions. Fine binders also bound albums as unique "one-off" books at the request of an individual. Of interest to book conservators treating books with original photographs is the great variety of nuances to be found in the binding structures that were used.



One of the earliest photograph albums in the Ransom Center Collection contains early experimental photogenic drawings and salted paper photographs (Fig.1). Dated by Gernsheim to 1842-1847, it is the work of George S. Cundell (1798-1882), au-

thor and early member of the Calotype Club.^{*iv*} It is a generic sewn book with compensation stubs, probably bought off-the-shelf.

In the mid-1840s, as scientific research and practical experience improved the quality and durability of photographic images, photographers began to establish businesses. They sold photographic prints separately or in albums, as well as in editions of photographically illustrated books. In 1844, J.H. Fox Talbot (1800-1877) published *The Pencil*

of Nature (Fig. 2), after having developed, but not quite perfected, the Talbotype (or calotype). This book had a caoutchouc binding, a contemporary style of adhesive binding often used for books with plates.

Roy Flukinger, curator of the Ransom Center Photography Department, suggests that it is not always easy to determine if an album is unique or part of an edition.^v Weston Naef, in *The Truthful Lens: A Survey of the Photographically Illustrated Book 1844-1914*, also explains this point:



Surprisingly, during 1850-1880 it

was not always easy to define a published book as distinguished from a

Fig. 1

unique set of photographs collected in a book-like album... Those who compiled albums were often skillful at making manuscript captions resemble printing. Occasionally someone of great means, or even the photographer, would have printed caption and title-page with text added to a single copy, thus making a unique collection appear to be a published book (Goldschmidt and Naef, 1980: 10).

In 1854 André Adolphe Eugené Disderi (1819-1890), a French portrait photographer, patented cartes-de-visite (*cartes*, as mentioned in the OED definition above), a small-sized albumen photograph that is mounted to a paperboard backing (approx. $2.5" \ge 4"$). The keen interest in collecting portraits at this time gave rise to their great popularity. Cartes-de-visite inspired the development of a new album structure that was able to accommodate the thickness of a paperboard mount. Gernsheim says that at the height of their popularity, approximately 300 to 400 million *cartes* were sold yearly in England (Gernsheim with Gernsheim, 1969: 301), and that as their popularity diminished, the cabinet card (usually albumen photographs mounted to paperboard approx. $4.25" \ge 6.5"$), was introduced along with albums that accommodated this larger format. "Outside fashionable society, the *cartes* and the Cabinet remained in favour, and mixed albums for both were popular until the First World War (303)."

In the 1880s and 1890s, another type of album structure was adapted from the emerging loose-leaf binding industry. New patents for these blank books generated the use of post bindings for account books, order forms, and ledgers. In general, these structures allow the pages to be added or removed from an album. Variations of these types of bindings were also adapted for use with photographs. Loose-leaf binders are the precursors of many of the album types, such as ring binders, that are used for photographs today.^{*vi*}

PHOTOGRAPH ALBUM STRUCTURES

Photograph albums drew on basic book structures, with some alterations, for their construction. While the leaves of printed books only need to support the ink of the text or illustrations, albums must accommodate the thickness, weight, and attachment of photographs. Therefore, in constructing an album, the binder paid attention to the type of paper and the format of the leaves or pages, the method of connecting the leaves to each other, the manner in which the photographs were attached to the page, the techniques used to attach the book covers to the text block, and the type of decoration used on the covers. The following section introduces some general bookbinding terminology that is applicable to photograph album structures.



Album Leaf Construction

In general, traditional text blocks have been made of groups of folded text-weight leaves, called "gatherings." In the case of photograph albums, a variety of weights of paper were used for album leaves, including flexible text- and cover-weight papers, flexible card-weight paper leaves, and rigid board-weight papers. Some albums had gatherings made of folded text-weight leaves (Fig. 3). Others had gatherings that were made of single leaves. Single leaves were whip stitched or overcast, and oversewn (Fig 4).^{vii} Single leaves with a returning or hooked guard (Fig. 5) that could be sewn on tapes or cords were also used. Single leaves with a stub were used for text- and board-weight papers (Fig. 6). A guarded leaf construction, without a stub (Fig. 7) and with a stub (Fig. 8) was also introduced for use with rigid paperboard leaves.

The text blocks of most albums also required compensation stubs/ guards, which are narrow strips or folds of paper or board added to the spine of the text block. Compensation stubs reduce stress on the spine by adding a thickness to the leaf connection or sewing structure, which is equivalent to the thickness added to the text block when the photographs are inserted in the album. Fig. 9 shows styles of compensation stubs and album leaves of varying thickness.

Leaf Connection Structures

In traditional books, gatherings were sewn through their centers to a sewing support. The sewing support could be sunken or raised cords, or cotton or linen tapes. These woven tapes were introduced in the latter half of the nineteenth-century, along with the use of metal staples (wire sewing) (see Middleton, 1996: 9-32, 294, and Roberts and Etherington, 1982: 229-231). Photograph



Fig. 9

albums were often sewn, but other methods of connecting the leaves of a text block together were also used, including accordion structures, caoutchouc (adhesive) bindings, guarded structures, and loose-leaf side sewn and loose-leaf mechanical structures. These structures will be explained in the following sections.

Text to Cover Attachment

Case bindings and hollow backs became prevalent in the 1820s and 1830s, and were especially useful for text blocks made with the heavier and less flexible papers that were used in photograph albums. A cover can be attached to its text block with laced-in cords – in-board binding – or it can be attached to the cover only by adhering the sewing supports and/or endpapers – case binding. In books with laced-in cords, the spine of the cover of a book is made separately from the text block and the spine of the cover is not adhered to the back of the book. Photograph albums were made with the more durable laced-in construction as well as with case bindings.

The thickness of the linings applied to the back of a text block affects how the leaves of the text block open. When the back of a text block of either an in-board binding or a case binding is heavily lined, the spine will retain its convex shape when the book is opened. The pages will have to flex at the inner margin in order to open flat, likewise causing the photographs that are adhered close to the spine to flex (Fig. 10). Conversely, when a book with few spine linings is opened, the spine







Fig. 11



Fig. 12

takes on a concave shape and the leaves of the text are thrown-up. Fig. 11 shows an album with a hollow back and paperboard leaves. This style of binding often strains the connection of the text block to its cover at the joints. Album leaves that were hinged to stubs (Fig. 12) allow the leaves of an album to lie flat, regardless of the number of linings applied to the spine.viii

Decoration of the Cover

Due to technological advances in the early 1800s, binders started to experiment with a wide variety of decorative techniques. Creating elaborately decorated book covers became easier and more economical when book covers could be decorated before attaching them to the text block. Although the covers of many albums

are plain, many are also elaborately decorated, often imitating the styles of decoration that were used for bibles (Gernsheim, 1969: 300). Covers of books were decorated by embossing, (Fig. 13) gold tooling by hand, stamping (Fig. 19), or building up the surface of a cover with a paper



maché form, (Fig. 14) sometimes called paneling. Overall grain patterns were imparted to cloth, leather, and paper using embossing machines. Embossed bindings are blind or blank, while the decorated areas of stamped bindings are often gilt or colored with printing ink (Jamieson, 1972: 27-28).

Fig. 14



Fig. 13

EXAMPLES OF PHOTOGRAPH ALBUM STRUCTURES

The following section will give an overview of the album structures found in the Album Survey, how they work, what parts deteriorate, and what parts have been mended. The different types of album structures found during the Album Survey have been classified from a bookbinder's point of view according to the method by which the leaves of the text block are connected. This method of classification is different from that of photograph historians and other book conservators. For instance Richard Horton (1999), book conservator, is interested in overall historical typology and trends of structures found in albums.

The structures found in albums that have been surveyed include a traditional sewn structure, a guarded structure used mainly for cartes-devisite or cabinet card albums, an adhesive structure using caoutchouc, a loose-leaf structure, and an accordion structure. These structures will be described using specific examples because they often share similar components, such as the style of the album leaves. The working characteristics and types of deterioration particular to a specific structure also can be more easily conveyed through a discussion of an individual album. Only mends specific to photograph albums are noted; other mends to the materials and structures, such as resewing or rebacking, were completed using traditional bookbinding methods described in conservation literature.

Sewn Books Folded leaves

This 1860s photograph album in Fig. 17, signed by Fredericka Halcomb, is an example of a sewn, in-board binding with a plain cover of half green leather and green cloth sides. It is a traditional sewn structure with gatherings of folded leaves that was used for many early albums. The structure varies little from a traditional binding, except for the addition of compensation stubs or guards, which. These guards compensate for the thickness of photographs that are added to the book structure. The leaves of the album are a medium-weight, fairly stiff text paper. The albumen photographs are



Fig. 15

adhered both partially and overall and some are detaching, probably due to the effect of the movement of the page on a deteriorating adhesive. The photographs flex only a little as the leaves are turned, without apparent damage to the image, such as cracking of the emulsion layer. The leaves were sewn on sunken cords and, as is typical of a traditional in-board binding, the spine of both text and cover were heavily lined. Because of this lining, the spine does not flex. In order for the leaves to open flat, they must flex at the spine. When album leaves constantly flex

over rigid compensation guards, a guard can act as a cutting edge to the adjacent leaves. This type of strain is destructive for brittle paper and can cause tears. Such damage is especially prevalent in albums with this type of stub or guard.



Single Leaves, Whip stitched

Lewis Carroll's (Charles Lutwidge Dodgson, 1832-1898) album, Professional and other Photographers, dating to the 1860s, has an in-board binding with a half leather and cloth cover that is very similar to that of the previous album. The text paper is a medium-weight, high quality sheet that remains very flexible. The text block is made of single leaves that have been whip stitched or overcast (Fig. 4) into gatherings, which was a common technique used for the binding of plates by the end of the eighteenth-century. In whip stitched gatherings, the single leaves are connected by sewing diagonally through a group of pages, around the spine edge, and in again. In order to form a text block, each whip stitched gathering is sewn to a sewing support. As can be seen in Fig. 18, this sewing method does not permit the leaves to open to a natural fold, and using the book can strain and tear the paper. Whip stitching also causes the leaves to move in groups, and as the spine adhesive becomes more brittle, breaks in the adhesive and thread occur between gatherings. Breaks in the spine of a text block can tear leaves that have not been completely separated. Because all the leaves are no longer held in place,



Fig. 17

Fig. 18

Fig. 16

edges protruding from the text block are subject to damage, and photographs located at these breaks can be abraded if they rub against each other as the pages are turned. Both the whip stitched gatherings and the heavy spine linings inhibit the back of this text block from flexing causing the album leaves and the adhered photographs to flex a great deal during use. Fortunately in this album, the photographs, adhered lightly and overall to the album leaves, exhibit no abrasion and only minimal damage from the flexing of the leaves.

Deteriorated albums with leaves that are whip stitched or oversewn are disassembled and rehoused, with specific handling instructions for the patron. If the albums are rebound, the individual leaves are guarded into gatherings using Japanese paper and resewn through the fold.

Guarded Leaves

Card-weight and board-weight papers were used for album leaves in commercial "one-off bindings" and many photographically illustrated books because they offered a solid support for the photographs. This is especially the case with albumen photographs that are



Fig. 19

very reactive to moisture. The stiff, single leaves were made into conjugate leaves by connecting them with a cloth, leather, or paper guard (Fig. 7). Often additional paperboard stubs, similar in weight to the album leaf, were added along the spine edge (Fig. 8). The addition of a stub allowed the leaf to swing open and lie flat. The guarded leaf with stub construction was used with the thicker paperboard leaves so that the album pages could open flat (Fig. 12).

Francis Frith's (1822-1898) North Wales, (Fig 19) published around 1870, is a photographically illustrated book containing albumen photographs. The cover is a starch-filled book cloth. The edges of the text are gilt. The volume is sewn on sunken cords, has a lightly lined spine, and



Fig. 20

a case binding. The spine does not flex in opening, but the guarded leaf with stub construction works well, allowing the leaves to lie flat when opened. The card-weight paper leaves flex slightly when turned, but this action has not affected the photographs.

Damage can occur in albums with the guarded leaf construction when the space between the stub and the leaf is too narrow. When the leaves flex as the book is used, the guard material is stretched and can tear, or it can cause a leaf to pull away from the guard. If the space between the stub and guard is too wide or flimsy, the album leaves can slide around and abrade the photographs. This is a problem with large albums. The same problem of slipping and sliding can occur when each gathering is no longer held in place because the spine adhesive or sewing supports have deteriorated.

In this type of album, tears in the guard material connecting the stub and leaf are mended with Japanese paper. Loose or detached leaves are readhered to their guards. If the adhesive and spine linings are deteriorated, the spines are consolidated with new adhesive and linings. If



Fig. 22



Fig. 23

the guard material is severely deteriorated, the album is disbound (Fig. 22). When disbound, the single leaves with mounted photographs are housed in polyester pockets and lignin-free paperboard housing.

Cartes-de-Visite and Cabinet Card Photograph Albums

Commercially produced carte-devisite and cabinet card albums appeared almost simultaneously with the development of the small-format mounted albumen images. *The Royal Album* (Fig. 23), published in August, 1860, by J. E. Mayall (1810-1901), was one of the earliest published cartesde-visite albums (Gernsheim, 1959: 261). The leaves of this album are constructed with a card stock core that has a cut-out window. The outer sides of the core are faced with paper. The paper overlaps the edges of the window in the core and functions like a mat (Fig. 24). This album leaf style offers a nonadhesive method of holding the photographs in the album, while the mat protects them from abrasion by contact with the adjacent page. The photographs can be slipped into the



Fig. 24

mats from the bottom (Fig. 25) or top of the leaf or from an opening in the mat located directly below the photograph.

In *The Royal Album*, the leaf is connected to a stub composed of linen and paper similar to a returning or hooked guard. The book is sewn on two cotton tapes. A light-weight, cloth lining on the spine similar to

that in Fig. 32 allows the stubs to lift and the leaves to lie flat (Fig. 26). The endpapers are a white moiré or damask patterned paper that is found in many photograph albums of



Fig. 25

this period. Helmut Gernsheim (1959) credits this album as starting the fashion of collecting photographs of royalty, politicians, and celebrities in albums.

Serving in much the same capacity as today's coffee table book, cartes-de-visite and cabinet card albums were highly decorated with gilt gauffered edges. The albums often had fore edge clasps, bosses, and other embellishments. In 1870, E. and H. T. Anthony & Company listed more than 500 styles of family albums made for *cartes*, cabinet cards and larger images (Welling, 1976:93).^{ix} Some of the cover designs as advertised by the American News Company, N.Y. in 1876, are found in Fig. 29. This ad lists at least 54 variations in size, materials, and decorations (Monachesi, 1876: 169).





Fig. 26

Fig. 27

Guarded Structures

While the *Royal Album* is a sewn structure, most of the *cartes* albums were not sewn. A method of producing these albums for cartes-de-visite and cabinet card albums without sewing is described in this 1880 quote from *The British and Colonial*:

They begin with the manipulation of the "front," or the interior of the albums. The front is first cut out, then guarded and built up with suitable middles or frames for photographs. The next process is "rounding" the back; then follows cutting, and after that, gilding. Thus the inside of the album is constructed. The leaves are now ready to be bound up in any of the special bindings manufactured.^x

Instead of connecting the album

leaves by sewing, the leaf connections of the guarded structure are generally made with cloth guards. In some cases, leather or paper was used. A guard is adhered to the spine edges of two paperboard cores, which hinges them together. The facing paper is then adhered to the paperboard, covering the guard attachment. The process is repeated until all the leaves of the album are connected. Fig. 30 shows a guarded leaf structure with stubs and Fig. 31 shows a guarded leaf structure without stubs. In the guarded structure, the spine is generally unlined, or, lined with only one layer of lightweight cloth such as mull or super (Fig. 32). If the spine of this type of structure is lined, the leaves cannot open flat.

Guarded structures make full use of the qualities of hollow back



Fig. 30 Guarded Structure with stubs

Fig. 31 Guarded Structure without stubs







bindings. Their leaves can open well. The opening of the albums in Fig. 11 (not a guarded leaf) with a stiff, heavily lined cover spine, contrasts with that of an album with an unlined cover spine in Fig. 33. When the album with the stiff spine is opened, the spine of the cover maintains its rounded shape, which causes the back of the text block to arch somewhat like a spring- back binding. This results in a problem of a geometric nature for guarded albums with stiff spines. The length of



Fig. 32

the arch of the back of the text block, from where it is connected at the joints, is shorter than the length of the arch of the spine of the cover. When the albums are opened, the leaf connections of the text block and the joints of the cover are strained. As materials deteriorate with time and use, an inner hinge or guard in the text block often splits. Likewise, in guarded albums with flexible spines, the deteriorated leather cracks and splits when it flexes during use.

When the albums become detached from covers with inflexible, heavily lined spines, it has been observed that they will break again if they are reattached firmly at the joint. Instead, to reattach an album to its cover, the front cover is attached to the text block with a standard Japanese paper hinge. The backboard is reattached to the text block with a Japanese paper gusset. The gusset expands when the book is used (Fig. 35).

For albums that have unlined spines with cover leather that is cracking, Lascaux 360, an acrylic adhesive, has been used on an experimental basis. Generally book conservators prefer to use reversible, time-tested, starch-based paste for mending books, but in this case, applying a Japanese paper reinforcement to the inside and outside of the spine with paste made the spine stiff, causing it to recrack when the book was



Fig. 33

Fig. 34

opened. The spine mended with Japanese paper adhered with Lascaux 360 remains flexible and supported as it opens.

Torn mats and slots in the facing papers are often mended. This problem was already noticed in 1872:

The attention of manufacturers and dealers is at the present time being called to the unsatisfactory

state of the greater part of the photographic albums now in use. They are, with some rare exception, made for sale, not for service...

From the first period of their introduction they have been in great demand, with but little time to inquire into their make and quality... At present they are very inconvenient as regards getting cards in and out, tearing, soiling, and finger markings being the result... (Graphicus, 1872: 112)

In the guarded structure, tears at the inside joint or tears in guards located in the middle of the text block are mended if the mend will not cause additional tears to another guard or to a joint.

Adhesive Bindings

In 1836, William Hancock was issued a patent for adhering single leaves together at the spine with caoutchouc or rubber, which is a natural resin made from the latex (juices) of

certain tropical plants. The spine of the text block was roughed up and two layers of adhesive and a cloth or canvas strip were applied to it. Adhesive binding eliminated the time-consuming task of sewing the book. This type of leaf attachment was widely used in the mid-nineteenthcentury for books with plates, but the rubber adhesive deteriorated and released, causing the leaves of these books to disconnect when they were used.^{xi} Fig. 36 is an image of an adhesive bound album used by Joseph Cundall (1818-1895), art historian, publisher, and member of the Calotype Club. It dates to the mid-1850s and was sold as a sketchbook, as suggested by the stationer's ticket, which says, "Newman's/Soho Square/ Every Requisite For Drawing and Painting."

The Pencil of Nature, the first photographically illustrated book, was bound using caoutchouc (Fig. 2). It was issued in six parts from 1844-1846. In the late eighteenth and nineteenth centuries, publishing books



Fig. 35



in parts or installments was a popular method that was used for selling expensive books. Collectors could have all the parts bound, if they wanted to, by a binder of their choice. Often the publisher would, simultaneously with the publication of the last installment, issue a complete bound edition (Carter, 1981: 148).

Albums with deteriorated adhesive bindings (Fig. 37) are generally left in their covers and housed. As much of the



Fig. 37

caoutchouc adhesive as possible is removed from the spine to prevent damage to the photograph, because the desiccated adhesive is crumbly and mobile. A label adhered to the housing directs users to align all the leaves before reinserting them between the covers.

Loose-Leaf Structures

Side sewn or mechanical loose-leaf bindings include those albums whose text blocks are composed of single leaves connected by metal posts, cords, thongs, and staples. Fig. 38 shows a turn-of-the-century album with silver gelatin prints of Texas landscapes. The leaves of this album are connected with staples. The covers of such albums are usually made with two pieces of binder's board with a flexible joint between the boards, so that they can open well. In this type of structure, the leaves can be single, board-weight paper leaves. The board-weight leaves usually have an extension stub connected by a cloth hinge. They can also be made of single text-weight leaves. In the latter, the condition of the album depends on the quality and flexibility of the paper that was used, because the leaves do not open at a natural flexing point. In general the paper used for these albums was of poor quality. Many are made with a black constructiontype paper. Often failure or loosening of the attachment mechanism causes the leaves to tear away from the volume as well.

The majority of the albums with a loose-leaf structure held together



by cords, staples or posts are twentieth-century. If the paper is brittle and cannot withstand use, the albums are disbound, and the pages are housed in polyester sleeves.

Accordion Structures

In accordion style bindings, the "text block" is made of one continuous piece of paper that is folded into pagesize leaves. Often, smaller



Fig. 39

sheets of paper are connected at their edges by adhering a cloth or paper guard in order to make the long continuous sheet. *In Souvenirs from Japan*, the author describes a photographic business in the 1880s with a staff of thirty-three people, including a bookbinder (Winkel, 1991: 29). Fig. 41 displays a photograph album from Japan, which probably dates to this time period. Covering materials for Japanese albums included plain cloth and silk brocade. The lacquer cover in the illustration, produced in a traditional lacquer shop, was the most expensive type of cover that was offered (Winkel, 1991: 31).



Fig. 40

Combination Albums

Two unique album structures in the Ransom Center Collection include an album combined with a music box and an "album" combining photographs and a viewer. F. W. Bossert was issued a patent for the music box and album combination in 1864 (Rutherston, 1996)

(Fig. 43). In 1876 Harroun and Bierstadt patented an album designed to hold a set of fold-out lenses for viewing loose stereo cards (Welling, 1976: 93). Fig. 45 shows an album with cartes-de-visite and a fold-out magnifying lens.





Fig. 41

Fig. 42

CONCLUSION

The primary focus of the Photograph Album Survey has been to document the structure and condition of the albums in the Ransom Center Photography Collection; to repair and house the albums; and to share the information that is gathered with binders and conservators. The Guild of Book Workers Standards Seminar offered an opportunity to present some of the structural features of nineteenth- and early twentieth-century albums and to discuss some of the problems inherent



Fig. 43

in these structures. The presentation was not meant to describe treatments fully, but rather to suggest possible techniques that could prevent further deterioration and allow the albums to be used in their original formats.

Acknowledgements

I would like to thank Jane Rutherston, Tom Conroy, Richard Horton, and Gillian Boal for sharing their research on photo albums and book structures, and my colleagues at the Ransom Center, Bar-

bara Brown, Jim Stroud, Mary Baughman, Pat Ingram, and Roy Flukinger, who are all participants in the Photo Album Survey; and Ann Frellsen and *GBW Journal* Editors for editing this paper for publication in the *GBW Journal*. The Album Survey also involved the efforts of interns and many student volunteers from Preservation and Conservation Studies, GSLIS, UT. A complete list of names can be found in the AIC *Interim Report*. All artifacts depicted in this article are from the Gernsheim Collection





Fig. 45

and appear courtesy of the Harry Ransom Humanities Research Center, the University of Texas at Austin.

NOTES

- ^{*i*} Barbara Brown and Olivia Primanis from the Harry Ransom Humanities Research Center, and Margaret Brown from the North Carolina State University Libraries, contributed to the original article Conservation of Scrapbooks and Albums.
- ii In his posting on SHARP-L, Dr. Colclough responds to a question on commonplace books after reviewing over 80 British commonplace books that are part of the Open University Book History Group research project "Was there a reading revolution? Change in the British reading experience, 1700-1740, 1800-1840." He found that there are differences in eighteenth- and nineteenth-century commonplace books, both in their content and organization. Eighteenth-century commonplace books followed the philosopher John Locke's guide and organized the generally historical and philosophical information with indexes, headings, and references as described in his essay "A new method of commonplace book" (1706). Colclough notes that while "[t]he majority of C19th books, in the sample I have undertaken, appear to have been bought as blank books, or are a collection of sheets bound together some time after they have been written on... The owners of these self-made anthologies refer to them as commonplace books or albums...Often they contain 'scraps' cut out from contemporary magazines and newspapers and pasted in, i.e. they have something of the function of scrap books."
- ⁱⁱⁱ Three publications by John Mason outline aspects of three branches of the bookbinding trade: *Letterpress BookBinding; Edition Case Binding; Stationery Binding* (all 1946).
- ^{iv} Ms. notation by Gernsheim on flyleaf of album. The Calotype Club was also known as the Photographic Club of London.
- $^{\nu}$ Ongoing conversations with Roy Flukinger, Senior Curator of Photography, Ransom Center, 1993-1999.
- ^{vi} Tom Conroy, book conservator and historian, provided citations to two essays by Herbert Stoeckel (1938, 1939) on the history of loose-leaf binding.
- vii Information on overcasting and oversewing can be found in Middleton, 1996: 24-25. Information on overcasting, oversewing, and whip stitching can be found in Roberts and Etherington, 1982: 182-183, 283.
- viii For more information on how treatment of text block spines affect the opening of the book leaves see, Conroy (1987) Jermann (1994).
- ^{ix} As noted by Taft (1938: 143), the second patent for cartes-de-visite, issued two weeks after the Grummel patent, was, most likely, to the same firm: Anthony and Phoebus of E. Anthony and Company.

- * This description of the Bradbury, Wilkinson & Co.'s Manufactury from The British and Colonial 4 (July-December 1880): 105-113 was cited in Rutherston's "Master's Thesis."
- xi Information on caoutchouc bindings can be found in Middleton (1996: 30-1)
 and Carter (1981: 108).

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MONIQUE LALLIER: CHEMISE AND SLIPCASE Sonia K. Jordan



The presentation focused on the making of a chemise and a slipcase over a book already bound. The French "chemise" wraps around the book with narrow flaps at the fore-edge. The slipcase fits over the chemise and follows the roundness of the spine. They can be lined with suede leather, felt or paper.

Monique Lallier is an internationally recognized bookbinder and book artist. She began her studies in the 1960s in Montreal at Cotnoir Cappone School of Fashion and L'Art de la Reliure bookbinding school with Simone B.

Roy. She then went to Paris to study with Roger Arnault, followed by studies at the Centro Del Bel Libro in Ascona, with Edwin Heim, and in Solothurn, Switzerland with Hugo Peller. Monique's books may be found in the collections of McGill University and St. Joseph Oratory in Montreal, Quebec; Vatican City for Pope John-Paul II; Louisiana State University; University of North Carolina, as well as in many private collections in the USA, Canada, Europe and Japan. Monique Lallier is the recipient of many grant awards and prizes, such as the Resources Techniques Program, Quebec Government, 1982 and 1983, the Bookmakers International Award and The Art of the Book, Canadian Bookbinders and Book Artists Guild Exhibition, March 1993. You can learn more about Monique by visiting her website at:

http://www.moniquelallier.com/index.html.

Author's note: I had the pleasure of reporting on Monique's chemise and slipcase demonstration. As always, Monique's presentations are relaxed, elegant, and filled with a richness of detail that comes from decades of skill and artistry. She always makes everything look easy, and yet it is clear that the making of a chemise and slipcase is an exacting and precise undertaking.

I sat in on the session in which she made the chemise and slipcase for the first book her husband, Don Etherington, ever bound. We were told that Don was only 16 years old when he made this beautiful full leather binding with inlays of seashells and gold waves. As I recall that day, everyone was listening and watching attentively during Monique's presentation, when she matterof-factly made this statement. There was a gasp in the air with the revelation. Could it be!! Chills ran down our book-loving spines! If that wasn't enough, the partnership of Don's book and Monique's chemise and slipcase were to be auctioned off at the banquet the next day. It was the last item to be auctioned and the bidding war was fierce, emotions high. Who would not give her right arm! O.K., maybe a bookbinder/book artist couldn't afford an arm, or hand or even finger, but even so, there was not a person in the audience, including myself, who didn't covet the book with chemise and slipcase. It was an unforgettable night. Sitting at the table of its new owner, along with Monique and Don, tears ran down my face. And so, what better way to introduce a chemise and slipcase than the one done for Don's first leather book? - Sonia K. Iordan

CHEMISE AND SLIPCASE

For more than a century, a chemise with slipcase has been used in France and Europe as an elegant option for protecting bindings. On the bookshelf, a chemise and slipcase are more attractive than a traditional clamshell box, protecting the book's spine while allowing the spine design to be duplicated on the spine of the slipcase.

When planning for a chemise with slipcase, the choice of materials should reflect the binding, and when possible, the same leather should be used. A book's endpapers may also be used for both chemise and slipcase. In a chemise, the edges meet at the center of the book's fore-edge. If the book is thin, the edges of a chemise overlap. If you are covering the chemise with paper, the chemise anchors in front of the book's foreedge. If you are making a leather chemise, it anchors around the square. (See Figure 1).

The instructions that follow are for a chemise with leather spine and fore-edge, with paper lining on a book of average thickness.

THE CHEMISE Materials List



1. Wrap the book in a good quality plastic wrap to protect it from moisture. I use Reynolds brand.

2. Choose the material for the lining of the chemise first so you can accommodate the thickness. This can be paper, felt, suede or cloth. Cut the lining:

a. Height equals the height of the book.

- b. Width equals the full width of the book from the edge of the front cover all the way around the book to the edge of the back cover PLUS 2 mm (1/16").
- 3. Card stock is used as the support structure for the chemise and wraps around the spine of the book. Use a 0.4 mm or 0.5 mm card. I use a 0.016 (16 pts) acid free gray lining card from Gane Brothers. Cut the card to:

a. Height PLUS 1 mm (just slightly taller than the book).

- b. Width equals full width of the book from the edge of front cover all the way around the book to the edge of the back cover PLUS $4 \text{ mm} (\frac{1}{8}'')$ for each side.
- 4. Wrap and center the card stock around the book. Mark with pencil or use a bone folder to indicate the edge of the front and back boards and the center of the spine.
- 5. Cut a piece of leather for the spine of the chemise:

Fig. 1

- a. 2.5 cm (1'') higher than the height of the card.
- b. 7.5 cm (3") wider than the thickness of the book's spine.
- c. Pare the leather to 0.5 or 0.6 mm (use a micrometer to verify the thickness).
- 6. Bevel all sides of the leather and pare to a smooth transition. Pare the head and tail turn-ins thinner than you would for a book.
- 7. Wet the outside of the leather. Using MIX or PVA, (whichever you are comfortable working with) glue up the leather and center onto the card. Do the turn-ins at the head and tail first. The leather should follow the lines of the card with no headcaps.
- 8. Wrap the material for the lining of the chemise around the protected book, and then the chemise over this. This is needed to ensure that the chemise's dimension accommodates the liner. Center the chemise:
 - a. Mark the fore-edge on the card PLUS 4 mm (1/8") for the front and back each and then score with a folder.
 - b. Use dividers to make sure that the crease is equal along the entire length of the fore-edge.
 - c. Fold the card at 90° angle at the foreedge mark.
- 9. Leather for the fore-edges of the chemise are prepared the same way. Cut the leather:
 - a. Height equals height of card PLUS 2.5 cm (1").
 - b. Width equals 3 mm over the crease and all around the edge to 3 mm over crease on the other side.
 - c. Pare the leather rather thin to 0.3 or 0.4 mm.
 - d. Paste leather on the fore-edge keeping the crease line very sharp.



Fig. 2

- e. Miter the corners on the inside of the chemise (See Fig. 2).
- f. Repeat for the other side.
- 10. Making sure the chemise is centered and squared, wrap the chemise, chemise lining and book with a good plastic wrap and let it dry

under weight about 10-15 minutes for straight PVA and a little longer for MIX.

Covering the outside of the chemise:

- 11. When dry, cover the outside of the chemise with the paper or the cloth you have chosen. Cut the cover material to:
 - a. Height equals height of the card PLUS 2.5 cm (1'').
 - b. Width equals the exact dimensions between the leather spine and the fore-edge trim PLUS 2 mm (1 mm over the leather).
 - c. Do the turn-ins first, rubbing the edges for a smooth level finish.
 - d. Wrap with plastic wrap and let dry under weight a couple of minutes.

Covering the inside of the chemise:

- 12. When dry, open the chemise and measure for the lining. Depending upon how much your paper will stretch when wet, you can accommodate this by cutting the paper 1 mm less. If you are not sure about this, you can cut off any excess paper due to stretching with a rounded scalpel after the paper is in place but before it dries. This is a difficult operation, but it can be done.
 - a. Height of lining is 4 mm (1/8") shorter at both the head and tail.
 - b. Width is 4 mm ($\frac{1}{8}$ ") to 7 mm ($\frac{3}{16}$ ") shorter from the fold or crease at the fore-edge on each side of the chemise.
- 13. Glue the lining to the chemise either with PVA or MIX. Hold the chemise relatively flat with weight. Depending on how experienced you are working with long sheets of glued paper, you can glue a section of the lining at a time, placing it down squarely and then moving on to another section, or you can do this all at once. It is a matter of personal experience and confidence. Once glued, rub the lining with a resin or bone folder to make sure there are no air bubbles. Let this dry for a couple of minutes.
- 14. Close the chemise, carefully checking that it adheres equally everywhere and rubbing it again if necessary, especially in the curve of the spine.
- 15. Wrap the chemise around the book and rewrap the plastic around the chemise. Let dry completely. If you have used paste (which takes longer to dry) for the leather chemise, wrap the chemise with craft paper to let the moisture escape and place a piece of Mylar (the size of the textblock) inside each cover to protect the book from moisture.

THE SLIPCASE

I use the same type of Davie board used for clamshell boxes. Find the long grain – it is the more flexible direction – and cut it parallel to the spine. All sidewalls of the slipcase will be mounted on the inside of the slipcase. Thus we will need to accommodate the board and liner thickness in our measurements. Make a jig of the lined board by using a scrap of the same board and cover it with the material you have chosen.

- 16. With the book wrapped in the chemise measure and cut the 2 boards that will make the side panels of the slipcase. Make sure that the two boards are identical and square:
 - a. Height equals height of the chemise PLUS 1 mm, PLUS 2 jig thickness (for head and tail walls).
 - b. Width equals width of book, MINUS 4 mm (¹/₈") short of the joint of the book, PLUS one jig thickness.
- 17. Measure and cut with the grain for the width of the head, tail, and back walls of the slipcase:
 - a. Place the book wrapped by the chemise between the two board walls you have just cut.
 - b. Measure the inside distance between the two boards; apply just enough pressure so that the book will nestle nicely into the slipcase, but not so much that you will abrade the sides when slipping it in.
 - c. Take these measurements for the width of the head, tail & back walls.
- 18. Measure and cut with the grain for the length of the head, tail and back walls of the slipcase:
 - a. Length of the back wall equals the height of the boards.
 - b. Length of the head and tail walls equal length of the boards PLUS 2 cm (34'').

This extra length will be used to trace and cut out the curve of the exposed spine.

- 19. Once all the boards are cut, line the boards with the paper you have chosen. Choose something that harmonizes with the chemise and slipcase cover. Use straight PVA. When glued up, give it a nip in the press to chase out all the air bubbles. Let dry under weight.
- 20. Set your dividers to 2 mm $(\frac{1}{16}'')$ and mark along the length of the inside or lined front and back board. Gently cut and lift off this portion of the lining. This will be the open side of the slipcase and will

be covered by the leather trim.

- 21. On the reverse side of where you have lifted the lining, bevel and sand the edge of the board to $\frac{1}{3}$ of its thickness. This will be the outside of the open front of the slipcase.
- 22. We are ready now to glue the head, tail and back walls. All side walls will be inside mounts. Make sure that the lining side of the slipcase is facing up and that the edge where you have removed the liner is not glued to a wall. Using PVA:
 - a. Glue the back wall of the slipcase, making sure it is square with the edges and at 90°. Make sure that you have NOT glued the back wall to the front side of the slipcase with the trimmed lining.
 - b. Glue the tail and head walls next, making sure they are straight, square, and at 90°. Use weights as needed to ensure good adhesion and a perfect fit. Let dry.
 - c. Glue the last board making sure the lining side is facing the inside of the slipcase, and that the edge with the trimmed off lining is facing the open front of the slipcase. Glue up squarely and let dry under weight with the chemise and book inside the case.
- 23. Because the head, tail and back walls are an inside mount, we will want to cover the seams. Use a 10 pt manila card. Cut strips to fit along the width and length of these walls to hide the seams and to provide a smooth surface for covering. Gently sand the edges of the manila to smooth.

Shaping the case

- 24. Unwrap the plastic around the chemise and the book. Place the book with its chemise into the slipcase. With a pencil, trace the curve of the spine on the inside of head and tail of the slipcase.
- 25. Using very good scissors or a blade, cut on the tracing and sand the edges to a smooth, round finish (Fig. 3).
- 26. Using the same divider measurement to remove the inside liner, trace 2 mm around the curve of the slipcase, cut and lift off the lining on the inside of the rounded head and tail.



Covering the case

Leather should be used for the rounded spine of the slipcase, even if cloth or paper is chosen for the rest of the case. If one has chosen paper or cloth only, the slipcase can be covered with one full length from edge to edge, trimming the last turn-in to cover the cut off strip of the lining.

Leather trim

- 27. For the vertical front edges of the case, pare the leather very thin (0.4 mm). Cut to:
 - a. Height equals height of case PLUS 2 cm (3/4").
 - b. Width equals width of cut off of inside liner (2 mm) PLUS 2.5 cm (1").

(Reserve additional pared leather for the round of the head and tail, see No. 29 below.)

- 28. Dampen the outside of the leather with water. Use either MIX or PASTE (if you need more time to adjust the leather) on the inside of the leather. Apply the strip of leather on the outside of the case first, bringing up enough leather to cover the inside liner which has been trimmed away. Make sure that you have worked the leather well so it adheres on the edge of the case. Push the leather into the corner of the slipcase and cut a straight line at the joint of the boards at the head and tail to release and bring the end of the strip onto the head and tail board. Cut a 45° angle from the corner to the middle of the head and tail board. Repeat on the other side.
- 29. For the round of the head and tail leather trim, cut two strips of leather about 2.5 mm (1") longer than the round. Wet the outside of the leather with water and PASTE the inside. Pull the leather over the round part snuggly and flatten the creases on the inside (Fig. 4). Push the leather into the corners to touch the leather from the front sides. Cut off any excess with a scalpel. Rub the rounded top with a resin or bone folder and cut the surplus with a scalpel on the outside of the head and tail.
- 30. Determine the width of the outside leather trim according to the head and tail. Using dividers, mark a consistent width all along the sides of the slipcase from head to tail. Trim off the excess leather in a straight line using a scalpel.



Fig. 4

Covering the rest of the slipcase

To cover the rest of the case, you may use either one piece that goes all the way around from the inside edge of the trimmed liner to the other, or two pieces that go from the open side to the middle of the back wall of the slipcase.

Using one piece to cover the case

- 31. With a scrap piece of paper, take the measurement for the cover.
 - a. Width equals the full measurement from the inside liner cut off, all the way around the case to the other side of the lining cut off or leather strip.
 - b. Height equals the height of the case, plus one thickness of the case.
- 32. Using MIX, glue up a section of the slipcase about 6.5 cm to 7.5 cm $(2 \frac{1}{2}" \text{ to } 3")$ and position it so that you cover half of the thickness at the head and the tail and reach the other side of the liner cut off or leather strip.
- 33. When this is in place, make a cut at the inside corner of the case to release the paper or cloth.
- 34. Continue to apply the MIX onto the case, little by little, giving you the time to place the covering material. Keep going until you reach the other side. Do not worry about the head and tail placement for now. The material you use may have stretched a little too, so you may have to trim it to fit it into the cut off of the inside lining or leather strip.

Covering the head and tail

35. Fold the excess covering material at the head and tail. They should meet in the middle (Fig. 5). If they do not meet, fill with an identical thickness material to achieve a smooth surface. Cut off the corners on the head and tail walls (just for the one-piece covering). Glue the material and place it down neatly, cutting any overlapping in the middle and making a straight cut at the join with the leather.





36. To cover the head and tail, trace the head and tail on the wrong side of extra covering material. Cut each piece 2 mm (1/8") less on the width and length both. Place this strip 2 mm (1/8") away from the rounded edge and short of the back. The covering material should overlap the leather strip of the rounded edge trim 1 mm.

Using two pieces to cover the case

- 37. Using scrap paper measure and cut your two-piece covering.
 - a. Width equals from inside lining cut off or the leather strip, to center of the back wall of the slipcase.
 - b. (For the covering material to end in the middle of the head and tail board) Height equals height of the slipcase PLUS one width of the head of the slipcase.
- 38. Attach each piece and make the trim cut on the back wall of the case and not on the head or tail wall. If you have used leather for the edges, overlap the covering material 1mm on the leather.
- 39. You will need to cover the joints at the head, tail, and back walls with a separate piece of the covering material here as well. To cover the seam of the covering material, cut strips to exact length for head and tail and $2 \text{ mm} (\frac{1}{8}'')$ less on the width. Recess them $2 \text{ mm} (\frac{1}{8}'')$ from the front and bring the overlap over to the back wall. The back wall lining goes over the join. The resulting 1 mm on each side of the head will not be visible since it is on top of the cover of the slipcase.

THE CHEMISE OVER RAISED BANDS

You can also make a chemise for a book with raised bands. The only difference is that there are two support cards for the sides and two leather spine strips (outer and inner) to affix together for the chemise.

40. There will be two sets of measurements, one for the inner spine and one for the outer spine.

Inner spine:

Height equals height of the book PLUS 1 mm ($\frac{1}{16}$ "). Width equals width of spine PLUS 3 cm (1 $\frac{1}{16}$ ") on each side.

Outer spine:

Height equals height PLUS 1 cm ($\frac{3}{8}''$). Width equals width of spine PLUS 3 cm (1 $\frac{1}{16}''$) on each side.

- 41. Pare the leather to 0.4 mm. On the inside of the leather, mark the width and the height of the spine of the book exactly. The outside piece of leather will be longer than the inside piece.
- 42. Wet the two pieces of leather on the outside, and using MIX, glue the inside spine leather only within the lines you drew on the outer piece.
- 43. Protect the book with a good plastic wrap (See No. 1 above.) Adjust the inner piece and place it over the spine of the book, pulling on each side of the leather to shape it around the raised bands.
- 44. With the leather securely over the spine, use band nippers to shape each side of the raised bands.
- 45. Wrap the chemise with plastic wrap or an ACE elastic band (for knees and elbows) and let dry over the book.
- 46. Measure for the card from the hinge of the book to the fore edge PLUS 0.5 cm ($\frac{3}{16}''$).
- 47. Bevel one side of each card; these edges will go between the leathers at the hinge.
- 48. Apply paste to the inside of the outside leather piece.
- 49. Put the chemise leather spine over the book and slip the card between the two pieces of leather. Adjust to the right place before rubbing the outside leather onto the card.
- 50. Repeat this for the other card.
- 51. Do the turn-ins first, head and tail.
- 52. Paste the inside lining leather next and fix it onto the card.
- 53. Complete the chemise and slipcase process starting with step 8 above.

Finally, I tool a small dot onto the center of the bottom round of the slipcase so I always know which end is down and up. Your chemise and slipcase are now finished, and they look WONDERFUL! Make two or three in a row and you will remember the method for life.

Enjoy!

Useful Resources:

Gane Brothers 1-800-523-7312 0.016 pt gray acid free card

Leather Splitting Hohenforst Splitting Co. 152-4 W Fulton ST Gloversville, NY 12078 Voice: 518-7250012 Fax: 518-762-5589

There is a \$50 set up charge that includes many skins. So, you should try and group many skins with a group of people. It is much cheaper. Paring leather in France: Est. Villeroy, 6 rue Chapon, 75003 Paris, FRANCE. You can send them a template of your book and they will pare the spine (specify if raised bands) and the turn-ins and they will also make the 2 strips for the chemise and case.

Acknowledgements:

- Figures based on drawings from Annie Persuy and Sün Evrard "La Reliure"
- Photograph by Sonja K. Jordan, Chief Librarian, Chicago Public Library, Special Collections and Preservation

As reported by Sonja K. Jordan; edited by Monique Lallier.

FRIDAY FORUM Peter D. Verheyen

Friday, September 20th, 2002 saw the Guild's first ever Friday Forum at Standards. While posters and other informal displays have been presented sporadically in the past, this year marked the first organized effort to make the event a regular feature. Posters were on display for the duration of the conference, allowing attendees to view them at their leisure during breaks in the conference.

On Friday evening, presenters stood by to answer questions and discuss the fine points. Posters are a terrific way to broaden involvement at Standards, offering attendees the opportunity to demonstrate or depict techniques, tips and tricks, tools, or address issues of interest or concern to them.

The eleven presenters in Minneapolis were:

- Pamela Barrios *Incorporating Original Spine Fragments Into Repair Material* described a way of debossing the shape of a spine fragment into new rebacking material. The process encourages flexibility around the fragment area so that the repaired book spine can be flexed without stressing the original fragment.
- Donia Conn *The Molded Paper Spine*, describing the use of University of Iowa papercase paper as an alternative to leather in the rebacking and rebinding of pre-19th century books.
- Betsy Palmer Eldridge *The Checkerboard Album Structure*, a flexible chain back album developed in 1865 with many applications now.
- Barbara Korbel *The Attachment of 3-Dimensional Objects to the Flat Surface of a Book Cover*, which described methods of inclusions.
- Monique Lallier *Chemise and Slipcase*, which illustrated the steps she presented in her demonstration.
- William Minter *Tool Time*, showing a variety of ingenious ways of embossing a grain in cloth and making paste, among others.

- Brenda Parsons *Two Tool Jigs* which showed a lifting device for spine rebacking and a jig for gold tooling lines with foils.
- Elaine Schlefer *Board Reattachment for Leather-bound Books Using a Pleated (zigzag) Japanese Paper Hinge.* It is especially useful for tightback books with deteriorated spines, since the spine does not need to be disturbed in any way.
- Priscilla Spitler *Jurying for Exhibitions*, which brought up for discussion criteria for judging works entered in national traveling exhibitions, focusing on In Flight, the Guild's upcoming exhibition.
- Peter Verheyen/Donia Conn *The Springback*, which depicted the German method of binding account and ledger books.
- Edna Wright *Starting Your Own Business* facilitated discussion of tips and pitfalls for those in business for themselves or contemplating such a move.

The Guild hopes that the success of this event will encourage more attendees to participate at Standards in Denver next year. Let's make this a regular fixture, and who knows, perhaps some will reappear as fullblown Standards presentations!

Editor's note: Peter Verheyen coordinated the Friday Forum poster session.

THE STONE EYE EXHIBIT AND CD CATALOGUE From an article by Pamela Rups

At the request of the GBW Midwest Chapter, Richard Taylor, Kentucky's Poet Laureate, and Gray Zeitz of Larkspur Press collaborated to produce a book with wood engravings by Canadian artist Wesley Bates. Of the 655 copies printed, 31 were hand bound by GBW members for The Stone Eye exhibit at the Minnesota Center for the Book Arts at 2002 Standards. The exhibit traveled throughout the Midwest from March through December 2002.

• The advantage of a CD over a printed catalog is that a large-memory CD can contain multiple views of the pieces in the exhibit, as well as background and supporting information in the form of audio, video and animation files. Many organizational, financial and technical obstacles had to be overcome. In addition to the challenges of a full-color printed catalogue, the interactive CD was a "stand-alone hybrid," designed to be viewed on both Macintosh and Windows computers without additional software. A debossed cover and etched Lake Michigan beach stones on the deluxe edition added complications, but also character and beauty to the final product.

• Three firsts: The first book exhibit catalog by a Guild chapter published as an interactive dual-platform CD; the first chapter exhibit catalog published without financial support from the Guild; and the first exhibit catalog produced by the Midwest Chapter. Pamela Rups served as project coordinator, and was copywriter, editor, and part of the production staff, as well. She has written an informative memoir of the process with extensive, instructive lists of project considerations and specific needs which may help others embarking on a similar project. Contact her at Pamela.rups@wmich.edu.

Copies of The Stone Eye catalog are available through the GBW Midwest Chapter, c/o Jim Canary, jcanary@indiana.edu.

Colophon

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