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Limp bindings from Tallinn

By Monica Langwe Berg

Background

I have had the privilege of studying bookbinding for three and a half years with Manne Dahlstedt in Sweden. Manne, trained in France, has been a great inspiration for me, partly because of his great knowledge, but perhaps mostly for his artistic sense of style.

During my studies, I learned about traditional bookbinding techniques, but also learned about new and innovative structures and techniques. During my third year I completed in-depth studies in historical binding techniques. What especially caught my attention were the limp bindings, a technique that has received relatively little attention in the history of bookbinding. It has unfairly been considered a simpler, inferior technique and therefore not able to compete with the more ornate books bound with hard covers. Perhaps it was this that made me curious. What story did these forgotten books with this ingenious binding style have to tell?



German law book from 1282

An in-depth study took me to the City Archives in Tallinn, Estonia that houses a large collection of limp bindings. With the assistance of Urmas Oolup and his staff at the Archives I examined and photographed 22 of the bindings. During this time, I also studied the research of Professor J. A. Szirmai (1).

 Szirmai, J. A., *The Archeology of Medieval* Bookbinding (England: Ashgate Publishing Limited, 1999)



Eight bindings from the City Archives in Tallinn

Eight of the bindings I examined are presented in my book "Limp Bindings from Tallinn." All of the bindingss are representative of this technique, but all are bound with different methods. The books illustrated were selected to show the widest variety of techniques and forms.

In the last part of the book I've let professional bookbinders from Sweden and Estonia explore the technique further. Each of the eight bookbinders has received a historic copy. Their assignment was to interpret the copy and then develop their own version. Hopefully, you the reader will be inspired by this gallery to develop additional variations.



Example of contemporary binding by Leif Malmgren, Sweden

Limp bindings – a broad concept

The term limp binding is a broad concept that includes many materials, several different types of stitching and a number of functions. These books cannot be defined as belonging to any certain period in history. They have occurred 3

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parallel to many other established techniques. Surprisingly little information about this technique has been published. According to J. Szirmai, this was due to the fact that the bindings lacked decoration and therefore were uninteresting to those who studied bookbinding. Limp bindings were so common in archives that no one paid any particular attention to them technically.

Limp bindings in Tallinn

The City Archives of Tallinn have a great collection of limp bindings. Unfortunately, not much more is known about the books shown here than that they were used in Estonia. The books are written in German as Tallinn was under the influence of the Hanseatic League during the 1200's and 1300's, and consequently the German language dominated Estonia's trade and culture.

During the five days I was in Tallinn to study these books, I selected those demonstrating various techniques and designs ensuring that the books were fairly complete so as to be able to examine the type of sewing. Of these, twelve had leather and ten had parchment covers. Ten of them were stitched using direct tacketing, three using indirect tacketing, four with chain stitch, and four with long-stitch. One was sewn on parchment slips. Most of the exterior supports were made of wood or leather, with horn and turtle shell also represented.

Areas of application

These books were functional and used daily, with this simple type of binding used to temporarily keep and preserve records and notes until a more permanent one could be made. This was also a practical binding method for minutes, accounts and other various documents. The books were portable and documents could easily be added as needed. In certain cases the parchment covers were made by recycling older documents. On several occasions I discovered stitching holes which indicated that the books had been rebound. One cover could actually have been used on more than one book block.

In spite of its simplicity, this type of binding has proven durable because of the great ease with which it can be repaired. The books consist of separate components, all of which can easily be exchanged for new ones since the structure is non-adhesive. A book using adhesives and hard covers is much more difficult to repair. The limp bindings are not exposed to as much pressure in the spine and guard and are not as often in need of repair. The wear I observed was on tacketing, stitching thread and covers. but most often all parts of the books were evenly worn.

Limp binding as design

I mentioned earlier that the construction of the books could be seen clearly. One could see how a support was fastened to the cover with cross-stitch in parchment for increased stability, or how lovely silk threads were sealed with wax to protect the book block. All of these technical details give the book its final appearance. The function dictated the form,



obvious in today's design methodology, although not always intentional.

This book from 1539 is a register of the town's lumber consumption. It shows the amount of lumber used for beams and fuel wood burned in tile stoves. It measures 19.2 x 11 cm and has a wrapper of a recycled parchment manuscript. The textblock is of paper and consists of 144 pages in six sections. It is sewn in long-stitch with linen stitching thread.



To create a binding using this style, determine the number of pages and sections needed. Choose hand-made paper for an authentic look. Cut the covers to size and fold in all the turnins as in the image below.



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The book has two parchment supports between the cover and the book block at every sewing station. A parchment support runs along the inside of each section.

Each section is sewn with two stitches – one long and one short. After going down into the section after the second stitch, change sections and go down to the next one as in the image below.



All of the stitching threads on the spine are sewn together at each station with a blanket stitch as above. Insert a thread from the inside of the cover between the two middle sections, in the center of the sewing station, and out onto the spine. Wind the sewing thread two and a half times around all the threads as shown below. The wrapper is closed with a pair of leather strips that are wound around the book and fastened in their own stitching. The strips are fastened with a knot that should lay under the turn-ins as the illustration repeated below.



Monica Langwe Berg lives and has her studio in Dalarna, Sweden. She is originally a painter but became interested in hand-made paper. After practical experience in paper-making in Sweden and Switzerland and three and a half years of bookbinding studies she built a workshop in her home.

Monica is deeply rooted in the rich traditions of Dalarna. She has great respect for the skilled handcrafts from the past but is also drawn to renewal of these handcrafts in search of her own design. She sees her artistic work as a combination of tradition and new design.

She has studied limp bindings at archives in Sweden, Estonia and at the Vatican archive.

In the book Limp Bindings from Tallinn, she invites the new to meet the old, resulting in exciting new interpretations. The book is available from her directly for \$50US and payment can be made to her via Paypal using her email address. She can be reached via <monica@langwe.se> or <http://www.langwe.se>.



Sew using a blanket stitch using the same thread along the entire section as in the image below. Insert into the cover again into a new hole and tie together with the beginning of the thread.



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An Overview of Fibers, Yarns, and Textiles for the Book Artist.

By Amanda Thompson, PhD and Anna Embree, MFCS

Introduction

Hand bookbinders use a wide variety of textile products for book production; these products include threads, tapes and cords used in sewing, spine lining and hinge materials, and covering fabrics. Some of these textiles are produced specifically for bookbinding but many are not.

A sound knowledge of basic textile science can aid in the selection of textile materials of a quality suitable for a book binder's end use. The purpose of this article is to provide basic information about textile properties, from fiber to finished cloth, in order to help bookbinders make more informed choices when selecting textile products and to guide them in storing and displaying these items. While this paper will not address specific commercial bookbinding supplies, the principles presented apply to textile products as a whole.

Fibers

Fibers are the basic unit of any textile product; fabrics inherit physical properties from the fibers that compose them. There are three categories of textile fibers: natural fibers (cellulose and protein), regenerated cellulosic fibers, and man-made synthetic fibers. Within these broad categories are a great number of fibers; however, this paper will concentrate only on the following fibers commonly found in bookbinding products: flax, cotton, and hemp (cellulose), silk (protein); rayon and acetate (regenerated cellulose), and polyester and nylon (synthetic).

Natural Fibers: cotton, flax, hemp, and silk

All cellulose fibers are derived from plants. Cotton is a seed hair fiber taken directly off the seed of the cotton plant. Flax and hemp are bast, or inner bark, fibers which are removed from the stem of certain plants. Once harvested, cotton, flax and hemp must be cleaned, sorted by length and graded for quality. Grading is determined by such properties as length, physical condition, and color (Collier and Tortora 2001). Traditionally these fibers were harvested by hand in very labor intensive processes. Harvesting is now mechanized but is based on the same steps followed in hand processing.

Cotton fiber grows between 1/8" and 2-1/2" in length but must be at least a half an inch long to be used in yarn production. There are many varieties of cotton, and their selection is based on staple length as well as the ability to grow in a given region. Cotton needs 6-7 months of frostfree weather to fully mature. The bolls that hold the fiber are harvested, ginned (separated from the seed), and graded for color, length, and fiber diameter (Hatch 1993). The cross section of cotton fiber is lima bean shaped when the seed hair fiber is dried. Cotton can be identified microscopically by characteristic convolutions that run the length of the fiber; these convolutions set cotton apart from other fiber types (figure 1). Cotton fibers have moderate strength and flexibility but low resistance to abrasion. The wet strength of the cotton is significantly greater than the dry strength; increasing up to 30% (Kadolph 2007).



Figure 1: ESEM picture of cotton (Gossypium) fiber along the lengthwise direction

Flax is a bast, or inner bark fiber, that grows between 4" and 40" in length and takes 100 days to mature on average. Growing and harvesting flax is still a time consuming process even with increased mechanization. The method used to obtain fibers from the plant is called "retting", a process of bacterial and/or chemical decomposition that releases the fibers from the bark. "Scutching" removes the rotted plant material so that only the fibers remain. "Hackling" separates the fiber bundles into smaller bundles and helps to sort long and short fibers (Hatch 1993). Flax has a polygonal cross section. The longitudinal view of flax under microscopic examination (figure 2) reveals characteristic nodes that make it appear bamboo-like. Flax fibers have a low resistance to abrasion. They are somewhat stronger than cotton fibers but are stiffer and less flexible. This stiffness can lead to breakage

when flax fabrics are repeatedly folded and flexed along the same fold lines (Kadolph 2007).



Figure 2: ESEM picture of flax (Linum usitatissimum) fiber along the lengthwise direction.

Hemp fibers (figure 3) resemble flax fibers but are coarser and stiffer than flax. Hemp is part of the mulberry family and its fibers can grow 3 to 15 feet in length. Hemp needs no pesticides during its growth because it is naturally pest resistant; this is particularly helpful when grown in tropical climates (Hatch 1993; Kadolph 2007). Hemp fibers have high strength and high abrasion resistance, but like flax have extremely low flexibility.



Figure 3: ESEM picture of hemp (Cannabis sativa) fiber along the lengthwise direction.

Silk is a protein fiber and is the only natural fiber that is produced as a filament (a long fine continuous strand). Silk is obtained from the cocoons of several varieties of caterpillars known as silk worms. The cultivated variety of silkworm is *Bombyx mori* but silk may also be produced by wild species. Whether cultivated or wild, the fibers are created during the life cycle of the silkworms: first, eggs are laid by the silk moth; second, caterpillars hatch from the eggs and feed on leaves until they are fully grown. Third, each caterpillar spins a cocoon of silk around itself; and finally, a silk moth develops in each of the cocoons (Collier and Tortora 2001).

Filament silk can only be obtained through cultivation because the pupa (developing moths) must be killed before they can make a hole in the structure and emerge from the cocoons. Conversely, silk from the wild species is called Tussah silk. These fibers are shorter than the cultivated types because harvest is done after the silkworm moths have left the cocoons (Collier and Collier 2001).

Silk is harvested from the cocoons in a process known as "reeling". The cocoons are placed in a bath of hot water to soften the natural gums that hold the cocoons together and then the filaments are wound onto a skein (Collier and Tortora 2001). Silk quality is determined by the cocoon layer from which the fiber comes and by whether the filament has been harvested unbroken. The cross section of a cultivated degummed silk fiber looks like rounded triangles. Under microscopic examination silk fibers seem rod-like in appearance (figure 4). Silk has low to moderate abrasion resistance and, though considered one of the strongest natural fibers, it loses up to 20% of its strength when wet (Kadolph 2007).



Figure 4: ESEM picture of silk (Bombyx mori) fiber along the lengthwise direction

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Regenerated Cellulosic Fibers: Rayon and Acetate

The starting material for the regenerated cellulosics, rayon (figure 5) and acetate (figure 6), is also cellulose. Because regenerated cellulose fibers and natural cellulose fibers have the same material building blocks, they have some of the same properties. However, regenerated cellulose fibers are composed of shorter polymer chains of cellulose and therefore usually do not have the strength of natural cellulose fibers. The beginning materials for both rayon and acetate are short wood pulp fibers. These wood pulp fibers are exposed to chemical processing: sodium hydroxide and carbon disulfide for rayon, and acetic acid and acetic anhydride for acetate. The combination of chemicals and mechanical processes produces a liquid that is extruded from a spinneret to form a filament fiber. The cross section of these fibers can vary based on the shape of the spinneret. Common shapes are round, trilobal, and dumbbell. The shape of the fiber adds to its ability to diffuse or reflect light, hide dirt, and add to the smooth textures of yarns.

Rayon and acetate are weak fibers and both have low abrasion resistance. The durability of rayon and acetate decreases substantially when wet; both become more susceptible to abrasion, and rayon fibers lose up to 50% of their overall strength when wet (Kadolph 2007).



Figure 5: ESEM picture of rayon in the lengthwise direction.



Below is Figure 6: ESEM picture of acetate in the lengthwise direction.

Man-made Synthetic Fibers: Polyester and Nylon

Polyester is a synthetic (man-made) fiber. Terephathalic acid and dimethyl ester, derived from petroleum, form the building blocks for polyester (figure 7). Polyester chips are melted and the solution is extruded through spinnerets. The shape of the spinneret and the amount of fiber processing is dependent on the end use of the fiber. The cross section of polyester fiber is controlled through the shape of the spinneret. As with the regenerated cellulose fibers, the shape of the fiber (round, trilobal, etc.) determines some physical fiber properties. Polyester fibers are highly resistant to abrasion and very strong. Additionally, most polyesters are chemically inert.



Figure 7: ESEM picture of polyester in the lengthwise direction.

Nylon is another fiber that is produced through chemical processes. The starting compounds for nylon (figure 8) are hexamethylene diamine and adipic acid. The word nylon is often followed by a number that indicates how many carbon atoms are in the beginning components; nylon 6, 6 is composed of two starting materials each with six carbon atoms. Nylon is formed into chips which are heated into a solution and extruded through spinnerets of a chosen shape. Common shapes are round, trilobal, square with voids, and flat or ribbon like. The extruded fibers can be stretched in an optional production step to add strength to the finished product. Nylon fibers have high strength and high abrasion resistance.



Figure 8: ESEM picture of nylon in the lengthwise direction.

Yarns

Yarns are composed of fibers that have been twisted to form continuous strands. They may be made from a single type of fiber or a blend of fibers, depending on the properties required of the yarn and the visual aesthetic desired. A single yarn is the simplest yarn-type, consisting of fibers twisted together to make one strand. Plied yarns are made by twisting together groups of single yarns, and a cord is formed when plies are twisted into a larger unit. Yarns vary from low to high twist; there is less cohesion of the fibers in a yarn with low twist than high twist, and the yarn is more easily pulled apart and abraded. Generally, the more twist that is inserted into a yarn, the stronger it will become and the more abrasion it will be able to withstand before failure. Crepe yarn is an exception to this rule. This yarn-type is twisted so hard that it buckles back on itself and is weakened in the process. Figure 9 illustrates singles yarns with low, moderate, and high twist.



Figure 9: From left to right are illustrations of low, medium and high twist in yarns.

Twist may be imposed on a yarn by turning the fibers in a clockwise direction, called a "Z twist", or in a counter clockwise direction, called an "S twist". Figure 10 illustrates Z and S twists as seen along the longitude direction of the yarn, showing that the twist makes a "z" or "s" design. The direction of the twist of a single yarn determines the direction of the twist of the plied yarn made from it. If the single yarns are twisted in the S (counter clockwise) direction, they must be plied together in the Z direction (clockwise) and vice versa. This is necessary for proper cohesion of the strands. The photographs in Figure 11 illustrate two single yarns being twisted together to make a plied yarn.



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Figure 10 (left): S and Z twist yarns Figure 11 (right): Single s-twist yarns are twisted into a z-twist 2 ply yarn

The visual appearance of yarns is categorized into two groups: simple and complex. Simple yarns have the same appearance throughout the entire length of the yarn; complex yarns have an appearance that varies along the length. A simple yarn can be made up of continuous filament fibers, such as silk, polyester, nylon, rayon, and acetate, and/or staple fibers such as cotton, flax, and hemp. In both cases, the fibers are twisted into a yarn that has an even appearance.

Complex yarns, also known as fancy or novelty yarns, have an irregular appearance due to enhancing elements that are incorporated into the yarn. Fancy yarns add visual interest to a fabric and are more expensive to produce than simple yarns, but are less durable than simple yarns. This is due to

the uneven surfaces, which are often easily snagged by passing objects, and because the different components of these yarns are not usually plied tightly, and thus can easily be stripped from the yarns. A few examples of common novelty yarns are loop, boucle, snarl, chenille, and slub. Samples of complex and simple yarns can be seen in figure 12.







Figure 12: From left to right: complex loop yarn, complex snarl yarn, and simple 2 ply yarn.

Fabrics

Most fabrics can be categorized into three types: knit, woven, and non-woven. Woven fabrics are by far the most common type to be encountered by a book artist, but it is important to note the difference between the types.

Woven Fabrics



Figure 13 (Left column bottom): A table loom illustrating A warp beam, B warp yarns, C reed, D heddles, E harness(es), shuttle (not pictured), and F cloth beam

Woven fabrics take their name from being woven on a loom as opposed to being knitted, felted, or twined. Looms are frameworks that hold at least one set of yarns under tension (warp) and allow another set of yarns (weft) to be interlaced with a shuttle or other mechanism. A basic loom (figure 13) has the following parts: warp beam, warp yarns, heddles, harness(es), reed, shuttle, and cloth beam. The warp beam holds the warps and controls tension from one end. The heddles are wires that have an eye opening through which the warp yarns are threaded to keep them in place during the weaving process. Harnesses hold the heddles and allow the warp yarns to be raised or lowered as the fabric type dictates. The shuttle carries the weft yarns across the warp yarns and interlaces them as needed. The warp yarns are threaded through the reed which keeps them in order and can also be used to compact the filling yarns as they are woven though the warp yarns. The cloth beam is at the opposite end of the loom from the warp beam and is used to wind the finished cloth and also to control tension.

The warp and weft of a fabric describe the direction of the yarns in reference to the weaving process. Warp yarns are held under tension on the frame of the loom. In general warp yarns are stronger and more regular than the weft yarns because they have to withstand greater tension and stress from the weaving process. The weft yarns are woven in and out of the warp yarns at right angles to the warp. Warp yarns are almost always simple yarns while weft yarns maybe simple or complex.

Selvages are created when the weft yarns run across the width of the fabric. There are two types of selvages shuttle and shuttleless. Shuttleless occurs when single weft yarns move across the warp yarns one by one leaving a fringe on the outside edge and shuttle occurs when a continuous weft yarn turns back on itself to make another pass through the fabric. Figure 14 illustrates both types of selvage edges.



Figure 14: Two types of selvages on commercial book cloth. Left: shuttleless. Right: shuttle.

Thread count is the combined number of warp yarns and weft yarns in one inch of fabric. If a yarn is plied it is still counted as one unit; the threads that make up the plys are not counted separately in thread count. If there are 150 warp yarns and 200 weft yarns in an inch, the thread count could be reported as 150 x 200; or, it could reported by combining the warp and weft into one number, 350. The higher the thread count the more durable the fabric is assumed to be. Thread count also shows whether a fabric is balanced or unbalanced. Balanced fabrics have the same number of yarns in the warp and weft directions. Unbalanced fabrics have considerably more yarns in one direction than the other.

Fabric weight is an important factor that helps to determine the use of a woven product and is described as oz/yd^2 or g/m^2 . In the apparel industry fabric weights are broken down

into top (light), medium, and bottom (heavy). These names describe the intended use for the fabric.For example, top weight fabrics are intended to be used for tops (blouses) or lighter weight products. Top weight fabrics typically weigh less than 4.0 oz/yd^2 . Medium weight fabrics weigh from $4.0 \text{ to } 6.0 \text{ oz/yd}^2$ and are used for heavier tops, dresses, etc. Bottom weight fabrics weigh more than 6.0 oz/yd^2 and are used for pants, upholstery or other products that need durable materials (Kadolph 2007).

Bias is a term referring to a line that is diagonal to the grain of a fabric. It is created when a woven fabric is rotated 45 degrees to the lengthwise or warp direction. Cutting a sample on the bias allows the fabric to conform to a shape better and adds stretch and greater drapability. A rectangular piece of fabric cut on the bias will often contain more yarns than if it were cut on-grain. While the number of threads in the bias sample increases compared to a piece cut with the grain, it is incorrect to state that the thread count is higher, because thread count is always calculated by square inch in alignment with the warp.



Figure 15: Sample A is positioned parallel to the warp, sample B has been positioned on the bias. The number of threads in each sample varies but the overall fabric thread count remains the same (5x5).

If fabric is from an unknown source, making it difficult to determine warp from weft, there are a few tricks that can help. First, the selvage always runs parallel to the warp because it is produced by the weft yarns in the weaving process. Second, the warp thread count is usually higher than the weft thread count in a fabric. Count the yarns in each direction for a given area; the direction with the higher count will in most cases be the warp direction. Third, weft yarns usually have a more crimped appearance than warp yarns. During the weaving process the warp yarns are under more tension than the weft yarns and this causes greater deformation of the weft yarns as they are interlaced. It may be possible to determine the direction of the warp by removing a

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yarn in each direction and examining their relative distortion.

Fabric should be washed prior to use. There are many finishes that may be added to a fabric during manufacture and laundering will remove some of these coatings -especially sizing (starch) and waxes. The warps of fabric are under tension in the weaving process. Laundering the fabric allows the warps to "relax" from the tension of weaving and this generally results in some shrinkage.

There are many types of woven fabrics. We will describe and give examples of some of the most common types and the ones we anticipate bookbinders will encounter most often in their work.

Plain Weave

The simplest woven fabric is called a plain weave. In a plain weave, the warp and weft yarn interlace over and under each other the maximum number of times possible. There is no technical face or back to plain weave fabrics; both surfaces look the same. Unless printed or otherwise colored to have a technical face, either side of the fabric may be used as the "right" side. Plain weaves can be simple or decorative, depending on the type of yarn used to construct them. Plain weaves can be made with many different types of fibers and yarns, and they can vary from light to heavy weight. Plain weaves can be balanced or unbalanced. Figure 16 illustrates the plain weave structure. Because of the high number of interlacings, plain weave fabrics tend to be less absorbent and more prone to wrinkle than other weaves. However, they tend to ravel less.



Figure 16: Plain Weave. Black represents the warps and white the wefts. This is termed a 1/1: 1 warp is interlaced with every 1 weft.

Twill Weave

Twill is another common weave. The twill pattern repeats after every three or more warps and wefts and produces diagonal (twill) lines on the face of the fabric. The technical face of the fabric is the side with the most pronounced twill line. Because there are fewer yarn interlacings in twill fabrics,

they tend to be more flexible, less prone to wrinkling, and less ravel resistant than plain weaves. Due to the greater number of interlacings per inch, twills have a higher thread count than comparable plain weaves, and this lends greater strength to the fabrics. The uneven surface of twill, caused by the twill line, hides soils more easily than the flat surface of a plain weave. Figure 17 illustrates twill weave.



Figure 17: Twill Weave. Black represents the warps and white the wefts. This is termed a 3/1: 3 warps are on the surface of the fabric and then a weft.

Satin

Satin is another common fabric weave. It is produced by passing, or "floating", the warp or weft across several yarns on the surface of the fabric. Floats add the luster, smoothness, and flexibility to satin fabrics. The luster of the fabric is enhanced further by using filament yarns, i.e. polyester, silk, acetate, etc. with low twist. Because the yarns are not laced as frequently as plain or twill weaves, the fabrics tend to snag and ravel. Figure 18 illustrates satin weave.



Figure 18: Satin Weave. Black represents the warps and white the wefts. This is termed a 4/1: for every 7 warps on the surface of the fabric there is 1 fill

Complex Weaves

Complex weaves such as jacquard, tapestry, and brocade incorporate plain, twill, and satin together in the fabric structure. Aesthetic effects, such as flowers or geometric shapes, can be woven into the fabric, offering a more permanent design than can printed fabrics. Complex weaves are generally heavy-weight fabrics, because they incorporate multiple yarns and multiple weaving techniques.

Knit Fabrics

Unlike woven fabrics which are composed on a loom, knits are produced instead by interlooping yarns that are comprised of courses (rows across the knit) and wales (columns that run the length of the knit). The structure of knits makes them stretchy and able to conform to three-dimensional objects like the human body. Knits are not appropriate for paper backing for cover materials in book binding because they are dimensionally unstable.

Non-woven Fabrics

Nonwovens are formed from fibrous materials without interlacing or interlooping of yarns. Felt, paper, Tyvek[®], Pellon[®], Reemay[®], and Hollytex[®] are all examples of nonwoven materials. There are many processes used to construct nonwoven materials, however in all cases the fibers are fixed through mechanical and/or chemical processing.

Storage Environment

In general, textiles used for bookbinding should be stored and handled in the same manner as paper-based materials. Temperature and relative humidity in storage environments should be moderate and stable with minimal fluctuations. High temperatures and high humidity will accelerate the deterioration of textiles and provide an environment that encourages insects, mold and mildew.

Light damage to textiles can weaken fibers and cause textiles to fade or change color over time. Light levels should be kept as low as possible in both storage and exhibition areas whenever possible. Because light damage is cumulative and irreversible, textiles should be stored in protective enclosures that will shield them from exposure.

Textiles should never be placed in direct contact with wood, cardboard, newsprint, or other acidic materials (Kadolph 2007). Because of the potential for alkali sensitivity of some fibers, dyes, and finishes, it is generally recommended that textiles be stored in acid-free unbuffered enclosures. However, due to the composite nature of books, decisions about storage materials should be based on the individual requirements of each item.

There are many insects and microorganisms that are known to damage textiles and textile fibers. Microorganisms include bacteria and fungi. The insects most problematic to textiles are clothes moths and carpet beetles (Lambert 1983, King 1985), but there are many other insects that may be attracted to a textile depending on fibers and treatments. Additionally, sizings, finishes, and surface dirt on textiles may encourage insects and microorganisms. Careful control of

the environment including environmental monitoring and cleanliness is recommended for all storage and display areas. Proper storage and maintenance can contribute greatly to the longevity of a collection.

Conclusion

There are a huge variety of textile materials and products, and each segment of production influences the properties of finished goods. Fibers, yarns, fabrics, and finishes all contribute to the performance of a textile product. Knowledge of these distinct components and the potential interaction of these elements can guide a consumer in the selection of materials appropriate for an intended end use.

Because of the versatile nature of textiles, they appear frequently as an integral part of both traditional and experimental book forms. It is hoped that this paper will assist book artists in their ability to evaluate the textile products they use, by providing information about the properties of textiles common to book work, the elements from which they are composed, and the techniques of manufacture.

References:

Hatch, Kathryn (1993). *Textile Science*. San Francisco: West Publishing Company.

Collier, Billie J. and Phyllis G. Tortora (2001). *Understanding Textiles 6th Edition*. Upper Saddle River, New Jersey: Prentice Hall.

Kadolph, Sara J. (2007). *Textiles 10th Edition*. Upper Saddle River, New Jersey: Prentice Hall.

King, Rosalie R. (1985). *Textile Identification, Conservation, and Preservation*. Park ridge, NJ: Noyes Publications.

Lambert, Anne, M. (1983). *Storage of Textiles and Costumes: Guidelines for Decision Making.* Vancouver, BC: University of British Columbia.

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Thinking by the Book

By Wendy Strauch-Nelson

Book making and book altering have become popular activities in primary and secondary art classrooms during the past decade. Many of us who teach art to children are intrigued by well-made, hand crafted books and the ingenious ways that existing books can be changed and enhanced by our students. We share our best examples with one another and we tweak each other's ideas. We invite local book artists to make books with our students. We keep thick files of ideas for future book making or altering units. Resources abound in the form of additional books, videos, workshops, and online sites to help the art teacher incorporate book making in his or her curriculum from kindergarten through the high school level. We seem to know, intuitively and collectively, that book making and altering are worthwhile activities for our students.

Yet the literature addressing the educational power of book making with children is sparse. What does exist is project oriented and focused mainly on specific techniques of book binding (Burkhart 2006, 261). Educators have not effectively explained or justified book making as an educationally sound activity or as a teaching methodology. What exactly are students getting out of this much-loved activity? What kind of thinking goes into the making or altering of a book? What kind of learning comes out?

In this article, I will attempt to begin providing answers to these questions based on focused interactions I have had with students involved in book making or altering at the middle and high school levels. Two separate projects will be described. At the completion of each project, the participating students were questioned about their experiences and their thinking.

The first project was a unit designed to integrate art and social studies. Students were asked to create or alter a book based on a local, state, national, or global current event. The unit was presented to middle and high school students attending an alternative public school that lacked an art program.

The students involved in the 8-week project (1 meeting per week) came from a variety of ages and abilities. Initially, the activity was planned for 8 or 9 "at-risk" senior high school students. However, as word of the project spread through the school, other teachers asked if their students could also be involved. The final group of about 14 ranged in age from 11 to 17. Several had learning disabilities, physical disabilities, or emotional difficulties and at least three were cognitively disabled. The second project was designed for high school age girls in a residential treatment center. The girls were in treatment for a variety of social and personal issues. There were about 12 students in this group at the start but the number fluctuated as students left the program and new girls entered. The project ran for about 9 weeks, again meeting once each week.

"Pattern" was chosen as the theme for this unit and so students were first engaged in looking at and discussing patterns. The girls were asked to brainstorm all the patterns they could. They began by listing things like math, poetry, music, seasons, weather, clouds and snowflakes. Quickly the list, still generated exclusively by the girls, changed in character to include thinking, personality, and behavior patterns. They discussed their own experiences with drinking, running away, self-cutting, and so on, in terms of patterns.

The two projects shared several characteristics. First, both groups of students included a wide variety of abilities. For instance, 12-year-olds with cognitive disabilities worked next to highly intelligent but emotionally troubled 17-year-olds. While challenging to the teacher presenting information and demonstrations, the advantage of this diversity was that it provided a chance to see how a wide variety of students responded to a fairly sophisticated set of tasks. As with any classroom, there were students who were afraid to do anything without checking with an adult first; who had no faith in their own ability to solve a problem. There were also those who resisted all instruction and simply wanted to interact with the tools and materials on their own.

Secondly, both groups of students were anxious to participate since much of their school experience was described as tightly structured. The bookmaking project was in sharp contrast to what students have leaned to expect in a school day.

Third, the individual nature of the assignments caused students to take personal responsibility for their learning. Students applauded the degree to which they were free to develop and solve their own problems within the context of each of the assignments. Although many admitted to struggling with the inherent decisions, all expressed great satisfaction in having control over their own learning.

At the end of each project, students were asked to respond to their experience; to describe their thinking process and the problems they both created and solved for themselves. The students were interviewed individually and the books were presented to the group as a whole for feedback from peers.

The observations and interviews with the students of both projects were analyzed using Core Thinking Skills, defined by Marzano et al in Dimensions of Thinking (1988). This model furnished a framework for understanding the participants' raw, concrete portrayals of the thinking they experienced. Core Thinking Skills include focusing, information gathering, remembering, organizing, analyzing, generating, integrating and evaluating. The skills are conveniently listed as discrete entities ranging from lower to higher level thinking. As these students described their process, however, it quickly became clear that their cognitive activities were neither discrete nor did they move though the list in a linear fashion. Rather they described overlapping and meandering processes that do not fit neatly in a chart of thinking skills. Nonetheless, the model was helpful in breaking down the experiences they described into categories that are generally understood as important to development.

Focusing, defining problems and setting goals was welcomed by students. Within broad themes, they were expected to choose their topic and conceptualize their finished product themselves. They decided each next step for themselves. Content and aesthetic decisions were in their hands. Certainly some had difficulty with this uncommon freedom and asked for continued assistance in making choices. Others, in describing their focusing activities, revealed complex self-determined reasons for their choices. For example, a 14-year-old in the first group named Matt chose the Iraq war as his book topic. He explained that he hadn't thought much about the war until a family friend was killed in Iraq. He wanted his book to define both sides of the issue as well as memorialize the family friend. He altered a book originally about war strategies. He struggled with his meaning as he made each decision. Where should he place the funeral card of his friend? At the beginning to set the mood; to elevate its importance? At the end to conclude that choices about war should not be made, or taken lightly? He chose the latter (interview with student, April 26, 2005)¹.

In the first project, *information gathering* involved reading current event magazines, newspapers and researching online. In his effort to keep his book from being one-sided, Matt searched for neutral information about the war. He found that deciding whether or not each report he read was indeed neutral was one of the most difficult challenges he faced. Students in the second group explored the idea of patterns and made connections between their topic and the characteristics of patterns.

In addition, students in both projects also needed to research how to make or alter a book. This meant considering a wide range of possibilities and examples, sketching ideas and creating models. Alexa, from the second group, considered several options and played with several models before deciding on a scroll format placed in a shoe box with a window. This format, she felt, best expressed the movie-like quality she wanted in her book about her place in the pattern of her new foster family.

Organizing skills include comparing, classifying, ordering, and representing. Organizing ideas in a book usually means working in a series. The serial and sequential nature of traditional books was discussed with both groups of students. However, these modest efforts could not account for the extent to which students were compelled to create books with consistent design elements from one page to the next. It seemed, perhaps from interacting with books for their whole lives, that most students intuitively knew the importance of an organizational flow through their book.

Almost all students demonstrated some desire to maintain visual consistency. Jason, a 15-year-old in the first group, used his book to discuss the legalization of marijuana. He continually expressed concern that his pages were similar in format. He wanted to maintain a for/against or yes/no approach to each set of open pages.

A 16-year-old from the second group, Marie created a book based on abstract visual pattern. Each page of the book had a pattern and the book itself created a pattern as it was opened and closed. She incorporated a window in each page so the viewer could get a preview of subsequent pages. This was mainly an exercise in technical problem solving. Getting Marie to think on her own was difficult. She complained and fretted throughout the process. She was afraid of every new step. She displayed a complete lack of confidence in her own ability to solve problems. Yet she knew exactly how she wanted the final product to look. She had a complete and detailed mental image of the book. Presenting Marie with a continual barrage of questions helped her engage in the organizational type of thinking she needed to take each next step.



Organizing also meant prioritizing information. Several students in both groups suggested that the most difficult decisions they had to make involved weighing the quality of information to determine what should be included and what should be left out. This prioritizing and editing required constant evaluation and resulted in informal collaboration among the students throughout the process.

Analyzing includes identifying attributes and components as well as identifying relationships and patterns. If combined, we could also think of these activities as metaphoric thinking, that is finding patterns and relationships among seemingly dissimilar elements. Metaphoric thinking is important in that it enables students to connect new learning to existing knowledge and to transform knowledge into new forms.

Several students immersed themselves in metaphoric thinking related to patterns. Rose, an extremely energetic and confident 14-year-old, decided to ink and print various found objects to represent members of her family. She used a doily for her step mom who enjoys designing and sewing, a fall leaf for her father who loves nature and his freedom, and leather for herself "because I show to be hard on the outside but I'm soft and warm on the inside" (interview with student, April 18, 2006).



Another student decided to depart from a traditional book form. She created her pages based on patterns of growth in nature and attached them to a small tree branch to bind them. She used elements of a tree as metaphors for her own growth and development. A bud, she explained, made her think about accepting where one sprouted and about starting to develop and cope, a green leaf for becoming and knowing you're not alone, and a branch for developing into someone that can support the growth of others.



Generating skills, that is inferring, predicting and elaborating, require the individual to go beyond the available information. It may involve anticipating an outcome or adding information, examples, or details. Again, this can be considered in two ways. First, there were physical and technical issues. Since each was highly individual, no one had ever done any of these exact projects before and there were no exact patterns or specific instructions to follow. Each student needed to envision, design, and generate the physical entity they wanted. This required very practical thinking in areas such as measuring, cutting, and assembly.

Second, students elaborated and inferred in terms of content and meaning. Max was a remarkable 11-year-old in the first group. He was one of the first to jump into the project and the last to finish. His book was an elaborate diorama based on the March 2005 hostage event in Atlanta during which a mother talked her captor into surrendering to authorities. Max worked with his father to create a wooden box that became his book. "I wanted to make it look like a house so it would remind people that it happened in someone's house" (interview with student, April 26, 2005). Max's pages were displayed on the box and inside the kitchen cupboards he created in his depiction of the scene. He took great pride in measuring all the components carefully so that everything fit together well.



Another younger student from the first group, Katie also used the Iraq war as her theme. She created drawings of a fallen soldiers home. As she explained, she wanted her audience to connect with the deceased soldier, not simply as a name printed in the newspaper but as though she were a friend or next door neighbor.

Marzano et al (1988) describe summarizing and restructuring as Integrating skills. This was evident throughout as students worked to combine the physical and aesthetic concerns with the content or meaning. It was also evident in their efforts to balance words with visual images. As soon as students knew what they wanted to say and had the information at their fingertips, they became concerned about how the integration of the physical book and the content could best enhance the meaning they were looking for. Perhaps Christa, a quiet girl from the second group, provides the richest example of integrative thinking skills. Not only did she integrate her content with her book form, she also integrated both with her treatment program. The resulting book, Steps to Success, was created of pages made to look like stepping stones. As each page is unfolded, one of her "steps to success" is revealed:

- 1. Having my own 6 steps to success
- 2. Talk to someone you trust instead of holding everything in.
- Be yourself. Otherwise you are wearing a lot of masks to impress other people.
- Take one day at a time. And don't put one foot in yesterday and the other in the future.
- Don't let what people say bother you because it just makes things worse.
- Also do not, I repeat, DO NOT build walls around yourself. It does not help.

Finally, *evaluating*, establishing criteria and verifying, involved students throughout the project. They engaged in informal peer review ("What do you mean you're done? That's not done.") They solicited comments from any and all available adults and they made constant revisions and improvements as they worked through the process. At the end of the project, students viewed all of the books and wrote comments for each of their peers.



Conclusions:

There are several inherent characteristics of books that help promote complex thinking... not by the reader in this case, but by the maker. First, as we have seen, bookmaking requires students to process, analyze, order, and transform meaning. In order for students to complete these assignments, they had to tackle a topic, gather information, analyze it, understand it, and make it their own. They had to make aesthetic, content, and combined judgements, based on their analysis of the facts, patterns, and relationships they found. They had to generate ways to represent their new knowledge and interpretations so their viewer could understand as well.

Secondly, books set boundaries. They are traditionally linear in style, hence the need for prioritization and ordering. Books are usually physically transportable by the individual. Students are called upon to identify and analyze these boundaries. They must then decide whether to honor them or establish new boundaries. Max, for instance (who made the diorama book discussed above), interpreted the idea of a book very broadly: simply as a container for information. His book, although linear in terms of text, presented richly layered visual meaning. This brings us to the third characteristic: book making encourages the integration of the linear-style written meaning and the layered meaning of visual images.

Traditional books have taught us to expect and understand the interaction of words and images. When students are called upon to organize, manage, and negociate between these two symbol systems, they are engaged in both linear and divergent ways of thinking as well as making the most this multidimensional pairing.

Fourth, books have the capacity to store and transport meaning. This was an empowering thought for students. They repeatedly described it as a chance to convince their audience to think as they did about a particular topic. They demonstrated an innate appreciation for this fact and made both aesthetic and content decisions in order to enhance the power of their meaning.

Finally, books have an elite status in our society. As Anne Burkhart wrote, "From the Koran to Dr. Spock, the book as an instructive authority is longstanding tradition" (Burkhart 2006, 255). Because of their honored position, books not only frame meaning, they elevate it. Students were acutely aware of this as they worked on their books. It was demonstrated in various ways. For some it was their references to the importance and lasting nature of their books. For others it was demonstrated by their pride (even boastfulness) in each finished element. Several described making a book as far more significant that other products they had created in art.

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Bookmaking is singular in combining all of these outcomes. It is truly a holistic activity that involves students in the exploration and processing of problems and ideas. It empowers them with the ability to embed their new knowledge in a lasting and respected format. Rather than passively reading, the act of book making is a way of actively engaging students in the subject matter. It also joins students with the community of bookmakers and writers who create these special objects. The books often become works of art that record what the child has learned.

Fredrich Froebel, who invented the kindergarten, taught that humans benefit more by what they put forth from within than by what they absorb or acquire from outside. He emphasized the importance of self-determined, all-sided, self-activity. He described it as "giving body to spirit and form to thought" (Froebel 1887, 93). The student made or altered book may provide that body and form in a powerful and unique way.

Note:

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1) Both institutions and all participants names were confidential. Names used here are pseudonyms usually chosen by the students.

References:

Burkhart, Anne (2006). Mongrel Nature: A Consideration of Artists' Books and Their Implications for Art Education. *Studies in Art Education*, 47(3), 248-268.

Froebel, Friedrich (1887). *The Education of Man* (W. N. Hailmann, Trans.). Clifton NJ: Augustus M. Kelly (Original work published in 1826).

Marzano Robert, Brandt, R., Hughes, C., Jones, B., Presseisen, B. et al. (1988). *Dimensions of Thinking: A Framework for Curriculum and Instruction*. Alexandria VA: Association for Supervision and Curriculum Development.

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Colours of Persia: The Making of a Book

By Susan Allix

Some time ago when I was in the vast cavern of the bazaar in Tehran, I noticed a small stand displaying pieces of type tied with page cord. A few questions to the owner revealed that I could have anything I liked cast then and there: "What words do you want? What point size?"

I realised this was a moment for decision. If I wanted to use Farsi letters among the vaguely forming ideas for a book, I must speak. I must instantly invent something relevant. I said, "Colours of Iran", and so began the book.

Travelling around this country with my bag of crayons, sketchbooks, notebooks and camera, I had been quite overcome by its colour. There were turquoise domes against blue or black skies, sun-baked courtyards containing everrepeated patterns of yellow and ultramarine tiles, glittering mirror work, piles of rosy pomegranates, eye-stretching fields of acid green rice crops. I could buy woven textiles from nomad people and rescue fragments of old blue and yellow ceramic from the gutter to remind myself of the colours when I returned to London.

Travellers in Persia always seemed compelled to write of their experiences. In using accounts which stretched from the 1st century AD until the present day and setting them in the places in which they were written, a mind picture could be built across time showing both the continuity and vicissitudes of life. The intimate and narrative qualities of a book, together with its images, lend themselves to a travelling progress. It was here that my instant bazaar-title helped to be selective. The colour, for me, informed everything, so I set about choosing from authors who were also susceptible to colour, and to give the structure a more positive form I arranged the work in five sections based on five cities. This still gave scope for digressions.



Kashkai woven bag. 4 colour lino cut.

In designing, the book grew. It became 137 pages of a quite generous 34 x 27 centimetres, and I decided to print 25 copies. As it progressed the choice of paper became clearer – a contrast between the printing of image and word. The colour and texture of Richard de Bas handmade printmaking paper seemed good for the etchings and combined well in tone with a smoother, silkier Barcham Green. The latter was old stock, and so very erratic in its making that the different weights of the sheets altered the impression of the type (and some imperfections had been "tidied up" by knife-scratchings when checked) but it was still a pleasure to use.



Woman in rice fields. 2 plate etching with open bite, carborundum and hand colouring.



Mosque wall, Yazd. Lino cut with etching and aquatint.

Although the viewer is involved simultaneously with image, word and the hand-held object, there are three distinct areas of making; prints, typography and binding. Making the prints largely shaped the book. I cut out zinc etching plates, often cut them up again in shapes or with holes (working in this way has led me to make books in order to feel the prints' immediate, tactile qualities which are lost behind glass) then etched, dry-pointed, aquatinted, carborundum-ed and lengthily proofed them for exact balances of colour.

Sometimes I used lino-cut with etching; the lino printed first on an Albion press which allowed several colours to be inked with small rollers at one time, then, after drying, the paper re-damped for printing the etching. I grind pigments in oil for printing – when you do this it is like working with friends, for you get to know their characters and temperaments and how they will behave.



King. Etching, drypoint, roulette and hand colouring.

Often I use hand colouring. For example, the pale yellow wash on the King was put on by hand and mostly washed out again under the tap for the required effect.

Usually I work from drawings or paintings, and if I use photographs they are as themselves. I find that in a photo too much is selected and I don't want it all; I want a selective way of saying more than all. In Colours of Persia I used drawings, some of which I scanned and reduced or enlarged to my working size to avoid losing their immediacy in re-drawing.

For the type I decided to print in black and let the descriptive words do the colour. As the book contains various voices I gave different authors different typefaces, to distinguish who was speaking. The five cities acquired their names in 48pt. Farsi after a visit to a more superior hot-metal man. (Slightly alarmingly I was told I couldn't have them at the last minute, in case I used them for printing illegal bus tickets, but that was happily resolved!) And there were other considerations: in Iran calligraphy is inescapable. It runs around buildings and almost becomes architecture itself; pens are sold (and expertly sharpened) in markets and lay-outs of pages in handmade books are frequently displayed. Here, blocks of different sized scripts are arranged together, which I found was an interesting and not inappropriate experiment when using differing typefaces together. I also drew about fifty large Ss before deciding that my lettering skills had lapsed. So I chose the best to make into a lino cut to appear in a poem by Hafez at the start of the book – a more dramatic opening than the usual half-title followed by title.



Drawing, with an audience.

Between prints and type I placed occasional coloured papers used as blocks of colour or texture, hard, soft or metallic, in shapes or cut-outs. The melons of Isfahan, as described by Ibn Battuta appear as a half-circle of dark green Japanese paper set against a curve of red type (14pt Baskerville, leaded, taken in hand and bent into a curve, then adjusted and locked up for hours and hours...).



Double page of the book resting in its box, showing a two plate etching, various coloured papers, and flap.

The third element of the making is the binding. Although coming last, it is a first impression and as important in its sympathy with the pages as in its ability to make the book function as a moveable, three-dimensional whole. To preserve a book's rhythm and completeness I must bind my books myself. I did visit a Persian bindery where I noticed that all the sewing was unsupported, but as this book is large and heavy I have sewn on tapes, and the fore-edge flap – a characteristic of bindings from that part of the world – I have removed to the interior of the rather complicated containing box. This is, after all, a western book although with an awareness of other themes.

The colours of the binding are those that dominate the interior of the book. These are vibrant yellow, cobalt or turquoise leathers with other suggestive elements such as waxed paper which is reminiscent of old patterned tiles, tall inlaid architectural shapes and freely cut onlays suggesting black calligraphy, making each book slightly different.



Binding of Colours of Persia.

In fact, it would have been impossible to make each copy the same. It all became a traveller's tale of various ideas evolved into one, in books that are not identical, just as, hopefully, while travelling the pages, they do not provoke identical responses in those who see them.

Susan Allix is an artist who works with the book as a creative form. As printmaker, printer and binder, she uses etching and intaglio methods together with wood, lino and letterpress printing, while in the binding and containing of the books a variety of materials are used, from conventional papers to metal, wood, plastic, silver and leather and other objects.



Isfahan. Soft ground etching with lino cut.

After studying painting at Guildford School of Art, she gained an MA RCA in printmaking at the Royal College of Art, followed by two years in Italy on a Rome Scholarship. Her education, together with her many journeys to various exotic and exciting countries such as Egypt, Iran, Sicily, Greece, India, and Spain, has helped to create a fine body of work which includes her much admired travel books, including Colours of Persia.

Her work is in many public and private collections. These include the British Library; the V&A National Art Library; the National Gallery of Art, Washington D.C.; the Dutch Royal Library, The Hague; the New York Public Library; Yale University Library; the Houghton Library, Harvard; the Arthur & Mata Jaffe Collection, Florida Atlantic University, Boca Raton; Cary Graphic Arts Collection, Rochester Institute of Technology, Rochester; the Klingspor Museum of Printing, Offenbach. She is represented in North America by Joshua Heller Rare Books, Inc. of Washington DC, <http://www. joshuahellerrarebooks.com>. She can be reached at <Susanallix@ukonline.co.uk>. All photographs © Joshua Heller Rare Books, Inc.

The Simplified Binding Examined

By Laura Wait, edited by Stephanie Wolff and Pam Barrios. Diagrams by Stephanie Wolff.

My interest in this binding structure developed after seeing many pictures of bindings in the Designer Bookbinder Journals that have spines of different materials than the boards by artists such as Jenni Grey, David Sellars, & Sue Doggett. I speculated that this might be an approach to creating similar effects. There are some other variants on the idea of three part or staged bindings that are also worth studying, and I have not been able to figure out how some of these are done, as the information is often sketchy.¹

The binding known as the "simplified binding" is a technique for binding books based on a method attributed to Sun Evard. It is simplified compared to a laced-in fine binding structure, but not simplified at all when it comes to beginning bookbinding students. I consulted the workshop notes to Sun Evard's presentation at the 1993 GBW Standards Seminar², as well as a short article I found in an old Fine Print magazine.³. I have been told there is some information on the binding in La Reluire by Evard and Persuy⁴, in French.

Priscilla Spitler first suggested that I give a workshop on this binding in 2002. These workshop notes have been used and adapted over the course of about seven events. I am indebted to Stephanie Wolff who has taken this workshop for her attention to detail in the wording and her drawings of structure.

In my own binding work, I have used the "simplified binding" for several fine bindings. It is a refreshing change to be able to create the spine beforehand, with its lettering completed off the book. Boards are made and decorated off the book, making it easy to accommodate leather onlays in the thickness of the boards.

I have also found this structure to be useful in edition binding for artist books when used with a concertina (as "In the Garden"). I often use thin marine plywood boards for the boards on artist books. They can be covered with thin paper, stained or painted.

These instructions are for a leather spine book with papercovered boards. This structure is best suited to thin books of 4-5 sections (perhaps up to 8 sections plus endpaper constructions), of flexible paper about 80 lbs in weight with sections of four folds. This method is very French and precise. I have made some notes where I deviate from Sun Evard's methods. I use "mix" for PVA/Methyl cellulose mixture, about 50/50. (Materials required are highlighted) Many thanks to Sun Evard for her inspiration.

1. Text preparation

Fold and press sections. Repair as necessary.

2. Endpapers

Use two folios of the book text paper, or other similar paper. These become the flyleaves. They can be a separate colored paper if you choose. These are sewn in with the rest of the sections. The outer fold of the flyleaf will become part of the board attachment.

The outer fold of this endpaper section is strengthened by a guard of Japanese paper attached with paste, mix, or PVA if you are in a hurry. I prefer to use paste. This should be applied about 1/8" over the fold on the inside paper, next to the text block, and about 1" on the outside fold, initially made larger than the height of the text. This will strengthen your board attachment. If using PVA, this can be air-dried. If using paste, this should be dried in a sandwich of Hollytex and blotter on both sides of this section, with light weights. An additional piece of blotter wrapped with Hollytex can be placed inside to prevent wrinkling if you have reactive paper.



An extra filler card should be attached to the outer fold of the end sheets, on the inside of the last sheet. This will allow extra room for the leather joint or endpaper, which is tipped in later. This is attached with small dabs of PVA, onto the outer fold of the flyleaf which will be part of the board attachment, or I use double stick tape since it is fast. This is a temporary attachment, so does not need to be too secure.

3. Sewing

Sew sections onto Ramieband tapes with linen thread about 18/2 or 32/3 in thickness, with a kettle station about ½" from each end. This is simple "all along sewing". The sewing thread can be thicker than normal, since it will help develop a shoulder. This is actually necessary for a thin book of only 4 or 5 sections, since there will be no backing. However, the sewing will create bulking on the outside of the spine, which needs to be compensated for in the linings.



Tip: "Ramieband" tapes are used in this workshop. They are most likely used in France. I have used "Pleister" tapes from Shepherds in England. They are stronger, and can be frayed out nicely, but they are thicker over the spine, and so more work is necessary to achieve a smooth spine. They would certainly be good for larger books.

Tip: For larger books, the sewing is stronger if you link the sewing at each station when you go around the tapes. However, this will create even more bulking.

4. Gluing up

The spine is knocked up square, and glued with mix or thin PVA. This should not be thick and goopy.

5. Rounding

After the glue is just dry to the touch (10-20 minutes), the spine is rounded gently, with or without a hammer. There is no backing, so a nice swell can really only be acquired by thick thread (an alien concept to those of us who try to keep swell down all the time).

6. Working boards

Make a pair of boards to use for pressing during the binding process. These should be sanded at the spine to fit in with the shoulder. This is a long shallow bevel. They will be very useful when you are attaching the spine, and help to define the shoulders. In a workshop situation these are the same boards that are used for the covers.



Tip: I use museum board for thin books, as it sands easily, is archival, and is the right thickness for thin books. Other board can be used of course.

7. Spine lining

Fray out the ends of the tapes, and attach them with paste or mix to the last endsheet. Flatten them out as much as possible. I find it useful to use a piece of Mylar and press them down lightly to dry under the working boards. This last end sheet will become part of the attachment to the boards, as a decorative sheet and possible leather joints can be added later.

If you are conservation minded, the first layer of the spine lining should be Japanese paper attached with paste. This can go over the shoulder slightly, in order to cover up the space between the last sections and the endpaper. This should be allowed to dry before further layers are attached in order to make a barrier for layers of PVA. (This is a conservation requirement, so it can be ignored if you want, but the Japanese paper layer will allow the book to be pulled apart if necessary without damage. This can actually be quite useful when you sew the sections in the reverse order).

8. Endbands



Handsewn endbands can be sewn now. These must be quite short, as the board squares are small on this book. I prefer to use leather endbands made by using thin leather folded around a thin cord or linen thread. This leather should be thin at the edges, and made in a stepped fashion to prevent ridges from developing. These can be applied with PVA.

9. Spine lining continued

Attach a layer of fabric, such as airplane linen, with PVA between the tapes and kettles. Follow this by a single piece of handmade paper, (weight about 90 g/m) attached on the whole spine. Let dry. Sand this and repeat if necessary. The goal is to build up an absolutely smooth spine, which falls off slightly at the head and tail to allow for the turn-ins of the leather. Recently I have been more concerned about flexibility of the spine, and I only attach one layer of paper. Sometimes that means there are slight ridges at the end, but this is a tradeoff for a book that really works (this is a conservation approach).

Tip. For a fine binding, I would attach a layer of leather on the spine with paste rather than the paper. This leather piece can be pared all around the edges before you start to help make a rounded, nicely shaped spine. This will mold over the bumps, and can be sanded flat. Make sure that you do not sand the thread away.

10. Make spine assembly

Cut a piece of thick paper or thin bristol board for the spine stiffener. I like to use thick printmaking paper, as it has enough give to get nice impressions on your tooling later. This should be as wide as the book spine from shoulder to shoulder, and slightly taller than the height of the spine including the endbands.

Tip: The French method is to pare the edge of the paper, so that the spine can be more rounded, and there is no edge. I sometimes skip this paring, as the ridge is useful if you are going to stamp the title in a stamping machine. The edge allows you to line up the type more easily.

Cut leather for spine. The leather should have about one quarter inch to three-eighths turn-ins at both the head and tail. The width should be the book spine plus about 1" on each side. You could make it even smaller as you get more skilled and want more precision.

The leather for the spine should be fairly thin for a small book. It is nice to get the pre-split leather (1.5 oz), but it does not take too long to pare a spine down.

The leather should be pared away to nothing on all edges. This will help limit bulking in the spine attachment area on the inner joint later.

Attach paper spine to dampened leather with PVA, Mix, or paste. I use paste; this will help in your tooling later. The turnins are straight across the top of the spine, and beveled slightly downhill on the sides of the spine, at the head and tail of the tabs, so that they can be attached to the boards later without sticking out above the text edge on the squares. This can be dried flat between two blotters and Hollytex.



Tip: The French dry this around a dowel to make it rounded and fit the shape of the book. I find that I prefer the spine be flat so that I can title it off the book. It can be rounded fairly easily later as it is a fairly flexible thin piece of material. Tip: It is also nice to add an additional piece of paper on the inside of the spine stiffener. This is placed between the turnins so that there is no bulking. This can also be pared on the long edges to help create round.

11. Titling (Optional)

The spine piece can now be decorated in any method you prefer, off the book.

12. Attach spine

Trim the head and tail of the last endsheet about 1/4". This will make it easier to sand down later, and avoid ridges. Place a piece of Mylar in between the text and the last end sheet for protection from moisture and unwanted adhesion.

Inspect fit of spine. The spine should rise just above the end bands at each end, so that they don't stick out. The head and tail of the spine tab leather should fit nicely just below the top edge of the text.

Attach spine tab carefully with Mix or PVA. Pinch in the ends to make sure it fits correctly, and then carefully press down remainder. Press with working boards till dry. The working boards will help shape the book to a nice shoulder. If this is not done, the shape is difficult to achieve later when the leather is dried.

When dry, trim off last endpaper and spine tab to about 1" from the edge of the spine, creating a flange, referred to as a tab.

13. Make boards

The boards are cut to size. They should have small squares. The spine edge will be sanded to fit the shoulder; the board should be just the thickness of the shoulder. If it is too thick, the board will stick up from the shoulder and be quite ugly. It will not open properly if it is too thick, causing stress at the joints. The board can be lined with paper on the outside with paste, so that it will counteract the warp of fillers instead of sanding down the edges of the turn-ins before the endpaper is attached.

Tip. As far as I know, this board is not usually pre-lined to counter the possibility of warping by leather as it dries. However if you want to pre-line it on the inside for this purpose, attach the liner paper with paste and sand the edges before covering. This will make the board a little harder to place when it is attached to the spine, since it may warp the board temporarily.

14. Cover with paper or leather.

The covering material should have a turn in of about 3/8" on head, tail and foredge. There is only about 3/16" at the spine edge. Leather should be pared down to nothing at the edges. Use mix or PVA for paper covers, and paste or mix for leather. I prefer to use paste for leather, since it is better for tooling later.

15. Tool leather cover (Optional)

16. Attach boards.

Sand down the spine edge of the turn-ins of the paper covering the boards before attaching them. (If leather, you can fill the board to compensate for the thickness of the leather, this will also compensate for the warping of the leather. But if I am using leather I like to line the inside in any case.)

Attach boards. This should be done with PVA, by gluing both tab and board at the spine edge. The flyleaf is only attached for about an inch, leaving part of the paper floating. Make sure you get enough adhesive, but without extra, which will ooze out and cause trouble. This is tricky, and the most important step of the book. The boards should fit nicely into the spine shoulder that has been created by the pressing of the working boards. There is no joint groove, it is more like a fine binding opening. Check fit of boards with a triangle before pressing. It is very difficult to fix these later.



Press, using Mylar pieces between end sheets and text. Check for glue oozes.

17. Endpaper attachment- paper

When the attachment has dried overnight, or at least for lunchtime (in a workshop), open cover, and tear off the part of paper of the last flyleaf that that is not attached to the cover on the spine tab. Also remove the filler card. Sand and pare the spine tab. If you have pre-lined the board then you can attach a filler paper between the turn-ins and the tab. This will help make the board smoother. Make it as smooth as possible, and you will need to work on the tab area more than the turn-ins. Paper covered boards that have no pre-liner should not need filling, but will need a lot of sanding to get them smooth.

Optional: leather joint: After sanding as above, cut a piece of thin leather about one inch wide and the height of the text. This is probably easier if it is the same color as the covering leather, but it does not have to be. This should be edge pared in a long bevel on both long sides. These are attached with Mix or paste. I like to attach them with the book in a 90 angle from the boards. This helps the book open later. Each joint must be done separately, and let dry 15-20 minutes, before closing around a piece of blotter wrapped with Hollytex. I like to close the book onto the board, rather than the board to the book. It seems to work better. (This is a tip I learned from Priscilla Spitler, who learned it from James Brockman).

To finish the leather joint endpapers, cut two sheets per end of decorated paper for your end sheets. A flyleaf is tipped on by a 1/8" wide line of PVA on the paper and set onto the leather. The amount of leather you leave exposed is your own aesthetic decision. I leave about ¹/4' to ¹/2" inch showing on each side of the gutter. I cut the head and tail height of the paper to fit the book after it is tipped on. The foredge is attached together only in the very front edge of the book in a flexi-end style. The board paper is cut to leave the right squares, and attached with whatever adhesive you used for the covering paper. This will help prevent warping.



Normal endpapers: Tip in single folds of endpapers with PVA; use slightly less than 1/8" width of glue. Place this up against the joint on the next endpaper sheet. The fold should be slightly larger than the book.

Trim head and tail to the largest section.

Open book, with board flat, trim out the pastedown, and allow for stretch.

Glue out with Mix (use the same adhesive you used for the outer board covering. This will help to equalize stretching.) Make sure there is not too much adhesive in the joint.

Carefully press down pastedown with your hands, with book at right angles, and smooth out. Rub down through paper. Press.

Flyleaves can be attached like a flexi-end, or the entire sheet can be glued down (the French method)



18. Attach endpapers- leather joint

Use this joint/endpaper construction for full leather books. Similar to the instructions in the previous section.

Sand down tab edge. Trim leather edges. Fill with paper. Sand down board after filling, so that the board is as flat as possible.

The leather joint is thin leather, pared to nothing on all sides. The joint is about 1" wide, or slightly larger, and height of textblock.

Attach with paste or PVA mix while the book is open. Do one side at a time, and let dry open, at 90 angle.

Attach paper pastedown and flyleaf as in previous section.

Tip: Doublure can be done instead.

Notes

1. "Peake's Alice", Angela James. Journal of Designer Bookbinders. Vol. VVIV. 2004. (and other articles) 2. "The Simplified Binding", Notes for the GBW Standards Seminar. Sun Evard. Boston. 1993. 3. "To Each It's Own", Featured Bookbinding. Sun Evard. Fine Print. Vol. XVI. No.1.

4. La Reliure. Sun Evard & Annie Persut. Denoel. 1983 Paris.

Examples of simplified bindings by the author



Within the Walls. Text by Perditta Schaffner. Woodcuts by Dellas Henke. Windhover Press. 1993.

Simplified style leather binding, tooled in gold and color, with leather onlays. 7.25"X 11. Bound 2002.

Collection of Princeton University.



The Black Cat. By Edgar Allan Poe.

Chelonidae Press. with leather onlays. 7.25"X 11. Bound 2002.

Private Collection



Stone Eye. Poems by Richard Taylor. Larkspur Press, 2001. From the Guild of Book Workers Midwest Chapter exhibit of the same name.

Simplified style leather binding, tooled in gold and color. 6" x 9.25". Bound 2002.

Private Collection



In The Garden. 2004. A hand-printed book, with box made by Priscilla Spitler. 11"X 15". 50 copies.

Six full spread woodcuts illustrate the book, along with collographs on alternating pages. The text of the book is an alternate story of Adam and Eve, written by the artist and printed with wood type on a Takach etching press using Akua-color. The pages are also toned by hand-coloring.

The binding is sewn on a concertina with green linen thread. The cover is a simplified style binding with green leather spine stamped in gold. The boards are wood, covered in rubbings from the woodcuts. Laura Wait lives in Steamboat Springs, Colorado and makes paintings, unique books, and prints. Her unique books incorporate, writing, painting and printmaking techniques, especially monoprinting, collographs and woodcuts. Her experience as a bookbinder and conservator for 20 years is the basis for her excellent bookbinding technique in the English tradition, including leather fine bindings, and medieval style modern wood binding.

She holds a degree in Art History from Barnard College, Columbia University, NY 1975 as well as certificates in Printmaking and Bookbinding from Croydon College of Art, England, awarded in 1976 and 1981.

She exhibits her art widely, and her artists books are in many private and public collections, including the Library of Congress. Her unique books are represented by Joshua Heller, Washington, DC and Priscilla Juvelis, Kennebunkport, ME. She teaches book art workshops throughout the country.

Her paintings and prints are available at Ksaari Gallery in Steamboat Springs.

She can be reached at <laurawait@springsips.com> or online at <http://www.laurawait.com>.

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Volume 5, Number 1, Fall 2008

Big Books: Constructing a Four Foot Springback

By Charlene Matthews

The largest book I have made is 5'x15'. The experience is like none other. One finds the sheets of paper as you sew, falling over your head, the covers coming down on you, and if you stay perfectly still you are physically inside that book, in its world. The smells are intense, full of pulp and paste and cloth and wood. And it is noisy. The pages as they turn whoosh, the covers float down with a jolt. The air moves. Plus, as you are working on that spine, it is very close to a human spine size. You find yourself massaging the book into shape. Maybe cracking a bone here and there into alignment, the pages sighing. Note, the pictures shown in this article are a combination of two books I did, hence the slight irregularities.

A few years ago I was commissioned to re-bind a four-foot book, with the text block composed of original artwork. The original binding was only a few years old, the binding covers had been made with layered Davy board slats and stapled, and the cover sagged when one went to open it due to the weak cover structure. In addition, the spine had torn away from its hinges as it had been sewn on tapes and lined in the matter of a regular flat back book, with the tapes stapled to the boards and one paper spine lining. The end sheets were not folded with the grain, as with the artwork text block, and the whole thing resembled a Frank Gehry structure.

First I removed the textblock from the covers by cutting away the sewing to leave me with a 'hinged' art text block. When removing staples from a book that houses original artwork, wear cloth gloves for blood letting.

I had been making some small springback books, and saw this as the perfect instance to apply my newfound knowledge, especially as this book was very much like a large ledger book. Before I began, I documented every step and prepared and/or constructed any device I would need.

Preparing the textblock

After removing the spine lining, I was dismayed to discover the artwork had been glued onto paper hinges in order to make signatures. PVA had been used to adhere the artwork to the hinges, and would not come off without the use of water and/or other solvents causing the artwork ink to run. As the hinges could also not be easily removed, risking damaging the artwork, I left the original hinges in place, and pasted on a thin layer of Japanese paper for reinforcement.

Making the endsheets

To make the endsheets, I ordered a six-foot wide roll of white Lenox paper. I made the cloth hinge out of Irish linen covering cloth that I backed myself. To back a piece of linen over four feet tall and about five feet wide for the covering, I used a thin Japanese paper with wheat paste and constructed a table of laminate to hold the large sheets while drying. My 4'x6' worktables are not anchored to the wood base, so I can add an extension to the table, making it 8' long if need be. This is handy for "Big Bookmakers."The backing of the Irish Linen cloth with paper was done in two sections, as I did not have paper big enough, with torn overlaps that were lightly sanded when dry so that they did not show. When dry, I then marked the position of the covers on the cloth and sent it to the artist to do a cover drawing.

Sewing

When resewing the book I used the original holes and tape placements. I marked the tape placement on my worktable, taped new sewing tapes to the bottom of the table and sewed each signature to the tapes. Sewing these big books is a riot as one finds ones self in the oddest positions, but the beauty of a large tape sewn binding at the end is worth it all. I do not have any tips here. Just do it. I used a heavy linen thread that I did not wax, something that might have made it easier to sew. The endsheets were tipped to the textblock and two covered bricks were used to knock the book up while laying flat. The spine was then lightly glued up with PVA and worked into a rounded shape using a backing hammer. Due to the size of the book this took some time and the adhesive had to be softened occasionally. An oversized ½" thick measuring stick was laid on the top edge to assist in even alignment.



The book sewn on tapes, on the table edge used to tape the tapes underneath and sewn. A thin layer of PVA has been applied to the areas around the tapes.

Forwarding

Using Lenox paper as the stiffener (flange), the tapes were glued down with PVA, and the spine lined with the same

covering cloth, letting the cloth extend over beyond the head and tail where a string was laid in and the lining folded back to create a small inner headband. Finally the flanges were trimmed per the springback norm, but adjusted to the large size.



Make shift press to adhere flanges in the split boards.

Making the spring

To make the spine piece, the heavy tubes Talas ships cloth in came in handy. I used a three-inch tube, cut it lengthwise with a jig saw, sanded, and slathered wheat paste over it to soften it, and put it in the 26" job backer. I then spent several hours boning the edge in till it dried to the correct "C" curve to fit the spine. I used just a Teflon folder and backing hammer. there were moments when I took out various other types of odd hand tools, but they were not the answer. The hardest part was getting the head, tail and lips to match. I almost chewed on them. Instead I cut equal Davy board spacers (wheat pasted and curved them) that fit inside the hollow round so I could make sure my round and lip was equal, and stayed equal as I worked, solving all my problems that day. I did search through all my tubes to see if I had one that would fit inside, but was not successful. When dry, I sanded the lips as they took a bit of beating, and covered the outside of the spine tube with paper and lined the inside with the same Irish linen letting it extend a few inches and frayed the edges.

Making the boards

To make the boards I measured the text block and cut four sheets of 1/8th inch Luan plywood to size. The wood was sanded and two sheets adhered together using wheatpaste, leaving a ten-inch space at the hinge. They were then pressed for two days and lined with Masa paper, sanded, and lined again, front and back. The springback is a split board binding. As the job was being done in the summer months, and I do not have air conditioning, it was very necessary to keep all the glue for the entire project the same, and wheat paste was it. I let the lining paper overlap the wood board edges, so I could sand the edges smooth. The boards cured/adjusted laying flat for about two weeks. The smell lingers.

Attaching the Boards

Next, I prepared a strip of board to aid in the placement of the boards at the joint. The strip had the thickness of the wooden boards plus the cloth, with a nudge extra. I let the book spine lay over the table edge and put the tube on with the inner cloth tube lining pulled taught. I then had to position the split board; I placed the front on first, 'flipped' it and attached the back board, inserting the flange and cloth overhang in the split. Initially I had put the whole flange (cut in three sections) in the split, DO NOT DO THAT. Insert only the middle flange piece. The two outer ones go under the board. Then, I placed the made board strip into the joint, and when I thought all was well I glued the whole thing up using wheat paste to slow the dry time. It took a few goes and lots of sweat to get the hinge joint right, this is one point that really must be right. I adhered the back cover first, using a makeshift press with clamps and let it dry overnight. Then I did the front. A tabletop jig made of wood strips and bricks ensured that my covers were square.



Photo of the book with the spring on.



Attaching the split boards to the book, with flanges showing.

Since the book was being covered in linen, I sanded the tube head and tail smooth, applied wheat paste to that area, and hammered it slightly in to make a cap that sat just above the self made one from the lining on the textblock. The text block had been wrapped with two layers of Mylar this whole time for protection, but it had become too difficult to maneuver the book with wrapping on. This meant that I just had to be very careful keeping things away from the book block edges.

For pressing, I put the book on the edge of one of my bigger tables, used the tabletop as the bottom board, put another tabletop on top of the book, and used vises to clamp it all down. Putting a square of board between the vise clamps and boards enabled me to screw down the clamps tighter. Not that a book needs to be excessively tightly clamped, but at this size it became important. I attached clamps every four inches and moved them every half hour. You have to pay continual attention as one weird crease or fold will appear bigger than normal, and cannot be ignored.

Covering the book.

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The front cover featured a drawing by the artist. I positioned the covering cloth on the cover and drew lines for correct placement. Next wheat paste was applied to the front cover and the cloth was put in place. The cloth was then worked toward and onto the spine, working it in at the joint and allowing the remaining covering to hang off the edge of the bench. After letting this dry for several hours, the book was flipped over and the process continued on the back.



Back cover finished. There is a line down the back in this photo, that was an irregularity in the fabric, which almost disappeared after a good ironing.

When dry, the turn-ins were made. As the corners of the board had a sanded round to them, the corners of the

covering material were pleated. Due to the size of the book this took more time than usual. Working the headcaps was a greater challenge, one that I was not entirely happy with. Every flaw stood out like a red flag. I thought I had sanded and worked the tube cap shape enough, but not so. I think if I had to do this again, I would line the head cap with a thin leather strip.



Photo of the book open, showing the outer flanges that sit on the inside. This is prior to trimming, filling in and setting corners.

Next the cloth inner hinges and side flanges were attached, beginning with the back. Unfortunately, all the mistakes such as uneven squares... showed up. Lots of time was spent correcting those. I put the spacer in the hinges and pressed overnight in my makeshift table press. I also ironed the covers with the spacer in the hinge, to give a crisp hinge edge. Finally, the paste downs were put down after various trims, sandings and cuts. Getting the board surface perfect under the paste down was very important as it is a large area and everything is magnified. The book was then pressed with blotters changed every half hour for a while, after which the book was left under weight for two days.

Conclusions

Overall, I was not happy with the view of the book through the spine at the end as it had too many rough edges to my eye. The book did POP as result of the spring, and I was happy with that. My client was happy with the book, as he did not want a 'machine' made looking binding, and wanted a few rough edges so I lucked out.

I made two more springback books of similar sizes for the same client, one was another re-binding and another one was from scratch. For this he drew on large sheets that were folded to make signatures and I devised a hinge that could be

archival and let the artwork lay flat when opening. I would not hesitate to make another.



The book open in a gallery in Paris. It was purchased by the Centre Georges Pompidou.

Publisher's Note

For additional information on the springback binding style see the tutorials published on *The Book Arts Web*. The tutorial on the German style can be found at < http:// www.philobiblon.com/springback>, and that for the English style can be found at <http://www.philobiblon.com/ springback-eng/index.html>. In addition, Volume 1, Number 1 of *The Bonefolder* featured the *Springbinding Hath Sprung* Bind-O-Rama found at <http://www.philobiblon.com/ springbackbindorama.shtml> featured many innovative examples of the structure. See also the next article in this issue by Karen Jones and more entries in the Bind-O-Rama section.

Charlene Matthews is a full time bookbinder, working in restoration, box making, art fabrication and book arts. Her studio is in Los Angeles and is celebrating her 8th year in her shop front on Melrose Avenue. In addition to binding and educating her customers about the finer side of bookbinding and book art, she teaches book art classes regularly in the Los Angeles area, is Chair of Workshops for the California Chapter of the Guild of Book Workers, and is an avid pin-hole photographer on paper film. Her work is held in university and private collections worldwide. For more info see <http://www. charlenematthews.com>.

Modified for Re-use: Broken Ledger Bindings become Ledger Enclosures

By Karen Jones

"Ledger" or "stationery" is a style of spring-back binding for books meant to be written in; it is designed to lie flat when opened. Once the main vehicle for keeping permanent records, this structure was widely used throughout the 19^{th} and early $20^{th}c$. Designed for heavy use, these bindings were usually very durable, with extra linings and laminated boards, often with hubs on the spine and a canvas covering over the heavy leather binding.

When these records were later microfilmed, the textblocks were often cut, leaving stacks of single sheets for easy processing; the cover binding intact.

This was the case in Jefferson County, CO, where the bindings were stored with the loose text inside, held in place with string ties.



Loose text slipped into binding.

Finding a more serviceable yet cost-effective way to keep the text with its respective binding was the task. Restoring the ledgers to their original condition was not an option. The problem was solved by re-using the binding to fabricate an enclosure.

The steps to fabricating an enclosure from a springback

First, clean up the text block and binding. If extant, the free flyleaves are trimmed off and the pastedown flange (lever) trimmed cleanly. The flange extends beyond the hinge in this structure. Any loose leather fragments left from the spine lining and other debris is cleaned away. Any local repairs to boards or reinforcement of the cover hinges is done at this time if required.



Textblock and binding cleaned and trimmed

Next, build a custom-fit 3-sided tray of archival board, covered in cloth. The tray is lined with archival paper both inside and out to minimize warp. Additional liners on the outside may be needed to insure good adhesion against an uneven board surface. Since the tray can't extend beyond the outer edge of the binding, board thickness and construction options must be carefully considered. The tray wall edges adjacent to the spine are cut to match its curve as can be seen in the illustration below.



Tray placed on rear board of binding



The tray is adhered to the rear board of the binding with PVA and left to dry under heavy pressure. A fore edge stop is fabricated with several laminates of binders board and covered

with cloth. A slot is cut into the inside front board of the binding, just inside the foredge square, to accommodate the stop. The stop is coated with PVA, inserted and dried under constraint.



The completed enclosure should be stored flat. The fore edge stop prevents the front board from sliding away from the tray.

Some observations about these bindings

The durability of these bindings was first impressed upon me while responding to a steam-pipe break disaster at the Colorado State Archives in the early 1990s. Despite exposure to the double whammy of extreme high heat and high humidity, these bindings protected their texts wonderfully. No textblocks were damaged although some bindings had to be sacrificed. I've admired these sturdy structures ever since; they seem more like little pieces of furniture than books.

Unlike the traditional spring-back binding style many of us studied in contemporary master classes¹, the bindings I worked on during this project, while very strong, evidenced some short cuts in materials and procedures. The bindings I worked on were fabricated in Chicago, St. Louis and Denver. Dates range from 1873 – 1899.

Sewing supports ranged from vellum strips in the earliest books to a thin card-loose weave cloth-card laminate support. These new supports were touted in the trade at the time,² but the ones I worked on tended to crack and delaminate when manipulated, making the insertion of new supports more difficult.

A paper liner for the rigid spring-back is lacking on all but the earliest books examined.

The spine lining and hinge materials became less substantial over time. On later bindings that include a protective canvas wrapper (1890+), the leather of the cover and a strip of text paper serve as the only internal hinge. This weaker hinge must rely on the cloth inner hinge of the endsheet construction and the sturdy canvas wrapper for support. The earlier bindings had an additional leather spine lining that extended between sewing supports to form the core of the hinge flange, although even these bindings did not contain the rigid flange laminate structure of several folds of heavy paper around a core of leather of the traditional spring-back. Some of the later bindings I examined incorporated pre-fabricated meeting guards, which allowed pages to lay flat for use without the lever action of the traditional structure.

A few later bindings no longer incorporated the split board construction; supports were laid directly under the cloth inner hinge.

Of the thousands of cut ledger bindings held in Jefferson County, CO, fifty were refitted as enclosures. There is no shortage of these bindings in their original, although often damaged, state. Every stationery binding does not qualify as an artifact..., yet.

1) Pleger, John (1914), Bookbinding and Its Auxiliary Branches, Part Three. Chicago. This was extracted by Tom Conroy for Sourcebook listed below.

2) A Sourcebook on Stationery Binding, compiled by Tom Conroy in 1995, workshop leader for the Mellon Advanced Conservation Workshop "Lessons and Techniques from the History of Conservation" is the most comprehensive compilation on the subject that I know of. His compilation and information gleaned while attending that workshop informed the observations I made during the Jefferson County project.

Etherington, Don and Matt Roberts (1982). Bookbinding and the Conservation of Books: A Dictionary of Descriptive Terminology. Washington, D.C.: G.P.O. http://palimpsest.stanford.edu/don/don.html

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Karen Jones is Collections Conservator at the Jefferson County Public Library in Colorado. She can be reached at <kjones@jefferson.lib.co.us>.

2008 Bind-O-Rama

Initiated in 2004, the Bonefolder's Bind-O-Rama challenge and online exhibition has become an annual event. The 2008 event features works exhibiting ANY of the structures described in the past 8 issues of the Bonefolder.

The elegible techniques include: The springback; drum leaf binding; the tunnel book; edelpappband/millimeter binding; the flag book; molded paper spine; limp vellum binding; twined binding; split board variation; board book adhesive binding.

Past Bind-O-Ramas featured the springback in 2004, the edelpappband/millimeter in 2005, the flag book in 2006, and the 2007 "set book" on the catalog to the Guild of Book Workers' 100th anniversary catalog.

Eric Alstrom, Okemos, MI, USA



The Rhyme of the Edited Mariner is a reduced-text version of Samuel Taylor Coleridge's *Rime of the Ancient Mariner*. Using Microsoft Word's Autosummarize feature, the text has been reduced to just 25% of its original, making it much more palatable for our fast-paced modern culture.

The text is ITC Bodini Text, laser-printed on Strathmore Fern Wove 80lb cover wove decorated with acrylic wash. The binding is the drum leaf binding with green leather spine, red skiver label and original hand-made pastepper covers. 13.6cm x 9cm x 1.2cm

Eric Alstrom has been involved with the book arts since 1989. He studied under James Craven and also at the Bessenberg Bindery in Ann Arbor, Michigan. He has taken workshops from many bookbinders and artists, including Don Etherington, Daniel Kelm, Barb Korbel, Sid Neff, Jr. and Sylvia Rennie. Eric is head of conservation at Michigan State University Libraries and the binding instructor for MSU's book arts program. He also teaches conservation, binding and book arts workshops locally and nationally. For further information, please visit Eric Alstrom | BookWorks http://webalstrom.ftml.net/bookworks>.

Whitney Baker, Lawrence, KS, USA



Envisioning Africa by Peter Edgerly Firchow. Lexington: University Press of Kentucky, 2000. Bound in the springback style with chocolate brown goatskin spine; paste paper sides (made by binder); made ends featuring yellow Ingres paper, brown Cialux cloth, and brown waxed linen thread. 23.5 x 16 x 2.5cm.

Whitney Baker was a work/study at the University of Iowa Center for the Book. MLIS in library science with advanced certificate in library and archives conservation, University of Texas at Austin. Advanced internship at the Library of Congress under Tom Albro. Currently conservator for University of Kansas Libraries.

Sherry Barber, Frisco, TX, USA



Full Harmatan leather binding with full thickness recessed onlays of alum tawed leather. Split board construction with blind tooled and stamped cover design. Sewn on frayed out cords and bound in the German fine binding tradition. This version is a copy of the Arion Press' edition of Moby Dick. 26.5 x 18 x 5 cm.

My training includes ongoing classes from local Dallas instructors as well as numerous workshops with various master binders and GBW's standards seminars. The most recent workshop was a private week with Frank Mowery purchased at the Dallas Standards auction. This book was completed during that week.

Pamela Clare Barrios, Orem, UT, USA



Vellum spine/Cave Paper sides. Cut-out design. The alumtawed thongs at the head and tail are incorporated in the sewing. This allows them to be laced at a right angle to the spine rather than angled down. $9.5 \ge 14$ cm.



Jumping Fish. Clip art fish cut out of the flag book accordion base to give a feeling of space and shadow. Color laser printed on blue cover weight paper. 7.8 x 14 cm

I trained in conservation at the NY Botanical Gardens and the New York Public Library (where I received full time intensive training in fine binding and conservation from Elaine Reidy Schlefer). I have attended numerous workshops and intensives, including Don Glaister, Hugo Peller, Tini Miura and Deborah Evetts in fine binding, and Abigail Quant and Bernard Middleton in conservation. For 18 years I have been a Rare Book Conservator at the Harold B. Lee Library at Brigham Young University. I am currently pursuing a BA in Art at Utah Valley University.

Cathy Berg, Vancouver, BC, Canada



Tunnel book based on *The Emperor's New Clothes* by Hans Christian Andersen, watercolor and pencil illustrations, three hand-cut watercolor paper panels. 36 x 24 x 15.5cm,.

BFA, Emily Carr Institute of Art and Design, Vancouver Canada.

Elizabeth Bittner, Dallas, TX, USA



Animal as Information. The idea for this book came from an article that was required reading for one of my introductory library science classes. Unfortunately, I don't remember the name or author of the article, but I do remember the author was attempting to define "information." At one point the author asked under what circumstance an antelope could be regarded as information. Taking that idea, I created this flag book using a picture I took of a female white-lipped deer at my local zoo. The fragments of text above and below the picture (and on the cover) were taken from various informational websites. The shape of the book is reminiscent of a brochure or pamphlet.

The picture and text were printed onto cardstock and a decorative Japanese paper was used for the cover and decorative accents. A heavy weight black artist's paper was used for the accordion and inside covers. 12 x 22 cm.



Diamondback Twined Binding. The textblock of this book is paper I made from abaca pulp at Jim Croft's 2007 Old Ways of Bookmaking workshop. paper sized with gelatin and then burnished it with bonefolders; Tim Barret PC4 paper was used for the covers and the sewing was done with linen thread. 13 x 16 x 4 cm. Elizabeth Bittner is a graduate of the book and paper conservation program at the University of Texas, Austin. She interned during 2007-2008 in the Conservation Lab of the Special Collections Research Center, Syracuse University Library.

Heinz Bossard, Zug, Switzerland



Volume 1, covered in Norwegian buffalo leather with title on cover in relief. $36 \ge 28 \ge 6$ cm.



Volume 2, covered in split goat leather with separately covered boards and spine. 34 x 27 x 4cm.

Both volumes are ledger books bound using the Germanstyle springback technique.

Apprenticed as a bookbinder with Louis Nabholz and studied with Franz Zeier (author of *Books, Boxes, and Portfolios*) at the Kunstgewerbeschule, both in Zurich, Switzerland. http://www.bossardzug.ch/buchbinderei>.

Linda M. Cunningham (Lasqueti Press), Calgary, AB, Canada



Le Rêve du Normand/Norman's Dream. Tunnel book, inkjet printing (Epson Stylus Photo 1400), paper (Canson Montval cold press 140 lb. watercolour), paste paper created by the artist, PVA, found objects (feathers, larch cone). Photography by the artist. 11.4 x 15 x 5cm.

Primarily self-taught bookbinder, with a two-week apprenticeship with Don Rash. Long-time fibre artist, spinner, knitter, designer and teacher.

Linda Douglas, Brisbane, Australia



Quest for Peace. 6 Flag books, Saunders watercolour paper, board, cover paper, hand carved erasers for the cover images, concertina spine. 12cm x 8 cm x 1cm.



Foundational. Flag book, handmade banana paper, parchment paper, cardstock, hand written font. 15.2cm x 11cm x 1cm.

President, Queensland Bookbinders' Guild, Australia 2005 – present.

Monica Feeney, Seattle, WA, USA



Twined Binding. Blank book block of light gray 100 gr Ingres, waxed linen thread (half undyed, and half dyed with blue Sellaset, blue and gray paper-backed book cloth. $9 \ge 12.5 \ge 3.5$ cm.

North Bennet Street School Graduate (instructors: Mark Andersson and Jeffery Altepeter), BFA Savannah College of Art and Design (instructor: Ana Galindo).

Cari Ferraro, San Jose, CA, USA



Drum-leaf style binding; calligraphy in graphite and ink on Arches Text Wove; paper-covered board, cloth spine, titles gilded with platinum leaf. 24.8 x 18.4 x 1.2cm.

"Spelling Words" explores the root of the English word "spell" and its intersection with letter magic. This binding allows every folio to be written and drawn across the twopage spread. I learned this book structure from Laura Wait, who adapted it from Timothy Ely's design, at Ghost Ranch in New Mexico in 2007.

Chris L. Hall, Deerbrook, WI, USA



German Springback form, blank book/notebook, the size was set by the cover material, an old men's silk tie, (a thrift store find) which I took apart and laminated onto mulberry tissue. The height of the book was the width of the bell of the tie minus the turn-ins. The boards were profiled, the textblock is made from plain ordinary 25% cotton bond typing paper, the endpapers are a Japanese Woodgrain Paper olive green, the headband is sewn on the spine with green, purple and white silk thread. 18 x 11 x 2.5cm.

I have no formal training in bookbinding or printing; my degrees are in Residential Design and Accounting. One day I decided that I was going to make books, it started as a hobby (that long ago got out of any control,), I read books on books, the internet and *The Bonefolder* e-journal, but it all comes down to just practice, practice, and more practice. This is the first time I've submitted a book for any sort of tournament, even though I have been doing this for more than 10 years.

Karen Hanmer, Glenview, IL, USA.



Patterns for Fault Tolerant Software by Robert S. Hanmer. Full leather binding, Don Rash's split board technique. Hand sewn silk headbands, gilded top edge, gold foil tooling. Leather hinge, brown Cave paper doublures and endsheets. Design evocative of software written to automatically recover from failures. 24 x 20 x 3cm.



Stiff: The Curious Lives of Human Cadavers by Mary Roach. Trade book disbound and guarded. Pam Barrios' threepiece technique limp vellum binding in veiny calf. Hand sewn silk secondary endbands over reverse bead primary endbands. Gilded top edge. Yapp foredge with ties. Drawings from Andreas Vesalius' 1543 De Humani Corporis

*Fabric*a visible through case. Additional folios of Vesalius drawings interleaved with folios of thin vellum as first and last signatures of the book. $22 \times 15 \times 3$ cm.

Study with Scott Kellar, Monique Lallier, Priscilla Spitler, and generous technical support from her colleagues on *The Bonefolder* editorial board. Hanmer also serves as Exhibitions Chair of the Guild of Book Workers. http://www.karenhanmer.com/>.

Robert S. Hanmer, Glenview, IL, USA



Patterns for Fault Tolerant Software by Robert S. Hanmer. Covered with Bookmarc goatskin using Don Rash's Split Board Binding variation. Hand-sewn silk endbands. Marbled paper ensheets. Goatskin onlays. 24 x 20 x 2.8cm.

Studying bookbinding for 10 years with Scott Kellar and Karen Hanmer.

Forrest Jackson, Dallas, TX, USA



Chimera: an Anthology of Literature, Art and Essays. This German-style springback binding in full goat-skin features yellow and green silk headbands and a simple, blind-stamped title on the spine. The colorful tiger eye endpapers were marbled by Catherine Levine. The text was printed on Mohawk Superfine paper in an edition of 540 copies. 29.2 x 20.9 x 4.7 cm I started bookbinding at the Craft Guild of Dallas in 1997. Since then, I have pursued fine binding, conservation and restoration. More examples of my work can be seen at Rosedale Rare Books. Favorite instructors: Sally Key, Jan Sobota, Jim Croft, Pamela Leutz and David Lawrence.

Peggy Johnston, Des Moines, IA, USA



Edelpappband Binding. Head and tail of this blank book are of Harmatan goat. A slice of agate is embedded in the front cover of the book. The opening for the stone is lined with goat skin, too. The rest of the cover is dyed lokta paper. $15.7 \times 10.3 \times 3.2 \text{cm}$

Peggy graduated from the University of Wyoming with a double degree in art and education. Since then she has continued her studies in painting, printing and the book arts by taking classes and workshops whenever possible.

Amy R. Lapidow (The Three Ring Binders), Somerville, MA, USA



What Color Today. Flag book with box Found museum tags, paper, board, ribbon, book cloth. 22 x 20 x 1cm.

Trained at the North Bennet St School, Boston, MA.

Roberta Lavadour, Pendleton, OR, USA



Diamondback 2008. Twined Binding, waxed linen over O'Malley walnut dyed flax, Zerkall Niddegen pages. Open faced enclosure can hang on a wall. 12 x 25 x 5cm.



Aphonopelma (Mexican Diamondback) 2008. Twined binding with slit warps, waxed linen over western style handmade paper crafted from crudo usually used for making amate. Waxed linen embroidery. 11.5 x 7 x 3cm.

Roberta Lavadour's book arts education has been shaped by workshop based encounters with icons of the book arts world, independent investigation and ten years of studio practice. For more see Mission Creek Press – Desultory Press at <http://www.missioncreekpress.com>. Carolyn Leigh, Tucson, AZ, USA



Esperanza Rising, 2008: a tribute to families who create shelter against all odds. Flag book. 53.4 x 13.7 x 3.5cm.



Two Two's, 2008: balance between chance ... shielded or juggling. Flag book. 78.8 x 15.2 x 2.5 cm.

My one-of-a-kind flag books are made from acid free binder's board and papers from recycled books, Golden and Daniel Smith acrylics, ph-neutral PVA adhesive and finished with Renaissance Wax.

Background includes: 1970-72, Scientific Illustration (which I later taught), University of Arizona including letterpress and offset printing; 2003, book binding and box making workshops with Curt Dornberg, Deer's Run Press, Tucson, AZ; 2007, flag book workshop with Karen Hanmer after first working with her article in *The Bonefolder*. <http://www.CarolynLeigh.com>.

Julie Mader-Meersman, Cincinnati, OH, USA



Flag book format used for the book, "Date Night" made in homage of Friday night dates to the grocery store composed of: reused paperboard packaging (flags); cash register conveyor belt rubber (end papers); coupon sheets (cover

papers); grocery bag paper (envelope for the receipt title on the cover). The book is audibly "clackity" because of the use of paperboard flags and the motion/interaction with the book simulates groceries getting scanned by the cashier as it is opened and closed.11 x 21 x 1.5cm.

MFA, Visual Communication Design, University of Washington, 1996; BFA, Graphic Design, Northern Kentucky University, 1993; Cincinnati Book Arts Society workshop attendee; and self-taught. http://www.originalia.org>.

Enrique Rodrigo Mancho, Valencia, Spain.



Painted linen on leather binding. 25 x 17,5 x 2,5cm.

Trained at the Escuela de Artes Aplicadas, Valencia.

Marvel Maring, Omaha, NE, USA





Two Drum Leaf Books (Tim Ely). Mixed media, watercolor, acrylic, pencil, colored pencil, paste paper covers, Book #1 has a green leather spine, Book #3 has an orange cloth spine. 24 x 13 x 1.2cm.

Marvel Maring has an MFA in Painting from the School of the Art Institute of Chicago (1991) and an MFA in Book Arts from the University of Alabama at Tuscaloosa (2003). She has attended many workshops including two with Tim Ely, as well as two PBI's.

Rhonda Miller, Halifax, Nova Scotia, Canada



Springback binding, English tradition. This is a blank journal, with quarter leather binding using brown deerskin. Cover paper marbled by the binder. Contains 544 pages, Mohawk superfine text weight paper. 13.5 x 8.5 x 3.5cm.

Training was received though numerous workshops including: Paper and Book Intensive at Arrowmont; Nag Hammadi Workshop with Susan Mills, Nova Scotia College of Art and Design; Introductory Book Arts with Nicki Moulder, Nova Scotia College of Art and Design; Historic Book Structures with Susan Mills, Boxes and Portfolios with Joe Landry, Handbound Books 2 with Joe.

Bea Nettles, Urbana, IL, USA



Fate, Being and Necessity, a flag book. Hard bound in white leather with tyvek spine covered with decorative paper. Images are printed on a color Xerox printer. 20 x 10 x 1 cm.



Aging Gracefully, a tunnel book with slipcase. Epson prints on 100% rag paper, laser cut and attached to paper concertinas. Covers are hardbound in gold bookcloth. Slipcase is cloth covered with Epson print insert. 12.5 x 16.5 x 40cm.

Nettles has made books since 1970. Her formal training has consisted of workshops with Heidi Kyle, Barbara Mauriello, and short courses at Paper and Book Intensives. She taught artists' book courses at the University of Illinois for five years before retiring in 2008.

Sabina U. Nies, Ashland, OR, USA



Recollections by Bernard Middleton, Oak Knoll Press & The British Library, Edelpappband, ¹/₄ leather, leather foreedge, Kennet book cloth, marbled end papers, leather headband, acrylic top edge decoration, title on spine in 24k gold, cover title and design in carbon and foil, hand tooled, 8 x 25.7 x 1.6 cm.

Sabina U. Nies is originally from Berlin, Germany. Sabina studied bookbinding with British bookbinder Dominic Riley and the German master bookbinder Tini Miura. Sabina graduated from the American Academy of Bookbinding in Telluride, CO in 2005. She has entertained her own bindery "SUN Book Arts" for ten years and now lives in Ashland, OR. She teaches classes at the San Francisco Center for the Book and at her studio. < http://www.sunbookarts.com/>.

Jana Pullman, Minneapolis, MN, USA



Bound in full goat leather using the split board technique. Blind stamped decoration and gold foil titling done on a kwik print stamping press. Lined borders were done with a hand pallet. Sewn on three linen tapes with three colored silk endbands and colored and sprinkled edges. Endpapers are done with tan Ingres papers and leather joints. 27cm x 17cm x 3.3 cm.

Studied with Jim Dast, University of Wisconsin-Madison and Bill Anthony, University of Iowa. Received a MFA in printmaking with an emphasis in book arts and papermaking. I have worked for libraries and institutions in book and paper conservation and now I am in private practice.

James Reid-Cunningham, Cambridge, MA, USA



The Pleasant History of Lazarillo de Tormes, Gwasg Gregynog, Newtown, Wales, 1991. Limp vellum binding pierced to reveal green silk lining. Back bead linen headbands. Sewn herringbone style on three alum-tawed goatskin thongs. Endband cores and thongs laced into the vellum case. Tyvek single tray box with bone clasps. 26 x 17.5 x 2.2 cm.

James Reid-Cunningham studied bookbinding with Mark Esser at the North Bennet Street School in Boston. Formerly the Conservator of the Graduate School of Design, Harvard University, he is currently the Chief Conservator of the Boston Athenaeum. He is the President of the Guild of Book Workers, and a Professional Associate of the American Institute for Conservation.

Linda Rollins, Silver Spring, MD, USA

Volume 5, Number 1, Fall 2008



What's In Your Wallet?, a flag book. Boards covered with paper scanned and printed from a million dollar bill. "Flags" are collected expired credit cards, facsimiles of credit cards from the never ending stream of credit card applications that come in the mail, "membership" cards and forgotten hotel keys. 17.6 x 9.2 x 1.8cm.

Training received from John C. Campbell Folk School, NC, Dea Sasso, instructor; 1 1/2 years apprenticeship with Joe Fisch, bookbinder, at Capella Book Arts, Ft. Lauderdale, FL, 10 yrs.(binding & restoration); internship at Folger Shakespeare Library, Washington, DC; Binder-in-Residence at Pyramid Atlantic, Silver Spring, MD.

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Peter D. Verheyen, Syracuse, NY, USA



Choo Choo's End. As a bookbinder, model railroader, and lover of children's books focused on railroads, Virginia Lee Burton's *Choo Choo* (1935) is a natural to bind or interpret. It was also begging me to create an artist's book based on it. In the book, Choo Choo bored by his hum-drum life of pulling locals makes a run for, loses his tender, and runs out of steam in the dark woods. In "Thomas" speak, he was not a helpful engine that day. As luck, and fate, would have it, he is saved by the big, bad streamliner in the form of a stylized Union Pacific M10000 that pulls him out backwards. Though mending his ways, Choo Choo will inevitably be rendered obsolete by the streamliner. This book is dedicated to Karen Hanmer and should have been completed for the 2006 Bind-O-Rama, but I had the lazy excuse of being overwhelmed by the Guild's 100th anniversary exhibition. 35 x 7 x 1cm.

Formal apprenticeship at the Buchbinderei Klein in Gelsenkirchen, Germany; internships at the Germanisches Nationalmusum in Nuremberg, Germany, and at the Folger Shakespeare Library with Frank Mowery; worked with Heinke Pensky-Adam and William Minter, and at the Yale, Cornell, and Syracuse university libraries. Past Exhibitions Chair for the Guild of Book Workers. http://www.philobiblon.com

Pamela S. Wood, Tempe, AZ, USA



Rabbit on the Moon, May, 2008, derivative of flag book, is based on Hedi Kyle's panorama book. Japanese Yuzen Chiyogami paper, Canson Mi Teintes, Johannot papers, laser typesetting, 18 kt gold ink. The cover is traditional quarter bound case binding with hand dyed book cloth by the binder. Accordion fold main page is decorated with painted gold stars and rabbit constellations. Flags are adapted to five slip cases, each slip case contains a simple pamphlet stitch booklet and is decorated with moon and rabbit. The five parts tell how the legend of the rabbit on the moon came about. 67 x 12 x 4.5cm.

Studied with Joe D'Ambrosio, Hedi Kyle, Tom Conroy, Chela Metzger, Pam Barrios, Dolph Smith, Jodi Alexander. BFA in Printmaking, Kent State University, post-graduate studies at Cleveland Institute of Art.

Roberta Woods, Lawrence, KS, USA



Twined binding on a copy of *Ireland: From the Act of Union*, *1800 to the Death of Parnell, 1891* short stories selected by Robert Lee Wolff. Endsheets: double folio of Dove Grey. Covers and twining supports: cut from sheets of walnut red and walnut brown Cave Paper. Twining material: waxed linen thread (red, tan, brown, royal blue, mint green). 21.4 x 14.8 x 4.7cm.

BFA Textile Design University of Kansas. Three-year Conservation Intern/GRA for Whitney Baker, Book & Paper Conservator for the University of Kansas. MA Museum Studies-pending spring 2009.

Book Reviews

David Pearson. English Bookbinding Styles 1450-1800. New Castle and London: Oak Knoll Press, The Bibliographic Society of London and British Library, 2005. 221p. ill. ISBN 1584561408(Oak Knoll); 071234828X(British Library). \$65. A review by Chela Metzger.

David Pearson's new guide is aimed at those who work closely with historic bookbindings. By placing the grammar of bookbinding ornament in line with the grammar of other decorative art trends in England and the Continent between 1450-1800, Pearson is able to simplify his discussion of bookbinding styles. Most importantly, he has systematized his many illustrations, so dating bindings and understanding their social status becomes a more manageable task.

He provides an overview of bookbinding interpretation, materials, construction, and the trade. His most detailed chapters cover decorative styles and tool shapes decade by decade, as well as examine "cheap and temporary" bookbindings. The appendices include an important diagrammatic summary of styles, and color photos of typical bindings at 50-year intervals. Other appendices cover language for describing bookbindings and problems in identifying tools and workshops. The book is well illustrated throughout with black and white photos, while the color plates are gathered near the end of the book. The notes and annotated bibliography provide information for further research.

There are a few problems in Pearson's guide. The first he readily points out: only English books are covered, and historical collections will have books bound all over Europe. He rightly notes his effort to connect English styles to Continental styles, and all can agree narrowing his research to make the work manageable is reasonable. Another concern, however, comes in actually reading the book. Flipping back and forth from the detailed descriptions to the illustrations referred to in the text can be painful at times, especially when one paragraph contains many such references. Finally, in the chapter on bookbinding materials and construction, the diagrams of endpaper construction are somewhat confusing, and the chapter neglects the use of "tying up" marks in the leather on either side of the bands on the spine, and does not discuss typical headcap shaping in enough detail.

Pearson states: "The outside of the book—the covering material and the way it is decorated—remains...the main body of evidence available for understanding and interpreting the binding.". This method of interpretation has historically been applied to fine bindings, emphasizing identifiable tools that may lead to identifiable workshops. Instead, Pearson usefully emphasizes styles found in the mass of historical bindings made in unknown shops. He briefly notes the possibility of interpreting bookbinding structure. Pearson's position that such research relies on dismantling books is rarely true. More reasonably, he concludes that, while useful, structural interpretation exposes as much bewildering variety as the study of individual tools has, and has not lead to identifiable workshops. Other roles for structural analysis are not considered here. Focusing on the outside of the book also allows him to avoid the issue of identifying a binding as 'bespoke" (created on demand for the owner), or trade (bound on order of the printer/publisher before sale), again allowing Pearson to reach his goal of helping readers identify general binding trends.

This guidebook brings together both general and detailed information and innovative illustrations of bookbindings. His arguments are well supported, especially by the photographs, and he is careful to note that styles do not fall into exact time frames. His target audience of librarians, curators, archivists and other professionals should find this book useful, and may well wish such handsome guides existed for other countries during this period.

A Companion to the History of the Book, Edited by: Simon Eliot (University of London) and Jonathan Rose (Drew University). Malden, MA: Blackwell Publishing. 2007. Hardcover, 616 pages, 23 illustrations. ISBN: 978-1-4051-2765-3. US \$158.95. A review by Donia Conn.

"Books make history... Conversely, books are made by history" is an apt description of this book by editors Simon Eliot and Jonathan Rose in their introduction. This is not a startling comment to those of us who work in or are involved in the field of books, bookbinding, book arts or conservation. What is a pleasant surprise is how well a volume focusing on the history of the book from the textural and cultural aspects can also speak so well to those with interests in the history of bookbinding and the book as object.

This hefty tome is well laid out into four sections: I. Methods and Approaches (focusing predominantly on bibliography and textural scholarship), II. The History of the Material Text (focused on region and era), III. Beyond the Book (ephemera and new technologies are of most interest), and IV. Issues. As with any book with chapters written by different authors, there are some chapters that are not as stellar as others. However, as a whole, the book provides clear and concise information on the book in its widest sense, from graffiti to "Google Books", accessible to both scholar and layperson alike. For those most interested in bookbinding and

the history of book as object, the most interesting sections are II and III, with two key chapters in section IV.

Section II, The History of the Material Text, is most relevant for those interested in the history of bookbinding and the book as object. Chapter 5 on clay tablets starts by challenging us with the question "what is a book?" and gives us a good foundation in the early forms of writing and the development of language. The author's case studies help to bring this often mysterious phase of our cultural history into perspective and show us that, in many ways, civilization hasn't changed all that much; teaching, commerce, and reference were the primary uses for written information.

Chapter 6 on papyrus gives us an introduction to the process of manufacture and why the scroll form was so prevalent with this material. We also start to get a sense that an industry is beginning to be built around the production of papyrus scrolls from the production of the raw material in Egypt to scribes and booksellers in the Greco-Roman period.

From papyrus, we shift our focus from the ancients to the development of the book in the East. Chapter 7 on China gives us a great history of the development of books in China from writing and binding of bamboo to the development of paper. The chapter also lays out the development of binding from scrolls to xianshuang binding, the side-sewn, thread bindings we are all familiar with. This chapter is very interesting reading for anyone who relishes working with Eastern paper and bindings. The following chapters on Japan, Korea and Vietnam, and South Asia help to complete the understanding of the development of the book in this part of the world and to show the differences and parallels between East and West in the development of books.

For those interested more in the decorative and calligraphic elements of books, the chapters on Hebraic and Islamic books will give a good, historical introduction to the topic.

Chapter 13 begins the journey into the Western world and the codex. The Triumph of the Codex, Parchment and Paper, and The Gutenberg Revolutions guide us on the progression from manuscript to print, religious to secular texts and introduces us to the field of paleography. We travel into the world of manuscripts, scribes, and the Medieval era where vernacular languages emerge in text, the book moves from religious to secular and personal and reading begins to spread from the monasteries to the wealthy and not-so-wealthy alike. Gutenberg and the invention of printing from movable type accelerates the evolutionary process begun with manuscripts and continues to expand the ownership of books beyond the privileged classes. The Gutenberg chapter gives a good description of the techniques of manufacturing type and printing in this early period.

From Chapter 16 and on, the book investigates the development of the trade, reading habits, innovations, regulations, distribution, culture, and technology in Europe, Britain and the US from the 16th through the 20th centuries. In the midst of this evolution comes the Industrial Revolution. Bob Banham has written a great chapter on the industrialization of the book looking at the developments in papermaking, presses, printing, binding, type manufacture, color and photography. This chapter, unlike many, has many illustrations to help understand the advances made in this era.

Section III provides a glimpse of the world surrounding books and book culture with the development of periodicals, the importance of ephemera in the study of book history (also many nice illustrations), and the recent history and development of hypertext in the 1960's and the digital world we find ourselves in now.

Section IV has two chapters of interest to those whose focus is not so much book culture and bibliography but bookbinding and book arts. The chapter on non-textual uses of books is an intriguing, look at how the book as object has been used throughout history and where some of our uses today developed, from taking oaths to being a pretty background in someone's decorating scheme. The Book as Art surveys the development and progression of the book from functional to art, distinguishing between text and book beyond concept and form to appeal and meaning. Illumination, printed images, textual layout, type design all come in to play in this chapter as well as illustration and modern artists' books.

The final chapter broaches the question of the future of the book, inspires us to think, and leaves the answer up to us and how we relate to books in the future.

A Companion to the History of the Book provides a wealth of information to readers of all levels in a well laid out and written volume. More illustration would have been helpful but would have understandably increased the size of this already large volume. I would not recommend reading all 617 pages through from beginning to end all at once but a full, systematic read through does provide a very solid foundation to the history of the book.

The Changing Book: Transitions in Design, Production, and Preservation. Kraft, Nancy E. and Huffman, Holly Martin editors. Binghamton, NY: Haworth Press, 2008. ISBN 978-0-7890-3460-1. \$75. A review by Peter D. Verheyen.

The Changing Book: Transitions in Design Production, and Preservation publishes the proceedings of the conference of the same name organized by and held at the University of Iowa July 22-25, 2005. This conference tied together many threads, from an exhibition honoring the life's work of William (Bill) Anthony, the first conservator at the University of Iowa and teacher to some of today's best, to a "tent show" which gave the public the opportunity to learn about the book arts hands-on, to 19 formal presentations spanning from the evolution of the "book," trends in book production, and the future of the physical book in the face of digital technology. Also covered were aspects of the craft of bookbinding, conservation, book arts, and education in the fields.

The proceedings begin with Mary Lynn Ritzenthaler's telling the story of "Craft Bookbinding in Chicago and Iowa," focusing on the work of Helen Gates Starr and the Hull House Bindery, The Hertzberg Bindery, and Bill Anthony. While coming from very different backgrounds, all three shared a strong commitment to the craft of bookbinding and made a significant impact. The art and craft of bookbinding and conservation are also discussed through the papers of Christopher Clarkson who spoke on conservation of the Kennicott Bible, James R. Canary whose paper "From Pothi to Pixels and Back Again" described the book in Tibet, to Pamela Spitzmueller's "Conservation and Book Arts, and Tim Ely's speaking on his own work in "Signal to Noise." Of these, Spitzmueller's paper is perhaps the most interesting in this group as it shows how the book as historical artifact, its conservation, and the book arts have all influenced one another – a reality given that so many conservators are also book artists and vice-versa.

There were also two panel discussions. The first of these composed of Anna Embree, Mark Andersson, Consuela (Chela) Metzger, Julia Leonard, and Steve Tatum discussed "Bookcraft Education" in the context of the leading educational centers where they work to train future generations of binders and conservators – The University of Alabama's MFA in Book Arts, The North Bennet Street School, the Kilgarlin Center for the Cultural Record at the University of Texas at Austin, and The University of Iowa Center for the Book. Central to their discussion were the "conflicts" between formal "academic" training and the apprenticeship model. Both have benefits and drawbacks, but it is the balance between both that will be central to "defining the parameters of fine book craft education. The second panel discussed "Bill Anthony's Influences on (his) Apprentices." This panel was composed of Bill Minter, Mark Esser, Lawrence Yerkes, Sally Key, and Annie Tremmel Wilcox, all former apprentices and students of Anthony and conservators working either in libraries or private practice. Often described as the "Johnny Appleseed" of binders for the way he directly or indirectly contributed to the training of generations of binders and conservators, it is clear that this is no idle claim. Traditionally apprenticed and trained in "the trade" like John Dean, Anthony likewise made the transition to conservation by showing that craft and conservation are not incompatible and the good craft is essential for good results in all aspects of bookbinding, conservation, and the book arts. Equally clear were the very deep personal touches that Anthony left with those who worked with him.

Don Etherington spoke on the "Historical Background of Book Conservation," looking back at the past forty years since the floods in Florence that did much to shape the relatively new field of book conservation in the context of the library preservation programs the grew out of through the efforts of such visionary leaders as Peter Waters, Paul Banks, Gary Frost, John Dean. Continuing, Etherington chronicles the development of modern library preservation programs and regional centers. This theme of programmatic preservation is continued in the papers of Yvonne Carignan on "Who Wants Yesterday's Papers," John Dean on the "World View of Book Conservation," Jeanne Drewes on "Alkaline Paper versus Acidic Paper in Current Publishing," and Roberta Pilette on "Book Conservation within Library Preservation."

The future of the book whether in analog, digital, or a combination of both was also discussed at length. Walter Cybulski spoke on how paper will endure in the face of digital collections and some of the pitfalls of digital in "e-Miles to Go and Promises to Keep," Kim White and Sarah Townsend talked about "The End of Paper" and how electronic media are shaping the way people communicate and work in the arts and beyond, and D.J. Stout spoke on the role of "Book Design in the Changing Book" using his own "graphic design daredevilery" to illustrate his points. As we head back towards the physical book, James Larsen spoke to the "Historical Background of Print/Bind on Demand," and Paul Parisi on "On Demand Book Production with New Technologies." The movement to on demand book production is an outgrowth of the outputting of microfilmed texts and is seen as the solution, especially for esoteric titles or preservation copies, both of which carry with them low print runs.

The Changing Book: Transitions in Design Production, and Preservation ties together the many threads of this important conference, providing a valuable starting off point for those just beginning to develop an understanding of these topics, as well as those already actively engaged.

HE CHARGING BOOK Transitions in Design, Production, and Preservation

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MFA IN THE BOOK ARTS

50



The Master of Fine Arts in the Book Arts Program

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Our website features nearly seventy *podcast interviews* with amazing book artists (available on iTunes as *Book Artists and Poets*), video from some of our *bookmaking trips to Cuba*, as well as *current news* about the program. Visit us at www.bookarts.ua.edu. Ad Kanyalak presents his Creative Project Thesis, *Faced*.

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