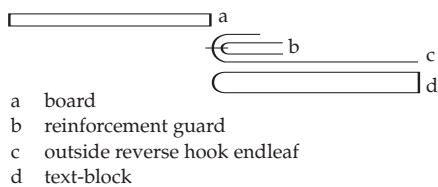


Andrew Honey

The conservation of *Annotationes in Libro Evangeliorum* using a natural cloth hollow over a moulded Japanese paper spine-former

This paper describes the treatment of the Merton College, Oxford, copy of Hugo Grotius's *Annotationes in Libro Evangeliorum*, a 1641 Amsterdam-printed folio in a contemporary English (probably Oxford) trade binding.¹ *Annotationes* is one volume from the Old Warden's Library, a collection of some 1400 volumes in the possession of successive Wardens or heads of Merton College and kept in their lodgings. After the Second World War the collection was made over to the college and became part of the college's library collection. In 1994, it was moved into the historic Upper Library. The library at Merton College, which was built between 1373–78, is situated within the oldest quadrangle in the University of Oxford and preserves a stall method of shelving dating to the last decade of the sixteenth century. The Old Warden's collection appears to have been a circulating one which would account for its appearance today, a group of plain, trade bindings containing texts reflective of the academic curriculum, chosen for teaching purposes and heavily used over the years. Few of the books have been repaired in the past and this seeming neglect has resulted in the preservation of a collection of largely untouched trade bindings. A refurbishment and book-shoeing project of the collection has been carried out and conservation treatments to some of the most vulnerable volumes have followed.

Fig. 2



¹ This article draws on two papers given by the author 'The conservation of *Annotationes in Libros Evangeliorum*' at the IPC conference 'Book Conservation: A Review of Current Practice' held in London, 30–31 March 1998 and 'Papier mâché spine-formers as a repair technique in rebacking' at the Society of Archivists conservators' training conference 'Conservation: Craft and Culture' held in Stafford, 3–6 Sept 2002.

² Dimensions: binding 324 x 226 x 89mm, text-block 315 x 206 x 72mm.

Description and condition

Annotationes had a printed paper text-block of 100 folio sections of six bifolia (Fig. 1).² The endleaves were single leaves of plain paper with outside reverse hooks and printed-waste reinforcement guards (Fig. 2). The text-block was sewn two-on, on five single supports, in a regular abbreviated pattern repeating every four sections. The single supports were of heavy alum-tawed leather twisted for bulk with tanned leather, and were all laced in a straight two-hole path into laminate pulp boards. It had endbands, worked in blue and white thread with five tie-downs, over a tawed core stubbed to the width of the spine. The text-block edges were ploughed and had been sprinkled yellow and red after the endbands were worked. The book was covered in brown tanned calf leather,

Fig. 1 Merton Library, 12.E.1 (Old Warden's Library), Grotius, Hugo, *Annotationes in Libros Evangeliorum*, Amsterdam, 1641. Before treatment.

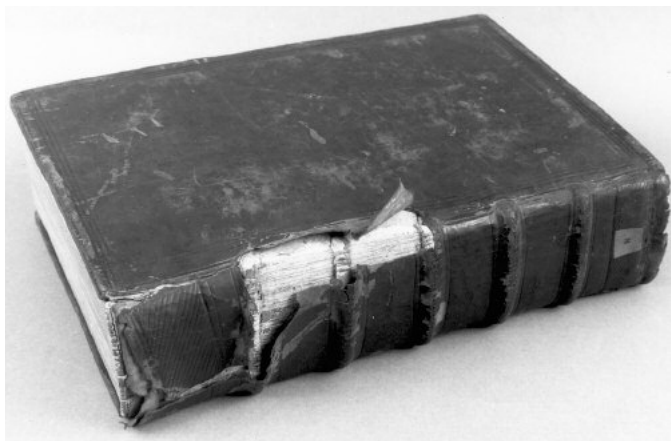


Fig. 3 Upper endleaf and inner face of board, before treatment.

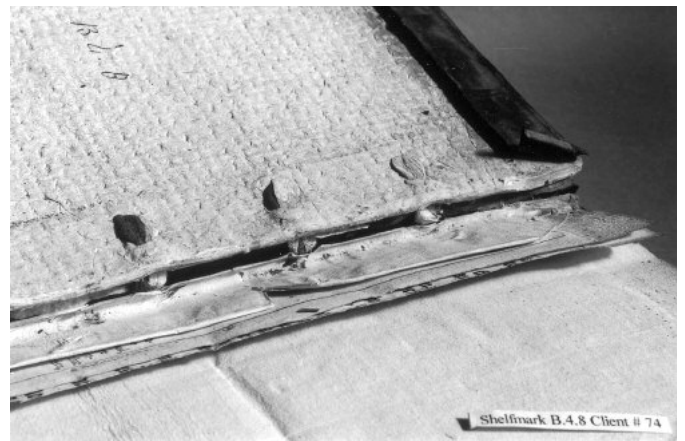




Fig. 4 Detail of spine, sewing supports 4 and 5.

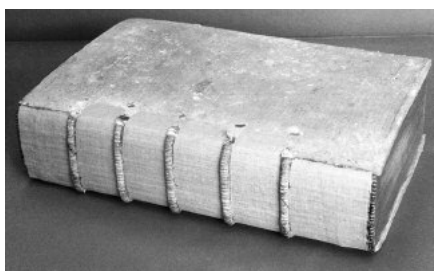


Fig. 5 Volume with aerolinen liners.

edge pared and turned in at all edges. The corners had been pre-cut then turned in with an overlap, the fore-edge turned in last. The endleaves had not been put down as board sheets, that is the outermost leaf had not been adhered to the board, leaving the inner face of the boards bare. The tooling was all blind, with a three-line roll border on the boards, single fillet on the centre of the raised bands which were flanked by double fillets. The first and last spine panels had hatching from upper left to lower right, a characteristic of Oxford work.³

The text-block was in generally good condition though the upper endleaf and prelims were crumpled and pleated with minor tears and abrasions to the reverse hook. The sewing supports and lacing were all intact. The covering leather was lifting away from the spine and the spine-edge of the boards, with losses extending across the three lower panels. The covering leather was also splitting at the joints, head and tail. The leather was lifting at the spine-edge of the boards and in places on the spine, leading the boards to hinge at the point where the sewing supports first entered the boards, some 7–10mm from the joint (Fig. 3). This had led to abrasion of the endleaves by the free spine-edge of the board and had caused damage to the covering leather at the spine and board edges. The grain layer of the covering leather was also detaching in large flakes on the spine and on the board edges. The endbands were sound.

A conservation treatment was sought that would protect this vulnerable volume from further damage whilst maintaining the character of the binding and its place in a larger collection of largely untreated bindings. The treatment needed to resolve three problems: to enable the boards to hinge at the joint once more; to consolidate the fragile grain layer of the covering leather at the spine; and to support the consolidated, fragile and fragmentary leather on the book.

Board hinging

Due to the deteriorated state of the paste used for covering, the leather, already partially loose, was easily separated from the boards with a long, wooden lifting spatula. When the volume was originally covered, the leather on the spine had been poorly moulded around the sewing supports and the spine had been loosely tied up. This led the covering leather to 'tent' on either side of the heavy supports. When the leather was removed, loose paste deposits were revealed with a heavy build-up around the supports at this tenting (Fig. 4). There were no spine liners. The loose and lifting paste deposits on the spine and supports were removed mechanically with a scalpel. The upper endleaf and title page were then relaxed *in situ* between damp blotters and dried under light weight. Paper repairs were then carried out to the endleaf, prelims and reverse hook. The removal of the covering leather also revealed the pulp boards, the edges of which were delaminating into three distinct layers. Each lamina had a distinct impression of a coarse textile on both surfaces. An unrefined adhesive residue containing wheat bran was visible between the separating board laminae. The cleaned spine was lined with medium-weight Japanese paper panel liners, applied with wheat starch paste, as a future release layer. Transverse aerolinen liners, washed to pre-shrink, were then pasted to the spine and to the outer face of the boards.⁴ The linings of panels 1 and 6 were pasted between the two outer delaminating layers of the pulp board, as these were accessible, as a stronger attachment. The delaminating board layers were readhered with dilute wheat starch paste. Pasting the liners to the boards, as described, strengthened the board attachment and enabled the boards to hinge at the joint (Fig. 5). The inner face of the boards was left exposed.

Consolidation of the covering leather

The covering leather, on removal, proved to be in generally good condition apart from the very friable and fragile grain layer on the spine and board edges. The corium seemed sound and the leather was robust over the boards. The entire spine surface, however, was crazed into individual flakes, which were lifting particularly over the sewing supports (Fig. 6). There were toned losses in the grain layer from an earlier treatment. A surface stain had been wiped over the

³ David Pearson, *Oxford Bookbinding 1500–1640* (Oxford: Oxford Bibliographical Society, 2000) 39–40; and Strickland Gibson, *Early Oxford Bindings* (Oxford: Bibliographical Society, 1903) 41 and plate XXX.

⁴ 'Transverse liners' is a term coined by Nicholas Pickwood to describe transverse strips adhered between the sewing supports but also long enough to be adhered to the boards. See J. A. Szirmai, *The Archaeology of Medieval Bookbinding* (Aldershot: Ashgate, 1999) 195 and Fig 9.13/2.



Fig. 7 Early surface stain on leather at spine band.

entire surface of the leather, which could be seen at the turn-ins where it extended in places onto the boards and as areas of toned corium where the grain layer had already detached (Fig. 7).⁵ The spine was gently swabbed with acetone under low-power magnification to remove any previous leather dressing.⁶ Trials were then carried out with a range of dilutions of Paraloid B72, 67 and 44 in acetone and dilute aqueous gelatine solutions as possible consolidants for the grain layer.^{7, 8} The trial attempted crudely to replicate the problem of lifting flakes by adhering a light-weight bond paper to the grain side of a modern leather by floating the consolidant under the edge of the paper with a 000 brush, the probable method to be used on this volume. When they were sufficiently liquid to flow under the paper's edge, the acrylics sank through the leather, failing to adhere the paper and stained the flesh side. When they did adhere the paper, they were too viscous to flow under the paper's edge. An aqueous gelatine solution, applied at the edge of the trial paper, managed to adhere it without sinking through the leather. Gelatine was therefore chosen as the consolidation method as it proved to be the most effective for flow, adhesion and ease of application. The spine was treated under low-powered magnification by applying a warm 3% w/v gelatine solution in deionized water around and floated under loose flakes, the flakes were then gently pushed back into place with a Japanese brush. Larger detached flakes were adhered with a warm 10% w/v gelatine solution. This stabilized the grain layer, enabling gentle flexing of the spine without further losses, but unfortunately it caused some discolouration to areas of exposed corium not previously toned.⁹

Supporting the spine leather

The book's boards now hinged at the joint and the fragile grain layer had been consolidated. The leather was in one piece and intact apart from the losses across two spine panels and at the head and tail caps. However, too much cannot be expected from a consolidant when the treated leather needs to move. Flexing of the consolidated covering leather, whilst the book was used, would need to be limited if the still vulnerable grain layer was not to suffer further damage. Recovering the volume as a tight-back, as originally planned in the treatment proposal, would lead to great strain on the consolidated spine when used and would probably lead to further losses of the grain layer. Releasing the covering leather from the spine of a tight-back binding to create a natural hollow-back is one method for reducing this flexing and can protect vulnerable leather from further damage.¹⁰ It enables the leather to open as a shallow arc rather than following the shape of the spine.



Fig. 6 Detail of covering leather at spine.

⁵ This was clearly a remedial process aiming to tone losses in the grain layer and improve its appearance rather than part of the original binding procedure. It is not possible to tell when this was done though later losses to the grain layer, showing as lighter areas, would point to an early date.

⁶ Small quantities applied with a cotton wool bud. Acetone is a strongly polar solvent which can move unbound tannins in leather and cause darkening if used in larger quantities.

⁷ Paraloid B72: Ethyl methacrylate co-polymer acrylic resin; Paraloid B67: Isobutyl methacrylate polymer acrylic resin; Paraloid B44: methyl methacrylate co-polymer acrylic resin. See C. V. Horie, *Materials for Conservation* (London: Butterworths, 1987) 106–109.

⁸ Following a conversation with Christopher Calnan about possible consolidation techniques. For the use of gelatine to reattach a lifting leather grain layer to underlying connective tissue, see H.A.B. van Soest, T. Stambolov and P.B. Hallebeek, 'Conservation of leather', *Studies in Conservation* 29 (1984): 28.

⁹ Further research into suitable consolidation methods for physico-mechanical damaged leathers is needed. For a recent overview of current methods, see *Guidelines for the Conservation of Leather and Parchment Bookbindings*, a translated and revised edition of Peter Hallebeek, et al *Richtlijnen voor de conservering van leren en perkamenten boekbanden* (Den Haag: Koninklijke Bibliotheek; Amsterdam: Centraal Laboratorium voor Onderzoek van Voorwerpen van Kunst en Wetenschap, 1995). The English version is available at: <http://www.kb.nl/kb/resources/frameset_kb.html?/kb/cons/leather/> (Mar 2003).

¹⁰ A natural hollow-back is formed when the covering material of a binding is not adhered to the spine.



Fig. 9 Cling film barrier on spine.

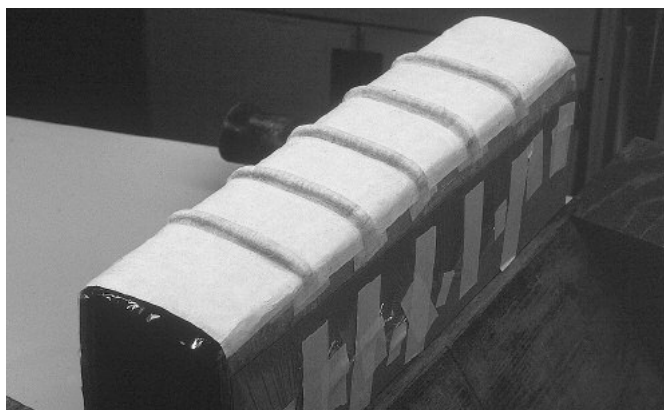


Fig. 10 Moulded Japanese paper spine-former drying.

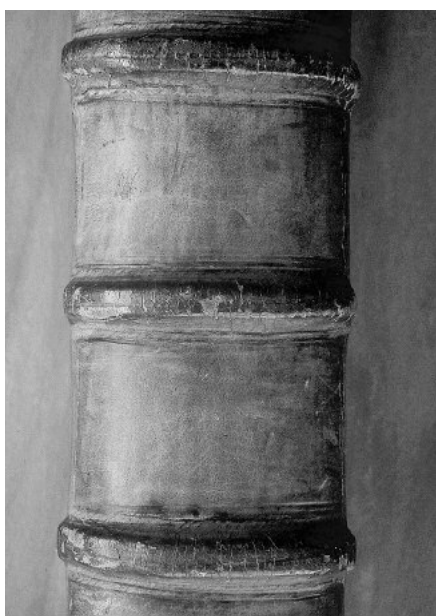


Fig. 8 Detail of spine showing compression damage to the leather over raised sewing supports 3 to 5. Bodleian Library, University of Oxford, Auct. 2R.1.4, Manutius, Aldus, In *M. Tullij Ciceronis de philosophia volumen primum (secundum) . . . commentarius*, Venice, 1583 and Manutius, Aldus, In *M. Tullij Ciceronis de officijs libros tres . . . commentarius*, Venice, 1581, bound as one volume. Two works from 72 bought by the library in 1603 with a gift of £50 from Sir Walter Raleigh. The works were bound with the donor's arms tooled as a centrepiece, see David Rogers, *The Bodleian Library and its Treasures 1320–1700* (Henley-on-Thames: Aiden Ellis, 1991) 27.

The covering leather on the spine of a tight-back binding covers a greater distance over the raised sewing supports than between them. With a flexible spine when the volume is opened this difference in quantity of material leads to great compression of the leather over the sewing supports.¹¹ Although it undergoes this compression, it is supported, as it is adhered directly to the spine and to the sewing supports. Damage over the supports, often seen as vertical cracks and losses to the grain layer, seems to occur when the bands become too bulky in relation to the spine. Early seventeenth-century tight-back English bindings, which often have very heavy single twisted raised sewing supports sitting high on the spine, are a good example of this (Fig. 8). Unfortunately changing a tight-back binding with heavy raised sewing supports into a natural hollow will also lead, on opening, to great compression where the moulded leather covers the supports. This may even lead to kinking of the moulded leather as it is no longer supported by the sewing support. I investigated a method of supporting the spine of *Annotationes* and creating a shallow semi-rigid arc on opening by recovering the volume as a natural hollow using a moulded support or 'spine-former' within the natural hollow which could support the covering leather and counteract this compression on opening.¹² The spine-former would need to be shaped around the very bulky sewing supports, and comply with the space constraint of recovering with the largely intact leather.

The natural hollow was created with a Japanese papier-mâché spine-former and a slotted aerolinen liner. I had recently visited 'The Art of the Picture Frame' exhibition which included a video of various frame conservation treatments.¹³ One treatment involved rebuilding part of a damaged papier-mâché frame by taking a cast, with cotton rag paper and wheat starch paste, from a complex silicon rubber mould of an undamaged part of the frame.¹⁴ The resulting paper cast impressed me both with its strength, flexibility on removal from the mould, and its ability to take a complicated shape. I made a simple trial over a raised band on a dummy book spine with Japanese paper, the results were promising and I experimented further with a whole dummy spine. It is this technique that I used to produce a spine-former.

¹¹ The compression of the covering layer on the spine of a tight-back binding that occurs on opening is explained and analysed in: Tom Conroy, 'The movement of the book spine', *Book and Paper Group Annual 6* (Washington DC: American Institute for Conservation, 1987) 4, Fig. 5; J. A. Szirmai, 'Conservation binding for medieval codices', *Care and Conservation of Manuscripts 6*, eds. G. Fellows-Jensen, P. Springborg (Copenhagen: Museum Tusculanum, 2002) 150, Fig. 61. They, however, do not differentiate between the compression of the

covering leather between the sewing supports on the spine and the greater compression that occurs in the leather covering the raised sewing supports.

¹² The technique of releasing the covering leather from the spine of a tight-back binding to create a hollow-back either to enable a 'tight' binding to open more freely, or, as in this case, to protect a fragile spine covering is not uncommon. Since giving this paper, I have been told of similar methods used by other

conservators, although I am not aware of any published descriptions.

¹³ Held at the National Portrait Gallery, London, 8 November 1996 to 9 February 1997. The video *The Art of the Picture Frame* (running time 10 minutes) was produced by the gallery to accompany the exhibition and showed the conservation of four frames.

¹⁴ Personal communication with Richard Hallas, Frame Conservator at the National Portrait Gallery, London, Mar 2003.

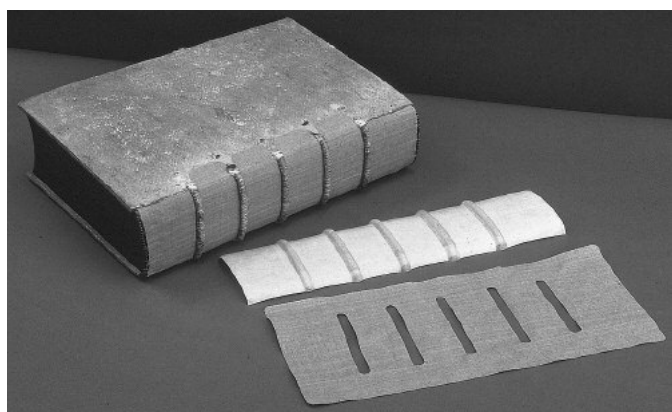


Fig. 11 Volume, spine-former and slotted linen liner.

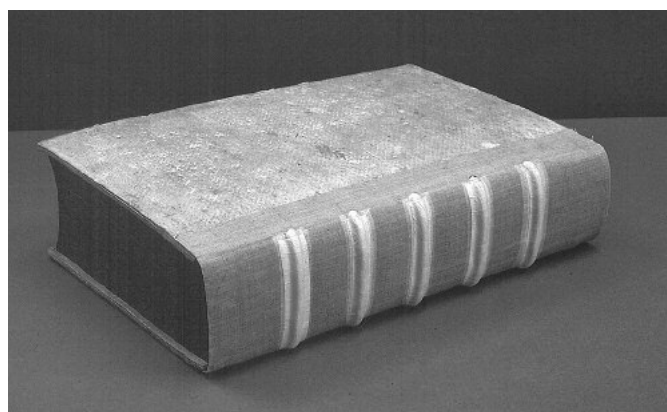


Fig. 12 Natural hollow adhered to volume.

The book was to be used as the mould so that the spine-former would accurately match the shape of the spine. Cling film was used as a barrier and stretched across the exposed spine, moulding it around the bands without creases, and was secured with masking tape to a sheet of paper folded around the boards (Fig. 9).¹⁵ *Minogami*, a light-weight Japanese tissue, was then pasted out and placed onto the cling film, over the bands, and brushed down with more paste. *Tonosawa*, a heavier weight Japanese paper, was pasted between the bands then a further layer of *Minogami* was pasted again over the bands. The paper was moulded to the spine and supports with a pounding motion using a stiff Japanese brush (Fig. 10). The spine-former was allowed to dry and then lifted clear of the spine and trimmed to the line of the joint. The cling film was then removed. A washed aerolinen spine liner, slotted to accommodate the sewing supports and extending onto the outer face of the boards, was cut (Fig. 11). The spine-former was put in place on the spine and the aerolinen liner was pasted out with a strong flour paste and stuck to the spine-former and the boards creating a moulded natural hollow that accurately followed the shape of the spine (Fig. 12). This light-weight and thin hollow opened in a shallow arc but the compression at the bands led to kinking of the paper over them. Further layers of *Minogami* were pasted over the bands and allowed to dry between each layer, until the bands had enough rigidity on opening not to kink (Fig. 13). Seven layers were eventually used, bringing the total to nine layers over the bands. It was important to build these up gradually to monitor how many layers were needed.¹⁶ Fortunately the tenting of the covering leather around the raised bands and the heavy paste deposits, now removed, allowed space for spine-former and the linen liner.

In subsequent treatments I have refined the process of making these spine-formers. I now put down one layer of paper between the bands, then three layers over the bands, then a final layer between the bands trapping the edges of the paper moulded over the bands. The first layer of paper both between and over the bands is moulded into place with water only, with the smooth side of the paper to the cling film. The next layer is pasted out with a very dilute paste again moulding it into place; this layer is put fibrous side down. The final layers are also put fibrous side down, leaving the two outer surfaces of the spine-former smooth. Each layer is moulded in place, with a pounding motion, using a stiff Japanese brush. My original technique used two weights of Japanese paper, a light-weight paper over the bands and a heavier paper between them but I now use a medium-weight paper for both. A recent spine-former and linen liner measured 0.37mm between the bands and 0.47mm, with a total of ten paper layers, over the bands. The use of water for the first layer leaves no paste residue to the underside of the spine-former reducing the risk of accidentally adhering it to the spine. The sandwiched layers, using the different surfaces of Japanese paper and its long fibre structure, produce a very compact spine-former capable of taking an accurate shape.

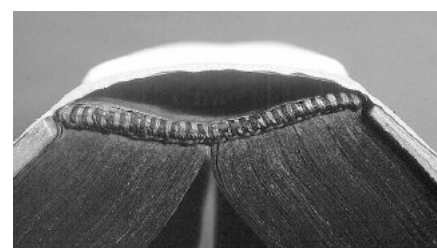


Fig. 13 Opening characteristic of natural hollow with spine-former.

¹⁵ Cling film is a low-density polyethylene film food wrap.

¹⁶ If too many additional layers are pasted at once they will, when dry, act as one distinct layer and separate from the spine-former on opening.

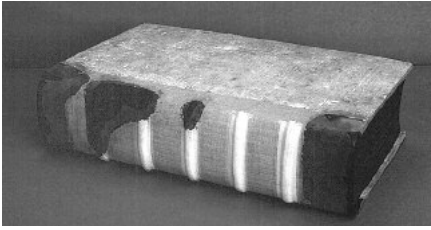


Fig. 14 Infill patches on spine, excess leather ground away to accept original without distortion.



Fig. 15 Volume after treatment.

The natural hollow and spine-former were strong and flexible enough to support the consolidated covering leather on the book and would limit further damage when it was used. Before the book was recovered, surface-stained calf leather patches were pasted onto the hollow, over the areas that losses in the original leather would leave exposed.¹⁷ This was primarily to provide an even thickness of covering leather across the spine, the infills helping to spread the compression evenly on opening. It would also improve the look of the repaired volume and protect the spine-former from damage. Before recovering, the original covering leather was held up to the patched spine and the contours of the losses were marked on the patches. The excess repair leather was ground away with a diamond abrasive bit held in a flexible drive shaft so that the original leather would fit in place without distortion (Fig. 14).¹⁸ The original leather, to keep it as dry as possible, was pasted out twice with a dry wheat starch paste and the boards were pasted once. The book was recovered and the spine tied up. Even with these precautions further lifting of the grain layer flakes occurred. When dry, the lifting flakes were readhered with dilute gelatine in deionized water (3% w/v), floating it under loose flakes and replacing the flakes separated during covering. The two courses of consolidation with gelatine had led to uneven discolouration of the exposed corium which was slightly disfiguring. As a result the consolidated corium was toned with watercolour gouache to a shade slightly lighter than the remaining grain layer, matching the earlier stain treatment. The exposed corium was preserved untouched at the head of the spine where the grain layer was entirely lost. The consolidated but still vulnerable spine grain layer was given a light coating of leather dressing to create a mechanical barrier to prevent the casual lifting of flakes in use (Fig. 15).¹⁹ Finally the book was housed in a book shoe, to support the text-block and binding on the shelf.²⁰ It is recommended that stepped foam wedge book supports are used when the volume is consulted, allowing room for the shallow arc of the spine between the wedges.²¹

Conclusion

The use of a moulded paper spine-former allowed a natural cloth hollow to control the spine's flexing on opening to a shallow but semi-rigid arc. This meant that the vulnerable and friable spine covering leather could be preserved on the recovered volume. I have found this to be a useful conservation technique when treating volumes with similar problems. It can support fragile, vulnerable, or fragmentary spine-covering leather on a binding which cannot safely be replaced as a tight-back. The technique relies on sound board attachment and sewing as it places additional stress on the text-block spine and joints. It does not allow space for reinforcing material to be added to the original sewing supports and thus can only be used in limited circumstances.

¹⁷ Stained with Irgaderm metal complex liquid leather dyes.

¹⁸ Sintered diamond abrasive bit and 'CC' series flexible shaft, both from Foredom Electric Company, Bethel, CT 06801, USA.

¹⁹ Workshop produced leather dressing: 250ml Neatsfoot oil, 250ml lanolin, 7.5g Carnauba wax.

²⁰ Christopher Clarkson, 'The book shoe: Description and uses', *Oxford University Libraries Bulletin* 41 (1984) 4-7 and Pascale Regnault, 'Putting shoes on Duke Humfrey. A passive conservation measure in the Bodleian Library, Oxford', IADA: Pre-prints of Eighth Congress, Tübingen, 1994, 21-28.

²¹ Clarkson Book Support System.

Acknowledgements

This work was carried out during my internship at West Dean College under Christopher Clarkon and I would like to thank him for his advice and assistance. I would also like to thank Jane Eagan and Nancy Bell of the Oxford Conservation Consortium, Dr. Sarah Bendall, Emmanuel College, Cambridge, Dr. Julia Walworth, Merton College, Oxford, The Warden and Fellows of Merton College, Oxford, and Sabina Pugh of the Bodleian Library.

Summary

This paper describes the conservation treatment of a 1641 Amsterdam-printed folio in a contemporary English tight-back trade binding. Transverse linen liners were used to improve board hinging, and consolidation, with gelatine, of the detaching leather grain layer is described. A method of supporting the consolidated leather using a natural cloth hollow over a moulded Japanese paper spine-former, enabling the spine to open as a shallow but semi-rigid arc, is explained.

Résumé

<<La conservation-restauration des *Annotationes in Libro Evangeliorum* en utilisant un dos creux naturel en tissu sur un papier Japon appliqué sur le dos>>

Cet article décrit le traitement de conservation-restauration d'un in-folio imprimé à Amsterdam en 1641 avec une reliure commerciale anglaise contemporaine au dos collé. Des bandes de toile transversales ont été utilisées pour renforcer les charnières des plats. On décrit également la consolidation de soulèvements de la fleur du cuir avec de la gélatine. On explique une méthode pour soutenir le cuir consolidé en utilisant un tissu composé de fibres creuses naturelles sur un papier Japon fait main appliqué sur le dos permettant à celui-ci de s'ouvrir en un arc profond mais semi-rigide.

Materials and suppliers

Paraloid B72, 67 & 44:
Rohm and Haas (UK) Ltd
Westgate, Aldridge
West Midlands WS9 8YH
UK

Food-grade leaf gelatine:
Rousselot Ltd
Dunn House
Charnham Lane
Hungerford
Berkshire RG17 0EY
UK

Minogami Usukuchi no. 3 Japanese paper:
Atlantis European Ltd
7-9 Plumbers Row
London E1 1EQ
UK

Tomosawa Japanese paper:
T N Lawrence & Son Ltd
208 Portland Road
Hove BN3 5QT
UK

Aerolinen:
Samuel Lamont & Sons Ltd
23 Henry Street
Ballymena BT42 3AA
UK

Daler Rowney Designers Gouache:
Rowney Daler Ltd
Peacock Lane
Bracknell RG12 8SS
UK

Natural Bookcalf:
Harmatan Leather Ltd
Westfield Avenue
Higham Ferrers
Northamptonshire NN10 8AX
UK

Irgaderm liquid leather dyes, from CIBA-GEIGY, Dyestuffs and Chemicals:
Clariant UK Ltd
Calverley Lane
Horsforth
Leeds LS18 4RP
UK

Clarkson Book Support System:
Polyformes Ltd
Cherrycourt Way
Leighton Buzzard
Bedfordshire LU7 8UH
UK

Resumen

"La conservación de *Annotationes in Libro Evangeliorum* usando un lomo de tela con fuelle natural sobre un lomo previamente cubierto de papel japonés"

Este artículo describe el tratamiento de conservación de un folio impreso en Amsterdam en 1641 que presenta una encuadernación contemporánea inglesa comercial de lomo unido. Para mejorar la bisagra de la tapa se usaron refuerzos de lino transversales. También se describe la consolidación con gelatina de la capa granosa de cuero desprendida. Se explica un método de sostener el cuero consolidado usando un lomo de tela con fuelle natural, sobre un lomo previamente cubierto con papel japonés, el cual permite que el lomo se abra con un arco poco profundo pero semirigido.

Zusammenfassung

„Konservierung/Restaurierung der *Annotationes in Libro Evangeliorum* mit einem natürlichen Hohlrücken aus Stoff über einem Rückenformer aus Japanpapier“

Dieser Artikel beschreibt die konservatorisch-restauratorische Behandlung eines 1641 in Amsterdam gedruckten Folianten in einem zeitgenössischen englischen Verlagsseinband mit festem Rücken. Um die Verbindung mit dem Buchdeckel zu verbessern, wurden die Bundfelder mit Leinenstreifen mit Flügen hinterklebt. Die Festigung des sich spaltenden Leders mit Gelatine wird beschrieben. Eine Methode wird dargestellt, das gefestigte Leder mit einem natürlichen Hohlrücken aus Stoff über einem modellierten Rückenformer aus Japanpapier zu unterstützen. Dies erlaubt bei Öffnung des Buches, daß der Buchrücken einen flachen, halbfesten Bogen formt.

Biography

Andrew Honey graduated from Camberwell College of Arts, London, in 1994 with a BA (Hons) in Paper Conservation. He worked at the National Museum of Wales from 1994–1995. This was followed by a two-year internship in the conservation of rare books and manuscripts at West Dean College, Chichester, from 1995 to 1997. Following West Dean he worked at Archbishop Marsh's Library, Dublin, for one year. He has been employed since 1998 as a conservator at the Bodleian Library, University of Oxford.

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