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Conserving Magdalen College MS.GR.3: the ‘Musterbuch’ and more

Katerina Powell

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Conserving Magdalen College MS.GR.3: the 'Musterbuch' and more

Abstract

Magdalen College MS Gr 3 is an early eleventh-century Greek copy of John Chrysostom's Homilies on Genesis, 31–67. Soon after it was written, its generous margins began to be used by Cypriot artists as a convenient space in which to draw saints and warriors, and the book has been dubbed a 'Musterbuch' or a model book by scholars. By the time the manuscript found its way to Magdalen College, Oxford, its Greek/Byzantine binding had fallen into disrepair and some of the drawings had been cut out. In early seventeenth-century Oxford it was rebound in a Western style and then re-backed in the mid-twentieth century. Despite the relatively recent repair to the binding, the underlying seventeenth-century sewing structure has deteriorated further, making it difficult to study the book safely, and it has been prioritized for conservation treatment and digitisation. This paper touches on the extremely rare marginal illustrations that make this manuscript unexpectedly famous. It also explores the evidence of working practices of binders, parchment makers and scribes, all features that impact the current conservation decision-making.

Keywords

Byzantine; Greek; parchment; repair; conservation; bookbinding

Introduction

Oxford, Magdalen College, MS.GR.3 is one of sixteen Greek manuscripts in the library of Magdalen College, University of Oxford. It is also known as the Magdalen College 'Musterbuch', or a model book, owing to a large amount of figural drawings in its margins. The volume is currently being conserved at the Oxford Conservation Consortium together with two other Greek manuscripts, which lets us have a closer look at its history and how this influences the conservation treatment.

Magdalen College was founded by William Waynflete in 1458, on the site of the Hospital of St John, outside of Oxford city walls. The intention from the start was to equip the college with a fitting number of books and as soon as the plans for new buildings were put into place the library was among them. The library was completed on the west side of the Cloisters in 1480 and 800 volumes arrived the following year.¹ The library continued to grow over the years and the historic collection is still in its original place today. The Old Library houses a large collection of early printed books and several hundred manuscripts, including sixteen Greek manuscripts that have been part of the collection since the end of the sixteenth century.² The main circulating library is in the newly extended Longwall building.

Magdalen College was one of the founding members of the Oxford Conservation Consortium (OCC) in 1990. As a cooperative conservation studio, OCC provides conservation care in a number of Oxford University college libraries and archives. In 2007, the Consortium carried out a survey of the Greek manuscript collection at Magdalen with a view to stabilising and treating this group of manuscripts at a time when they were also being catalogued by Mark Sosower. The survey revealed that three required major conservation treatment: MS.GR.1, MS.GR.3 and MS.GR.5. The college and Consortium sought external funding for this work and their applications to the National Manuscripts Conservation Trust and Marc Fitch Fund were successful. The conservation project started in 2015, first with the conservation of MS.GR.1 and MS.GR.5, later followed by MS.GR.3.

MS.GR.3, contents and textblock

Oxford, Magdalen College, MS.GR.3 is the second part of John Chrysostom's Homilies on Genesis 31–67.³ It is a parchment manuscript written in the first half of the eleventh century in two columns defined by pricking and ruling on the hair side in a very regular and elegant pearl script in brown ink. Two scribes are thought to have written the text, the second from fol. 281 in a slightly larger hand. The beginning of each Homily is decorated with a painted headpiece in red, blue, green, yellow, black and gold, and the text starts with a section written in red and gold ink accompanied by a large painted initial letter. Red capital letters were also added at the side of the text, each marked on the side of the page by small guide letters by the scribe. The guide letters for the outer column were probably placed near the fore-edge and were trimmed off after sewing, but the guide letters for the inside columns were written near

¹ C.Y. Ferdinand, *Magdalen College and the Book Trade: The Provision of Books in Oxford, 1450–1550*, Magdalen College Record, 1998, pp. 86–97.

² You can read more about the Old Library [here](#).

³ N.G. Wilson, ed., *A catalogue of the Greek manuscripts of Magdalen College* (Oxford: Venetian Press, 2016), 9.

the gutter and were identified when the book was taken apart. The order of quires in the book was marked in the top right corner of the first leaf of each quire. Most of the signatures have subsequently been cut off, but some are still visible. There are 40 quires in the textblock, each formed of four bifolia, although in some instances a double leaf has been substituted with two singletons hooked around each other.

The manuscript was written on sheepskin parchment and the leaves in the quire are arranged in the pattern of hair side to hair side and flesh side to flesh side, with the flesh side on the outside of the quire.⁴ The parchment is not of the finest quality; there are many imperfections and process repairs carried out by the parchment makers and it is easy to find stitch repairs or patch repairs in the text. Some stitch repairs were done very quickly and some were carefully finished by covering them with thin, split-skin patches of sheepskin parchment. Many holes were repaired without stitching them first by applying the patches directly over the hole, probably whilst the skin was still on the parchment maker's frame. Sometimes the patches are applied on both sides of the leaf, sometimes only on one side, and often if a patch like this has been used on the flesh side of the leaf the follicle pattern of the patch is clearly visible (Fig.1).

The use of parchment was economical, and natural or process edges appear along the tail edge or corner in some quires, even though the textblock has been trimmed at least twice since the manuscript was written. The present leaf size is 309 x 234 mm, but the extent of the original size can be seen in several folded over corners and tail spine-folds, which indicate that up to 10 mm were trimmed off both head and tail and 15 mm at the fore-edge, when the manuscript was rebound. The original size would have been approximately 330 x 250 mm. Two missing double leaves in quire 35 were replaced with paper in the fourteenth century, together with the last leaf in the text (fols. 275–81 and 321).

The origins of the manuscripts are not known, but by the twelfth century the manuscript was in Cyprus, as indicated by scholia, or marginal notes, on folios 120v–123v.⁵ This is where a new life was introduced to its wide margins by the addition of drawings of saints, angels, religious figures and warriors. Many drawings were later excised, but 112 are still preserved.

4 The visual identification of parchment was confirmed by non-destructive method of DNA analysis from eraser crumb samples collected from the book. They were analysed by the Biology, Archaeology and Chemistry section of the University of York as part of [project CodeX](#).

5 N.G. Wilson, ed., *A catalogue of the Greek manuscripts of Magdalen College* (Oxford: Venetian Press, 2016), 9.

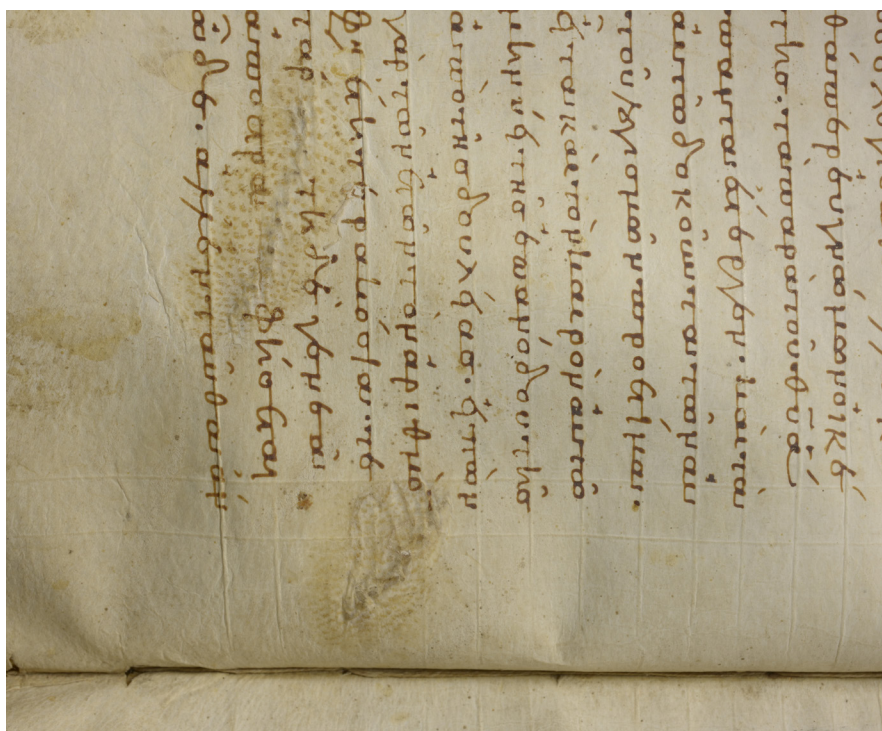


Fig. 1 Patches over prior stitch repairs in fol. 68v, on the flesh side of the leaf.



Fig. 2 Busts of John the Baptist in fol. 10v and the Virgin and Christ in fol. 11r as in a Deësis (Christ in Majesty), by Painter B. The drawing of John the Baptist is reversed; in a depiction of Deësis, he would normally be facing Jesus from the right.

The figures attract scholarly attention and are thought to have been introduced by painter A and B in the late twelfth century, painter C in the thirteenth century, and by others in the fifteenth or sixteenth century.⁶

About 50 figures drawn by Painter A are tall and slender and executed in light grey ink. Painter B used brown ink and his figures are slightly bolder and fuller; he had an attention to detail in garments and armour (40 drawings) (Fig. 2). Painter A and B probably worked simultaneously as they often depict the same compositions or figures and could have been following the same examples. Painter C worked in bright brown ink and in a few instances improved drawings of the two previous artists by adding bolder lines to emphasise contours of the figures. He added twenty drawings of his own, his figures are more accomplished and monumental. Several drawings were made by a Veneto-Greek artist in the fifteenth or sixteenth century and some drawings towards the end of the manuscript were partially coloured in various shades of brown ink and in one instance there is a later addition of copper green.

The youthfulness and slender features of some of the figures, together with the iconography and style of dress, point to twelfth-century wall paintings or icons in Cyprus and other areas with close links. For example, the paintings in a cell carved by St. Neophytos in the side of a mountain near Paphos in Cyprus were finished by the 1190s and bear a close resemblance to some of the drawings in the manuscript.⁷ But scholars have also found similarities in other sites in Cyprus, such as the twelfth-century wall paintings in the Panagia tou Arakos church in Lagoudera, the Church of the Holy Apostles in Perachorio and others.⁸

However, the drawings do not just copy the surrounding art; some of them are mirror images of the depicted scenes and figures, which leads scholars to believe that the people who drew them had access to the cartoons and tracings used when the murals or icons were painted, or they were the painters themselves, using the margins for practice (Fig. 2). The book may also have served as a book of patterns or a model book, which is where the German attribute *Musterbuch* comes from.⁹ Model books are very ephemeral and it is certain these drawings survive only because they accompany an important patristic text.

Some 30 drawings have been cut out from the volume; sometimes it is just part of the margin, while other times the entire fore-edge is missing. In a couple of instances a corner of the remaining leaf was folded over and left untrimmed during later rebinding in Oxford, which suggests that the drawing had been removed before the book was rebound (Fig. 3).

6 I. Hutter, 'The Magdalen College "Musterbuch": A Painter's Guide from Cyprus at Oxford,' in *Medieval Cyprus: Studies in art, architecture and history in memory of Doula Mouriki*, eds. N.P. Sevčenko and C. Moss (Princeton, 1999), 117–129; M. Castiñeiras, 'Oxford, Magdalen College, MS.Gr.3: Artistic Practice, Byzantine Drawings and Mobility in Mediterranean Painting around 1200,' *Arte Medievale*, IV Serie, V (2015): 87–100.

7 'The Great Supplication (Deësis),' European Collections, accessed 18 March 2019, https://www.europeana.eu/portal/en/record/2058601/object_CUT_18991342.html?q=saint+neophytos+enkleistra.

8 See Hutter and Castiñeiras who discuss the similarities in more detail. Connection is also made with icons at St. Catherine's Monastery in Sinai (Hutter 129).

9 Hutter is 'convinced ... that ... Magdalen College gr.3 was adapted to serve as a model book and was actually used as such' (118).



Fig. 3 Trim evidence in top corner on fol. 164r suggest a drawing was removed before the edge was trimmed.

¹⁰ N.G. Wilson, ed., *A catalogue of the Greek manuscripts of Magdalen College* (Oxford: Venetian Press, 2016), 1; D. Roberts and R. Sheppard, eds., *Hidden Magdalen* (Oxford: Magdalen College, 2008), 176–177.

¹¹ MS.GR.1, St. John Chrysostom, *Sermons on the Gospel of St. John*, eleventh century, MS.GR.5, Gregorius Nazianzenus, *Homilies*, tenth century, MS.GR.10, *Florilegium, mainly of patristic texts*, mid-fourteenth century, MS.GR.16, *Nicéphorus Blemmydes* etc., thirteenth century. For further information see Wilson.

¹² S. Gibson, *Early Oxford Bindings*, printed for the Bibliographical Society (Oxford University Press, 1903); J.B. Oldham, *English Blind-stamped bindings*, (Cambridge University Press, 1952).

¹³ N.R. Ker, *Fragments of medieval manuscripts used as pastedowns in Oxford Bindings: with a survey of Oxford binding c.1515–1620* (Oxford Bibliographical Society, 2004 for 2000), 97.

¹⁴ In chapter VIII, 'Methods of securing the endleaves in Oxford binding which have manuscript pastedowns,' 226, Ker observes that this method of securing endleaves in bindings was common in Oxford from 1540 and manuscript waste was used as pastedowns mainly between 1520 and 1570 and also for about 50 years either side of that period (Introduction in the same book, vii), roll bindings went out of fashion in around 1620 when they were replaced by fillets and hatching on board edges (ditto, III. 'Roll Bindings, c. 1574–1620,' 214).

¹⁵ C.Y. Ferdinand, *Magdalen College Library in the Fifteenth Century* (Magdalen College Record, 2002), 117.

Migration to the West

MS.GR.3 was still in Cyprus in the fifteenth century during the Venetian mandate on the island, as proved by the additional drawings and scholia which date to that time. The Ottoman conquest is perhaps the reason for its migration to the West. It is thought to have arrived at Magdalen College with the other Greek manuscripts in the sixteenth century when the interest in classical studies in Oxford increased. The first mention of the manuscript in Magdalen's collection is by Thomas James, Thomas Bodley's first librarian, who catalogued manuscripts in Oxford and Cambridge libraries. His catalogue, *Ecloga Oxonio-Cantabrigiensis*, was published in London in 1600.¹⁰

Seventeenth-century binding

When the manuscript arrived in Oxford, its Byzantine binding was replaced with an early seventeenth-century Oxford roll binding (Fig. 4). But the manuscript was not rebound alone. There are four other Greek manuscripts in the collection which have similar bindings to MS.GR.3; these are MS.GR.1, MS.GR.5, MS.GR.10 and MS.GR.16.¹¹ The last two manuscripts were written on paper and are much smaller.

The manuscripts were sewn all along on four double tanned supports laced in paper pulp boards, covered in tanned calfskin and blind tooled following the same pattern using roll no.XII described in Gibson's *Early Oxford Bindings* (or MW.a(1) in Oldham).¹² They had decorative front bead endbands worked in blue and pink thread and textile ties, some of which had been replaced later, only to be lost again. There are traces of two different colours used on the edges: red sprinkling and solid yellow. All five bindings originally had manuscript waste pastedowns which had been removed in the past and are now kept in guard books in the library (MS.Lat.270). Neil Ker identified them as leaves from a Sarum Missal, and in a 1947 letter to the then Magdalen college librarian, which is pasted to the inside of MS.Gr.1., Ker dates the bindings to about 1600. The manuscripts are listed in Ker's *Pastedowns* under number 1037.¹³

The construction of the seventeenth-century endleaves would also have included a blank paper flyleaf at each end of the textblock, the parchment and the paper folded over to create an outside hook and sewn through the fold with the textblock. The double hook was pasted to the inside of boards under the pastedown.¹⁴ Unfortunately, the removal of pastedowns from the manuscripts disturbed the endleaf construction, and while the re-used leaves of Sarum Missal have been preserved elsewhere, only a few of the paper flyleaves survive: one at the beginning of MS.GR.3, at the end of MS.GR.10 and at the beginning of MS.GR.16 respectively. Traces of paper guards remain on the inside of some of the boards, for example in MS.GR.5 and MS.GR.1. Both the boards and removed pastedowns show chain staple marks and nail holes from different chaining periods in the library—books at Magdalen were chained until 1799.¹⁵



Fig. 4 Seventeenth-century binding of MS.GR.3 with twentieth-century ties and repairs to the spine.

However, the seventeenth-century replacement of the earlier Byzantine structure did not last as well as intended. The tanned supports became brittle and could not hold the manuscripts together, which led boards and quires to become detached. In addition to this, MS.GR.3 inherited problems from the poor condition it was in before it was rebound. It is evident from the damage to the spine-folds that the earlier Byzantine sewing structure would have been relatively intact, but the cover and boards may have been badly damaged or missing as the head and tail area of the spine were very distorted and many tears in the textblock existed before edge trimming during rebinding in Oxford. The binders proceeded with their work without unfolding the creased spine-folds at head and tail and most are still distorted today.

Twentieth-century repairs

In 1950, MS.GR.3 was chosen for repair. The work was carried out at the Bodleian Library; an inscription on the inside of the upper board reads: 'Repaired by Wilmot of the Bodleian 2 March 1950 C.T.O.' Both boards were probably detached at the time, but it was possible to repair the manuscript without resewing it. Missing areas in the first couple of leaves were filled with parchment, machine-made paper guards were added to secure loose leaves or sections at the end of the book, and the outside quires together with several others in the middle of the textblock were sewn through to reinforce the sewing structure. Some of the distorted spine-folds at the tail were unfolded, but only in two separate quires. A leaf, which was accidentally slit when a drawing was removed in the past, was repaired with a combination of parchment and silk repair, the silk over the text and the parchment in the margins. Oddly, this is the only repair of this kind in the manuscript while other tears in the text were left unrepaired. It is also within the quire in which the spine-folds have been straightened out; perhaps it was a sample quire where the repair technique was trialled or demonstrated.

Once the repairs to the textblock were finished, machine-made paper endleaves with cloth hinges were tipped to outer leaves. The upper endleaf included the original seventeenth-century flyleaf, now lined with machine-made laid paper. The cloth hinges, together with loops of cord between broken sewing supports and boards, formed the board attachment. After lining the spine with black machine-made paper, the outside joints were covered in tanned leather and the original leather, neatly trimmed, was pasted over. Brown ties of synthetic fabric were added at the same time.

The in situ repairs to the manuscript and re-backing helped to keep the binding together, but unfortunately could not address longstanding issues, such as the damage to spine-folds at head and tail and severe cockling and contracted spine in the last quarter of the book (Fig. 5). The tanned supports continued to crumble and as the spine linings became detached from the spine, the textblock fell into several pieces and the manuscript became very difficult to handle.



Fig. 5 Cockling and distortion of leaves in the last quarter of the manuscript caused by ingress of water in the past and the use of hot animal glue on the spine.

16 See also <http://www.magd.ox.ac.uk/libraries-and-archives/treasure-of-the-month/news/greek-manuscripts-1-3-5/> and <http://www.magd.ox.ac.uk/libraries-and-archives/conservation/greek-mss-project/>

17 An alternative term for back bead endband is an endband with a reversing twist. See Ligatus Thesaurus at <https://www.ligatus.org.uk/lob>.

Conservation of MS.GR.3

The conservation of the three Greek manuscripts began in January 2015, first with the repair of MS.GR.1 and MS.GR.5.¹⁶ The work on MS.GR.3 began in 2018 and is still in progress. The manuscripts are part of an interesting group of bindings with intriguing history and connection to the college and this, as well as making the texts accessible to readers, was foremost in the minds of everyone involved. Carrying out in-situ repairs to reinforce the seventeenth-century sewing structure and re-backing the volumes was one of the options considered; however, MS.GR.3 and 5 were likely to become damaged again due to their size, especially their thickness. The decision to dismantle the manuscripts and re sew them was difficult, but also afforded the opportunity to digitise them while disbound, a key factor given the scholarly interest they had attracted. Rebinding also allowed us to carry out all necessary repairs to the textblocks and provide a sympathetic and durable structure that would preserve them for the future. The final treatment proposal was to rebind the manuscripts and reuse their important seventeenth-century boards and spine coverings. As well as replacing the deteriorated tanned supports with linen cords, structural wound endbands with back bead would be added to make the new board attachment stronger and support the flow of the textblock when open.¹⁷

Disbinding MS.GR.3 proceeded carefully, and extensive records were made to document the existing binding. It was particularly difficult work in quires with the 1950s repair sewing. The spine-folds were cleaned of old adhesive residues and larger pieces of the black lining paper were removed dry, but most of the glue required softening with a poultice of wheat starch paste before mechanical removal. It was interesting to see the characteristic V-cuts made for the Byzantine link stitch sewing emerge (Fig. 6).

Dismantling the volume and cleaning the spine revealed the extent of damage to spine-folds. Many outer and some second bifolia required repair along the fold, and there were several bifolia which were completely separated. Throughout history, various techniques have been used to join separate leaves in bindings. One example is overcasting, which had been used in the manuscript in two instances. One of these was in quire 15, where a single thread similar to that of the seventeenth-century sewing joined folio 113 to folio 120. The other example is probably an earlier overcasting stitch repair in the last quire of the manuscript. Here a thick thread was used to connect folio 313 to folio 320. There are other sewn repairs in the textblock either to hitch a loose leaf or to repair tears in the leaves.

A different spine-fold repair method was found in MS.GR.5, where parchment patches were adhered over damaged areas. New V-cuts were made through the patches to accommodate link stitch sewing which means the volume was re-sewn in Byzantine style before arriving at Oxford.

The repair of text leaves of MS.GR.1 and MS.GR.5 had already been completed earlier in the project, including the spine-fold repair, and the same method will be followed when re-

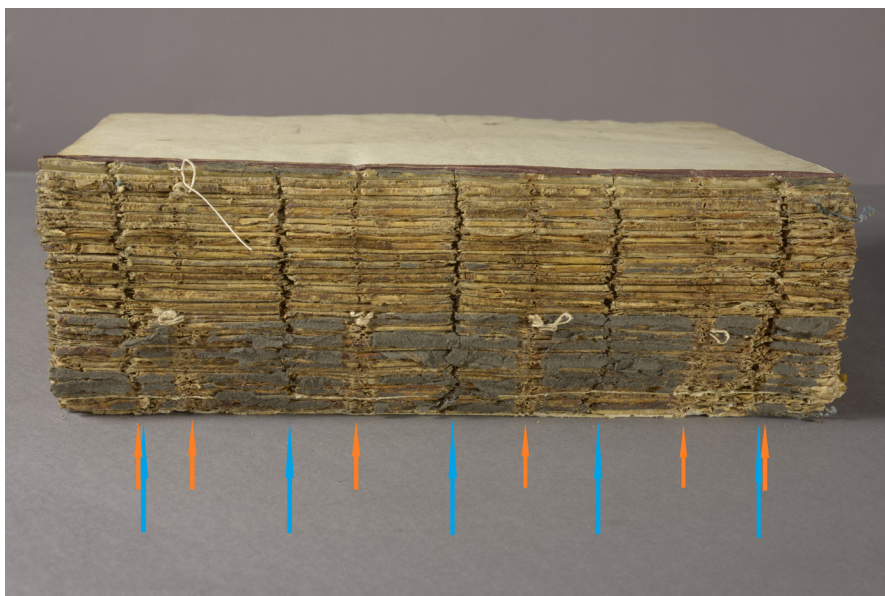


Fig. 6 Partially cleaned spine after the manuscript has been taken apart. Blue arrows point to five V-cuts made for Byzantine unsupported link sewing; orange arrows point to four seventeenth-century sewing stations between the V-cuts with change-over stations running through the first and fifth V-cut.

pairing the spine-folds in MS.GR.3. In this technique small patches of repair parchment are carefully cut to cover missing or split areas, their edges pared or sanded down to overlap without increasing the thickness of parchment around the lacuna more than necessary. The patches are adhered with gelatine, either warm or finely sieved cold and applied as a mousse. Cold gelatine is sometimes preferred as it is less likely to cause gelatinisation of the original parchment, however the adhesion is better when using the liquid gelatine (Fig. 7). The infills were primarily used to cover large losses and splits in spine-folds, but most Byzantine V-cuts did not need to be repaired as they did not affect the strength of the spine-fold and did not interfere with re-sewing in the seventeenth-century pattern. Spine-folds in more fragile areas were repaired with Japanese paper adhered with gelatine mousse or wheat starch paste, and this was also the best method to use when repairing tears elsewhere in the leaf.

However, the repair of spine-folds in MS.GR.3 is not as straightforward because of the distorted edges, mainly at the tail. The folds are often split and their edges pleated and creased several times. The creases can run beyond the tail kettle stitch and sometimes as far as the lowest sewing station. As this happened before the manuscript was trimmed, when unfolded, the edges extend beyond the tail edge and in some instances even beyond the board squares. It was therefore important to find a solution that would accommodate the distorted corners and make re-sewing of the manuscript and the addition of structural endbands possible.

A trial repair of one such spine-fold was carried out in which a single layer of toned Japanese paper was used to fill in the gap between separated and creased edges of the spine-fold at the tail. The paper was adhered to the verso of the creased area and was flexible enough to follow the uneven distortion in the parchment. It worked well in joining the two leaves together to form a fold through which the endband tiedown can be anchored, and it will prevent further distortion of the edges as the manuscript is consulted by readers (Fig. 8). A combination of the two methods:



Fig. 7 Parchment repairs in MS.GR.1. The V-cut near the head through which the kettle stitch will pass has been filled; the second V-cut is located between the seventeenth-century sewing stations and can be left unrepaired.

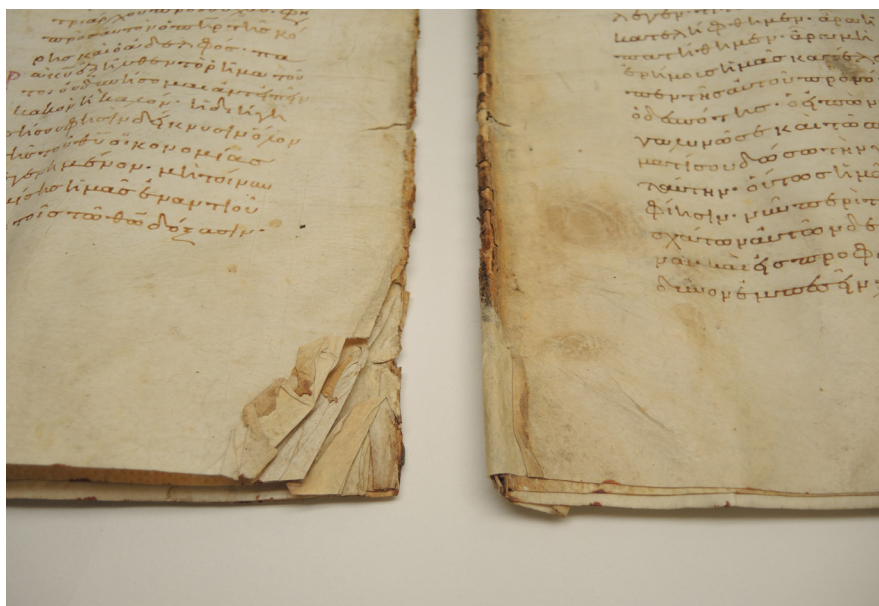


Fig. 8 Distorted spine-fold at the tail of quire 22 on the left (the creases are in fol. 176v–fol. 174v) and on the right, quire 3 with the spine-fold at the tail repaired with toned Japanese paper (fol. 17).

parchment repair in the majority of the spine-folds and Japanese paper repair when accommodating excess pleats, will probably be the most practical solution for this problem.

A large amount of work has already been done: tears in the textblock have been repaired with varying thicknesses of Japanese paper adhered with gelatine mousse and the most cockled and distorted leaves have been humidified and straightened. Although introducing moisture to historic parchment is best avoided to prevent its further deterioration, it was necessary in several quires which were severely cockled to make sure the volume can function correctly in the future and pages can be turned without introducing strain to the support or media. The conservation work is still in progress and as soon as the spine-folds are repaired it will be possible to turn my attention to sewing, working the endbands, attaching boards and covering. It has been a very rewarding project so far and the result will hopefully make the manuscript a more accessible and enjoyable object to study.

Acknowledgements

I would like to thank Jane Eagan, the Head of Conservation of the Oxford Conservation Consortium, and Maria Kalligerou, my colleague, for their guidance and support during the project and for allowing me to use images of their work on MS.GR.1 and 5 to demonstrate the treatment proposal; and to Maria Parani, Professor in Byzantine Art and Archaeology at University of Cyprus, for directing me to images of related wall paintings. All images used here are the property of the President and Fellows of Magdalen College, Oxford.

Biography

Katerina Powell ACR is a Senior book and paper conservator at the Oxford Conservation Consortium. She first trained as library and archive conservator at The School of Conservation and Restoration Techniques, Czech Republic, followed by an Internship in Conservation of Rare Books and Manuscripts at West Dean College. She became accredited by Icon in 2007.

Materials & suppliers

Hidakawashi Toned Tengu NAJ 3.5g—Japanese tissue
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