

THE MAGAZINE OF THE INSTITUTE OF CONSERVATION • JULY 2015 • ISSUE 59



Japanese paper hair ornaments

Also in this issue

Drawing as a documentation tool

Safe use of dichloromethane vapour

A day out at the Bodleian

Exploring shagreen

conservation register

Are you thinking of joining the Conservation Register?

The Conservation Register is the recognised source for finding professionally qualified conservator-restorers in the UK & Ireland.

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- An individual entry providing full contact details and including automatic links to a website and email address;
- Inclusion in all UK and Ireland searches for your discipline;
- An opportunity to showcase examples of work to potential clients;
- Provision of information on the accreditation and skills of you and your staff;
- Login access for feedback on how often your own entry is viewed.

For further information and full details on the requirements for inclusion in the Conservation Register visit:

www.conservationregister.com

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THE INSTITUTE OF CONSERVATION

JULY 2015 Issue 59



From the Editor

I'm constantly being struck by how much we have in common whatever discipline or material we specialise in within the conservation profession. We all seem to use the same consolidants, solvents, equipment, tools and materials, so it shouldn't be surprising that cross-

fertilisation can and does happen. Our In Practice piece describes a use for dichloromethane vapour which came about following a chance discussion by its author Rachel Thomas – a stained glass specialist – with a ceramics and glass conservator. And in his article on drawing as an underappreciated tool for documentation Georgios Boudalis's argument has far wider application than the field of book conservation in which he specialises. His own drawings make the case powerfully, with their fine, informative and beautiful detail

Of course, most important of all in uniting us as a profession is that we all work to the same principles, for Icon members now embodied in the Institute's Code of Conduct and Professional Standards.

Lynette Gill



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ISSN 1749-8988

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Cover photo:

After conservation: Japanese hair
ornaments, made of textured kozo
paper, from the Economic Botany
Collection at the Royal Botanic
Gardens, Kew. Article on page 14

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England and Wales (Number
1108380) and in Scotland (Number
SC039336) and is a Company
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5201058)

professional update

From the Chief Executive



Photo: Matt Wrieford

ICON AND THE EMERGING PROFESSIONAL

Alison Richmond ACR FIIC reports on a dialogue with students

I have just returned from a really stimulating visit to the University of Northumbria where I met the students on the MA in Fine Art Conservation courses. I was very fortunate to have been invited to give the closing remarks at the 33rd Gerry Hedley Student Symposium.

This is a student-led annual event held jointly by Northumbria, The Courtauld Institute and the Hamilton-Kerr Institute at the University of Cambridge. The venue rotates between the three each year. Topics are focussed around the disciplines of paintings and paper conservation. The quality of the students' presentations was outstanding.

I wanted to tell the students a little bit about the profession that they would be likely to be entering and about how Icon is supporting emerging professionals. But I was also there to listen to them, to what they had to say about their profession. I wanted to know about their concerns and about what more we can do to help them transition into the workforce.

How does Icon support emerging professionals?

I told them about the National Conservation Education and Skills Strategy and how Icon is working with employers, HEIs (Higher Education Institutions) and funders to 'map a coherent career path' and what this means in practice:

It means mapping the workforce. We have already published our Conservation Labour Market Intelligence report in 2013 and this set the benchmarks for measuring who we are, what we do, where we work, and what our expectations are of the future. We intend to repeat the research in 2016/17 to identify trends.

It means establishing frameworks for work-based learning aligned to the professional standards. Our paid internship framework is well established and we are developing an entry-level qualification with the Victoria and Albert Museum. We are also working with employers and HEIs to produce best-practice guidance for short-term placements.

It means mapping education, training and CPD against known standards and we are reviving the idea of QAA benchmarks for conservation courses as well as exploring the possibility of Icon validating courses.

We are seeking funding to continue our internship programme after the end of our HLF funding and to make

sure that opportunities are accessible to people from a wide variety of social backgrounds. We have commissioned an external evaluation of the programme and we have found out that it is highly valued by interns and employers and there is still a need for strategically targeted internships to fill the skills gaps across the UK. We also know that the 'living wage' stipend is a crucial factor in enabling uptake of these opportunities.

The PACR Pathway was introduced two years ago. This was to encourage members to think about accreditation earlier in their career and to provide them with mentor support to guide them through the process. This has been an astounding success. We now have four hundred and fifty people registered on the Pathway. If you think that we now have seven hundred and eighty ACRs in total, that is a significant number. So I urged the students to follow their three hundred peers who have already joined Icon, so that they would not miss out on this opportunity. Our workforce research and our evaluation of the internship scheme provide strong evidence that employers value accreditation.

What do the students have to say and what can we do to help them?

I was absolutely bowled over to hear so many positive comments about Icon. These two will give you the flavour:

'When I joined I received mailings and access right away. Really useful things. I feel very well supported by Icon.'

'I am very impressed by Icon. I have seen your organisation actively reach out to students and young professionals with a genuine interest in coming alongside them as they develop their careers. There is a lot of support offered by Icon and I think it is amazing that you are actively trying to phase out unpaid internships. I intend to join once I have saved up some money!'

But the students were worried about what would happen once they graduated, about the lack of internships and jobs. They feared losing their skills if they waited too long to get work experience. Still others talked about the need to go to London to find jobs and the lack of opportunities in the regions.

Many of the students were from abroad and their visas expire exactly four months after their courses end. They felt bitter about this given that they had invested so much in their tuition and living. I found out that they all value the networks that they have built up here in the UK and that going 'home' meant starting all over again from scratch. We undertook a thought experiment about how to set up an international network of mentors and a global accreditation pathway with ACRs in every country. Next step: world domination!

While we are clearly doing something right, there is much more to consider at our education and skills stakeholders' meeting on 30 June.

CHANGES TO ICON'S PROFESSIONAL DEVELOPMENT TEAM

Our funding from the Heritage Lottery Fund has finally come to an end. HLF has provided £2.45m over nine years. This is more than any other Training Bursary Scheme has received (there were twelve). Moreover, Icon was given an exceptional third round of funding. The fact that this funding has now come to an end is not a reflection on Icon. While the scale of the funding is reduced, we are continuing to look for funding for internships, and already have nine underway and five more in the pipeline.

We are developing a new entry-level qualification with the Victoria and Albert Museum that includes everything in our Conservation Technician Qualification but has been updated to meet the requirements of national frameworks. No new CTQ candidates are being taken on by Icon. From the launch in the autumn of the new jointly-branded qualification, the V&A will be managing it.

The PACR Pathway is going from strength to strength. At the time of writing there are four hundred and fifty Associates on the Pathway. There is a great deal of new work to do to support our members on their way to accreditation.

We are using all of this change to review the staffing structure at Icon, not only to accommodate reduced income from the completion of the HLF funding, but also to encourage a more holistic approach to our professional development functions. In June, we said farewell to Jayne Sheraton, Training Manager, and Kath Whittam, Professional Development Support Officer. Jayne and Kath have worked to deliver a fantastic programme of internships, Conservation Technician Qualification and Tru Vue Scholarships over the past three years or so.

In the past, accreditation and training have been handled separately, primarily due to their having different income streams. It has always been our ambition to bring more of this work together in order to work more efficiently and effectively as a team.

We have therefore created a new post of Training and Development Manager who will be responsible for all of our training and accreditation operations. Susan Bradshaw, whose job title will change to Head of Professional Development, will continue to manage the team and will have a larger role in promotion, advocacy and strategic planning.

We expect these changes to be fully in place by the end of August.

GOODBYE TO JOANNA BADEN-MORGAN

Last month also saw the departure of Joanna Baden-Morgan who has been helping us with membership. This year renewals have been particularly heavy in terms of administration. This is because every member was required to sign the new Code of Conduct before their renewal could be processed. In addition, we changed direct debit provider, generating additional work for the Membership team. We are grateful to Jo for being able to step in to help.

CONSERVATION AWARDS UPDATE

We have had a fantastic response this round. A total of fifty nine applications were received in time for the screening panels to get cracking on the terrifically challenging task of creating a shortlist in each category. This is just under twice the number of applications in the last round of 2010. Unfortunately, the shortlists were not quite ready in time for going to press, but by now you will have seen the contenders in Iconnect. We wish them all the best in the run up to the big night.

ICON'S JOURNAL: UPDATE

As I write this, it is a very energising time for the *Journal of the Institute of Conservation*. The March 2015 issue came out with a fantastic array of articles relating to book and paper conservation, and I am currently finalising details of the September 2015 issue. I am also getting very excited about 2016, when the *Journal* enters into a new publishing contract. Staff at Icon have been working very hard over the last six months tendering for a new publishing contract for the *Journal*, interviewing bidders and negotiating with a preferred bidder. At the time of writing, we are deep in negotiations and therefore I can't reveal details. However, I can write that I am looking forward to a healthy future for the *Journal*. There will be changes, which are all aimed to improve what you receive and when you receive it. As soon as the contract is finalised, we will be publicising details on Icon's new website, through Iconnect and in Icon News. So watch this space!

In the meantime, please keep submitting your articles to the *Journal* at <https://mc.manuscriptcentral.com/rcon>

Submissions are now throughout the year, therefore please submit when you have a completed article. We are looking now for articles for the March 2016 issue. If you would like to discuss your ideas with the Editor, please email me at journal@icon.org.uk

Janet Berry

Editor, *Journal of the Institute of Conservation*

MAJOR AWARD FOR GLASGOW

Congratulations to Glasgow University's Centre for Textile Conservation, which has won a major award from the Arts and Humanities Research Council to study barkcloth. These unique textiles from the Pacific Islands are coming under the microscope, courtesy of an innovative collaboration between Glasgow's textile conservation experts, botanists at the Royal Botanic Gardens, Kew, and barkcloth specialists at the Smithsonian Institution in Washington, DC.

Conservators from the Centre, and the Smithsonian Institution's National Museum of Natural History, will share their expertise in caring for barkcloth (or tapa cloth as it is often known) and apply it to two of the UK's major collections of this historic cloth: The Hunterian in Glasgow, and Kew's Economic Botany Collection. As part of this work they will research the material's properties and develop conservation treatments.



Tapa cloth garment from Samoa. Economic Botany Collection, Royal Botanic Gardens, Kew. Given by Captain Sir Everard Home, 1850. Conserved by Textile Conservation Centre student Judith Hubbard.



Photograph by Limmy Folau of Vava'u Press.

Tongan ngatu presentation following the mautohi ceremony (signing of the marriage licence) for the wedding of the Crown Prince Tupouto'a to Sinaitakala Fakafanua, July 10, 2014



Tapa cloth textile from Fiji. The Hunterian

Barkcloth is made from the inner bark of the paper mulberry tree and other plants. It has been produced for around 5,000 years for use as clothing, furnishing and ritual masks and garments. However, it gradually fell out of favour as a result of increasing Western influence and today the skill of making it has been lost in many of the Pacific islands though the material is still used across the region as an expression of cultural identity. By studying the material closely, it is hoped to gain new insight into the lost skills, culture and knowledge associated with this ancient craft.

Frances Lennard, Senior Lecturer in Textile Conservation at the University of Glasgow, will lead the project. She says: 'We are looking forward to beginning work on this landmark project which will contribute greatly to our rather scant knowledge of the history and techniques at the heart of this traditional skill'.

The project will run for three years from November 2015 and the results from it will be freely shared worldwide via a website, as well as by publications and conferences.

Hosting interns for eight years

The Guildhall Art Gallery conservators tell Icon News about the opportunities at the art collection of the City of London

We all know that internships are an invaluable part of a conservator's training, but opportunities are scarce for newly qualified paintings conservators, and even more so for those thinking of becoming frames conservators.

At Guildhall Art Gallery, the conservation studios offer a six-month internship each year, alternating between paintings and frames conservation. The internships are currently funded by NADFAS and The Radcliffe Trust and administered through the Friends of Guildhall Art Gallery (FOGAG); former funders also include Icon-Heritage Lottery Fund and The



Vicky Leanse with Guildhall Art Gallery conservators and Sonia Solicari (Head of Guildhall Art Gallery), Caroline Egan (NADFAS), Claire Anstee (FOGAG), Sally Woodcock, and interns Alison Stock, Katy Sanders, Claire Pearson, Yukiko Yoshii, Harriet Pearson, Laura Haines and Olympia Diamond (Genevieve Silvester was in New Zealand!).

Clothworkers' Foundation. All the Gallery's former interns are still working in conservation, several having secured employment in national museums on leaving the Gallery.

Vicky Leanse set up the scheme eight years ago, and when she left the Gallery recently, her colleagues and former interns celebrated with her at the Art Workers' Guild.

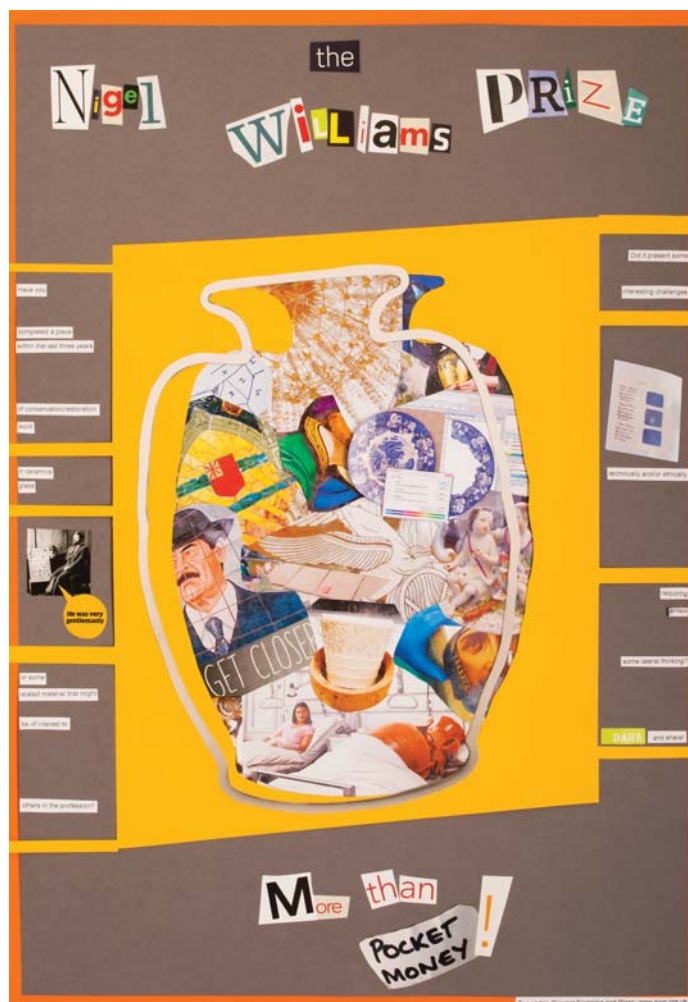
The internship continues under Alexandra Walker and her colleagues – the next internship will be in frames conservation and recruitment is already under way.

Of the interns listed in the photo caption above three were managed by Icon.

Claire Pearson – HLF /Icon frames conservation internship for twelve months in 2008/09, Year 3 of HLF programme

Yukki Yoshi – funded by The Clothworkers' Foundation and managed by Icon for six months in 2010

Genevieve Silvester – a six month paintings internship funded by The Clothworkers' Foundation and managed by Icon 2011/2012



The Secondary Prize: entirely at the judges' discretion, a **Secondary Prize** of **£400** may be awarded to any applicant considered to be a close runner-up.

The Student Prize: Applications in this section must have been completed while the applicant was still in full-time or further education. The winner receives **£250**.

Application Criteria: See under: Groups/ Ceramics and Glass/Nigel Williams Prize: www.icon.org.uk

THE NIGEL WILLIAMS PRIZE 2016

- Have you recently (or within the last three years) completed a piece of conservation/restoration work in ceramics, glass, or some related material that might also be of interest to others in the profession?
- Did it present some interesting challenges, technically and/or ethically, requiring perhaps some lateral thinking?
- Would the project fit the Applications Criteria on the Icon web-site?

If the answers to the above are generally YES, then why not apply for the 2016 Nigel Williams Prize!

The bi-annual Prize, now divided into three categories, is the result of the collaboration between Nigel Williams' family and the Icon Glass and Ceramics Group. It was created to serve both as a memorial to Nigel's work and to encourage continuing high standards at all levels within the profession.

The Main Prize: The **Winner** receives **£1000**, together with a "virtual" presentation of a gilded ceramic copy of the **Portland Vase** (kindly donated by Wedgwood and kept at the Museum).

NEWS FROM THE GROUPS

Book and Paper Group

It already seems so long ago that we had the Adapt & Evolve conference.

It was a truly great success on all levels: papers, venue, timing, and not least food and drink! Many of you will now understand how much time was spent on logistics alone in organising this peerless conference. Thanks to all the speakers for such informative and stimulating talks and discussions. My thanks go out to all in the Book and Paper Group's Co-operative Training Register, to Françoise Richard (CTR Chair) and a special thanks to Amy Junker-Heslip, who was Conference Chair. The conference committee included Oriana Calman, Sayaka Fukuda, Melissa Lewis, Fiona McLees, Amelia Rampton, Maartje Schalkx, Holly Smith, and Sarai Vardi.

These are just some of the team who worked so hard to make it the success it was, including blessing the event with lovely weather! Perhaps those coming from overseas will take the old chestnut about English weather with a pinch of salt! There

are reviews of the conference in a few places on the internet, but we aim to offer free postprints for the Adapt and Evolve Conference. Hopefully these will not take too long but please be patient – it is still a long job editing and proofing.

Once we have an idea of the profits from the conference, we have confirmation from Icon that a part of those profits can be used for some supportive or charitable event on behalf of the Book and Paper Group. We would like you to suggest how this money could be used. Please make use of our emails or pages on the Icon website for your suggestions.

The AGM of the Book & Paper Group took place shortly after, on 20 April. It was great to see so many people attending, not least inveigled into attending by our fantastic speakers. The first of these was Dr Athanasios Velios, who gave us 'Extra value from documentation: a proposal for Icon' – a talk about the role of conservation documentation in online museum and library records and a proposal for an Icon network on documentation.

Next Mariluz Beltran de Guevara from the British Library presented 'An Overview of Current Parchment Treatments'. This talk introduced parchment as a material, focusing on damage assessment, current treatments and their limitations.

Finally, PhD student Natalie Brown, from UCL Institute for Sustainable Heritage, discussed 'From paper conservator to heritage scientist: a personal account'. Natalie focused on how training as a paper conservator has equipped her with the necessary skills for her current doctoral research, which involves non-destructive analysis of paper using near infrared (NIR) spectroscopy.

A big thank you to our speakers for sharing their knowledge with us. Thank you also to the committee members who organised the AGM so smoothly.

Lastly, a short *journal* update. Icon is still waiting for the end of the tendering process to publishers. The bids from publishers are in. After this, the options presented by The Task and Finish Group will be put before the Board of Trustees for approval or otherwise. Hopefully, this is something that should be announced within the next three months.

Have a wonderful summer.

Isabelle Egan (Chair)

The Book and Paper Group CTR news

The CTR has recently organised a variety of workshops including an Introduction to x-ray fluorescence (XRF) spectroscopy, with Abigail Bainbridge. West Dean College very kindly provided a portable XRF spectrometer for the workshop that was held on 19 May at Blythe House, Victoria & Albert Museum, London. Following the announcement of this workshop, publishers Taylor and Francis have made Abigail's article on XRF freely available online: *Non-destructive analysis of selective discolouration in two seventeenth century codices* – Journal of the Institute of Conservation (Vol.38, Issue 1) [Available at: www.tandfonline.com/doi/full/10.1080/19455224.2014.997771]

The popularity of other workshops has prompted second runs of some events. Constanza Isaza Martinez and Melanie King provided a hands-on introduction to the cyanotype process at their London based photographic studio Lux Darkroom in early 2015. The workshop proved very popular – being oversubscribed within just a few days of registration opening! – and it was well reviewed by participants. As such, a repeat of the workshop was scheduled for 3 June. Fiona McLees from the CTR is in touch with Lux Darkroom photographers as we are hoping to build on this first collaboration and explore other photographic processes.

An upcoming event scheduled on 10–11 November 2015 is a workshop on Iron Gall Ink at the British Library. Sayaka Fukuda from the CTR is in touch with the British Library team of conservators to prepare a two day workshop on conserving and treating iron gall ink manuscripts. More details will be published in due course.

Finally, one comment we received multiple times from workshop and conference attendees was a request to organise events elsewhere than in London. It is a great suggestion and we would love to provide local, affordable training events. One major hurdle is that current CTR members are based in London, Oxford and Cambridge. Organising regional events elsewhere would therefore only be possible with the active involvement of conservators locally. The CTR committee can offer support and guidance but only so much can be done at a distance. Real presence is necessary to liaise with potential host institutions and address all aspects of the practical organisation of an event. If you are interested in hosting a regional workshop please get in touch!

Françoise Richard ACR, Chair

Book and Paper Group Co-operative Training Register
fr.conservation@gmail.com

Ceramics and Glass Group

In May we hosted the annual Ceramics and Glass Group conference in the wonderfully historic Worcester. Two days of talks, visits and posters were enjoyed by all the delegates – and for the first time for the Group, lots of twitter conversations and postings! It was really wonderful to see so many students at the conference, with most of them involved in presenting something (some stepping in at the very last minute with only twenty four hours to prepare!) One of our Lincoln University students has also written a review giving her highlights of the weekend (see page 26).

Our AGM was held as part of the conference in May. A longstanding member of the committee, Sarah Cheng stepped down after six years working with us. All her efforts have been greatly appreciated by the Group and she will be very much missed. However, I am delighted to say that we now have two new members joining the committee – Jasmina Vuckovic and Mary Terese Vigliotti. They are both full of fresh ideas and I'm very much looking forward to working with them!

Looking forward, I'm pleased to announce the launch of the 2016 Nigel Williams Prize. Full details are available on the Group's pages of the Icon website, but just to highlight that

there are two categories – one for established Conservators, and one for Students. The prize is a wonderful celebration of work undertaken in the field of Ceramics and Glass Conservation, so please do consider applying!

Finally, booking will be opening soon for our next workshop on Colour Fills – please see the website for further details.

Rachel Sharples

Icon Ceramics and Glass Group Chair
Follow us on twitter @ICONCGG

Paintings Group

The next Paintings Group evening lecture will be held on Wednesday 15 September. Charlotte Bolland, Exhibition Project Curator (16th Century) at the National Portrait Gallery, will present her talk “*H. Holbein inventit’: Holbein’s Legacy in England*”.

Hans Holbein’s portraits of the Henrician court had a fascinating afterlife. They came to be prized not only as depictions of illustrious men, but also for Holbein’s skill as an artist, and as a result were frequently copied, with artists producing paintings that faithfully mimicked both the composition and colouration of the original portraits. This lecture will examine how these paintings were produced and discuss how they were perceived, because the number of surviving works of this type suggests that there was a lively market for such paintings during the reigns of Elizabeth I and James VI and I.

Venue: In the Robing Room at Freemason’s Hall, 60 Great Queen Street London WC2B 5AZ, close to both Covent Garden and Holborn Tube Stations. Doors open at 6:00pm; talk 6:30pm – 8:00pm. Tickets: Icon members £10; non-members £15; students £5 (student card required to be shown on the door).

Please apply for tickets through Eventbrite.com. Note that there is a small booking fee and no refunds can be made up to two days before the event. Free wine and cheese included in the price of the ticket.

Conference news

The Paintings Group is pleased to announce this year’s annual conference ‘*Appearance and Reality: Examining Colour Change in Paintings*’ to be held on Friday 9 October at Tate Britain.

Changes in colour may completely alter the way we see a painting. From blue leaves in a still life, to the blue walls in Van Gogh’s bedroom, our perception of a painting can be informed by an understanding of these changes. When conserving paintings our comprehension of these alterations can influence the way we display and restore them. This conference aims to provide an overview of colour change in paintings, from the work of the old masters to modern and contemporary painters. It will also address the aesthetic considerations related to these changes when approaching conservation treatments and how understanding these variations can influence the restoration and presentation of paintings.

The full list of papers and speakers is confirmed as follows:

Colour change in old master paintings by Marika Spring
Restoration of paintings with colour change by Larry Keith
Fading of Prussian Blue in Danish Golden Age Paintings by Jørgen Wadum and Anna Vila
Colour change in Van Gogh by Ella Hendricks
Harvard Rothko virtual restoration by Jens Stenger
Colour change in modern pigments by Bronwyn Ormsby
Microfading: applications for paintings by Joyce Townsend
Light and fading: incandescent and LED by Joseph Padfield

Tickets prices are: £75 for Icon members, £95 for non-members and £45 concessions. Tickets can be booked through the Eventbrite.com website. The price includes lunch, tea/coffee and an evening drinks reception.

Photographic Materials Group

Save the Date: 15 September 2015

You may have noticed an item in the May issue of Icon News (pp 23-24) about the exhibition Photography: A Victorian Sensation which opened at the National Museums Scotland (NMS) on 19 June 2015. Icon Photographic Materials Group are happy to announce that we are working with the conservation staff at NMS to bring you a half day event of tours and talks which will explore the treatments, decision-making, design and project management that brought together approximately fifteen hundred photographs for display in this inspiring exhibition. Further information will be circulated when all talks have been confirmed, but please also keep an eye on our Icon webpages, facebook and twitter for further details.

Facebook: <https://www.facebook.com/ICONPhMG>

Twitter: <https://twitter.com/ICONPhMG>

Past Events

Two recent events, the Cyanotypes workshop at Lux Darkroom, a collaboration with the Icon Book and Paper Group, and our event Digitisation and Display at National Museum Wales, Cardiff, proved to be very popular, and we’d like to thank attendees for their feedback. We hope to bring you further practical workshops exploring historic photographic processes over coming months and would welcome your feedback on what other events you would like to see. Do you have a photographic materials project that you feel would be of wider interest to fellow conservators? Have you been involved in putting together an exhibition recently? If so, please get in touch with our events coordinator Zoe Kennington: Zoe.Kennington@lancashire.gov.uk

Stone and Wall Paintings Group

Conference: FIRED EARTH –The Conservation of Architectural Terracotta

Date: Thursday, 8 October 2015 9.30-17:00

Venue: Oxford Town Hall, Saint Aldate’s, Oxford, OX1 1BX

The programme will include:

- An historical overview of architectural terracotta in England by Jonathan Taylor
- Structural issues by Michael Beare
- Cleaning issues by Adrian Paye, PAYE
- A U.S. perspective by Xusha Flandro, Jablonski Building Conservation Inc.
- Replacement – provenance and innovation by Amy Smith
- The India Tyre Factory Building, Inchinnan, Scotland by Clive Raymond
- Coade Stone on Chelmsford Town Hall by Simon Swann, Simon Swann Conservation

Cost: Icon Members: £55.00, Non-members: £75.00, Icon Student members: £25.00, Students (non-members): £35.00

Please register online at: <https://www.eventbrite.co.uk/e/fired-earth-the-conservation-of-architectural-terracotta-tickets-17394654881>

Please note that you must register before 30 September.

Textile Group

The Back to Basics on plastics held in May was very successful and received good feedback from those attending. There will be a review of this event in the next issue.

In September there will be a tour of the Conservation Studio at the British Library with a talk by Liz Rose, the Textile Conservator. Also, the Icon triennial will be held in Birmingham in June 2016. Look out for finalised dates and further details on these events and any further upcoming events on the website, Iconnects and Facebook.

ENVIRONMENTAL MONITOR and LOGGER



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WEST DEAN COLLEGE 

CONSERVATION SHORT COURSES

Mortars for Repair and Conservation
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Course leader: Catherine Woolfitt

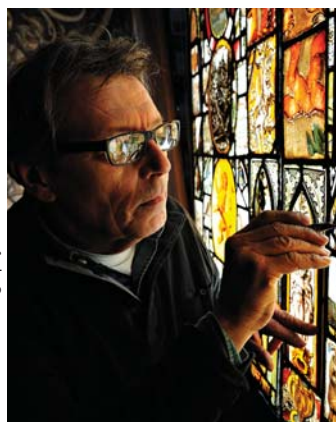
Conservation of Photographs 10% discount to ICON members
9-12 November
Course leader: Susie Clark

Conservation of Historic Interiors 10% discount to ICON members
23-26 November
Course leaders: Heather Tetley and Allyson McDermott



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Awards



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Congratulations to **Keith Barley** ACR, who has been awarded an MBE 'for services to cultural restoration and conservation' in the recent Queen's Birthday Honours list. Founder of Barley Studio in 1973, throughout his career, Keith has been instrumental in challenging and developing the accepted ethics of conservation, restoration and preservation of stained glass. His pioneering work promoting the use of environmental protective glazing to preserve vulnerable medieval (and later) windows has been followed by practitioners across the UK and beyond. His approach to conservation and restoration is carefully considered and adapted for each individual project and involves collaboration with expert art historians.

Keith was 'surprised and enormously delighted' by the honour. He is particularly pleased with the citation for both restoration and conservation, as this recognises his desire to treat stained glass windows as a work of art rather than merely an object of antiquity; respecting their imagery, meaning, and above all the intentions of the original artist.



Congratulations to **Nancy Bell**, one of this year's two winners of the Plowden Medal, which she received at a ceremony in early June. The Medal is awarded annually by the Royal Warrant Holders' Association (RWHA) to recognise the person who has made the most significant recent contribution to the advancement of conservation.

In its citation, the RWHA notes that Nancy, Head of Collection Care for The National Archives, has 'demonstrated the importance of science in leading the development of new environmental standards for cultural heritage collections. She has also been an effective champion of collaboration within the conservation community. Her project, 'Mind the Gap', has led directly to significant advances within conservation through greater efficiencies and the sharing of best practices'.

This year, for the first time ever, there are two recipients of the award: the second winner, Sarah Staniforth, will receive hers in the autumn. (More of this in a later issue.)

Appointments



Icon's very own Membership Manager, **Michael Nelles**, has won a Commendation for his MA Dissertation in the Institute of Historic Building Conservation's 2014 Gus Astley Award. He collected his award at the IHBC's Annual School in Norwich last month. His work, *Modernity in a Historic Setting: Urban Redevelopment and the Rise of the Historic Buildings Conservation Movement in Winchester, 1925–1970*, has served as the pilot study for his current part-time PhD project at the University of Southampton.



Martha Infray joins the National Trust team at Knole in Kent as Project Conservator, replacing Siobhan Barratt. Martha will be working as part of the *Inspired by Knole* project team. She will assist in the planning and delivery of the documentation, storage, transport, packing, protection, cleaning and return of the contents and historic fabric of the showrooms during the building works. Her role provides support and expertise in all aspect of preventive and remedial conservation of collections and historic interiors.

Martha recently completed an Icon internship at Norfolk Museums Service in Preventive Conservation and was the author of our Emerging Conservator article in the May issue about planning for an emergency.



Welcome to these new members



Holly Marston has recently been appointed as the Conservator at Rotherham Metropolitan Borough Council, where she will be working on the Rotherham collections, based at Clifton Park Museum, and developing a Conservation Traded Service, working on objects from external clients to provide revenue for the Council.

Prior to her role at Rotherham MBC, she was the Conservation Trainee for a year with both the Royal Armouries and Leeds Museums and Galleries.

This gave her a solid grounding in conservation which she feels she will be able to bring to her new role. Holly is a graduate of the MA in Conservation of Archaeological and Museum Objects from Durham University, and completed a nine month student placement with the York Archaeological Trust between 2012 and 2013.



Making the move to a new job can be daunting enough, let alone moving from a life in the public sector to a new role in a large successful commercial company.

Caroline Checkley-Scott is doing just that this month, leaving the only world she has ever known to take up the newly formed role as Business Development Director at Armour Systems, part of Conservation by Design.

After eighteen years in London, working at the British Library and then the Wellcome Library, Caroline moved to Manchester, where she became Collection Care Manager at the University of Manchester Library. Her experience as a customer for twenty five years puts her in a very good position in her new role. In addition, during that time she has acquired a wide range of skills and experience, so perhaps her latest move is not such a strange one after all.

We'd like to extend a very warm welcome to everyone who joined us in April and May 2015. We hope to see you at an event soon!

Oluseyi Odunyemi Agbelusi
Student

Mark Anderton
Associate

Kaori Arakaki
Student

Samuel Bainbridge
Student

Angelina Bakalarou
Associate

Beata Baran
Student

Avery Bazemore
Student

Bradford Industrial Museum
Organisational Subscriber

Richard Broome
Associate

Roxane Burke
Student

Cadogan Tate Fine Art London Ltd
Organisational Subscriber

India Carpenter
Student

Anna Don
Student

Mary Evans
Student

Alice Evans
Student

Jennifer Goss
Student

David Gough
Associate

Catherine Hodgson
Student

Jessica Hyslop
Student

Lois Jolly
Associate

Ian Kenny GCF
Associate

Christine Slottved Kimbriel
Associate

Rebecca King
Associate

Samantha Matthews
Associate

Keira McKee
Student

Louise O'Connor
Associate

Kimberly Reczek
Associate

Jamie Robinson
Student

Chris Scales
Student

Jonathan Schiavone
Associate

Heather Stewart
Associate

Anna Taylor
Associate

Natalia Tinacci
Student

Hannah Vickers
Student

Alexandra Warwick
Associate

Tomasz Włodarczyk
DEKO Studio
Associate

Zhi Xiao
Student

Sophia Zweifel
Student

'A Drawing is Worth a Thousand Words'

Georgios Boudalis discusses drawing as a tool for the documentation of historic bookbinding structures

AN UNDERVALUED DOCUMENTATION METHOD

Of all the different methods of conservation documentation, one of those which has attracted the least attention is drawing, even though it is often used by conservators for everyday record keeping, conservation reports and publications.

Due to the complex nature of the items on which they work, conservators often need to document not only the object's condition, but also the various conservation procedures applied to it, as well as its technical features and details of its composition. Such details are often both complex and invaluable to understanding the artefact and its history. Some of these observations offer themselves better to visual rather than verbal descriptions and the simplest, clearest and most user-friendly way to record such historical and technical details is by drawing them.

This is especially true for book conservators, as the conservation process is often the only means of achieving a deeper understanding of historic bookbinding structures. In recent years there has been a growing interest in bookbinding archaeology as part of the research and literature on the history of books.

The sort of drawing I am talking about may be considered in the broader context of scientific illustration – anatomical, botanical, architectural, technical etc – each with its own graphic and visual conventions. My own approach is driven mostly by an interest in historic book structures, as well as my privileged experience of working on the St Catherine's Library Conservation Project. The survey of the manuscripts and early printed books of the library was planned and supervised by Professor Nicholas Pickwood who, from the very beginning, insisted on the incorporation of drawings as a means of documentation in conjunction with photography and a detailed standardised written form*.

PHOTOGRAPHY VERSUS DRAWING

Photography is indispensable as it creates an objective visual record of the item without imposing the interpretation of the photographer. While the point of view, the depth of field and the use of macro photography can guide the viewer to focus on specific parts of an object, photography usually makes no distinction between what is important and what is not.

Although such impartiality in the visual documentation of an object is certainly necessary, it can also be a disadvantage. Drawing, by contrast, offers the option to distinguish between what is – or is thought to be – important and what is not, recording only the former and omitting the latter, therefore transmitting the desired information more directly to the viewer.

Ideally, photography should be supplemented by drawings or annotated in order to record as much information as possible, especially when access to the book or its pre-conservation state is difficult, unsafe or impossible. Conservation is often like an archaeological dig: you can never excavate the same plot twice and therefore recording as much as possible during the process is crucial, even things that are not necessarily understandable or clear at the time of documentation.

Drawing does not merely copy the appearance of an object but instead recreates an artificial image of it. This is the result of hands-on observation of the object, followed by mental analytical deconstruction and then its graphic reconstruction on paper in a way that most clearly presents the features observed.

Tactile or very fine physical evidence, although easily observable when examining a book in front of you, may be totally lost or be indistinguishable in a photograph. As digitisation has shown, no matter how good the images, often it is necessary to see the original, physical object, for a more complete understanding of its materiality. Drawings can often help make this materiality more evident.

THE PURPOSE OF DRAWING

Drawings can be used to describe and communicate features, techniques and condition. For example, there are many different ways in which boards can be connected to a book block, with thread laced through holes and channels or via the sewing procedures used to bind the gatherings together. The nature of a book's board attachment can often be perfectly detectable through the manipulation of an object but be lost to photography. Such things can be very well recorded with a drawing using a range of graphic conventions such as parallel perspective, cross-sections, exploded and ghosted views, broken and dotted lines and hatching, all of which can be supplemented with short written notes (Figure 1).

Drawings can also incorporate the element of time or a sequence of movements into a single image, simplifying the communication of complex processes that would otherwise require long and usually inadequate textual descriptions (Figure 2).

* See indicatively N. Pickwood, The Condition Survey of the Manuscripts in the Monastery of Saint Catherine on Mount Sinai, *The Paper Conservator*, 28 (2004) and A. Velios and N. Pickwood, The Database of the St. Catherine's Library Conservation Project in Sinai, Egypt, IS&T Archiving 2005 Conference, April 26–29

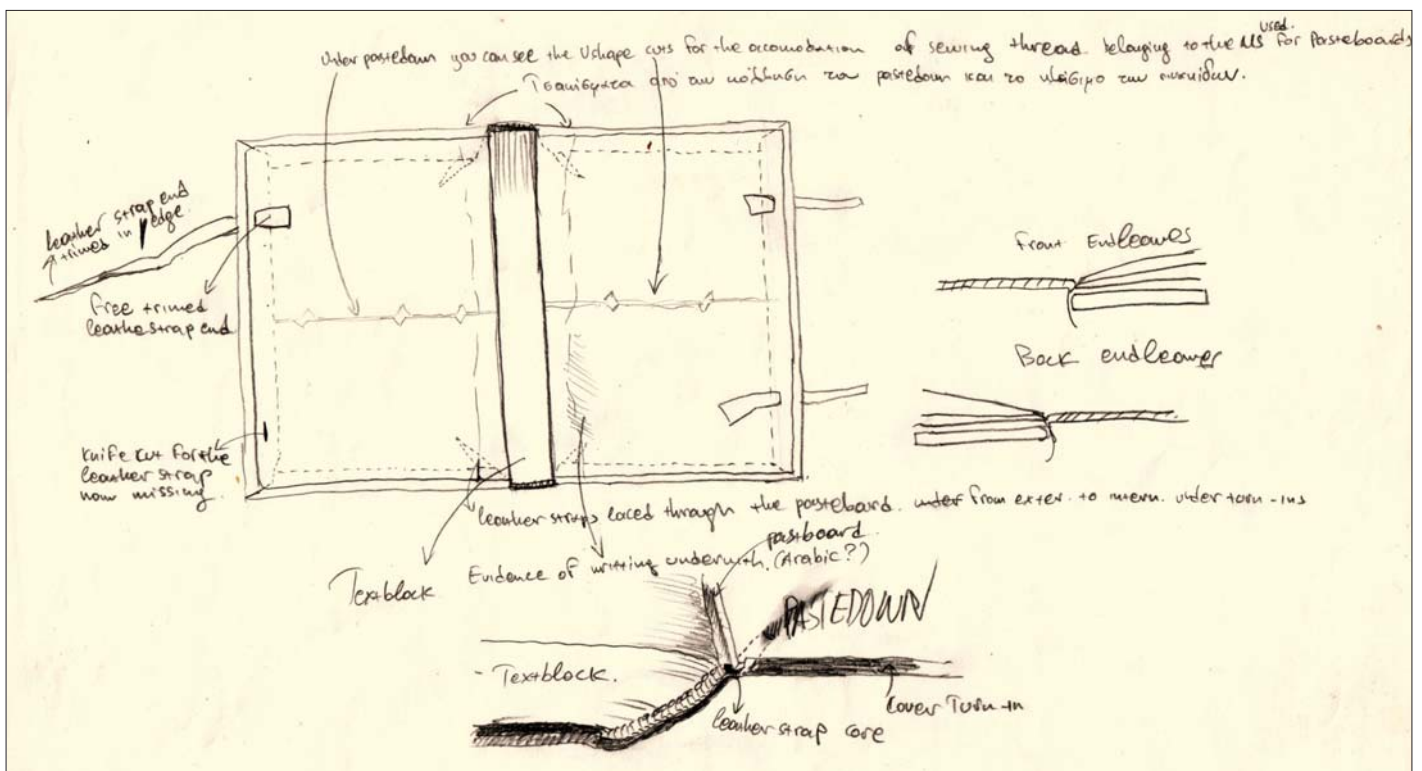


Figure 1. An A4 page used as an annotation sheet for recording the structural details of a binding. No other method of documentation could provide the same information in such a compact, direct and user friendly format. Graphic conventions like broken lines, hatching, arrows and text are all used to convey information in the most direct way.

Drawings may also supplement written notes providing quick sketches of things that for one reason or the other are considered of interest or importance.

APPROACHES TO DRAWING

There are two different types of drawings typically used by conservators, which serve different purposes and require different skills. Precise and accurate line drawings are normally used in publications in order to illustrate complex technical features that are not obvious or clear in photographs: for example endbands, sewing structures and board attachment techniques. Such drawings normally require better-than-average drawing skills and take considerable time to execute (Figures 3, 4c and 4d).

Quick freehand sketches, on the other hand, are normally accomplished in one session, in often limited time, with the object in direct observation, and are usually not destined to be published in print. Such sketches are often quick visual notes that supplement other means of documentation such as photography and data recording and can be elaborated or reworked at a later time either to produce a better, more 'polished' work, or to clarify features and processes noted later on (Figures 1 and 4b).



Figure 3. The spine of a bound Byzantine codex (Codex MBP 24) of the 14th–15th century (above) and the graphic representation of the sewing of the board and gatherings (below). The manuscript was repaired and therefore the considerable amount of time spent on it made it possible first to grasp and then to graphically reconstruct the structure and process for the sewing of its gathering and boards. For reasons of clarity the book was not drawn to scale. The actual number of gatherings is 15 as clearly shown in the drawing.

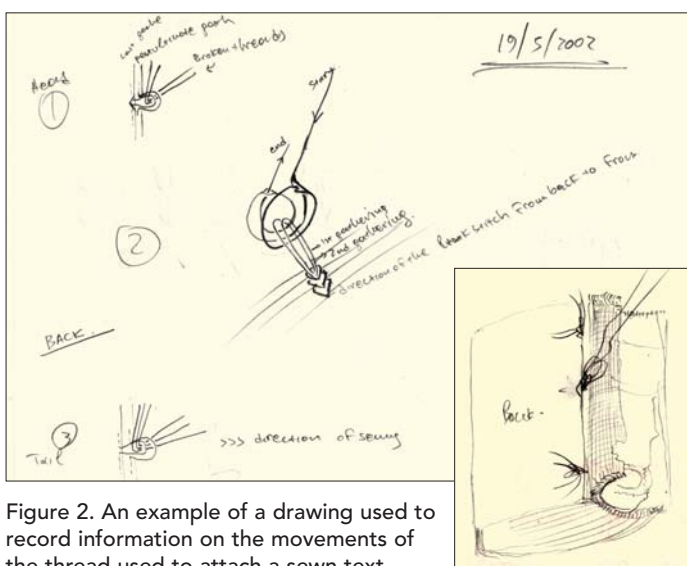
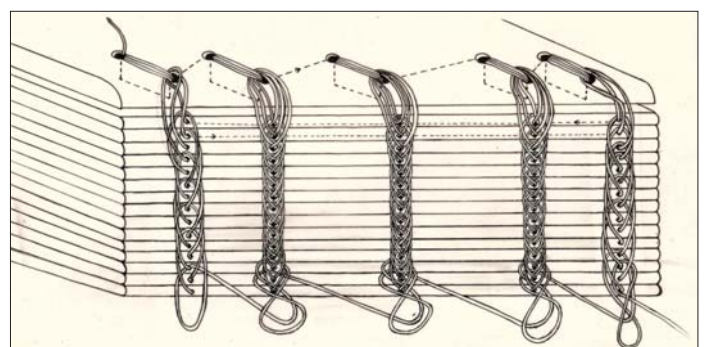


Figure 2. An example of a drawing used to record information on the movements of the thread used to attach a sewn text-block to its boards which are now lost (inset drawing). The numbers refer to the three sewing stations of the text-block from head to tail.



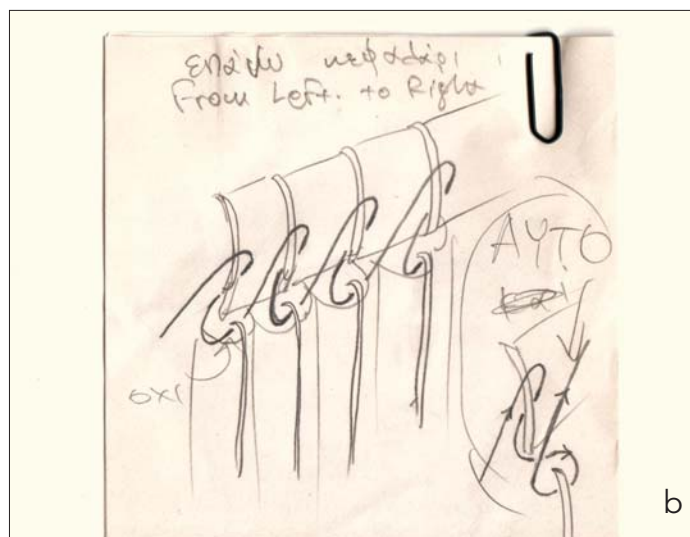
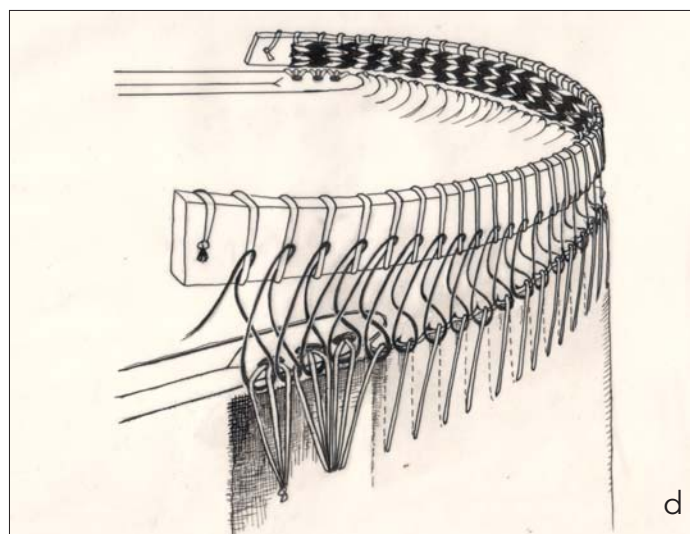
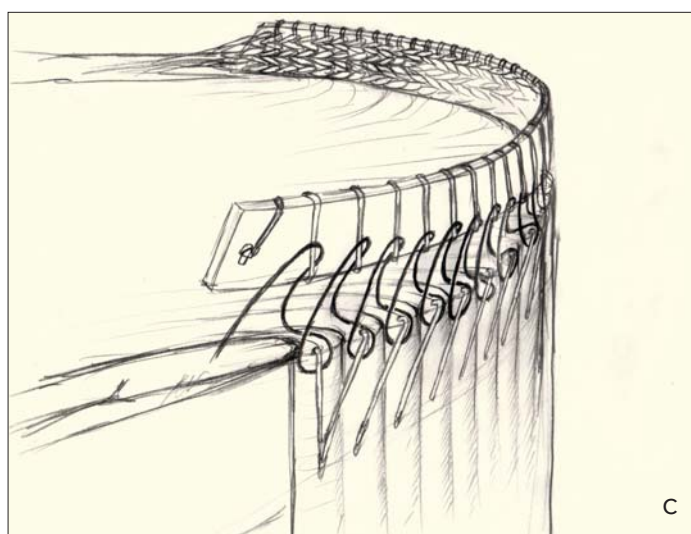


Figure 4. The conservation of a 16th-century bound codex revealed the presence of a type of endband, until then unknown to the writer, in which the visible part of it was woven off the book with tablet weaving and then attached onto the book with a figure-of-eight stitch (a). Close observation made it possible to identify exactly the techniques used and record them with initially quick sketches (b) which were later used to make a more elaborate and complex illustration of its structure (c,d).



Even if drawings of the first category are probably beyond the skills of many conservators, drawings of the second category can and should be used by any conservator with a basic training in drawing principles and methods.

AN ESSENTIAL SKILL

Although there are drawing and illustration software programmes which can produce great results, they require training and obviously the use of a computer in situations where the use of pencil and paper might be much more straightforward. Tablet computers can offer a valid alternative even for quick sketches, although for many conservators the passage from paper to LCD screen will not be a natural or desirable solution.

No matter what the means are – pencil and paper or computer and touch-screen stylus – the advantages of drawing against other types of documentation are such that conservators of all types of objects should be familiar with its use from their formal training and education onwards. Above and beyond its value for documentation purposes, drawing has another, no less important advantage. To draw means to be able to clearly see and understand the object drawn. This is a two-way relationship: the better you understand the artefact, the more clearly you draw it, and the more clearly

you draw it the better you understand it. Drawing is primarily a mental process and as such can be learned and improved. Manual drawing skills will follow but in this context are not of the greatest importance, as artistic quality is secondary to the processes of looking, interpreting and synthesising a clear visual representation. In a way drawing is like handwriting, we all appreciate a beautifully handwritten text but the beauty of the script has no direct impact on the validity or significance of the content of that text.

Dr Georgios Boudalis has studied conservation and fine arts and is the head of book conservation at the Museum of Byzantine Culture in Thessaloniki. He has worked in monastic libraries in Mount Athos and Sinai as well as in a number of smaller manuscript collections in Greece. He completed his PhD in 2005 on the evolution of Byzantine and post-Byzantine bookbinding and has published on the subjects of bookbinding history and manuscript conservation. Since 2006 he has been teaching courses on the history of Byzantine bindings and related book structures both on a historical and practical basis. His main interest is the evolution of bookbinding structures in the Eastern Mediterranean.

Treating three-dimensional paper objects

Nicole Monjeau on reshaping and repairing Japanese hair ornaments

BACKGROUND

In the Spring of 2014, I treated a group of Japanese hair ornaments belonging to the Economic Botany Collection at the Royal Botanic Gardens, Kew. Treating these objects was part of my final project as a Master's student in paper conservation at Camberwell College of Arts.

The hair ornaments are part of the Parkes Collection of Japanese Paper, divided since 1874 between Kew and the Victoria and Albert Museum. The Kew portion contains about one hundred and forty objects, including both paper specimens and artefacts made of paper, collected at the beginning of the Meiji period (1868–1911). Sir Harry Parkes, the British Minister in Japan, collected these objects following a request by Prime Minister William Gladstone for more information on Japanese papermaking. The Parkes Collection

One bundle of the *kanoko* hair ribbons prior to conservation treatment.



is highly valued as it contains a systematic record of papermaking in Japan at the time, as well as samples of nearly all Japanese paper manufactured at the time.

I treated three different types of hair ornaments, all of which were made of *kozo* (paper mulberry). There were multiple bundles of *kanoko*, strips of textured paper, similar to a ribbon in Western culture. There was one bundle of *nishibiki himo*, thin twists made of pleated paper. Finally, I treated two *kanzashi*, or hair pins, which were decorated with flowers made of paper and had wooden sticks which were used for placement in the hair.

FLATTENING A TEXTURED OBJECT

The main conservation issue with the *kanoko* hair ribbons was that they had been creased and crushed. While a typical flat paper object would be humidified and pressed to release the creases, the *kanoko* had a textured surface, which pressing would destroy. I began looking to other areas of conservation to get some ideas. The first technique I looked into was the use of blocking in textile conservation. Blocking is a way to dry textiles by humidifying and laying the objects out in their desired shape, sometimes using pins to keep the textile in place. The second technique I researched was the use of magnets to flatten parchment.

Following testing carried out on sample objects, I discovered

One of the *kanzashi* hair pins prior to conservation treatment





The author laying the *kanoko* out on a metal board to be reshaped with magnets and small strips of blotter

that the use of magnets worked best. In the end, I cut small strips of blotter, which were roughly 3 mm wide. These were placed at the edges of the *kanoko*, in between the peaks created by the textured surface. Neodymium circular disc magnets were placed on the strips of blotter, as close to or as far away from the object as needed to hold it in place. This method created enough pressure to allow the object to maintain a relatively flat shape, while ensuring that no indentations were left on the surface of the hair ornaments.

Reshaping of the *kanoko* took about fifty hours in total, during which they remained on a metal board. My intention was not to make the object completely un-creased, but to allow the

hair ornaments to be better viewed in their final storage box so that visitors to Kew Gardens could access the hair ornaments more easily.

REPAIRING A BROKEN WIRE SPRING

One of the *nishibiki himo*, or hair pins, needed an innovative repair treatment as well. This particular hair pin had flowers and leaves made of paper, which were inserted into five metal wire spirals that were attached to the wooden stick. One of the spirals had broken. I was cautious of carrying out a highly interventive treatment such as soldering the wire back

The *kanoko* being reshaped with magnets and small strips of blotter.





Repair of the wire spiral on the *kanzashi* hair pin in progress: the rolled piece of paper inserted into one side of the wire.



Repair of the wire spiral on the *kanzashi* hair pin completed: both sides of the wire have been placed around the rolled paper and adhered with Paraloid B72.

together, as I wanted the treatment to be easily reversible.

I noticed that the spirals were originally attached by inserting a rolled piece of paper, and then adding adhesive to secure the metal and paper together. I decided that the best solution would be to essentially create an extension to this. So, I toned a piece of Japanese tissue to match the original paper, and rolled it tightly. This was inserted into the two sides of the broken wire, and Paraloid B72 was used to strongly adhere everything. This flowed very well visually, is easily reversible, and still maintained the flexibility of the wire.

FINAL THOUGHTS

The Economic Botany Collection is regularly shown to visitors at Kew, so I knew I needed a storage solution that would allow the hair ornaments to be both easily accessed and stored safely. I made corrugated board boxes with Plastazote inserts cut to fit the shapes of the objects. The *kanoko* and *nishibiki himo* were given enough room to lay flat, preventing them from being crushed and creased in the future. Inserts which fit the size and shape of the *kanzashi* were made to provide proper support for the wire springs and paper flowers. I felt the storage provided adequate support for the

The *nishibiki himo* and *kanzashi* following conservation treatment





Purpose-made boxes provide support, storage and access without handling

ornaments, while also allowing them to be easily displayed, thus reducing the need to take them out of the housing.

Overall, my final project gave me exactly what I wanted: it was both challenging and fun! I really enjoyed being able to try out some unique treatment methods, and was even more pleased to do so on such beautiful objects.

Nicole is currently doing an internship in paper and photograph conservation at the Corning Museum of Glass in New York, where she is working on the Whitefriars Collection of stained glass cartoons

The Kanoko hair ribbons on display in a glass cabinet within their boxes



Touchy Feely Follow Up

Inspired by the recent Care of Collections Group conference, Cathy Proudlove ACR, a long-serving committee member, reflects on current approaches to object handling and access

INTRODUCTION

Twenty one years ago a Care of Collections Forum (CCF) was set up in response to the emergence of preventive conservation as a specialist area. For ten years there were study visits, a regular newsletter and an annual themed meeting. When Icon was established ten years ago, CCF voted to merge and become a Group within Icon and has since continued with similar activities.

Object handling and access to collections were on the original long list of areas of interest, but became ever more pressing at the millennium, and were the theme of the annual meeting for two years running in 2000 and 2001. The Care of Collections Group annual meeting in January 2015 returned to this theme, celebrating object handling as well as seeking solutions to the inevitable conservator concerns. This article summarises the main themes of the meeting and puts them in context.

CHANGING ATTITUDES TO ACCESS

Conservators have often struggled to assert the importance of their work in a society that seemed to value words, numbers and images far above material culture and the work of the human hand. Corinne Julius' *Intervention* in January's Icon News (issue 56) suggests that this may be beginning to change at last.

We may once have seen ourselves as objects' only defenders and resisted any activity that might put them at risk, but most of us now see well-managed access as essential to the long term care of collections. While all forms of access may pose risks to objects, the risks of hiding them away unseen can be much greater. We, of all people, value the real thing, and by sharing our enthusiasm can help ensure that collections survive and are taken care of. Ways of managing this have

been tested for some years now, and the recent meeting was an opportunity to review how successful these have been, and what sort of fine tuning is still needed.

The meeting focussed on getting close enough at least to touch the object if not to actually pick it up and handle it. Most of the papers fully recognised the desirability of this form of access and considered ways of controlling the risks involved. Some described collections that were put together on purpose to be handled and emphasised the great benefits this can bring to all sorts of people. It was exciting to be reminded that universities – once sadly neglectful of their collections – are starting to recognise their enormous potential.

SAFE AND MEANINGFUL HANDLING

Whatever the context, conservation expertise is important to good access in many ways, starting with advising on what type and level of access is appropriate for the object in question.

Handling by individuals and small groups in controlled conditions can ensure that people understand what they are doing and why, and there are various ways to limit damage by mounting, packaging and surface coating individual objects.

Each project is unique, and the facilities and furniture available, along with the age and special requirements of the person or group and the numbers taking part, must always be considered. Conservators may also be best placed to understand what risks the object may pose for the handler.

For most people, the primary form of access is visual, and close viewing and handling combined can be the ultimate experience. The combination of sight and touch is an important way we understand objects from infancy onwards. But close inspection may be very rewarding even where touching is not acceptable. So effective lighting should never be forgotten when setting up for this kind of access.

OBJECTS ON DISPLAY

We have moved from museums where 'do not touch' was an absolute rule and displays were patrolled by stewards in quasi-military uniforms, to a situation where some touching and handling of objects is expected. But there are still many objects that should not be touched and it seems many visitors are now confused as to which is which. When asked to stop, however politely, they can feel they are being 'told off', a dispiriting experience that can be disastrous for visitors who may have felt nervous about entering the museum in the first place.

There was evidence here that the significance of plinths, ropes and barriers is not always understood, least of all by the under-fives who tend to regard them as play equipment

Students working with collections at Manchester Metropolitan University





Small textile objects are nested in a container with plastazote. This enables them to be passed round a group and closely examined without actual handling

(a good reason to provide something specifically for this age-group somewhere in the building).

Nobody wants to see displays plastered with 'don't touch' messages, so we should try to find a way of letting visitors know that not all un-cased objects should be touched, while continuing to adjust the displays to help them tell which is which. It may be best to start by briefing them verbally when they come in. This would mean having all visitors check in, which most museums do nowadays in any case. At this point they can also be given a leaflet showing a symbol that signifies where touching is allowed. Any introductory film should include an explanation of risks to objects and celebrate conservation.

It may be hard to accept the thoughtless and sometimes mischievous attitude of some visitors, but as part of the museum team we have to recognise that object damage cannot be avoided altogether without restricting the visitor experience far too much. The conservator's problem then may be whether it is advisable to repair the object and return it to the handling context. Evidence is that objects once broken, however well repaired, will tend to break again and again at the same place, so conservators will hope to persuade colleagues to spare them this unrewarding task and to respect their advice about risks. The damage report form can be a useful tool for raising managers' consciousness.

PEOPLE AND RESOURCES

In austerity times, we all need to be careful to spend our time effectively, as well as being aware how we use the money of our clients and employers. Close access and collection handling are expensive to deliver, because supervision by trained people is nearly always essential. Reliable volunteers



Much thought is needed when protecting objects for handling collections. This well-meant effort didn't quite succeed

can be a godsend but are not always easy to find, and training may be time consuming for staff.

Given the skeleton staff now operating in many museums, it may be difficult to find time for anything more than firefighting. Collections champions may not feel that such resource-hungry activities deserve priority. A spate of thefts has led to tightened security in some museums, requiring closer supervision by people who have many other calls on their time. In fact security and insurance concerns may now have outstripped those of conservation. Libraries and archives may be ahead of the game in ensuring we know exactly who is handling important collections.

So, while public access has rightly been high priority for funders since the millennium, it may be time to remind the powers that be that there are other reasons to sustain collections and that access at all costs may be disastrous for some of them.

Access activities often have dedicated funding, in which case it is important to ensure that appropriate conservation input is included in the project costings. If nothing else, negotiations over handling can help to integrate conservation into the museum team, increasing respect for our expertise and helping to overcome that dog-in-the-manger label we may still bear.

Abstracts of the Touchy Feely Conference papers are available on the Icon website and are well worth studying for all who are planning to extend access to a collection or reviewing existing programmes. You will find them on the Care of Collections Group pages

A great day out

Visiting the University of Oxford's Weston Library

The third annual outing for Icon's office staff lived up to the standard of excellence set by the two previous years' events. We had a splendid visit to the transformed Weston Library (formerly the New Bodleian Library), where we were treated to great hospitality and saw wonderful objects undergoing conservation treatment.

THE BUILDING

The Grade II listed New Bodleian building was originally designed eighty years ago by leading architect Giles Gilbert Scott to serve as a space for readers and a huge storage facility. The recent refurbishment by Wilkinson Eyre Architects has completely re-imagined the interior to create improved facilities for scholarship and research, conservation and digitisation, along with public areas which include a café and exhibition spaces.

At the heart of this modernisation was the removal of an eleven-storey book stack in the centre of the building. Books are now stored in underground stacks and the space freed up forms a huge entrance foyer, the Blackwell Hall, with an innovative glass-sided floating book stack above and space for a café, shop and displays.

THE EXHIBITION ROOMS

The first stop on our visit was to the two exhibition galleries off the Blackwell Hall. As the Weston Library is also the new home for the Bodleian's Special Collections, one of the galleries forms a permanent display area for some of its greatest treasures and is fittingly called Treasury. The other gallery houses temporary exhibitions.

Of great interest were the special brass book cradles, chosen for aesthetic, financial and environmental reasons as an alternative to more traditional acrylic cradles, although the latter are still used for some items, which are too heavy, small or fragile. In the Treasury, the same cradles are used in the display cases to dramatic effect: attached to a black arm coming out of a black wall, the items on display appear to float unsupported in mid air.

Unusually, if not uniquely to the Bodleian, the exhibitions team largely comprises trained conservators, so the conservation department can rest easy in the knowledge of shared understanding between the two teams over such issues as the safe handling of books, finances and other implications of a busy exhibition schedule.

Blackwell Hall, the entrance foyer to the new Weston Library, showing the floating book stack, the café on the left and a glimpse of the Sheldon tapestry map of Gloucestershire (right)





The specially designed book cradle

THE SCIENCE BIT

Moving on, we arrived at David Howell's eyrie. Head of Conservation Research, he described himself as 'a chemist in a cupboard'. His workspace may be small but the imaging equipment he has to play with is huge in its capabilities, essential perhaps given the Bodleian's policy of not taking samples for analysis. We marvelled in particular at the hyperspectral camera, the first in the country to be bought for heritage purposes. David's work links him far and wide to, inter alia, University College London, Durham University and Diamond Light at Harwell (home of the UK's synchrotron). The benefits to conservation research of such collaborations and space age technology are already coming through.

THE LUNCH BREAK

In the interests of full disclosure, the admirable lunch to which we were treated at this juncture has to be mentioned. We repaired to nearby Wadham College, where we were served lunch in the College's undergraduate dining hall seated at a long table under a high-raftered ceiling, the wooden panelled walls adorned with oil paintings of the great and the good from the college's past.

Sabina Pugh explains a treatment proposal



Head of Conservation and Collection Care Virginia Lladó-Buisán (right) welcomed the Icon staff warmly



Icon and Bodleian staff

TOURING THE CONSERVATION STUDIO

Our visit next took us to the North Conservation Workshop, one of the two conservation workshops at Bodleian, and where the focus is on interventive work. It is a big, flexible space benefiting from lots of north light, a photography studio and a room for wet treatments. The new architecture and recent departmental restructure has very much helped bringing people together into one team, enabling better workflows, staff development and communication. It was clear that the new provision for conservation is a great improvement and much appreciated.

The Conservation & Collection Care Department has welcomed lots of visitors since it moved to these new facilities and this engagement role is essential to the role that the

Close interest in Julia Sommerfeldt's work on a Book of Hours





Richard Mulholland tells us about the unusual technique of natural history painter Ferdinand Bauer for recording the colour of specimens

department plays in the Bodleian's public engagement strategy. The tours provide both a window into the world of conservation and access to Bodleian's experts and collections.

Our own glimpse into this world showed us objects of great beauty and interest as you would expect from the Bodleian's historic collections, such as the late 13thC Latin Gloss Bible which originated in an Evesham monastery before reaching the Bodleian via the Library of Henry VIII. A 14thC French Book of Hours was receiving a new binding to replace a poor quality 19thC binding. Chinese scrolls from the late Ming era were in the studio for the challenging removal of 19thC repairs and subsequent scroll mounting. The rich parade continued, accompanied by knowledgeable and enthusiastic explanations by the staff of what discoveries have been made and what treatments are being considered or undertaken.

We also had a whistle-stop tutorial in fasciculing, a technique developed at the Bodleian for storing loose leaf or single sheet items, such as letters, photographs and other ephemera. Rather like the principle of a scrapbook, the items are put into a blank archival quality fascicule, attaching them to its pages with a hinge of Japanese paper. Although the fascicules take up more storage space, the items are far better protected because they do not need to be handled when they are viewed by the readers.

The nature and scope of the preventive conservation task was also explained to us; lux, UV, humidity and temperature are monitored via more than a hundred sensors in place across three sites (the Weston and old Bodleian Library and the Book Storage Facility in Swindon). Environmental monitoring covers not just the book stacks but also the new exhibition galleries, which are fitted with a Hanwell monitoring system and every display case contains a sensor. The Synergy software permits instant, remote access to the data. One particular monitoring project utilising the spectrophotometer involves keeping close watch on the condition of over forty colours of the Sheldon Tapestry Map of Worcestershire – an enormous Elizabethan tapestry on display in the grand Blackwell Hall, after its conservation by National Trust conservators.

Find out more about the Bodleian's Conservation & Collections Care Department and their projects at <http://www.bodleian.ox.ac.uk/our-work/conservation>. You can also follow them on Twitter at <https://mobile.twitter.com/lladobuisan>



Andrew Dawson presents the Bodleian's fascinating process

ACKNOWLEDGEMENTS

A huge thank you must go to Virginia Lladó-Buisán, Head of Conservation & Collection Care, for organising a full and most interesting day. Her warm welcome, along with the enthusiasm and generous time given by the Conservation and Exhibitions teams to explain their projects, made this a memorable visit. You can see from the illustrations how much we enjoyed the day!

Robert Minte has just completed work on a 12thC manuscript with funding from the National Manuscripts Conservation Trust



around and about

A huge print project

The paper conservation and conservation mounting teams at the British Museum have embarked on a major project to conserve one of the largest and most ambitious prints ever produced. The *Triumphal Arch* was commissioned by the Holy Roman Emperor, Maximilian I (1459–1519) to celebrate his achievements and commemorate the Habsburg dynasty for posterity.

Designed by the great German printmaker Albrecht Dürer (1471–1528) at the pinnacle of his career, the *Arch* took some three years to produce. Dürer drew the design onto one hundred and ninety two woodblocks, which were then cut by a team of highly skilled woodcutters, and printed onto thirty six sheets of paper. When assembled, a monumental printed arch around three and a half by three metres in size was formed.

The conservation project has been made possible by the generous support of Howard and Roberta Ahmanson.

As the project will take the best part of a year to complete, the team will be using the Museum website blog to give a regular update on activities and treatments. Already the sheer

Curators from Prints & Drawings get their first look at The *Triumphal Arch* out of its frame in the World Conservation and Exhibition Centre paper studio



Conservators and the object handling team taking *The Triumphal Arch* down from exhibition



size of the print has impacted on managing transportation, photography and condition assessment. If you are interested in seeing our progress, please keep an eye out for blogs at www.britishmuseum.org/blog.aspx

Caroline Barry, Head of Pictorial Art Sections
Department of Conservation and Scientific Research,
The British Museum

Rochester's Vinegar Bible

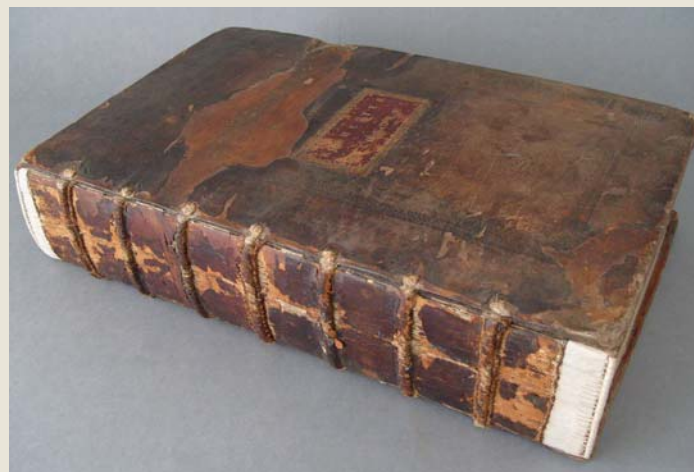
Icon member Lara Meredith, a freelance book and archive conservator, has just reached the end of a fascinating project conserving a very badly damaged 1717 bible from Rochester Cathedral in Kent. As part of the process the Cathedral asked for the conservation work to be filmed, because they wish to display the bible and film in a new development within the cathedral.

The film, by Dream Vision Media, was made to be shown to people with very little or no conservation knowledge. Lara hopes that other conservators will enjoy it as it has been produced in a manner that fulfils its intended purpose and is visually interesting. The film can be seen at <https://vimeo.com/130068808>

It is known that the bible has been at Rochester for most of its life and is therefore extremely important to the Cathedral. But it was in a poor state and Lara told Icon News that the conservation task was particularly challenging, as the requirement from Rochester was to retain as much of the previous damage as possible whilst still allowing the bible to be safely consulted. As a result of this brief, much of the conservation work is on display (as the illustration clearly shows) where another client might have opted for a concealing leather reback.

Keeping the evidence of past damage was easier in some respects than others and Lara was able to keep to the brief

The Vinegar bible after conservation showing some of the work done on the spine to support the sewing structure and reattach the boards. Unusually all the work is on display as the client did not want a reback

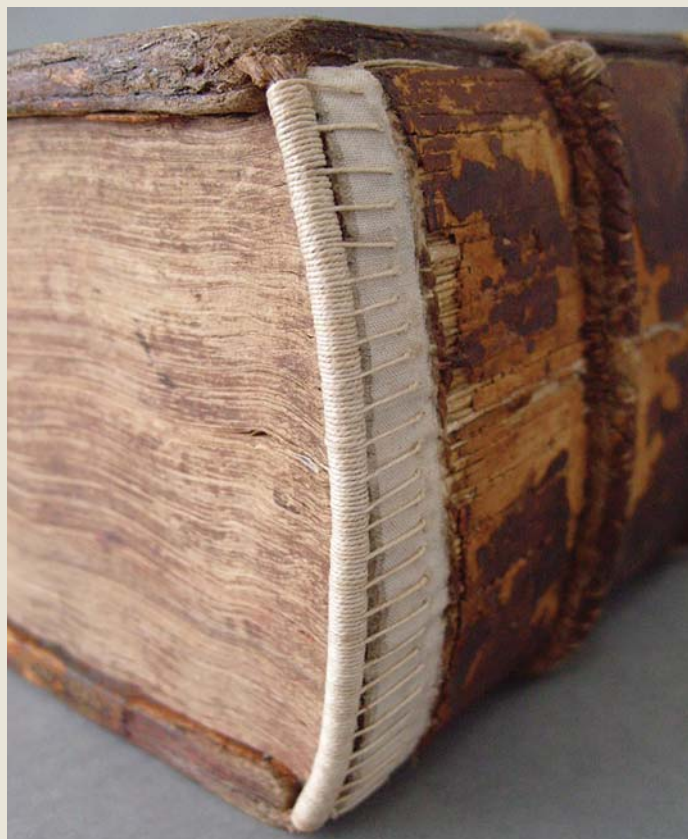


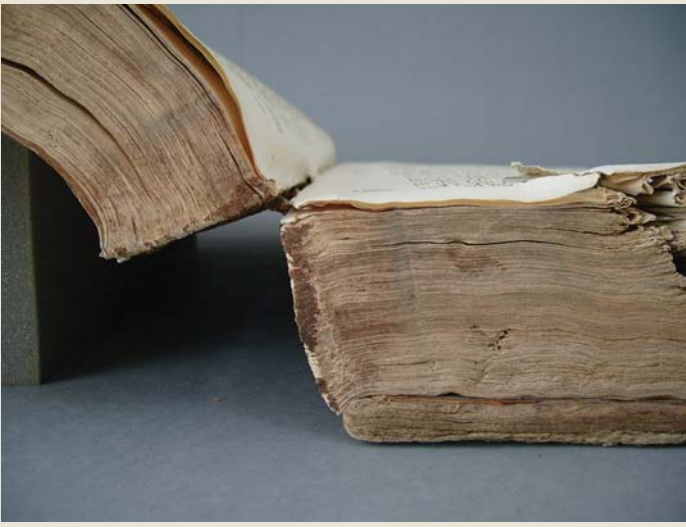
Lara at work on the bible

when supporting the text block tears with tissue splints. But greater intervention was required for dealing with the detached flyleaf and other page fragments; the replacement of the endbands, and the reattachment of the boards. The reattachments were to ensure that all the parts remained together, the endbands were to try to stabilise the text block as much as possible and the board reattachment was to ensure that the bible could be used again.

There is a break in the textblock that seems to have been there for quite some time but was going to be very difficult to stabilise without spine linings. As there was evidence of previous endbands Lara introduced the neutral coloured, simple endbands, sewn through Aerocotton, and to stabilise the break as much as possible the endband cores were slotted into the delaminating boards. The boards were reattached by sewing new cords to either side of some of the

The finished endband





The split in the textblock before conservation



The job that the new endband is doing to hold the textblock split in place

original cords and attaching the boards to these new cords. The endbands and new cords did require some losses to the spine leather but this was kept to a minimum.

Lara would love to receive feedback from other conservators about the work and the film. She can be contacted by email lara@meredithconservation.co.uk and her website is www.meredithconservation.co.uk

And in case you are wondering why 'Vinegar Bible'? This edition is so nicknamed from a particular misprint where the word vinegar is used instead of vineyard.

Europa Nostra Awards

The Churches Conservation Trust (CCT) received a €10,000 award and was declared a Grand Prix laureate in the Dedicated Service category at the European Union Prize for Cultural Heritage / Europa Nostra Awards 2015 last month.

The international award, considered Europe's most prestigious prize in the heritage field, was given in recognition of the national heritage charity's service over forty six years to saving historic churches at risk in England. Amongst the three hundred and forty seven buildings in the Trust's collection are irreplaceable examples of architecture, archaeology and art from 1,000 years of English history.



The remarkable medieval wall paintings at the Buckinghamshire church of St Lawrence in the care of The Churches Conservation Trust



A number of Icon members will be familiar with the Trust's work as they will have been involved in conservation projects for the Trust. A case in point is shown in our illustration of St Lawrence's church at Broughton in Buckinghamshire with its stunning medieval wall paintings. Only rediscovered in 1849, the paintings went through several preservative treatments over the course of the next century, until in the 1990s they were extensively conserved and earlier coatings removed by Conservation Register members, The Perry Lithgow Partnership.

The Grand Prix laureates were chosen from a total of twenty eight projects from fifteen countries selected as winners in an early round of the awards. The Churches Conservation Trust was the only Grand Prix laureate from the United Kingdom but amongst the earlier round of winners was Stonehenge: Surrounding Landscape and Visitor Centre. The news of this success came just too late to be included in last issue's article on making replicas for the Visitor Centre.

BOOKS

INTEGRATED PEST MANAGEMENT IN CULTURAL HERITAGE

David Pinniger with Adrian Meyer

Archetype Publications 2015

ISBN: 9781909492226 156pp

Those of you who remember my moth rant in Icon News issue 45 (March 2013) will realise that I like my Integrated Pest Management. Consequently, a new IPM book is a cause for some excitement.

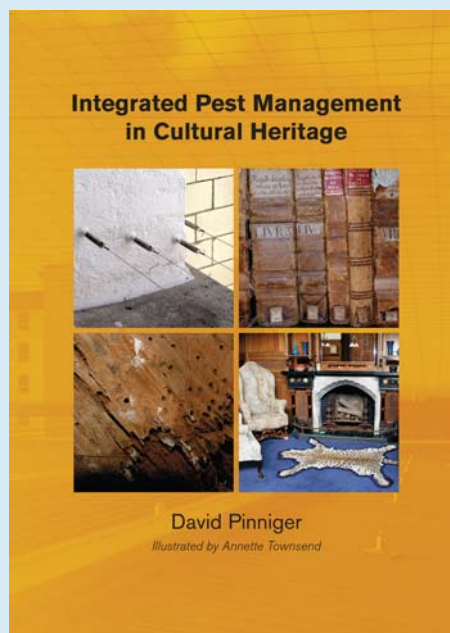
I confess that the review that follows may be biased as two of my photographs appear in the book, as does a fabulous cartoon of the .303 bookworm, described by the late Sir Terry Pratchett, originally commissioned by David Pinniger and me for a Care of Collections Group IPM meeting. I feel, however, that my contribution is so small that it can hardly be said to have skewed my judgement.

Integrated Pest Management in Cultural Heritage is a revised edition of *Pest Management in Museums, Libraries and Archives* (2001). This bald statement does not, however, do the new edition justice. The structure of the book is the same and much of the basic information is repeated but the book is a thoroughly modern and up-to-date affair. Chapters cover the basics of IPM, insect identification, quarantine – everything necessary to manage pests effectively in cultural heritage organisations. The latest information and research regarding trapping, monitoring and treatment for insects, rodents and birds is clearly presented, including information on changes to legislation. A great boon to the new edition is a full index and a detailed contents page, making it very easy to track down specifics.

Readers of the earlier edition will remember Annette Townsend's beautiful illustrations of insects. These are included in the new edition but are supplemented by colour photographs, many specially commissioned, as the range of insects covered has been considerably extended. Photographs are used throughout the book and the quality of their reproduction is, like the book as a whole, very high.

Factual books, although useful, can often be dry, but this is a very entertaining read. I found that the train journeys that were accompanied by this book went very quickly. Even though I have been leading on IPM at Birmingham Museums Trust for many years and teaching the subject for eight or so, I found that the book contained new information and suggested items that I should add to our IPM programme.

Budgets are tight and every purchase must be justified, but I heartily recommend this as an addition to the IPM bookshelf. The small outlay to purchase the book will be richly



rewarded by the help and support that the book will give. Plus you get to see my amazing photographs!

Jane Thompson Webb ACR Conservation Team Leader, Birmingham Museums Trust Chair of Care of Collections Group

CONFERENCES

FROM POTTERY TO PORCELAIN: Production and preservation in the heart of England

Icon Ceramics and Glass Group

Worcester 15–16 May 2015

This year's two-day Ceramics and Glass Group conference was held in Worcester with a good demographic of around forty delegates in attendance. Conservators from the museum sector and private practice attended as well as students from many of

the conservation courses throughout the UK.

The first day started with a trip to the Museum of Royal Worcester where we received a talk from Master Potter **Roger Green** who explained the design, development and casting process used by Royal Worcester to create their figurines. Following this the group was given a tour of the museum (the world's largest collection of Royal Worcester porcelain) by the great **Henry Sandon** of Antiques Roadshow fame! This was one of the highlights of the conference, his knowledge is second to none and his enthusiasm and love for porcelain are infectious.

After lunch there was a wonderful tour of Worcester Cathedral given by three very knowledgeable guides. Perhaps the area of the cathedral that made the greatest impression on me is the section that was left unrestored during the 19th century renovations as a lasting reminder of the devastation caused by the reformation and the English civil war.

The second day of the conference comprised presentations from both practising conservators and students. All of the talks were highly informative, however there were some standouts among the group. **Jerrod Seifert**, student at Cardiff University, gave an excellent presentation on the use of enzymes for adhesive removal on ceramics. **Peter David**, a private ceramics conservator, regaled the audience with the story of an exceptionally hot gallery (120°F), the havoc it wreaked on the adhesive holding shelves of ceramics in place and the subsequent conservation works that were

A tour of the Royal Worcester Porcelain Museum with Henry Sandon



undertaken to repair the damage caused when the shelves decided to take a southerly journey.

Two colleagues and I, from the University of Lincoln, gave our first ever conference presentation regarding the conservation and restoration of some replica terracotta warriors and the digital replication of a missing warrior head.

Digital copies of most of the presentations are available through the Icon website. To summarise the two days, I drank a lot of tea, met many lovely people and learned a great deal; it was thoroughly enjoyable and interesting.

Anna Stone

MA student, University of Lincoln

PAPER CONSERVATORS IN SCOTLAND: Exchanging news and ideas Edinburgh 6 May 2015

This informal conference was a sort of paper conservation clan gathering. The event was organised by **Helen Creasy** ACR, and was hosted by The National Library of Scotland. It was a relaxed get-together, the aim of which was to facilitate an exchange of ideas.

Fifteen conservators from across Scotland signed up to give talks; there were thirty participants in total. Each presenter gave a short talk about an interesting aspect of their work. There was no unifying theme, beyond paper conservation, so a huge variety of topics was discussed during the course of the afternoon. The length of each presentation was deliberately and strictly limited to five minutes, meaning that each subject was discussed in a succinct manner. A break was scheduled half way through, and at the end, for tea and questions. The presentations which were given are listed below.

- **Ruth Honeybone**, from the Lothian Health Services Archive, gave an outline of Edinburgh University's internship scheme for newly graduated book and paper conservators.

- **Caroline Scharfenberg**, from the Book and Archive Conservation Service, talked about the preparation and application of gelatine-based remoistenable tissues. She highlighted the benefits of this quick and reversible method of repair.

- **Lisa Cumming** described the preparation work that was involved in setting up a major photography exhibition at the National Museum of Scotland. The exhibition runs from June until October and features hundreds of items, including daguerreotypes. She also discussed the role of micro-fading as a selection tool with regard to a collection of salt paper prints.

- Several members of the collections care team at the National Library of Scotland gave presentations. **Gordon Yeoman**

discussed the work of a busy exhibitions conservator. He described the making of conservation mounts and stands, and the act of assessing and treating collection items.

Simona Cenci reviewed the treatment of Patrick Leigh Fermor's diary. Her aim was to make the fragile binding easier to handle, whilst retaining its appearance and preserving 'the smell of the journey'. **Ryan Gibson** described his involvement in a recent photographic survey, explaining the criteria used during the condition assessment stage. **Isobel Griffin** and **Erika Freyr**, a freelance paper conservator, gave a joint presentation on the challenges of preparing collections for digitisation, referencing the House of Lords Papers. **Sarah Wilmot** spoke about her efforts to rehouse the Fairbairn collection. Her presentation described a technique known as 'fisherizing', developed by Andrew Honey at the Bodleian Library.

- **Louisa Coles**, from the Glucksman Conservation Centre at Aberdeen University Library, discussed a project which she is currently planning – the conservation of two 'squeezes'. These paper-based casts of an Egyptian tablet are used for educational workshops, and are in a poor condition. Louisa sought suggestions as to how the squeezes could be flattened and repaired without damaging the surface relief.

- **Charlotte Park**, from the National Galleries of Scotland, described the mounting and framing of thirteen large screen prints by Roy Lichtenstein. It was apparent that careful planning had been fundamental to the success of the project.

- **Anna Trist**, a freelance conservator, talked about the treatment of a map fashioned from sixteen individual sections of parchment. The surface of the map had become severely distorted. Anna humidified and flattened the sections using a suction table, and mounted the map onto a new support using strips of BEVA film.

- **Tizzy Hepher**, from the Royal Commission on Ancient and Historic Monuments, described how to use a hikkake pitching stick for lining. Her practical demonstration showed that the technique can be utilised as an economical alternative to Melinex.

- **Helen Creasy**, from the Scottish Conservation Studio, extolled the benefits of linen as a material that absorbs and releases moisture. Although its woven structure makes it unsuitable for use during pressing, linen can be used for humidification, drying and blotting. In addition, Helen gave a second presentation about her experience of light bleaching as a treatment for works of art on paper.

- **Tarn Brown**, paper conservator at Glasgow Life, discussed her use of UV photography to examine a selection of watercolour paintings by Arthur Melville, one of the 'Glasgow Boys'. The technique

identified key pigments within each artwork, a process which informed the conservation treatment and helped to establish the artist's technique.

- **Pawel Pronobis**, a student at Northumbria University, talked about the use of rigid hydrogels in relation to developing a system for the treatment of albumen prints, in particular those which have become foxed.

The gathering was a resounding success. The attendees hope that it will become an annual event and that it will inspire similar get-togethers for other disciplines.

Shona Hunter, Conservator
National Library of Scotland

ECCLESIASTICAL TEXTILES STUDY DAY Textile Society

London 27 March 2015

As a huge enthusiast of ecclesiastical textiles I seized the opportunity to attend the event organised by the Textile Society devoted entirely to this subject. I felt at home, having completed my dissertation on this matter last year and having just participated in a conservation project on the tapestry depicting 'Christ in Glory in the Tetramorph' in Coventry.

The conference began with a keynote address by Professor **Mary Schoeser** who presented an overview of research, restoration and reassessment within the subject of ecclesiastical textiles. She pointed out the number of interesting studies and the necessity to tie them all together as the most advantageous way forward in the advancement of the topic.

Following her was Dr **Brenda King** who shared an account of the successful attempt in raising awareness of textile heritage of the Leek Embroidery Society through the organisation of the Festival of Textiles. She presented the reasons, the process and outcomes of the project, which attracted local and international attention.

Janie Lightfoot commenced the conservation themed block, providing an overview of conservation practice and range of available treatments while working with ecclesiastical textiles using examples from her own experience.

The paper presented by **Alison Lister** dealt with the challenges of preserving contemporary, large woven textiles. Their size, location and unique character present a series of difficulties and limitations in their care and conservation treatments.

Maureen Jupp astonished the listeners with the modest manner in which she described the amount of work that the Guild of St. Faith's has undertaken to restore, create and continuously care for vestments and other textile objects stored at Westminster Abbey.

The report given by **Frank Rhodes** showed his efforts in producing a list of pre-Victorian

ecclesiastical textiles in the provinces. By using old references and recent enquiries he tried to locate these historical pieces and proved how more efficient records are desperately required.

Kay Staniland devoted her talk to the aspect of making medieval vestments and demonstrated this production to be more industrial than it had been believed. By tackling practical aspects of production she provided a realistic image of ecclesiastical workshops around London in the 14th century.

The last paper came from **Claire Browne** who curates the upcoming exhibition at the Victoria and Albert Museum allocated to *Opus Anglicanum*. She tantalised the audience with the images of magnificent examples anticipated to be included in the display and shared the process behind the arrangement of the event.

This was an inspiring meeting that brought professionals from different fields and demonstrated how crucial it is to work in conjunction with and involve those people who often care for church textiles in isolation.

Many thanks go to the organising committee for arranging such an interesting and successful event, hopefully the first of many more to come.

Maria Armstrong Textile Conservator
May Berkouwer Textile Conservation

COURSES

UNDERSTANDING ASIAN PAPERS AND THEIR APPLICATIONS IN PAPER CONSERVATION

Icon Book and Paper Group Co-operative Training Register
London April 2015

This two-day course, hosted by Tate and generously sponsored by Conservation by Design, focused on the characteristics of papers made in China, Korea, and Japan and their use within conservation. **Minah Song**, senior paper conservator at the Conservation Center for Art and Historic Artifacts (CCAHA) in Philadelphia, tutored the course, imparting her extensive knowledge of the different papermaking processes unique to each country. The course was a mix of discussion-based sessions and practical exercises.

On the first day we launched straight into making a simple drying board, an alternative to the traditional Karibari, which we would use the following day. The drying board was constructed from honeycomb board, lined on both sides with heavyweight mulberry paper, and finished with a protective coating of Lascaux 498 HV. While we waited for our boards to dry, Minah talked us through the various techniques and materials involved in



Minah Song (right) examines different raw bark samples with the group



Delegates practise lining using their karibari-style boards

Chinese, Korean, and Japanese papermaking. The lecture focused on the raw materials used in East Asian papermaking, the regional variations in their cultivation, and the different papermaking processes that give the resulting papers their inherent characteristics.

The lecture was followed by a papermaking session on a miniature scale, using an improvised mould made from an embroidery hoop and silkscreen fabric. The exercise illustrated points laid out during the lecture. For example, how, even in the hands of a novice, the use of a formation aid results in a more acceptable and even paper mat compared to sheets made without. Different drying methods were also employed to illustrate their impact on the final appearance, texture, and quality of the papers produced.

The second day began with a discussion on lining and drying methods, followed by a practical session in which we carried out two

different lining techniques. The first technique put to use our drying boards, which would be used to stretch dry our objects for at least a week after carrying out a drop lining. The second technique demonstrated by Minah was a double-sided lining technique to be used on extremely fragile documents, such as those damaged by fire. By using a thin paste and a lightweight tissue, this lining would give the object strength without compromising its legibility or flexibility.

After lining our objects we had the opportunity to test out different repair methods using re-moistenable tissues on a variety of substrates, focusing on how to produce a repair with the appropriate texture, strength, and opacity. We prepared our own re-moistenable tissues, using wheat starch paste and methylcellulose, gelatine, and Lascaux 498 HV adhesives. Working on different substrates, including parchment, we tested methods of application using minimal



The group takes a closer look at different types of Japanese and Korean papers

moisture. This was also an opportunity for attendees to share information and discuss their personal preferences for certain methods of repair.

The course concluded with an opportunity for attendees to get creative as we were introduced to the Korean art of paper felting, Joomchi. The art of paper felting exemplifies the affinity between paper and water and the remarkable wet strength of mulberry paper. The pieces of Korean paper, composed to form an image or pattern, are wetted and sustain repeated rounds of pounding, scrunching, rolling, and hurling at the table top before drying as one felted mat. The resulting objects (works of art) added to the substantial amount to take home from the course, which was at all times enjoyable and highly informative.

Will Kentish

Intern at Museum Conservation Services Ltd

JAPANESE TISSUE SHOWCASE

Icon Ethnography Group
UCL, London 25 April 2015

Icon's Ethnography Group's Japanese Tissue Showcase and Group AGM was held at the Institute of Archaeology, University College, London. The programme was split between PowerPoint presentations and practical demonstrations.

The day aptly began with a presentation by **Megumi Mizumura** on the history of Japanese tissue and how it is made. I found this presentation particularly enlightening as it gave advice on how to research and select long fibre tissues that are of high quality for conservation work.

The following presentations were primarily case studies of conservation treatments using Japanese tissue. Each case study was unique and presented the wide spectrum of possibilities when working with Japanese tissue. For example, **Misa Tamura** introduced the use of beaten Kozo fibres, not yet made into a paper, for backing repairs on barkcloth. **Barbara Wills** presented the use of pulped paper for

repairs on archaeological leather and began her presentation with the memorable line 'If you can't do it with paper and paste, it's just not worth doing'! As a student of conservation, I really appreciated **Ciarán Lavelle's** presentation on 'The Good, The Bad and the Ugly', where he described several treatments using Japanese tissue and their varying outcomes.

The early afternoon was devoted to case studies of more traditional conservation uses of Japanese tissue, although on very interesting and complex objects. **Laura P Jackson** presented about the use of a tissue backing on an ivory calling card; **Simon Moore** presented about backings on natural history specimens (memorably, butterflies munched on by museum pests); **Karen Horton** described the conservation and mounting of a cedar bark whaling hat, and

Lucie Monot described mending basketry on a Madagascan Ody talisman figure.

The true highlight of the day for me was the afternoon's practical demonstrations. A number of conservators in attendance set up booths with all of the tools they needed to do several demonstrations of a particular technique. The audience was able to walk between them to observe and ask questions. My personal favourites were the production of paper fur, demonstrated by Charlotte Ridley, and the extremely delicate repairs of butterfly wings demonstrated by Simon Moore. Other demonstrations included embossed Japanese tissue fills by Charlotte Ridley, Sophie Rowe's colouring of Plastozone foam with Japanese tissue, Misa Tamura's preparation of beaten Kozo for barkcloth backing, Barabara Wills' repair of medieval leather with pulped paper, and Verena Kotonski's mending of butt joints of small diameter with Japanese tissue.

For me, the practical demonstrations offered an opportunity to really understand the decision-making and techniques behind the treatments described earlier in the day. They were hands on and thus very memorable. Conservation is a practical field, and it is very exciting to watch professional conservators demonstrate their skills and discuss new ideas for working with what is now a very accepted and frequently used material. This (plus the tea and treats provided – including a variety of different Japanese candies!) made the day exceptionally worthwhile.

Megan Narvey

MSc student, University College London

Misa Tamura demonstrates the preparation of beaten Kozo for barkcloth repairs during the Japanese Tissue Showcase



DICHLOROMETHANE VAPOUR

Rachel Thomas ACR of The York Glaziers Trust discusses its safe use in the removal of lead-light cement

The risks of using Dichloromethane (DCM) and the increasingly stringent regulations concerning its use have been in the news recently, making a piece on our experience of its safe use in the context of stained glass conservation timely. This article outlines the measures taken by the York Glaziers Trust (YGT) to test the efficacy of the material in vapour form as a means of softening and removing hardened lead-light cement, and the precautions taken to ensure that this could be done without risk to object or conservator.

Introduction to the Project

York Minster's Great East Window of 1405–8 stands 78 feet-tall. The window, made up of over three hundred individual panels, is the largest expanse of medieval stained glass in Britain and is one of the great masterpieces of pre-Renaissance European art. Created by John Thornton of Coventry, the window depicts the Beginning and the End, starting with the Creation and culminating in the Apocalypse, arranged under the feet of God the Father and the Company of Heaven. Removal of the window during structural conservation of the east façade was the catalyst for the conservation of the stained glass, a project funded by the York Minster Fund and the Heritage Lottery Fund.

Panel 3h (Revelation 19:20) before conservation, displaying the heavy leading typical of the post World War II restoration programme (1946–53)



Restoration history & the glaziers' cement

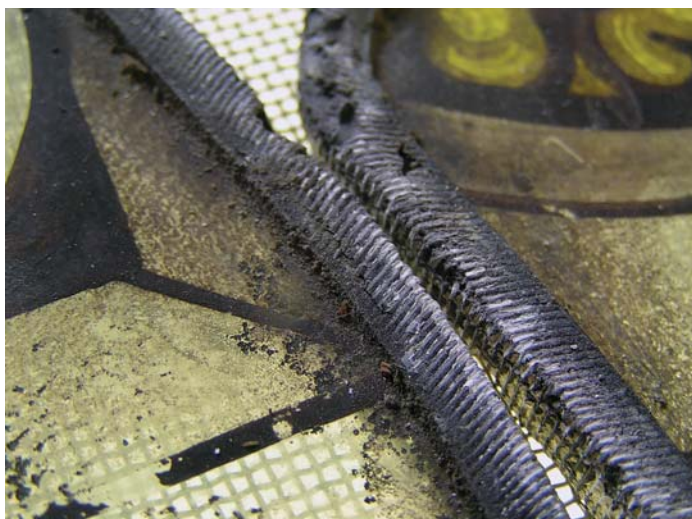
The Great East Window has been subjected to restoration more than once. Interventions of the 1790s can be traced through glaziers' graffiti. Between 1824 and 1827 the entire window was removed during the replacement of window mullions, and the glass was completely re-leaded, probably for the first time since its creation. The most recent restoration campaign followed the Second World War, when the window was once again completely re-leaded by a small team of glaziers. The panels were re-leaded throughout using a heavy 10mm wide H-section lead. As a result, the glass was securely supported within the lead net, but the weight of the panels had been significantly increased and the legibility of the narrative and the brightness of the glass had been submerged under a profusion of heavy mending lead leads. As was common practice at the time, the panels were then stiffened with a traditional mix of weather-proofing 'cement' applied between the lead and the glass with a stiff brush. This cement was prepared in the workshop by mixing a powdered calcium carbonate body with linseed oil, red lead as a hardening agent, darkened with lamp-black pigment. Not only has the stiff brushing caused damage to glass-paint, but it has resulted in an almost uniformly hard U-section of cement, around 2mm in depth, wrapped around the glass edges.

The Decision to Dismantle

Over time, the excessive weight of the lead within the panels was beginning to cause many of the panels to buckle, thereby causing stress and fracturing of the glass. The heavy lead significantly impinged on the legibility of the Biblical story, and after lengthy discussions with the Minster's East Window Advisory Group, and consultation with the Fabric Advisory

Panel 3h after conservation and reglazing





Lead calme removed. Residual glazing cement, showing the imprint of the milling mark in the heart of the lead, firmly adhered to the glass

Committee and the national Cathedrals Fabric Commission for England, all informed by the conduct of a series of conservation trials, the decision was finally made to dismantle the glass from the 1950s' lead matrix.

Extensive research and the physical evidence of the window itself, including a small area of medieval leading and many painted fictive lead lines, established that a 4mm lead calme was close to the size of lead section used by the medieval glaziers and the conserved panels have been re-leaded accordingly. Dismantling also made possible some edge-bonding of fractured glass, further reducing the negative impact of mending leads. A critical component of the detailed conservation method statement, approved in 2008, was the commitment to the reinstallation of the conserved window in a ventilated protective glazing system.

Technical Challenges

Extreme care in dismantling the glass from the lead was required and appropriate health and safety measures were also put in place. Dust extraction, masks and protective clothing were essential. By cutting through each of the leads around the solder joints, it was possible to carefully remove the glass from the calmes. The lead came away from the cement with ease, but the cement stayed firmly adhered to the glass pieces. White, powdery lead corrosion products remained on the newly exposed cement, whilst potentially dangerous red lead was also clearly visible.

It was immediately apparent that removal of the hardened cement from the glass with a scalpel alone was impossible as the mechanical forces involved were too great and could result in broken glass, broken scalpel blades and uncontrolled slips. Poultices of ethanol and deionised water helped lift the cement from the surface of the glass, but as it involved the wetting of the glass for long periods of time, this technique was far from ideal. Given the sheer scale of the window (approx. 200,000 pieces of glass), a safe solution to the problem of the hard cement was urgently needed.

A fortuitous discussion with a ceramics and glass conservator on the use of DCM vapour for dismantling glass vessels previously bonded with organic adhesives, prompted me to trial various techniques for using it to soften the hardened glazing cement. We had already trialled the use of a poultice of DCM and methylcellulose to soften and remove linseed oil cement from very thin glass in the conservation of two late

thirteenth-century windows at the Minster. Whilst this proved very effective in softening the cement on a small number of individual pieces prior to removal with a scalpel, the poultice technique could not be safely scaled up to cope with the Great East Window glass.

Working Safely

Workshop trials and the development of a technique

The DCM vapour penetrates the cross-linked polymer matrix of the cement, acting as a plasticiser and causing the matrix to swell and soften so that it can be cut away with ease. Also, the vapour penetrates the linseed oil residues at the interface between the glass (and fired glass paint) and the cement, allowing the cement to separate cleanly.

As is widely known, exposure to DCM poses a number of short and longer-term harmful risks to health.¹ Before starting work, a risk-assessment was carried out, which highlighted the need for appropriate personal protective equipment and a disaster plan.² Each stage of the process demanded calm and clear planning, especially when handling and pouring the DCM.

The first test trial of this technique was carried out, albeit crudely, in a well-ventilated room. A single piece of modern unpainted glass with firmly attached cement was selected. The glass was put in a chamber containing a concentration of DCM vapour and placed on a warm light-box for approximately an hour. This had a positive result. The cement 'lifted up' and separated cleanly from the glass. The technique was tested further by fuming several fragments of medieval painted-glass. A second test-chamber was placed inside a zip-seal polythene bag and placed on the warm light-box. The results were consistent with the first trial; the cement was easily removed. When the fragments were examined under a binocular-microscope, the inorganic fired glass-paint could be seen to be unaffected.³

The test materials chosen for sealing in the concentrated vapours were unsuitable for repeated use with DCM. An alternative procedure was required if the vapour was to be used for large-scale cement removal and this procedure also

The steel trays with steel gauze sheets placed inside polythene zip bags





The cement after exposure to the DCM vapour, now pulled away from the glass

needed to properly address the Health and Safety requirements.

A steel warming-cupboard with steel shelves and steel trays, fitted with good external extraction, was designed and constructed. The trays were designed with a broad lip to accommodate a flat glass plate designed to concentrate the vapour within the steel tray. The glass pieces were placed on steel gauze sheets that were stacked three high on spacers. These were then placed into the steel trays with approximately 50cl of DCM, before being sealed by the flat glass plate and placed inside two polythene zip-sealed bags. The bags contained the vapour and remained inflated for the one to two hours needed for the interaction between the DCM and the cement. On opening the bags, any remaining DCM (liquid or vapour) was evacuated through the external extraction before the glass was handled and the cement removed. It was possible simply to pull the cement away from the edges of the glass using finger-tips or the light pressure of a scalpel. The cement separated cleanly from the glass, greatly facilitating further cleaning under a microscope.

A passive-diffusion sampler-badge, measuring vapours only, was worn by two conservators on a day when they were working entirely on the fuming process and physically removing the cement. The results showed that their exposure to DCM vapour was less than 10% of the Workshop Exposure Limit of 350mg.m⁻³ over an eight hour period.⁴ Satisfied that we are working safely, this fuming technique remains in use ensuring that mechanical and physical stresses on both the glass and the conservator have been greatly reduced.

Further uses for DCM vapour

This method of softening hard glazing-cement could also have valuable implications for the removal of Butyl mastic. Until the early 2000s, rubber-based Butyl mastic was extensively used in stained glass conservation and restoration in the UK. Sold as a non-setting glazing compound, it was first adopted as a weather-proofing agent because of its attractive handling and initial setting qualities. Unfortunately, with time, Butyl mastic has set harder than traditional lead-light cement and is often found to be firmly adhered to both glass and lead. During conservation of a 1670 painted glass sundial, Marie Groll MA, of the University of York, found that the DCM vapour technique could be used successfully to soften Butyl mastic.⁵

The medium/long term availability of DCM (also known as Methylene chloride) is uncertain. The supply of DCM-based paint strippers for use by the general public and professionals was banned from the market after 6 December 2011 but the supply of DCM is still legal under current legislation. To find safer alternatives that work as well as DCM but without any potential risk to ourselves, the object, or the environment, will take time and might not be possible. The availability of many solvents has been restricted over the years, which has affected many professionals throughout the heritage sector. On-going changes in EU regulations, health and safety law and the supply of new products on the market make access to suitable solvents a challenging issue.

DCM is now only available through a limited number of stockists. On 25 October 2014, the Department for Environment, Food and Rural Affairs made a Statutory Instrument entitled 'The REACH Enforcement (Amendment) Regulations 2014' (S.I. 2014/2882), which came into force on 1 December 2014. The amendments will allow the supply and professional use in the UK of paint strippers based on the solvent dichloromethane by introducing necessary training requirements and a mandatory certificate of competence for professional users. The Health and Safety Executive, which was responsible for consulting on this proposal, is currently developing the proposed training syllabus and testing regime for professional users of DCM-based paint strippers with the assistance of the Health and Safety Laboratory.

For the health and safety of individuals who in their own workshops may choose to use DCM vapour to soften lead light cement or for any other use, protective measures must be in place. If you are considering employing this technique then **please take heed of your health and safety and that of others around you**, be fully aware of the material safety data and proceed with care.

To follow our work on the Great East Window and other projects at the YGT, please go to our website at www.yorkglazierstrust.org/

References

1. For safety data see: www.chemicals.co.uk/uploads/documents/DICHLOROMETHANE-TECHNICAL-MSDS.pdf (accessed 22 January 2015)
2. Personal protective equipment included Ansell Edmont Gloves (DCM proof PVA 15-554, 9-10, CE0493) and masks. A Fentex spill kit was always on hand and the location of the chemical cabinet is clearly marked on the YGT Disaster Plan supplied to the Fire Brigade
3. Any unfired organic cold paint would, of course, be damaged by this treatment
4. The external H&S consultants employed by the YGT, Safety Management Systems, Europe (SMSE) Ltd, commissioned B Environmental Ltd to provide an analytical report
5. Stained glass sundial by Henry Gyles (1640?–1709) from Nun Appleton Hall, North Yorkshire, now in the York Art Gallery. Conservation was carried out by Marie Groll whilst studying towards the MA in Stained Glass Conservation and Heritage Management at the University of York.

A SHAGREEN WALKING STICK

Catherine Silverman describes starting at square one with this unusual skin

Introduction

When given a new project I generally begin by consulting books, articles and treatment reports describing the conservation of similar objects or materials, so when I was allocated a shagreen-handled walking stick as a bench project during my Postgraduate Diploma in the Conservation of Furniture and Related Objects at West Dean, I headed to the library to find out how to conserve this peculiar and, for me, previously unencountered skin. I quickly discovered a real paucity of published information on the topic. This article describes the process of experimentation undertaken in order to devise an appropriate method of treatment.

Shagreen

The term 'shagreen' has, somewhat confusingly, been used to describe several distinct, roughly textured skins. But nowadays, the term most frequently refers to the skins of rays, as well as sharks, dogfish, and other cartilaginous fish. These are covered in protrusions called placoid scales which are similar to teeth, with an inner core of pulp surrounded by dentine and a thinner layer of enamel. In Japan shagreen was used for samurai sword hilts, its texture offering the user better grip. In Europe for a long time it was simply a by-product of the fishing industry and was used as an abrasive by cabinet makers.

Although it had already been imported to Europe for about a century, in mid-18th century Paris, Jacques Galuchat popularized the material when he covered hundreds of small objects for Louis XV and Madame de Pompadour in green vegetable-dyed shagreen. The material experienced a renewal in the Art Deco period, which is presumably when the walking stick was manufactured.

The project

The walking stick once belonged to Francis Cadell (1883-1937), a Scottish Colourist painter renowned for his depictions of elegant interiors of his native Edinburgh. It is now owned by one of his descendants. When it arrived at West Dean College the top section of the handle had been separated from the rest of the stick, and the intervening 4cm long section was missing. A previous student had already recreated the missing section from limewood, securing it to the original part of the stick internally, using carbon fibre rods. As well as the new section, which had no shagreen covering, there were several areas where the scales were missing.

The owner wanted the visually distracting losses to be filled. For my part, I wanted to ensure that the treatment adhered, as far as possible given the brief, to the ethical principles of conservation, upholding the key tenet of reversibility/retreatability.

Replacing lost scales

I used three different techniques to replace the missing scales on the handle. One technique was used for the replacement section, another for individual missing scales, and a third for larger areas of missing scales within the original shagreen.

I began by thinking about how to replace the individual missing scales. Scales were missing along the top of the cane (an area perhaps particularly vulnerable, due to handling) and along the joints, where the maker had evidently inserted scales, now lost, in an effort to distract the eye from what would otherwise have been very straight lines.

Initially it was thought that these could be replaced using genuine shagreen scales, cut from the skin and glued in place. I experimented, removing scales from a scrap piece of shagreen using a scalpel, and gluing other scales in their place. This method was relatively straightforward and visually effective. Unfortunately, the shagreen hides I was able to

The walking stick before and after conservation





Scale shapes hand-modelled in Milliput epoxy putty and glued to MDF

source had scales that were significantly smaller than those needed for the object.

I therefore decided to make artificial scales from coloured resin. A mould was created by hand-modelling scale shapes from Milliput (a plasticine-like epoxy putty that hardens at room temperature). An impression was then taken using Lab-Sil (a kneadable silicone putty made for the dental industry).

Three different resins were tested – two epoxy resins and one polyester resin. HXTAL NYL-1 epoxy resin was selected. Although it has a very long cure time (approximately thirty hours required for the small scales) and is expensive, it is colourless and non-yellowing (unlike most other epoxy resins), compatible with Orasol dyes, and relatively non-toxic (especially compared to the polyester resin).

Orasol dyes – a range of colours with good light-fastness – were used to colour the resin. A concentrated dye/acetone mix was used to minimise shrinkage resulting from the evaporation of the solvent. Fillers were also added to the resin in order to match the translucency of the original shagreen. Pumice powder, colloidal silica, whiting and glass microballoons were all tested. The colloidal silica gave the best effect, with the whiting tending to create a grainy mixture, and the microballoons collecting in the centre of the 'scale'.

In order to create a paler background and to allow the artificial scales to sit flush with the surface, the void was lined with Japanese tissue paper before gluing the scale in place using EVA. The artificial scale was then abraded and polished



An impression was taken of the 'scales' using Lab-Sil silicone putty to make a mould

in situ to ensure that it was flush with and of a similar sheen to surrounding scales. A hard wax was mixed with dry pigments to match the fill between the scales.

Dealing with larger areas of loss

It would have been impractically time consuming to make individual scales to fill larger areas of loss in the shagreen. A technique commonly used for the conservation of leather was therefore employed.¹ Layers of Japanese tissue paper coloured with Selladerm dyes were built up using poly(vinyl acetate). By tearing the tissue paper an unobtrusive edge was created. The tissue paper also creates a slightly mottled, translucent effect which blends better than other fill materials. Watercolours were used to paint small circles and add further variation in colour to replicate the pattern of surrounding scales.

Three resins were tested to see which would be the most suitable to use for the artificial scales – HXTAL NY-1 epoxy resin, West System 105 epoxy resin and Taranti GP polyester resin (left to right)



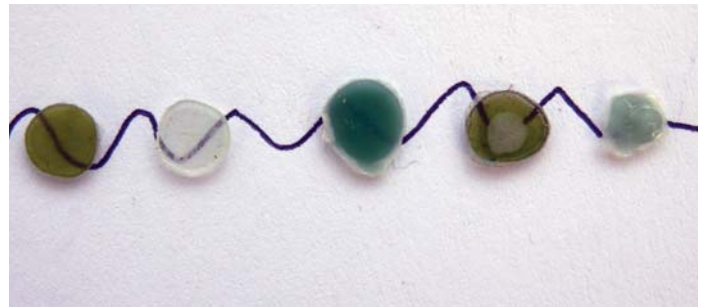


Orasol dyes premixed in acetone before being added to HXTAL NYL-1

Dealing with the new handle

For the new section of handle, a real piece of shagreen was sourced. The trade in exotic skins is governed by The Convention of International Trade in Endangered Species. Shagreen falls into Appendix II which covers 'species not necessarily threatened with extinction, but in which trade must be controlled'. According to the regulations, skins must be imported into the EU accompanied by the export certificate issued by the government of the country of origin. It is therefore legal and relatively easy to source shagreen – it can even be bought from eBay.*

Once a skin had been procured, a piece was carefully selected in order to match the original shagreen as closely as possible. Rayskin has its largest scales down the middle of the back, with scales gradually diminishing in size towards the edges. The maker utilised this feature for decorative effect,



HXTAL NYL-1 with (left to right) colloidal silica, pumice powder, colloidal silica (larger proportion), microballoons, whiting

with the largest scales running along the top edge of the handle. The surprisingly tough scales took almost twenty minutes to grind down using an orbital sander with the coarsest paper available. Selladern leather dyes were used to colour the shagreen.

The piece was then cut approximately to size using a scalpel. In order for the shagreen to wrap smoothly round the compound curve of the new section it was necessary to dampen the skin. The shagreen expands and stretches significantly when wet, so it was important that it was securely bonded whilst under tension, before it shrank back to its dry dimension. A fast-acting glue that would cure in the presence of considerable moisture was therefore required. Superglue was found to be very effective. Although irreversible, this was ethically justifiable, as the glue was only applied to the new section, rather than to the original object.



Before and after voids are filled with artificial resin scales.



Larger areas of loss filled using Japanese tissue





The handle with new piece of shagreen glued into position – before second stage of colouring and filling joint lines



More detail and colour was added using watercolours, acrylics and dyes

The dye had achieved a quite consistent colour across the new piece, which was very noticeable when compared to the surrounding shagreen which exhibited much greater variation in colour. A range of watercolours and acrylics were used to match the variation. The colour and wax used on the handle were sealed in with layers of Paraloid B-72 and the whole handle was given a light coating of microcrystalline wax.

Conclusion

There are some considerations that may be worth noting should you ever find yourself conserving a shagreen object. Firstly, the use of superglue, whilst acceptable in this situation, would be difficult to justify if the shagreen or substrate were original to the object. Secondly, a lot of the colour, particularly on the new piece of shagreen, is only surface-deep. If the walking stick were intended for use, it would inevitably wear off with time. Finally, the process of creating the individual artificial scales was extremely time-consuming. The Japanese tissue technique could have been used for these areas and would have been more efficient.

This was a challenging and valuable learning experience. I would now feel less daunted if faced with a problem not clearly addressed by the conservation literature. The project also fired an abiding interest in the conservation of this unusual material.



The author with a ray skin and the finished object

References

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- 3 McPherson, Angie, 'New Study: 1 in 4 Sharks and Rays Threatened with Extinction', National Geographic website, 24 January 2014, <http://newswatch.nationalgeographic.com/2014/01/24/shark-ray-biodiversity-oceans-conservation-endangered/> (last viewed 10/5/2014)

Since graduating from the Postgraduate Diploma at West Dean, Catherine has been working as an Assistant Furniture Conservator at Period Furniture Conservation (a private conservation studio) in New York.

***CAVEAT:** Although it can be bought legally, there are ethical implications. There is an assumption that because rays are farmed as a food source in South East Asia their skins are a sustainable by-product. However, farming does not always relieve pressure on wild populations.² Further, a recent report suggests that a quarter of chondrichthyans (including sharks and rays) are actually threatened with extinction.³



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