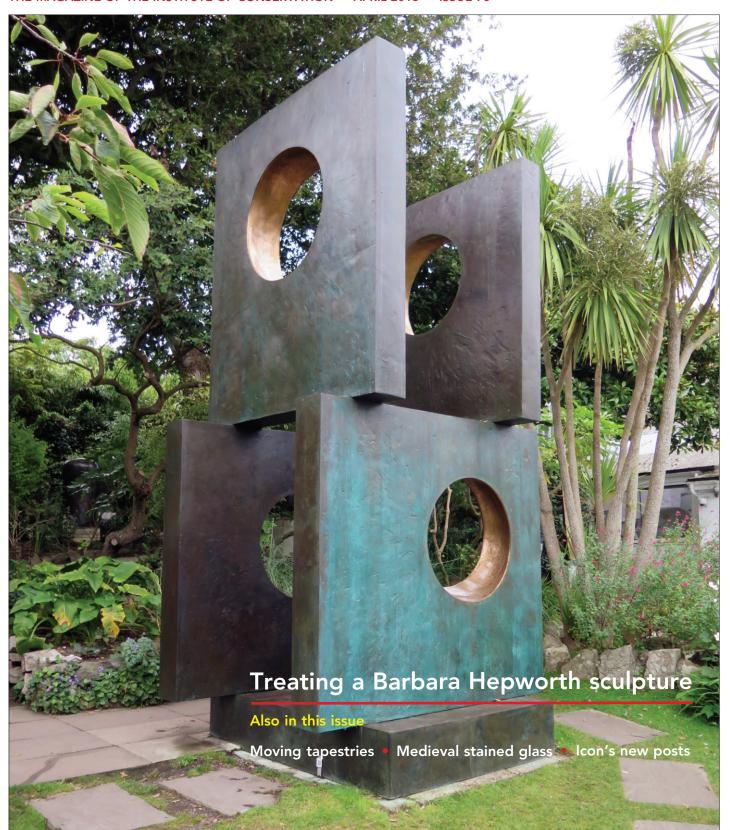


THE MAGAZINE OF THE INSTITUTE OF CONSERVATION • APRIL 2018 • ISSUE 75





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APRIL 2018 Issue 75



From the Editor

Largeness is the theme threading through this issue, what with an outdoor sculpture, as you can see from our splendid cover, enormous tapestries in Derbyshire (there is a rare opportunity to see all thirteen of them together between now and June) and even an

outsized glass lantern slide. This coincides with the publication of an excellent publication *Guidelines for the Care of Larger and Working Historic Objects* – details within on how to obtain it.

Wanting Icon to have a large impact despite its small size (punching above its weight as the over-used and ugly metaphor has it) is, of course, something we all want to achieve in the interests of the national heritage and of the profession. The appointment to Icon of both a Policy Advisor and a Marketing and Development Officer are important steps in the right direction. You can read more about these posts in Professional Update.

Lynette Gill





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Deadlines for adverts and editorial

For the June 2018 issue Tuesday 3 April 2018

For the August 2018 issue Friday 1 June 2018 Icon is registered as a Charity in England and Wales (Number 1108380) and in Scotland (Number SC039336) and is a Company Limited by Guarantee, (Number 05201058)

professional update

From the Chief Executive

Alison Richmond ACR FIIC on recent activity in the policy field



It seems that the last few months have passed in a whirlwind of activity. The arrival of Anni Mantyniemi, Icon's Policy Advisor, has certainly upped our game! It is early days but we have been able to map our stakeholders and in such a way that we can monitor our influence on them. We have responded to some important consultations based on well-researched evidence, including Banning the UK sales of ivory, Historic England's Conservation

Principles, and the UNESCO/BEIS survey on innovative practice in heritage. We have contributed to others' responses, too, for example Heritage Alliance's survey on the DCMS Inquiry on heritage and health.

We have written welcome letters to the relevant new Government ministers in Westminster and in the Welsh Government, and other letters commenting on policy, such as the changes to the Heritage Lottery Fund's Grants for Places of Worship. We have also published statements in response to various government-sponsored reviews, such as the Taylor Review of the Sustainability of Churches, and welcomed the Heritage Statement from the Department for Digital, Culture, Media and Sport (DCMS). In response to a member's concerns, we have written Freedom of Information Requests to all of the London Councils with responsibility for cemeteries asking for the criteria they use to select conservators.

We are also learning a lot by talking to other professional bodies and heritage organisations. They have been very generous with their time and have shared their approaches to policy and to setting priorities. We have learned that it is important to decide the purpose of our advocacy – what is it we want people to do? - and vital to establish our priorities as this will determine how much energy we will put into any topic.

Not only that, but there are so many consultations coming through to the heritage sector we will need to balance responding to those with more pro-active letter writing and face-to-face meetings. We also want to be fleet of foot to make the most of opportunities when they come along. While

we are very keen to work in partnership, and add our voice alongside others', we also want to ensure that our key messages about the conservation of our kind of heritage are heard.

The purpose of all of this is to be in a position to shape the policies of governments and of significant bodies in all four nations. To do this, Icon needs to have built a profile as an organisation to be listened to, one which should be consulted early on in the process of policy-making. For us to be taken seriously, we will need to have sound data on our workforce, data that government and others want. As I write, we are drafting a research proposal to be discussed with funders. Another big challenge is measuring impact. It is not the number of consultation responses or letters that counts, but the impact that our advocacy has.

Being transparent and engaging members in Icon's advocacy is crucial. Anni and Cynthia Iňesta (Icon's Digital Content Officer) have already set up a Policy page on our website where members can see what we have done. But we need to make sure that members can feed into our policy work in advance and to make this happen we will be inviting members who are interested to join an Advocacy Panel, with a call going out annually.

Speaking of policy, in the last issue of Icon News, I reported on the review of the Masters Degree at Camberwell. Since then, Juergen Vervoorst ACR, Head of Conservation at The National Achives, Dr Cordelia Rogerson, Head of Collections Management at the British Library, and I met the Head of Colleges, Professor David Crow, at the University of the Arts London. We were keen to get across the need for the programme and the impact it would have on the sector if it were to close. We also offered to help in any way we could. I am pleased to say that although the course is currently suspended there appears to be a genuine will to take it forward. Our input was welcomed and I am of the view that the conversation will continue.

On another policy matter we have had a measure of success. For the last eleven years, Icon has been an Appointing Body to the National Trust's Advisory Council. The Trust is in the process of restructuring the Council to shrink it from fifty two seats to thirty six, with only half of those to be appointed by appointing bodies. Icon has applied to be on the ballot of appointing bodies and we have just learned that we are among the eighteen organisations proposed by the Nominations Committee to be recommended by the Council to the members. So, a few hurdles to go yet, but well done us for getting this far! So, calling all National Trust members: when the time comes to vote, please do vote for Icon!

TRUSTEE PLANNING DAY

Every January, the Icon Board of Trustees and senior staff get together in an informal way to discuss matters pertinent to the future direction of Icon. Over the last two years, the Trustees have focussed on first setting and then refining Icon's five-year strategy. This year, Trustees were asked in advance to identify topics for the day. The top priorities were income generation and policy.

A small group of Trustees and staff had received fundraising training supported by the Giving to Heritage Scheme and it was decided to share some of this learning with all of the Trustees, with the aim of engaging the Board with drafting Icon's Case Statement. This is the sentence (or two) that summarises the case for support, in other words the rationale for giving to Icon. Trustee Ruth Howlett volunteered to lead this session. She was the perfect choice as her day job is Head of PR and Communications for BBC Children in Need!

Breakout groups came up with three versions of the case statement that had a lot of commonality. The next steps will be to call together a small group of Trustees to come up with one final version of the case statement to go to the March Board meeting. In advance of that meeting, external perspectives will be sought to test the wording. Once agreed, it will be embedded in all Icon's communications.

Anni Mantyniemi, our new Policy Advisor, had joined Icon just a few months before the meeting and this would be an opportunity for her to present her role to the Trustees. She also shared the work she was doing on mapping our external stakeholders.

We also had the good fortune of having Peter Hinton, Chief Executive of the Chartered Institute for Archaeologists, join us for the afternoon session on policy. ClfA is very experienced in this area of work and Peter was able to tell us about their aspirations, the reality and the pitfalls of policy work. His key message was: make sure you know why you are doing advocacy. What is it that you want people to do? Otherwise, there is a risk that advocacy becomes an end in itself.

Chair of the Board, Siobhan Stevenson lead the session to engage the Board in establishing the policy priorities for the next year and prioritising them. It was somewhat surprising that all groups emphasised the need to raise the profile of conservation. This was seen as a key area of work going forward.

For policy work, Anni will draft a 'policy on policy and advocacy' to include who does what, when and how, and to include:

- the balance of pro-active and re-active advocacy,
- provision for setting up and consulting an Advocacy Panel of members,
- provision for decisionmaking in situations when the members hold conflicting views,
- provision for communications to be signed off.

A separate list of policy priorities will be drawn up each year

and agreed by the Board. In addition, the Chief Executive will lead the organisation in a refreshed campaign to raise public awareness. There will be another update on progress in the next issue of Icon News.

Alison Richmond, Chief Executive

MARKETING AND DEVELOPMENT

Recently the Trustees of Icon agreed that our income generation strategy needed some dedicated resource if it was to be successful. While we have successfully upskilled the Senior Management Team and Trustees in fundraising, the strategy included generating income through other means:

- increasing the number of members by reaching out and marketing to non-members,
- selling other products such as advertising and conferences, and
- securing greater levels of sponsorship for Icon products and events.

We had many aspirations but did not have a job role dedicated to marketing. Recognising that we already had a member of staff with a strong marketing background who was in another role, the Trustees agreed that the new post could be recruited internally. Fiona Brandt was successfully recruited to the role of Marketing and Development Officer and she starts on 1 April.

This is a pilot project for two years. The post is tied to specific financial targets with the aim of generating enough income to cover the majority of the costs of the post in year 1 moving to a surplus in year 2 and creating favourable conditions for future years. The aim of the post is to increase the knowledge base of the Icon team and to support the Chief Executive to co-ordinate the marketing activity across Icon. In addition, the MDO will sell advertising and support the Senior Management Team in developing income generation bids to external funders and sponsors.

Alison Richmond, Chief Executive

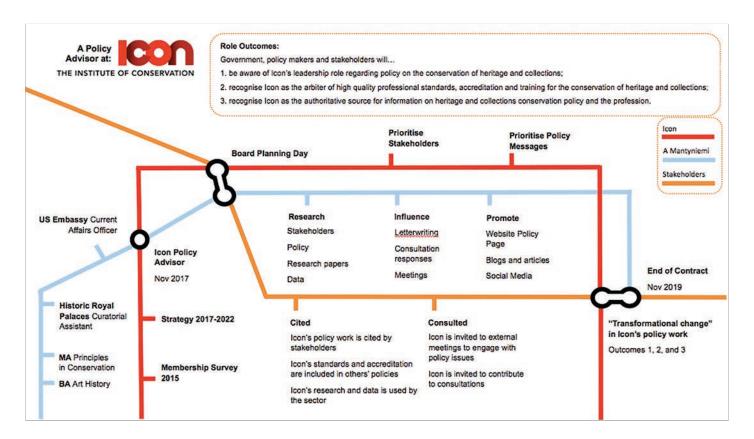
Fiona Brandt writes:

'Before my time at Icon, I had spent ten years working in both



media and advertising agencies in roles encompassing media planning and buying, research and analysis and most notably, marketing strategy. I worked across a variety of brands but had always wanted to work in the heritage sector. As such, I am thrilled to be embarking on this new role.

In the eighteen months I have worked at Icon, I have been able to get to know the



various facets of Icon's organisational offering. I feel confident that I will be able to develop a marketing strategy and deliver an implementational plan that grows Icon's products and services whilst supporting our mission to promote advocacy, excellence and engagement in the conservation of our cultural heritage'.

POP GOES THE WEASEL (WORDS)



Anni Mantyniemi

What does a government reshuffle and Leonardo Da Vinci's Lady With an Ermine have in common?

Both are associated with weasels. The latter's reference to the animal is obvious – Da Vinci's subject delicately holds a white ermine in her hands as a symbol of purity or perhaps in reference to her name. In terms of the former – no, I am not taking a political stance on Theresa May's new cabinet. Rather, I am referring to a common perception of

politics. Policies and political initiatives are often accused of being composed of vague and meaningless words that lack concreteness and hide the truth rather than communicate it. I recently learned that this phenomenon is described as 'weasel words', alongside synonyms such as 'gobbledygook', 'sophistic wordsmithing', and 'circumlocution' (here's to the English language!).

As Icon's new Policy Advisor, I hope to avoid weasel-y language and aim to make sense of it if and when it appears in others' policies. In my first three months, I have been lucky to engage with policy at a rather tangible level. Alongside Chief Executive Alison Richmond, I have met with policy

professionals across the heritage sector to discuss mutual priorities and how we can complement each others' work. We have also analysed recent proposals and strategies affecting heritage and responded in the form of statements, letters and consultation responses. Do have a look at our recently-launched Policy and Advocacy webpage to see what we have said, for example, on the government's proposed ivory trade ban or twenty-five year plan for the environment.

I hope you will think that this is taking Icon's policy work in the right direction, as the argument for a policy advisor role emerged from the feedback of members. The results of the 2015 Membership Survey underscored a wish for Icon to lobby more forcefully in local and national political processes, to reach out more to key stakeholders, and to collaborate more widely across the sector. This was addressed in Icon's five-year strategy, which identified advocacy as one of its main themes and focuses.

My post was made possible through the generous funding of the Clothworkers' Foundation, for the purpose of delivering 'transformational change' in Icon's policy and advocacy. My aim is to promote the value of conservation, the importance of high quality standards and of Icon's leadership role in the field to all sector policy makers. In the long-term, I hope this will drive positive change and result in the better appreciation and understanding of the conservation of our heritage.

To progress towards these ambitious objectives, I have found it helpful to visualise my role in the form of a 'tube map,' as pictured. This map details how I see my actions (the blue line) and Icon's strategic direction (the red line) coming together to influence our stakeholders (the orange line) and resulting in the desired 'transformational change'.

I see my role comprising two main work streams: research and communication. Research includes analysing opportunities and challenges in our sector and identifying ways in which we can maximise the benefits and minimise the threats. A strong evidence base will be crucial to the latter as influencing decision-makers will rely on us demonstrating a convincing

case. Your expertise and experience contain great potential to build an effective argument as you understand better than anyone the current challenges of the profession. I hope you will allow me to tap into this knowledge. We at Icon HQ are currently looking forward to surveying the membership and workforce on issues ranging from skills needs to Brexit.

The second part of my role includes influencing decision-makers and stakeholders through direct and indirect communication channels. This takes the form of sharing our research and advocating for Icon's positions through meetings with policy makers, letter writing and consultation responses. We will also promote our work online through social media and the Icon website. I expect our Policy and Advocacy page to grow with blogs, articles and statements making the case for conservation.

Da Vinci wrote that an ermine would rather die than soil its coat. I am advocating for making 'weasel words' extinct and – applying Da Vinci's principle to the animal's namesake phrase – plan to do this by working in the trenches. Icon's policy work should not be an exclusive or pristine process, if not for the sole reason that delivering 'transformational change' is impossible on your own.

I will continue working closely with members, Alison, the Trustees and staff to promote the value of conservation and the profession to policy makers. Over the spring I will be developing a more transparent process for members to engage with policy, for example through the form of a feedback or consultation panel. I would love to hear any ideas or preferences you might have on involving members with Icon's policy work, so please do share them with me!

In the meantime, I hope all natural history conservators will forgive my appropriation of one of their subjects.

Anni Mantyniemi Policy Advisor

JOURNAL NEWS



Hélia Marçal

The Icon Journal Award

An award of £250 is kindly granted by Taylor & Francis – publishers of the *Journal of Institute of Conservation* (JIC) – for Icon to present to an author who has made a worthy contribution to the Journal.

Each year an award winner is selected based on meeting one or more criteria, including being:

- a new author,
- a newly accredited member of Icon, or
- an emerging professional

For Volume 40 (2017) it is our pleasure to make this award





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Helping To Preserve Heritage

to Hélia Marçal, who, in her article 'Conservation in an era of participation' (Journal of the Institute of Conservation Vol 40, No. 2, 2017), argues for a more ethnographic understanding of the profession by examining the paradox of the collection and preservation of performance art to propose new practices in conservation documentation.

Hélia Marcal writes:

'It is truly an honour to have been granted this award. My article proposes new practices in the documentation of performance-based art, mostly concentrated around an idea of delegation. It argues that conservators should practise a form of ethnographic participation in order to understand what are often neglected aspects of performance art. I believe the Icon Journal Award is an important recognition for this work and provides a great incentive towards the growth of contemporary art conservation in the coming years.'

The Taylor & Francis Award will be made retrospectively each year and contributors to the three issues of Volume 41 will be the next authors to be considered

Call for submissions to the Journal

The Journal is our peer-reviewed publication. With international contributions on all aspects of conservation, it is an invaluable resource for the heritage sector and is published in full colour, three times a year. (https://icon.org.uk/what-is-conservation/publications)

The aims of the Journal are to:

• Promote knowledge of cultural heritage conservation practice, the research which underpins it and related issues

- Enable communication of advances between conservators and the wider conservation and heritage communities in the UK and internationally
- Provide a permanent medium of record of issues relating to conservation and the heritage sector

We welcome submissions for publication on any topic related to the conservation of cultural heritage, including (but not exclusively):

- advances in collection care, display and archiving
- advances in interventive treatments
- advocacy and ethics
- critical approaches to conservation
- education and training
- literature reviews
- new understandings of decay
- participatory and collaborative processes
- professional and ethical issues
- remedial or preventive conservation
- technical studies of objects and conservation materials

Guidance about writing an article for JIC is available on the Taylor & Francis website

http://www.tandfonline.com/action/authorSubmission?journal Code=rcon20&page=instructions

If you are thinking about submitting an article or book review to JIC please feel free to email me to discuss your ideas: journal@icon.org.uk.

Jonathan Kemp Editor
Journal of the Institute of Conservation

NHSF NEWS

Careers in Heritage Science project

The National Heritage Science Forum (NHSF) has appointed heritage and arts consultancy Culture Syndicates CIC to carry out research into postgraduate training and careers in heritage science. The *Careers in Heritage Science* project aims to provide insight into why students choose whether or not to pursue postgraduate training and careers in heritage science, and understand the career paths of researchers following completion of their studies.

The first step in Culture Syndicates' work is to get in touch with training providers to reach postgraduate students and alumni who completed their studies after 2011 and request their participation in a brief survey.

The project will gather labour market intelligence to inform NHSF actions and strategies to grow and sustain the heritage science workforce, to meet the future needs of cultural heritage in the light of Brexit and major national infrastructure projects.

To find out more please visit the NHSF website www.heritagescienceforum.org.uk or contact Caroline Peach: administrator@heritagescienceforum.org.uk

Tate receives NHSF grant

The National Heritage Science Forum (NHSF) provides grants to enable the Gold Open Access publication of heritage science research. The Forum is a keen supporter of Open Access as a means of maximising the benefits of research and making it widely available. 'Gold Open Access' means that everyone can have access to the full article online as soon as it is published, i.e. no paywalls or subscription barriers.

Tate successfully applied for an NHSF grant to support the Gold Open Access publication of a key Cleaning Modern Oil Paints project (CMOP) research paper, entitled *Scientific investigation into the water sensitivity of twentieth century oil paints.* The paper has been published in the peer-reviewed *Microchemical Journal.* It describes an in-depth investigation into the chemical characteristics of water sensitive paint passages, and likely causal factors.

The Cleaning Modern Oil Paints project (CMOP) is a collaborative European research project, funded through the JPI Heritage Plus programme, which runs from June 2015 – May 2018. The project aims to investigate conservation challenges associated with twentieth and twenty-first century oil paintings in order to ensure that modern oil paintings continue to be fit for display for future generations.

The interdisciplinary CMOP team has been investigating the underlying causes of water sensitivity in modern oil paints. This information has been used to inform the systematic testing and evaluation of selected cleaning systems for use on water sensitive modern oil paintings, with the aim of informing conservators about the risks involved and how to minimise them.

Part of the CMOP research has involved the chemical analysis of a series of naturally aged modern oil paint micro-samples, taken from case study oil paintings and from historic Winsor & Newton (W&N) artists' oil paint swatches. The W&N paint swatches were originally produced by the manufacturer for quality control testing, and were subsequently donated to Tate by ColArt UK for research purposes.

The research at Tate is led by Principal Conservation Scientist Dr Bronwyn Ormsby, with Post-doctoral Researcher Judith Lee, and with the support of Tate's Collection Care Research.¹ More information on the project and details of the key CMOP project dissemination event; *Conference on Modern Oil Paints* taking place on 23–25 May 2018, are available on Tate's website.²

The research is published in *Microchemical Journal*, Volume 138, May 2018, pp.282-295:

https://www.sciencedirect.com/science/article/pii/S0026265X17309104

NHSF's grants are available to employees and students at NHSF member organisations and are targeted at research that aligns to the National Heritage Science Strategy and will have wide impact on heritage science. The grants cover the article processing charge associated with Gold Open Access publication. Further information on the NHSF grants is available at: http://www.heritagescienceforum.org.uk/whatwe-do/gold-open-access-fund

A longer version of this article will be published on the NHSF blog in April

https://nationalheritagescienceforum.wordpress.com/

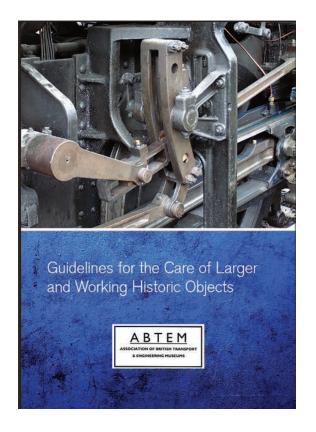
- 1. http://www.tate.org.uk/research/collection-care-research
- 2. http://www.tate.org.uk/about-us/projects/cleaning-modern-oil-paints-0

GUIDELINES FOR LARGE OBJECTS

An impressive document has recently been launched by the Association of British Transport & Engineering Museums (ABTEM): Guidelines for the Care of Larger and Working Historic Objects. The work has been produced to provide practical conservation advice for heritage organisations, such as museums and enthusiast societies, or for private individuals. They should also be of interest and use to conservators and a number of Icon members contributed to their preparation.

The terms 'larger' and 'working' broadly refer to industrial, transport, military and agricultural objects, which may or may not be preserved in working order. But the Guidelines are also applicable to other types of objects, from social history to automata and computers.

As the introduction notes 'the Guidelines provide a structured process for the conservation and care of historic objects, starting from acquisition, initial measures to stabilise an object and the research needed to understand its significance, through to conservation and maintenance. They work through the decision-making process for the selection of appropriate conservation routes that include, but are not limited to, the conservation of an object in static or working order'.



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The Guidelines can be obtained in several ways:

- a free downloadable PDF file is available from https://abtemguidelinesorg.files.wordpress.com/2018/02/12 4317-abtem-guidelines-booklet.pdf
- a 'Flipbook' format book that can be viewed free of charge at: http://online.fliphtml5.com/wffb/bclk/
- a hard copy version produced in conjunction with the Collections Trust at a cost of £24.99. Copies can be ordered from: www.collectionstrust.org.uk/product/guidelines-forthe-care-of-larger-and-working-historic-objects

TRAVELS WITH THE MEMBERSHIP MANAGER: Spring 2018

As Emily M Williams explained in her article on cross-disciplinary conservation in issue 3 of last year's *Journal of the Institute of Conservation*, the conservation profession has tended to be demarcated by specialism – sometimes rigidly. Emily traced the origins of this syndrome to divisions between historic practitioners for whom conservation was a sub-set of other skilled professions. With this foundation, in the ensuing years conservation training programmes emerged along traditional lines of specialist focus and demarcation.¹

A key premise behind Icon's formation was the notion that the united conservation profession, encompassing a broad variety of specialist disciplines, would attain greater critical mass – working to ensure that conservators could be stronger together. With a diversity of conservation specialisms under one roof, it should be no surprise that boundaries are frequently blurred as cross-disciplinary approaches gain



Icon members view the reinstallation of 14th-century stained glass panels at Canterbury Cathedral during the Group's 2016 Annual Conference and AGM

traction across our networks, offering means to tackle age-old challenges. It is certainly true that Accreditation is based upon the standards, not the specialism, in the PACR framework.

In my own time with Icon, I have developed a strong sense that the age-old divisions between specialisms are becoming increasingly porous. This is due in part to the shifting contexts in which conservators work and to the increased exposure of diverse techniques and approaches across the sector but, as we will see, it is also readily apparent that this sense also has ready applications beyond our sector.

In many cases, the objects themselves demand crossspecialist skills in conservation. This past November, I attended the Metals Group Annual Conference and AGM at Tate Britain, which focussed on the complex challenges involved in the conservation of composite objects. Dichotomies in typical treatment approaches for objects ranging from cars to corrosion masses exemplified the hazards of navigation – where, for example, a conservation project rooted in archaeological approaches would need to contend with the conservation of metal and organic compounds within the same object. Solvents that might typically do the trick and help to disentangle the mess from one angle could pose dangerous conflicts for the other materials. For objects of more recent origin – such as a classic car - treatment would need to navigate across varied integrated materials, ranging from the metal body of the exterior, to the leather upholstery of the seats, to surviving electrical components and complex dynamic aspects such as engines.

Of course, working together seems to be the most obvious way forward, where possible, and in this I was reminded of a project the Stained Glass Group visited back in the autumn of 2016. Delegates ascended the scaffolding to view the reinstallation of the 14th century stained glass panels in the Great South Window at Canterbury Cathedral. Over the centuries, corroding ironwork inside the stone had created distortions in the edifice leaving the historic glass at risk. Conservators worked closely with stonemasons throughout the project to rebuild the entire window – and the results speak for themselves.

These approaches can readily bear fruit on large projects where a diversity of skills are accessible, but it also has far more immediate implications. For the lone practitioner or small organisation presented with the need to consider cross-specialists approaches to a project, it also underscores other imperatives. Our 2015 Membership Survey strongly suggested an increased tendency towards cross-specialist working practices and there is a clear need for conservators to ensure that they have access to networks where a range of specialist skills and advice can be found. Making and maintaining personal connections across the spectrum can ensure that help can be close at hand and, indeed, that reciprocal referrals and business arrangements between conservators working in different specialisms can readily bear fruit.

The imperative is indeed significant, as the pace of advancement is swift across all the disciplines. 'Photography moves incredibly fast,' explained Icon member Marta Garcia Celma as she presented her paper at the recent Photographic Materials AGM and conference. To ensure that conservators could stay on top of swift-moving advancements, 'our profession will have to catch up'. This exemplifies a key dichotomy within conservation: the speed at which conservators must come to grips with emerging new facets of cultural heritage – the digital world being only one prime example – while simultaneously keeping on top of developments relating to more 'traditional' materials. How are we all to keep up and stay in the picture, as it were?

Naturally, there is a fascinating constellation of events and lectures underway across Icon in any given month but it is clearly impossible for one individual to attend everything. This becomes even more tricky given the time it takes to get out of the studio or office and travel to every interesting lecture that might be on the calendar. One recent suggestion under study highlights the potential to amend the calibration of Icon's conferences to help contend with this; speeding up the frequency, and programming every second conference not around specialist segmentation, but around cross-disciplinary approaches – delivering parallel sessions that would truly run the gamut of skills in the sector. We will see how this notion tests in forthcoming research around the extent to which Icon members like this idea.

But our efforts cannot be limited to the conservation field

Nicola Emmerson, Chair of the Icon Metals Group, launches their 2017 Annual Conference & AGM $\,$



PROFESSIONAL DEVELOPMENT IN CONSERVATION



Coatings and Consolidants for Masonry 9-11 April 2018

Conservation and Repair of Brick and Flint Masonry 30 April-3 May 2018

Managing Wildlife in the Historic Environment 14-17 May 2018

Integrated Pest Management Workshop 4-7 June 2018

www.westdean.org.uk/cpd

cpd@westdean.org.uk

West Dean College of Arts and Conservation Chichester, West Sussex PO18 0QZ



anyone wishing to join the committee please do contact any of the committee members for more details; our contact emails are on the Icon Archaeology Group website.

Suggestions for future events and workshops are always welcome. Watch Iconnect and Twitter (@ICONArchaeology), Facebook and website for announcements.

Helen Ganiaris ACR Icon AG communications rep

Book & Paper Group

Chairs' Update

It has been a busy start to the year with lots going on for the Book & Paper Group. In particular, look out for:

- Our AGM, which takes place in the spring. This year the AGM will be more in depth, with a range of talks throughout the day. Don't miss out on booking your place!
- Further details about the Book & Paper Group Conference (see below)
- News about the next stage of the Fred Bearman Research Grant. At the time of writing we are reviewing the applications. We would like to thank all applicants for supporting this wonderful scheme in Fred's memory.

In addition, we are closely monitoring developments with the MA Conservation at Camberwell College of Arts. We fully support all those involved in conservation training and education in the UK, and will work closely with Alison Richmond and the other Icon Groups to protect and develop training courses.

Michelle Stoddart and Liz Ralph (Co-Chairs, Book & Paper Group)

itself. As Helen Shenton exemplified at the Scotland Group's AGM and keynote annual Plenderleith Lecture in Edinburgh this past November, cross-specialist and indeed cross-professional skills mixes are essential for conservators to equip themselves to become heritage sector leaders. In Helen's case, her early experience as a book and paper conservator gave way to a progression of roles of increasing responsibility in collections care and project management at the British Library – leading ultimately to an Executive Directorship at Harvard, followed by a key strategic leadership role at Trinity College Dublin. Helen's leadership role ensures that she will keep in close contact with disciplines across the broader sector – from librarians, to curators, to digital specialists.

This in turn indicates that there are clear advantages to be gained by attracting the widest spread of expertise from related professions into our networks at Icon - helping to ensure access to cross-disciplinary skills and approaches not only in conservation, but outside our field as well. Recently, the Board of Trustees appointed a Task and Finish Group to examine ways to broaden Icon's membership beyond the ranks of our field, to broaden our influence and push our key messages further beyond the reaches of our core audiences. A key method of achieving this was seen to be the drive to engage those working in allied professions, who may not be conservators themselves but who work in similar contexts in museums, historic houses, institutions or auction houses people who we need on our side. Close co-operative working with key allied professionals, such as curators, is not just a simple idea, but an imperative.

Michael Nelles Membership Manager

1 Emily M Williams, 'Cross-disciplinary conservation – is this the way forward?' Journal of the Institute of Conservation, Vol. 40 No. 3, p 201–211.

NEWS FROM THE GROUPS

Archaeology Group

The Group's training workshop on bone and ivory identification was held at Manchester Museum in December and is described by one of the participants in this issue (see Reviews). As it proved to be very popular, the Group is considering running it again in the near future. Thank you to committee members Ellie Rowley-Conwy and Bronwen Faulkner for organising the event and Dr Sonia O'Connor ACR for delivering such interesting and useful training.

Icon AG and RESCUE are currently working to produce a newly revised version of 'First Aid for Finds' with publication expected for the 21st anniversary of Icon AG in 2019. Archaeology Group committee members continue to attend meetings of The Archaeology Forum, the British Archaeological Trust (RESCUE), the Archaeological Archives Forum, and the All Party Parliamentary Archaeology Group and report back at our committee meetings which are held four times a year. Icon-AG members are also involved in organising a session at the next European Association of Archaeologists conference, September 2018 in Barcelona.

The venue and theme for our AGM in June (date to be confirmed) are being discussed. Elections will be held then so

Events & Training Update

Unexpected Fame: Conservation approaches to the preparatory object

2nd Icon Book & Paper Group Conference, Oxford 1–3 October 2018

Preparation for the conference is fully underway and we were delighted at your responses to our call for papers – we received forty abstracts in total from which our review panel have selected the successful entrants.

We hope to publish a full programme soon but as a taster we are very pleased to announce that we have four guest speakers lined up who we are sure will bring their unique expertise and knowledge to our conference attendees:

- Dr Fenella France, Chief, Preservation Research and Testing Division, Library of Congress
- Professor Margaret Holben Ellis, Eugene Thaw Professor of Paper Conservation, NYU Institute of Fine Arts
- Dr Irene Brückle, Professor for Preservation & Restoration, Staatliche Akademie der Bildende Kunst, Stuttgart
- Dr.Christopher Fletcher, Keeper of Special Collections, Bodleian Libraries

Booking for the conference opens in early April through Eventbrite – this will be announced via email so please check your inboxes for further details.

Fiona McLees and Holly Smith (Co-Chairs, Book & Paper Events & Training)

Heritage Science Group

On January 10, committee member Helen Wilson hosted the Heritage Science Group meeting at The National Archives, Kew. The results from the Group's Ethical Sampling Survey led by Anita Quye and Matija Strlic, were top of the agenda. The Committee provided useful feedback for the development of the draft guideline document, which will be shared with the community for consultation, hopefully in the spring.

The survey results were encouraging and revealed numerous aspects that need to be considered, and the Committee is grateful to Icon members for having shared so many useful insights. At present, the final document is thought to consist of guiding principles for the development of institution-specific guidelines for ethical sampling.

Additionally, student representative Natalie Brown, shared with us the feedback from her focus group with heritage science PhD students regarding Icon membership. The results will help us to reflect on our offer to students to increase student membership and involvement with the Group. We thank all those who participated in the workshops and the surveys for their valuable input. For more information on these and the other topics discussed please see the minutes from the meeting on our Group webpages.

We are excited to announce that:

• After the success of last year, the HSG Photo Competition is returning for its second year;

- Our next events is a Colour Science training day led by Dr Lindsay MacDonald. It will be held at Charlecote Manor in Warwickshire on Friday 20 April 2018;
- The next HSG AGM and Invited Lecture will be held at UCL on Wednesday 27 June 2018.

For more details, please keep an eye out for our notices in Iconnect, on our webpages, and on Twitter (@ICONSci) and get in touch via our new Group email address (hsg@icon.org.uk) if you would like to become more involved in the Group's activities. The next HSG meeting will be held at The University of Glasgow, on 18 April 2018.

Helen Wilson

Photographic Materials Group

The Icon Photographic Materials Group and The National Archives are delighted to announce a three-day practical workshop with Debra Hess-Norris. Conservators, archivists and curators of historical photograph collections are invited to participate. The workshop will take place at The National Archives in London, between Monday 9 and Wednesday 11 July 2018.

Debra Hess-Norris is Professor of photograph conservation at the University of Delaware and an internationally renowned author, teacher and lecturer. This workshop represents a rare and significant opportunity for twenty participants to meet and study with her in the UK, focussing on the identification and treatment of traditional photographic materials and emergency preparedness for collections.

On Tuesday 10 July Debra will also be giving an evening lecture for forty participants. This session is aimed at curators, archivists and collection managers as well as interested non-specialists. It will take place in central London and is bookable separately; see the Icon PhMG Eventbrite page for details.

Given the anticipated demand for places, all participants are required to pay for the three day workshop in full by Monday 23 April. Prices are as follows:

Professor Debra Hess-Norris teaching





Willard CONSERVATION EQUIPMENT ENGINEERS



Introducing the NEW Sub-Illuminated Suction Table

The evenly illuminated work surface combines the benefits of a light box with a suction table thus allowing tears and variations in the density of an object to be easily observed. This technology makes it easier to prepare and apply reinforcements and repairs with great precision.

We are pleased to offer variants of this table to suit your specific needs so please get in touch for further information and to discuss your requirements.

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in

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Three-day workshop at The National Archives: £375, or £325 for Icon members

Evening lecture in central London: £15.

There will be a limited number of free places for those attending the three day workshop.

Booking is now open through the Icon PhMG Eventbrite pages:

Three day workshop: www.eventbrite.co.uk/e/here-there-and-everywhere-the-preservation-of-photographic-collections-a-practical-workshop-tickets-42781803526

Evening lecture: www.eventbrite.co.uk/e/the-preservation-of-photographs-collections-care-advocacy-and-fund-raising-tickets-42782147555

If you have any questions or queries please contact us: phmg@icon.org.uk

Icon Scotland Group

Our first event of the year was the *Risk Assessment for Collections Care* workshop, which was given by Dr Paul Garside, a conservation scientist from the British Library. The session was run twice to maximize the numbers who could attend and participants from both sessions got together over lunch for animated discussions of how they would put this very pragmatic approach into practice!

We are currently working on our events plan for the rest of the year, using data from a recent survey we carried out to ascertain the kind of events that people would like to see in Scotland.

The Icon Scotland Group has close links with The Centre for Textile Conservation and Technical Art History at the University of Glasgow, and we are pleased to note that the

Centre has been particularly busy recently, hosting a lecture on Researching Scotland's textile heritage through material culture evidence in February and a workshop on The Conservation of Polynesian barkcloth in March, and having recently launched a new MSc on Modern Material Artefacts, which will start in September 2018.

We would like to remind conservators in Scotland that each year we offer four grants of £350 towards the costs of the PACR process, thanks to a sum donated to the Group and its predecessor SSCR by an anonymous donor. The application form is available from the Icon Scotland Group page on the Icon website and the next deadline is 2 April 2018.

Contact and keep in touch

We obviously welcome primary and secondary members, but remember that all you need to do in order to receive the emailed Scotland Group Iconnects is tick the Group on your Icon membership form. You can also see our latest updates on social media: our blog is at

https://iconscotland.wordpress.com, our Facebook page is https://en-gb.facebook.com/iconscotlandgroup and our Twitter feed is @icon_scotland.

Textile Group

The last couple of months have continued to be busy for the Textile Committee.

Textile Group Forum May 2018

The Textile Group Forum, *The Nature of Textiles*, is being held on Monday 21 May at the Museum of London. Bookings can be made through the Eventbrite website. The Textile Group has organised free events for members on the days around the conference, though spaces are limited and tickets

for these tours should be booked at the Eventbrite checkout when buying the forum ticket. These events are a tour of the British Museum's Textile Conservation Studio, the Linnaean Society in Piccadilly and entry into the Fashioned from Nature exhibition at the V&A.

Icon Textile Group Events

The Textile Group is organising a visit to Knole House (National Trust), Sevenoaks, Kent on Saturday 28 April 2018. The visit begins at 10:30am in the conservation studio. Join host Heather Porter ACR, Senior Upholstery Conservator at Knole, for a behind-the-scenes tour of the new conservation studios and facilities, followed by an informal tour around the house showrooms to highlight ongoing projects in the conservation of the house and its interiors.

Attendees are invited to stay for lunch, which can be purchased from the café on site, and will then be free to explore the rest of the house and gardens for the remainder of the day. Please note that due to ongoing refurbishment works, only half of the house is open to the public at this time.

Booking is free via Eventbrite, and attendees will be expected to purchase their own ticket to the showrooms upon arrival. Entry is free to National Trust members.

New committee members needed

Four of the current Textile Group Committee members (the Chair, the Secretary, and two Events Co-ordinators) will be retiring at the end of May so we are looking for applications from individuals who would like to be nominated for election. Committee members must be members of the Textile Group.

The Committee exists to represent the Textile Group within Icon and arrange events and activities for its members. It meets four times per year, normally at a venue in London. Travel expenses are reimbursed. Membership of the Committee, which is very democratic and open to fresh ideas, can provide opportunities to develop new skills, connect with fellow professionals and build your profile in the field.

If you are interested in being nominated please send a short biography along with a brief statement indicating which position you would like to be considered for and why via email to Sarah Glenn, TG Committee Secretary at s.glenn@vam.ac.uk by 5pm on Monday 23 April 2018. Election nominations will be circulated to TG members and the final selections made at the AGM in May. Please feel free to contact any of the current Committee (contact details are on the Icon website) if you would like an informal chat about what membership involves.

Other News

A sold-out one-day workshop, Costume Mounting with Fosshape™, organised by the Icon Textile Group, was held on 19 March at the Clothworkers' Centre, Blythe House, London. Many thanks to Rachael Lee and Lilia Prier Tisdall, Textile Conservation Display Specialists at the V&A Museum, for hosting this. Please look out for a review of this course by

Kim Thüsing, Textile Conservator at St. Fagan's Museum, Wales, in a future issue of Icon News.

Due to publication deadlines, it is not always possible to mention all events so please check the Icon website, Facebook page, Twitter feed and Iconnects for details. If you have anything that you would like mentioned in our communications please contact nadine.wilson@nationaltrust.org.uk.

DYNAMIC OBJECTS NETWORK

2017 Roundup

2017 marked Icon's Dynamic Objects Network inception. In late February forty two people gathered at The Clockworks in London for a great inaugural meeting. Françoise Collanges outlined its aims: to bring together likeminded people, to enable an e-forum of ground-breaking ideas for the care of working, static or stored dynamic objects, and to produce quidelines for the care of these objects.

In practice the Network organised a meeting in May and provided input to a 'soon to be launched' guideline paper. The meeting, titled 'Dynamic object and organic materials' and held in Cambridge, was supported by about fifty people. It started with a fascinating presentation by Edward Cheese ACR, who had been asked to work on and conserve a fifteenth-century manuscript in the Fitzwilliam Museum. The manuscript was bound in an inflexible eighteenth-century binding to satisfy the aesthetics of its bookshelf surroundings, resulting in its use being compromised and even leading to damage.

Edward's approach was to remove completely the failing spine and to make a new binding to let the book be useable and thereby open up its beauty and sing its praises. Immediately he found unseen markings hidden in the tight gutter which, through his binding approach, were revealed to scholars for the first time in about 250 years. The dynamics of the book have changed from one where all the pages were clumped together standing bolt upright, to a book where each page can be read and turning the pages is a dynamic, effortless delight without having to keep adjoining pages pressed down.

Indeed Edward showed a photograph of the head edge of the open book where the spine was in a natural arch capable of revealing one page at a time without putting any stress on the binding or the new spine. The presentation was fascinating, showing how books are designed to be dynamic objects when read, and demonstrating how thinking out of the box can benefit both an object and its reader and was more than likely close to how the book was bound in the first place.

Following Edward, Matthew King, of Time Traveller Clocks, a meticulous professional clock maker, discussed making a replica of John Harrison's wooden longcase clock on show to the public at Nostell Priory. He brought along a replica he has already made. This was set up for the meeting and described, demonstrating the awe-inspiring qualities of



Matthew's work based on John Harrison's original.

The main focus of the post-presentation discussion was to gain ideas as to what could be done to engage the public in heritage conservation and more specifically what could the National Trust do to fulfil their obligations of both preserving heritage treasures yet making them approachable and accessible. Those present recognised the importance of this heritage object to the nation and that a dynamic display of an object was more captivating than a static display.

There was divided opinion about keeping the original working as opposed to a working state or resting it now to leave it looked after. Many felt it would be better if the replica was run for the public with it standing by its original. There was debate on the point of recognising heritage books and clocks as complete working objects rather than dissecting a movement from its case and context, or, separating a book's illustration, and other physical attributes from its text and use. However the meeting recognised members of the public have different interests to visit an object and satisfying everything is a challenging curatorial task.

Besides thanking the presenters for their work to prepare, travel and present two fascinating presentations, I would like to thank Deborah Walton and Sarah Finney FLS who both organised the venue and provided refreshments.

In the autumn five members of The Network made positive comments on the Association of British Transport and Engineering Museums (ABTEM) document 'Guidelines for the Care of Larger and Working Historic Objects'. After wide

consultation ABTEM has now launched the document. [See item on page 7 for more details.] The Dynamic Object Network team notes that the ABTEM Guidelines are targeted at larger dynamic objects but many points and approaches form a working base that can be applied to smaller objects. When members of The Network begin to address their approach to general guidelines for the care of Dynamic Objects this document will be used as an input.

Which brings us on to the last point – Françoise and I need a wider base of people to help bring and organise dynamic ideas to the table for new meeting themes, speakers and venues. Already on the cards are four meetings in 2018: help would be appreciated.

Kenneth Cobb Françoise Collanges

THE REPAIR SHOP RETURNS

Many of you will have noticed that BBC 2 aired series 2 of its show, *The Repair Shop*, in March. Icon member and accredited paintings conservator, Lucia Scalisi, is once again a member of the team who give new life to the prized possessions that people bring in from their homes.

Lucia tells us that a third series will be airing later this year and Series 4 is due to start filming. Moreover, it seems that the team will be developing outreach, too. Lucia will continue to preach the gospel of conservation at every opportunity she gets. We await developments with interest!

people

Appointments



In January, **Emily Watts** was appointed as Collections Care North Manager, at The British Library, at their site in Yorkshire. Emily will be managing and developing a collection care programme to ensure the preservation of the collections in storage, transit and use on the Boston Spa site. She will be working with colleagues and stakeholders to minimise risks to collections and to foster a culture of collection care awareness.

Emily started her career working for the National Trust, before moving on to the British Museum, working on the WCEC Storage Move Project, and then the RAF Museum. She undertook her MA in Preventive Conservation with Northumbria University, graduating in 2012, and was awarded an Icon Tru Vue CPD grant to complete the Chemistry for Conservators course in 2016.

A member of the Icon Care of Collections Group Committee, Emily's areas of interest are in engaging audiences in conservation, working with volunteers, emergency planning and care of stored collections.



In January this year, Rhiannon Clarricoates took up a new position as a Senior Research Fellow in Conservation and Heritage at the University of Lincoln. As part of this role she will work as a commercial conservator and architectural paint researcher for Lincoln Conservation, as well as teaching and mentoring students across the School of History and Heritage. This move follows thirteen years at Hirst Conservation, where she worked with a small team of conservators specialising in the conservation of historic interiors and architectural conservation

Rhiannon is an accredited paintings conservator and an active member of the conservation community. She was secretary of the Icon Paintings Group for nine years and remains on the committee, helping to organise the Group's conferences and coedit three sets of post-prints. Rhiannon was a recent recipient of a Tru Vue grant and has commenced training to be an assessor for the Conservation and Collections Care Technician's diploma, a new work-based qualification being offered by the Victoria & Albert Museum and the Institute of Conservation.



In November 2017, Icon member **Yoko Hanegreefs** took up a new permanent post at the National Trust's Textile Conservation Studio as a textile conservator. Yoko trained at Royal Academy of Fine Arts (University of Antwerp), followed by placement at Heritage Malta and starting work at May Berkouwer Textile Conservation in 2013.

Yoko first came to the Studio to take up the two-year Levy Internship in 2014. During this internship she worked on a variety of projects from a set of canvas-work chair covers to tapestries and curtains as well as undertaking condition surveys and putting together estimates. She was then successful at interview in securing a two- year post at the Studio specifically to support the textile conservation work for the 'Inspired by Knole' project. During 2017 Yoko has demonstrated her drive to research techniques and develop her skills level, with the use of tinted Japanese paper as an overlay on very fragile silk as well as engaging with volunteers and the public to explain the work of the Studio.



Catherine Woolfitt ACR has been appointed the new Subject Leader in Historic Building Conservation and Repair at West Dean College of Arts and Conservation. An archaeologist and architectural conservator, Catherine has worked in the conservation of built heritage since 1993. having practised conservation in Italy, Israel, England, Scotland and Wales; her experience bridges the museum, object, and building conservation sectors. She is committed to raising standards of work to historic fabric and to wider dissemination of conservation principles and practice across the allied fields of archaeology and construction.

She provides technical advice in the conservation of historic masonry buildings, ancient monuments and sculpture and specialises in porous building materials, with a focus on building limes, building stones and architectural ceramics.

Research interests range from the investigation and analysis of historic mortars and their technical development, to architectural ceramics, in particular the impact of past chemical cleaning of brick and terracotta, and the in situ treatment of architectural sculpture.

New Icon Trustee



Lucie Mascord ACR was appointed to Icon's Board of Trustees at the Annual General Meeting held last November.

Lucie is a natural history conservator working for Lancashire Conservation Studios and as a freelancer. Training as an anatomist, Lucie moved into conservation through a route of intensive work-based training amongst which she undertook an Icon Internship and was awarded a Queen Elizabeth Scholarship.

Her expertise sees her working extensively across the heritage sector, with clients including the National Trust and national and independent museums. Lucie is also involved with Icon as a PACR assessor, and a volunteer for the Conduct Register. Lucie is the conservation representative for the Natural Sciences Collection Association.

NEW ACRs

The Accreditation Committee approved the accreditation of the following conservatorrestorers at its meeting in February 2018

Congratulations to all these new ACRs!

Sian Brake – Metalwork, large industrial objects

Rowena Mair Doughty – Archival materials

Amy Griffin – Easel Paintings Lucyna Kaszewska – Decorated architectural surfaces

Zoe Kennington – Paper archival conservation

Sarah Knighton – Stained glass

Emily Nisbet-Hawkins – Preventive conservation

Heather Porter – Upholstery Misa Tamura – Ethnography

Bridget Warrington – Books and archives

Welcome to these new members

We would like to extend a very warm welcome to all those who joined us in December 2017 and January 2018. We hope to see you at an Icon event soon!

Irina Alaeva

HTW Berlin Student

Jamie Baker Associate

Anna Barona Student

Wendy Batten Associate

Kate Bowles

Colin Bowles Ltd

Antonio Caricchio

Associate

Jocelyn Cook University of Lincoln

Student

Sophie Coulthard

Student

Arantza Dobbels Busto

Student

Sarah Dunn

Cardiff University

Student

Mark Folkes

Bristol Stone Masonry

Associate

Lizzie Fuller

Camberwell College of Arts

Student

Susan Fullwood

Goodwood House / AHS

Associate

Gloria Gamboz

Student

Laura Gisela Garcia Vedrenne

Student

Luanna Gomez

University of Washington

Student

Lisa Handke

Oxford Conservation

Consortium

Associate

Libby Ireland

Student

Lauren Isles

Associate

Matilda Kallander

Flygvapenmuseum Supporter

Stacy Kammert

Wharton Ross Fine Art

Appraisers, LLC Supporter

Marius King

University of Lincoln

Student

Biliana Konaktchieva

Supporter

Eleni Kotoula

Associate

Ana Logreira

Associate

Clare Mardall

Associate

Sara Mazzarino

Associate

Claire McQuillan

Chatham Historic Dockyard

Trust

Student

Sergio Efren Merida Hernandez

Associate

Camilla Molignano

Associate

Isis Muhleisen

Student

Eleanor Nethaway

Student

Eoin O Suilleahbain

Associate

Anna O'Regan

Mountain Warehouse

Student

Adriana Paez

UCL

Student

Scarlett Parry

University of Lincoln

Student

Irena Pistun

University of Manchester

Student

Rosalind Polos

Associate



The June Baker Trust awards

Amy Randall

Student

Isabella Rossi

Student

Satomi Sasaki

University of the Arts London Student

Julia Stolzenburg Supporter

Anna Szewczyk Associate

Serena Tabachi

Serena Tabach Intern

Anja Vanderhoydonck De Vergure Associate

Christelle Wakefield Student

Naomi Watts-Kitto Student

Tatjana Wischniowski Associate

Annette York

Chetwynd Conservation Associate The June Baker Trust is pleased to announce the latest 'Awards for Emerging Conservators in Scotland'. This is the last of four rounds of grants given to recent graduates from conservation programmes to support them in developing their skills and becoming better equipped for employment in the field.

Helen Baguley, a graduate from Cardiff University, was awarded a grant of £994 to attend a four-day course on historic surfaces and finishes on wood. The course provides practical experience of surface finishes such as staining, waxes and French polishing and repairing veneers. It includes theoretical knowledge of how to start and run a business, styles of furniture, dating furniture and understanding wood.

Judith Leigh qualified as a paper conservator from Northumbria University. Her grant of £1,000 will support her to develop skills in the area of parchment conservation. . Judith will undertake a literature review and shadow conservators at Tyne and Wear Archives and Museums, then apply what she has learned volunteering at the University of Edinburgh's Centre for Research Collections undertaking a pilot study to treat parchment charters in the David Laing manuscript collection.

Gemma Mathieson qualified as a paper conservator at Northumbria University and is currently working for a bookbinder in Glasgow. The grant of £720 will enable Gemma to undertake two fortnight-long voluntary placements at the National Libraries of Scotland, developing skills to work on large-scale digitisation projects and dealing with multiple objects at a time.

Charlotte Roden gained a MA in Stained Glass Conservation and Heritage Management from the University of York. Currently working at Barley Studio in York she now wants to widen her ability to recreate effects in glass to follow the intentions of the artist where there is lost material, and to develop knowledge of building conservation in Scotland. A grant of £765 from the June Baker Trust will enable her to attend a calligraphy course, an acid etching work placement in Canterbury and a summer school with Historic Environment Scotland.

Julia Tauber has a diploma in conservation from West Dean College and a Masters in Conservation of Historic Objects from the University of Lincoln. She is currently on a temporary contract working in technology conservation at National Museums Scotland. She wishes to deepen her scientific knowledge of materials and the June Baker Trust grant of £233 will enable her to attend an intensive twoday course with International Academic Projects in Budapest on the chemistry of adhesives, consolidants and coatings.

Charlotte Tomlin is currently the Bute/Icon intern with the National Trust for Scotland developing skills as a preventive conservator working with historic houses, having qualified as a conservator of Archaeological and Museum Objects at Durham University. Her £500 grant will help Charlotte enhance knowledge of key preventive conservation issues by enabling her to attend the IIC 2018 Turin Congress.

The June Baker Trust was set up in 1990 to help individuals working in the conservation of historic and artistic artefacts in Scotland, or training with the intention to do so.

For the past four years the Trust has been able to offer two different annual awards. The 'Awards for Conservators in Scotland' are available to assist with funding travel, attendance at conferences and on short courses, purchase of equipment, or other suitable projects for conservators with a strong Scottish connection. These awards are made once a year, with the deadline for applications being 31 May.

The 'Grants for emerging conservators in Scotland' have been available for recent graduates from conservation training courses. The June Baker Trust has distributed nearly £9,000 to twelve conservators from this fund.

The Trust can be contacted at: junebakertrust@gmail.com Applications and information on the Trust are available on the Icon website.

Pragmatism and problemsolving on a large scale

Maria Jordan ACR and Elaine Owers on conserving the largest tapestries in the National Trust collection

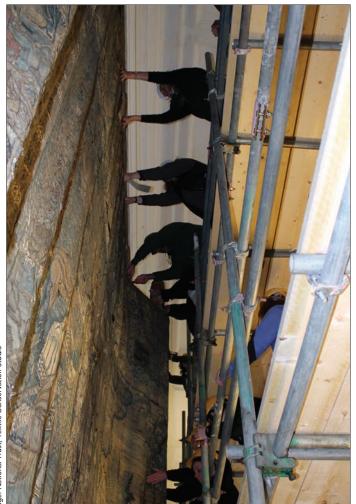
BACKGROUND

For the last seventeen years the Gideon tapestries from Hardwick Hall (built between 1590 and 1597), have been conserved by two studios, that of Danielle Bosworth and the National Trust's Textile Conservation Studio. This is a set of thirteen tapestries commissioned by Sir Christopher Hatton and woven in 1578.

The set depicts the biblical story of Gideon, from the Old Testament Book of Judges, in which Gideon leads an army to save his people from the Midianites. Bess of Hardwick bought the set from the nephew and heir of Sir Christopher Hatton in 1592, at a cost of £326.6s from which £5 was deducted because Bess had to change the Hatton arms to her own.

This is the largest set of tapestries in the care of the National







Scaffolding set up for take down

Wooden track, trolley and pole base





Weavers' or Merchant's mark found on main field right border

Trust, measuring 6 metres in height and varying from 2.36 metres to 9 metres in width, making 70 metres of tapestry in total. The tapestries still hang in their original space, the Long Gallery, which is the largest surviving Elizabethan long gallery and the only one to retain its original tapestries and many of its original paintings.

Starting in 2001, Ksynia Marko and Danielle Bosworth developed the treatment parameters in terms of materials, techniques and the use of patches and infills to treat areas of loss. By 2014, the conservation of ten of the tapestries had been completed, although the largest three tapestries had been left until last. Fortunately the National Trust's Textile Conservation Studio is a large barn and can accommodate a tapestry of 9 metres in width.

REMOVAL FROM THE WALL

However the first problem to solve was removing them safely from the wall in the Long Gallery. This requires the tapestry to be rolled off the wall vertically from a tower scaffold. Whilst this is manageable for a tapestry up to 6 metres in width, a further 3 metres adds a good deal more weight (approximately 18 kg) and the health and safety implications of lowering or raising a tapestry are considerable. With the addition of an uneven floor the methodology for removing the tapestry needed to be revisited.

It was decided that a fixed scaffold would need to be built and that levelling the floor would be necessary to ensure maximum stability. In order to roll a tapestry off the wall, a

Lining the lower border separately in the studio,





The Gideon tapestry after conservation

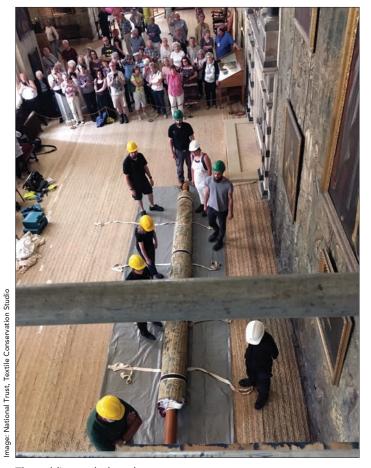
drainpipe is used and moved across the floor as the tapestry is released. To level the floor, a track was built between the scaffold and the wall and to ease the movement of the tapestry a bespoke trolley has been made on which the drainpipe sits.

The Gideon tapestries have been woven in three horizontal sections, the top border, the main field and the lower border. These three sections were then stitched together before being lined. To reduce the weight and assist with removal, the lower border can be detached before removing the rest of the tapestry. Corresponding tailor tacks are stitched onto the

Rolling the tapestry after its lining in studio



Image: National Trust, Textile Conservation Studio



The public watch the rehang



Rehanging the top border and main field

main field and border before the stitching is cut and the lining released. The lower border can then be carefully rolled onto a small drainpipe. This has the advantage of lessening the weight of the tapestry by approximately 9 kg. The main field and top border can then be removed by a large team of people, one person in control of the trolley, one turning the drainpipe at the base, two conservators at the top removing the tapestry fixings and two in the centre to guide and support. However to raise and lower the drainpipe an additional six people may be needed.

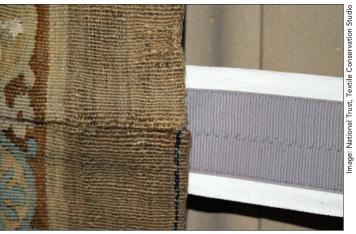
Raising the tapestry into position for the rehang



Rehanging the lower border



The lower border attached with concealed Velcro fixing



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Stitching the lower border in place

RE-HANGING OPTIONS

In summer 2014 work began on the 11th in the series, *Gideon Choosing his Army*. After it was removed from the wall and prepared for wet cleaning, it was sent to De Wit in Mechelen, Belgium, which has specialist facilities for cleaning large textiles.

After conservation, previous tapestries were fully reconstructed in the Studio and lined as a whole piece, but they were much lighter. Given the size and weight of the current tapestry (54 kg) we started to consider if it was possible to rehang the lower border separately and how to treat the lining. Different ideas were discussed and tested; the decision was to use Velcro® initially as a method of rehanging the lower border off the main field and to re-stitch this to the main field once hanging.

Three methodologies were discussed for supporting the weight of the 9 metre border using Velcro strips. The first was to use a continuous piece to give equal and continuous support, although it was thought that removing 9 metres of Velcro from behind the tapestry might be difficult. The second was to use shorter sections, although the weight would not be equally supported. The third was to use vertical tabs, although again the weight would not be equally supported and it was unclear how the main field and border would hang for stitching in situ.

The first option was chosen, since the equal support it gave the border would make stitching in situ much easier. A row of loop Velcro was stitched to the reverse lower edge of the main field and another row of loop Velcro was stitched to the reverse top edge of the lower border. Two rows of hook Velcro were then stitched to a wide linen webbing tape. The webbing tape would act as a concealed fixing between the main field and the lower border and would be attached to the main field before the tapestry was installed. A new batten was

also attached to the wall at the top of the main field. Here an additional two rows of Velcro were stitched to help support the weight.

RE-ATTACHING THE BORDER

In June 2017 the top border and main field were rehung using the same vertical roller, trolley and track method used for the removal of the tapestry. The lower border was then unrolled and attached onto the webbing tape and Velcro fixing, matching up the tailor tacks stitched onto the two pieces of tapestry before removal.

The tapestry was left to hang and settle for six weeks. Three conservators then returned to Hardwick Hall and spent a day stitching the lower border to the main field after which the hook Velcro on webbing tape was removed. The Velcro fixing allowed the two pieces of tapestry to sit snuggly together,

Scaffold set for rehang





The tapestry in situ after conservation

Re-stitching the lower border

which made stitching them straightforward. This marked the end of three years of conservation, a total of 5,972 conservation hours. We were pleased with the result and look forward to tackling the last two tapestries in the series, which are both planned into our work programme. Currently the complete set is on display in the Long Gallery at Hardwick Hall and will be until June this year, when we will start on the conservation of the penultimate tapestry.

During the conservation of the Gideon series, much information has been revealed about the tapestries, their materials and production, which we plan to be the subject of future articles and papers.

ACKNOWLEDGMENTS

Many thanks to all our colleagues from Hardwick Hall and Clumber Park who helped with the installation, to Pip Sanders who was the initial Project Manager for this Gideon tapestry and Ksynia Marko who was instrumental in establishing the early methodologies.

Further information about the conservation of the Gideon tapestries can be found on our blog: www.nttextileconservationstudio.wordpress.com

Maria Jordan ACR is Studio Manager at the National Trust's Textile Conservation Studio in Norfolk. Elaine Owers is Project Manager for this work



Barbara Hepworth's Four-Square (Walk Through)

Tate's Gates Sofer ACR, Carla Flack ACR, Lyndsey Morgan ACR and Deborah Cane ACR present a case study on the treatment of a Hepworth sculpture

INTRODUCTION

Dame Barbara Hepworth is one of the most well-known British sculptors, both in the UK and internationally, and her distinctive style is instantly recognisable. Tate is proud of its Hepworth collection and in addition to managing the four gallery sites (Britain, Modern, Liverpool and St Ives), since 1980 Tate has owned and managed the Barbara Hepworth Museum and Sculpture Garden (BHM) in the very heart of St Ives. Tucked away in the lanes just behind the harbour, its stone walls enclose the area where Hepworth lived and worked from 1949 until her death in 1975. Here she created a unique landscaped garden containing many sub-tropical plants and, of course, sculpture.

Four Square (Walk Through) before treatment 2017



THE MAINTENANCE REGIME

Tate's Sculpture Conservation team is based in London and twice a year a team head down to St Ives for a week to condition check and maintain the sculptures, studios and studio objects at the BHM. In particular, the focus is on the twenty-two outdoor sculptures which consist of bronze, stone and steel, and range in size from 34cm (Corymb) to 4m in height (Four-Square (Walk Through)).

A specific maintenance plan based on the requirements of the different patinations and finishes of the bronze works has been created. However, the team also have to be pragmatic, as the sculptures sit within a maritime environment and the garden is open to 45,000 annual visitors (who love to touch the highly tactile sculpture, which is allowed in the garden but not for the indoor sculptures) six days a week throughout the year.

To date, treatments have consisted of using preparatory waxes, applied hot and cold, to try and keep the patinations as close as possible to what we believe to be the original finish of the works. We are now starting to examine and discuss with other institutions and private practitioners the use of different waxes and application methods to offer the most appropriate aesthetic appearance and to provide longevity of protection.

RECONSIDERING TREATMENT

In 2016 Tate conservators started visiting the BHM for a second week in the autumn which provided the opportunity to look at individual works in more detail, carry out treatments that required a dedicated focus outside of the maintenance week and research current maintenance methods.

Firstly, Two Forms (Divided Circle) was re-treated to reinstate the polished bronze finish on the inner circles, which had dulled in the years since the previous treatment in 2007 carried out by Jackie Heuman. The finish achieved is in keeping with the age of the work which gave the essence of Hepworth's intention. The rings were then lacquered for protection.

The success of this treatment gave the conservation team the impetus to tackle the much bigger project of Four-Square (Walk Through) (1966). The sculpture is on long-term loan from the Hepworth Estate to Tate, for display at the BHM. Hepworth sited it there when it returned from the foundry in October 1967, fifty years ago exactly, so a pertinent time to consider the treatment of the artwork.

At 4.2 meters high this sculpture is the most challenging to maintain as it requires a scaffold for even the simplest





The scaffolding in place

treatments; which, in the garden, open to the public, can be a challenge in itself. Looking at many years of photographic documentation it is clear that the patination had weathered and altered, unsurprisingly given the marine environment.

At this point Patina Art Collection Care Ltd, led by sculpture conservator Lyndsey Morgan, was brought in to collaborate with Tate Sculpture Conservators on the project and treatment. Lyndsey was chosen due to her long-standing connection with Tate, the Barbara Hepworth Estate and her previous treatment of another cast of Four-Square (Walk Through) located in the grounds of Churchill College,

Results after treating with Thermotech©.



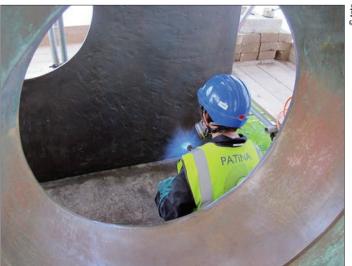
Removing wax layers with Thermotech©.

Cambridge (in the collection of the Fitzwilliam Museum) and the successful treatment of *The Family of Man* at Yorkshire Sculpture Park in 2016.

From archival research, Lyndsey and Tate Sculpture
Conservators could piece together that the inner circles – as
with Two Forms (Divided Circle) – were originally polished.
Early photographs also suggested that the different faces of
the sculpture had originally been patinated in different shades
of brown and green. These findings and the treatment
proposal were discussed with the Tate curatorial teams and
Dr Sophie Bowness (Head of the Hepworth Estate) to agree
the treatment approach prior to work starting on site.

Before undertaking the treatment, an assessment of resource requirements, timescales, skill sets, logistics and the general H&S management of such a large scale treatment within a public environment had to be undertaken. This was coordinated by the Sculpture Conservation Manager in conjunction with the Registrar, Buildings Manager and Head of Operations at Tate St Ives with the aim of minimising any impact on the visitor experience whilst also offering the public an insight into the conservation of artworks.

Applying protective wax



© ta



The cleaned and newly waxed surface

THE TREATMENT

For two weeks in May 2017, Lyndsey, her team and Tate Sculpture Conservators worked side-by-side on Four-Square (Walk Through). The treatment was broken into three sections:

- firstly, to clean the sculpture using ThermaTech©, a superheated water system, that cleans more gently than standard cold-water-pressure washing, to remove years of wax build-up;
- secondly, to protect the work using a carnauba-based wax on the patinated bronze; and
- thirdly, to polish the inner circles referring to archive images in order to achieve a finish as close as possible to Hepworth's intent. The rings were then lacquered to protect the finish and prevent tarnishing.

As the work involved the use of superheated steam, large blowtorches and a number of solvents, the most challenging part of the project was how to carry out the treatment whilst keeping the garden open. It was necessary to provide as much safe access as possible for the visitors, whilst managing the safety of the conservation team and artwork. A covered scaffold was erected and the area cordoned off while still allowing the public to see some of what we were doing.

As ever, the visitors were intrigued about what was going on behind the tarpaulin and Lyndsey and the team were more than happy to give short talks. The visitor services team at the BHM were also briefed on the treatments and were extremely helpful in explaining the work being undertaken to all visitors as they arrived.

The conservation team found that the removal of built-up wax with steam revealed much more of the original patinated colour scheme than they had anticipated, showing the innovative use of colour in this bronze that now contrasts beautifully with the polished inner circles. Post-treatment, this piece is truly a centrepiece of the garden.

LOOKING AHEAD

Now we look to the future and how we improve our current maintenance through targeted treatments on other works in the garden.

The experience of working with a private sector partner has proved successful in achieving the desired outcomes for the



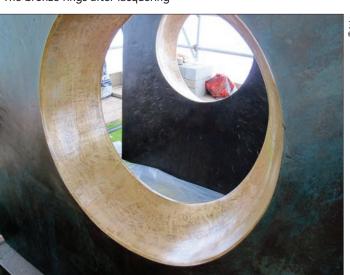
Lacquering the bronze rings

artwork, providing fruitful discussion and debate around process and products as well as a skills-share opportunity. It is a model that many museums are using and one that Tate would employ again due to the positive outcomes for the artwork and the staff involved.

ACKNOWLEDGEMENTS

The work is a combination of many people's hard work and could not have been undertaken without their input, so we would like to take this opportunity to thank; Tessa Jackson ACR (Jackson Conservation Ltd), Laura Davies (private practice), Karl Bush, Johnny Gordon, Rachel Robbins, Melanie Rolfe ACR (Sculpture & Installations Conservation, Tate), Helen Bent, Ross Peakall, Simon Pollard, Jonathan Morton, the Visitor Services Team (Tate St Ives/BHM), Sara Maston and Chris Stephens (Curatorial, Tate). This project was made possible by the ongoing support of Dr.Sophie Bowness and the Barbara Hepworth Estate and funded by the Porthmeor Fund.

The bronze rings after lacquering



© tate

reviews

WORKSHOP

BONE AND IVORY IDENTIFICATION Icon Archaeology Group

Manchester, 12-13 December 2017

This 'Bone and Ivory Identification Workshop' was led by **Dr Sonia O'Connor ACR** in the Manchester Museum at the University of Manchester. Attended by thirty members from many Icon specialism Groups, this hands-on course took place over two days. Densely-packed with information, the course focused on understanding and identifying the key features of ivory from tusks and teeth, as well as osseous and keratinaceous materials from a wide variety of animal sources.

The course design consisted of lectures first discussing the biological structure and function of each material. Each lecture then moved on to how the structure contributes to the key features that are visible to the naked eye or under low magnification. Dr O'Connor's slides contained excellent images and diagrams of patterns, grooves, and textures on the natural forms of the unprocessed substances.

These raw materials were also shown in context with historic objects from many cultures and eras. Objects included sculptures, buttons on textiles, ornate personal accessories and jewellery, decorative art objects of all kinds, and fragmentary archaeological objects. Case studies of difficult to identify materials were discussed, reference books were reviewed for scope and content, and analytical studies were presented alongside the steps to identification.

After each lecture, a handling session allowed the thirty attendees to work with materials in natural and processed states. The handling objects were from Dr O'Connor's extensive teaching collection, along with select objects from the Manchester Museum collections. Testing out our new knowledge in groups was an excellent opportunity to get to know other conservators, and share experiences of working with bone, ivory, and related objects. The subtle differences between antler and bones from several deer species; the attributes to differentiate elephant ivory from mammoth ivory, walrus tusk, or whale teeth were all discussed in detail. Also covered were keratinaceous materials, including horns, hooves, turtle species from which 'tortoiseshell' is sourced, and the baleen plates of non-toothed whales.

To round out the course, less frequently encountered material such as beaks of helmeted hornbills or pangolin scales were introduced. Substances often mistaken for bone or ivory were also reviewed, including corals, shells, nuts, and plastics.



Staphany Cheng, a second year post graduate student conservator from the Centre for Textile Conservation at the University of Glasgow examines the vascular structures of a small piece of deer antler. This tray from Dr O'Connor's teaching collection includes objects of plastic, elephant ivory, bone, horn, tagua nut, antler, and the mineral jet.

At the end of the second day, we had a chance to test our skills in groups by identifying source materials for a set of artefacts. The task of recalling and identifying the key features on artefacts in practice, and defending their identification during a group presentation and discussion was a fun and challenging way to engage with the topics.

Dr O'Connor's expert knowledge of the physical and chemical properties of hard and soft animal tissues was evident. Her enthusiasm for teaching the visual analysis necessary to identify these materials, and to recognize when there is not enough data to identify, energized the group during the handling and discussion sessions. As my first introduction to identification of many of these materials, I can see myself returning to my notes and lecture handouts often in the future. Thank you to Dr Sonia O'Connor for sharing her expertise and resources, the Manchester Museum for hosting, and the Icon Archaeology Group for organizing.

Megan Mary Creamer

CONFERENCE

UNROLL AND UNFOLD

IIC & Hong Kong Palace Museum Hong Kong 24–26 November 2017

Hosted by the Hong Kong Conservation Office and jointly presented by the IIC* and Palace Museum, this symposium was titled Unroll and Unfold: Preserving Textiles and Thangkas to Last. The event brought together an international group of speakers

* International Institute for Conservation of Historic and Artistic Works

and attendees and covered a broad range of themes, from the ethics of conservation of religious textiles, to the delightful tradition of Chinese animal-shaped children's hats. It was an incredibly well organised event, with all talks in either English or Mandarin and simultaneous translation provided via headsets.

The first session looked at the conservation and study of thangkas – Tibetan Buddhist paintings or embroideries, usually mounted on a silk backing. All three speakers focused on thangkas in the context of Buddhist halls and temples. **Jirong Song** talked about the conservation work at the Palace Museum on a group of thangkas that had not been moved or cleaned for over two hundred and seventy years.

Teresa Heady's talk was framed by the priorities and limitations (such as lack of electricity) of working in the field, detailing pragmatic, reversible methods of stabilising fragile textiles, whilst Ann Schaftel's talk focused on her approach to developing sustainable conservation methods lead by monks and nuns caring for the thangkas.

The topic of the second session was 'Textiles Along the Silk Road'. Feng Zhao, Director of the China National Silk Museum, spoke about recent exciting archaeological discoveries of ancient textiles and looms, and ongoing work to identify dyes and recreate ancient weaving processes. The Silk Road had many branches; Franca Cole gave an interesting talk on one of its outposts, a Roman site in Libyan Ghirza, and a fascinating group of textiles found there (now in the Leicester Brogan Archive).

This was followed by a talk on conservation of Silk Road textiles at the British Museum, specifically a large 8th century embroidery, presented by **Monique Pullan** and myself. The next speaker, **Junchang Yang**, gave a detailed insight into early examples of goldwrapped threads found in the 7th – 10th century Underground Palace of Famen Temple. To end the day, **Julia Brennan** talked about her conservation work in the royal collections of Bhutan and Thailand, with interesting insights into how traditional textiles had been treated, for example by soaking them in coconut water and polishing with cowrie shells.

The third session covered 'Court Textiles and Ethnic Costumes'. Yarong Wang talked about a number of archaeological textiles, excavated from Chinese tombs and conserved by Wang and a team of students. It was interesting to note her use of silk net (rather than the nylon net favoured in the UK) as a support. This was followed by two talks on conservation in Western institutions – Mary Ballard on work in the Smithsonian, and Marion Kite on the V&A collections.

Next came a study and conservation of an embroidered Chinese plaque by **Yang Chen**,



Centre for Textile Conservation alumni at the IIC-Palace Museum Symposium

a research fellow at the Palace Museum. **Angela Cheung** then talked about the history and conservation of Chinese children's hats at the Hong Kong museum, fascinating objects incorporating a variety of materials and techniques.

The final session, 'Crafts and Art of Textile Artefacts,' began with a talk by **Mary Brooks** on the 'material memories' of textiles, with a particularly interesting example of a velvet cope, revealed by x-ray analysis to have residual stitch holes, in the shape of a dove and kneeling figure. Could the stitching have been removed due to religious prohibitions at the time?

Francesca Casadio, a conservation scientist at the Art Institute of Chicago, then promoted the use Surface Enhanced Raman Spectroscopy (SERS) to identify organic colourants, raising lively debate amongst attendees over the limitations of SERS compared to separation techniques.

Conservator **Ningchang Shi** then outlined the history of kesi, complex woven Chinese works of art traditionally associated with the Imperial Palace. **Chris Hall** talked about Chinese rank badges, textiles worn on the chest with specific imagery to denote status. Hall illustrated the talk with textiles from his private collection and personal insights such as finding peacock feather used in some embroideries being prone to pest damage. **Yong Lei**, a research fellow at the Palace Museum, wrapped up the symposium with a talk on dye identification of lantern fringes in the royal court.

All in all, the symposium included a well-balanced mixture of talks from professionals working in Chinese, UK and US institutions, and many working on archaeological sites and in temples. We were also afforded a sneak preview of the exhibition 'Miles and Miles: World Heritage Along the Silk Road' at the Museum of History and a choice of

cultural tours. Visiting the conservation labs was a great opportunity to see current projects and discuss treatment approaches with fellow attendees from Egypt, Australia, Sweden, Singapore and the US, to name just a few!

I am grateful to the Anna Plowden Trust and Bei Shan Tang Foundation for enabling me to attend and co-present at this, my first, symposium.

Hannah Vickers

Textile Conservator Doddington Hall, Lincolnshire

VISIT

WESTMINSTER ABBEY EFFIGIES

Icon Textile Group London 30 November 2017

Westminster Abbey is home to a significant collection of Royal funerary effigies. These life-size wax and wood figures were created to resemble deceased Kings, Queens and nobles and be present at their extravagant funerals – a custom which seems obscure to us now.

The oldest of these effigies are Elizabeth of York and Henry VII dating from the early 1500s. The remaining ten cover the next three hundred years up until Admiral Horatio Nelson in 1806.

Thanks to the current conservation project and preparations for a new display, Westminster Abbey conservation studio opened its doors for a selection of the Icon Textile Group to have a tour round. I am delighted to share with readers some of the secrets of the effigies and reflect upon our interesting conservation discussions.

When they were originally created, the funerary effigies were designed to appear life-like and to conspicuously represent the

wealth and prestige of the deceased.
Conservator **Zenzie Tinker** commented that their use was important to show 'a continuing royalty' – something that new monarchs used to prove their right to succeed to the throne.

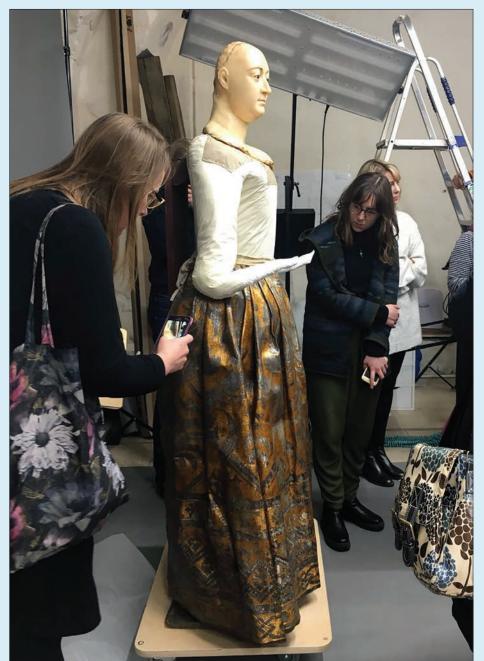
Over the centuries they have been moved around Westminster Abbey from their prominent place of display in Henry VII's chapel to various alcoves and finally ending up in the crypt. They became known to visitors as the 'Ragged Regiment' as a result of their tatty and dirty appearance. Unfortunately the effigies had been the victims of pest infestations so this name was particularly appropriate, as Zenzie and Rachel Rhodes – another conservator working on the project – explained to us.

Typically each figure had a wooden 'body' padded out with straw, hair and tow – a type of rope – to get the right shape, and dressed in splendid clothing and wigs often worn by the subjects themselves. The majority of materials are organic, aside from some gold or silver thread and jewels. Zenzie and Rachel explained the processes involved in their critical conservation work and we were impressed that 4000 hours have been spent conserving the twelve effigies and their two hundred items of clothing and accessories.

The work involved removing the clothing, which was cleaned and repaired. The effigies themselves were then frozen to destroy the possibility of further pest activity and dressed in a layer of Tyvek. In some cases new back panels were created where they had originally been left out. The costumes, wigs and accessories are in many cases of considerable historical importance. They have survived well and although it is a shame that outer garments hide intricate details, it is for this reason they have survived so well. Queen Mary II, for example wears a standout underskirt of gilded and silver-gilt leather. This piece is sumptuously coloured, having been made of the most expensive materials, and is patterned with leaves and birds. It is however an underskirt and is invisible when the effigy is fully dressed.

Similarly Charles II wears his Order-of-the-Garter robes, including the breeches which, upon close inspection, were frilled and laced with cloth of silver and silver threads. These too are difficult to see when the effigy is fully dressed and certainly will not receive the attention they deserve when on full display. These delicate materials have no doubt been preserved by their outer garments from the damage that years of display in a light and dusty environment can bring to costume collections.

In addition to Charles' hidden bloomers and Mary's secret skirt is Catherine the Duchess of Buckingham's fantastically embroidered underskirt, and in the coat of her four year old son's tiny child effigy are small holes cut for leading reins, a poignant detail. Finally









Conservation by Zenzie Tinker Conservation Ltd. of effigy figures for the Queen's Diamond Jubilee Galleries at Westminster Abbey

Frances, Duchess of Richmond has two pairs of stockings, intricately decorated shoes and the only wax legs in the collection.

All of these unseen details were a delight to see, sparking a discussion about the deliberations necessary when selecting display techniques. Rachel and Zenzie told us that they had carefully considered displaying the undergarments separately but preference was given to the 'authenticity' of keeping the effigies fully dressed in their associated material. This treatment included keeping all of the original padding intact, some of which had been subject to pest infestation and are filled with frass and insect carcasses. This was treated by freezing, gently cleaning and dressing in the layer of Tyvek before redressing.

The wax heads, hands and, in the case of the Duchess of Richmond, legs, were removed from the body, cleaned and treated by expert conservator Valerie Kaufman ACR. The barrier of Tyvek prevented further

degradation and discolouration of the wax from contact with the textiles.

The clothing, and in some cases the effigies, have been subject to various conservation interventions over the years. Most remarkably some of the garments were sent to Sketchleys the dry-cleaning company (Sketchley's have since been absorbed by Johnsons). The company labels can still be found on some of the garments. It is astonishing that such precious items were entrusted to a high street cleaning company rather than professional conservators.

It has been a delight to have been able to view these artefacts close-up and on behalf of everybody on the tour I would like to express our gratitude to the organisers and to our inspirational guides. The opening of the Jubilee Galleries in the triforium is expected in June 2018 and I recommend that everybody go and see these fantastic pieces which have captured the lives and

features of the royals from so many years ago – and bear in mind that beneath the layers of costume there are many hidden delights waiting to be uncovered – hopefully in a project specific book, which I am sure would be excellently received.

Rachel Arnold
RA Conservation

All photos – © Westminster Abbey. Images: Zenzie Tinker Conservation

in practice

BLYTHBURGH CHURCH IN SUFFOLK

The Holy Well Glass team describes the conservation, repair and re-instatement of a medieval glazing scheme original to the church

Part of a medieval glazing scheme, original to Holy Trinity church in Blythburgh, has been re-instated by Holy Well Glass following its removal as long as seventy five years ago, and until recently many involved with the church were completely unaware of its existence. Two separate sets of this medieval stained glass cache, comprising small tracery panels, were presented to Holy Well Glass in the mid-1990s, with a view to their eventual repair and reinstatement at Blythburgh.

The glass is of a very high quality, with beautifully painted figures, typical of the Norwich school of glass painting. Developed in the 15th century, it displays extensive use of white glass and silver stain and great delicacy of painted detail. This combination results in the much admired subtle silvery light which is typical of East Anglian church interiors lit through glass of this period. As a survival it is historically significant.



Holy Trinity, known as the 'Cathedral of the Marshes', is a wonderful medieval church that has managed to retain so much of its character, often through poverty and neglect over time. The current church was built early in the fifteenth century, but just over one hundred years later its lengthy deterioration began, after the Dissolution of the Monasteries when a supporting priory was suppressed and dissolved in 1537.

The rise of Puritanism in the mid-17th century saw the wilful removal of superstitious ornament in churches across the country. At Blythburgh in 1644 a local Puritan, William Dowsing, ordered, among many other items, the removal of '...twenty suspicious pictures...... and gave order to take down above two hundred more pictures, within eight days'¹. Many precious medieval stained glass 'pictures' were therefore removed. From then on much rural poverty, as well

Holy Trinity Church, Blythburgh, south side

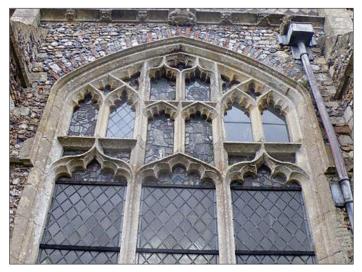




Close-up of painted detail from panel C

Panel C after conservation





Window sIX from outside

as the local rise in Methodism, led to a further decline of the church and by the late 19th century it was in a very poor condition.

In the 1880s the Society for the Protection of Ancient Buildings (SPAB) successfully halted a proposal for a radical and major restoration of the church and instead a slow and more considered level of repair has been ongoing ever since.

In 1995 the architect of Blythburgh at the time, Andrew Anderson, arranged the removal of two very weakened medieval tracery sections from window sIX, and gave them to Holy Well Glass for safe storage. In their place in the church plain sheet glass was installed. Then, when the prominent conservation studio of Dennis King closed in 2003 a number of glass projects were found in his Norwich workshop; among them were more panels from Holy Trinity.

In King's obituary in 1995 Hilary Wayment explained how this

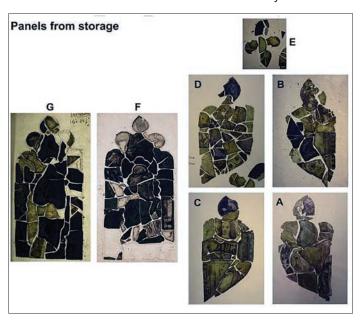


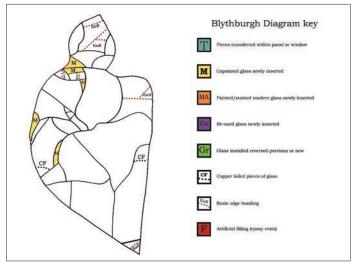
Before removal

Window sIX, before repair and re-installation works

glass, was often to remove damaged panels and put in temporary replacements. These panels were stored away until a time could be found to repair and re-instate them. One can easily assume that this was how the Blythburgh glass came to be separated from the church, possibly during World War Two, when a great deal of glass was removed from churches and cathedrals nationally in order to protect our heritage from enemy bombardment.

Panels A to E - removed from Holy Trinity, Blythburgh by Dennis King, and later passed to Holy Well Glass. Panels G and F removed from Window sIX in 1995 and stored at Holy Well Glass





After conservation: the diagram for panel A with the documentation diagram key



Panel D before and after conservation. On the left an intrusive historical insertion can be seen. On the right: the newly painted insertion is an isolated exception







Panel A after conservation, in reflected light and in transmitted light

Thereafter, a number of projects from King's workshop, including the Blythburgh panels (already removed from their leads whilst at King's) were given to Holy Well Glass by the Council for the Care of Churches (now the Church Buildings Council), with the understanding that efforts would be made to reinstate them in their original locations. Finally, in 2016 funding was secured and the panels were conserved and replaced back into the church some twenty one years after arriving at Holy Well Glass.

CONDITION OF THE GLASS IN STORAGE

Panels F and G originated from window sIX; they are arguably the more sophisticated in terms of design and glass painting. They were fragmented, although the figurative elements remained more complete. Their condition was poor, with an unusual, continual layer of white lime-based material on the





Original fragments, forming part of an eagle design

inside. The external face exhibited one of the most complex conservation problems, having a heavy surface layer of dark brown corrosion firmly bonded to the glass structure, which had rendered the glass opaque. The remaining panels, A to E, believed to have originated from the chancel clerestory glazing were very fragmentary, probably assembled following the sacking of the church and much of its glass by Dowsing in the 17th century. The condition of the surviving painted glass was better, although there was still external corrosion. The imagery remained legible.

CONSERVATION ASSESSMENT & APPROACH

The original location of five of the panels was unclear. The wish of the parish was to have all the medieval panels reinstated together in one grouping, and the decision was made to incorporate all seven panels into Window sIX, as this was the known origin of two of the panels (F and G). Following a design selection process a suitable arrangement was chosen by the parish. In Window sIX both the glass and the lead were in a poor condition, and therefore it was agreed to carry out a full conservation programme for all the medieval glass, as well as the related plain glazing.

The process was as follows:-

- The removal and careful conservation of all of the surviving in-situ stained glass in window sIX and the medieval glass in long term storage.
- Following conservation, the installation of the traceries in an internally vented protective glazing system.
- The replacement of the main diamond quarry leaded lights



Close up of medieval glazier's mark

with new slightly reamy cylinder glass and the incorporation of the medieval glass in long term storage in an internallyvented protective glazing system.

WORKSHOP CONSERVATION

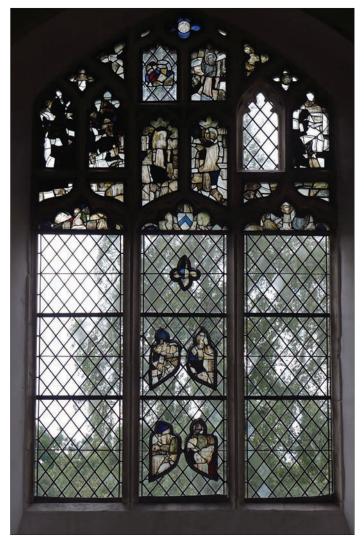
The condition of the glass, both in terms of corrosion of the glass body and condition of painted detail, demanded that careful consideration be given to its protection, so that it remains sustainable into the future. Holy Well Glass has adopted a policy involving the minimum intervention possible. The glass has been fragmented through historic political and religious upheaval, and also neglect. However we took the stance that there is no justification for any reordering or introduction of new material, with isolated exceptions where repairs and interventions are intrusive and interfere with the intent and message of the glass, such as infills of plain unpainted sheet glass.

In terms of cleaning, there were two distinct approaches, tailored to the two separate collections of glass: panels A-E from Dennis King's workshop, and panels F and G removed in 1995 under the direction of architect Andrew Anderson.

For panels A – E the cleaning was minimal; a light clean with cotton wool swabs and a mix of ethanol and de-ionised water. The main consideration was to protect the painted surface, for, whilst relatively well fired, it remained delicate. Improvement to legibility was a secondary consideration.

For panels F and G the cleaning was more complex for two reasons. First, the reverse of the glass was heavily corroded with dark brown surface deposits, probably indicative of an excess of manganese in the original glass batch. Its removal is beneficial as it is a hygroscopic layer, which compounds the chemical reactions producing the corrosion crusts. Overcleaning the external face may have resulted in an accelerated period of degradation of the glass surface. It was decided to use the mechanical method of softening the surface with alcohol, followed by microscope-monitored scalpel cleaning.

Secondly, the internal surface had a surface layer of historic

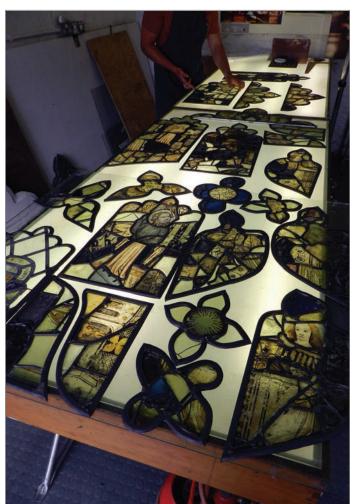


Window sIX after conservation and site installation, showing the new arrangement of panels $\,$

lime wash. Test cleaning revealed that the original kiln-fired painted detail remained in remarkably good condition beneath the lime wash. Therefore cautious cleaning with sable brushes and scalpels monitored by binocular microscope was undertaken to panels F and G.

The in-situ medieval tracery glass from Window sIX was removed from site and transported to the workshop to be dismantled and conserved alongside the glass that had been in storage. After assessment minimal cleaning was carried out. For all panels, the copper foil method was used to repair simple breaks in the glass, whereas epoxy resin (araldite 20:20) was employed to edge-bond more complex breaks. Removal of some repair leads from the ancient glass allowed edge bonding to improve the legibility of the overall design. These repairs did not require any protective backing glass as an environmental protective glazing system was installed.

Once the pieces were repaired, all the glass was laid out on a rubbing to assess how the shape and size of the panel had altered post-conservation. In order to accommodate the original positioning of the medieval glass, some unpainted historic additions were moved slightly, and any small gaps required the insertion of newly painted pieces. For this purpose appropriate glass was selected from hand blown tints in stock in the workshop. Paint and stain tests were conducted to achieve the closest match, and new inserts were signed and dated in kiln-fired glass paint, in order to clearly and honestly establish them as new. Finally the panels were re-



Panels in the workshop, after conservation

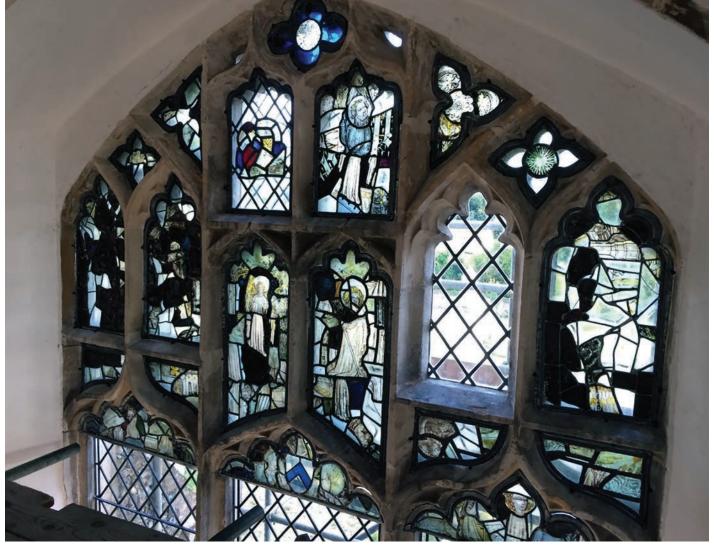
leaded, with care given to match the old lead profiles. Slender string lead repairs were used to separate modern inserts from original glass. The panels, no longer having to protect against weather, did not require cementing however small areas were hand-puttied with linseed oil putty stained with lamp black pigment, to stop any light halation or movement.

NEW PLAIN GLAZED PANELS

The existing plain glazed panels in the main section of Window sIX were made with modern machine-made glass, and in line with an established campaign by the church we replaced them with traditional handmade cylinder glass. This had already proven to improve the quality of light into the church. It has been installed in the original position on the existing original medieval glazing bars, and pointed with gauged lime mortar. This was continued into the tracery section as the outer layer of the protective glazing system.

ENVIRONMENTAL PROTECTIVE GLAZNG SYSTEM

It was decided that the stained glass would be sited in the internal parallel area of the glazing reveal adjacent to the original glazing groove. The visual context of the glazing and the external architectural context is thus maintained. In manufacturing the EPG system heat-formed supporting bronze frames were made to exactly follow the basic lead lines of the individual panels. These frames are held to the stonework with bronze tabs. The panels are attached to the



Window sIX, tracery section, after conservation and site installation

frames with lead ties, the frames patinated, and a lead skirt surrounding each frame creates a light seal. To allow space for ventilation the frames are set marginally forward from the original groove.

CONCLUSIONS

We believe this extant medieval stained glass is highly significant, it belongs to the church, and it is only right that it has finally been reinstated. It is of high quality and historically significant, both nationally as an important survival of medieval art, and regionally as a rare survival of a particularly East Anglian form of glass painting and design.

The repairs to the glass fabric have been minimal, retaining all the medieval glass, and undertaken sympathetically, using mechanical and reversible techniques that do not compromise the historic fabric. Although it would have been tempting to try to re-arrange the medieval glass pieces further, we felt that it would be too interventive and subjective.

It is interesting, nonetheless, to document where some newly revealed design detail has been realised. One example is a number of original glass fragments which form part of a larger eagle design. Due to the nature of the fragments, incomplete evidence, and the size of the stonework, it was decided to relead the pieces separately, but the images of medieval

roundels suggest how the full design may have originally appeared.

Some cleaning has taken place where safe to do so, but at all times the integrity of the medieval glass paint has remained paramount. The glass is heavily corroded in some areas to the point of being opaque; there has been a considerable degree of manganese browning. This is something which has to be accepted as part of the history of the glass; it cannot be removed to any significant degree, neither will it improve legibility if attempted. The small amount of newly painted insertions have been clearly signed and dated to show they are from this period of repair.

Alongside the medieval glass, the plain glazed panels, now containing traditional handmade cylinder glass quarries, have given back to the church that special quality of light and context.

Holy Well Glass has introduced the most passive method of conservation for the medieval glass in introducing an Environmental Protective Glazing system – the glass is visible once again, but no longer subject to the elements; this period of repair and re-installation will significantly lengthen the life of such a fragile inheritance.

1. http://holytrinityblythburgh.org.uk/history/ . Accessed Feb 2017 2. http://www.independent.co.uk/news/people/obituary-dennis-king-1615547.html . Written Thursday 13 April 1995. Accessed Feb 2017.

the emerging conservator

REPAIRING A GLASS LANTERN SLIDE

Stephanie Jamieson sets out some tips for the repair of a glass lantern slide using Vivak PETG

BACKGROUND

The National Library of Scotland has a collection of material documenting the incredible life of Fanny Bullock Workman, the pioneering American explorer and mountaineer. Workman and her husband William Hunter Workman began their adventures cycling through Algeria, recounting their travels in two books: Algerian Memories: A Bicycle Tour over the Atlas Mountains to the Sahara and Sketches A-wheel in Modern Iberia. Later in 1898, they spent two years cycling around India and the Far East, subsequently publishing Through Town and Jungle: Fourteen Thousand Miles A-Wheel Among the Temples and People of the Indian Plain. During their tour the Workmans visited the Himalayas, and mountaineering became the focus of their future expeditions.

This passion for mountaineering saw Fanny set the women's altitude record in 1906 when she climbed to the summit of Pinnacle Peak in the Nun Kun (around 23,000 feet). The Workmans continued to set new records in the Himalayas and documented their efforts through publications and photographs. Many of these images are held in the Fanny Bullock Workman collection at the National Library of Scotland. A wide variety of formats were used to capture and show the Workmans' Himalayan travels, including silver gelatin prints, carbon prints and glass lantern slides

A GLASS LANTERN SLIDE

One item from the collection in need of conservation treatment was a panoramic glass lantern slide (83 x 325 mm) depicting a series of Himalayan peaks. When this item came to the conservation studio it was not only badly broken but its pieces were mixed with those of another broken glass lantern slide – this one a standard square format 82.55cm^2 – depicting a scene of the Workmans' mountain camp. Both slides were housed in a card mount with rusted metal fixtures designed to hold the panorama in place.

PREPARATORY TREATMENT

The first stage of treatment involved the removal of the glass pieces from their card mount and the separation of the two slides. The sealing tape and cover-glass had to be removed, and the original labels saved to be re-attached later on.

Once separated, the pieces of the two slides were photographed over a light box and housed in temporary sink mounts. The images taken were used to digitally re-assemble the slides in Photoshop so that handling would be minimised when determining the correct position of each piece.

The procedure for using Photoshop to plan the re-assembly was as follows:

1. The pieces were photographed or scanned over transmitted light.

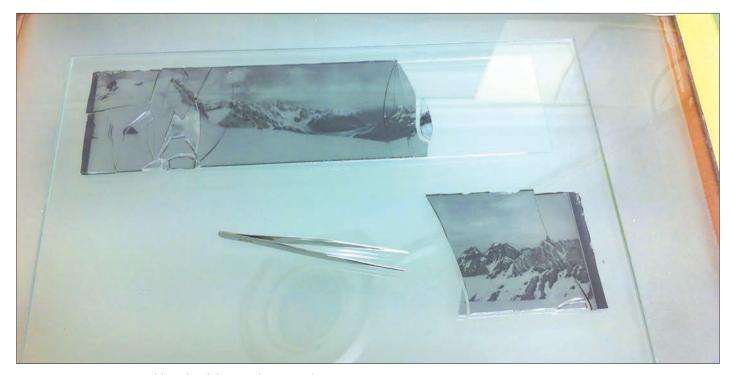


The two slides mixed together in one card mount. Acc 13773



The panoramic slide photographed over a lightbox. Acc 13773

- 2. The images were opened in Photoshop and made into layers by drawing around each and cropping the rest of the image. This was repeated for all of the pieces, ending up with the original image split into several layers.
- 3. Once the individual pieces had been rendered as separate layers they were moved into position using the select, edit, transform and rotate commands.
- 4. The layers were dragged into position.
- 5. The final assembled image was used as a reference when working with the object.



During treatment: re-assembling the slide over the cover glass. Acc 13773

Before re-assembly, each piece of glass needed cleaning, first with an air-puffer to remove dust, and then by wet-cleaning on the non-emulsion side with water and IMS (40:60) on a cotton swab.

THE THERMOPLASTIC INFILL

The clean pieces were then reassembled and any areas of loss, first identified in Photoshop, were confirmed. These could have been filled using un-buffered conservation grade mount board, but for an item like the panorama, a more aesthetically sympathetic repair was desired. Vivak® PETG, a transparent thermoplastic, was chosen as the infill material as it can be cut to the right shape in the studio, is inert, and has a similar refractive index to glass.

The problem with Vivak is that it is difficult to hand-cut accurately and scratches easily. It is important to ensure the surface of the Vivak still has its protective coating attached while cutting and shaping to minimize scratches. If the coating has been removed, its surface can be temporarily protected with tape.

The best way to cut the pieces was to tape a card stencil of the infill onto the Vivak and lightly trace around it with a scalpel to create an accurate first cut. A retractable utility knife was then used to deepen the first cut, and this was repeated a few times. The area around the infill was then divided up with the utility knife so that the correct shape could be achieved. Once deep cuts were made, the plastic could be bent back until it snapped cleanly.

The edges of the Vivak then needed smoothing and shaping. This was achieved using the edge of a metal ruler to remove sharp bits and a nail file to make it smooth. Once complete, the card stencil and protective tape were removed, before the Vivak surface was wiped with a damp cloth.

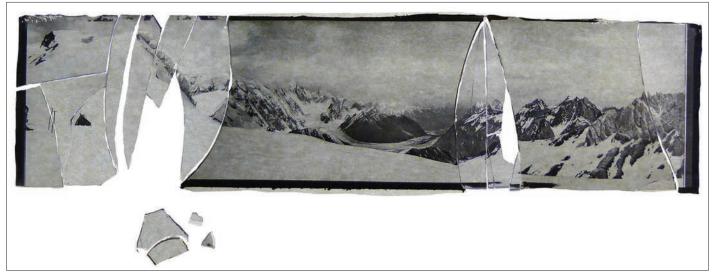
The piece was toned using gelatine mixed with watercolour paint. The appropriate watercolours were mixed into a batch of 6% gelatine until the right tone was achieved. To stop this solution from solidifying, the beaker was kept in a bottle warmer. The solution was then applied to the emulsion side of the Vivak and left to dry overnight. Finer details were then added once the infill was dry using acrylic paint.

HOLDING THE SLIDE IN PLACE

Once the infills were finished and added to the reassembled slide, two pieces of glass were cut to match the size of the panorama. These were then cleaned with water and IMS (40:60) and used to sandwich the panorama fragments. Keeping all the pieces in place proved quite fiddly, but the most successful way was using a larger sheet of glass over a light box as a support. One of the newly cut pieces of coverglass was then placed on top and the broken slide reassembled over this before sandwiching with the other piece of cover-glass. A strip of polyester was then cut to the combined length of the perimeter of the slide and the thickness of depth of the slide and cover-glass. This was used to seal the edges of the slide and help keep the pieces in place when taping around the perimeter. Filmoplast P90 was used to secure the polyester strip to itself.

To recreate the sealing tape Filmoplast P90 was painted black with acrylic. Once fully dry, the tape was cut to the correct size (matching the width of the original sealing tape); this was another fiddly task, particularly for such a large slide. The best way to apply the new sealing tape while keeping the reassembled slide in place was to move the slide and glass sandwich to the edge of the glass support so that one edge was protruding. This method allowed tape to be applied to the front and back of the slide without the need to flip it over. This was repeated for each side and the ends of the tape were trimmed to make neat corners. To ensure the tape was fully and evenly adhered it was rubbed with a Teflon spatula.

The original labels were then re-adhered, using methyl cellulose to stick them to pieces of Filmoplast P90, which was then applied to the new cover-glass.



The final photoshop reassembled image. See point 5.



The re-assembled slide with its taped surround. Acc 13773

CONCLUSION

Making infills from Vivak is a time-consuming process, aesthetically preferable to card infills but adding no more structural support to the broken slide. For an item like the Himalayan panorama, taking the time to make your infills blend as much as possible is worthwhile; however for more common glass lantern slide formats I think cardboard is the speedier option.

Acknowledgements

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Stephanie Jamieson was the Icon intern in photograph conservation at the National Library of Scotland from September 2016 to September 2017. She is currently the project conservator at Glamorgan Archives, funded by the Wellcome Trust. Stephanie is also the Communications Officer for Icon's Photographic Materials Group.

References:

 $\label{lem:http://library.americanalpineclub.org/exhibits/show/womenclimbing/fannybullockworkman$

 $\label{limits} https://trivia-library.com/c/biography-of-us-mountain-climber-fanny-bullockworkman-part-1.htm$

http://www.alpinejournal.org.uk/Contents/Contents_1992-93_files/AJ%201992%20231-237%20Plint%20Workmans.pdf

https://www.adventure-journal.com/2012/11/historical-badass-climber-and-explorer-fanny-bullock-workman/

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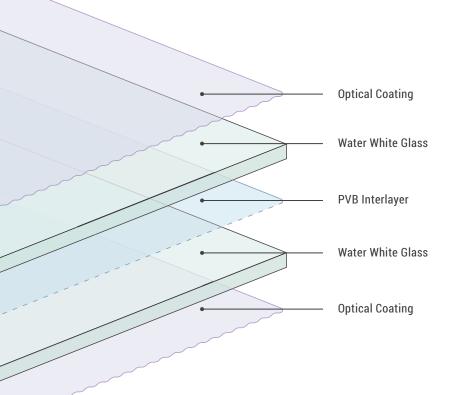
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