

THE MAGAZINE OF THE INSTITUTE OF CONSERVATION • NOVEMBER 2014 • ISSUE 55



Launching the 2015 Conservation Awards

Also in this issue

Conservation in the WW1 trenches

Gut parkas, genizahs & guidelines

Interns, technicians and mentors

conservation register

Are you thinking of joining the Conservation Register?

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

Practices that are included in the Conservation Register will benefit from:

- Referrals from organisations including the National Trust, the V&A museum, the Council for the Care of Churches;
- An individual entry providing full contact details and including automatic links to a website and email address; Inclusion in all UK and Ireland searches for your discipline;
- An opportunity to showcase examples of work to potential clients;
- Provision of information on the accreditation and skills of you and your staff;
- Login access for feedback on how often your own entry is viewed
- Practices in which the lead member is an accredited conservator-restorer (ACR) of Icon, or ARA, or BHI, accredited through PACR (Professional Accreditation of Conservator-Restorers) are eligible for a 15% discount with Heath Lambert insurance brokers.

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

www.conservationregister.com

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THE INSTITUTE OF CONSERVATION

NOVEMBER 2014 Issue 55



From the Editor

With commemorations of the First World War all around us, Icon News is playing its part with a piece about post-excavation and conservation work on a WW1 site in France. It is especially interesting for being written as a collaborative effort, showing the conservator as part of a team of different disciplines and

setting the conservation aspects of the project in the wider context.

In fact, collaboration threads its way through this issue. Conservators from three different London museums played their part in the work of storing and transporting two Inuit parkas, whilst the Wallace Collection's workshop for the blind and partially sighted was a team effort by an audio descriptor and paintings conservators.

And, of course, one of the 2015 Conservation Awards – the Beko Award for Conservation in the Community – will celebrate a collaborative project involving a professional conservator that has increased the learning of new skills by volunteers. We saw a great example of this on display at the launch of the Awards – see pages 2 & 3. So, with the Awards up and running, do put yourself in the field by applying for one.

Lynette Gill



2

2 NEWS

The conservation awards, environmental guidelines, mentoring, cpd grants, Group news, Intervention

10 PEOPLE



15

11 WW1 EXCAVATIONS

Conservation work in a multi-disciplinary team

15 NEW CONSERVATION STUDIOS

The British Museum's new conservation studios



30

18 AROUND AND ABOUT

A taste of conservation for the sight-impaired, a request for help with some special picture mounts

22 REVIEWS

Books, the ICOM conference, wallpaper, mounting art on paper, synthetic resins for furniture, visiting the National Portrait Gallery studios

30 IN PRACTICE

Preparing fragile gut parkas for storage and **the emerging conservator** on treating material from a genizah



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Detail of embroidery on the *Night and Day* fancy dress costume made by the House of Worth and shown at the 2015 Conservation Awards launch. Image courtesy of Zenzie Tinker Textile Conservation Ltd with permission of Pennington Mellor Munthe Charity Trust

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professional update

From the Chief Executive

THE CONSERVATION AWARDS



Photo: Matt Wrieford

Alison Richmond ACR FIIC explains the approach to the 2015 Awards

I hope that it will not have escaped your notice that we have launched the Icon Conservation Awards 2015. It is a commonly held view that awards are a good way of raising awareness of your cause. It is also true that an awards ceremony per se does not hold much sway. It is the build-up to the awards presentation, the anticipation, the tension, and the magic words 'and the envelope please!' that pique

people's interest. We also know from the *Demos Report It's a Material World: Caring for the public realm* (2008) that as a prerequisite for raising the profile of conservation and, in so doing, sustaining support for it, conservators have to get people engaged and involved in what they do; in part this means becoming less object-focussed and more people-focussed.

These two ideas have informed the development of this round of Conservation Awards. We have devised a programme that extends over a longer time, one year from launch to ceremony. Why? Because this gives us a chance to do a number of critical things:

- * First, we can get the word out to a wider audience about the Awards and explain what is different about these awards compared to any other conservation award and why they are important.
- * Second, it gives people a chance to think about whether they wish to apply, whether they have a suitable project now or are they going to have a project in future, and whether they would like to let us know about it in advance of applying.

- * And third, it gives us time to follow the progress of some of the projects, telling the stories of the people and objects.
- * Fourth, we have time to promote these stories to the media, perhaps achieving our ultimate goal of coverage in a national paper or on national television.

But there is another dimension to this vision. We also want to let more people know of the huge potential of conservation to engage people: they can get involved; they can learn new skills and knowledge from professional conservators; there are projects going on around the country that they can plug into.

We have been fortunate in getting a lot of help from people who know about getting messages across to the public. Beko plc, our new corporate sponsors, have contributed much more than their significant sponsorship funding, with Teresa Arbuckle, Marketing Director UK & Ireland, giving generously of her marketing expertise. Beko has brought in creative agencies and a public relations firm, all at no cost to Icon. These have shared ideas, given us access to their press lists, and helped to refine our communications in ways that have a better chance of reaching new audiences.

ArtsMediaPeople, the project managers for the Awards, produces cultural campaigns, participatory experiences and live events. They are experts in arts advocacy and audience development. With their help we are hoping to design a new kind of awards programme that is more inclusive and exploits social media to generate interest and build momentum.

It has taken some time to get to this point. I began working on the Awards intensively about a year ago. It has been a steep curve of learning for me to work with a corporate sponsor. There is always a risk in trying something new but the effort of so many talented and knowledgeable people is already paying off. When Maxwell Hutchinson, former President of the RIBA, cultural commentator and presenter on radio and TV, launched the Awards last month at the Cutty Sark, we started on the journey to making a real difference to people's understanding of what conservation is and what it could mean to them.

For more information about the Icon Conservation Awards 2015 and how to apply visit: www.conservationawards.org.uk

THE AWARDS ARE LAUNCHED!

The 2015 Conservation Awards were launched on October 21 from the Cutty Sark, a most appropriate venue given its own status as a heritage treasure and a great conservation project. And it was a delightful event. With sponsors, conservators, staff, press and heritage grandees in attendance, the welcome was warm, the coffee was good, the speeches were informal and short and there was a beautiful display.

The words of welcome from Cutty Sark Curator Jessica Lewis

were only slightly undermined by her reminder that we were sitting under 963 tonnes of ship. Undaunted by that, although initially bemused by the loss of his notes, architect, broadcaster and conservation enthusiast Maxwell Hutchinson then took to the floor, noting that with a pacemaker installed he himself could be said to have been conserved.

'Conservation turns inheritance into heritage' he told us and, recalling previous award winners, ranging from submarines and Roman food remains to a medieval altarpiece, he marvelled at the range of what we deal with, with our 'unique



Our CEO Alison Richmond (l) with Teresa Arbuckle, Marketing Director of Beko, and Maxwell Hutchinson

combination of enthusiasm, skill, dedication and knowledge'. He rightly wondered how on the earth the judges were going to make up their minds.

Our CEO Alison Richmond then got down to the business of the day, announcing the new sponsors of the Awards, Beko plc, who join Icon's partners in the awards: The Pilgrim Trust, The Institution of Mechanical Engineers and the Anna Plowden Trust. She also detailed the six awards available in their different categories with prize funds ranging from £10,000 to £2,500. Alison drew attention to the added dimension to these awards, that of telling the stories of the people behind the projects and celebrating the value and knowledge that the professional conservator can add to community and volunteer efforts.

This collaboration was wonderfully illustrated on the day by a display which brought to life a project currently taking place

Textile conservator Zenzie Tinker (l) and NADFAS heritage volunteers arrange the House of Worth display



Admiring the House of Worth fancy dress costume *Night and Day*



A treasury of couturier costumes found in the Southside House trunk

for Southside House in Wimbledon. Following its chance discovery in the attics, a trunk packed full of House of Worth costumes from the early 20th century is being conserved by Zenzie Tinker ACR and NADFAS Heritage Volunteers. Zenzie, volunteers Jacqui Wood and Caroline McCowen, the trunk (a most piratical-looking affair) and several amazing items were there for us to exclaim over – the purpose and thrill of conservation brought to vivid life.

We were also privileged to have the opportunity to tour the Cutty Sark herself, before the regular day's visitors came on board, with Piran Harte acting as our guide. Fortunately, the remnants of Hurricane Gonzalo just held off: those masts and riggings were awe-inspiring enough without added sound and other 3-D effects. Even in dry dock, the ship and the lives of those who sailed in her were impressive.

There is a great new website to handle all the award activities and material. All the information there is going to be added to and updated as the count-down to the award ceremony progresses. Do take a look at it: www.conservationawards.org.uk.

OUR NEW CODE OF CONDUCT

The new Icon Code of Conduct has been resoundingly approved by members in a postal ballot. Members were asked to vote on whether or not they supported the adoption of the Code of Conduct and Declaration. The Trustees had agreed that the ballot would be passed by a majority of those voting. There were two hundred and twenty nine in favour and sixteen against.

What happens next?

The Code will be uploaded to our website along with the Professional Standards, which should be read alongside the Code. We have revised the Professional Standards so that they no longer apply solely to the PACR accreditation process but provide guidance applicable to all members. The Code of Conduct and the Standards are therefore intended to be used in conjunction with each other: the Code to guide our professional behaviour and the Standards our professional practice.

Members will soon be briefed on the implementation of the Code and the date when the Code will take effect. Until then, the ECCO Guidelines will continue to be used. In due course, there will be a press release alerting stakeholders and public to the changes.

Alison Richmond, Chief Executive

COME TO THE ICON AGM!

Note the date – **Monday 1 December at 5pm** – in your diary and let the office know that you are planning to attend (membership@icon.org.uk) so that adequate catering provision can be made.

It should be an informative and enjoyable event. Not only is it a good thing in itself to check out – and challenge – what your professional organisation has been doing over the past year, it is also a great opportunity to catch up with fellow conservators.

And on top of that, we have a talk which promises to be interesting and thought-provoking: David Mitchell will be giving a talk entitled 'The Glasgow School of Art's Fire – A Personal Perspective'.



David is Director of Conservation at Historic Scotland where he is responsible for the ongoing conservation and maintenance of the three hundred and forty five properties and collections in the care of Scottish Ministers with a technical team of four hundred people spread across the country. His responsibilities include technical and scientific research, technical education,

The AGM will be held at the St Bride Foundation, Bride Lane, Fleet Street, London EC4.

A PACR Pathway event will take place at the same venue that same afternoon 1.30 – 4.00pm. This is the second such event for PACR Pathway members. More information and the booking form are on the Icon website under the Events heading. Why not stay on for the AGM afterwards, learn about Icon and meet more colleagues?

traditional materials and skills, climate change and applied conservation.

His own background is in earth sciences and conservation, with his specialist areas of expertise relating to traditional building materials and industrial heritage. Before joining Historic Scotland in 2002 he was Managing Director of Heritage Engineering, specialising in the conservation of industrial heritage.



TRU VUE

TRU VUE/ICON CPD GRANTS

As you will know from reading Icon News and Iconnects, with funding from our friends at Tru Vue, Icon has set up a grant-making programme for mid-career professional conservators. The scheme invites applications for sums of up to £900 so that mid-career professionals can attend courses, seminars and conferences that will enhance their knowledge and keep them up to date.

As our friends at The Clothworkers' Foundation have been giving out grants for years, rather than reinventing the wheel, we went and learned as much as possible from their expertise. So, following their advice, we set up our own scheme.

In the first round we received seventeen applications and a total of ten grants were awarded. The main reasons why applicants were unsuccessful were that the event had already happened; that the person was not mid-career but starting out in the profession and in one case because it was the wrong kind of conservation. (Sorry! we do not look after trees).

Of those who were awarded a grant, four were overseas conservators, three were London based, and four were sole traders who have no employer to contribute to their CPD. There was one full grant of £900 ranging down the spectrum to £200.

The recipients are:

Helen Warren	Preventive conservation short course
Kasia Bernaciak	Conservation of Glass Course
Beky Davies	Preventive Conservation short course
Patricia Falcao	iPres Conference in Australia

Tristram Bainbridge	Stichting Ebenist 12th International Symposium
Sonja Schwoell	Chemistry for Conservators course
Sylwia Bronchard	Conservation in Museums course
Sarah Foskett	IIC 2014 Hong Kong Congress
Emma Le Cornu	IIC 2014 Hong Kong Congress
Sarah Jane Benson	ICOM-CC 17th Triennial Conference

Look out for their reports about what they did with the grant via social media and Icon News. They want to share their learning experience with you and satisfy the requirement of receiving this grant funding.

The second window of opportunity for our mid-career CPD grants opened on 1 November and closes on 1 January 2015. Plan your CPD and please make sure that the date of the event is after 31 January 2015 to give us time to sift and make awards.

WIIFM – MENTORING ?

Susan Bradshaw, Icon's Professional Development Manager, supplies the answer

The PACR Pathway has increased the demand for Icon mentors with 270 members signed up to date and working towards accreditation over a period of up to five years. Some will go forward quite soon and others will plan their development using Icon's Professional Standards and identifying areas of personal development along the way, growing in confidence and experience.

So what is in it for a mentor? Mentors say amongst other things that it is challenging, enjoyable, soul-searching, personally rewarding and:

- not only do I stay reminded of the Professional Standards listening to their interpretation for different disciplines, it is a wonderful way to get to know conservators from other sectors and hear about their successes and challenges
- ...seeing their confidence grow in what they are saying on their PACR application forms, or in preparing for their assessments is really satisfying
- and [I] benefit from their skills and experience in a work setting different from my own. I think the positive 'ripple' effect of self-help networks like this is wide ranging, long lasting although hard to measure
- [it] has really broadened my own knowledge and appreciation of the wider profession
- ...as my career has moved away from bench conservation, for me it's a welcome way of reading about interesting object conservation projects
- It always amazes me how much I learn through the process of being a mentor, which in turn enriches my own CPD... An enlightening experience all round!
- I learn much from them and share the knowledge I myself have acquired, to assist them through the accreditation process

- I tend to work a lot in isolation being the sole conservator and so I enjoy it when I get the opportunity to share some of my experience and foster networks with others that I might not have otherwise
- Honestly though, it does keep my practice fresh and allows me another insight into current developments in training and early career opportunities in the conservation community

And what they offer those being mentored is:

- [direction] helps the PACR applicants to understand both the accreditation process and how this should at present and in future continue to inform their conservation decisions
- [confidence] once we discuss their projects together we can usually find more than enough evidence in the projects they have identified to support the application
- [enlightenment] Some get very bogged down in trying to fill in the form by closely following the Standards. Encouraging them to write up their projects first and then refer to the Standards usually seems to help
- [clarity] Most also forget to write about themselves initially and fail to identify what they did personally, what they thought, why they made the decisions they did, what they learned, would do differently etc
- [reflection] to reflect what they think and do as professional conservators
- [questioning] the mentees and guide them in providing the right sort of information about their work
- [listen and offer] a sounding board and a confidential ear. Accreditation is hard work and I think that it is important that those going through it don't just endure the process but see it as an opportunity to celebrate their achievements
- [remind] ... it is not a tickbox exercise to successful accreditation
- [personal experience] ... from going through the PACR accreditation process myself I feel in a good place to be able to help and advise applicants and steer them in the right direction

And what is in it for mentee? When asked they said:

- I chose a mentor in a different specialism to mine for objectivity
- It was very helpful to discuss projects with someone who did not know me in order to get used to the types of questions to expect
- Even though I left it late I found it very useful to get another's opinion on the application form
- [mentor] was very helpful having experience in both the private and public sectors
- Having a mentor was great, and saved a lot of time in the process

If you are interested in becoming a mentor please email Susan Bradshaw sbradshaw@icon.org.uk.

Mentor training is required before you join the Icon list – it is

a one day event held in London, or another location if there is sufficient interest in an accessible place, Travel to attend is covered by Icon. The next event will be in London on 5 March 2015.

If you want to know more about the PACR Pathway go to www.icon.org.uk > Accreditation/CPD

NEWS FROM THE GROUPS

Book & Paper Group Glasgow PF2013 Postprints

It is with great pleasure that we would like to announce that the postprints from the Group's sessions at PF2013 are now available. *Current Solutions for Mutual Issues: postprints from the Book & Paper Group sessions at the Icon Positive Futures conference 2013* can be downloaded as a PDF from <http://thebookandpapergathering.org/>

From the very beginning, it was the organising committee's firm intention to publish postprints, allowing us to reach all the members within the Group and in Icon as a whole, many of whom were unable to be in Glasgow in April 2013. At that time, I naively thought that this would be an easy matter: request the scripts, polish up the wording a bit, add a few images and the postprints would be ready in a few months. As you can see from the date, this was not the case.

The publication has, like the theme of the sessions, been a superb collaborative effort involving a huge amount of co-operation and communication between the committee, the speakers, our editors and the designer. It has been a great experience working with them to produce a lasting body of work that is a comprehensive representation of both our presence at the conference and our strong inter-group links. Our sincere thanks go to them all. I hope you agree that, now you too can enjoy them, the Book & Paper Group postprints were worth the wait.

Victoria Stevens ACR

2015 Conference update

We are delighted to share that we have been making great progress on *Adapt & Evolve: East Asian Materials and Techniques in Western Conservation*, the Book & Paper Group conference to be held at SOAS, University of London, in April 2015. The conference explores two themes: the introduction, formalisation, and evolution of East Asian materials and techniques in the conservation of Western book and paper collections, and the latest research into materials and techniques from Japan, China, Taiwan, and Korea.

We have an exciting programme of speakers from East Asia, Europe, and the USA, including Mr Katsuhiko Masuda, one of the first specialists to introduce Japanese mounting techniques and materials to the West, and Ms Noriko Hayakawa, a scientist who will enlighten us on the latest research on the use of starches in conservation. As well as speakers, the programme includes studio tours, practical demonstrations and workshops, two drinks receptions, and a trade fair.

Tickets went on sale in mid-October and are selling fast! Keep an eye on the conference website for updates: adaptandevolve2015.wordpress.com

Book & Paper Group Conference Sub-committee

Ceramics & Glass Group

There is still time to submit your abstract for the next Ceramics and Glass Group conference '*From pottery to porcelain, production and preservation in the heart of England*'. This two day conference will take place in Worcester on 15–16 May 2015. The event will focus primarily on porcelain as we will be in the home of Worcester porcelain, however we hope that this will not restrict your papers but show the diversity and creativity of materials usage on other ceramics, glass and related materials.

We are keen to hear from students, whether in the form of a poster or a presentation. This is an opportunity for you to put forward your ideas and research before a very encouraging audience.

All abstract submissions for presentations or posters should be approximately three hundred words and include the title, names of all contributors and full contact details of the main author (e-mail and mailing address, telephone number).

The deadline for abstracts is Friday 19 December 2014. As always full details are available on our Group's pages on the Icon website.

Rachel Sharples

Icon Ceramics and Glass Group Chair

Paintings Group

Our next event will be held on Thursday 20 November. Rachel Barker and Bronwyn Ormsby, two members of the Tate Rothko Conservation Treatment Project team, will speak on Rothko's '*Untitled Black on Maroon*': *Recovering an Icon*.

They will present an overview of and share some personal insights arising from the conservation treatment of Rothko's *Untitled Black on Maroon*, 1958 (Tate T01170) which was vandalised with graffiti ink in October 2012 at Tate Modern.

Venue: In the Drawing Room at Freemason's Hall, 60 Great Queen Street London WC2B 5AZ, close to both Covent Garden and Holborn Tube Stations. The Drawing Room at Freemasons Hall is on the 1st floor, up the main staircase and straight in front of you. Doors open at 6pm. Talk 6.30pm–8pm

Tickets: Icon members £10, Non-members: £15, Students £5 (student card required to be shown on the door). Wine and cheese is included in the price of the ticket. Please apply for tickets through Eventbrite.com. You should book your tickets no later than Tuesday, 18 November 2014 for us to compile the security list.

Future dates for 2015 include Jacob Simon, Research Fellow at the National Portrait Gallery, talking on the history of conservation at the NPG on 23 February 2015, and Vernon Rapley, Head of Security and Visitor Services at the Victoria and Albert Museum, talking on forgery and art crime on 15 April. Both talks are scheduled to be held at Freemasons' Hall in London.

Textile Group

An *Upholstery Back to Basics* two day workshop will be held at Camberwell College, London on 11–12 December. The tutor will be Heather Porter and the cost for members is £165 and non-members £195.

This workshop will give a history of upholstered furniture, discussing materials and techniques used and how to examine and understand physical evidence on the object. Non-traditional treatment options will be discussed to manage a range of frequently encountered problems. There will be a practical element as well. Places are limited to twelve, so please email Kate Orfeur (kate.orfeur@hrp.org.uk) to check on availability before sending payment.

A talk by a furniture conservator at the V&A will be held on the evening of 12 December and there will be a visit to the Tankerdale Conservation Studio (furniture) at a later date. Priority will be given to participants on the *Back to Basics* but there will hopefully be more places available.

Please consider presenting a paper at our next Forum: *Learning Curve: Education, Experience and Reflection*. It will be held, as last year, at Birkbeck College, London and it will be in March 2015 but the exact date has yet to be finalised.

The committee would like abstracts and posters on the themes of education, experience and reflection. These could include but are not limited to: new innovative techniques, developments of existing techniques, solutions to perennial problems, working with new materials. Other possible topics are reflecting on successful projects or the not so successful; what would be done differently, what solutions were found; positive and negative experiences of collaborative working, possibly with commercial or non-conservation partners, or with other conservation disciplines. Also we welcome the experiences of students and emerging professionals and information on student dissertation topics. Presentations could also cover hosting internships and working with volunteers or reflections on changes in the profession and on the role of the conservator.

When submitting your abstract please indicate the length of your talk (5–25 minutes) and whether you are presenting a poster. Please submit abstracts to Jane Smith jane.smith@nationaltrust.org.uk by December 31.

The format of the day will be dependent on the response to this call for papers, but we envisage a mix of talks and 'updates'. Poster presenters will have more dedicated time for the appreciation of their work. The social evening was a success last year so we will be doing that again, with a glass or two of wine or juice to be enjoyed.

On the day after the Forum we will be arranging a visit. This has not been decided on yet but possible destinations include Hand and Lock embroiderers or Sans Studios, so look out for further information on this.

Next year there will be a *Back to Basics on plastics* held May 14–15 2015.

The first day will be led by Brenda Keneghan, conservation

scientist at the V&A. Further details are currently being finalised; but it will be held at the V&A Clothworkers Study Centre, Olympia, London. Areas to be covered include identification of commonly found plastics in textile collections, history and science of plastics/synthetics and conservation and storage of plastic objects.

There will be a day of talks and object identification, followed by visits on the second day. It will be for a maximum of fifteen to twenty delegates.

Look out for any further information on the Forum and events in the Iconnects and on the website and we look forward to receiving your abstracts.

With **news from the Centre for Textile Conservation** and Technical Art History at the University of Glasgow, **Frances Lennard**, Programme Convenor writes:- We are now able to send out electronic versions of the student dissertations from the MPhil Textile Conservation programme at the University of Glasgow.

Please see the list of abstracts which you can download from the Research tab on our website:

www.gla.ac.uk/textileconservation Unfortunately we do not have electronic versions of many of the dissertations from the MA Textile Conservation at the University of Southampton and we are not able to make copies, but you are welcome to come to Glasgow to look at the hard copies of both sets of dissertations.

ENVIRONMENTAL GUIDELINES

At the September conference of the ICOM-CC (International Council of Museums Committee for Conservation) in Melbourne, environmental guidelines for museums' collections were discussed and taken forward for further consideration by delegates at the IIC (International Institute for Conservation) Congress in Hong Kong later that month.

In an excellent example of good planning and joined-up thinking, at the end of the Hong Kong event an agreed joint declaration was announced on the subject. Its text follows below:

ENVIRONMENTAL GUIDELINES

– IIC and ICOM-CC Declaration

At the IIC congress in Hong Kong and the ICOM-CC conference in Melbourne in September 2014 the delegates discussed and agreed the following declaration:

The conservation profession has come together and agreed a position on environmental guidelines as follows:

Sustainability and management

- The issue of museum sustainability is much broader than the discussion on environmental standards, and needs to be a key underlying criterion of future principles.
- Museums and collecting institutions should seek to reduce their carbon footprint and environmental impact to mitigate climate change, by reducing their energy use and examining alternative renewable energy sources.

- Care of collections should be achieved in a way that does not assume air conditioning (HVAC). Passive methods, simple technology that is easy to maintain, air circulation and lower energy solutions should be considered.
- Risk management should be embedded in museum management processes.

Museum environment

- It is acknowledged that the issue of collection and material environmental requirements is complex, and conservators/conservation scientists should actively seek to explain and unpack these complexities.
- Guidelines for environmental conditions for permanent display and storage should be achievable for the local climate.

Loans

- There needs to be transparency about actual environmental conditions achieved in museums to ensure that realistic requirements are made for loan conditions.
- Noting that most museums in the world have no climate control systems in their exhibition and storage spaces, we acknowledge the need for a document that will influence decision makers that the environmental conditions for international loans may not be appropriate for the permanent display and storage of collections in all museums.
- There needs to be flexibility in the provision of environmental conditions for loans from museums which have climatic conditions different from the set points in the guidelines. This may be achieved with alternative strategies such as microclimates.

Existing guidelines

- The existing interim guidelines agreed by AIC, AICCM, the Bizot group etc (see Appendix) should be guidelines not interim guidelines. It is noted that these guidelines are intended for international loan exhibitions.

APPENDIX

Bizot Interim Guidelines for Hygroscopic Materials

For many classes of object[s] containing hygroscopic material (such as canvas paintings, textiles, ethnographic objects or animal glue) a stable relative humidity (RH) is required in the range of 40–60% and a stable temperature in the range 16–25°C with fluctuations of no more than $\pm 10\%$ RH per 24 hours within this range.

More sensitive objects will require specific and tighter RH control, depending on the materials, condition, and history of the work of art. A conservator's evaluation is essential in establishing the appropriate environmental conditions for works of art requested for loan.

The AICCM recommended Interim Temperature and Relative Humidity Guidelines for acceptable storage and display conditions of general collection material are:

Temperature – between 15–25°C with allowable fluctuations of $\pm 4^\circ\text{C}$ per 24 hr.

Relative Humidity – between 45–55% with an allowable fluctuation of $\pm 5\%$ per 24 hr

Where storage and display environments experience seasonal drift, RH change to be managed gradually across a wider range limited to 40%–60%.

Temperature and Relative Humidity parameters for preservation of cultural materials will differ according to their material, construction and condition, but stable conditions maintained within the parameters above are generally acceptable for most objects.

AIC Interim Guidelines endorsed by the Association of Art Museum Directors:

For the majority of cultural materials, a set point in the range of 45–55% relative humidity with an allowable drift of $\pm 5\%$, yielding a total annual range of 40% minimum to 60% maximum and a temperature range of 59–77°F (15–25°C), is acceptable.

- Fluctuations must be minimized.
 - o Some cultural materials require different environmental conditions for their preservation.
 - o Loan requirements for all objects should be determined in consultation with conservation professionals.

A MEMORANDUM OF UNDERSTANDING

As well as the Declaration on environmental guidelines, another valuable initiative has emerged from September's IIC Congress held in Hong Kong. This takes the form of a Memorandum of Understanding (MOU) signed by the Palace Museum in Beijing and IIC, the International Institute for Conservation of Historic and Artistic Works. The MOU records the intention of the two organisations to collaborate, with the aim of promoting research and exchange of expertise and training in conservation internationally.

The collaboration was proposed by Dr Shan Jixiang, Director of the Palace Museum, who was awarded IIC's Forbes Prize for his services to conservation at the September event. The initiative will be in place for three years from 1 October 2014 and will include training courses and other events to strengthen the relationship between conservation professionals in China and the rest of the world. Other possibilities include the setting up of an IIC China Regional Group, and the translation of conservation publications between Chinese and English.

The Palace Museum is located in Beijing's imperial palace, also known as the Forbidden City, and the vast holding of the imperial collections of paintings, calligraphy, ceramics, and decorative objects make it one of the most prestigious museums in China and the world at large. It is one of China's foremost-protected cultural heritage sites and was made a UNESCO World Heritage site in 1987.

Industrial heritage – conservation challenges and solutions

Chris Knapp ACR is Conservation Manager at the Imperial War Museum's Duxford site. His own specialism is the conservation of aircraft



Great Britain was once called 'the workshop of the world' and as a result we have a rich and varied industrial heritage, covering areas such as maritime, railways, aviation, road transport and much, much more. Regarding aviation alone there are ninety six member organisations of the British Aviation Preservation Council, ranging from national museums to small local museums. There are similar organisations for maritime, railway and other

engineering disciplines. Add to them the thousands of private collectors and you start to get an understanding of just how big the industrial heritage sector is.

The problem is that industrial objects are usually large, hard to care for, and often difficult to move. They can be a significant drain on scarce funds if projects are allowed to get out of control and as a result many museums are reluctant to take them on. Even now it is not unusual to hear people say 'industrial objects are too big and cost too much to conserve'. But size alone should not be the determining factor to prevent an object from being collected, if the organisation has thought through the resources needed and it is relevant to the collection.

Traditionally these collections have been cared for by professional engineers working on one-off contracts, or retired engineers working as volunteers, or in a few cases engineers on the staff of the museum. It was rare for them to have any background or training in conservation. To compound the problem these engineers have often been looked on as 'big boys and their toys' and were shunned by colleagues in the more traditional conservation disciplines because industrial conservation was somehow not what 'proper' conservators do. I am pleased to say that there is a slow but definite change in that view.

The difficulty with industrial conservation is that the conservator needs the skills for the particular field of engineering they are working in, so the bigger and more varied the collection, the more skilled staff are needed. Some skills are common across the board but not all, and safety reasoning dictates that to deal with a forty tonne battle tank or a railway locomotive you must have a

conservator with appropriate skills for the object. Most engineers have completed an apprenticeship lasting three to five years or even longer and, apart from the RAF Museum's apprenticeship programme, I know of no engineering apprenticeship syllabus that covers conservation.

So where do we go from here? We could send a traditional mixed media trained conservator to do an engineering apprenticeship but that is not really practical. We could pair an engineer with a conservator for this sort of work, but although that approach has worked on some projects it can also be prohibitively expensive. I was fortunate enough to complete the excellent industrial conservation course run by the Science Museum in the early 1990s but unfortunately it did not continue after the second intake. When I looked for training for my own staff I could not find anything suitable, so in 2000 I approached West Dean College with a suggestion for a short course and struck lucky. I did not know how to set up such a course but I was fortunate enough to work with Pat Jackson who certainly did.

I believe that industrial conservation is a mind-set that can be taught and that the way forward for industrial conservation is to train skilled engineers to use their skills to achieve a different end. Pat and I had a series of meetings where she patiently listened to my random thoughts and put together a five day short course that surpassed my expectations. A measure of the quality of the course Pat created is that I hoped it would run at least twice so that I could get all my staff trained; it is now about to run for the thirteenth time and we have had students from many museums around the world. The feedback has invariably been positive, the approach to industrial conservation in many organisations has changed for the better and I would like to think that I have done my little bit to ensure the future of industrial collections around the world but the real credit must go to Pat and the continued support from West Dean College.

*An introduction to the conservation of transport and industrial collections, 22–27 February 2015, **West Dean College**. Contact bookingsoffice@westdean.org.uk or visit www.westdean.org.uk*

The Institution of Mechanical Engineers has sponsored two brand new awards for the conservation of an industrial artefact. Please go to www.conservationawards.org.uk to find out more.

New Icon staff



Introducing our new Digital Content Officer Rebecca Bell

She writes:

As Icon's new Digital Content Officer, I will be working two days a week on web and social media. I am delighted to be joining Icon; my background is in art and design history, both as an academic and professional within the museum and gallery sector.

I am currently carrying out a PhD in design history at the Royal College of Art and my passion for material culture and heritage extends into every area of my life. As well as archives, lecturing and curating, producing digital content is a key area of my experience working with organisations such as Art on the Underground, The School of Life and the Design and Artists Copyright Society. I also worked for sculptor Andy Goldsworthy for several years and was a Hunterian Scholar at the Hunterian Museum and Gallery.

I believe that the digital realm allows incredible opportunities for shared knowledge and community, bringing together expertise and debate. It is particularly exciting to be joining the team in order to support the design and

migration of Icon's new website. I look forward to this opportunity to work with Icon to develop and enrich its digital content for the benefit of all members.

Rebecca's normal working days will be Thursday and Friday, taking over Jayne Sheraton's desk on Jayne's regular non-working days. Rebecca can be reached by email at rbell@icon.org.uk.

CTQ successes

During September and October five Conservation Technician candidates completed and achieved a full CTQ certificate. Congratulations to them!

Caleb Howgego – A *Skills for the Future* funded intern in Heritage Documentation with Colchester and Ipswich Museum Service based at Ipswich Museum

Hilary Tricker – A *Skills for the Future* funded intern in Heritage Documentation with Colchester and Ipswich Museum Service based at Ipswich Museum

Stephen Douglas – A *Skills for the Future* funded intern in Heritage Documentation with Colchester and Ipswich Museum Service based at Museum of East Anglian Life, Stowmarket.

Emma Kennedy – A *Skills for the Future* funded intern in Heritage Documentation with Colchester and Ipswich Museum Service based at Museum of East Anglian Life, Stowmarket

Wendy Richardson – Collections Care Assistant with English Heritage at Dover Castle

New interns & a Fellow

Congratulations to the latest intake of Icon interns and the new Fellow! We hope they enjoy their placements.

Jenny Snowden – Archive Conservation with Staffordshire Record Office. *Post funded by The Clothworkers' Foundation*

Alice Young – Textile Conservation with Historic Royal Palaces (HRP). *Post funded by HRP*

Jorge Otero – Preventive Conservation with the National Trust for Scotland (NTS) at Bute. *Post funded by NTS*

Marie Kaladgew – Japanese Scroll Mounting with the British Museum. *Post funded by the BM*

Paul Turner – Paintings Conservation at the Bowes Museum

Maria Pardos Mansilla – Textile Conservation at the Bowes Museum

Emily Turner – Textile Conservation at the Bowes Museum

These three placements funded by the Heritage Lottery Fund are part of the Bowes Museum bid for HLF funding under the Skills for the Future scheme.

Icon interns are now funded from a variety of sources and not solely via HLF See Icon News 54 Sept 2014 p.4

If you or your organisation is thinking of putting in a bid to HLF, please consider including internships in your bid and contact sbradshaw@icon.org.uk to discuss how Icon can support your bid and your internships.

The new Fellow

Lisa McCullough – Preventive Conservation (environment) with the National Trust. *Post funded by the National Trust*

First World War excavations at La Boisselle

Post-excavation and conservation work in a multi-disciplinary team are described by team members Anna Gow (Finds Officer, Photographer & Surveyor), Pieta Greaves ACR (On-site conservator) and Simon Jones (Project Historian)

INTRODUCTION

A unique First World War landscape under threat from development was the scene of an investigation started, at the invitation of the landowners, in 2011 by the La Boisselle Study Group (LBSG). The site is at the edge of the village of La Boisselle in the heart of the Somme battlefield. From late 1914, the sector saw particularly fierce fighting which quickly moved underground, with the result that German, French and British military engineers excavated some five miles of tunnels beneath a small area of ground that became known to British troops as the 'Glory Hole'. Practically undisturbed since 1918, archaeological investigation has revealed a host of features including evidence of all three armies' occupation spanning the duration of trench warfare.

THE JULY 2013 EXCAVATIONS

During these excavations the team hoped to understand more about the fighting for the farmstead at La Boisselle, between French and German troops in 1914–1915. However, a week before the end of the project a set of British remains was found at a junction between German and French trenches. Although substantial quantities of disarticulated and often fragmented human remains had been found nearby during previous work, the location and historical record indicated that these remains may have been related to a well-documented event, involving more than one individual, and thus potentially identifiable. Given the time-constraints, the remains were not excavated: it was decided to protect them and seal the area until such time as archaeological retrieval could take place.

Information about British remains can only be released by the Ministry of Defence (MOD) and the Commonwealth War Graves Commission (CWGC) and are therefore not included in this article. And until the MOD and CWGC have carried out their work, the full archaeological report of the three week excavation with reference to the remains of British soldiers cannot be released.

NOVEMBER 2013

With the agreement of the MOD, CWGC, French authorities, the Direction Régionale des Affaires Culturelles (DRAC) and the Office Nationale des Anciens Combattants et Victimes (ONAC), and after an intensive fund-raising campaign, work recommenced at La Boisselle on 15 November 2013 to archaeologically explore the area of the remains.



Tins corroded together

In view of the importance of artefacts in possibly providing information as to the identity of individuals, a finds conservator was also recruited to the team of historians, archaeologists, genealogists, geophysicists, anthropologists and surveyors.

THE POST-EXCAVATION PROCESS

A specially-designed shelter was constructed over the proposed work area, providing privacy from public view and shelter from the elements. It comprised an artefact processing

Simon Jones on site recording the excavated finds





Pocket watch before and after conservation

area, a conservation area and an anthropology section. The excavation revealed the complexity of the archaeological record. Human remains and artefacts spanning twenty months of fighting were unstratified, German trenches and dugouts dating from 1915 were in turn altered and extended by French and subsequently British occupants. The detonation of very large underground mine charges of up to fifteen tonnes had also caused major upheaval to the landscape.

Within the excavation area were found a further two British and two French soldiers. The archaeological and archival evidence both point to yet more human remains but this could not be investigated in the time available. The team's contract with the landowner has expired and it is uncertain whether further recovery work will take place.

The excavation revealed numerous examples of both personal and military-issue artefacts such as food tins, drinking vessels and cutlery. Equipment such as rifles, digging tools, gas masks, helmets, remains of leather boots and uniform buttons made of bone, shell and copper alloy all helped to identify the soldiers' countries of origin.

In order to understand as fully as possible the soldiers being excavated we needed to gain as much information as possible from the remains and any uniform, equipment or personal effects that may have been associated with them. To achieve this all items found directly associated with the human remains were logged as small finds, as were all other items of military equipment such as firearms or digging tools.

Many of the 280 plus small finds could be directly attributed to a particular set of human remains before being lifted, as each object was photographed in-situ and the location surveyed before being lifted. A form was developed which enabled the finds team first to log which artefacts belonged to which set of human remains and, secondly, to ensure that no stages were missed in the processing of finds.

Once lifted, all small finds were reviewed by the project on-site conservator, Pieta Greaves, and cleaned as deemed appropriate before being photographed. Each artefact had its own recording sheet completed and finally all items were

packed for long-term storage. Post season the photographs, survey data and completed records will be entered into a database to give a complete picture of all the small finds and to allow further analysis for future publication.

When the project ended on 8 December, the French remains (and their associated finds) had been deposited with the ONAC in Bray-sur-Somme. The CWGC, acting on behalf of the MOD in the UK, is holding both sets of British remains (along with any personal items found with them) at its morgue in Beaurains, and the MOD is continuing the work to identify the casualties.

ON-SITE CONSERVATION

Conservation support from Pieta Greaves was required to handle the freshly excavated finds, working closely on-site with the excavators but especially with post-excavation specialists Anna Gow and Simon Jones. This ensured that the maximum information could be gathered from the excavated objects to help identify the individuals. The overall aim of the conservation was to create a stable archive so that the objects can be stored and researched in the future.

Sealed in their burial environment, all the objects were waterlogged. The metal objects were heavily corroded with voluminous corrosion products of iron and copper alloy obscuring the surfaces. Conservation and identification were further complicated where corrosion had fused adjacent objects. Organic and composite objects took the form of leather boots, belts and pouches containing ammunition; mineralised textiles were attached to some of the copper alloy buttons, as well as some remains of wood on the rifle stocks. Early plastics, a comb and components of early gas masks, made up a small but more complex portion of the finds assemblage.

Only simple first-aid conservation techniques were employed. All objects were dried; composite wood components, now very weak and in parts powdery, were consolidated to ensure that they did not deteriorate further during the slow drying process. Plastics were conserved and soils removed but their long-term survival is not assured given their unstable nature. Metal objects were air dried to inhibit any fresh corrosion and an on-site team of volunteers investigated the bulk iron and copper finds by using mechanical tools to uncover any markings left by a soldier.

Personal items proved to be the most poignant objects. Both French soldiers had compressed aluminium ID tags that had become corroded at the boundaries where the surface letters had been impressed into the disc. The corrosion was very powdery and retained no detail of the original lettering. Without access to x-ray facilities the decision was made to carefully remove the corrosion products and adhering soils mechanically with acetone and a scalpel.

Luckily one disc still held enough information for an identification of the individual (more on this below). A particularly fine pocket watch was found with him and on-site investigative cleaning revealed it to have a porcelain and



Pieta Greaves at work on a rifle

enamel face with copper hands and a copper alloy case with intricate vine designs.

INTERPRETATION OF FINDS

The relation between recording and interpretation, conservation and interpretation

The unstratified nature of the archaeology, and the need to preserve the associations between individuals and small finds, meant that strict and thorough on-site documentation of finds was vital. Two types of burial were encountered: the two French soldiers had apparently been deliberately placed one on top of the other and interred in the trench wall, whilst the two British soldiers had apparently been buried in a trench by the surprise explosion of a very large German mine. Both types had many associated finds, including the equipment and clothing issued to them, and a smaller quantity of personal effects. Both are significant historically and for assisting the identification process.

Uniform

Military-issue clothing and equipment is subject to regulation and recording: markings, dates and designs were subject to frequent change during wartime. They are also increasingly well documented in published literature. Badges and buttons, generally copper alloy, were the clearest clue to the nationalities of the soldiers. An astonishing total of seventy six buttons was found with the French soldiers, accounted for by



French ID tag

the fact that in winter French soldiers wore a woollen waistcoat, a short tunic and also a greatcoat. In the first months of the war, the French infantry tunic and greatcoat were of dark blue woollen textile while the trousers were bright red. Although little organic material survived with the human remains, the abundance of copper alloy buttons, badges and rifle cartridges resulted in the preservation of small amounts of textile due to the toxic copper salts. In the case of the French soldiers, this had the effect of providing samples of this early uniform.

'Dog tags'

Unlike British soldiers during the First World War, the French were issued with metal identity discs. For the upper of the two soldiers the disc was too heavily corroded to read the name, just a number which was unique only to his regiment. A disc found with the lower set of remains however enabled the identification to be made as Louis Joseph Heurt, of the 118th Infantry Regiment. Death certificates for French First World War soldiers are available online and it was quickly confirmed that he had been killed at La Boisselle on 8 January 1915. An on-line search through the history of the Regiment revealed that the number and other fragmentary information on the identity disc of the first soldier corresponded to a man killed on the same day, from the same regiment, Appolinaire Joachin Marie Ruelland.

The external historical evidence is used to verify the identification of the archaeology but at the same time, where the archaeology has a clear context, the archaeology is evidence in itself, a valuable snapshot of material culture in use at a moment in time.

Fragments of rectangles of celluloid were identified as the eyepieces of early gas masks, used by both French and British soldiers and issued just months after the introduction of poison gas, in which a textile hood was impregnated with chemicals to neutralise chlorine and other gases. These were in use for just a few months before being replaced by improved types.

Military hardware

Ordnance, in the form of grenades, shells and rifle ammunition, was a fundamental part of a soldier's life and death and was found in abundance. Strict procedures had been agreed with the French Service de Déminage and comprehensive training given by professional personnel from BACTEC INTERNATIONAL, a leading commercial ordnance



Complexities of a First World War site, live ammunition and grenades mixed with recoverable finds

disposal company. Potentially hazardous as it may be, often ordnance needs to be recorded as a small find, even if simply photographed in-situ rather than examined and measured, before being removed to a place of safety for subsequent removal by the Service de Déminage. As with gas masks, there was a rapid evolution in grenade design, many of which were produced in workshops behind the lines. The discovery of a range of different grenades, closely associated with datable human remains, means that very specific data can be extracted about the types in use at a precise date, with a specific unit and at a particular location of the battlefield.

Equipment, especially weapons, may be marked in such a way as to identify if not the owner at least his unit and may indicate whether he was an original member of his battalion, or sent as a reinforcement draft. This information may help to identify the British soldiers, however, as the future LBSG report will show, weapons can be found marked as issued to

French flaming grenade copper alloy button with mineralised textile



one regiment apparently in use with another. All the historical research and information gathered from the objects will be integrated with the osteological reports to help with the identification.

CONCLUSION

The multi-disciplinary approach used at La Boisselle is key in all modern conflict situations, in fact in archaeology in general.

Modern conflict assemblages, as typified by these from the First World War, provide distinct challenges to excavators, finds specialists, conservators and curators. Sites such as these were fought over in living memory and can be subject to considerable development pressure. They can contain dangers not usually faced during other excavations such as unexploded ordnance (explosive and chemical) and loaded weapons.

Twenty years ago this branch of archaeology was not seen as within the purview of professional archaeologists and heritage organisations but this is changing, both in Britain and France. These sites provide very specific challenges and do not always lend themselves to traditional methods of finds processing and conservation. In addition to the issues related to identification and handling of ordnance, excavations of even short sections of trench produce vast quantities of metal artefacts. Industrial scale warfare produces industrial scale debris. With this type of excavation archaeologists and conservators are working with novel materials - early plastics such as the celluloid eyepieces in gas hoods, rubber and rubberised cloth, or the corrosion of sheet aluminium. While traditionally archaeologists and conservators have guidelines and well-established protocols for dealing with most types of excavated artefacts, there is an urgent need for new techniques and procedures to deal with these new challenges.

Acknowledgements

The LBSG is under the overall direction of Peter Barton. In addition to the authors, volunteers include Cameron Ross (archaeological direction), Brian Powell (archaeologist), Dr Marie Christine Dussault (forensic anthropologist), Glen Phillips (military genealogist), Fanette Pocentek (translator), Jeremy Banning and Iain McHenry

The authors also wish to thank all other volunteers and the many who have contributed to the funding and success of the project, in particular M. Tahar Ben Redjeb (Service régional de l'archéologie, Département de la Somme)

The project website is www.laboisselleproject.com

The new British Museum conservation studios

Recently, Icon News had a tour of the new conservation facility at the British Museum. And it was a real pleasure to see such splendid premises devoted to the pursuit of research, analysis and treatment of the collections of one of our great national institutions.

Of course, that is how it should be in an ideal world, you might think, given the international reputation and prestige of the British Museum and its holdings. But memories of visits to the BM conservation facilities over a decade ago dredge up images of ad hoc, shabby studios scattered here and there right across the BM site and beyond. A friendly atmosphere, certainly, and no doubt about the quality of the work undertaken but nevertheless more than a whiff of the Cinderella

attaching to conservation, collection care and research.

All that has changed with the achievement of over six years of hard work to plan and implement the new studios and laboratories in a brand new building which the Department of Conservation and Scientific Research shares with the Sainsbury Exhibitions Gallery. Now virtually all the different disciplines within conservation and scientific research have come together, uniting ten previous locations. The only exception is the Hirayama Studio, a specially designed space where Asian pictorial art is treated with traditional Chinese and Japanese materials and methods. The great storage facility at Orsman Road in East London also remains in the system for the time being, until its 200,000+ objects can be

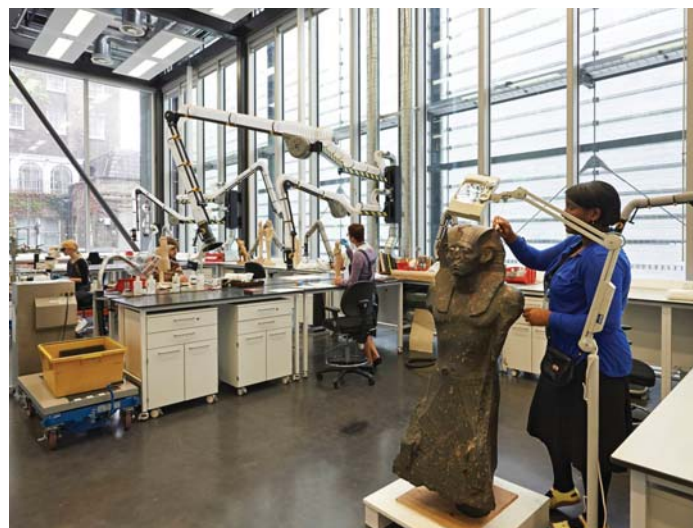


Laboratory for the preparation of organic samples for chromatographic analysis.



New imaging and optics laboratory with the microfade test equipment.

Suite for the department's two scanning electron microscopes, showing the high-resolution field emission instrument.





The studio for organic object conservation on the top floor of the new wing. The majority of benches are mobile so they can be reconfigured to support large objects

brought over to the main site. That will be the next great project, once the inevitable glitches associated with moving into a new building have been ironed out.

As the pictures show, the new spaces are purpose designed for the activity within, such as high ceilings for those studios where large and tall objects might have to be treated (statues and totem poles). Flexibility is manifest everywhere: work benches and tables – large and small according to need – on wheels so that they can be moved, extractor fans on extended trunking and power supplies coming down from the ceiling or routed up a pillar, so that space can be used adaptably.

And light everywhere, too. Most of the studios have two if not three walls of glass and some also have natural light overhead with glass ceilings, naturally shaded where necessary from the sun's glare. Synergies have also been created so that, for example, the textile and paper studios share a large wet room, albeit with different wash tables for their respective needs.

With the light, upper floors mostly devoted to treatment

The studio for conservation of Western art on paper, which now shares the same space as the large benches of the conservation mounters, who used to be housed in a small basement.



Conservation studio for ceramic, glass and metal objects. The central top-lit studio is surrounded by smaller separate rooms for noisy or dusty activities

studios, the extensive research and analytical activity largely takes place in rooms in the basement areas, with the advantage that rooms for ultra-sensitive equipment could be buffered from vibration. To avoid any risk of contamination, the preparation of samples takes place in separate spaces from their analysis – and every kind of analytical and imaging equipment imaginable is installed in state of the art conditions, for example a lead-lined chamber that allows users to take x-rays of smaller objects without leaving the room.

The complex extends over five floors and includes a library, café area and open plan office space, not to mention an enormous drive-in lift so that lorries can load or unload artefacts at different destinations, the stores, the exhibition space or the conservation areas. The contrast with how things used to be could not be greater; and to all the good qualities of the past will be added the benefit of knowledge exchange and co-operation which co-location in the new surroundings should facilitate.

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around and about

A grand day...

...at Paisley's Grand Fountain. You can see the formal opening of the star of our recent series in a five minute video made by Renfrewshire Council. Our author Jim Mitchell makes a brief appearance. Catch it at

www.youtube.com/watch?v=VNB4msxln3s&feature=youtu.be

Sensations The Art of Painting Conservation

The Wallace Collection regularly holds workshops for blind and partially sighted people. After a popular session on painting a participant asked whether a future event could feature the conservation of paintings. The Wallace Collection has been undertaking technical research and treatment of a group of twelve paintings by the artist Sir Joshua Reynolds over the past three and a half years. The 'Sensations' workshop, held at the Wallace Collection in July, explored Reynolds's painting technique and the difficulties of

The Wallace Collection's workshop



Photo: Alexandra Gent

conserving and restoring his paintings. The workshop was led by the audio descriptor Bridget Crowley and paintings conservators Alexandra Gent of the Wallace Collection and Rebecca Hellen of Tate.

A group of sixteen adults attended the event (including guides) and one guide dog. Following a packed lunch together, the first session took place in the galleries. Bridget presented four paintings; *The Duke of Queensberry*, *Miss Jane Bowles*, *Mrs Elizabeth Carnac* and *Mrs Mary Nesbitt*. After introducing the sitters she described in detail the compositions (which way the sitter is facing, what she is wearing, how her hair is styled, where the light is coming from, what is in the background, whether she looks sad or happy and so on).

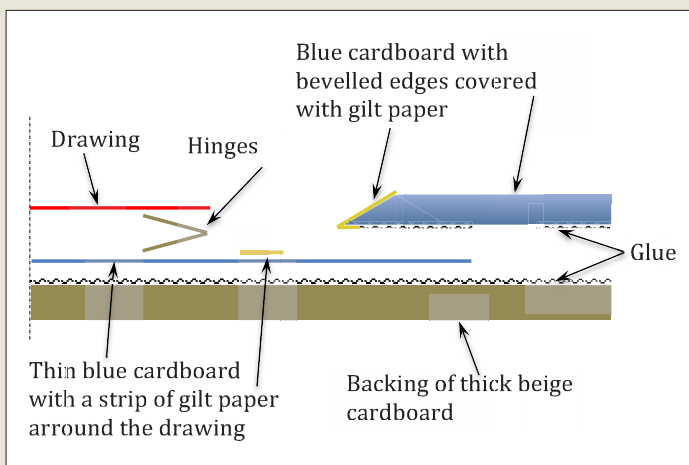
The participants were very responsive, asking many questions and getting to the crux of why these paintings appear as they do. When Bridget described the background of the *Duke of Queensberry* as being dark with no detail, one participant asked whether this had always looked this way or had the paint changed? Alexandra and Rebecca were on hand to answer questions about fading of pigments, cracking of paint and removing yellowed varnish.

The second part of the workshop took place in the education studio. Rebecca began with a short introduction to the methods and materials of historic paintings. She presented replicas of paintings she had made while training at the Courtauld (a tempera panel painting, an oil painting on canvas and an oil sketch on artist's board), which offered tangible examples for the participants to touch and feel.

Rebecca then began to explain the principles of conservation; reversibility, documentation and the choice of modern restoration materials.

Samples of materials and tools were passed around to help illustrate the discussion; mastic resin, a natural product, was compared to synthetic Paraloid B72, a small sable retouching brush was handled alongside a larger bristle brush and a palette knife which an artist might use. Alexandra and Rebecca prepared some rabbit skin glue and demonstrated how the strength of the adhesive can be tested between thumb and forefinger. Alexandra described cleaning a painting, rolling cotton swabs (which were also passed around), testing solvents and how touch and feel as well as appearance are important in assessing varnish removal.

Many of the participants attend these events regularly and are knowledgeable and engaged. The subsequent feedback was positive and the number of guests (sixteen, apparently the largest group to date) on the day was testament to the popularity of the topic. Rebecca and Alexandra, who were working with Bridget for the first time, were fascinated by her descriptions. The event proved once more how much the practice of conservation has to offer access programmes at museums and galleries.



Sectional diagram of the construction of the mount

Help wanted!

French conservators Eve Menei and Laurence Caylux are looking to British colleagues for clues about the mounts in the Duke of Aumale's collection of drawings at Chantilly

The Condé Museum of Chantilly houses the collections assembled by Henri d'Orléans, Duke of Aumale, in the latter half of the 19th century. This great collector put together a major part of his collection of drawings in the course of his two exiles in Great Britain from 1848 to 1871, then from 1886 to 1889.

Concerned with the conservation and presentation of the drawings, he had boxes, directly inspired from the Solander

Box (structure, shape, decoration), made for his collection of drawn portraits from the 16th and 17th centuries but displaying his coat of arms.

He also had his acquisitions displayed in a characteristic decorated mounting system. The drawing is attached by four hinges along the edges on a background of thin blue cardboard. It is surrounded by thin lines in black ink and a strip of paper gilded in fine gold. A window in thick blue cardboard with bevelled edges, covered with the same gilt paper, is glued on top. A backing of thick beige cardboard is glued to the back.

The colour is doubtless inspired by 18th-century French mounts such as those of the great collector Pierre-Jean Mariette. On the other hand, the presence of the protective bevelled window is original. The Duke of Aumale most likely had these mounts made in England, probably inspired by collections seen there.

Despite the mediocre quality of the cardboard, these mounts have considerable historical and aesthetic value and are preserved during the restoration of the drawings. They are adjusted to allow for the preservation of the decoration. After careful dusting of the whole, the beige cardboard backing is eliminated and replaced by a sheet of buffered paper. A

A drawing in its mount (1024 x 721)





Corner detail showing the mark of the collection (1024 x 683)

window is cut in the thin blue cardboard, level with the thin decorative lines. This cleaned-up window is assembled by a hinge with a neutral cardboard background, thus constituting a classic conservation mount. The presentation of the drawings thereby keeps its initial appearance, so important to the Duke of Aumale, which he had clearly specified in bequeathing his collection to the Institut de France, stipulating that it not be modified.

We are seeking information about mounts displaying similar characteristics in public or private British collections. If you can help, please contact us at the following address : evemenei@free.fr

Cathedral cornucopia

In October a second round of awards was announced from a twenty million pound fund set up earlier this year for cathedral repairs. The funds were made available in recognition of the significant role cathedrals are playing throughout the commemorations of the centenary of the First World War and their symbolism in Britain's shared history.

This latest disbursement saw eight million pounds given to thirty one cathedrals across England, from Arundel to York and Truro to Lancaster. The motivation may not be purely philanthropic: the Chancellor of the Exchequer said about the awards: 'Our great cathedrals are the envy of the world, bringing many tourists to the cities of UK, so this investment is also great value for taxpayers'. Hopefully some of the benefits will accrue to conservators, particularly where stonework and windows are concerned.

York Minster, in receipt of £200,000, will direct its award to the repair of the stonework and roof of the Camera Cantorum. Dating from 1415, this is a two storey structure, which currently houses the Minster shop and the Minster Song School, where generations of choristers have been trained. Twelve former choristers and an Alto songman were killed on

York Minster from the west



Icon Scotland Group are delighted to announce that the

17th Annual Plenderleith Memorial Lecture

will be given by

Professor Gaël de Guichen, one of the most respected and influential authorities in the field of conservation and former colleague of Dr Plenderleith. His lecture title is

Creating Conservation – Harold Plenderleith's Life and Legacy

27 November 2014, 7pm

The Royal College of Surgeons,
Nicolson Street, Edinburgh

The lecture will be preceded by the Icon Scotland Group AGM and followed by a drinks reception.

Cost – £11 Icon Members, £13 non-Icon members, £6 students

To book, go to the Icon website: Groups – Scotland – Current Events



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active service in the First World War. The Dean welcomed this 'contribution to the ongoing, protection, repair and conservation of the Minster.....Enabling the restoration of the Camera Cantorum with funds from the First World War fund is a fitting response and establishes a living memorial to the lives of those local young musicians of great promise who gave their lives in service of the nation'.

A further round of awards will close in January 2015.

A Gaelic thesaurus

Access to specialised Gaelic terminology relating to the historical environment is now available via an online thesaurus which has been launched as a joint project by Historic Scotland and the Royal Commission for the Ancient and Historical Monuments of Scotland.

The thesaurus contains more than 4,000 terms from altar slab to zinc mine and is aimed at Gaelic speakers, learners and schools, as well as the general public. It provides terminology relating to areas such as architecture, archaeology and history as well as place-names for many historical sites.

As a thesaurus, it not only functions as an English-Gaelic, Gaelic-English dictionary of terminology but also provides the meaning of each term in both languages. The thesaurus is available on the Historic Scotland website at:

www.historic-scotland.gov.uk/gaelic-thesaurus

The Marsh Awards

The Marsh Award for Excellence in Conservation of a Public Sculpture is due to be announced on 6 November, just after Icon News goes to print. So we can only give the shortlisted candidates our best wishes.

Of the five sculptures on the shortlist, four of them have been treated by companies on the Conservation Register:

- London-based Rupert Harris Conservation Ltd – in the frame with two sculptures
- London-based Hall Conservation Ltd
- McNeilage Conservation, based in Devon

An annual competition since 2005, the Marsh Awards are offered by The Public Monuments & Sculpture Association and Award sponsors, The Marsh Christian Trust. They include an award for Excellence in Public Sculpture, alongside the award for the conservation treatment or repair of an existing work in a public place within the last two years. A third award is for Excellence in Public Fountains, which is offered for a fountain installed in a public place within the last five years, either for a new work or for an outstanding conservation project.

BOOKS

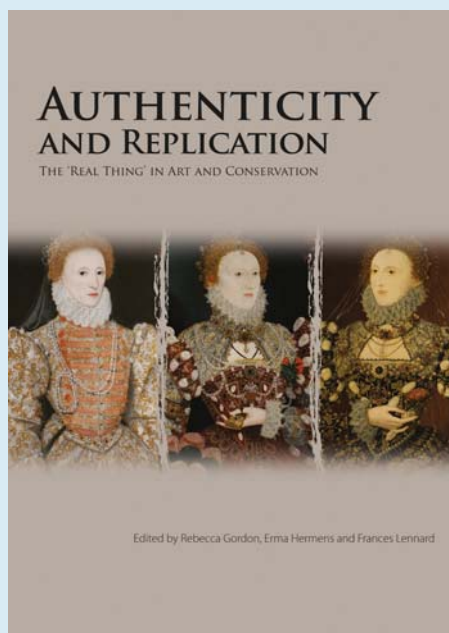
AUTHENTICITY AND REPLICATION – The 'Real thing' in Art and Conservation Rebecca Gordon, Erma Hermans and Frances Lennard, eds.

Archetype Publications 2014
ISBN: 978-1-904982-99-9 224 pp

The meaning of the word 'authenticity' requires clarification. An 'authentic object' is commonly understood to be an object which is genuine – not a forgery. This understanding of the word is linked with the monetary worth of an object and its value measured in pounds and dollars. As conservators may only occasionally become involved in projects which aim to expose fakes, misattributions, or the identification of copies of original works, they may be inclined to assume that the topic of authenticity is of little relevance to their professional work. But the concept of 'authenticity', or perhaps we should say 'authenticities', in the broader field of material culture and in the context of heritage values discussed in this book, is a topic which underpins all conservation decisions and conservation treatments and presentation options – and cannot be ignored by conservators.

The papers in this publication provide accessible insights into the complex, constantly shifting attitudes to the 'authentic' and the 'real thing', and discuss where conservation sits in this evolving process. For me the beauty of the book is the variety of the reflective object-based case-studies presented, the diversity of the backgrounds and tone of the writers. Each paper in its own terms illustrates how theory and practical opportunities and constraints have been integrated to explain the decision-making process and final presentation of original objects, degrees of intervention and in some cases the creation of replicas. No one paper can cover all the issues of this complex subject but reading this collection provides a multifaceted update on current thinking on authenticity and should prompt conservators to question and re-evaluate their working practice.

Mary Brook's paper '*Indisputable Authenticity: engaging with the real in museums*' provides an excellent introduction to this complex topic. In two papers which discuss two entirely different objects (a 16th century tapestry and a 1939 film costume), the authors, respectively Sarah Fosskett and Jill Morena, both cite the conservation theorist Munoz Vinas to explain their decision making process. Munoz-Vinas states '*The present condition is necessarily authentic and furthermore its present condition is the only actually authentic one*'. (Contemporary Theory of Conservation, 2005). He is not advocating that nothing should be done to an object. We can decide



that an earlier intervention is intrusive and detracts from the authenticity of an object as we perceive it – and which we prefer. All conservation decisions are subjective.

Fosskett admits the practical impossibility of returning the 16th century tapestry, *The Triumph of the Virgin* to its original state. Archival research and examination of the tapestry revealed that during the 1930s sizeable missing sections of the tapestry had been rewoven before it was bought by Sir William Burrell. These new sections are now more readily identifiable today by using ultraviolet illumination. Further research established that the weavers working in the 1930s considered themselves as custodians of 'their' tapestry and a valid part of its biography. There is value in examining the different authenticities presented by the tapestry. The tapestry is authentic in its current condition because it is what it is – the sum of all its interventions. The sections of reweaving were retained.

Morena discusses the problems with conserving and replicating the iconic green 'curtain dress' worn by Vivien Leigh as Scarlett O'Hara in the 1939 film *Gone With The Wind*. The 2010 examination of the original and a 1986 copy (supposedly an exact stitch by stitch replica of the original costume) revealed that the copy had improved on the original, ignoring the narrative of the story that the dress was made from faded curtains and was badly tailored. But an examination of the original revealed the difficulty of establishing the dress's original state. It proved impossible to determine the 'authentic' appearance of the dress at the time of filming as it had undergone extensive repairs before 1986. The project was complicated by the public's memory of the movie. '*Between shifting notions of authenticity of the 'original' object, the tug of nostalgia, the power of memory and the enduring screen image, the definition of 'the real thing' is difficult to fix*'.

The revised treatment policy discussed by Giulia Chiostrini in her paper '*Differing interpretations of the authenticity of an Ushak carpet from the Metropolitan Museum of Art*' reflects changing attitudes to what is 'authentic'. In 2001 a decision was made to

remove all the colourful embroidery repairs and inserted fragments of other carpets from the important 17th century Ushak carpet acquired by museum in 1972. These repairs were distorting the original carpet and considered at this time to be disrupting its original appearance. In 2001 the repairs and additions were carefully recorded before being removed and placed in store. However the project was put on hold until 2011 when the early conservation programme was reviewed. It was decided to carefully replace the removed fragments after the distortions in the carpet had been rectified. Reference was made by the author to Cesare Brandi's idea that an object has a 'creative time' and a subsequent 'life time', and that traces of later alterations and accretions should be retained. But as Chiostrini points out, respecting an object's original fabric and retaining evidence of the passages of time clearly leaves a lot of room for choice and preference to achieve a balance.

Many of the case-studies presented reiterate the point, now widely accepted, that the conservation goals and presentation are questions of preference, not an inherent factor. I have examined three papers which discuss textiles, but the other fifteen papers discuss similar issues with reference to a variety of objects: paintings on paper, silk, canvas and wood, picture frames, sculptures and archives. Ceri Jones examines the authenticity of living history presentations by performers in museums: '*Bringing the past to life? Exploring the role of authenticity in developing young people's historical understanding*'.

Two papers consider the challenges of conserving modern art and ask what is authentic, the artist's concept or the decaying physical object? The various incarnations of Ross Sinclair's installation, *Journey to the Edge of the World* are explored in Rebecca Gordon's paper '*Identifying and pursuing authenticity in contemporary art*'. A transcript of a lively conversation with the artist, who installs and constantly modifies and alters his own work, touches on the question of what is the authentic version, and what he wants to happen to his works after his death. Determining the wishes of the late David Smith and the questioning of the authenticity of finishes applied to his sculptures are the subject of Richard Mulholland's paper '*And I know damned-well what he wanted!*' The title hints at tensions and disputes.

The papers were presented at a two-day international conference held at the University of Glasgow in December 2012. The conference was supported by a grant from the Getty Foundation and was the culmination of the Research Network in Textile Conservation, Dress and Textile History and Technical Art History

(2010–2012), and a development of one of its research themes. The papers offer an excellent introduction to the concept of authenticity as a core factor driving decision making in conservation and interpretation and should, I feel, be placed on every conservation student's reading list. It is a complex subject but as Oscar Wilde said 'The Truth is rarely pure, and never simple'.

Helen Hughes

Historic Interiors Research & Conservation

PAINTINGS IN THE LABORATORY: Scientific examination for art history and conservation

Karin Groen; edited by Esther van Duijn

Archetype Publications 2014

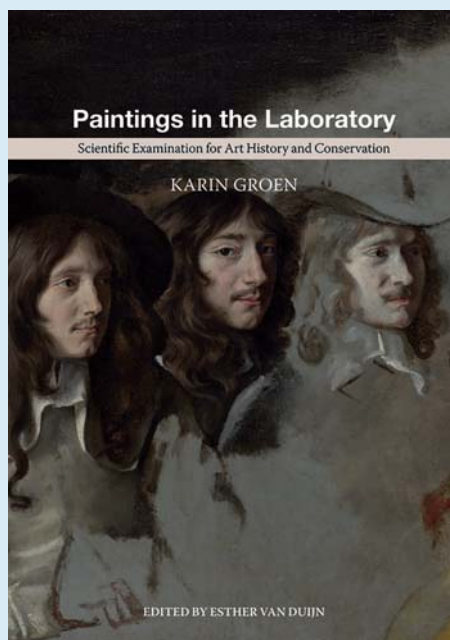
ISBN 978-1-909492-13-4 200 pp

Paintings in the Laboratory is a selection of the published work of scientist Karin Groen (1941–2013) and commemorates a highly distinguished and pioneering career. The volume includes articles previously published in books, journals and conference preprints from the period 1975 to 2005, as well as newer material that she presented in 2011 as part of her PhD dissertation at the University of Amsterdam. Some articles are presented here in English for the first time and many have been revised for this publication.

Trained as an analytical chemist, in 1969 Karin joined the Central Laboratory for Objects of Art and Science (later known as ICN, now RCE) in Amsterdam. From this move followed a career marked by extensive interdisciplinary collaboration with conservators, physicists and art historians. Karin also worked at the Hamilton Kerr Institute in Cambridge in the 1980s, and joined the newly-formed Stichting Restauratie Atelier Limburg (SRAL) during the early 1990s, before returning to the Central Laboratory in 1995. Consequently her research focuses largely on Dutch oil painting, especially from the 'Golden Age' of the 17th century.

The articles published here reflect the broad range of interests and knowledge of the author, and within these pages the reader will witness a wide range of analytical techniques as well as research into the culture, economics and even geology of the Netherlands in the 17th century. Throughout the volume, the author's enthusiasm, knowledge and experience is reflected in the clear and fluent text, despite the fact that writing for an interdisciplinary audience necessitates a good deal of explanation that can occasionally feel excessive or repetitive from a conservator's perspective.

An introductory essay 'Perspectives on the evolution of science for art history and conservation, and its current state' charts the gradual integration and embracing of scientific examination into these fields, particularly as a tool for attribution, with several interesting case studies cited, and



the need for continuing communication and cooperation between disciplines is stressed.

Part I, dealing with grounds and binding media, showcases the author's involvement with the Rembrandt Research Project. Karin's pioneering work on the examination of ground layers, previously a quite neglected area of investigation, is described in 'Grounds in Rembrandt's workshop and in paintings by his contemporaries'. Rembrandt's workshop is found to have at times utilised unique ground layer formulations that include high quartz or white clay content. An up-to-date and comprehensive knowledge of available analytical techniques is stressed, as well as sound judgement regarding which technique or techniques might be best suited to the research in hand.

In 'Earth matters: the original of the material used for the preparation of *The Night Watch* and many other canvases in Rembrandt's workshop after 1640' the work on ground layers is further expanded, with the unique ground of *The Night Watch* precipitating fascinating investigations into Rembrandt's possible professional relationships with potters and into the sources and international trade in clays in the 17th century.

'In the beginning there was red' is the playful title of an article looking at the use and origins of characteristic double grounds commonplace in Dutch 17th century painting, where a first layer containing red earth was applied before a second greyish layer. The article suggests this technique has a long history, inherited from mural painting and polychrome sculpture in the 16th century and earlier. This is a stimulating piece highlighting how connections and histories can be formulated from research and comparative studies.

Part II of the volume is concerned with observed colour changes in oil paintings, more specifically the numerous possible causes and effects of passages of originally green areas darkening or changing hue. The earliest article in this collection, 'Towards identification of brown discolouration on green paint', first published in 1975, is

followed by a longer '... revisited' article from 2011, where improvements in analytical techniques over the thirty-five year interim are discussed and further analyses presented. The earlier, inconclusive paper considered three paint samples from a discoloured, copper-containing layer from Lucas van Leyden's *Triptych with the Last Judgement* (c1526–27), while the follow-up paper examines further cases of discoloured copper-containing layers.

These two papers nicely present the continuing development of conservation science over the decades. The third paper in this section, 'The foliage tends almost to blue' examines historical methods through which artists have created satisfactory greens, and how discolouration of green paints, oil-rich layers, smalt and organic yellow pigments have all been responsible for colour changes.

'Scanning electron microscopy as an aid in the study of blanching' was first published in 1988 and demonstrates how a particular instrumental technique can be applied to increase our understanding of an observable phenomena that was previously not so well understood. As well as examining blanched areas of paintings, the author examines with SEM the effects of cleaning procedures on test samples and attempts to remove blanching.

Part III is concerned with technical art history, focusing on the author's studies, in collaboration with others, of the painting techniques and materials of Frans Hals and Judith Leyster through surface examination, X-rays and paint sample cross-section analysis. These are interesting pieces beyond their focus on individual artists, as they provide an insight into widespread workshop practices in 17th century Netherlands as well as the idiosyncrasies of Hals and Leyster. This section ends with 'Scientific examination of Vermeer's *Girl with a Pearl Earring*', combining an overview of the painting's somewhat battered state and known restoration history, each partly a consequence of the other, with an investigation into the dark background paint that is uncharacteristic of Vermeer but which originally was a deep, dark green and intended to bring the figure forwards in jewel-like clarity.

In summary this volume, well illustrated and attractively presented, is a highly interesting, stimulating read for conservators and demonstrates how rich and rewarding the scientific study of paintings can be. Karin Groen's achievements in technical art history and conservation science, and her accomplishments in promoting multidisciplinary research, set a very high standard for those who follow.

Michael Correia

Freelance Paintings Conservator
Paintings Group Committee



The Melbourne Conference Convention Centre

CONFERENCES

ICOM-CC 17TH TRIENNIAL CONFERENCE– Building Strong Culture through Conservation

Melbourne, Australia 15–19 September 2014,

The 17th Triennial Conference of ICOM-CC held in Melbourne in September was an exciting and heady affair, attracting over six hundred delegates from all over the world. All the delegates attended the three plenary sessions for key-note lectures and general discussions but for the rest of the five days, we were spoilt for choice with five parallel sessions of papers (one hundred and sixty three papers in all and ninety posters). Papers and posters had all been subjected to careful scrutiny and exacting peer-review and contained cutting-edge ideas and innovative techniques.

Icon members were well represented in Melbourne. Excellent papers were presented by Jane Henderson, Phil Parkes, David Thickett, Jeremy Uden, Zoe Roberts, Deborah Cane, Helen Lloyd and Amber Xavier-Rowe. Our hosts had organised a series of interesting technical visits and cultural events which enhanced our Australian experience. I attended a workshop which visited and discussed the conservation of the 1984 Keith Haring mural with the conservator, and a guided tour of the Australian Centre for Contemporary Art (ACCA). The Welcome Reception and Cultural Evening held at the National Gallery of Victoria offered opportunities to experience native art and dance.

An Open Forum discussion led by Julian Bickersteth, Luiz Souza and Sarah Staniforth considered environmental standards for exhibition and storage in museums. Views from the floor were incorporated in a draft document which was to be taken to the IIC Congress in Hong Kong for further discussion. [See page 7&8 for the outcome.]

The 18th Triennial Conference will be held in Copenhagen, Denmark in 2017. I urge Icon members to join ICOM-CC (membership provides free access to museums and exhibitions all over the world!) and become involved with the activities of the working parties. Do plan to attend this conference,

which will mark the 50th anniversary of the organisation.

Helen Hughes

Historic Interiors Research & Conservation

The International Council of Museums Committee for Conservation 17th Triennial conference gathered international delegates together to hear a series of inspiring presentations on a wide variety of subjects that involved the theme of 'Building Strong Culture through Conservation'. The conference started with a warm Welcome to Country by senior elder Aunty Joy Wandin Murphy to show respect to the Warunju tribe, who were the traditional custodians of the Melbourne area. The theme of reverence for local traditions continued across the conference through presentations, evening events and technical visits.

This review mainly focuses on the textile related aspects of the conference. The Textile Working Group session began with a retrospective look at the use of adhesives at the Rijksmuseum from **Suzan Meijer**. Many past treatments do not meet today's standards in terms of reversibility, leading to



The Melbourne conference offered diverse experiences

a detrimental effect upon the object. However, modern techniques and a greater emphasis on preventive measures are helping to rectify this. **Sarah Benson** (Heritage Conservation Centre, Singapore) reported findings from her detailed comparison of natural and synthetic stitching threads used in textile conservation, conducted as her dissertation for a Masters in Textile Conservation at the University of Glasgow. This investigation was inspired by Sarah's previous experience in couture fashion, which provides a valuable background to her work as a conservator.

Metal conservator **Ian D. Macleod** (Western Australian Museum) recounted the

Visit to the textile conservation studio at the National Gallery of Victoria





Helen Lloyd, David Thickett and Jane Henderson in Melbourne

conservation of a mid-eighteenth century Italian cope, where neutral dithionite had been used to clean tarnished gold embroidery threads to great effect. **Julia M. Brennan** and **Nuchada Pianprasankit** described the current project at The Queen Sirikit Museum of Textiles in Bangkok, Thailand, which is collecting tangible and intangible evidence of traditional Thai techniques of textile production and maintenance. This information is then merged with established western knowledge and used to inform textile conservation practices in Thailand.

The hugely moving story of a tapestry damaged by a terrorist attack was presented by **Ida Areklett Garmann** (Museum Centre in Hordaland, Bergen). The tapestry, by the artist Hannah Ryggen, had hung in a government office in Oslo since 1958 until the building was severely damaged by a car bomb in 2011. This event was the largest terrorist act to date in Norway; the conservation of the tapestry was an emotionally charged process. The repair carried out equated to the healing of a wound. The importance of an open decision-making process through consultation with interested parties was emphasised.

Many other working groups featured presentations that were relevant to textile conservation. For example **Lisa Masen** (State Academy of Art and Design, Stuttgart), as part of the Leather and Related Materials Group, presented her findings from an investigation into removing mould spores from leather. Through systematic experimentation Lisa was able to establish the effectiveness of vacuuming and other methods of surface cleaning leather. Throughout the conference, presentations and poster sessions were scheduled methodically, which allowed delegates to move to different working groups mid-session. A technical visit to the textile conservation studio of the National Museum of Victoria was a particular highlight.

Many thanks to Robyn Sloggett, Marcelle Scott and the National Organising Committee, who produced such an informative and enjoyable event.

Zoë Lanceley

Textile Conservator
Icon Textile Group Committee

WORKSHOPS

INNOVATIONS IN CONSERVATION MOUNTING OF WORKS OF ART ON PAPER

**Icon Book & Paper Group Co-operative
Training Register and Icon Scotland Group**
John Jones Arts Building
3-5 September 2014
Scottish Conservation Studio
8-10 September 2014

For three days in early September I was fortunate enough to attend a lively, engaging, deeply informative and even emotional workshop on Innovations in Conservation Mounting techniques led by **Hugh Phibbs**.

Hugh Phibbs is former Coordinator of Preservation Services at the National Gallery of Art, Washington DC, where he worked for more than three decades within the Conservation, and Loans and Exhibitions divisions. He has taught and published widely on the preservation of works on paper, and his extensive research and knowledge, into and of, mounting techniques and sealed packages is impressive.

We, the delegates, came from a range of backgrounds: we were paper conservators, framers, artwork presentation specialists and archivists. We were private practitioners, recent graduates, and specialists in our fields. We were from a wide range of institutions: the Bodleian Library, Tate, the

British Museum, John Jones, and The National Archives. We were from all over the UK, some of us were closer to home than others, and some of us had flown from Germany, from Denmark, and from the USA.

The workshop was held in the newly built John Jones Arts Centre and, having been warmly welcomed into the building, the delegates were led to the Conservation Department where we were greeted by Hugh's infectious enthusiasm, by views south across London, and by a wealth of zip-seal bags filled with intriguing materials spread out upon the benches before us.

Over the course of the next few days each of these sample-filled bags was passed around, and we'd reach in to take pieces, touching, feeling, smelling, peering, turning to each other and asking questions, turning to Hugh and asking questions, learning from each other our experiences of each material, and learning from Hugh their potential applications, how he'd come across them, where we could source them, and the physical and chemical characteristics of each.

During tea and coffee breaks we spoke avidly of what we'd learnt, of what we'd discovered, of what we'd use, of the techniques that we could implement. We recapped. We discussed the importance of what we were learning, the importance of discussion, and the importance of sharing knowledge.

The first line of Hugh Phibbs's notes reads: *Preservation of paper = continuity = knowledge = culture/history*, and for the three days of the workshop Hugh guided us through preservation mounting and sealing techniques with a palpable sense of urgency to convey to us as much information as he possibly could. We began with chemical, physical and biological effects on cellulose. Hugh highlighted the importance of enclosure as the most effective means of preservation, and we discussed oxidation,

Hugh Phibbs' workshop at Hopetoun





Some examples of hinging methods without using starch paste and the hypoxic enclosure – made at Hugh Phibbs's workshop

photo-oxidation, acid migration, atmospheric pollution, fluctuations in relative humidity, radiation, kinetic impact and pests.

We moved on to materials: the permeability of acrylic, the expense of laminated glass, oxygen absorbers, fluted boards, UV inhibitors, antioxidants, microchamber, Artcare, active carbon, zeolites, EVA, polythene, plastazote, Melinex, Vivak, Marvelseal, Corrosion Intercept, Japanese and Korean papers, and we began to discuss adhesives.

Hugh was particularly keen to share with us the physical and chemical properties of methyl cellulose re-moistenable hinges, as outlined in his Preservation Practices article on Methyl Cellulose Hinging in *Picture Framing Magazine* (September 2014). Hugh described and demonstrated their shear strength as well as their reversibility, their non-comestibility, and the degree to which the introduction of moisture can be controlled. We looked at hinge placement, hinges that will shear and hinges that will roll under impact. We looked at laminated hinges, composite hinges, pierced hinges. We debated centre hinges, and whether or not to feather. We looked at pass-through mounts and pass-through feeders.

As well as the zip-sealed samples, Hugh had numerous models, maquettes, and examples of mounting and housing solutions and enclosures to show us and whilst the mornings were more cerebral, the afternoons were more hands-on, with Hugh guiding us as we made our own edge supports and wrappers. We learnt about spacers, made spacers for pastels, learnt economical techniques for creating deep mats and on the last day made our sealed packages.

We began the final day with a tour of the John Jones Arts Building, led by Matt Jones (Director) and Paul Tame (Design Consultant). Matt Jones spoke insightfully and passionately about the building and about the company, describing John Jones' collaboration with artists and British craftsmen, the fine-tuning of the building's design and its technical and practical features. The tour was an enriching experience, both personally as a member of the John Jones Conservation Department, and as a member of the workshop.

We ended the tour in the Conservation

Department, and returned to our benches, to new materials, and to making a sealed package. We learnt about heat-sealing composite foils, and polyflute, corrugated and honeycomb boards. For our final package we used a combination of acrylic and glass. The glass (on the outside) forms a barrier, and the acrylic (on the inside) protects the artwork from the glass should it break, the two materials are separated by a rag board spaced to prevent Newton Rings forming. We placed the mount package behind the glazing, and wrapped shop-bought heavy-duty aluminium foil around the entire package, adhering it to the front of the glazing using ATG tape; we then burnished the foil and trimmed away any excess. Hugh recommended that we use Stinger™ board as a backboard due to its strength-to-weight ratio. The backboard could then be taped to the aluminium-wrapped glazing and mount package, the tape providing a puncture-resistance to the aluminium foil. Voila! It was a satisfying moment, and Hugh was delighted to see our final results, the culminations for him of tried and tested and tried again systems.

Hugh Phibbs' enthusiasm for preservation, and his ambition to share knowledge, to continue learning, and to teach, encourage and inform, is inspiring. My heartfelt thanks to Hugh and to my workshop companions, and to John Jones for hosting the event. Thanks also to the Clare Hampson Fund for sponsoring the workshop, and to the Book & Paper Group CTR for organising it.

Rosalind Foley, Paper Conservator
John Jones

After delivering his mounting workshop in London, Hugh Phibbs travelled north to run the same course again in Scotland. This time around, the workshop was held at the Scottish Conservation Studio, an independent conservation business located in the stunning grounds of Hopetoun House, one of Scotland's finest seventeenth-century stately homes, just outside Edinburgh. The weather was amazing and lunch breaks saw us exploring the gardens, as well as having a complimentary tour of the house.

There was a considerable amount to get through on the three-day program, with practical exercises and lots of group

discussion during the workshop sessions. By the end of the program, the group had gained valuable insight into the uses of a number of paste-free hinging methods, the benefits of methyl cellulose as an alternative to starch paste and the potential for using cost-effective, easily available materials such as aluminium foil.

Participants included a mix of paper, photo and frame conservators from national institutions and the private sector, conservation technicians, commercial picture framers, and students. As you can imagine with such a diverse range of expertise and experience there were many questions and Hugh was extremely helpful in answering them and providing examples drawn from his years of experience working at the National Gallery of Art, Washington DC.

With competition for places on the mounting workshops in high demand we were very grateful that the organisers chose to run one of the two workshops in Scotland. This made attendance much more affordable for northern Icon members who would otherwise be factoring in potentially prohibitive amounts of time and money to travel and stay over for courses in the south. All but one of the places were taken by people from Scotland and the north of England, giving us a very valuable opportunity to get together and strengthen or forge new links with 'local' colleagues. We hope that members of Icon Scotland might be inspired to host other courses and events.

The workshop was followed by an Icon Scotland open lecture given by Hugh at the National Library of Scotland.

Special thanks go to Anna Trist and Helen Creasy who did all the local organising and hosted the course at Hopetoun, and to Helen and her daughter who supplied the most delicious home-made cakes and scones every day of the workshop. Thanks are also due to the Clare Hampson Fund for their financial support for the workshop.

Ryan Gibson, Conservation Technician
National Library of Scotland

SYNTHETIC RESINS COURSE

Icon Furniture and Wood Group
Bucks New University 13 September 2014

As part of the Furniture and Wood Group's on-going efforts to provide its members with new and exciting ways to improve their conservation skills, we held a one day class on synthetic resins. Specifically, the title of the class was 'Synthetic Resins in the Conservation of Furniture and Wooden Objects' and it was led by **Tristram Bainbridge**.

Tristram and Abigail Bainbridge form a conservation team called Bainbridge Conservation, focusing on furniture, books and paper. Tristram is a furniture conservator



Tristram Bainbridge (standing) discusses one of the finishes at the Synthetic Resins course, whilst participants apply the various finishes to their boards.

specialising in Asian lacquer and has worked as a contract furniture conservator at the Victoria and Albert Museum since 2011. He is the associate tutor for the furniture conservation programme at West Dean College and has lectured in conservation at the City and Guilds of London, Camberwell College of Arts and is a trustee of the Anna Plowden Trust.

At this sold out event there were fifteen conservators working to learn new ways to treat objects in their care. The day started with a brief but thorough history of finishes and the materials used for conserving and restoring older finishes. Many of the strengths and the shortcomings of the older materials used in conserving older finishes were discussed, thus identifying the reasons behind the search for newer finishes. In summary, the disadvantages of the older, natural resin surface treatments (including, shellac, dammar, sandarac, etc.) are the degradation, yellowing, darkening and a shift in polarity.

As part of the discussion, Tristram also

identified the key properties of different finishes and solvents pointing out the positive and negative attributes of each (hand outs were provided, summarizing the key properties to be aware of). One example was the glass transition temperature of the resins. This is 'the temperature where the polymer goes from a hard, glass-like state to a 'rubber'-like state'. Knowing this enables the user to know how soft or brittle a resin is at room temperature and whether the temperature of a particular environment would cause problems for a surface finish. Other considerations discussed included what additives, solvents and application methods could be manipulated to obtain a glossy or matte surface.

This led to a brief history of the development of new, synthetic products that were introduced as potential replacements for the natural resin or oil finishes. This included initial research on methods of stabilizing dammar. The three key synthetic products that were discussed were Paraloid B-72, Laropal A81 and Regalrez 1094. In

addition to these materials, there was an introduction to the use of Gamblin Conservation Colours for retouching. These colours had the advantage of being very light fast, reversible in low polarity solvents and easy to apply.

And that was the morning (whew!)

The afternoon was spent actually working with many of these products and seeing how they were applied. For this, Tristram had prepared small boards, which were divided into twelve squares. In each of these a different treatment or combination of treatments were applied. On some a selection of Gamblin colours were also applied.

The initial feedback from this session has been very positive. The Furniture and Wood Group hope to put on more of these one-day sessions in the future. Furthermore, we hope that others will be able to take advantage of them.

Dr Ernest Riall

Furniture conservator

TALKS

'WALLPAPER: Printed, pasted, hung and conserved'

Independent Paper Conservators' Group
Freemasons' Hall, London
30 September 2014

The National Trust of England, Wales and Northern Ireland cares for the largest collection of historic wallpaper still to be found in its original setting. From late 17th century flock and hand-blocked distemper, through exotic imported Chinese wallpaper, mass produced Victorian sanitariums, mid 20th century pre-pasted vinyls and much more besides, wallpapers can be found in over one hundred and eighty of the Trust's historic houses.

Andrew Bush, Conservator to the National Trust, presented a talk about such wallpapers held within the Trust's collections, covering their history and the materials and techniques used to produce them. This formed the body of the lecture, with some information given about their conservation via specific case studies. He also brought along original examples to view, some of which were examined under magnification, greatly enhancing the learning experience.

In Italy, small decorative hand block printed sheets were produced, before progressing to be hung on walls around the late 17th century, forming the concept of wallpaper as we know it. Before the invention of machine-made paper, wallpaper was only affordable by the wealthy, as each sheet of paper had to be hand made, hand printed, and sometimes adhered together to form rolls, all costly processes.

The technique used to produce these sheets involved painting a distemper ground (chalk,



Materials and sample boards ready to use during the Synthetic Resins course



Multi-flocked wallpaper with overprinting at Clandon Park, probably by Reveillon late 18thc

pigment, water, animal glue), drying, then creating a relief block print by hand, similar to textile printing. In France sheets were applied directly to plaster walls with adhesive and nails, often overlapping at the joins.

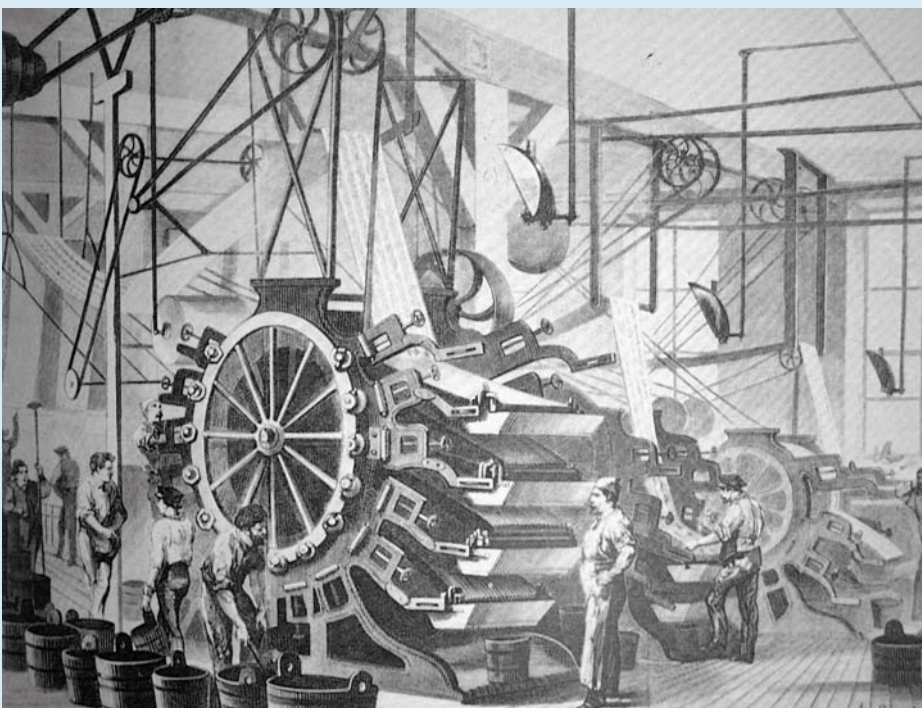
Early examples of flock wallpaper exist from the 1680s. Here the pattern was printed in adhesive before the paper went through a trough of dyed wool fibres. Modern flock is applied electrostatically using synthetic fibres. Eighteenth century flocks comprised of different coloured fibres would have been very expensive, reflecting the time and space required to allow drying between applications.

In contrast to European methods, Chinese

papers were often printed with a black decorative outline, then hand-coloured, and formed of three layers of paper.

Continuous rolls were not allowed until 1830 for tax reasons, thus horizontal joins in rolls often indicate they are pre-1830. By the 1850s relief rollers allowed for mass-produced rolls, and they became available to a much wider audience, as well as increasing the decorative possibilities. The Victorian era saw popular sanitary designs copied, and by the late 19th century embossed, leather, gilt, and woodchip designs were all available. The 20th century saw silk-screen, photogravure and all sorts of other techniques emerging.

Ten colour wallpaper printing machine c1860



Chinese wallpaper at Felbrigg Hall after conservation

Deterioration of wallpaper occurs for several reasons. Cheaper papers suffer from acidic deterioration, with the lack of alkaline buffer from the absence of distemper ground. Chinese papers are often thin and weak in nature. Damp causes mould, silverfish are difficult to keep away, and light fading often occurs.

In terms of conservation, Andrew highlighted the need for strong condition monitoring. Ideally wallpapers are treated in situ, but this is not always possible. A particularly interesting example of specific techniques used in the treatment of a Chinese paper at Felbrigg Hall was detailed.

Andrew provided details for further information, including the Wallpaper History Society, and the National Trust's ABC Bulletin. Many thanks go to Andrew for such an informative and interesting talk. Many thanks also go to John Purcell Papers who sponsored the talk. Samples of their stock were also on display and it was possible to discuss ordering and purchases in person. Everyone enjoyed the drinks and food provided by the committee of the Independent Paper Conservators' Group. The next lecture in our series will be on Tuesday 17 March 2015 and will be given by Nicholas Burnett – title to be announced shortly. Put the date in your diary and look out for further announcements. If you would like to join the IPCG, or have an idea for a lecture, please contact Laila Hackforth-Jones: laila.hj@blueyonder.co.uk.

Jillian Gregory

Archive Conservator
Bethlem Museum of the Mind

VISITS

NATIONAL PORTRAIT GALLERY: Frame Conservation Studio

Icon Gilding and Decorative Surfaces Group
London 24 July 2014

The Frame Conservation Studio at the National Portrait Gallery had, for a number of years, been in need of refurbishment, and



The National Portrait Gallery's Frame Conservation Studio before refurbishment

after many months of consultation, planning and construction the project was completed in July 2013. Prior to the refurbishment, the conservation team were consulted regularly throughout the design process to allow the studio to reflect the needs of the team. The studio is now fit for purpose and has large clean work surfaces, secure access, a dedicated mounting area, solvent extraction, task lighting and additional storage facilities. Most importantly, the studio is now environmentally controlled, providing a suitable environment to store and unframe vulnerable paintings, photographs and works on paper.

Since the refurbishment the conservation team at the NPG have been keen to provide an occasion for fellow conservators working in the field to visit the new space and discuss recent projects. Back in November 2013 I became an elected member of Icon's Gilding and Decorative Surfaces Group Committee and I proposed the idea of a visit to the Frame Conservation Department as a possible event. The idea was well received and promptly organised for the summer, inviting conservation professionals from both the public and private sector.

The afternoon event began with an



The NPG's Frame Conservation Studio after refurbishment

introduction to the department from **Richard Hallas**, Senior Conservation Manager, followed by a tour of the refurbished Frame Conservation Studio and Structural Studio with **Stuart Ager**, Frame Conservation Manager, who discussed how the spaces had been significantly improved. Following the studio introduction, the Frame Conservation Team discussed projects recently undertaken in the studio. Stuart Ager discussed his research and preparations for the fabrication of a new frame for NPG 3638 Henry VIII, based on a similar portrait of Henry VIII currently on long term loan to the V&A. This portrait has retained its original frame and there is evidence of the original simulated tortoiseshell or grained finish to the frieze.

Laura Haines, Assistant Frame Conservator, recently framed the portrait of Angelica Garnett NPG 6951, a recent acquisition now in the Gallery which formed part of the Smith and Dobson display. A 20th century dealer's

frame was purchased specifically for this portrait, however it was slightly too large and had to be cut down to size. The existing toning layers were evened out and the shine of the highly burnished water gilding reduced.

I then discussed my treatment of the original water gilded frame for the large group portrait of the Naval Officers of WWI (NPG 1913). The frame required surface cleaning, gesso repairs, bronze paint removal and toning and at just over five metres in length, provided me with a valuable lesson in logistics while assisting with both installation and de-installation within the gallery.

The final part of the session focused on the NPG's approach to the framing of moisture-sensitive works, intended for display at venues with limited environmental controls. The conservation team at the NPG refer to this as 'climate buffering'. The glazing is taped into the frame, and both the rebate and the protective backboard are sealed using conservation grade materials designed to resist the transmission of moisture. These materials have been exhaustively tested by the studio for their suitability and effectiveness. This was of particular interest to the group, and the discussion demonstrated that a wide variety of methods and materials are being used across the profession to provide stable environmental conditions within frames.

We then provided a short 'highlights' tour of frames currently on display in the gallery, including the recently acquired Van Dyck self portrait with its striking Mannerist frame, before enjoying afternoon tea in the Portrait Restaurant. The afternoon was a ticketed event and proved incredibly popular. We hope to provide a second visit in 2015. The Frame Conservation Team at the National Portrait Gallery would like to thank the Gilding and Decorative Surfaces Group Committee members for their help in organising the event.

Claire Pearson
Frame Conservator

Visiting the Frame Conservation Studio



INUIT PARKAS MADE OF GUT Their storage and transport at the British Museum

by Sarah Glenn, Textile Conservator, Victoria and Albert Museum, Nicola Harrison, Conservator, Natural History Museum and Pippa Cruickshank, Textile Conservator, British Museum

Introduction

This article will explain the use of an innovative internal support system to secure the two largest Inuit-Aleut gut parkas in the British Museum collection to enable safe transportation. The work began during a three-week work exchange between conservators from the Victoria and Albert Museum and the British Museum. Sarah Glenn devised the initial concept for the internal mount which was concluded by Nicola Harrison during her Junior Clothworker's Fellowship, both working with Pippa Cruickshank as the project leader for the work on the gut parkas to prepare them for their relocation.

The Project

Inuit gut parkas made of sea mammal intestine are often vulnerable objects, as over time the intestine becomes dry, brittle and may split readily, as was the case with the two British Museum parkas. After treatment the parkas were due to be moved from the Organic Artefacts Conservation studio in North London to permanent storage in the new British Museum World Conservation and Exhibition Centre (WCEC) facility at the Bloomsbury site. This journey required the

parkas to be temporarily tilted to pass through narrow doorways and travel across London in a van. Each parka measures nearly 2m in length and width. After investigating methods used in other museums to protect and store such objects, the following requirements were identified for their safe transport and storage inside archival boxes:

- To be kept horizontal with outstretched arms (due to the nature of the material it is not possible to fold to reduce their size)
- Provision of internal supports to prevent development of creases and folds
- Provision of handling boards so the parkas can be removed from their boxes without being handled themselves
- Securing the handling boards and parkas inside their respective boxes so that they would not move when the boxes were tilted at a steep angle, and when transporting them to the new storage facility
- Provision of custom-made acid-free boxes which could be used in store shelves rather than drawers to provide external protection.

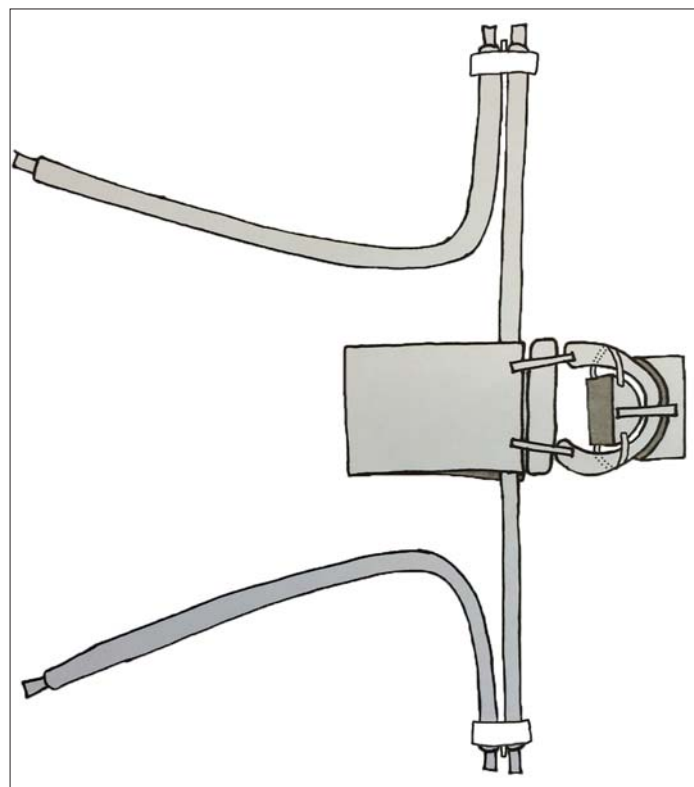
Internal Support

Using the experience of the V&A Textile Conservator with securely packing fragile objects for travel, a lightweight internal support system of padded forms and tapes was created so that the parkas could be secured within their archival storage boxes on to a rigid backboard made of two joined sheets of Tycore® covered in unbleached calico.

Securing the arms and body

A simple system was created using lengths of 5 cm wide cotton twill tape, padded with polyester wadding in various thicknesses and covered in thin 30gsm Bondina® (non-woven polyester) secured with sewing machine stitching. These padded strips provided a slight 3-dimensional shape once in place within the object, preventing further creasing without

The support system diagram



Inserting the side supports





The ends of the arm and side seam supports protrude beyond the cuff to secure to the backboard

stretching the parka. The smooth outer layer made of Bondina protected the gut and aided smooth insertion.

To support and hold in place the fragile outstretched arms and shoulders, one padded strip was inserted horizontally from cuff to cuff. Rings of 3 mm thick Plastazote® covered in Bondina were made to open out the cuffs. To prevent the sides of the parka from flattening and forming sharp creases, and to hold the body of the parka in position on the board, two additional padded strips were inserted at each wrist (again through the cuff supports), fed through each arm in turn, then gently curved down towards the bottom hem of the parkas.

Each end of these three padded strips (1× cuff-to-cuff and 2× cuff-to-hem) protruded beyond the parka, leaving sufficient tape for later attachment to the board so that the parka would not slip once angled. Velcro® was initially considered to secure the protruding padded strips to the boards but there was a risk that the close proximity of the tabs to the fragile gut material might result in damage when peeling back the Velcro on the tabs. Therefore, the tabs were sewn directly to the cotton sheeting covering the board, using red cotton thread. This will be quick and easy to remove or replace if required and should discourage unnecessary removal of the parkas from their mount.

Supporting the neck and chest area

Each parka also required lightweight chest supports. These were created by folding a rectangle of 3 mm thick Plastazote, covered in Bondina, to create a gently tapering 'wedge', with the deeper end supporting the neck area. However, the parkas' differing styles demanded some individual adapting of the support system. Specifically, one parka had a longer neck that required a padded support made from a wide ring of 3 mm Plastazote covered in Bondina, inserted above the wedge. These internal supports made further internal padding unnecessary; especially as this would add extra weight to the system.



Inserting the chest 'wedge' through the hood

Once secured, the parkas were safely held in position on the boards without exerting unnecessary pressure or weight onto the fragile gut material.

Securing the hoods

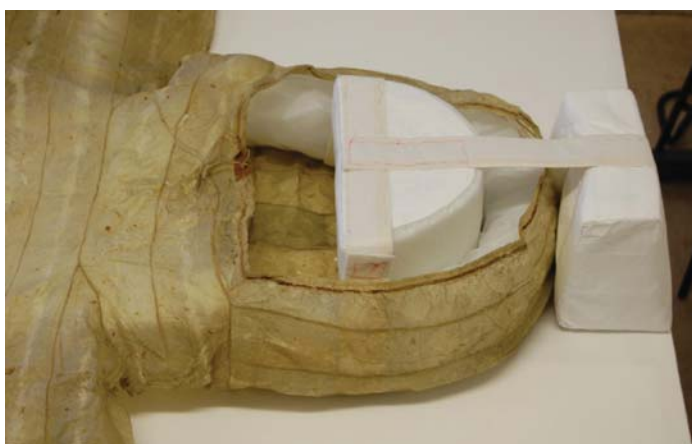
The last stage of the process was to consider how to protect the hoods of the parkas by holding them in place and preventing movement during transit. Again, it was necessary to create slightly different supports to mirror the different shapes of each hood. Internal lightweight hood support rings were made from soft polyester wadding covered in Bondina. These were secured to the neck or chest support using Velcro tabs for ease of insertion. The support can be removed without the need to detach the Velcro fixings. To stabilise and secure the central part of the hood within the soft padded ring on the smaller parka, a soft internal support was created using polyester wadding, covered in Bondina.

In contrast, a slightly more rigid support made from Ethafoam® and polyester wadding covered in Bondina was used in the larger parka to protect the rim of the deeper hood. Both of these internal supports were then secured to the lightweight hood support rings by wrapping Bondina covered cotton tape around the padded hood ring and sewing to the top of the internal support using red cotton thread.

Lastly, solid forms were shaped from Ethafoam to follow the external curve of each hood, differing in shape across the two parkas. These external supports were covered with Tyvek and secured to the mounting board using both strips of Velcro directly beneath the supports and cotton stitching. The shapes of the supports ensured that the hoods would be even more stable and secure when the parkas are tilted towards the vertical, as they would be when the boards are slanted during transit.



Internal support completed



Showing the deeper and more rigid insert for the larger parka connected to the external support

Bondina-covered cotton tape was sewn into place on each support to connect the internal and external hood supports and to enable the supports to work together and prevent movement of the hood during transit. For the deeper and more rigid hood insert of the largest parka, the outer edge of the external hood support was extended to the edge of the handling board and the cotton tape extended right over this support to enable it to be secured to the reverse of the board to provide the necessary strength. The connection of these hood elements to the internal support structure also ensured that the internal neck and chest supports were gently held in place and would not slip downwards when the boards were tilted during transit.

External support

The parkas, now secure on their boards, could then be placed into their acid-free, archival cardboard boxes, custom-made by an external company. So that the mounting board could be lifted safely into and out of the storage boxes, thick cotton straps were adhered to the underside of the boards, with excess material sewn into handles. During storage, these cotton handles can be folded away from the parka.

To prevent the boards lifting inside the boxes during transport, triangular corner blocks matching the depth of the storage boxes were created using Ethafoam and covered with Tyvek. Once the lid of the box was fitted, these corner supports filled the void between the back board and the lid, preventing any movement of the board during transport.



Showing the soft hood support for the smaller parka



The completed system for the larger parka with board handles

Finally, a detailed instruction guide with photographs of each stage was produced to assist with the correct future packing and handling of the objects.

Conclusion

The internal mounting system safely secured both parkas within their storage containers in preparation for transportation and permanent storage. The system will also enable the parkas to be safely accessed by researchers in the future and could even be utilised for future display. When used with gut parkas in stable condition, the system could also be used for travel for loan.

The storage and transportation of such fragile material is a challenge facing many conservators and the simple internal system could be adapted for both storage and transport on a range of costumes and textiles with fragile elements in a variety of sizes.

Acknowledgements

Pippa Cruickshank is the Leathersellers' Company Conservator of Organic Materials at the British Museum and would like to thank them for their support, and Nicola Harrison would like to acknowledge the support of the Clothworkers' Foundation. Sarah Glenn would like to acknowledge the support of the V&A and BM Conservation Departments in undertaking the work exchange.

CONSERVING THE LEWIS-GIBSON COLLECTION

Mary French, Rebecca Goldie and Emma Nichols of Cambridge University Library discuss the re-treatment of manuscript fragments from the Cairo Genizah.

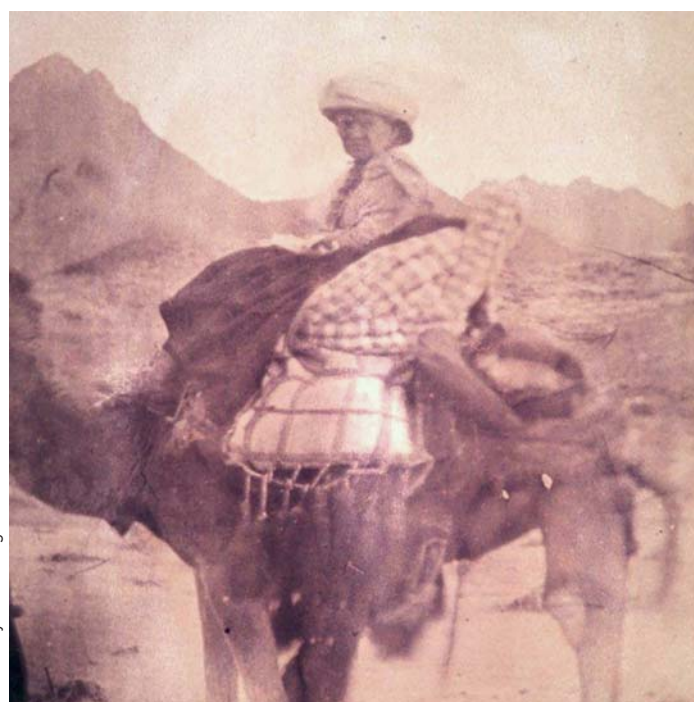
Cambridge University Library (the UL) contains the largest collection of medieval Jewish writings in the world. Around 200,000 fragments from the Cairo Genizah are housed there in three unique collections (the Taylor-Schechter, Jacques Mosseri and Lewis-Gibson Collections), and the UL has been home to the Taylor-Schechter Genizah Research Unit since the 1970s.

The Cairo Genizah

The Jews of Fustat, the medieval capital of Islamic Egypt, lived at the commercial and administrative hub of a vast empire that stretched from Spain to Iraq. Following rabbinic tradition, they treated their sacred writings with respect. Once damaged or obsolete, these texts would be deposited in a synagogue storeroom called a genizah prior to their eventual ritual burial.

Although such storerooms would usually be emptied regularly, the two-storey genizah at the Ben Ezra Synagogue in Fustat, known as the Cairo Genizah, was left largely untouched for nearly a millennium, and continued to accumulate defunct documents up until the mid-nineteenth century. Alongside worn out prayer books and Bibles, the Fustat Jews also stored the detritus of their daily lives, depositing letters, poetry, shopping lists, legal documents, and accounts, thus providing an unparalleled window into the medieval Mediterranean world. The Cairo Genizah was

Margaret Dunlop Gibson on her travels



Fragments from the Cairo Genizah before conservation and cataloguing

recently described by historian Simon Schama as 'the single most complete archive of a society anywhere in the whole medieval world'.

The History of the Lewis-Gibson Collection

The Cairo Genizah came to the attention of Cambridge scholars through the efforts of Scottish twin sisters, Agnes Smith Lewis and Margaret Dunlop Gibson. An idiosyncratic upbringing and a timely and substantial inheritance enabled the sisters to indulge their interest in biblical scholarship by travelling to exotic climes. On one expedition to St Catherine's Monastery in the Sinai in 1892, Agnes and Margaret discovered a palimpsest containing the earliest known copy of the Gospels in Syriac.

The sisters bought religious manuscripts from dealers and in antiquities' bazaars on many of their travels, believing it their duty to preserve the fragments for study. After one such journey to Egypt, their friend Solomon Schechter, Cambridge's Reader in Rabbinics, identified amongst their purchases a fragment of the book of Ben Sira (Ecclesiasticus) in Hebrew, its original language of composition (it had hitherto been known from a later Greek translation). This discovery led Schechter to travel to Egypt to discover other similar fragments of this work, and in 1896 Schechter located and eventually acquired the remaining contents of the Cairo Genizah, bringing 193,000 fragments in tea chests to Cambridge University Library.

Agnes and Margaret gave the fragment of Ben Sira to the UL, but bequeathed their remaining 1,791 genizah manuscripts in their private collection to the United Reformed Church's Westminster College. As the collection was one of the earliest to be taken out of the Cairo Genizah, it includes a number of hand-picked treasures. The collection includes an autograph work by Moses Maimonides, the earliest known example of a Jewish engagement deed from 1119, an autographed poem by the medieval Spanish Hebrew poet Joseph ibn Abitur, a letter written by a woman fleeing the First Crusade and a rare, tenth-century copy of Saadya Gaon's translation of the Bible into Arabic, as well as magical spells and many other religious texts.

In August 2013, following a major public appeal, the Bodleian Libraries, University of Oxford, and Cambridge University



Poetry by Joseph ibn Abitur (l) before and (r) after conservation (L-G Liturgy 3.25)

Library jointly purchased what is now known as the Lewis-Gibson Genizah Collection, of which we are the project conservators. After conservation and digitisation of these fragments has been completed at Cambridge, the collection will be divided between the two libraries.

Approaching the Collection

Unlike the other genizah collections held at the UL, which arrived loose in crates or boxes, the fragments of the Lewis-Gibson Collection had already been repaired in the late nineteenth century. The majority of the fragments were adhered to paper hinges and guarded into fifteen large volumes. Another forty eight were enclosed between glass, thirteen of which were later removed due to cracks in the glass or fragment instability and were rehoused in Melinex.

As is the case for any large-scale manuscript collection, finding a conservation treatment that can be applied to every fragment in the collection and to a deadline has been quite a challenge. We have 1,791 unique parchment and paper fragments, each with its own qualities and decay characteristics, all of which merit individual attention.

A detailed conservation survey was carried out upon the collection's arrival at the UL, which recorded the condition of every fragment and estimated the treatment each would require prior to digitisation. Lying untouched in a genizah for hundreds of years has left its mark: the impact of fluctuating temperature and moisture levels are evident across the collection as stains, tears, losses, cockling, brittleness, gelatinisation of parchment, extensive insect and rodent damage and ink corrosion.

Fragments in their nineteenth-century bindings





A parchment fragment exhibiting multiple types of damage

Following the survey, our colleague Lucy Cheng, who has over three years' experience working solely on genizah material, designed a treatment protocol specifically for the Lewis-Gibson Collection. Its main objectives are to reveal and preserve the text, stabilise the fragments and provide better housing in order to reduce direct handling, extend the life of the collection and facilitate digitisation and access.

Assessing the impact of historical treatments

The Lewis-Gibson Collection has provided a chance to reflect on previous treatments applied to the fragments in the light of current conservation ethics.

Nineteenth-century bindings

The nineteenth-century decision to house most of the collection in guard books had at one time offered some protection to the fragments but this is no longer a suitable solution. The volumes are tightly bound, obscuring text and restricting movement. Turning the pages requires direct contact with the vulnerable fragments, risking further damage. The hinges offer little support to heavy or badly damaged fragments and the binding materials are non-archival. These problems affect the long-term survival of the fragments and make digitisation difficult, and so the decision was made to remove the fragments from their volumes.

Ink stability

As some of the inks had been severely damaged or lost, the ink on every fragment was examined under magnification during the survey, with the expectation that many would need consolidation. Instead, while some of the inks in other genizah collections held at the UL are extremely friable, most of the inks in the Lewis-Gibson Collection were found to be stable.

It has been hypothesised that during repair in the late nineteenth century, the fragments were humidified and pressed flat and this inadvertently consolidated the inks,



Examination of inks under magnification

increasing their overall stability. Unfortunately, it is also very likely that some text was lost during this process.

Historical repairs

Three main types of historical repairs have been applied to the items in this collection: large strips of heavyweight paper, paper which has been applied and then abraded to give a feathered edge, and translucent paper. As many of the existing repairs are causing damage to the fragment or ink, or obscure the text, they often have to be removed.

The heavyweight and translucent paper repairs are always removed unless doing so would actively harm the fragment beneath. In general, the abraded paper repairs are confined to areas around the margins where there is no text. These repairs are left intact when possible to preserve some

A fragment showing all three types of historical repairs. Clockwise from top: heavyweight, abraded, and translucent paper repairs





Removing a hinge with a methylcellulose poultice

remnants of the previous repair work, avoid introducing unnecessary moisture to the fragments and expedite the conservation process.

The Conservation Process

Documentation, Cleaning and Removal of Historical Repairs

Fragments are removed from the binding and photographed on both recto and verso to provide pre-conservation documentation. If the hinges contain any marginalia, they are removed and retained, as are any adhesive samples, thread, tape, or deposits found on the fragments.

Before conservation begins, the stability of the ink on each fragment is re-tested, after which the fragments are cleaned with soft brushes. Although much of the original dirt was presumably removed during historical treatment, what remains is often difficult to remove as it has bonded closely with the surface of the fragment in a similar fashion to the inks.

A methylcellulose poultice is then applied to the hinges and historical repairs to facilitate removal. Since the previous repair papers respond at different rates, we carefully monitor the poultice to make sure that the fragment underneath does not become overly humidified.

Stabilising the Fragments

To prevent further loss, enable better readability, and ensure that the fragments lie flat for digitisation we unfurl and realign folds where possible. On paper fragments, a spatula and a damp brush are used to tease folds open. On parchment we use a rigid agar gel as a poultice with a Bondina barrier; this allows us to carefully control the delivery of moisture to the fragment.

New repairs are only applied to areas at risk of loss or further damage. Depending on the area that needs repair, we use either wheat starch paste or remoistenable 2.5 gsm Berlin tissue to stabilise tears and vulnerable areas. We pre-coat our tissue with a 50:50 mix of methylcellulose and wheat starch paste, which is reactivated with a damp brush. These materials were chosen to minimise the visual impact of the repairs and limit the introduction of moisture.

Throughout the treatment process the fragments are dried and acclimatised between Bondina and blotter or felt under light weights. We use an 18 gsm Spanish felt that is perfect for pressing parchment as it offers soft support, following the



Unfurling folds in parchment with agar gel

unique contours of each fragment, so we can gently coax it flatter over time.

Short-Term Housing for Digitisation

After acclimatising under weight for several days, the fragments are encapsulated in Melinex and closed on four sides with an ultrasonic welder. This temporary solution means the fragments can be viewed clearly on both sides and handled safely during digitisation. Air holes are left around the edges to prevent a microclimate forming that may encourage biodeterioration of the fragment, or trap damaging compounds off-gassed by the fragments themselves. The fragments are stored in individual paper folders within archival boxes in the UL's environmentally controlled stacks. We are currently investigating solutions for long-term housing.

Looking Forward

Approximately halfway into the conservation of the Lewis-Gibson Collection we are making good progress and are pleased with the results. We occasionally come across fragments that pose new challenges so we are constantly adapting and re-evaluating our techniques and materials.

Plans to complete XRF analysis of the inks, FT-IR analysis of the historic adhesives, and peptide mass fingerprinting of the parchment substrates are underway, all of which will help us to build a clearer picture of the composition and history of the fragments.

Conservation and digitisation are both due to be completed by the end of 2015. There will be an exhibition at the UL in early 2016 which will tell the story of the collection and showcase the fragments and their conservation.

In another century, conservation procedures, materials and tools will have all evolved, but we hope that with the methods available to us at the present we have given the fragments the best possible chance of long-term survival.

Acknowledgements

The Lewis-Gibson Collection was surveyed by Lucy Cheng, Rebecca De'Ath, Deborah Farnell, Mary French, Anna Johnson and Shaun Thompson

Thanks to Melonie Schmierer-Lee for providing background information on the collection

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