News in Conservation



The e-paper from the International Institute for Conservation of Historic and Artistic Works

Acropolis Museum and CSI Sittingbourne joint winners of the 2012 IIC Keck Award



Conservation works on the Caryatids - the Kore from the south porch of the Erechtheion temple

LONDON – The 2012 IIC Keck Award was awarded jointly to the Acropolis Museum in Athens, Greece, in collaboration with the Institute of Electronic Structure & Laser at the Foundation for Research and Technology in Crete (IESL-FORTH) and to Anglo-Saxon CSI: Sittingbourne in Kent in the United Kingdom. IIC's Council recognised that both institutions had, from their respective situations, made a positive contribution to public awareness of the practice and beneficial results of heritage conservation.

The Acropolis Museum won the award for the conservation and restoration of the Caryatids with the use of laser technology, in collaboration with the Institute of Electronic Structure & Laser at the Foundation for Research and Technology in Crete (IESL-FORTH). The award recognised the Acropolis Museum's successful approach in providing visitors with the opportunity to observe procedures that until recently were undertaken in the conservation laboratories, away from the public view.

Issue 34, February 2013

From Students to Emerging Professionals –

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Jonathan Tetley discusses conductivity for the treatment of carpets from historic houses
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The 'Viral' Effect -

Antonino Cosentino on blogging and the social media revolution Pages 20-22

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The Caryatids are sculpted female figures serving as an architectural support in place of traditional columns or pillars, in this case supporting the roof of the south porch of the 'Erechtheion'. Originally a set of six, one of the Caryatids is now in the British Museum. Threatened by



Visitors watching a video showing conservators cleaning the Caryatids with advanced laser technology

environmental pollution, the remaining sculptures were moved to the old Acropolis Museum in 1979 and again in 2007 when they were transferred to the new Acropolis Museum.

The conservation project started in December 2010, and included documentation, condition assessment, fixing of unstable fragments, structural restoration, removal of corrosive factors and cleaning of black crust and soot deposits by means of laser technology.

The surface cleaning was achieved by means of a custom made and innovative laser system developed by IESL-FORTH in Heraklion, Crete. The laser is capable of operating at two wavelengths simultaneously (Infrared at 1064nm and Ultraviolet at 355nm) and is able to remove thick pollution accumulations in a controlled and safe way for both the object and the operator. The combination of the two wavelengths ensures that no discoloration or damaging phenomena occur on the original substrate, while revealing its unique surface.

The conservation process was conducted in a purpose-built laboratory temporarily housed in a specifically designed platform that "embraces" and isolates one sculpture at a time. This platform is moved to different heights, so that conservators obtain optimum access along the surface of the Kore.

Complying with strict health and safety regulations, protective curtains shielding the laser beam used in the conservation process surround the work area. Visitors can follow the work carried out behind the protective curtains via a camera connected to a monitor outside the laboratory platform. When conservators are not working, a recording of this process is displayed on the monitor. Since December 2010, more than 2 million visitors have been able to follow the work of the conservators.

For further information about the project including a video of the conservation work, please visit:

http://www.theacropolismuseum.gr

http://www.theacropolismuseum.gr/en/content/conserving-caryatids

http://www.iesl.forth.gr/research/project.aspx?id=131

http://www.forth.gr/index_main.php?l=e&c=20&i=288

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Editorial

While part of Europe was freezing under a blanket of snow and Australia was experiencing one of the hottest summer on record, I was working away putting together this winter issue of *NiC* which I hope will find his usual place on the top of your pile of favourite reads.

Without further ado, let me introduce you to this issue and its amazing contributors!

Three emerging conservators that participated with a poster to the 2012 IIC Vienna Congress have contributed the first of the long features. Not only they had an incredible experience but Emmanuel Lara Barrera, Ana Lanzagorta Cumming and Mariana Almaráz Reyes also won the IIC Award for best student poster. The account of their experiences, together with an extract from their poster is presented on page 6-8 - *NiC* wishes them all the best for their future career.

Following on, Jonathan Tetley, textile conservator in private practice, writes about textile conservation discussing cleaning methods that employ conductivity as a base to establish the best treatment for the objects in his care.

Conservation scientist turned blogger Antonino Cosentino has contributed a very interesting article for our *Views+Opinions* section. Antonino candidly explains the reasons that moved him to create his blog *Cultural Heritage Science Open Source*, a platform intended to provide tutorials on methods for art examination and documentation, focussing specifically on innovative lowbudget scientific solutions.

The second in the series of reviews on conservation journals was submitted by Heike Winkelbauer and focuses on New Zealand. Remember that you can contribute your own review by writing to news@iiconservation.org

Barbara Borghese Editor >> The co-winner of the 2012 IIC Keck Award was Anglo-Saxon CSI:

Sittingbourne, a pioneering conservation project located in a town centre shopping mall. The project is set up as an archaeological exhibition mounted in a shop together with an investigative conservation laboratory set up in a unit facing the shop in Sittingbourne, Kent, UK. The exhibition gives visitors the chance to learn about the archaeological discovery and view a selection of conserved objects. In the *CSI* lab, conservators and conservation volunteers work on objects excavated in the 6th to 8th century Anglo- Saxon cemetery site where 229 graves were discovered. Many of the burials contained iron, copper alloy, gold, silver and garnets with hundreds of beads. The project is a unique example of community-led heritage conservation allowing public access to a field that is not well known or fully understood.

Set up as a local initiative, the project involves a Sittingbourne-based (Dana Goodburn-Brown ACR, conservator **AMTeC** http://www.amtec.org.uk/), the archaeological excavation organization (Canterbury Archaeological Trust http://www.canterburytrust.co.uk/) and a (Sittingbourne voluntary museum Heritage http://www.sittingbourne-museum.co.uk/), combined with the support of local businesses, history enthusiasts and the wider community. Started in late 2009, the project has attracted over 20,000 visitors and has received the contribution of more that 5,000 volunteer hours.

The project and its relationship to the community has been used as a case study for two different MA student projects focusing on social values of cultural heritage, (University College London and Kingston University). Public engagement with archaeological conservation has been examined and visitors' comments collected.

Locating this project within a shopping mall is one of its greatest strengths - as an unusual 'shop', it creates curiosity amongst shoppers, is central to the town, and offers opportunity to many who might never visit museums/heritage locations otherwise. The facility was set up largely through donations of redundant exhibition materials, equipment such as an airport X-ray machine and conservation supplies.

Several conservation interns have participated in the project and gained valuable experience in supervising volunteers, in investigative conservation of archaeological finds, and in sharing their skills and knowledge with the general public. Local school groups have visited and many children have returned with their family members over the following months. Special events have been organised, such as visitors and volunteers being invited to carve and print linocuts of their favourite artefact or conservation discovery. The resulting prints have been used for a fundraising T-shirt design and illustrations for a forthcoming popular book on the project.

The project has enjoyed extensive media coverage (BBC news, local papers, as well as numerous articles in professional and popular magazines) as well as being mentioned as a good example of public engagement with conservation science at a House of Lords Inquiry, and featured in The National Heritage Science Strategy document.

The project has a website www.anglosaxoncsi.wordpress.com, a Facebook page and a Twitter account @CSIsitt.

http://www.iiconservation.org/node/3507

News in Brief...

Fight to save Roman general's tomb gets celebrity backing.

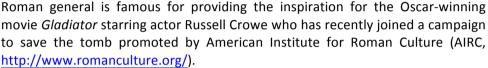
ROME - The tomb of the Roman general Marcus Nonius Macrinus in Rome is at risk from neglect and could be reburied to prevent further decay.

Discovered in 2008 it is considered one of the most significant finds in the archaeological area located in an industrial zone north of Rome in the vicinity of the river Tiber.

During the original excavation project, archaeologists stumbled upon the remains of a 13m (45ft) high structure fronted by four columns that was later acknowledged to be the remains of the

Both images showing fragments of the

grand tomb of Marcus Macrinus. **Nonius**



The campaign is appealing to the Italian authorities responsible for budget allocation to preserve the 2nd century mausoleum, which is threatened by looters and environmental damage. The funds needed for conservation and preservation management of the site are in the region of €2m-€3m; it is estimated that approximately 40% of Italy's archaeological sites are now closed due to lack of funds. http://www.iiconservation.org/node/3508



X-rays unveil mysterious degradation of Van Gogh painting

OTTERLO - X-ray analysis performed on Van Gogh's "Flowers in a blue vase" has identified the cause of a degradation of the colours affecting some areas.

The culprit has been identified in a protective varnish applied after Van Gogh's death that has caused the darkening of cadmium yellow, a bright yellow used on some of the flowers that is turning into an orange-grey colour. Normally, cadmium yellow grows paler and less vibrant as it ages.

The team collected small samples and sent them off to be analysed by laboratories in France (European Synchrotron Radiation Facility ESRF, Grenoble) and in Germany (Deutsches Elektronen-Synchrotron DESY, Hamburg) with the aim of determining the material composition of the samples and also to establish the precise structures in the interface layer between the original paint and the varnish.

Results showed the presence of a compound called cadmium oxalate that is the cause of the degradation.

The study has yet to establish the cause of the degradation process at the interface between paint and varnish, but provides information on how varnish layers applied at different times can contribute to the degradation of certain pigments in a painting. The study also opens the way for further investigation into ways to stabilize the degradation



Flowers in a blue vase, Vincent van Gogh

process. The complete results of the study appear in the journal "Analytical Chemistry" (http://pubs.acs.org/doi/abs/10.1021%2Fac3015627).

Van Gogh painted "Flowers in a blue vase" in 1887 in Paris; according to experts the problem with cadmium yellow is not widespread as the pigment was expensive and Van Gogh found it difficult to acquire when working outside of major cities. The Kröller-Müller Museum in the Netherlands acquired the painting in the early 20th century. http://www.iiconservation.org/node/3509

National Trust for Historic Preservation calls for nominations of Latino endangered sites

WASHINGTON – The National Trust for Historic Preservation, a USA privately funded non-profit organisation working to save America's historic places, is calling for nominations of endangered Latino sites for its 26th annual list of *America's*



From the 2012 List - Kappel House in Zoar, Ohio, USA

11 Most Endangered Historic Places. In calling for nominations, the Trust is recognising the importance of preserving the Latino cultural legacy and its contribution to the current social context.

Nominations are open until March 1, 2013 and though the sites don't have to be famous they must meet certain criteria including being significant within their own cultural context, Illustrate important issues in preservation and having a need for immediate action to stop or reverse serious threats. Past heritage sites to make the list have included the birthplace of Malcolm X, Ohio's Zoar Village and abandoned USA post office buildings.

Since 1988, the National Trust for historic Preservation has used its list of America's 11 Most Endangered Historic Places to raise awareness about the threats facing some of the nation's greatest treasures. The list, which has identified 242 sites to date, has been so successful in galvanizing preservation efforts that only a handful of sites have been lost.

Dozens of sites have been saved through the tireless work of the National Trust, its partners, and local preservationists across the USA. For more information visit: http://www.preservation.org/ http://www.iiconservation.org/node/3510

Manuscripts targeted by Islamist militants in Timbuktu

TIMBUKTU – A group of Islamist militants has attacked the Ahmed Baba Institute of Higher Learning and Islamic Research (IHERI-AB) in Timbuktu, Mali, for a second time in less than a year (News in Conservation, June 2012, Issue n. 30, p.3), destroying a considerable part of the manuscripts held in the library.

The centre was established in 1973 and in 2009 it initiated a digitization project to make the manuscripts available through a dedicated website with funds from the South African Government. It is estimated that before the attack it housed at least 2,000 manuscripts. The damage could have been much worse considering that the centre was supposed to have housed many more manuscripts but following a similar attack the books were instead sent to Bamako, the Capital of Mali and other secret locations as a precaution against further loss.



Timbuktu Manuscript - Astronomy tables

In an interview, mayor of Timbuktu Ousmane Halle said: "They [the militants] torched all the important ancient manuscripts, the ancient books of geography and science. It is the history of Timbuktu, of its people. It's truly alarming that this has happened." The manuscripts date as far back as the 13th Century AD and contain texts on art, geography, medicine, and science and include some rare copies of the Qur'an. http://www.iiconservation.org/node/3511

2012 IIC Vienna Congress – Our Experience as Students



by Emmanuel Lara Barrera, Ana Lanzagorta Cumming, Mariana Almaráz Reyes http://www.iiconservation.org/node/3504

During the summer of 2010 three emerging conservators - Emmanuel Lara Barrera, Ana Lanzagorta Cumming and Mariana Almaráz Reyes participated in a volunteer programme with the National History Museum's Depositories in Mexico City. During this period the three students classified more than 200 fans according to their condition and performed priority conservation treatments on those objects that most needed attention. This is their account of what happened two years later...

Two years after the completion of the project "Emergency Conservation Treatments for the Collection of Fans from the MNH" at the National History Museum's Depositories (MNH) in Mexico City, Mexico, we had the opportunity to participate in the 2012 IIC Vienna congress with a student poster. We could not let this opportunity go for two reasons: firstly, the work we had done in the fan collection fitted perfectly with the Congress' theme and secondly, this year was the last opportunity to participate as students at a Bachelor's' level, as we would soon graduate. In order to be able to present a relevant and interesting poster at the Congress, we decided to go back and continue working on the fan project at the MNH. This second stage of the process involved choosing one fan to restore, establishing three main criteria for our selection: relevance within the collection, complex materials structure and bad condition. After selecting a fan for the project, we decided to carry on with repairs on the paper leaf using tzauhtli, a natural adhesive extracted from certain species of Mexican orchids found in 16th and 17th century colonial handcrafted objects. The decision to treat the fan using this adhesive was motivated by its proven suitability for use on delicate textiles (thus on paper), and very importantly because it its use is relatively unknown outside of Mexico. This way we had a great opportunity to contribute our knowledge and experiences and share it with IIC Congress's international audience. We concluded the fan project with the submission of the poster for the congress and were delighted when we learned that it had





¹ For further information, see the authors' poster: *The conservation Process: revitalizing a collection of hand fans,* [online] http://www.iiconservation.org/system/files/publications/conference_paper/2012/clanzagorta2012.pdf







been accepted. As far as we know, our participation represents an achievement rarely accomplished by Mexican students in the past.

At this point we were still unsure about travelling to Vienna because of the high costs involved. Our outlook changed when we realised the possibility afforded by the Brommelle Memorial Fund Grant. We got our papers ready and with the poster as our principal argument we solicited the grant. We were very thankful to finally receive it since it allowed all three of us to attend.

The Congress

The congress took place from 10th to 14th September 2012. During the five days of the event several meetings and lectures took place and as students we got plenty out of them. Learning about the new trends and treatments used in the profession enriched our formation as conservation professionals and allowed us to think about how to apply this knowledge in our Mexican reality.

It was also very gratifying to meet world-class conservators previously only known through their books and papers; networking during coffee breaks and other social gatherings was a great opportunity to receive advice on different topics, from restoration techniques to career development. We believe that through events such as the Congress, IIC has demonstrated its commitment to be a platform for sharing knowledge and creating new networks.

Student involvement

As students, we are extremely grateful to be considered an important part of this event. Through the different meetings that we attended we got a real sense of what it means to be a part of IIC: the dissemination of research, the community, the collaboration and everything else that goes on within the organisation.

The invitation to become active members was emphatic and enthusiastic; we felt compelled to take the initiative of spreading this call to colleagues in our country. Meeting other students was another fascinating part of the experience allowing us to begin networking even at this early stage of our career. This is essential since we are the professionals of the future and we will probably continue to meet each other on many more occasions.

Our greatest surprise and most exciting moment was when we received the prize for the best student poster. It was very gratifying to gain recognition for our work in front of such an important audience. This experience made us proud of our training in Mexico since it was clear that we had all the necessary tools to succeed.

All else aside, our poster had an impact on the judges due to the fact that it shows the way we conceived conservation as a long process involving several stages and constant reflection, something we have learned in school since the beginning of our course.

Conclusion

During our studies we learn the theoretical, methodological and technical aspects of the practice of conservation and restoration, but all the knowledge acquired only starts to make sense once we apply it in the best way possible to care for our heritage. As students, we are not usually aware of the importance of sharing this knowledge with our peers and it has been gratifying to be able to demonstrate the benefits of such experience to colleagues and other students alike. Besides, we have realized that we should always strive for the best in ever project since every experience has the potential to grow unpredictably as our story has proved.

Being able to attend this international forum was an excellent opportunity to get away from our daily



Ana, Emanuel and Mariana receiving the award from Amber Kerr-Alison

routine and observe from a different perspective the strengths and weaknesses that the profession has in Mexico. Finally we were reminded of the importance of updating our knowledge continually through investigation, networking and participation in congresses and other local and international events. It was definitely a very significant episode of our lives!







Mariana Almaraz

Reves studied Conservation and Restoration at the National School of Conservation. Restoration and Museum Studies (ENCRvM-INAH) Mexico City. In 2011 she participated in the 8th North American Textile Conservation Conference (NATCC) in Oaxaca, Mexico, presenting the poster: Restoration of Ethnographic Textiles from Teotitlán del Valle: Experiences Inside an Indigenous Community. Currently she is completing her BA thesis on the technology and conservation of a feathered textile: The 18th century mantle of San Miguel Zinacantepec, Mexico.

BA in Conservation and Restoration at ENCRyM-INAH in Mexico City, Mexico. He has complemented his education by attending national and international congresses as an organizer, speaker or participant including the IIC Congress (2012 student poster award in Vienna), The North American Textile Conservation Conference (NATCC, 2011 poster in Oaxaca, Mexico and 2013 lecture in San Francisco, US) and a considerable number of conferences and exhibitions in the National Autonomous University of Mexico (UNAM) and ENCRyM. He is currently involved in the research of the technology of a 16th century Aztec featherwork shield with tzauhtli as its original adhesive.

Emmanuel Lara finished his

Ana Lanzagorta studied in the United States she was introduced and encouraged to join the art world; she gained a BA in Art History at Universidad Iberoamericana, Mexico. She later went on to study at ENCRyM-INAH and there she discovered her passion for textile and paper conservation. She graduated in the year 2012 and is now continuing her professional development in the field of nanotechnology for paper conservation.

Observations on Current Usage of Conductivity in Cleaning Carpets from Historic Houses

by Jonathan Tetley

http://www.iiconservation.org/node/3505

After many years of being confronted with big, dusty, sooty and stained carpets to clean, it became apparent that Jonathan Tetley needed more information at hand to decide on cleaning treatments, which were mostly undertaken with reference to his experience or that of other conservators.





Since the 1980s, conservation requirements for institutional bodies such as The National Trust (UK) have included carpets as textiles worthy of consideration to be conserved, and not just to be consigned to storage or treated as sacrificial items. My work at the Tetley workshop over the past 30 years has been to develop and refine our cleaning treatments to meet these requirements; careful choice of cleaning methods is not only important because of irreversible results, but also because it is quite likely the piece has not been 'properly' cleaned for up to 200 years or more, and may not be cleaned again for a similar period of time.

Environmental conditions of the historic setting where the object is kept may have certain inbuilt problems such as temperature changes, extreme fluctuating levels of humidity, foot traffic or handling. It may be that some or all of these conditions cannot be changed or ameliorated, or that the piece may have become acclimatised to conditions very different from those when it began its life. This would require returning the piece to a semblance of its former condition, if clean.

Since 2007 I have adopted an approach to the treatment of carpets, that is largely influenced by the work of Dr Richard Wolbers, the paintings conservator and conservation scientist based at The University of Delaware in the USA.

This approach introduces the use of conductivity and pH testing as a means of both monitoring and controlling the inherent condition of the object. Through monitoring the conductivity of both the carpet and the cleaning solution, it is possible to adjust the conductivity of the solution to match the desired resting conductivity of the cleaned carpet. This stabilises the carpet for the conditions to which it has become accustomed, making it less likely to take up atmospheric and environmental pollutants in reaching equilibrium. There can be a risk from 'overcleaning' with just deionised or demineralised water where the piece is left in a highly conductive (ion-attracting) state. As Rebecca Pavitt points out in her workshop review in *News in Conservation*, October 2012 'Cleaning of painted surfaces – Wolbers strikes again!':

"The ability of a material to conduct electric current is related to the concentration of ions in solution. Every material has some amount of ionic compounds on its surface and, in the case of porous materials such as paper and textiles, within its body. This can be measured by taking samples...and using a...conductivity meter."

Textiles, particularly large hairy carpets, have things happening both at the surface and within the body of the textile. There can be accumulations akin to geological strata: gravy and canapés, underlaid with wine and essence of dog, Devonian sands or granite grit and limestone mud forming dunes in the weave in addition to the acidic conditions inside the yarns. Clearly the accuracy of readings that a paintings conservator can achieve with a micro conductivity meter can only get us so far with carpets. In addition, there may be risks of potential or actual dye run; some or all of the dyes in the piece may be loose or unstable to certain aqueous or other solutions, or to light. Previous repairs have to be considered, not only as potentially runny, so in need of testing along with the original dyes, but also in terms of how

they will affect the structural stability of the piece during cleaning.

Because of these different factors, I have developed varied approaches to testing. Where there are loose varns, it is possible to for test both the conductivity and pH of the whole piece and of individual dyed yarns. Samples are macerated and immersed in control water, then tested after 1-2 hours. Where the carpet is intact, removing yearns damaging, control water is passed through one



area, collected and tested. From this initial conductivity and pH testing, various solutions can be constructed to match the conditions of the piece.

I have noticed that historic carpets often have a particular smell and a low pH, often between 3.0 and 5.0. This could be attributed to years of coal smoke and other airborne pollutants. In addition, acidity produced by ageing wool, thought to cause deterioration of cellulose in the linen wefts, can cause small splits that grow into broken areas leaving the woollen warp and knots intact but loose and going into holes. Tests comparing the sorption rates of sulphur dioxide (SO₂) of wool with other fibres have showed that wool absorbed SO₂ steadily in low amounts over a long period of time. Sulphur dioxide (from car fumes, for instance) when mixed with water (humidity) turns to sulphuric acid, causing acid hydrolysis to break down the polysaccharides of cellulosic, starchy, or hemicellulosic materials to simple sugars. This would seem to indicate that where wool carpets have linen warps or wefts, over time and in damp conditions such as in British historic houses, sulphuric acid will have formed and contributed to the breakdown of the cellulosic fibres.

For instance, in the 1757 hand-knotted Axminster carpet from the drawing room at Dumfries House Ayrshire, Scotland, the smell suggested an acidic condition caused by breakdown of the wool; the exposure of the cellulosic linen warps indicated the necessity of cleaning. Several samples were colour tested with Dehypon® and ROW (Reverse Osmosis Water). Brown dyed samples showed colour run on blotting paper with swabs. DT (Devon Tap Water) tests were then set up.

	Quantity	рН	Conductivity
ROW	2.5 ml	5.4	15
DT	2.5 ml	7.4	103

The carpet was setup to test for actual pH and Conductivity as well as for colour run, using DT.

	рН	Conductivity
Blue	5.8	115
Black	5.8	104
Brown (Dark Khaki)	5.6	114
Dark Brown	4.6	110
Light Brown (2 nd dyeing DB?)	4.8	88
Red	5.0	85
Yellow	5.2	113
Dark Brown from rotten area	5.0	116
Dark Brown from Split	5.2	76

Wash solution included Dehypon LS45 at 0.5g per litre of stock solution.

Colour testing results

Because of the dye run testing with Dehypon and ROW, it was decided to test with two higher pH solutions: -

	рН	Conductivity	
SA05 (& with	6.0	78	Sodium Acetate @ 0.5g per litre
Dehypon®)			stock
SAL2 (& with	7.9	115	Sodium Acetate @ 0.5g per litre
Dehypon®)			Sodium Chloride @ 0.0025g per
			litre Acetic Acid @ 0.0004% stock
DT/DT & Dehypon®	7.4	103	

The tests were checked and showed no run with DT and Dehypon®. The object had to be washed in three sections, and it was intended that the same procedures were repeated at each section.

The conductivity and pH of the cleaning solution were 110 and 7.2 respectively (using non-ionic detergents ensures that wash and rinse solutions have the same readings). At the end of cleaning the first section, the conductivity was down from a high point of 2470 to 103 but after the carpet was dry it was still looking slightly dull and the pH was lower than desired at 4.5. This might have been due to the inhibition of the water flow beneath the carpet laid flat, pile down, on the wash bath floor. The areas that had been stabilised for cleaning with netting showed signs of brown colouration, as did blotting paper tests. Since the pH was lower than desired (4.5 rather than around 5-7) and the appearance of the carpet was still dull, the pH tests were rechecked. Although the electronic pH meter turned out to need recalibrating, it was decided that the concentration of detergent was insufficient. It was decided to double the detergency concentration for the second and third sections. Because of this, the second and third sections had final readings of 103/5.2 and 88/5.5 for conductivity and pH respectively.

This case study introduces the issue of detergency and critical micelle concentration (CMC). I believe that excessive concentrations of detergent can be harmful to the piece, and whereas CMC (the point at which optimum cleaning efficiency is achieved) is required in commercial laundry cleaning, it is not always desirable in historic textiles. You only need to look at some of the electron micrographs prepared by Dr Bill Cooke at UMIST to see the drastic changes wrought by strong detergent solutions. However, I put my hand up to having used too weak a detergent solution initially with the Dumfries carpet, which necessitated mid-clean alterations to the concentration of detergent used. In my opinion the current optimum wash strength for tank immersion cleaning is at 0.3g detergent per litre of water. With wet extraction (hand held wet vacuum extraction and spray applied solution), it is possible to reduce this further due to the mechanical action of suction pressure as an additional cleaning factor. I am always aware of the desirability of proper rinsing, and the stronger the detergent solution, the harder it is to rinse out residues satisfactorily.

Colleagues have argued that fluctuations in conductivity and pH during the cleaning, and the disparities within the uncleaned piece itself, make periodic testing a fairly pointless exercise, since no accurate measurements are possible. I





disagree, since periodic testing not only provides 'snapshots' of the condition of the piece for the record, but also allows a picture to develop of the effectiveness of the cleaning – or not. By a process of 'progressive approximation' it is possible to move towards the desired resting conductivity and pH.

It is also possible to reduce dye run by matching conductivity and pH of the cleaning solution, wash or rinse, to problem dyes in the carpet. Since there are parameters with both conductivity and pH that I try to observe, this means that some pieces cannot be safely wet-cleaned, but it is surprising how many can be, even if full immersion cleaning is rejected in favour of partial wet extraction cleaning. The Waterloo Chamber Agra carpet at Windsor Castle has a blue dye in the design of the border, which turns out to be Saxe Blue. This dye showed unacceptable migration during testing and the piece was therefore only wet cleaned in the field and dry cleaned in the borders.

In addition to wet extraction cleaning, I have developed further methods utilising a combination of mechanical action and detergency to effect cleaning. I designed a structure that would enable effective cleaning

of an Aubusson carpet from Harewood. These carpets often do not lend themselves to immersion cleaning due to dye problems and have a tendency to 'tramline' with wet extraction cleaning, where certain areas of the weave retain more residues than others. The model of the stamp pad suggested itself, where the amount of liquid coming onto the adhesive coating of the stamp can be controlled by the pressure applied to the waterlogged sponge pad. I came up with a bath structure in which sponge pads were placed in the bath section, a measured amount of solution was poured on and rolled in, and then the section had solution drawn through by suction with a water extraction vacuum through a net; the purpose of the net being to hold fast any loose or fragile areas undergoing suction pressure. The monitoring procedures of conductivity and pH were observed throughout.

In conclusion, after five years of working with conductivity and pH monitoring, I would argue that this is probably the single most useful tool at my disposal in planning and executing appropriate methods for treating historic carpets. In finding out the environmental conductivity and pH to which an object has stabilised, I know how I aim to leave the carpet at the end of cleaning. By continual monitoring, I cannot only record the changes that are happening during the cleaning process, but adjust the methods to produce the desired result, and address the problem of acidity in carpets with a cellulosic, or partly cellulosic structure. It is also clear that much greater control can be exercised in dealing with problem dyes, enabling a more informed decision to be made as to what solution to construct or whether to wet clean at all.



Jonathan Tetley is the cleaning works manager of The Tetley Workshop (http://www.tetleyworkshop.co.uk/), the successor to the Carpet Conservation Workshop. From 1996 to the present day, Jonathan has undertaken carpet and textile conservation, office administration, conservation cleaning treatments and project managing large carpet treatments. From 1985 to 1996, he was a director of The Carpet Conservation Workshop Ltd. From 1981 to 1985, he undertook trade restoration of carpets and rugs. Before this, he worked as a freelance graphic designer and illustrator. This followed a course in Graphic Design and Illustration at Bristol Polytechnic Faculty of Art and Design, now part of the University of the West of England (UWE).

Reviews

Conservation Publications – IIC member's reviews of international periodicals: New Zealand/ Aotearoa

Following on from the first review published in the December issue of NiC (Elitza Tsvetkova, Bulgaria), we have now a review on journals and various other publications from New Zealand. Submitted by IIC member Heike Winkelbauer from the Auckland War Memorial Museum, these publications are both in English and in Te Reo Māori.

While New Zealand is a bilingual country, conservation related subjects are published in the first language, English. There are however bilingual publications and journals written in Te Reo Māori covering topics focussing on New Zealand indigenous knowledge and development, Māori material culture, Māori history as well as language developments.

Mana Magazine has for example published an article about a wananga (workshop) held by conservators and the University of Otago in conjunction with Ngāi Tahu (Māori iwi whose traditional lands incorporate much of the South Island of New Zealand) to share knowledge about the care of collections and to assist in the display and storage of Māori taonga (artefacts/treasures).

While there are no conservation publications in New Zealand, conservators do see the need for publications that focus on local artists and local issues and use local publications and online resources for dissemination. Results of technical examinations of artworks have been published by conservators in art history magazines such as the Journal of New Zealand Art History but should be utilised more often.

Studies in Conservation has its place as a scientific journal, but it is important to have ICON and the JAIC as well, which cover other topics of great interest and relevance to conservation.

Conservation is not purely a scientific discipline and it is important that there are forums for discussion about technical art history, ethics, philosophy, treatments and so on. It is good that Studies in Conservation now includes *Reviews in Conservation*, which are extremely useful.

To raise awareness about research and developments initiated by New Zealand conservators, publications in foreign journals and magazines are of great importance. Ethical and philosophical discussions need to be published not only in New Zealand, but also overseas as large collections of New Zealand heritage are held outside the country. This will encourage greater international co-operation and collaboration in the preservation of New Zealand heritage (tangible and intangible). Greater emphasis should be given to the inclusion of source communities in looking after, and having access to collections to study and pass on traditional arts and crafts, but also enriching contemporary developments in New Zealand.

Following is a collection of resources available in both print and digital format:

New Zealand Conservators of Cultural Materials (NZCCM)

This is an online newsletter to share information about work undertaken by the NZCCM and their members at work places and communities. This Newsletter is available to members only. To see the website please visit: http://nzccm.org.nz/

Historic Places Trust

The New Zealand Historic Places Trust (NZHPT) is a crown entity, New Zealand's leading national historic heritage agency and guardian of Aotearoa New Zealand's national heritage. Their publications can bee seen at: http://www.historic.org.nz/Publications/RegNewsletters.aspx



Atlas of plant material & fibres from New Zealand and the Pacific

This free-to-use database can assist employees and volunteers in cultural institutions to identify plant materials used in artefacts. Positive identification provides information on historical use, and allows for the targeting of appropriate conservation treatments, which may vary among plant species. The database includes indigenous, common and botanical names, images of plants, scanning electron microscopy images of plant leaf/material surfaces and optical microscopy images of plant leaf/material cross-sections.

http://www.otago.ac.nz/appliedsciences/clte/research/otago037060.html

http://tepapa.govt.nz/ResearchAtTePapa/Pages/collectionsandresearch.aspx

Costume and Textile Association of New Zealand

The Association was established as The New Zealand Costume & Textile Section of the Auckland Museum Institute in 2002 as a national organisation to provide a forum for the study, research and conservation of costume and textiles. http://www.costumeandtextile.co.nz/

Journal of New Zealand Art History

The Journal of New Zealand Art History, originally called The Bulletin of New Zealand Art History, dates back to 1972. Since 1989 it has been published annually by the Hocken Collections, University of Otago. The Journal of New Zealand Art History is dedicated to publishing a stimulating diversity of high-quality articles and reviews on all aspects of 'New Zealand art history'. This can include Māori and Māori-related themes, museology, photography, design and architecture are all embraced. The Journal draws on a variety of contributors, ranging from senior academics, graduate students, curators and conservators. The editors are willing to consider proposals from potential contributors so long as they relate to art from, of, or in New Zealand.

http://www.otago.ac.nz/historyarthistory/journal/index.html

Art New Zealand

Art New Zealand is the major visual arts journal in New Zealand. It was first published in 1975. It is essential reading and reference for those interested in New Zealand art. Conservation subjects (not science related) have been published in this journal. The journal is published quarterly

http://www.art-newzealand.com/main/previous121on.htm

Record and Bulletins of the Auckland Museum

Records of the Auckland Museum (formerly 'Records of the Auckland Institute and Museum'), contains results of original research on the Museum collections, and research by Museum staff in their particular subjects. Records of the Auckland Museum have been published annually since 1930 dealing mostly with zoology, archaeology, ethnology, and botany. The articles contain important accounts of archaeological excavations and ethnographic objects, and descriptions of nearly 700 new taxa (mostly new animal species and subspecies) – a major contribution to the documentation of New Zealand's biodiversity.

http://www.aucklandmuseum.com/235/museum-publications#Bulletins

The Bulletin is a vehicle for longer monographs, and issues appear occasionally. The subjects covered are natural and human history. Nineteen bulletins have been produced since 1941. Proposals for library exchange agreements should be addressed to the Librarian. The last *Bulletin of the Auckland Institute and Museum* was No. 17 (1996). From No. 18 (2000) the title was changed to *Bulletin of the Auckland Museum*, reflecting a change in name of the institution. http://www.aucklandmuseum.com/235/museum-publications#Records

Records of Te Papa

Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa is the successor to the Museum of New Zealand Records, the National Museum of New Zealand Records, and the Dominion Museum Records in Ethnology. It is peer reviewed, published annually, and collects together papers by Te Papa's curators, collection managers, and research associates on a range of topics, from archaeology to zoology. Tuhinga is published by Te Papa Press. Ordering current publications and back issues can be done by contacting Te Papa Press.

http://www.tepapa.govt.nz/researchattepapa/researchandmuseumpapers/Pages/overview.aspx



List of Māori Serials/ serials pertaining to Māori

Lifestyle magazines:

Mana Magazine http://www.manaonline.co.nz/

Tu Mai Magazine (E-journal) http://www.tumai.co.nz/pages/index3.html

Academic Journals:

Nga Pouhere Korero http://tepouherekorero.org.nz/?page_id=116

A collective of Māori colleagues interested in history, established in 1992 at an inaugural hui at Rongopai Marae near Gisborne, Aotearoa

MAI journal: a New Zealand Journal of Indigenous Scholarship (previously MAI Review)

http://www.review.mai.ac.nz/index.php/MR

MAI Journal publishes multidisciplinary peer-reviewed articles around indigenous knowledge and development in the context of Aotearoa.

Journals written in Te Reo Maori

Te Kotihitihi- Nga Tuhinga Reo Maori http://www.waikato.ac.nz/maori/kotihitihi.shtml

A new online academic journal published solely in te reo Māori. Topics range from language revitalisation, Māori history, tikanga and mātauranga Māori.

http://www.iiconservation.org/node/3506



Heike Winkelbauer received her Degree in Conservation of cultural materials from the University of Applied Sciences in Cologne, Germany. Before and during her studies Heike specialised in the conservation of cultural materials from the Pacific and consequently migrated to New Zealand in 2000. After several years of project work for institutions in New Zealand (Otago Museum, Museums of New Zealand Te Papa Tongarewa, Nelson Provincial Museum and Antarctic Heritage Trust) she now works as an organic conservator at Auckland War Memorial Museum, Tamaki Painga Hira.

Address: PO Box 92018, Auckland 1142, New Zealand.

Email: hwinkelbauer@aucklandmuseum.com

IIC News

IIC forms Media Working Group

Following the advancements and constant changes in the use of technologies and all the new possibilities afforded by the exploitation of new media, IIC has responded by creating a dedicated group that will deal with the management of the web, social media and forums. Co-ordinated by IIC Vice-President and Director of Communications Julian Bickersteth, and working closely with IIC Secretary General Jo Kirby Atkinson, and Executive Secretary Graham Voce, the team is also composed of:

- Athanasios Velios IIC Webmaster
- Heather Ravensberg Assistant to IIC web-master
- Eike Friedrich Assistant Webmaster
- Barbara Borghese Editor, News in Conservation and IIC web-site News
- Amber Kerr Allison Social Networking Editor
- Kate Stonor IIC Web Content Editor
- Sharra Grow Assistant Social Networking Editor
- Clare Finn IIC Enquiries Forum Co-ordinator

Working on a voluntary basis, the team will meet monthly via group calls to discuss their work and ways to communicate it to IIC membership; future developments as well as improvements to the existing operations will be the focus of the group's activities. If you have any queries, wish to contact any of the group members or offer your help and advice please write to news@iiconservation.org

IIC now on LinkedIn

IIC now has a dedicated page on the social networking site LinkedIn. The page can be viewed by clicking on the following link: http://www.linkedin.com/company/2834510?trk = NUS_CO-logo.

You can start following us by going to the company page and clicking on the 'follow' icon.

LinkedIn is the world's largest professional network on the Internet with a subscription pool that has reached 200 million members. New members continue to join LinkedIn at a rate of two per second. The site is available in a total of 19 languages. By Joining LinkedIn, IIC hopes to be able to reach new audiences and reinforce its position as the international organisations of reference for professionals in the fields of preservation, restoration and allied disciplines.

The IIC AGM - a snow-white event!

The IIC Annual General Meeting 2013 was held on Friday 18 January in London in the beautiful setting of the Institute of Materials, Minerals and Mining.

Although the event proved lively and interesting, the bad weather affected numbers, as some members were unable to join due to the snowstorm that caused flight cancellations and general transport mayhem in the UK.

After voting in favour of the event to go ahead, members listened to reports from the Council and voted for the election of a new President, Secretary General, Treasurer, Vice-Presidents and seven Ordinary Members of the Council.

NiC wishes IIC new President Sarah Staniforth all the best for her new position; *NiC* would also like to thank Jerry Podany for his amazing work during his tenure as IIC President – watch this space for an in-depth interview with Jerry about his work, IIC and his future projects!

More News

The J. Paul Getty Museum announces the return of a Head of Hades



Head of Hades, about 400 - 300 B.C., terracotta and polychromy

LOS ANGELES—The J. Paul Getty Museum outlined plans for the voluntarily restitution of a terracotta head to Italy. The fragment represents the god Hades and dates to about 400–300 B.C. The sculpture was acquired by the Getty Museum in 1985.

The decision to return the object was prompted by previously unknown information on the likely provenance of the sculpture suggesting that it was appropriate to return the object to Sicily. The research was conducted in collaboration with Sicilian researchers.

In a press release, the Getty Trust explained that the decision to transfer the sculpture was based on the discovery of four terracotta fragments found near Morgantina in Sicily, similar in style to the Getty head.

In 2011, Getty Museum curators initiated discussions with Sicilian colleagues on the possible relationship between the head and the fragments, subsequently working with the director of the Morgantina Archaeological Park to corroborate the identification.

These fragments indicate that the original location of the head was the site of a sanctuary of Demeter, clandestinely excavated in the late 1970s.

Timothy Potts, director of the J. Paul Getty Museum said: "The Getty greatly values its relationship with our Sicilian colleagues, which culminated in the 2010 Cultural Collaboration Agreement; this collaboration has brought significant opportunities for scholarly dialogue, joint conservation projects, and loans, most notably the 'Charioteer' from Mozia that is currently undergoing a thorough seismic conservation assessment and remounting in our conservation studios."

According to Enrico Caruso, director of the Parco Archeologico di Morgantina, "Close collaboration with the Getty's curators and conservators on the examination of the head has allowed us to give a name to the sanctuary shrine where several fragments of its curls of hair were found in 1978, as well as a name to the Getty's anonymous sculpture. It is Hades, God of the Underworld, the terracotta body of which is in the course of an extensive restoration in the Archaeological Museum in Aidone".

The head will be go on display in the Getty-organised travelling exhibition *Sicily: Art and Invention between Greece and Rome* and later be transferred to the Museo Archeologico in Aidone, Italy.

For more information please visit: http://www.getty.edu/

Source: The Getty Trust press release

http://www.iiconservation.org/node/3512

Interested in advertising with NiC? Want to hear what we can offer? Get in touch with us, write at news@liconservation.org

Five conservators awarded QEST scholarships

LONDON – The Queen Elizabeth Scholarship Trust (QEST) has awarded five scholars totalling to £26,000 (US\$41,000). The winners will therefore be able to continue their studies and progress their careers.

The winners of the scholarships are:

Mary French – Book Conservator Timothy Hughes – Clock Conservator and Restorer

Emma Nichols - Fine Art, Paper, Book & Archive Conservator

Lewis Robins-Grace - Conservator of Historic Objects and Buildings Sarai Vardi – Book Conservator

QEST was endowed by the Royal Warrant Holders Association to advance education in modern and traditional crafts and trades in the UK. Scholarships of up to £18,000 (US\$28,281) are open to men and women of all ages and are awarded twice a year.

Since 1991, the Trust has awarded £1,876,100 (US\$2,747,700) to 273 craftsmen and women aged between 17 and 50+ to develop their skills through study, training and work experience.

Winning a QEST Scholarship will ensure that talented people are able to embark upon the next stage of their education to ultimately help them in their career and for some, establish their own businesses. Some will attend college, others become apprentices and still others will learn from master craftsmen on a one-to-one basis.

The age range has been more pronounced than ever, with QEST being



Lewis Robins-Grace at work, toning-in a wooden sculpture

one of the few funding organisations to award grants to mature applicants – this year, six were in their forties with one being over the age of fifty. The awards will be celebrated in an event that will be held in London, UK in June 2013.

For more information about the Queen Elizabeth Scholarship Trust and to learn about eligibility criteria please visit: http://www.qest.org.uk/

Source: QEST

NHIG Trainees go behind the scenes at St Paul's Cathedral

LONDON – In October 2012, the 2nd year Heritage Blacksmith Bursary trainees, along with members of NHIG's training steering group, were given a rare insight into the ironwork at St Paul's Cathedral. On a fascinating and informative tour of the site the group was given access to areas normally not accessible to the general public.

The visit was organised by David James of the NHIG with Assistant Surveyor Suzi Pendlebury and was intended for the current recruits of the specialist training course set up by the NHIG as part of the Heritage Lottery Fund's (HLF) *Skills for the future programme* (*NiC* Issue 27, December 2011, pp.1-2).

On their visit the group benefitted from the expert knowledge of Surveyor, Oliver

©Chapters of St. Paul's Cathedral

West window, St. Paul's Cathedral

Source: NHIG Press Release

Caroe (Head of Collections), Simon Carter (Senior Conservator), Teresa Hardy and Architectural Archivist Catherine Angerson.

The visit included looking at some outstanding examples of modern work, by artist blacksmiths James Horrobin and Alan Evans, as well as appreciating some of the historic work, in particular the railings on Admiral Nelson's tomb and the Wren Chain. Also of great interest to the trainees were the Tijou gates and screens to the



Sacrarium screen, St. Paul's Cathedral

north and south of the Quire as they were able to make direct comparisons with Tijou's work at Hampton Court which they have been working on. They were all particularly impressed with the high quality of the repoussé work on the Tijou panel grilles and High Altar gates.

The visit concluded with a fascinating tour of the archives, which contain many original drawings, and a walk through the Model Aisle, where many objects are displayed, including another fine piece by Tijou. For more information on NHIG's activities please visit: www.nhig.org.uk http://www.iiconservation.org/node/3513

Bad vibrations - Cologne Cathedral affected by new train line

COLOGNE – Cologne Cathedral, one of Germany's most celebrated landmarks and a UNESCO World Heritage Site, is being threatened by a newly operational underground train line. Visitors to the cathedral have reported vibrations and noises raising concerns that it might suffer damage.

The cathedral is not new to such concerns having suffered heavy damage in 1960, as a result of construction work on an underground railway station adjacent to the Gothic masterpiece.

Church and city officials are now worried that the 1960's scenario could be repeated due to the new railway line, opened in December 2012, that is causing the cathedral to vibrate. "The effects can be felt, measured and heard," said the provost of the Cologne Cathedral, Norbert Feldhoff, in an interview with a local newspaper. In a statement posted on the church's website Feldhoff wrote that "it cannot be ruled out that the (vibrations) could cause long-term damage to the structure."

Following an emergency meeting called to discuss the problem, it was agreed that metro trains would travel 20 kilometres per hour instead of the planned 30 kilometres per hour through the tunnel section in question.



View of Cologne Cathedral

Seismographs have already been installed in the past for measuring vibrations in and around the church; additional tests are scheduled for the coming weeks.

Construction of the cathedral began in 1248 and was only completed in 1880. It survived World War II largely unscathed, even though Cologne was virtually destroyed. It has been a UNESCO World Heritage Site since 1995.

For more information about the cathedral please visit: http://www.koelner-dom.de/index.php?id=19167&L=1 http://www.iiconservation.org/node/3514

Views+Opinions

Eventually, I got Viral!

by Antonino Cosentino

Some time ago IIC asked its social media followers to give feedback on open source tools available for conservators on the web. The feedback was immediate, informative and surprising. We were amazed at the amount of useful tools and references available and have decided to focus on some of the most commented upon by our followers.

Antonino Cosentino is a conservation scientist turned blogger who uses his platform to provide tutorials on methods for art examination and documentation, focussing specifically on innovative low-budget scientific solutions; this is his account of how and why he went "viral".

Although I was among the first to sign up after reading about it on a computer magazine, I'm totally new to Facebook, I actually just kept my account following my girlfriend's advice. As I do with any other social network, I like to see how it works. Unfortunately I lost interest pretty soon and got bored, leaving the account dormant for years. Why I'm talking about Facebook? I'm a blogger, pretty new to this world; I've always liked to have my own website, so I was researching available platforms including *HTML*, *Dreamweaver* and *CSS* but as an amateur I find it all very confusing so I turned to *Wordpress*, one of the many open-source, easy to use platforms for blogging. Their service made online publishing a very smooth operation. Initially I wasn't interested in blogs either - never having followed a particular one except occasionally when searching for "geeky" computer articles. But I was immediately attracted to the unfiltered way people interact on the platform and decided to give it a go.

In September 2012 I concluded my teaching in New York (scientific art examination), and I returned back home to Italy to start up my own private practice in art diagnostics. Friends, colleagues and former students kept asking me for advice on technical issues such as buying new equipment, fixing old ones, finding educational resources. I was eager to help but realised that I had to be organised. I figured that the best way to avoid repetition and provide the help requested was to write down my answers and have a 'repository' to keep everything. Its title? *Cultural Heritage Science Open Source*.

The Internet has made our world so different from the past especially in respect to knowledge. Does that sound like a trite sentence? Consider how in the 1980s knowledge could be kept jealously by those who had it; for some it could be a source of income. Nowadays, knowledge is everywhere and slips through the hands of those who want to keep it for themselves. Perhaps I am over-dramatizing but I am sure many people will agree, mostly. Today, being a jealous custodian of one's knowledge is not enough to gain a competitive edge. You have to be creative, innovative and mingle with your colleagues to find competitive solutions. What is new and fancy today becomes, too soon, out-dated.

This is the scenario where blogging fits in. A good blogger is supposed to select and deliver valid and really useful content to his audience. Side effects of blogging are self-education and networking - you learn from anybody commenting on your posts! Blogging facilitates the connection between like-minded professionals and could lead to fruitful collaborations with people you really "click" with.

Cultural Heritage Open Source is a little experiment. Although I had completed my teaching appointment I wanted to keep discussing methods for art examination and documentation. The topic of this blog was inspired by talks with Yngve Magnusson, Head of Conservation at The Bergen Museum of Art, Norway. Yngve is an esteemed conservator with a huge international experience and a love for science. He showed me the necessities and the workflow of medium-small



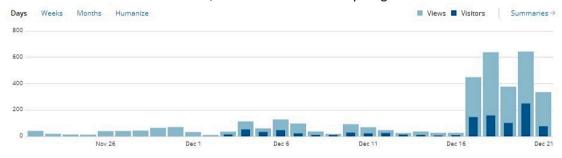
museums such as his institution.

Coming from an academic environment, I didn't have any insight into this world. My terms of reference were large institutions that I had been working with; these tended to have scientific departments and large budgets for cutting-edge technologies. But, aside from the Getty in Los Angeles, the Metropolitan Museum in News York, the National Gallery in London and other similar institutions, what access do other museums have to scientific and technological innovation? It turned out that access is very limited. Our discussions inspired me to focus my efforts into innovative yet budget-friendly solutions in order to have a REAL impact in art conservation and examination practices in smaller institutions. I need to thank the museum's Director, Erlend Høyersten and the curator, Line Daatland, for believing in my projects and finding the money to enable me to work on their amazing collection of Edvard Munch and J.C Dahl.

This blog was targeted at medium-small museums when couldn't afford a full time scientist on their payroll; this often left science out of reach or pursued by dedicated conservators trying to do their best to update their knowledge of new technology.

There is another issue - publications dealing with cultural heritage science are almost exclusively targeted at scientists. While in other popular disciplines - such as astronomy - there are plenty of websites, blogs, and online resources for both professionals and amateurs, this is not the case for cultural heritage science. There is a strong need for scientific publication to target a wider audience as demonstrated by the questions I keep receiving from conservators, art historians and curators about technical instruments and their applications. Moreover, smaller institutions strongly believe that scientific insight into their collections will benefit the overall appreciation by the communities they serve.



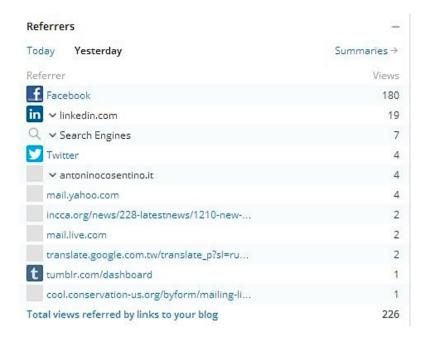


Before December 17th 2012, the number of visits to the blog was consistently stagnant. I was contacted by professionals who were already interested in multispectral imaging and were browsing the web with related keywords. On Dec 17th, the blog was publicised on the ever-popular *Conservation DistList* and the number of visits took off. At this point the blog was still mainly visited by colleagues reading the *Conservation DistList*. The Blog become "viral" when people started to *LIKE It* on Facebook thus generating a 'word-of-mouth effect' giving access to a much greater number of networks. The statistical data on December 20th shows that even on the day the Maya famously predicted the end of the world, people were sharing their knowledge making a science blog one of the most popular out there.

My role is essentially limited to editing papers written in the '80s and '90s using a modern and accessible language, adding links and many, many videos. I refer for example to the posts on microscopy. I read the decades-old McCrone's papers on microscopy for art and gave them a 'new dress'.

There aren't many opportunities to stimulate interaction between conservation science research centres and conservators from medium-small institutions, in order to improve everyday practices with scientific innovation. There seems to be reluctance from traditional peer-reviewed journals to focus on innovation obtained from modestly priced technology. Indeed I have yet to come across a paper on the examination and documentation of a work of art using a USB microscope (priced at US\$100/£62 on *ebay* at the time of writing). But when I posted on the blog on the use of such USB microscope the message got viral and I was excited to receive such positive feedback from readers. In the past I wrote papers on complex technologies and impressive science but I cannot help wondering what is ultimately having more impact on understanding and conserving cultural heritage. Blogging about a mere \$100 USB microscope made me realise that I made a great number of professionals happy, right away!





Blogging is cost-effective. I made more valuable connections in the past two months writing online than I have by going to a number of congresses while a PhD student. I connected with proactive professionals working in the field across the world and we figured out collaboration projects, all through the Internet. Cost-effectiveness in time of economic restraint is a must; it is important to improve productivity, especially in our industry, which is perennially underfunded. Money, time and productivity matter now more than ever.

Don't get me wrong, I strongly believe in the need for public funds for research, but that money should be spent wisely. New communication technologies allowing for information-sharing should become the norm and affordable budget technical solutions should be encouraged.

I am acutely aware that part of the success of this blog relies on the fascinating mix of art and science. Most of the inspiration to create and maintain this platform came from my students at the Pratt Institute in New York. Reading some of the student's evaluations of the course, from the most detailed ones to the simple "the use of equipment is cool" proved very inspiring.

http://www.iiconservation.org/node/3515



Antonino Cosentino is a PhD Physicist specialising in Cultural Heritage Science. His goal is to promote innovative and affordable solutions for Scientific Documentation and Examination of Art. He is currently working at his private practice providing scientific support as well as training and consultancy to public and private institutions as well as collectors and other interested parties. Dr. Cosentino taught "Scientific Methods for Art Investigation" both in Italy and recently at the Pratt Institute in New York, USA. He has carried out scientific examinations of important works by artists ranging from Caravaggio to Andy Warhol and Edvard Munch both privately and on behalf of a variety of museums including the European Mobile LABoratory for Art investigation (MOLAB) and as A.W. Mellon Fellow in Conservation Science at New York's Metropolitan Museum of Art. For the University of California San Diego, USA he served as an expert on neutron and spectroscopic techniques, and in

particular Raman spectroscopy, for the project "Searching Leonardo's Battle of Anghiari."

What's on + NiC's List

Call for papers

ASOR 2013 - Conservation and Site Preservation in the Near East

20-23 November, 2013
Baltimore, MD, USA
Interested speakers should submit a talk title and abstract
(maximum 250 words) by February 15, 2013 via

which can be found at:

http://www.asor.org/am/2013/2013-call-2.shtml>

ASOR's online abstract submission system, a link to

"From Microorganisms to Mega-organisms" - Book and Paper Conservation: Horn II

23-25 April, 2014 Horn, Austria

Authors are kindly invited to submit papers preferably abstracts of about 2 pages in a 12-point font. All paper submissions will be handled electronically.

Email abstracts to:

Prof. Dr. Jedert Vodopivec at:

jedert.vodopivec@gov.si

Dr. Georgios Boudalis at: geoboudalis@gmail.com
The deadline for submissions is 31 April 2013

Conserving Outdoor Painted Sculptures

4-5 June, 2013

Kröller-Müller Museum, Netherland
If you would like to give a presentation at this
meeting, please send an abstract of 250 words
maximum to: lydia.beerkens@planet.nl by March 1,
2013

Further details of the meeting will be forthcoming, but for now: please save the date. Please note, a reduction in registration fee will be offered to all ICOM-CC members

A comprehensive list of events taking place around the world, in and around the field of conservation. Write at news@iiconservation.org if you wish to add your event

CO-MA 2013 Safeguarding Image Collections

31 October, 2013

Royal Institute for Cultural Heritage (KIK-IRPA), Brussels, Belgium

Proposals for papers should be sent to: Hilke Arijs, Royal Institute for Cultural Heritage (KIK-IRPA), 1, Parc du Cinquantenaire, 1000 Brussels, Belgium, or by e-mail to hilke.arijs@kikirpa.be by 31 March 2013. All applicants will be informed about the status of their application by 15 July 2013.

For more information on this event please visit the website at:

http://org.kikirpa.be/coma2013/index.html

Conferences/Seminars

Conserving Modernity: the Articulation of Innovation 9th North American Textile Conservation Conference

12-15 November, 2013

de Young Museum, San Francisco, California, USA For more information about this event please contact: NATCC@natcconference.com

Conference on the Protection of Cultural Property in Asia

15-18 February 2013

National Convention Centre, Thimphu, Buthan For more information about this event please visit the website: http://www.mohca.gov.bt/conference/

Flood Protection and Heritage Conservation on Rivers and Streams: Integrating Competing Interests in Urban Development

22-23 March, 2013

Technische Universität Dresden, Dresden, Germany For further information about this event and to register please visit:

flood-heritage-2013.arch.tu-dresden.de



Tourism and the Shifting Values of Cultural Heritage: Visiting Pasts, Developing Futures

05-09 April, 2013

Taipei, Taiwan, Republic of China

For further information about this event and to register please contact:

ironbridge@contacts.bham.ac.uk

Society for American Archaeology (SAA) 78th Annual Meeting

3-7 April, 2013

Honolulu, Hawaii, USA

For further information about this event and to

register please visit:

www.saa.org/aboutthesociety/annualmeeting/tabi d/138/default.aspx

ICONConference : Positive Futures in an Uncertain World

10-12 April, 2013

University of Glasgow, Glasgow, UK

For further information about this event and to

register please visit:

icon.org.uk/index.php?option=com_content&view=

article&id=1794:icon-conference-2013-get-

involved&catid=1:news-desk&Itemid=15

arichmond@icon.org.uk

Heritage Science and Sustainable Development for the Preservation of Art and Cultural Assets: On the Way to the Green Museum

11-12 April, 2013

Berlin, Germany

For further information about this event and to

register please visit:

www.smb.museum/rf

s.tesche@smb.spk-berlin.de

MW2013: Museums and the Web 2013

17-20 April, 2013

Portland, Oregon, USA

For further information about this event and to

register please visit:

mw2013.museumsandtheweb.com

info@museumsandtheweb.com

ICOM-CC Working Group: Graphic Documents:

Paper Conservation : decisions and

compromises

17-19 April, 2013

Vienna, Austria

For further information about this event and to

register please visit:

www.onb.ac.at/ev/about/ifr/21166.htm

16th Annual US/ICOMOS International Symposium: The Historic Center and the Next City: Envisioning Urban Heritage Evolution

02-04 May, 2013

Savannah College of Art and Design, Savannah, Georgia, USA

For further information about this event and to register please visit:

www.usicomos.org/symposium

Conservation in the Nineteenth Century (CiNC)

13-16 May, 2013

Copenhagen, Denmark

For further information about this event and to

register please visit:

www.natmus.dk/CiNC

CiNC@natmus.dk

Courses/Workshops

Users' Group for Mass Spectrometry and Chromatography (MaSC) - Sixth Workshop and Meeting

3-7 June, 2013

University of Pisa, Pisa, Italy

For further information and to book a space please

visit: www.mascgroup.org

15th SFIIC Study Day - Outdoor Metal Sculpture from 1800 to 1940: Identification and conservation-restoration

30 March, 2013-02-04 Paris, France

For further information about this event visit the

website: www.sfiic.fr

Or send an email to: sfiic@free.fr

SOIMA 2013 Course Announcement

23 September – 16 October, 2013

Application forms can be downloaded from:

http://www.iccrom.org/eng/01train_en/forms_en/
2013 SOIMA applfrm en.doc

Completed applications should be sent no later that 1

March 2013 to: Soima2013@iccrom.org

For more information about these conferences and courses see the IIC website: www.iiconservation.org