



ILLUMINATING THE NEW

CONTEMPORARY PRACTICE AND ISSUES
IN MATERIALS CONSERVATION

2015 AICCM NATIONAL CONFERENCE

4-6 NOVEMBER 2015 • BAHA'I CENTRE • HOBART

EDITORIAL

ABSTRACTS: LIGHTNING TALKS

ABSTRACTS: PAPERS

ABSTRACTS: POSTERS

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Welcome to the 2015 National Conference of the Australian Institute for the Conservation of Cultural Materials (AICCM) at the Baha'i Centre in Hobart from the 4th to the 6th of November.

The last time that the Tasmanian Division of the AICCM hosted the national conference was in 1990 in Launceston. We are a very small division and so the prospect of organising such an event can be very daunting. The task is now completed, thanks to the wonderful drive and co-ordination of Michelle Berry and the support of the Victorian Division of the AICCM.

The theme of the 2015 national conference "Illuminating the new: contemporary practice and issues in materials conservation" has been chosen to respect the UNESCO International Year of Light and Light-based Technologies. The Year of Light is a timely recognition of the challenges facing conservators with conference speakers addressing this theme in a variety of ways.

Our keynote speaker is Professor Sarah Kenderdine, the Deputy Director of the National Institute for Experimental Arts at the University of New South Wales. As the Director of the iGLAM Lab (Laboratory for Innovation in Galleries, Libraries, Archives and Museums), she researches at the forefront of interactive and immersive experiences for museums and galleries.

Galleries and museums are collecting an increasing number of time-based media and live art works, presenting challenging technological and ethical conservation issues. Conservation processes are utilising current technologies in new and innovative ways from GoPro video cameras for condition reporting and documentation to digitising and 3D scanning technologies for loss compensation. Conservators are finding new ways to work with the sometimes transient, substandard and hazardous artefacts of the 20th century. Advanced analytical techniques are enlightening our understanding of artist materials in new ways and being applied to large groups of materials. Surprising collaborations are achieving remarkable results and contributions from conservation managers throw a spotlight on future directions for our profession, deconstructing previous assumptions that will no longer serve us in the 21st century.

This conference encompasses new technologies and the futuristic challenges for the conservation profession.

Included on this USB flash drive are the program and abstracts for the papers, lightning talks and posters presented at the conference. Presenters are encouraged to consider re-working their presentations and submitting them as papers to our peer reviewed journal The AICCM Bulletin (please see guide to authors on website at <https://aiccm.org.au/aiccm-publications/bulletins>). The AICCM Bulletin is published twice a year in partnership with Routledge, Taylor and Francis.

We are indebted to all the presenters for their contributions and we would like to thank our sponsors:

Museums Australia
The Tasmanian Museum and Art Gallery
The Tasmanian Archive and Heritage Office (LINC Tasmania)

Special thanks to the conference organising committee, particularly Michelle Berry and Amy Bartlett.

Stephanie McDonald
On behalf of the organising committee



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Notes on paper-pulp fill materials for the integration of surface decoration on moving substrates

Presenters: Rebecca Cvetanoski and Hanna Sandgren

Co-authors: Rebecca Cvetanoski¹ and Hanna Sandgren²

Affiliations: ^{1,2} Centre for Cultural Materials Conservation (CCMC), Australian Institute for the Conservation of Cultural Materials (AICCM)

In March 2015, two masters students from the Centre for Cultural Materials Conservation at the University of Melbourne undertook treatment of a contemporary bark painting by Garawan Wanambi, an artist from the Buku-Larrnggay Mulka Centre in Yirrkala, Northern Territory. The paint layer was comprised of natural ochre pigments bound with polyvinyl acetate (PVA) adhesive, and displayed quite extensive flaking, tenting and loss. The painting required stabilization treatments in the form of consolidation and infilling that would cater to the highly soluble and porous paint layer and adhere adequately to the movable cellulose-based substrate. The students developed a compatible fill material based on paper-pulp that was lightweight and flexible ideally echoing any future dimensional change in the bark. There is little published research regarding the use of paper-pulp fills outside of paper conservation, despite their popularity amongst practicing objects conservators. One explanation of the lack of research may be the imprecise methods of mixing such fills; the usual procedure gradually works up a paste by adding aqueous adhesive and optional additives to the pulp in proportions that suit the conservator's needs. The fill material created for use on Wanambi's painting was a combination of an acrylic emulsion (Plextol-B500), acid-free hardwood paper (blotter) pulp and Polyfilla® interior powder. This lightning talk will provide an introduction to various recipes. The treatment of Wanambi's painting will be used as a case study to demonstrate the effects that variations in materials, and relative proportions of the materials, might have on the properties of a custom paper-pulp fill.

Biography

Hanna Sandgren is currently undertaking a Master of Cultural Materials Conservation at the University of Melbourne. She has, thus far, specialised in the conservation of Indigenous cultural heritage. Earlier this year, she received a grant, alongside Rebecca Cvetanoski, to conduct in-situ treatment of two significant works from Kintore, Northern Territory.

Rebecca Cvetanoski is a current student at The University of Melbourne, undergoing the Masters of Cultural Material Conservation program. Originally from Canberra, she has an undergraduate degree in Visual Art from The Australian National University, where she focused on all aspects of modern and contemporary sculpture.

Wings of Desire: complex treatment on an historic vulture specimen

Presenter: Megan Dean-Jones

Affiliations: Australian Museum

The Australian Museum is currently undergoing a massive renewal program part of which is the development of a permanent Natural Science gallery. Hundreds of specimens have been selected from the vast collections for this gallery entitled 'Wild Planet' including both modern and historic taxidermy mounts. Falling victim to the vagaries of popular taste, many of the Museum's historic exotic specimen collections have been both out of sight and out of mind for decades. Accordingly, many unique specimens have sustained major damage while simultaneously missing out on modern conservation care.

This talk will focus of the treatment of one specimen selected for the new gallery which is an historic taxidermy mount of a White-rumped Vulture. The specimen's most visually distracting problem was that the left wing had been eaten away down to the bone from an old pest infestation. The challenge was to make it appear whole. This kind of work having today become the responsibility of materials conservators rather than taxidermists means that the treatment approach needs to fit with modern conservation ethics and techniques. Ideally, treatments should be sympathetic, non-invasive and to the greatest extent possible, reversible. Possessing many of these desirable properties, I selected a Japanese tissue and starch paste pulp treatment. Using a template replicating the intact wing, I created a mirror-image scaffold of tissue to support the pulp. I built the wing up over a series of days until I achieved the desired shape. I then painted the feather pattern onto the surface to resemble the model wing.

Specifically, this treatment outcome was very successful. But more broadly, this large scale preparation of such a wide range of Natural Science collection material has allowed Conservation staff the opportunity to showcase contemporary, sympathetic and hopefully reversible treatment methods on old specimens that would not have received conservation attention in the past.

Biography

Megan Dean-Jones has worked in Conservation for the Australian Museum and in other cultural institutions for over ten years. Megan works across the Museum's collections, having expertise in providing solutions to complex storage problems. Recently Megan has become involved with natural science Conservation programs, working closely on the Wild Planet project.

Bad medicine: pharmaceuticals in historical collections

Presenter: Helen Privett

Affiliations: Museum Victoria

Museum Victoria has recently undertaken a review of pharmaceuticals and other scheduled poisons in the Humanities Collection. The collection is extensive, dating from the 1850s to today and includes a diverse array of products from pharmaceuticals to cosmetics, from pesticides through to industrial chemicals. This project has led to improved documentation, storage and understanding of the legal implications and requirements for storage, handling, display, security and management of these materials. This lightning talk will introduce this project and the Poisons Schedule to the audience, with specific reference to legislation and licensing in Victoria.

Biography

Helen Privett is Manager, Conservation at Museum Victoria. Helen graduated from University of Canberra in 1998 and since that time has worked in a number of roles at National Gallery of Victoria and Museum Victoria. Helen's recent focus has been on managing hazardous substances in collections, plastics and digitisation.

Dirty bones: surface cleaning medium to large natural science skeletal specimens

Presenter: Sheldon Teare, Natural Sciences Conservator

Affiliations: Australian Museum

Articulated skeletal material is not a widely covered topic in conservation and I know that not many Conservators are faced with cleaning whole skeletons. Most Conservators find bone as parts of decorative or cultural objects, such as inlays or small carvings, which require a different approach. Less frequently, Conservators are asked to work with articulated skeletons or partially articulated skeletons. As Natural Science Conservator at the Australian Museum I often have skeletal material to work on. There are many factors that can influence the conservation approach chosen, such as the method in which the skeleton was initially prepared. Certain conditions during maceration or other preparation methods can leave the bones embrittled. Fat deposited within the bones, if not removed thoroughly, can lead to oozing and the build-up of lipids on the surface of the bones. This can greatly impact on its overall condition in the future. The type of soiling is also a major factor. For example, is it well adhered to the surface or easily dislodged through dry brushing?

I have found that there are a number of aqueous methods to choose from when cleaning bones and have used many of them. Obviously some work better in certain situations than others. Through recent treatments of medium to large articulated skeletons, one conservation method stands out to me. When working with fairly robust bones, an aqueous solution of ethanol and water applied with both a toothbrush and latex sponge works quickly and effectively to remove heavy deposits of black greasy dust. The skeletal specimens suited to this type of treatment are medium to large robust natural science specimens, such as marine mammals and large mammals.

Methods for cleaning lipids from bones, such as whales, are not covered in this talk due to time constraints.

Biography

Sheldon Teare is Natural Sciences Conservator at the Australian Museum. Sheldon works across all the Natural Sciences collections, providing conservation advice and expertise regarding the long-term preservation of these collections. Sheldon specializes in carrying out complex treatments of historical Natural Science specimens. Currently Sheldon serves as President of NSW AICCM division.



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Glittering geodes and pickled parasites: improving conservation through the reinvention of identity, roles and values, and student involvement at the University of Canberra

Presenter: Hakim Abdul Rahim

Affiliations: University of Canberra

University museum and collections occupy a special place in museums and heritage. These museums and collections hold a significant part of Australia's natural and cultural heritage but its care and conservation have been declining in recent years due to the change of direction and restructuring occurring in the university sector. These issues include changing roles and use of collections, deaccessioning or destruction, lack of resources and formation of a strong identity (Australian Vice-Chancellors' Committee 1996, Yerbury, 2001). Solutions to these issues often take a top down approach with recommendations aimed at executives and management personnel. The unique position of these museums and collections in universities also poses a set of challenges and issue in its proper care and conservation.

At the University of Canberra, a grassroots effort is taking place where heritage and conservations students, working together with the custodians of the museums and collections formed the UC Collections Group where students are involved in the care, engagement and conservation of the university's material heritage. Traditional roles and use of university museums and collections have been renewed and revived through the work of students in bringing together these museums and collections to strengthen the university's history and heritage. This paper will explore three key issues. Firstly the preservation and care of university museums and collections and how these museums and collections are re-engaged to strengthen university identity and heritage. Secondly it will explore the use of university museums and collections to teach heritage conservation and collection management. Lastly it will highlight the need for further research into the care and conservation of university museums and collections, and this grassroots effort can achieve a dual purpose of preserving tertiary educational heritage and satisfying the need for real life experience for student conservators.

References

- Australian Vice-Chancellors' Committee. University Museums Review Committee 1996, *Cinderella collections: university museums & collections in Australia: the report of the University Museums Review Committee*, Australian Vice-Chancellor's Committee, Canberra.
- Yerbury D., 2001, "The Cinderella Collections: An Australian Fairy Story", in *Managing University Museums*, OECD, Paris, pp 55-67.

Biography

Hakim wears many cardigans. He is a horticulturist, curator, crafter, heritage enthusiast, emerging conservator, a lifelong learner (still a student) and occasionally a general nuisance. His interest lies in the natural sciences and their collections, youth engagement in heritage, university museums and collections, and crocheting.

Emerging from the fog: investigating the problem of 'fogging' display case glass

Presenter: Lisa Addison

Co-authors: Lisa Addison¹ and Donna Hinton²

Affiliations: ¹ National Gallery of Australia
² Art Gallery of New South Wales

This paper addresses issues surrounding the problem of 'fogging' glass in showcases. 'Fogging' is generally seen as an overall white bloom on the internal face of enclosed glass showcases. It may also be present in the form of white spots, a mottled appearance, or may even appear as a ghosting outline of writing or materials previously in contact with the glass. In some situations, crystalline deposits have been observed with the bloom or adjacent to silicone sealant. Initially the fogging was considered a cleaning problem for installation staff to deal with, but it has become obvious that this is a reoccurring issue, and is more sinister than first imagined.

A collaboration has formed between the National Gallery of Australia, Art Gallery of NSW and University of Technology, Sydney to investigate the cause of the fogging glass and to find a way to remove the problem permanently. We are concerned that the same factors affecting the glass may be damaging the artworks displayed in the cases.

So far, we have shared literature searches, tested the air quality inside showcases using Draeger testing kits and passive samplers taken samples of the different forms of fogging and crystalline deposits, examined them microscopically and analysed using FTIR and GCMS. We have also carried out practical cleaning tests to find non-toxic and effective ways to clean the glass. Further work underway includes obtaining samples of all materials included in the affected display cases to test their reactivity, and investigating the influence of environmental factors such as light, heat and high relative humidity.

At the conference we will present the work we've done to date and share our discoveries. We will also be seeking others interested in joining us in finding solutions. As many display cases have been custom built in museum spaces, retrofitting them with stable materials appears to be a more practical approach than to replace existing display cases altogether.

Turn it on: conserving works of art with electrical components at the National Gallery of Australia

Presenter: Kasi Albert

Affiliations: National Gallery of Australia

Many contemporary works of art utilise elements which are powered by electricity. These may include light components, motorised parts, or sound producing devices. Parts may have been produced commercially, partially altered or made entirely by the artist. The electrical components are usually connected intrinsically with the meaning of the art and, in most cases, it is necessary for them to be in working order and in compliance with safety standards. Achieving this can be problematical for many reasons. To what extent is it acceptable to alter an artwork? Is deterioration or failure an inherent element that must be accepted? Can a work be displayed if it is not fully functional?

The National Gallery of Australia's (NGA) collection encompasses a variety of artworks with electrical components, from lamps in the Decorative Arts collection, to important works by Robert Rauschenberg and Edward Keinholz in the International Sculpture section.

Recently, a conservation survey was undertaken in order to identify as many of these works as possible and to assess their condition. As well as viewing works from a standard objects conservation perspective, the electrical functionality and safety of the works was evaluated through the application of some general electrical knowledge gained through testing and tagging certification, and with the assistance of a qualified electrician.

An important part of the project was to develop and establish a system for documentation, maintenance and installation of these works. In many cases, electrical components were not fully recorded in curatorial cataloguing, as cords, wires and bulbs were seen as being somewhat 'auxiliary' to the artwork itself. Details of original performance were also rarely documented. Decisions regarding treatment, repair and alterations were naturally considered on a case-by-case basis, but on a whole were informed by the ethical considerations that generally surround the conservation of contemporary art. Some works were rewired or repaired, however many were simply documented and earmarked for future treatment. Finding a balance between conserving 'original' materials and maintaining the 'meaning' of the work will be key in this ongoing process.

Biography

Kasi Albert is an objects conservator at the National Gallery of Australia, Canberra. She has a special interest in the conservation of decorative arts and contemporary sculpture. She has completed a Masters in the Conservation of Cultural Materials, a Postgraduate Diploma in Restoration and Conservation Studies and a Bachelor of Arts.

A critical evaluation of the GoPro Hero4 Action Video Camera as a condition assessment tool for permanent exhibitions

Presenters: Sarah Babister and Danielle Measday

Co-authors: Sarah Babister and Danielle Measday

Affiliations: Museum Victoria

Wild: Amazing Animals in a Changing World is a permanent exhibit at the Melbourne Museum, showcasing biodiversity and environmental change through the display of more than 750 taxidermied animals from Museum Victoria's natural sciences collection. Installed in 2009, the award winning gallery presents numerous preservation challenges due to the large number of significant mounted specimens on open display, and its complex tiered design which limits access for regular cleaning, assessment and removal of specimens. In recent years, increased incidents of physical and pest related damage necessitated a comprehensive in-situ condition survey to obtain current and accurate data. As part of the assessment GoPro HD Hero4 Action Video Cameras were utilised to film and image capture specimens. The compact camera equipment can be mounted onto a variety of extensions, which allowed for previously inaccessible specimens and parts to be filmed and thoroughly assessed using a live feed on an iPad. This presentation will discuss the effectiveness of the GoPro camera as an assessment tool including what worked, what didn't and how it might help conservation care for objects on display.

Biography

Sarah Babister is an Objects Conservator in the Collection, Access and Exhibitions team at Museum Victoria. She graduated from the University of Melbourne with a Master of Arts (Cultural Materials Conservation) in 2009 specialising in Objects. She came to Museum Victoria in 2010 after previously working as a genealogist and as a Conservation Assistant in the Projects Laboratory at ArtLab where she worked on outdoor sculptures, monuments and buildings. Sarah has had a long term interest in exhibitions and indigenous collections.

Danielle Measday is the Conservator of Natural Sciences for Museum Victoria, in Melbourne Australia. Danielle's love of museum conservation began the first time she saw an X-Ray of a painting. She trained as an objects conservator at the University of Melbourne's Masters of Cultural Material Conservation program, and then stepped sideways into the sciences and never looked back. She works closely with collection managers, curators and researchers across the zoology, palaeontology and geosciences fields to find solutions to facilitate access to the collections, and preserve them for the future.

Marrickville's winged victory: an unusual war memorial story

Presenter: Julian Bickersteth

Co-authors: Karina Acton

Affiliations: International Conservation Services

The Marrickville Soldiers' Memorial was unveiled in 1919 by Sir Walter Davidson, Governor of NSW, before 15,000 people. The Memorial honoured the 458 local soldiers, from the suburbs of Marrickville, Dulwich Hill and Enmore, who died during World War I. The monument for the top of the Memorial was created by local artist and sculptor Gilbert Doble. Doble created a hollow Winged Victory sculpture, formed from thin copper alloy sheeting, which created a dominant artwork within the tight constraints of the Memorial Fund's budget. The instability of the resulting artwork became apparent as early as 1927. Within 40 years, the condition of the sculpture had deteriorated so badly that it was taken down in 1962. Despite being returned to the Memorial in 1988 following restoration work, the continued instability of the Winged Victory sculpture saw its removal a second time in 2008.

Additional options for restoring and reinstalling the statue were unsuccessful and in July 2013, Marrickville Council voted to commission a new sculpture for the Memorial. Marrickville Council also endorsed the transfer of ownership of Doble's original Winged Victory to the Australian War Memorial. In order to be displayed the work involved separation of the sculpture into two and the restoration of the original form and colour of the upper half, which has now become the focal point of the Memorial's new First World War Galleries, opened in 2014.

Meanwhile "Winged Victory, 2015" was commissioned in cast bronze from Melbourne's Meridian Sculpture with lead artists Peter Corlett and Darien Pullen. It is an independent work that reflects the content of the original Doble sculpture within contemporary contexts of war remembrance. The new sculpture was installed on the Marrickville Soldiers Memorial on 15 April 2015.

ICS have been working with the Council since 2008 and the Australian War Memorial since 2014 on the sculpture, and this paper will discuss the many facets of this unusual project.

Biography

Julian is the Managing Director of ICS, a Professional member of AICCM, a Fellow of IIC, and Vice President and Director of Communications for IIC.

Karina Acton is Senior Objects Conservator at ICS and a Professional member of AICCM. Karina led the conservation work on Winged Victory.

Conservation in museums: where to from here?

Presenter: Julian Bickersteth

Co-authors: Fiona Tennant

Affiliations: International Conservation Services

2014 saw Australia hosting the ICOM CC conference for the second time, the first being in Sydney in 1987. The museum world has changed substantially in the intervening 27 years. Conservators are no longer focused on saving the world's cultural heritage for ever, but on managing change. They recognise that not all objects are equal. They understand the need for informed conservation, where significance, available resources and environmental context all need consideration.

This paper will briefly review the story of Australian conservation since 1987. It will examine where conservators sit in the current museum hierarchy, what tasks they are now being asked to perform, and the particular nature of the Australian museum conservation scene as against that in North America and Europe.

It will look realistically at what the future may hold for the conservator's role in museums and the value we can bring to museums great and small.

Biography

Julian is the Managing Director of ICS, a Professional member of AICCM, a Fellow of IIC, and Vice President and Director of Communications for IIC. He has long had an interest in the interface between the conservation profession and the wider museum sector.

Illuminating the materials and techniques of Philip Wolfhagen and the use of beeswax in his paintings

Presenter: Cash Brown

Co-authors: Cash Brown¹ and Mar Gomez Lobon²

Affiliations: ¹ Cash Brown & Co, Museum of Australian Democracy at Eureka
² Artco – Art Conservation & Museum Services

This presentation provides an overview of a preliminary study into Tasmanian Artist Philip Wolfhagen's materials and techniques. Regarded as one of Australia's most eminent landscape painters, Wolfhagen (b. 1963) is well known for the use of beeswax in his oil paintings.

The study documented the materials, techniques and attitudes of Wolfhagen from the beginning of his career to the present time; including supports, grounds, painting mediums, recipes and techniques, varnishes and glazes, framing and final presentation, as well as the conceptual rationale and meanings behind his choice of materials. The information was gathered by the authors through a series of interviews at the artist's studio in Longford, Tasmania, and access to his journals and studio notes.

A second stage of this project investigated potential problems related to the addition of beeswax to the paint, as this had been a cause of concern by the artist. Therefore the materials used by the artist with potential to cause degradation phenomena were investigated in more detail. This included carrying out a literature review of the vulnerabilities of all media components, coupled with the results from examinations of representative paintings from different collections and information gathered from conservation treatments of Wolfhagen's works. Some conservation problems relating to wax mediums and the use of shellac as a barrier in some early works were observed. Implications of the artist's use of beeswax & dammar resin medium are discussed, as well as the potential failure of zinc white on acrylic emulsion grounds. The significance of artist made stretchers, frames and backings is also highlighted.

The study presents outcomes of a holistic approach to the documentation of a living artist's entire oeuvre. The project was carried out as a case study for a Minor Thesis for the author's Masters in Cultural Materials Conservation at the University of Melbourne. A full paper with all the details of the study will be published by the authors in the upcoming AICCM Bulletin Vol. 36.2.

Biography

Cash Brown gained a Master of Cultural Materials Conservation from the University of Melbourne (2014) after many years working with galleries and not for profit organisations as a curator, preparator and program manager. She is the curator/conservator at Museum of Australian Democracy at Eureka and runs a fine art conservation business.

Mar Gomez Lobon graduated in Conservation of Paintings at the School of Conservation of Cultural Material in Barcelona (Spain) in 1999. Following several conservation positions in Spain, Italy, UK, NZ, Australia and Singapore, she founded *Artco – Art Conservation and Museum Services* in 2011, based in Launceston, Tasmania.

ILLUMINATING intuition with evidence: assessing collection risks within the Museum Victoria's exhibitions

Presenter: Alice Cannon

Co-authors: Alice Cannon and Robert Waller

Affiliations: Museum Victoria
Protect Heritage Corp.

At Museum Victoria, exhibitions are one of the main ways the public access our collections. We accept some level of damage from sources such as light, pests, and physical handling, leading to loss in the value of our collection items. We use various strategies to minimise loss – for example, showcase design, lighting level and duration control, and regular monitoring of environmental and physical conditions.

However, we wanted to know more about how much damage we can expect over time, and to identify any sources of unnecessary loss. To achieve this we conducted collection risk assessments for each of our three exhibition venues, using a method based on the Cultural Property Risk Assessment Model (CPRAM) to identify, characterise, and estimate the magnitude of risks.

Not surprisingly, our results showed that cumulative light exposure was by far the highest risk to collections on display. However, other results were less intuitive. Water leaks and pest infestations make up a large percentage of our incident reports but ranked very low in terms of overall expected loss to the collection. Loss due to seismic activity ranked higher than expected, given the popular perception that seismic activity need not concern those living in the Melbourne region.

The assessments also highlighted which object populations are more likely to suffer damage. Plastic materials, fluid-preserved specimens, objects on open display and objects on very long-term display were found to be most at risk.

The results of our assessments will feed into our exhibition design and maintenance program, in which cost-benefit arguments will also factor. Additionally, they will inform future analysis and research projects that will enable our risk estimates to become increasingly realistic and precise in subsequent assessments.

Biography

Alice Cannon trained in paper and photographic conservation and holds a Master of Arts by Research from the University of Melbourne. She has worked in the conservation profession for over 20 years, including many years at both Artlab Australia and The State Library of Victoria, and is a professional member of AICCM. She is currently Manager, Integrated Collection Processes at Museum Victoria, a role concerned with collection risk management.

Museum Victoria, GPO Box 666, Melbourne, Victoria 3001, (03) 8341 7395 acannon@museum.vic.gov.au

Robert Waller is President and Senior Risk Analyst with Protect Heritage Corp., a firm dedicated to helping institutions and organizations improve heritage management. His career includes 33 years with the Canadian Museum of Nature. He holds a Ph.D. in Cultural Property Risk Analysis from Göteborg University. Robert Waller has taught, lectured, and served as a consultant at museums and universities throughout North America, Europe, Asia, and Australasia. He is professionally accredited by CAPC, a Professional Associate of the AIC, and a fellow of IIC.

622 Simoneau Way, Ottawa, ON K4A 1P4, Canada, Ph: +1-613-833-2707
www.protectheritage.com rw@protectheritage.com

Broadening parameters at the National Library of Australia

Presenters: Denyl Cloughley and Erin Dampney

Co-authors: Denyl Cloughley and Erin Dampney

Affiliations: National Library of Australia

The Library has not conducted a review of collection storage parameters for 15 years. In light of recent research supporting broadened parameters, and the development of revised parameters internationally, a review of parameters is currently taking place.

Latest research into collection storage guidelines has seen a general shift towards broader parameters. This is paired with an international acknowledgement that museums and collecting institutions have a responsibility to reduce their carbon footprint and operate in a more sustainable manner. The recent International Institute for Conservation (IIC) congress in Hong Kong and the International Council of Museums Committee for Conservation (ICOM-CC) conference in Melbourne developed a joint declaration for the international conservation community¹.

The AICCM parameters are broad. They are also guidelines for the acceptable storage and display of general collection material and as such, the Library's tape stores, cold store, freezer and exhibition galleries fall outside the scope of this project.

For the parameters to be successful, the Interim Guidelines acknowledge that institutions need to work within these guidelines in a manner that suits their collection and organisation. The Library's collections of predominantly paper based materials are densely packed in storage. The buffering nature of paper-based collections enhances the capacity of stacks to drift gradually within parameters and create a stable environment. Additionally, Canberra's mild and dry climate contributes to gradual drifting. Recent seasonal trials of turning off air conditioning to a number of stack areas, and the ongoing passive climate at the Library's off-site repository, have shown that the building and collection lend themselves to a stable environment when allowing seasonal drift.

This paper will summarise the broadened parameters that have been agreed, the staged approach the Library is taking to broadening parameters, issues that have been faced along the way, and a report on how the project is progressing.

¹http://www.icom-cc.org/332/-icom-cc-documents/declaration-on-environmental-guidelines/#.VTBJC_BNhYa

Biography

Denyl Cloughley: Since graduating from the University of Canberra in 2001, Denyl Cloughley has worked as an Objects Conservator in museums, libraries, art galleries and private conservation companies throughout Australia, New Zealand and the United States of America. She currently manages the Preservation team at the National Library of Australia.

Erin Dampney: During 11 years at the National Library, Erin has worked across a number of areas including Preservation, Exhibitions and Building Services. Erin was project manager on the design and construction of the Library's Treasures Gallery, and now works as Sustainability Project Manager, supervising the Library's sustainability and building heritage initiatives.

Artists' interviews and their use: study tour of practices

Presenter: Sabine Cotte

Affiliations: University of Melbourne

This paper will explore the practice of artist's interviews by conservators and how to use and disseminate the acquired knowledge. As part of my PhD on the materials and working processes of Sabine Cot French Australian artist Mirka Mora, I undertook a research trip to the USA and Europe in 2014 to discuss best practices in the use of artist interviews in conservation. The meetings in various institutions in USA and during a two days conference in Europe provided opportunities for reflection on the practice of artist interviews and its use, and more importantly provided insights into the best ways for sharing results with the conservation community in a meaningful manner.

I gained some insights into practical tips and pitfalls of participatory methods of research, discussed efficiency of communication and of sharing knowledge through specific documentation forms. I also benefited from experience and reflection from institutions whose mission is based on dialogue with communities or with artists or who include this in their research mission. As research is a two ways exchange, my communication in an international conference in Europe also contributed to include Australian conservation into global research networks on the particular challenges of conservation of contemporary art. Both the public exposure and the one to one time spent with professionals was extremely beneficial for designing future ways to share my research, as well as for re-assessing Australia's position in global research. Given our physical isolation, sharing knowledge and experience is essential for Australian conservators, and this National Conference is a perfect forum for such exchange.

Biography

Sabine Cotte has diplomas in conservation of paintings from Institut National du Patrimoine (Paris), ICCROM (Rome) and a MA from University of Melbourne. After working ten years for French museums, she moved in 2001 to Melbourne where she works as a private paintings conservator. She is completing her PhD at the University of Melbourne, Grimwade Centre for Cultural Materials Conservation.

A welcome return: Arthur Boyd's *The Prodigal Son*

Presenter: Jocelyn Evans

Co-authors: David Wise

Affiliations: National Gallery of Australia

In 2014 the National Gallery of Australia organised the major retrospective, *Arthur Boyd: Agony and Ecstasy*. The exhibition contained close to 200 objects including works on paper, paintings, tapestries and ceramics. Almost all were drawn from the Gallery's collection and many had never been previously exhibited. The exhibition included a particularly challenging painting to prepare, *The prodigal son*. This is one of only four known surviving, substantial sections of a mural scheme painted by Boyd on the wall of the dining room of his uncle's home, The Grange at Harkaway, Victoria. All are in the NGA collection. The 'fragments' consist of the painting, the original plaster, the wall and a protective concrete envelope. The largest piece is around three tonnes in weight.

Due to the painting's poor condition, weight and structural fragility there were challenges at every stage of transport, handling and display. Preparing and installing the work required the input of NGA Conservation, Exhibitions and Registration staff, as well as the expertise of external engineers.

The exhibition of *The prodigal son* generated discussion around the most appropriate way to store and potentially exhibit these works in the future. This paper will discuss the treatment that has been carried out to date and the logistics of handling the pieces for storage, treatment and display. It will discuss projections for possible future treatments and some of the options that have been considered. It will also touch on ideas of how the works could be displayed sympathetically at the NGA given the destruction of the original location and design.

Biography

David Wise is the Senior Conservator – Paintings at the National Gallery of Australia.

Jocelyn Evans joined the National Gallery of Australia in 2013 as a Paintings Conservator. Her career in conservation includes roles at the University of Melbourne, Queen Victoria Museum and Art Gallery, Queensland Art Gallery, The Australian War Memorial, and Harvard University Art Museums.

Surveying Museum Victoria's History and Technology Collection for hazardous substances

Presenter: Rosemary A. Goodall

Affiliations: Material Scientist, Museum Victoria

Museum Victoria has a strong commitment to identifying hazardous substances on collection items and developing appropriate safe methods for the storage and handling of these materials. As part of this ongoing commitment we have surveyed the History and Technology collections for hazards. The diverse range of items in Museum Victoria's History and Technology Collection presented some unique challenges for the development of a systematic approach to surveying the collection for hazardous substances. Historical items in particular technological equipment often incorporate inherent hazardous materials, for example polychlorinated biphenyls (PCBs) in electrical equipment which are often sealed in small components and are not visually apparent. The diverse range of hazardous substances required the use of multiple testing systems to identify all materials.

To survey the collection a combination of techniques was used including instrumental analysis, desktop surveys and visual inspection. This collection is a combination of numerous sub-collections such as Photographic items, Economic Botany items, Games & Toys items and Manufacturing & Industry items. Each of the sub collections had inherent hazards and some have heavy metal pesticide treatments. This survey was conducted by sub collection enabling a more focused approach to the hazard category. We have been able to flag high risk items within each collection group. The information gathered has been used in the development of policies, procedures and training for the safe handling of hazardous substance in the Museum's collections.

Biography

Dr Rosemary Goodall is a Material Scientist at Museum Victoria investigating the hazardous substances in the collections. She has over 30 years' experience in chemical manufacture and instrumental analysis, specialising in Elemental and Vibrational spectroscopy. Her previous research interests include the study of Rock Art pigments from North Queensland and Maya pigments from Honduras.

Painted (ghost) signs in the City of Port Phillip: a community conservation project

Presenter: Dr Nicole Tse

Co-authors: Ren Gregoric¹, Sandra Khazam², Caroline Kyi³ and and Nicole Tse⁴

Affiliations: ¹ Private Objects Conservator; ² Arts & Heritage Team Leader; ³ Private Wall Paintings Conservator; ⁴ Grimwade Centre for Cultural Materials Conservation, School of Historical and Political Studies, University of Melbourne

The colonial history of the City of Port Phillip (CoPP), Victoria, Australia extends from the mid nineteenth century. Mercantile and social aspects of this history are captured in painted (ghost) signs evident on private and commercial buildings throughout the municipality. However, despite providing access points to this rich local history, these signs are at risk of loss. Various factors contributing to their demise include: urban developments, exposure to environmental conditions; deterioration of original materials as well as poor maintenance and neglect, in the absence of policies and legislation directed at their preservation.

To facilitate and support a community-based, approach to the long-term preservation of these immovable forms of cultural heritage, and to promote the adaptation and use of citizen science models, a collaboration between heritage specialists and community members from the City of Port Phillip (CoPP), with staff and students from the Grimwade Centre of Cultural Materials Conservation (GCCMC) was established. One of the main outcomes of this collaboration was the 'Community conservation project: painted (ghost) signs in the City of Port Phillip'. Conducted in 2014, the primary aims of this project were to develop and implement an inclusive and locally relevant, conservation-based methodology to the documentation and interpretation of painted (ghost) signs within in the CoPP, as well as contribute to teaching and learning programs of the GCCMC and the engagement in local, Melbourne-based projects. This paper reports on the successes, sustainability and lessons learnt from participatory conservation practices in creating social values beyond institutional frameworks.

Biography

Ren Gregoric has degree in Sculpture and Spatial Practice and a Masters Degree in Cultural Materials Conservation from the University of Melbourne. During his time as a student conservator he worked at numerous local museums and heritage centres and completed an internship at Museum Victoria. He has designed a floor talk for the Ian Potter Museum of Art, presented at an event for the 2014 Melbourne Art Fair and is a volunteer assistant editor for the Australian Institute for the Conservation of Cultural Material (AICCM) Bulletin.

Sandra Khazam is the Art & Heritage Team Leader at the City of Port Phillip. She is interested in the intersections of cultural heritage and community engagement, and different methodologies for the sharing of local stories and histories. She holds a Masters Degree in Museum Studies from Deakin University and has worked in the museum and community sector for over twenty years.

Caroline Kyi is a Post-doctoral fellow at the Grimwade Centre for Cultural Materials Conservation at The University of Melbourne. Her research focuses on the conservation of wall paintings as well as the biodeterioration of cultural materials. She has worked on the conservation issues presented by a range of moveable and immovable forms heritage in Australia and internationally. She is also an assistant co-ordinator for the ICOM-CC Murals, Stone and Rock Art working group.

Dr Nicole Tse is part of the research and teaching team at the Centre for Cultural Materials Conservation, at the University of Melbourne. Nicole's main research interest is cultural materials conservation in tropical climates, non-invasive investigatory tools and twentieth century materials in works of art. She is a founding member of the Asia Pacific Twentieth Century Conservation Art Network (APTCCARN).

So far removed: conservation in remote Aboriginal communities

Presenter: Samantha Hamilton

Co-authors: Samantha Hamilton, Robyn Sloggett, Marcia Langton, Jacqueline Healy

Affiliations: All from the University of Melbourne

Remote Aboriginal communities throughout northern Australia hold historic and significant art collections and related materials, and are also creating new cultural products that require conservation management. In doing so they are faced with a range of macro and micro challenges such as isolation, extreme climates, insufficient resources and sporadic budgets consequential of fluctuating government subsidies and support. Additionally inadequate infrastructure and the absence of specialised conservation and collection management skills adds further burden around standards and strategies required to fully support the long term preservation of cultural materials.

Conservators are equipped with knowledge and skills to help preserve community held collections however there are no dedicated positions in remote communities and the majority of conservators are employed in government institutions located predominately in Australia's major cities with little spare time to provide any outreach. Conservators also lack the experience in dealing with remote communities such as the need to understand specific protocols and requirements, the complexities of access and isolation and the technical nature of in-situ conservation.

These issues coalesce around the care of church art in Aboriginal communities. This paper will provide a perspective of these issues by describing current and initial PhD and ARC research that is being undertaken with the remote Aboriginal communities of Wadeye, Northern Territory and Balgo, Western Australia.

Biography

Samantha Hamilton is an object conservator who has worked on multidisciplinary collections in national and international institutions and in private practice. She is currently on leave from Museum Victoria to undertake a PhD at the University of Melbourne researching the topic of '*Best practice in conservation programs for remote Aboriginal communities*'.

Associate Professor, Robyn Sloggett is Director of the Centre for Cultural Materials Conservation, the University of Melbourne. Robyn's research interests include attribution and authentication of cultural material, materials conservation in the Asia-Pacific, collection development and history, studies in materials and techniques, and the preservation of cultural material held in regional and remote communities.

Professor Marcia Langton AM PhD, BA (Hons), FASSA is an anthropologist and geographer, holds the Foundation Chair of Australian Indigenous Studies at the University of Melbourne. She has produced a large body of knowledge in the areas of political and legal anthropology, and Indigenous culture and art.

Dr Jacqueline Healy, BA(Hons), MBA, PhD, is Senior Curator of the Medical History Museum, University of Melbourne. Jacky's research over the last 16 years has focussed on remote area art centres in particular Walaryirti Artists at Balgo. A major recent publication *Walayirti: The art of Balgo* has covered the early banners painted in 1981.

Composite dilemmas: cleaning silk and rayon composite textiles

Presenter: Susie Collis (presenting on behalf of Kylie Howe)

Co-authors: Kylie Howe

Affiliations: Student at GCCMC, University of Melbourne

Much has been written about the effect of various cleaning methods on textiles made from natural fibres. More recently, a limited amount of research has been conducted into the cleaning of rayon. To date, however, nothing has been written about the impact of conservation treatment of textiles where natural fibres are combined with semi-synthetic fibres. Rayon, a regenerated cellulose fibre, and silk, a natural protein fibre, are typically treated quite differently. Tradition dictates that the more reactive of the fibres in a composite object is given precedence when treating an object, yet there has been no examination of the results of this for the textile as a whole. Using a series of methods commonly used in both conservation and in domestic cleaning of garments, this paper examines the effects on the whole textile to find that while a conservation grade surfactant performs best, there are aspects of a domestic washing powder that also perform well. Results also confirm just how detrimental commercial dry cleaning processes are on historic textiles.

Biography

After initially studying architecture and property at the University of Melbourne, **Kylie Howe** worked in the industry both in Australia and overseas for many years before deciding to pursue a career in conservation. She is currently completing the Master of Cultural Material Conservation, specialising in object conservation.

What objects can the public touch?

Presenter: Vicki Humphrey

Affiliations: 1. National Museum of Australia 2. Fellow of IIC
3. Member AICCM Education Standing Committee
4. Member ICON Accreditation Committee
5. Member ICON Publications Committee

Conservation work continues to change to meet the requirements of the various contexts in which it operates. In the museum world there is a greater push for “democratising museum spaces”, for audience curation, for engagement with collections, for more participatory museums.

The urge for an enriched visitor experience can lead to pressures to use collections in the present, in ways that we have not before. As conservators, we may see this as threatening the material integrity of objects and therefore their significance and availability for future generations. But will future generations be as engaged with objects as we have been? Will they have the same concepts of significance? Could this mean we should look very hard at the life-cycle of objects and allow some to “die” while others are preserved based on ongoing assessments of their values? In addition, Pop-up exhibitions, fast changeovers and other ways of feeding the perceived need for constant refreshment of content requires that conservators are “responsive”, “flexible” and “agile”.

These trends present exciting opportunities for innovation but they are also challenging. This paper seeks to promote discussion about how we respond as a profession to our changing contemporary contexts.

Biography

Vicki Humphrey is currently Head of Conservation at the NMA. From 2003 to 2008, she was Head of Conservation at the British Library and has also worked at Artlab Australia and the Royal Botanic Gardens, Kew. Vicki is involved in professional committees in Australia and internationally.

Binders and pigments used in traditional Aboriginal bark paintings

Presenter: Narayan Khandekar¹

Co-authors: Georgina Rayner¹ and Daniel P. Kirby²

Affiliations: ¹ Harvard Art Museums
² Private practice

In conjunction with the upcoming exhibition *Everywhen: The eternal present in Indigenous art from Australia*, the Straus Center for Conservation and Technical Studies, Harvard Art Museums has conducted a major survey of the pigments and binders used in traditional Aboriginal bark paintings from Arnhem Land, Groote Eylandt, the Kimberley and the Tiwi Islands. Paints were analyzed for: 1. binding media using Fourier transform infrared spectrometry and pyrolysis gas chromatography mass spectrometry and 2. pigments by laser ablation-inductively coupled plasma-mass spectrometry to determine if an elemental fingerprint could be identified. Approximately two hundred samples from fifty paintings were analyzed from: Museum Victoria; Ian Potter Museum of Art, University of Melbourne; National Gallery of Australia; Art Gallery of New South Wales; Australian Museum; National Gallery of Victoria; Macleay Museum, University of Sydney; Peabody Museum of Archaeology and Ethnology, Harvard University. The following art centers provided standard pigments and binders: Buku Larrnggay Mulka, Yirrkala, NT; Tiwi Design, Bathurst Island, NT; Warringarri, Kununurra, WA.

Binders were present in 77% of the samples we analyzed. No proteins, waxes, fats or blood were detected as a binder. The presence of nitrocellulose on Groote Eylandt paintings was connected to records from the 1948 expedition linking the condition of the paintings to an application of Duco to consolidate them. Orchid juice was chemically identified as a binder in a painting for the first time and was identified in the oldest bark paintings dating to pre-1878.

The use of a variety of blacks from Groote Eylandt was identified as originating from natural manganese ore, dry cell batteries and charcoal. The differences in elemental fingerprints between ochres of the same location, as well as from painting samples indicates that more studies are required on a local level to determine the source and movement of ochres.

Biography

Narayan Khandekar is Director of the Straus Center for Conservation and Technical Studies and Director of the Center for the Technical Study of Modern Art.

Georgina Rayner is the Andrew W. Mellon Post-doctoral Fellow in Conservation Science.

Daniel P. Kirby is a conservation scientist in private practice.

Connecting objects, communities and cultural knowledge

Presenter: Sophie Lewincamp

Co-authors: Sophie Lewincamp¹ and Associate Professor Robyn Sloggett²

Affiliations: ¹ PhD Candidate, Grimwade Centre for Cultural Materials Conservation, University of Melbourne

² Director, Grimwade Centre for Cultural Materials Conservation, University of Melbourne

Cultural objects carry forward the identity of the past into the future. The process of preservation therefore has strong impact on the transmission of cultural knowledge and the definition of identity. Building on Pratt's theory of contact zones this paper examines how questions of meaning and materiality bring people together. Examining two case studies, the Middle Eastern Manuscript Collection at the University of Melbourne and the Returned and Services League (RSL) LifeCare War Museum in Narrabeen as zones of contact, this paper argues that interactions occurring between researchers and communities are potent multivalent sites for complex and creative exchanges of knowledge and belief. In these two case studies, conservators working with these collections examined the potential for object-based examination and dialogue to bring academic conservation knowledge and the academic system of inquiry into community settings to establish ongoing relationships that share and recover knowledge.

Biography

Sophie Lewincamp is PhD researcher at the Grimwade Centre for Cultural Materials Conservation. Her topic entitled 'Interpreting Collections: investigation of community contexts, use and provenance' which informs this paper.

Sophie has worked in many of Australia's leading cultural institutions including the National Library of Australia and the Australian War Memorial and more recently at the GCCMC, University of Melbourne.

She is also the project manager for the RSL LifeCare Community Engagement and Conservation Project and in 2013 was awarded the Australian Institute for Conservation of Cultural Materials (AICCM) Service to the Profession Award for this role.

Dr. Robyn Sloggett is the Director of the Grimwade Centre for Cultural Materials Conservation at the University of Melbourne. Her research interests include attribution and authentication of Australian paintings, the development of the Australian art market, collection development and history, the investigation of the materials and techniques of artists, and the preservation of cultural materials held in Australian Indigenous communities. She holds qualifications in art history, philosophy, and cultural materials conservation (applied science). She has a PhD from the University of Melbourne.

Selected conservation issues of paintings on composite, rigid supports

Presenter: Damian Lizun

Affiliations: Heritage Conservation Centre, Singapore

Conservation of paintings executed directly on composite materials such as plywood, Masonite, cardboard or canvas paintings glued onto such supports becomes today more challenging due to way how they were utilized by artists or because of their poor quality and deterioration. In preparation for the opening of the National Gallery Singapore in November 2015 the paintings conservation team from the Heritage Conservation Centre (HCC) had an opportunity to review the condition of over 130 paintings requested for the show and faced some conservation problems evident in the paintings created directly or indirectly on composite materials. To the knowledge of the author the conservation issues of the paintings on composite supports have been addressed in limited way. This paper outlines some problems associated with the paintings on composite rigid supports and presents conservation approaches applied by conservators at HCC to improve their long term stability. Seven case studies were selected in respect to technical condition of the composite supports; two canvas paintings glued onto plywood, one canvas painting glued onto Masonite board, one canvas painting attached onto the paper board, two created directly on the plywood and one painted directly on the Masonite board. These case studies reflect the issues the HCC painting conservators have encountered rather than present exhaustive study of all possible types of damage and conservation scenarios. The issues described in this paper encompass delamination of canvas support from the composite board, delamination of the board, veneer checking of plywood, warping, twisting and woodworm. Conservators' primary aim was to halt deterioration and reintegrate paintings unity with minimum interventive treatment. However, if stabilization could not guarantee long term stability of the painting, then variants of invasive treatment were implemented. The core treatment methods included reattachment or separation of the canvas primary supports glued onto composite boards, modified strip lining of the Masonite boards and partial transfer of plywood painting top ply containing the paint layer onto another rigid substrate. Ethical concerns over the extent of the invasive treatments and respect for the integrity of the paintings construction were discussed pointing out that there is not an optimal conservation treatment for each painting.

Biography

Damian Lizun received his Master of Arts in Conservation and Restoration of Paintings and Polychrome Sculpture from Nicholas Copernicus University, Torun, Poland in 2001. During his studies and after graduation, he worked in his family's conservation business, where he gained practical and analytical skills from his father, conservator Zenon Lizun. Over the last 14 years, he has worked on the conservation of easel paintings, frames and polychrome sculptures in private and public collections in Poland and Ireland. In 2006 he was appointed Painting Conservator at the Tipperary County Museum, Ireland. He moved to Singapore in 2013 when he was appointed Conservator (Paintings) at the Heritage Conservation Centre.

More lives than one: the changing fortunes of a museum object

Presenter: Colin Macgregor

Affiliations: Australian Museum, Sydney, NSW

An institution like the Australian Museum is a constantly changing environment and regularly redefines its mission as management and staff change. This can renew focus on areas of the collection that have been considered unimportant for decades. Political, professional and even design trends result in the fortunes of objects waxing and waning with these shifts in direction. This paper aims to illustrate the impact of landscapes on collections and conservation departments.

Over a history of 190 years, the Museum has been at times a window to the civilizations and nature of the world; a cathedral of taxonomy; and more recently purely focused on the cultures and natural sciences of Australasia and the Pacific Region. In addition, the last 30 years has an increased need to generate revenue by enlarging audiences by appealing to a broader demographic.

All these changing directions influence the perceived importance of areas of the collection. Categories of objects that fell out of favour 50 years ago can rapidly become “key” collections. Taxidermy specimens that were not considered of scientific importance are now valued for their historic and sometimes exotic appeal.

For the museum artefact or specimen suddenly thrust into the limelight, this attention can be an opportunity and a threat. Having survived the threat of de-accessioning and prolonged neglect, the unsuspecting object suddenly justifies a concentrated bout of conservation treatment to undo the ravages of B-grade storage. However this may also be a prelude to an extended period on open display.

The recent interest in reviving the curatorial approach of 19th century museums and recreating cabinets of curiosity require particularly eclectic groups of specimens of a particular vintage. For example, glass models that were acquired to illustrate marine creatures which could not be displayed themselves were withdrawn from display for decades as being inaccurate depictions. However they have been rediscovered and now represent a historical illustration of the highly developed skills of model-makers.

The role of the guest curator or artist has also shifted focus on collections. The incorporation of many related objects as elements of a large visual installation has led to increasing pressure to select objects which are in poor condition in order to complete the overall concept.

There has been shift in conservation ethics from treating all objects equally to accepting that some objects are more significant than others. Significance 2.0 created an objective process for assessing the significance of museum objects. However it has to co-exist in tension with the directions of individual institutions which may adopt quite different curatorial frameworks. We need to acknowledge that volatile political and cultural environments can wrong-foot us and strategies should be considered to manage the impact of these changes.

Biography

Colin Macgregor joined the Australian Museum in 1989 and has been Manager of Materials Conservation since 2001. Previously, he worked with the Scottish Museums Council, Sheffield City Museums and the National Museum of Scotland. He completed a post-graduate diploma in Archaeological Conservation at Durham University and has worked on projects in five countries. He is a Fellow of IIC and a Professional Member of AICCM

A cup of tea but no piece of cake: the treatment of a late 19th century Robur Tea poster by William Blamire Young

Presenter: Clair Murray

Co-authors: Caroline Milne and Clair Murray

Affiliations: National Archives of Australia

In late 2014 an envelope containing a tightly folded billboard poster was brought to the National Archives of Australia conservation lab to be treated so it could be digitised for a researcher. Part of series A1719, consisting of artistic copyright files dating 1871–1913 and including photographs, postcards, prints and other diverse material, the item is described in the Archives' RecordSearch database as "*New Seasons Robur Tea [polychrome billboard poster]*" with no further details. The poster consists of six sheets measuring approximately 760 x 1000 mm each. The paper was brittle with splits along the fold lines and multiple tears. When the poster was relaxed enough to open, the artist was revealed to be William Blamire Young (1862–1935), a renowned British/Australian poster and watercolour artist. In the 1890s, Blamire Young attended art school in England and became involved with renowned British graphic artists The Beggarstaffs (James Pryde and William Nicholson) whose influence is evident in the design of this poster, which was produced in the late 19th century during the "Golden Age" of poster design in Europe.

A treatment plan which aimed to stabilise the poster and allow for digitisation was devised. In the past at the Archives, the separate sheets of large format billboard posters have been lined and then physically joined together; however, this kind of oversized item becomes difficult to store. Taking advantage of current photographic technology, it was decided to treat each of the six sheets separately and stitch them together digitally, allowing for ease of storage of the originals.

This paper will include a summary of historical research carried out into poster design and Blamire Young's work. It will then discuss the challenges associated with the treatment. These included the expected logistical problems when dealing with an item of this scale, in poor condition. But it also raised issues that were not expected, with some sheets responding in unforeseen ways to the planned treatment.

Biography

Clair Murray is currently Acting Senior Conservator, Services and Preventive at the National Archives of Australia. She has worked at the Archives in the Conservation Lab since 2003. Clair has a background in printmaking and visual arts.

Caroline Milne completed a Bachelor of Cultural Heritage Conservation at the University of Canberra in 2014. Whilst studying she worked for ACT Historic Places and in 2012 was awarded The National Archives of Australia Jikji Scholarship and Internship. Caroline is currently Acting Conservator at the Archives.

An exploration of the use of digital technologies in materials conservation practice, research, training and teaching

Presenter: Petronella Nel

Co-authors: Marcelle Scott

Affiliations: Grimwade Centre for Cultural Materials Conservation

Use of an expanding array of digital technologies is becoming increasingly common in the GLAM (gallery, library, archive, museum) sector. These trends are also occurring in materials conservation and need to be reflected in the training of students being introduced to the profession. There is a responsibility to ensure students have learned skills required by the profession, and have the capacity to incorporate new technologies into their research and practice as they become available. This paper explores the development of and the promotion of the use of digital technologies in the postgraduate teaching and research programs at the GCCMC (Grimwade Centre for Cultural Materials Conservation).

Biography

Dr **Petronella Nel** is a lecturer at GCCMC with PhD in Chemistry (2000) and MA in Cultural Materials Conservation specialising in objects (2006), from the University of Melbourne. Petronella, a Professional Member of the AICCM, is currently conducting research into polymers in collections and pigment characterisation.

Marcelle Scott co-ordinated the Cultural Materials Conservation Masters program at the University of Melbourne from 2004 until 2012. She stepped away from the role to pursue further research into conservation pedagogy. She is a Professional Member of the AICCM, and a Fellow of the IIC. In 2013 she was an inaugural inductee into the AICCM Hall of Fame.

Current status of plastics conservation in Australian cultural heritage collections

Presenter: Emily Noake

Co-authors: Emily Noake¹ and Petronella Nel²

Affiliations: ^{1,2} Grimwade Centre for Cultural Material Conservation,
University of Melbourne

Synthetic materials are likely to be widely spread across Australian cultural heritage collections, in many forms beyond the obvious and 'hidden' in unexpected locations. Appearing on the cultural heritage stage in comparatively more recent times, modern synthetic materials present a new and growing issue for museums and the conservation sector; particularly as some plastics have inherent vice, presenting risk, not only to the plastic itself, but also to neighbouring artefacts, raising new and complex collection management issues. Expertise, experience and research in the field are progressing internationally. It is of interest to investigate to what extent research from the North American and European research centers is impacting on exposure, uptake, adoption and adaption in the Australian context.

As part of a collaborative research project between the University of Melbourne's Grimwade Centre for Cultural Materials Conservation (GCCMC), Museum Victoria and CSIRO, a survey was conducted to provide an overview of knowledge, approaches to management and level of experience with these materials and their associated issues in the Australian cultural heritage context. This survey presents an opportunity to initiate discussion, about the conservation of plastics and facilitating a growing knowledge base and experience in the Australian context. It is recommended the Australian conservation profession should be exploring the benefits of collaboration; resource and experience sharing; and, training.

Biography

Emily Noake is currently undertaking her PhD titled: Deteriorating cultural heritage: placing a framework around malignant cellulose nitrate in museum collections, under the supervision of Dr Petronella Nel and Deborah Lau, Research Program Leader at CSIRO. Emily completed her Masters in Cultural Materials Conservation in 2013 specializing in object conservation.

Dr Petronella Nel is a lecturer at the Grimwade Centre for Cultural Materials Conservation (GCCMC), with a PhD in Chemistry (2000) and MA in Cultural Materials Conservation specialising in objects (2006), from the University of Melbourne. Petronella is currently conducting research into polymers in collections and pigment characterisation.

Ron Mueck *In Bed* (2005): a contemporary textile challenge

Presenters: Amanda Pagliarino and Dr. Michael Marendy

Co-authors: Amanda Pagliarino¹ and Dr. Michael Marendy²

Affiliations: ¹ Queensland Art Gallery / Gallery of Modern Art

² Studio 105, Conservation Consultancy Service

Following the inclusion of Ron Mueck's *In Bed* (2005) in the 2010 National Gallery of Victoria Touring Exhibition 'Ron Mueck' and the 2011 Queensland Art Gallery / Gallery of Modern Art Regional Tour '*In Bed by Ron Mueck*', the artwork underwent a major conservation treatment. The treatment focused on remediation of textile staining and discolouration which had progressively increased over the period of exhibition. In addition to the treatment the Gallery undertook to reproduce three textile components comprising the upper and lower pillowcases and the duvet cover. The monumental scale of *In Bed* posed considerable conservation challenges in both undertaking the cleaning treatment and manufacturing the reproduction textile pieces. An extensive literature review revealed little published material on the treatment of large contemporary textiles, therefore the treatment methodology was based on principles developed for historic textiles. To wash the oversized textile pieces the Gallery built a 5 x 8 metre custom-designed washtub and drying rack. The use of theatre curtaining in the manufacture of the original and reproduction textiles required experimental work to determine the validity and success of established historic textile treatments applied in a contemporary context.

Biography

Amanda Pagliarino is Head of Conservation and Registration at the Queensland Art Gallery / Gallery of Modern Art. She holds a Bachelor of Arts (Visual Art) from the Queensland University of Technology, a Bachelor of Applied Science (Conservation of Cultural Material) from the University of Canberra. In 2005 Amanda received the Australian Institute for the Conservation of Cultural Material (AICCM) Conservator of the Year award.

Michael Marendy has a background in clothing design, fashion education, textile conservation and museum curatorship. For 15 years he taught in the tertiary sector, as well as working as a clothing designer and textile conservator. In order to cross these unique, but overlapping professional areas he has studied in Australia, Canada, and England. In 2013 he was recognised as a 'Queensland Cultural Champion' for his contribution to the preservation of Queensland textiles.

Developing an Environmental Management Strategy for Museum Victoria

Presenter: Karina Palmer

Affiliations: Museum Victoria

The museum environment is an essential element in the preservation of cultural material. Extremes of temperature and relative humidity (RH) and wide fluctuations in these can increase rates of material degradation. The conservation profession has in recent years seen widespread consideration and scrutiny of environmental standards, with a particular focus on reducing energy consumption and facilitating loans.

It is within this context that the Museum Victoria Environmental Management Strategy is being developed. Initially, a review of the conservation literature regarding the physical effects of temperature and relative humidity on different materials was undertaken. The review was used to specify the ideal temperature and RH settings for each material type and outline the parameters the organisation aims for in each collection and exhibition area.

The strategy outlines the technical procedures involved in environmental monitoring and reporting throughout Museum Victoria facilities. Continuous reporting since 2011 has led to the development of preservation metrics which quantify the quality of each collection area against specific environmentally induced degradation processes, including natural aging, mechanical damage, biological risks and metal corrosion. This in turn allows the conservation department to effectively communicate with facilities managers, collection managers and executives around maintenance of systems and planning of object storage.

The ultimate outcome of the environmental monitoring program will be the annual "State of the Museum Environment" report, enabling the high-level planning of infrastructure investment to improve and maintain appropriate storage conditions.

This presentation provides details of how the MV Environmental Management Strategy is being developed, paying particular attention to the calculation of environmental monitoring statistics and how they may be used for improving preservation environments and long term planning of museum storage.

Biography

Karina Palmer is Senior Conservator, Collection Preservation at Museum Victoria. Karina graduated from University of Canberra in 2001 and has worked as an objects conservator in various organisations including Australian Museum and Heritage Victoria. Karina's recent focus is preservation environments and providing support in IPM, natural sciences and audio-visual conservation.

Shining the light on hazards in Museum Victoria's collections

Presenter: Helen Privett

Affiliations: Museum Victoria

The museum profession has had a growing awareness of the presence and implications of hazardous substances in collections for the past 30 years. These hazards may be inherent, for example in radiation emitting mineral specimens or in domestic technology such as capacitors in microwave ovens, or they may be applied as found in scientific and cultural collections where heavy metal or organic pesticides have been used post-collection.

In 2009 the development of the *Wild* exhibition and subsequent XRF testing of specimens at Melbourne Museum prompted Museum Victoria to address the way hazardous substances in the collection were documented, stored and managed in our institution.

The work of the Hazardous Substances in Collection Working Group from 2009 marked the beginning of a long-term project, aiming to fulfil the goals of a strategic roadmap. This roadmap outlined the legislative, regulatory and best practice needs of Museum Victoria in relation to management of hazards in the collections.

Since that time the interdisciplinary working group has identified a broad spectrum of hazardous substances in the collection, educated staff and senior leaders at Museum Victoria about safe handling and management requirements, established a suite of procedures to share knowledge and create a standardised approach to management of hazardous substances and shared this knowledge with the broader museum community in Australia. The group has also instigated infrastructure projects such as the creation of a Downdraft Workshop which can be used for treatment of oversized contaminated specimens and objects.

This paper will outline the project, the achievements to date and the aims for the future management of hazardous substances in the collections of Museum Victoria.

Biography

Helen Privett is Manager, Conservation at Museum Victoria. Helen graduated from University of Canberra in 1998 and since that time has worked in a number of roles at National Gallery of Victoria and Museum Victoria. Helen's recent focus has been on managing hazardous substances in collections, plastics and digitisation.

Acrylic emulsion paints: supply, up-take and colourfield painting in Australia

Presenter: Raymonda Rajkowski

Co-authors: Raymonda Rajkowski¹ and Dr Nicole Tse²

Affiliations: ^{1,2} Grimwade Centre for Cultural Material Conservation, University of Melbourne

Mid twentieth century saw the invention and uptake of acrylic paints worldwide with Liquitex[®] becoming synonymous with the water dispersed artists paints. In Australia colourfield painting and associated movements leading to The Field exhibition in 1968 at the National Gallery of Victoria, has been linked to the uptake of acrylic paints. However, its use by artists James Doolin (1932-2002), Alun Leach Jones (1937-) and Col Jordan (1935-) and Paul Partos (1943-2002), for example, and the art historical and technical implications of acrylic paints has remained largely unexplored. This paper addresses this gap in technical Australian art history and conservation research. Key historical developments in local manufacturer of acrylic paints by Australian companies, including Vynol Paints (now called Derivan) and Chromacryl[®], are presented and compared with international innovations. Acrylic paints are also shown to be particularly significant to the development of colourfield painting, due to the unique handling properties of acrylics that enabled painters to achieve the characteristic flat, expansive areas of unmodulated colour. This connection is explored through the practices of artists featured in the The Field, a seminal exhibition of Australian abstract art.

Biography

Raymonda Rajkowski is a PhD candidate at the University of Melbourne, researching acrylic paints and Australian colourfield painting. She holds an Honours degree (Fine Art) at Queensland University of Technology and an Honours degree (double major in Art History) at University of Queensland, and a Master of Cultural Material Conservation.

Dr Nicole Tse is part of teaching team at the Grimwade Centre for Cultural Materials Conservation, University of Melbourne. She is a founding member of the Asia Pacific Twentieth Century Conservation Art Research Network (APTCCARN). Her research interests are cultural materials conservation in tropical climates and 20th century materials.

The conservation of time-based art at Auckland Art Gallery Toi o Tāmaki

Presenters: Brooke Randall and Annette McKone

Co-authors: Brooke Randall and Annette McKone

Affiliations: Auckland Art Gallery

In June 2014 Brooke Randall, Masters student at the University of Melbourne, undertook a three-month internship at Auckland Art Gallery. Brooke's role was to scope the collection of time-based art, assess the condition of the collection, explore maintenance needs, identify unsafe housing issues and work with registration to ensure all relevant information was entered into Vernon, the Gallery's collection management database. A methodology for the adequate documentation of future acquisitions was also developed and findings presented to Gallery staff.

Auckland Art Gallery was found to care for 264 time-based artworks. Although artworks were evenly distributed across production years, the number of time-based artworks acquired by the Gallery was continuing to grow, from two in 1996 to thirty-one in 2013. Approximately 13% of all time-based artworks were stored on analogue media, 40% were stored on digital media and 15% were sculptural with an analogue and/ or digital component. A further 20% incorporated light and 11% an electronic component (i.e. motor).

Nearly eighteen months have passed since the internship commenced. In this time the conservation and registration departments have taken the first steps in ensuring the Gallery's time-based art collection remains viable. This includes introducing a time-based art acquisition form and migrating the audiovisual archive to a server provided by Auckland City Council. As part of the 2015 AICCM Conference Brooke Randall and Annette McKone will reflect on the success of the internship, comment on the skills acquired and the knowledge that was shared.

Biography

Brooke Randall is currently undertaking a Masters of Cultural Materials Conservation at the University of Melbourne. Although interested in all aspects of conservation, Brooke has directed her studies toward the conservation of modern and contemporary art. Prior to commencing post-graduate study Brooke was a practicing artist making sculptural work with an audiovisual and/or electronic component. She also has extensive voluntary experience working within contemporary art organisation, including Gertrude Contemporary in Fitzroy, and artist-run spaces, such as Format in Adelaide.

Annette McKone has a Diploma in Fine Arts from Otago School of Art, Dunedin, and a degree in Applied Science in the Conservation of Cultural Materials, Objects, from the University of Canberra. After graduation in 1993, Annette became Objects Conservator at Auckland Museum, a position she held from 1994 to 2003. She worked in private practice from 2004-2009 and at the end of 2009 became Auckland Art Gallery Toi o Tamaki's first Objects Conservator, her current position. Annette has a particular interest in plastics and synthetic polymers.

Investigating new treatment approaches for conserving contemporary outdoor wooden sculptures

Presenter: Emma M. Rouse

Co-authors: Emma M. Rouse¹, Stefanie-Ann Alexander^{2,3}, Caroline Kyi^{1,2,3}, Carl Schiesser^{2,3} and Nicole Tse¹

Affiliations: ¹ The Grimwade Centre for Cultural Materials Conservation, School of Historical and Philosophical Studies, The University of Melbourne, Victoria, Australia

² ARC Centre of Excellence for Free Radical Chemistry and Biotechnology, Australia

³ School of Chemistry and Bio21 Molecular Science and Biotechnology Institute, The University of Melbourne, Victoria, Australia

The deterioration of outdoor sculptures can be primarily attributed to their exposure to unregulated environmental conditions. These forms of cultural heritage are at high risk of damage due to the processes of weathering, the effects of pollution and biodeterioration, as well as vandalism and neglect. Sculptures made from organic materials, such as wood, are particularly susceptible to biodeterioration as a result of their ability to absorb and retain moisture in addition to providing the perfect habitat for microorganisms that cause wood decay. In the conservation of outdoor sculptures, options for preventive conservation are often limited and appropriate remedial treatments are therefore sought. The application of chemical treatments, such as biocides, to kill microorganisms are commonly used in the treatment of biodeterioration. However, conservators must evaluate the toxicity of these products before their use on artworks.

The opportunity to examine and investigate treatment options for biodeterioration presented itself when the contemporary wooden outdoor sculpture titled, *So it's come to this* (1986) by the Melbourne-based artist Bruce Armstrong (Figs 1 and 2), was in poor condition due to biodeterioration after prolonged exposure to the elements and moisture gain. Armstrong's intention for the preservation of this sculpture inspired research into safe, effective methods of preventing biodeterioration of outdoor wooden sculptures. The condition of this sculpture has enabled an object-based case study to be undertaken in order to evaluate a newly developed nitroxide compound, 3-(dodecane-1-thiyl)-4-hydroxymethyl)-2,2,5,5-tetramethyl-1-pyrrolinoxyl (DHT-TPO) as a less toxic treatment option in the control of biodeterioration. Very low concentrations of the nitroxide DHT-TPO were tested as this compound can be easily prepared and handled and has been shown to prevent the formation of biofilms (Alexander, Kyi & Schiesser 2015, p. 4752).

In this investigation, microorganisms isolated from the Armstrong sculpture were exposed to varying concentrations of two biocides – benzalkonium chloride (0.001% – 1% w/v) and Proxel GXL™ (0.0005% – 0.25% v/v) – commonly used on cultural materials. The effect of these compounds was compared with a two-step treatment involving the nitroxide DHT-TPO. At low concentrations (0.002% – 0.2% w/v) DHT-TPO was found to disperse bacterial biofilms making them easier to kill with reduced concentrations (0.001% w/v benzalkonium chloride) of biocide. Based on these findings, further research into the nitroxide DHT-TPO has the potential to develop a safer chemical treatment for controlling biodeterioration in contemporary outdoor wooden sculptures.

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Investigating new treatment approaches for conserving contemporary outdoor wooden sculptures *(from previous page)*



Figure 1: Bruce Armstrong, *So It's Come To This* (1986), photographed at time of installation (Gott, T 1999, *Savage Beauty – The art of Bruce Armstrong*, exhibition catalogue, Heide Museum of Modern Art, Melbourne, p.8).



Figure 2: Bruce Armstrong, *So It's Come To This* (1986), current condition in Deakin Court, The University of Melbourne. Wood rot and biodeterioration can be seen on the top and proper left side of the object. Photographed by Emma Rouse, 6 August 2014.

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Biography

Emma Rouse is currently working at the Art Gallery of NSW in the Frames Conservation department. Earlier this year she worked as an Objects Conservator at Heritage Conservation Centre in Singapore, specializing in contemporary art and sculpture conservation.

Stefanie-Ann Alexander is currently a post-doctoral research fellow in the ARC Centre of Excellence for Free Radical Chemistry and Biotechnology at the University of Melbourne where her work focuses on developing novel remedial treatments for treating and preventing biodeterioration on items of cultural significance. Stefanie is also a qualified paper conservator and has worked at the Grimwade Centre for Cultural Materials Conservation and the National Gallery of Victoria.

Caroline Kyi is a Post-doctoral fellow at the Grimwade Centre for Cultural Materials Conservation. She has a post-graduate diploma in Wall Paintings Conservation from the Courtauld Institute of Art, London and PhD from the University of Melbourne, Australia. Her research focuses on the conservation of wall paintings as well as the biodeterioration of cultural materials. She has worked on, and undertaken research into, the conservation issues presented by a range of moveable and immovable forms heritage in Australia and internationally. She is also an assistant co-ordinator for the ICOM-CC Murals, Stone and Rock Art working group.

Carl Schiesser is Professor of Chemistry at the University of Melbourne and Director of the ARC Centre of Excellence for Free Radical Chemistry and Biotechnology. His research interests include combatting the damaging effects of free radicals, as well as the role that free radicals play in the deterioration of cultural materials.

Nicole Tse is part of the teaching and research staff at the Grimwade Centre for Cultural Materials Conservation, the University of Melbourne. She has a research record in the conservation of cultural materials in tropical climates.

Non-traditional gilding revisited: evaluation of gilded surfaces exposed to uncontrolled day-night fluctuations for over ten years

Presenter: Dr Malgorzata Sawicki

Affiliations: Art Gallery of New South Wales, Sydney, Australia
margaret.sawicki@ag.nsw.gov.au

Conservation of gilded objects, particularly frames, involves often in-gilding/ retouching using gold leaf. Conservation ethics demand using reversible materials and methods, thus utilising traditional gilding techniques for this task is not advisable. Finding suitable alternatives has been challenging and discussed sporadically in conservation literature since the 1980s. In 2000-2008 I researched the suitability of selected synthetic conservation materials in replicating traditional matte water-gilding for loss compensation in gilded objects. Results indicated acrylic dispersion Plextol[®]B500, acrylic resin Paraloid[®]B-72, and polyvinyl acetate resin AYAF were potentially the most useful synthetic materials (Sawicki, 2010). The final experiments involved testing the aging characteristics of gilded surfaces created with these three synthetics, as compared to those of traditional gilding.

The behaviour of gilded surfaces under the stresses of natural changes in RH and temperature, through day-night cycles, was tested by exposing one of two gilded mock-up frames to sunlight via window glass without UV filtering over a period of ten years.

Relative humidity and temperature changes were monitored during the first two years. RH fluctuations remained within a 67.63% range (the lowest: 6.98%, the highest 74.61%, with common drop of more than 40% in one day), and temperature changes within a 22.4°C range (the lowest: 17.1°C, the highest: 39.4°C, with common jump of almost 20°C a day).

Observations were recorded after twelve months of exposure (Sawicki, 2010) and again after five years (Sawicki, 2011). After ten years, the current report concludes the experiment and discusses the nature and significance of detected ageing in three cases; gilding on a foundation of acrylic dispersion Plextol[®]B500 (diluted 2:1 with a water/ethanol mixture, 4:1), acrylic resin Paraloid[®]B-72 (15% w/v in 1-methoxypropan-2-ol), and polyvinyl acetate resin AYAF (15% w/v in ethanol/diacetone alcohol, 2:1)¹.

The results

All synthetic materials exhibited a tendency to form cracks following exposure to humidity and temperature fluctuations. Visual examination revealed distinct craquelure formation in the B-72-based gilding. Samples created with Plextol[®]B500 and AYAF showed considerably less changes, indicating that greater flexibility preserved in the resins allowed them to resist the stresses of fluctuating environmental conditions.

The B-72 sample started to develop a craquelure pattern after eight months of exposure. Over ten years, the extent of the craquelure increased dramatically creating losses to the gilding and exposing the watercolour-gesso foundation beneath. The crack formations and aging behaviour are comparable to oil degradation in traditional oil-gilding. The cracks were associated with blooming. These changes occurred mainly in the sections coated with a traditional animal glue-based protective layer. The potential impact of this coating to the overall degradation of the B72-based gilding cannot be underestimated.

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Non-traditional gilding revisited: evaluation of gilded surfaces exposed to uncontrolled day-night fluctuations for over ten years

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Changes in humidity, temperature and UV absorption caused re-crystallization of the animal glue coating and were responsible for increased opacification or greyness in this layer. In the sections gilded using Plextol® B500 and AYAF, the damage caused by re-crystallisation was confined to the uppermost layer. Greyness in the B-72 sample however, extended deeper beneath the craquelure and was apparent even after removal of the glue coating.

As noticed previously, when polymer materials are exposed to direct sunlight, cracking and crazing are likely to occur (Searle, 1994). Micro-cracking will subsequently affect the rate of moisture absorption/ desorption during repeated hydro-thermal cycles. This accelerating deteriorative process may be responsible for the blooming effect around the cracks in the B-72 gilding.

After 10 years, only the B-72 sample showed a tendency for flaking. In such extreme conditions, it was expected that delamination would occur, due to scission of the adhesive bond between layers (Mecklenburg, Tumosa and Erhardt, 1998).

Gold leaf acts as a protective barrier from the damaging effects of UV exposure, responsible for photo-chemically induced scissions in materials. Therefore, it is likely that the significant degradation of the polymer matrix in this study was caused by the heat generated by direct sunlight exposure.

Cracks in the mitre corners of frames are often caused by compression shrinkage in wood when it is exposed to fluctuating humidity. It is remarkable that after 10 years of exposure to RH fluctuations, very little damage has been noticed in the corners of the frame. Fluctuations in humidity occurring within the day-night cycle were insufficient to induce forms of fatigue in the longitudinal direction of gilded wood. Despite the fact that RH was often at extreme values, no cracks developed in the tangential directions on wood-gesso composites in any of the gilded surfaces either. This confirms gold leaf is an effective barrier in preventing moisture diffusion through wood (Michalski, 1991). It also indicates that a much longer time is required for wood samples to reach equilibrium with new environmental conditions following changes to relative humidity (Mecklenburg, Tumosa, and Wyplosz, 1995). This indicates the damage observed in the samples was the result of changes affecting the upper, surface layers (gold and polymers) and not caused by movement of the underlying wood, which remained unaffected.



Figure 1: Detail of the B-72 gilding after 10 years of exposure to direct sunlight. The section gilded with a traditional matte water-gilding technique showed little changes.

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Non-traditional gilding revisited: evaluation of gilded surfaces exposed to uncontrolled day-night fluctuations for over ten years

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Despite obvious physical changes in all polymer samples, little alteration was noticed while examining the samples with Fourier Transfer Infrared Spectroscopy (FTIR). Miniscule changes to the bands intensity in FTIR spectra were observed with AYAF or Plextol® B500 films. The B-72 FTIR spectra shows a decrease in intensity of particular characteristic bands, but otherwise there was little difference to the spectra of the unaged B-72 film. As noticed elsewhere (Butler 1989, Lazzari, M., *et al* 2000, Chiantore, O., *et al* 2001, Ropret, *et al* 2007), it indicates that chain scission prevailed over crosslinking, resulting in a lowering of molecular weight, but no insoluble fractions were formed on aging. Follow-up solubility tests with xylene, acetone, and ethanol revealed no difficulties when removing the aged gilded films right down to the watercolour-gesso foundation layers. Far from undermining the usefulness of B-72 as a conservation material; the conducted experiments demonstrated that B-72 should not be the material of choice when treating areas exposed to environmental stresses.

Notes

¹ For details regarding preparation of the samples and the test conditions see: Sawicki, M. 2010, pp.185-201.

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Materials

Paraloid® B72: a copolymer of ethyl methacrylate (EMA) and methyl acrylate (MA) (70:30); manufactured by Rohm and Hass Company, Philadelphia, PA 19105, USA.

Plextol® B500: a copolymer of ethyl acrylate, methyl methacrylate, and ethyl methacrylate, at 50% solid content concentration; manufactured by Rohm GmbH Chemische Fabrik, Postfach 4242, 6100 Darmstadt 1, Germany.

PVAC AYAF: polyvinyl acetate resin AYAF (MW = 169,000); manufactured by Union Carbide Corporation, Old Ridgebury Road, Danbury, CT 06817, USA.

Biography

Dr **Malgorzata Sawicki** is Head of Frames Conservation at the Art Gallery of New South Wales, Sydney, Australia. Trained in gilded/ polychrome objects conservation at the State Enterprise for Culture Heritage Preservation, Warsaw, Poland, 1975-81, Malgorzata studied Preservation of Architectural Heritage at the University of Nicholas Copernicus, Torun, Poland, 1978-1981, and later Applied Science (Materials Conservation) at the Western Sydney University, receiving her Master Degree with Distinction (2000), and then PhD (2009) for completing her research on non-traditional gilding techniques. *Conservator of the Year* in 1999, in 2009 honoured with the *Certificate of Appreciation for Outstanding Research in the Field of Materials Conservation*. Founder/ first Convenor of the AICCM Gilded Objects Conservation Special Interest Group, 1996–2001. Coordinator of the ICOM-CC Wood, Furniture, and Lacquer Working Group, 2008–2014.

Towards a tangible virtuality: a holistic approach towards the conservation of time-based art

Presenter: Asti Sherring

Affiliations: Art Gallery of New South Wales

When we enter the realm of the digital, change will always be an option (Weinbren 2011)

Time-based artworks are part of a neoteric, rapidly expanding medium; in which the intrinsic cultural value of the work is entwined with its inherent instrumental like nature. This poses numerous ethical, theoretical and technical problems for cultural institutions, where strong foundations based on the concepts of originality and authenticity that focus on the tangible material object, have long been established. Time-based art challenges this paradigm. In 1989 Brian Smith (Smith 1989, p.40) declared that 'technology must be demystified, not denied'. While 'things are changing' (Viola 1999, p.90) in regards to the collection management of time-based works within an institution; Smith's statement is an accurate representation of the institutional mindset surrounding artworks that plug into the notion of virtuality. This talk presents a composite theory for exploring the challenges surrounding the conservation of time-based artworks at the Art Galley of New South Wales.

The AGNSW owns a significant collection of time-based artworks that span across a range of analogue and digital platforms. Over the years, multiple projects have been undertaken to address the migration, storage and overall management of the Gallery's holdings, with ongoing work on the collection being conducted without a definitive project brief or schedule. Over the last five years significant progress has been made with regards to the re-housing and migration of obsolete media, the pursuit of relevant copyright licences, and the resolution of collection status for un-accessioned materials (Jaspers 2015). In August 2015 the AGNSW employed its first time-based art conservator to work over an initial period of six months on a dedicated project addressing the outstanding and key issues of the time-based art collection.

The aim of this project is to achieve a set of clear goals regarding:

- The question of 'what is time-based art?'
- The accurate identification and classification of objects with a durational aspect within the collection.
- The standardisation of terminology and the need to establish a cohesive language for the time-based art collection gallery wide.
- The development and implementation of cataloguing guidelines, specifically in relation to 'media category' and 'medium description' fields, and 'object part' naming system by evaluating the current database system of management.
- A collaborative review of all object parts received and the sourcing of any outstanding parts required to be undertaken.
- An audit of works in the collection that have a time-based licence and/or standard non-exclusive licences associated with an acquired work.
- The development of one amalgamated copyright licence, which incorporates language applicable to the time-based collection in standard clauses.
- The continuation of migration strategies by developing a priority list of analog formats requiring migration and completing the outstanding migrations for obsolete formats and analogue works.

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Towards a tangible virtuality: a holistic approach towards the conservation of time-based art (*from previous page*)

- The identification of born digital works requiring duplication onto the current AGNSW internal digital server.
- A review of the AGNSW existing digital archive, which involves revisiting naming protocols and re-cataloguing the works stored on the server.
- Investment in developing an appropriate long term digital asset management system that ensures the long term secure preservation of digital content through a multilayered hardware and software platforms.
- The development of comprehensive new policies and procedures for time-based collection acquisitions.
- The documentation of conservation management activities drafted, reviewed and approved.

In order for conservators to go beyond the veneer of time-based art we must acknowledge the true nature of the medium, as works that are not singular objects of art, but are made up of a series of procedures 'where the individual components of the technology are pre-designed with a set of deliberate characteristics and presumed uses' (Viola 1999, p.89) most of which take place unbeknownst to the viewer. What we then view as an audience is the representation of a technological action fixed within the concepts of interactivity, temporality, duration, sound and movement. By ascertaining that the term time-based art would constitute a multiplicity of artistic forms which use the passage of and the manipulation of time as the essential element, the AGNSW can begin to develop successful strategies in regards to the accessibility, and integrity of the data surrounding the time-based art collection.

The wicked problem (Rittel & Webber 1973, p.163) regarding the conservation of time-based art as it currently stands, is that time is of the essence and as such every decision, including the decision to do nothing, is consequential. However, it is only by engaging with the full spectrum of time-based art, that we can begin to confront the difficulties of conserving this medium. Active engagement with the time-based art collection has presented the Art Gallery of NSW with a unique opportunity to prepare a framework for the future that will guard against epistemic failure and confront the intrinsic dilemma of digital permanence. While this project is still in its infancy, it is evident that the future stability of the collection focuses on a secure digital asset management system, as well as an organisational commitment to the stewardship of these virtual materials. The conservation of time-based art requires a holistic approach, involving the cooperation and resources of the Curatorial, Conservation, Registration, Audio-Visual, Information Technology, Copyright and Collection Systems departments. Moreover, an awareness of the purpose and application of current digital products as well as identifying the potential suitability of emerging technologies is essential to the role of the time-based art conservator. By embracing new technologies within the professional field of conservation, the conservator's role in the examination, documentation and conservation of time-based art could be significantly enhanced. By taking a lead role in the decision-making process, conservation professionals can 'reinvent themselves' in regards to their conservation approach (Witcomb 2007, p.35) and their current role as custodians of time-based art.

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Biography

Asti Sherring completed a Bachelor of Media Arts with honours from Sydney University in 2005. She completed a Masters of Materials Conservation specialising in paper and photographic materials in 2012 and a Post-graduate Certificate in photographs conservation (Melbourne University) in 2011. Asti has worked as a conservator at The National Archives of Australia (film and audio department), The Museum of Contemporary Art, and The Art Gallery of NSW, as well as completing a fellowship in photographs conservation at the Los Angeles County Museum of Art in 2014. She is currently employed as a time-based art conservator and web development digital researcher at the Art Gallery of NSW.

Relinquishing ambulance chasing and engaging with the real threats to the preservation of Australia's cultural record

Presenter: Robyn Sloggett

Affiliations: The Grimwade Centre for Cultural Materials Conservation

Crises in the conservation of Australia's cultural material have been acknowledged since at least 1933 when *A report on the museums & art galleries of Australia* was published by The Museums Association in London. Just over forty years later the 1975 Australian Federal Government's Senate Inquiry into Museums in Australia, known as The Pigott Report, again identified the critical damage that was occurring in Australia's collecting institutions. By 1995 a National Conservation and Preservation Policy for Movable Cultural Heritage was in place, with the national strategy following a year later. Both the National Policy and the National Strategy had a direct lineage to the 1933 and 1975 reports. The modelling remained, despite some rhetoric to the contrary, on collections in institutions, which were then and which remain located in, and serving, major population centres. Where Indigenous culture was considered it was within an institutional custodian framework, where the focus remained on the agency of conservators who were working for institutions.

This modelling is no longer useful for the conservation profession; intellectually, economically or professionally. It does not deliver an argument that can be employed in any effective discussions of job creation. It does not engender the rigorous debate needed to tackle national priorities. It places severe restrictions on the fight for funding. It does not provide the intellectual framework to deliver radical new thinking in the sector. It lacks the pluralism required to deal with the issues facing the conservation of Australia's movable cultural heritage. This paper explores some national approaches to conservation that are less alarmist, are intellectually engaged with the core issues of knowledge retention and loss, and that can support the advocacy and engagement required to sustain and grow conservation as a leading discipline and a viable profession. In doing so evidence is produced that identifies where new priorities may sit for conservation and where new opportunities may present.

Biography

Robyn Sloggett is Director of the Grimwade Centre for Cultural Materials Conservation. Her research incorporates art authentication, the scientific and cultural analysis of cultural material, art market development, cultural conservation in Southeast Asia, and the preservation of cultural material and archives held in remote and regional communities.

A technical study on the influence of pH and bioreceptivity of retouched Japanese tissue papers in paper conservation

Presenter: Dr Somayeh (Mona) Soleymani

Affiliations: University of Canberra

The aim of this study is the identification of the fungal bioreceptivity of a wide range of pigments and dyes, particularly those which are mostly used for toning Japanese tissue papers and the influence of pH on the formation of fungi on retouched Japanese papers. A number of studies show that acidic conditions (low pH index) cause more fungal growth than an alkaline environment. However, others indicate that there is not a good correlation between the fungal growth and the pH index of the papers. Few studies have examined the pH of Japanese conservation papers and correlated this with their bioreceptivity.

The present study evaluates the acidity and alkalinity level of Japanese conservation papers after toning with different dyes and pigments and the bioreceptivity of these papers, using a number of DNA and polymerase chain reactions (PCRs) techniques. The real time PCR is used to target polymorphic DNA sequences with the aid of an intercalating fluorescent dye which binds to amplified double stranded DNA. This technique is used to measure the concentration of DNA in paper samples inoculated with the fungal spores (*Aspergillus niger* and *Penicillium rubrum*) at the time of inoculation and then after 10 days of incubation in an artificial ageing environment. This indicates how successfully fungi are able to colonise different papers treated with different colourants, thereby indicating which papers and colourants have the most effective antifungal properties. This new knowledge will assist paper conservators in making better choices to ensure the long term preservation of restored paper materials, with a greater resistance to fungal attack.

Biography

Somayeh Soleymani received her PhD in heritage materials conservation with specialty in paper conservation from the University of Canberra. Her study was focused on the physical stability and bioreceptivity of dyes and pigments used for toning Japanese mending papers in paper conservation. She is currently lecturing heritage conservation to the Bachelor of Heritage, Conservation and Museum Studies at the University of Canberra.

Mona.Soleymani@canberra.edu.au

The conservation treatment and visual re-integration of a major repair of a painted photograph of the Archdeacon William Henry Brown

Presenter: Robin Tait

Co-authors: Robin Tait¹ and Mar Gomez Lobon²

Affiliations: ¹The Tait Bindery

²Artco – Art Conservation & Museum Services

This presentation aims to share the complex conservation treatment of a portrait of the Reverend William Henry Browne (1807 – 1873), circa 1860s. Browne was the Archdeacon of St John's Church, Launceston, from 1830 until 1845 and he was a prominent figure in the colonial days of northern Van Diemen's Land. The portrait, by an unknown but highly skillful artist, was painted with watercolour, chalk and gouache over a photographic print, lined onto a fine cotton canvas and mounted on a strainer. It had suffered severe damage resulting in a large loss of both the paper and canvas supports comprising a large section of the sitter's head. Other damage included mould, water damage, powdery paint caused by loss of binding media, many fractures and punctures, large distortions and tearing along edges of stretcher.

The structural treatment involved unstretching, removal of fabric lining, a blotter 'wash', lining onto a new cotton cloth similar to the original and stretching the work back onto its original strainer.

The reintegration of the large missing area on the face posed some serious challenges to the conservators since an imitative reintegration could not be done in an ethical manner. A general background colour to the repair would also have proved to be visually disturbing. Archival research was undertaken in order to find other portraits or photographs of the sitter to use for reference. This led to the fortunate finding of a small photograph that was found to be the same as the painted photograph in the portrait. This finding allowed for a full reconstruction of the missing area, using background with the general tonings over which were laid the additional details in the same media as the original work which completed the image but remained visible from a close distance.

This treatment involved combining the skills of a paper and paintings conservators, working with a short time frame and a limited budget. Working in a collaborative manner and using tools such as archival research allowed solutions to be found for a challenging treatment that could not otherwise have been undertaken, and rescue a significant artwork.

Biography

Robin Tait is a graduate of the University of Canberra and Camberwell College of Art and Crafts, London in Book and Paper Conservation. In 1984 she studied with James Brockman at his Bindery in Oxford. She has worked in a number of Australian public institutions as a Paper and Book Conservator and is now a Director and Principal Conservator of *The Tait Bindery*.

Mar Gomez Lobon graduated in Conservation of Paintings at the School of Conservation of Cultural Material in Barcelona (Spain) in 1999. Following several conservation positions in Spain, Italy, UK, NZ, Australia and Singapore, she founded *Artco – Art Conservation and Museum Services* in 2011, based in Launceston, Tasmania.

Application of modern conservation ethics to historical Natural Science collections

Presenter: Sheldon Teare

Co-authors: Sheldon Teare, Natural Sciences Conservator
Megan Dean-Jones, Conservator

Affiliations: Australian Museum

The Australian Museum has installed a new Natural Science gallery as one part of a redevelopment scheme of the Museum. This will be a new permanent gallery, reclaiming floor space from the Café, Gift shop and admissions. The gallery will focus on biodiversity and feature over 400 collection specimens from the Natural Science collections. The development of a new permanent Natural Science gallery at the Museum involved selecting hundreds of specimens from the collections. The selected specimens mainly comprised of mounted taxidermy specimens from Mammal and Ornithology collections, but included specimens from Herpetology, Entomology, Malacology, Palaeontology, Ichthyology and Arachnology. The taxidermy ranged from modern taxidermy mounts and ones collected and prepared in the late 1800s. These hundreds of specimens all required different levels of conservation involvement to get them ready for display.

Many of the Museum's exotic specimen collections (animals from outside of Australasia) had suffered from neglect in a number of ways. This neglect included poor storage, active damage, curatorial neglect and a lack of exhibition interest. This is believed to be due to trends in the museum moving away from exotic specimens. These specimens had rarely been accessed over the past 15-20 years, or more, meaning they had received little in the way of modern conservation treatment or assessment.

Exhibition and design staff seem to approach the display and handling of Natural Science specimens differently to Cultural materials. Conservation staff found that they had to bring up simple principles of ethics and standards. Ethical discussions around historical bases, labels, the poses of mounts, and the removal of specimens from dioramas were constant throughout the preparation of the specimens.

This large scale preparation of such a wide range of Natural Science collection material has allowed Conservation staff the opportunity to apply contemporary treatment methods to specimens that would not have received Conservation attention in the past. Sympathetic and hopefully reversible treatments have been applied, taking the place of hot glue and poster paints.

A number of different materials and techniques were used across the 400 plus specimens selected for the new Gallery. A number of specific treatments have been chosen to highlight the breadth of collection types and range of different conservation treatments applied.

Biography

Sheldon Teare is Natural Sciences Conservator at the Australian Museum. Sheldon works across all the Natural Sciences collections, providing conservation advice and expertise regarding the long-term preservation of these collections. Sheldon specializes in carrying out complex treatments of historical Natural Science specimens. Currently Sheldon serves as President of NSW AICCM division.

Megan Dean-Jones has worked in Conservation for the Australian Museum and in other cultural institutions for over ten years. Megan works across the Museum's collections, having expertise in providing solutions to complex storage problems. Recently Megan has become involved with natural science Conservation programs, working closely on the Wild Planet project.

Replicating the past: a digital approach to loss compensation in cultural material conservation

Presenter: Claire Tindal

Affiliations: Grimwade Centre for Cultural Material Conservation,
University of Melbourne

The 2010s have thus far ushered in a meteoric rise and expansion of digital imaging and mass manufacturing. Once restrained by technological and financial limitations, digital-born industries – including 3D scanning and 3D printing – are beginning to present as viable alternatives to traditional design and manufacturing processes. In a similar vein, both technologies lend themselves particularly well to principles of customisation, a reality that is desirable in cultural material conservation. Often damage to an artwork or archaeological material presents conservators with missing components requiring a form of loss compensation. Traditional modes of treatment – moulding, casting and modelling – can be impossible or undesirable in some situations, as they require contact with the object or may misrepresent the lost material. Such presents unnecessary risk, a concept that is at odds with ethical principles guiding the profession.

An alternative approach to loss compensation involves the integration of non-contact 3D digital imaging techniques with different modes of mass customisation – 3D printing in particular. The former functions to document the geometry of the missing part in a manner that will not damage the surface or leave residues, while mass customisation processes fabricate the desired replacement part from its digital file. To shift from concept to tangibility, one must first develop a data acquisition pipeline tailored to cultural heritage objects, and then determine which 3D printing processes produce suitable geometric accuracy in material types that maintain conservation-grade stability standards. PhD research is currently underway at the University of Melbourne to explore best-practice approaches to these areas of interest, so that digital imaging and mass customisation might one day be a feasible option for loss compensation through the creation of detachable fills.

This presentation will outline the principal concepts inherent to this topic, present preliminary research – especially with regard to 3D print material stability – and propose future directions for digital technologies in cultural material conservation.

Biography

An archaeological conservator by training, **Claire Tindal** holds degrees in cultural material conservation and anthropology. She previously served as Historic Conservator for the Florida Bureau of Archaeological Research and has worked with Heritage Victoria, the National Museum of Australia and the Clemson Conservation Center. She is currently pursuing a doctor of philosophy with the Grimwade Centre for Cultural Material Conservation at the University of Melbourne. Her interests include metals, archaeological materials, large technology and 3D printers.

Behind, over and under the scenes...the conservation of the First World War dioramas at the Australian War Memorial

Presenters: Alana Treasure and Nicholas Flood

Co-authors: Alana Treasure¹ and Nicholas Flood²

Affiliations: ¹ Australian War Memorial

² International Conservation Services

In the lead up to the First World War centenary, the iconic FWW dioramas at the Australian War Memorial have been the focus of a major conservation project involving cleaning, repair and relocation as part of the complete redevelopment of the Memorial's FWW galleries.

The dioramas were accessioned into the art collection in the 1990s, having previously been considered exhibition 'props', and so presented many ethical issues in dealing with objects that have a mixed history with varied restoration interventions in the years since their creation in the 1920s and 30s. Over a two year period a dynamic team of objects and painting conservators carried out intensive surface cleaning, consolidation, filling and inpainting, repair or replacement of missing and broken components, as well as assisting with considerable structural improvements to their base framework to allow their movement.

Several light technologies were used in the project, with surveying and 3D scanning enabling the design and construction of new backdrops for several dioramas, which include innovative digital displays and a demountable painted 11 metre curved canvas support. A missing soldier was produced by the application of 3D scanning and printing. Customised LED lighting now illuminates all the dioramas in a new light.

Close collaboration with internal workshop, registration, curatorial and exhibition staff along with external builders and designers was required to facilitate substantial structural building works and new exhibition infrastructure layout. The majority of the conservation work was conducted onsite, with multiple, often shifting, deadlines throughout the redevelopment period. Logistical considerations, estimates and management of resources and time therefore played a significant role in the project. With funding allowing us to devote thousands of hours of attention to the much-loved dioramas, both Memorial staff and the general public regard the project to be a very successful part of the Memorial's commemorations for the First World War centenary.

Biography

Alana Treasure has been Senior Paintings Conservator at the Australian War Memorial for seven years, previously working at the National Archives of Australia and University of Canberra in both conservation and conservation science following her B.Sc (Chemistry) and M.App.Sc. (Conservation of Cultural Materials – Paintings). She conducts materials analysis for many cultural institutions.

Nicholas Flood is currently Objects Conservator at International Conservation Services. In 2013-14, he worked as part of the First World War Diorama team at the Australian War Memorial. Holding qualifications in Cultural Material Conservation and Chemistry, Nicholas has contributed research in characterisation of collection material, conservation photography and conservation advocacy.

Decision making, materiality and digitisation: Esteban Villaneuva's *Basi Revolt Paintings of Ilocos*

Presenter: Dr Nicole Tse¹

Co-authors: Professor Maricor Soriano², Dr Ana Labrador³, Robert A. Balarbar³, Ray Esguerra³ and Erline Millar³

Affiliations: ¹ Grimwade Centre for Cultural Materials Conservation, University of Melbourne

² National Institute of Physics, University of the Philippines

³ National Museum of the Philippines

Esteban Villaneuva's fourteen 1821 paintings titled *Basi Revolt Paintings of Ilocos*, are valued for their representation of conflict between the Spanish colonial administration and Filipino insurgents and the beginnings of secular artistic practice in the Philippines. As significant cultural and historical documents linked to national independence, the visual navigation of the paintings for their meaning is critical. Damage, previous restorations and the tropical climate, however has not been kind to the *Basi Revolt* paintings. This paper reports on the extended technical and materials analysis of the paintings, and digitization and image analysis as an alternative conservation model that preserves multiple perspectives and pluralistic values. It acknowledges the trajectory and life of the paintings in conservation decision making.

Standard research conservation pathways determined that there was significant variation across the fourteen paintings. They lacked consistency in materiality and their complex states suggested numerous stages of restoration. Inorganic analysis identified a palette of titanium white, cadmium red and zinc oxide inconsistent with the date of the works and a standard palette of barium sulphate, lead white, vermilion, realgar and red lead considered to be within the 1800s time frame. Given their complexity and a preference for multiple perspectives and evidential bases to be retained, protocols for their digitisation and reconstruction were explored. Collaboration with optical physicists from the University of the Philippines, curators, art historians and conservators from the National Museum in the Philippines, Provincial Government of Ilocos and the University of Melbourne, allowed for broader conservation decision making. A digital imaging system that captured colour-calibrated images of the paintings at 442 to 461 dots-per-inch (dpi) were scanned with a high resolution Niji-Series unit at the National Museum of the Philippines. Using image enhancement techniques and virtual inspection, the collaboration focussed on the algorithmic analysis of white balance, histogram equalisation and edge detection to virtually reconstruct multiple authenticities. Overall this project highlights alternative approaches to the conservation of paintings without permanently interfering with the historical record. It demonstrates a collaborative and pluralistic approach in cultural materials conservation for differentiated trajectories to be retained.

Biography

Roberto Alfonso Balarbar is the Section Head of the Chemistry and Conservation Laboratory and the Arts Division of the National Museum of the Philippines. He has been a Museum Researcher/Conservator-Analyst/Lecturer/consultant at the Chemistry and Painting Conservation Laboratories of the National Museum for 29 years and is involved in the recent disaster recovery programs on the island of Bohol in the Philippines.

continued next page

Decision making, materiality and digitisation: Esteban Villaneuva's Basi Revolt Paintings of Ilocos *(from previous page)*

Ray Esguerra, Paintings Conservator, and **Erline Millar**, Textiles Conservator, are part of the Chemistry and Conservation Laboratory of the National Museum of the Philippines.

Dr Ana Labrador is a social anthropologist and Assistant Director of the National Museum of the Philippines, managing its interdisciplinary research and collections. She is also its chief curator. In 2008, she was a Visiting Scholar at the University of Melbourne's Centre for Cultural Materials Conservation, continuing her work on traditional knowledge and preventative conservation from the University of the Philippines at Diliman where she was Associate Professor of Art and Museum Studies.

Professor Maricor Soriano is a professor of physics at the National Institute of Physics at the University of the Philippines. With scientific papers in the area of optics, electronic imaging and pattern recognition, she has a long-standing interests in materials conservation with a collaboration with the Vargas Museum Art Collection at the University of the Philippines and the National Museum of the Philippines.

Dr Nicole Tse is part of the teaching and research team at the Grimwade Centre for Cultural Materials Conservation, The University of Melbourne. With an interest in cultural materials conservation in tropical climates, she received an Australia Endeavour Executive Award in 2014 to work with the National Museum in the Philippines.

Teaching and research in the examination of the interior paint scheme of the Victorian Trades Hall Old Council Chambers

Presenters: Eleanor Vallier and Yasmin Kopij

Co-authors: Madeleine Roberts, Robyn Ho, Dr Nicole Tse

Affiliations: University of Melbourne

Situated in the Victorian Trades Hall, the Old Council Chamber is one of the most historically significant rooms in what remains a Victorian and National icon for the trade union movement and broader political landscape. Originally boasting an elaborate interior decorative scheme, this detailing is currently obscured beneath subsequent layers of non-original overpaint, with no full conservation assessment of the original decorative scheme having been undertaken. Identification of this conservation gap enabled materials conservation students from the University of Melbourne to undertake examination of the interior paint structure, identify the original decorative scheme and propose a methodology for the removal of non-original paint. This project and its findings have a twofold relevance to heritage conservation. First, the project outcomes utilizing microscopy, cross sections, solubility testing, Fourier Transform Infrared Spectroscopy (FTIR) and Portable X-Ray Fluorescence Spectroscopy (pXRF) of the paint samples provided a deeper understanding of the complexities of nineteenth century interior decorative schemes including appropriate cleaning methodologies for the removal of oil-alkyd overpaint. Secondly it provided a project based learning experience for students and staff for effective, flexible and independent learning. Working between the laboratory and the heritage site location highlighted the importance of collaborative and interdisciplinary methodologies within a professionally guided context. The implementation of effective project management skills and comprehensive documentation resulted in the provision of a practical report which included materials analysis and industry standard records. The final report of findings will be used by Trades Hall to support further funding and provide the basis for future conservation treatment.

Biography

Eleanor, Yasmin, Madeleine and Robyn are second year students of the Master of Cultural Materials Conservation at the University of Melbourne specialising in paintings. Dr Nicole Tse is part of the research and teaching team at the Centre for Cultural Materials Conservation at the University of Melbourne.

Digital heritage futures – creating, sharing, preserving

Presenter: Alison Wain

Co-authors: Tracy Ireland

Affiliations: University of Canberra (both authors)

Digital technologies that emulate traditional copying and collection processes have been adopted by many curators, collection managers and conservators. The collection of born digital materials such as document files, emails, webpages, images and digital sound recordings generally follows similar protocols to the collection of non-digital materials, while the digitisation of collections continues existing practices of transferring vulnerable material onto new formats for preservation and access, albeit with new technical challenges.

The impact of digital technologies on heritage does not end with these comfortable equivalencies though. Digital technology is disrupting traditional business models in heritage as much as in other industries, changing what heritage is considered to be, how it is made and the skills needed to preserve it. Heritage practitioners, including conservators, need to develop new digital literacies in this environment, to enable them to drive innovation in digital heritage creation, preservation and engagement (Mansfield *et al*, 2014).

From a conservation viewpoint, developing understandings of the materials (the code) that digital heritage is made of, the impact of the environment (hardware, web, Cloud etc) in which it exists, and the intangible heritage of experience, memory and culture associated with it is vitally important, equivalent to understanding the materials, physical environments and associated intangible heritage of traditional physical objects. Digital skills, however, have traditionally been a STEM focus, and many heritage students, including conservators, do not see digital literacies as core, or even particularly relevant, aspects of their future professional identities.

This paper discusses responses to these issues developed through the Future Heritage Program at the University of Canberra. Our research focuses on transitioning heritage students from a low level of digital interest and skill to an active role as digital creatives, highlighting digital making as a route to engagement, knowledge acquisition and skill development.

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Biography

Alison Wain's research interests include the integration of digital understandings into conservation practice, the use of lasers in conservation, and large technology heritage conservation, interpretation and community participation. She is currently Course Convenor and Senior Lecturer in Conservation for the Bachelor of Heritage, Museums and Conservation at the University of Canberra.

Tracy Ireland is Associate Professor of Cultural Heritage and heads the Future Heritage program of the Centre for Creative and Cultural Research at the University of Canberra. Her research focuses on historical archaeology, heritage and conservation in settler societies, and her most recent book is *The Ethics of Cultural Heritage*, edited with John Schofield.

Knowledge transfer strategies for the acquisition of contemporary live art

Presenter: Jessye Wdowin-McGregor

Co-authors: Robert Lane

Affiliations: The University of Melbourne

Live art is a form of practice that requires a different approach to sustain its memory to that employed for fixed, tangible objects. In the context of this research, the term 'live art' is utilised as a means to distinguish art works that involve live performers in galleries from art works in which performance situations are represented in secondary formats through time-based media installations. A recent resurgence in the programming and acquisition of live art within major cultural institutions prompts questions about the preservation of an art form that has no material presence. This paper examines alternate forms of transmission for the long-term transfer of live art and addresses the necessary skills required to maintain a live art legacy.

British-German artist Tino Sehgal is a leading practitioner of contemporary live art; the recipient of the Golden Lion award for best artist at the Venice Biennale, he has been nominated for the Turner Prize and his work has been exhibited at major international venues. Sehgal's art leaves no material traces, as the artist resists the use of photos and videos acting as a documentary surrogate for his work. In the absence of images, instructions or recordings, the perpetuation of Sehgal's work relies on remembrance and 'body-to-body transmission', a practice associated with dance. The research is primarily informed by Australian dancer and choreographer Becky Hilton, who plays a crucial caretaker role in the production and future transmission of Sehgal's work *This Is So Contemporary* (2005), recently acquired by Sydney-based not-for-profit organisation Kaldor Public Art Projects and exhibited at the Art Gallery of New South Wales in 2014. The study investigates non-written documentation strategies as an alternate form of knowledge transfer practice for *This Is So Contemporary*, including embodied memory and re-performance.

Biography

Jessye Wdowin-McGregor is a recent graduate of the Master of Cultural Material Conservation (2014) at the University of Melbourne and previously completed a Master of Fine Art (by Research) (2008) at the Victorian College of the Arts. She has undertaken conservation projects with organisations including National Gallery of Victoria, National Herbarium of Victoria (Royal Botanic Gardens), Carlton & United Breweries, Koorie Heritage Trust and City of Port Phillip and is currently employed at the Centre for Cultural Partnerships, University of Melbourne. She has research interests in caring for contemporary art collections, including time-based media, audiovisual materials and live art practices. As a practicing artist, she works in the mediums of collage, video and performance.

Robert has degrees in Communication (RMIT), Education (Deakin), and is a PhD candidate at Research School of Humanities & the Arts (ANU). Currently based in Victoria, he works at the University of Melbourne Grimwade Centre for Cultural Materials Conservation. Robert has published a wide variety of cultural material, including ethnographic films, interactive museum installations, traditional music anthologies, live performance recordings, radio documentaries, conference sessions and articles. Since 2008, he has conducted extensive fieldwork with the Yolngu people of Northeast Arnhem Land. Areas of interest include: Documentation, Ethnography, Multimodality, Pedagogy, Creative and Practice-led Research Methods.



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Conservation in context: shedding a new light into the conservation of the University of Canberra's Indigenous Artefact Collection

Presenter: Hakim Abdul Rahim

Co-authors: Robyn Victory

Affiliations: University of Canberra

The conservation and management of university museums and collections provides interesting challenges to the student conservators at the University of Canberra. The UC Indigenous Artefact Collection has been in storage for 30 years and has recently undergone a collection condition assessment to ascertain the conservation needs of the collection. The collection consisting of over 500 artefacts from all over Australia has been stored in inadequate conditions that have resulted in pest infestation (Florian 1997). Conservation treatment was undertaken to eradicate the pest problem but the resulting conservation management of the collections has thrown up some interesting challenges. Due to lack of proper storage facilities, solutions were needed to best manage the collection within the parameters of an ever-changing tertiary system. This poster will address two areas. Firstly it will document and present the conservation treatments involved in the pest eradication project. It will also include some collection management procedures and issues that accompany small collections in universities (New South Wales. Cultural Activities Division 1977). Secondly it will showcase the challenges and issues in preventative conservation within the real life context of a university. The poster will highlight the need for more research and development in the conservation and management of university museums and collections.

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Biography

Hakim wears many cardigans. He is a horticulturist, curator, crafter, heritage enthusiast, emerging conservator, a lifelong learner (still a student) and occasionally a general nuisance. His interest lies in the natural sciences and their collections, youth engagement in heritage, university museums and collections, and crocheting.

Robyn is a third year Heritage, Museums and Conservation student, hoping for a life in paintings conservation. Currently an intern at the Australian War Memorial Robyn also has a strong interest in Australian Indigenous art and culture.

Illuminating conservation through the use of social media

Presenter: Amy Bartlett

Affiliations: Queen Victoria Museum and Art Gallery

Cultural institutions have taken up web-based social networking to engage with audiences since its increased popularity during the 1990's. Most recently, the use of important platforms such as Facebook®, Twitter®, Instagram® and blogs have been used to promote galleries, museums, libraries and archives. This form of contemporary campaigning for advocacy is important in the current climate of economic pressure to ensure that the conservation of cultural material is preserved and institutions are supported.

The Queen Victoria Museum and Art Gallery (QVMAG) in Launceston, Tasmania has been using its current Facebook® page since 2011 as an opportunity to promote the collection, exhibitions, public programs, education, and the history centre and library services. The institution has also started a blog which complements the official webpage. These powerful tools provide a chance to enhance the relationship with visitors and have become a significant aspect of the institution's marketing strategy.

The QVMAG Conservation Department realised the magnitude of this form of engagement and has been consistently producing content for the social media platforms over the past two years. These posts focus on the work conducted by the unit such as treatments, exhibition preparation, preventive conservation projects, and volunteer programs. This poster will use examples to demonstrate how social networking can be used to engage the community, broaden our audience, and promote conservation worldwide.

Biography

Amy Bartlett completed a Bachelor of Arts and a Graduate Diploma in Arts Administration before undertaking studies in conservation including a Master of Arts (Cultural Materials Conservation) and a Postgraduate Certificate (Photographic Materials Conservation). She is currently employed as Senior Conservator at the Queen Victoria Museum and Art Gallery in Launceston. Prior to this, Amy worked in various roles at the National Archives of Australia, National Gallery of Victoria and Museum Victoria. Amy is an active member of AICCM and is currently the President of the Tasmanian Division and is Co-Convenor of PHOTON, the special interest group for the conservation of photographic materials.

Breaking the mould: investigation into the effectiveness of current strategies for the remediation of mould from cultural heritage artefacts and historic building interiors

Presenter: Tess Evans ACR

Affiliations: 1. The National Trust; 2. English Heritage;
3. University College London; 4. Courtauld Institute of Art

Fungi play a considerable role in the deterioration of cultural material. Climate change predictions suggest that the future of the environment will exhibit a range of new conditions from increasing temperatures and relative humidity (RH) to rising sea levels. Resultant changes to indoor environments and an unstable thermo hygrometric environment will put organic collections at increased risk of biodeterioration by fungi.

This poster researches the potential of a biocide to remove and control fungal growth from a range of heritage artefacts. Working collaboratively with conservation scientists at English Heritage and University College London, and with students from the Courtauld Institute of Art, using a range of sites as case studies chosen to reflect different indoor environments and a varying range of object types and media. The Historic House Knole near Sevenoakes in Kent, UK (The National Trust) was chosen as a representative of a typical unheated interior, with substantial mould issues on wall interiors, soft furnishings and highly significant Paintings on Canvas. The Secret War Tunnels at Dover, UK (English Heritage) are a network of chalk-cut tunnels deep beneath the castle, close to the south east coast of Britain, and contain a social history collection including costume, maps, books, furniture and The Underground Hospital.

This site was chosen, as the extent of mould growth currently requires an exhaustive and unsustainable cleaning protocol.

Biography

Tess completed a Post Graduate Diploma in Textile Conservation and a three-year apprenticeship in Tapestry Conservation at the Textile Conservation Centre, London (1984) and went on to become Deputy Head of the Textile Conservation Centre Tapestry Department for three years, before moving to Australia in 1987.

Since that time she has worked primarily in private practice in Australia and Internationally, establishing Heights Heritage Conservation in 2005 where she is the Principal and Senior Conservator and became a Professional Member of AICCM in 2012.

In 2011 Tess began a two-year sabbatical to UK, pursuing her research interest in biodeterioration of cultural materials and received an MSc with Merit in Museum Studies from Leicester University in 2014. During this time, she completed her ICON Accreditation and Lectured for the BA Conservation course at the Camberwell College of Art, University of London.

Travelling two Carey Globes from the collection of the National Library of Australia

Presenter: Peter Faulkner

Co-authors: Peter Faulkner and Alexa McNaught-Reynolds

Affiliations: National Library of Australia

Two globes made by John Cary (1754-1835) were acquired by the National Library of Australia in 2011. John Cary was a well-known map-maker based in London, his maps and globes became highly sought after, they were scientifically accurate as he referenced the most knowledgeable sources of his time. This pair is significant as they are one of the first published globes to use the name 'Australia' after its approval by the British government in 1824.

The two globes, Map Globe 18 and Map Globe 19, are Cary's new terrestrial globe and Cary's new and improved celestial globe. The terrestrial globe uses the sources of Captain Cook; Captain Vancouver and M. de La Perouse. The celestial globe shows the whole of the stars and nebulae contained in the astronomical catalogue of the Revd. Mr. Wollaston. F.R.S. also sources Flamsteed, de la Caille, Hevelius, Mayer, Bradley and Herschel Maskelyne.

Each globe measures about 53cm in diameter, it is constructed of a wooden frame, covered with papier mache and plaster with the paper gores adhered over the top. The globe sits on a mahogany quadrant raised on a tripod stand. They were acquired in sound condition with some minor repairs evident being done in the past, mainly to the globes themselves with small losses infilled and in-painted. The stands were scratched and worn from wear but are structurally sound.

The two globes were requested for a travelling exhibition in Australia. The globes were assessed by the conservation, exhibition and curatorial team and were considered stable enough to travel. Once approval had been given, the job of packing and crating started. The many elements to the globes made this an interesting challenge. As a Library we are accustomed to sending books and framed items of work so this presented a unique and interesting opportunity.

Biography

Peter Faulkner has worked at the National Library of Australia for 15 years. Peter is an expert in installing exhibitions and crate making, he has installed a number of blockbuster exhibitions including 'International Treasures', 'Handwritten' and 'Mapping our World' and has crated hundreds of NLA material for safe travel to National and International venues.

Alexa McNaught-Reynolds graduated from the University of Melbourne in Paper conservation in 2009. Since then she has worked in a number of institutions and for the last 7 years Alexa has been at the National Library of Australia where she started as a paper conservator before moving into Exhibitions conservation in 2011.

Getting hands-on with archives

Presenter: Prue McKay

Affiliations: National Gallery of Australia

The plethora of television programs in recent years that involve presenters and guests using archival collections has brought to light the varied practises of handling old books, maps and papers – using cotton gloves used to be almost ubiquitous, but lately we can see more and more that nitrile gloves are being worn instead, or that gloves are being rejected completely in favour of bare hands.

At the 2008 Book, Paper and Photographic Materials Symposium I presented preliminary research looking at some consequences of handling archival material in these different ways. I am now continuing this project, to determine whether bare hands, cotton gloves or nitrile gloves are “best” over a range of observations. Sets of samples representing common archival collection material are being created, and volunteers are asked to handle them using methods including clean or unwashed hands, and bare skin, cotton gloves or nitrile gloves. We also briefly experimented with saliva before deciding it was too disgusting to carry on with. Testing will continue into 2016, with results to be presented at the 2016 Book, Paper and Photographic Materials Symposium.

This poster will briefly look back at the history of wearing gloves to handle archives, and at the results of the earlier testing phase, before outlining the current research project.

Biography

Prue McKay is a Senior Conservator, responsible for Exhibitions and Projects, at the National Archives of Australia. She has been at the National Archives since 2001, except for a three-year hiatus during which she worked at the Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS). Prue’s conservation interests include investigating the white-glove myth, early photography, and pith paintings – she is involved in a Pith Revival Project being run out of Taiwan.

Conservation in a developing economy: tower houses in Albania

Presenter: Jennifer O'Connell

Affiliations: International Specialist Skills (ISS) Institute

Gjirokastra, the 'Stone City,' is famous for its 18th Century tower houses. The houses are unique examples of the combination of Ottoman and Albanian architecture and served as homes as well as defensive structures. Unfortunately many are in a state of disrepair. As the Albanian economy is still developing, there are limited resources available for the conservation of these monuments. There are strict guidelines surrounding the restoration of the houses as they are either Category 1 or 2 monuments of an UNESCO World Heritage Site, thus making documentation critical.

Several of these houses have wall paintings on the exterior or interior walls, and these show signs of deterioration. The major areas of concern include plaster separating from the wall, whitewash overpaint and water damage via a leaking roof. Jennifer O'Connell undertook conservation documentation of the wall paintings at two of the houses; the Skenduli House and the Kikino House. Jennifer was supported by the International Specialised Skills Institute and looked at the ways 3D laser scanning and volunteer conservation projects could assist the conservation profession in Australia. The projects were hosted by Adventures in Preservation, an American organisation, in conjunction with the Regional Directorate of Monuments of Gjirokastra and the Institute of Cultural Monuments in Tirana. The projects are completed on a voluntary basis. Professionals from different areas, including engineers, architects, conservators and photographers, have contributed their skills.

The goals of the projects are to provide documentation that can assist with applications for future restoration and funding. To achieve this outcome, the volunteers photographed the paintings, noted techniques of execution, recorded previous restorations, highlighted signs of degradation and compiled the findings into a report. The photography was undertaken by professional photographers. At Skenduli House a team from Italy, Storia Ambiente Monumento, also undertook a 3D survey.

In the case of Gjirokastra, there are many monuments that need conservation, however, due to limited resources additional assistance is required. A volunteer team that can bring financial and in-kind assistance and that works with the local community has provided one successful solution to the problem.

Biography

Jennifer O'Connell is a painting conservator who graduated from the Master of Arts (Cultural Material Conservation) in 2011. Jennifer was the recipient of the ADFAS Student Conservator of the Year Award (University of Melbourne) in 2011. Her work experience includes conservation projects with the University of Melbourne, Artcare and David Stein & Co. Jennifer is Secretary on the AICCM National Council.

You want me to move what?: collection relocation and conservation at Museum Victoria

Presenter: Frances Paterson and Lucy Willet

Co-authors: Frances Paterson and Lucy Willet

Affiliations: Museum Victoria

The Interim Collection Storage Project is an Arts Victoria funded programme that aims to resolve the critical storage issues across four of Museum Victoria's six sites. It is the second largest relocation in the museum's 160-year history. Of the many stages of this complex project, the most significant and largest involves the Geosciences and Palaeontology collections, which are currently housed in sub-standard environmental conditions in the Royal Exhibition Building basement. So that these sizable collections can be rehoused in the main museum complex, back of house storage systems are being replaced with more efficient, space-saving solutions, generating an unprecedented opportunity to engage closely with each of the Indigenous Cultures, Natural Sciences and History and Technology collections and staff. The ICSP Relocation team is working closely with collection managers, logistics personnel and external contractors to maintain and preserve a protective environment for the museum's unique and diverse collections during this period.

The project is interdisciplinary and directly aligns with Museum Victoria's core principles; increasing access to the collections and providing a greater opportunity for community engagement and research. The relocation has been a valuable chance to broaden the conservation practice, collaborate with other museum professionals whilst sharing knowledge and skills between colleagues.

From a conservation point of view, specialist understanding of material science, object vulnerabilities and preventive practices (including freezing for IPM) have the capacity to significantly inform day-to-day work activities, including packing techniques, complex and simple movement methodologies, risk assessments and occupational health and safety. In this project, specialist conservation knowledge has married with art handling and logistical know-how to improve storage and increase collection access, enabling research and greater community engagement.

Biography

Frances Paterson graduated from the University of Melbourne's Masters of Cultural Materials Conservation in 2012, specialising in objects conservation. She has undertaken internships at the National Gallery of Victoria and the Canadian Conservation Institute, and has worked as an Outdoor Sculpture Conservation Technician at Central Park Conservancy in New York. She currently works as Collection Relocation Coordinator at Museum Victoria.

Lucy Willet is a graduate of the Masters of Cultural Materials Conservation course at the University of Melbourne, specialising in objects conservation. She has completed a Fellowship in Organic Materials Conservation at the Art Gallery of New South Wales and an internship at the National Gallery of Victoria. Currently Lucy is the Collection Relocation Manager at Museum Victoria.

A poster about a poster: conservation treatment of a Forty Thousand Horsemen movie poster

Presenter: Wendi Powell

Co-authors: Wendi Powell, Eliza Penrose and Katie Wood

Affiliations: International Conservation Services

Forty Thousand Horsemen, a film focusing on Australian Light Horse's Palestine campaign in World War I, was released in 1940. The film struck a chord with many everyday citizens at a time when their country was at war, breaking ticket sale records and proving popular both in Australia and overseas. Evidence of the film's success can still be seen in the form of posters and other ephemera collected by institutions throughout Australia. In March 2013 International Conservation Services was contacted about one such poster hanging in the Chauvel Cinema in Paddington, NSW.

The project raised a range of complications which required intricate preparation, planning and multi-disciplinary collaboration:

- Location: the poster was located in a confined space, just outside of the main theatre, with difficult access and poor lighting
- Size: the poster was very large, overall measuring approximately 1920 x 1880mm and composed of six separate panels
- Condition: the poster was in a poor and fragile state, with surface damage, tears, losses and stains. There were also multiple ad-hoc repairs which had been made over the years using a range of different adhesives

This poster outlines the successful removal of a Forty Thousand Horsemen poster from a wall, and its subsequent treatment and storage, highlighting the benefits of working across conservation departments to find solutions.

Biography

Wendi Powell holds a Bachelor of Arts (Archaeology), a diploma in Heritage Resources and a diploma in Collections Conservation and Management. She has worked for both private and small institutions since graduating in 2004. Since 2007 Wendi has been working at International Conservation Services, initially as an objects conservator and since 2010 as a paper conservator.

During this time she had worked on a wide variety of objects and works on paper. Wendi is a professional member of AICCM.

Since completing a Masters in Conservation of Fine Art (Works on Paper) at Northumbria University, UK in 2006 **Eliza Penrose** has gained considerable experience in the conservation of a wide and varied range of works on paper. She is Senior Paper Conservator at International Conservation Services, and is a professional member of AICCM and ICON, UK.

Katie Wood is a paper conservator at International Conservation Services. She has worked here since graduating two years ago from the University of Melbourne with a Master of Cultural Materials Conservation. She also holds a Post Graduate Certificate in Science, endorsed in Heritage Materials Science and a Bachelor of Arts in Art History, both from the Victoria University of Wellington in New Zealand.

Shifting significance: exploring the value of digital prints by a living contemporary artist for temporary display (or: It's ok, he can reprint)

Presenter: Jodie Scott

Affiliations: Artlab Australia

It is acknowledged that an individual object entering a conservation laboratory carries significance; whether it be of historical, aesthetic, unique or monetary value. Consider, however, an object that was created in the past 24 hours, an object that can be materially recreated at any time in the near future. Does the intrinsic value of such an object shift? And should the way a conservator approach such an object shift parallel with its significance? The temporary exhibition '*Trent Parke: The Black Rose*' opened in March 2015 at the Art Gallery of South Australia. For Artlab Australia conservators the preparation of the show provided an interesting insight into the working process of a contemporary visual artist in the medium of photography. It also presented challenges to conservators working with the materiality of new and sensitive digital inkjet prints. Working on items with shifting significance tested conservators' planning and preparation of many items to be displayed. Photographs were substituted and reprinted by Trent Parke throughout the preparation of the exhibition due to poor printing, handling damage or incorrect printed detail. This made the line between what was necessary for the artist's vision for display and what should be considered for long term preservation contentious and indistinct. This presentation considers the question proposed at the previous AICCM National Conference, '*Are all objects equal?*', in the context of working with photographic visual art created by a living contemporary artist and investigates how conservators evaluate significance with shifting guidelines and priorities for the object itself.

Biography

Jodie Scott is a Senior Paper and Photograph Conservator at Artlab Australia. Jodie graduated from the University of Canberra, Bachelor of Applied Science: Conservation of Cultural Materials (Paper) in 2002 and completed her post-graduate certificate in the Conservation of Photographs at the University of Melbourne in 2009. Jodie has worked at Artlab Australia since 2003 and has conserved works and prepared exhibitions for all South Australian major cultural institutions as well as private custodians.

Microscopy for the identification of pigments and fibers in art and artifacts: a unique training opportunity offered by the McCrone Research Institute in conjunction with the Campbell Center

Presenter: Analiese Treacy

Affiliations: Art Gallery of New South Wales

For Conservators interested in training opportunities, *Microscopy for the Identification of Pigments and Fibers in Art and Artifacts* is a comprehensive course offered by the McCrone Research Institute. The course is taught by Gary Laughlin PhD, Senior Research Microscopist and Instructor at McRI and is held at the Campbell Center for Historic Preservation Studies, in Mount Carroll, Illinois, USA. The Campbell Center provides a wide range of courses in collections care and historic preservation in addition to conservation refresher courses for mid-career professionals. The one week intensive course offers an in-depth look at polarized light microscopy techniques and is aimed at professional conservators, art historians and materials science enthusiasts. Class sizes are kept to a minimum to allow for detailed tuition and focus on particular areas of interest, and courses are held simultaneously with others taking place at the Center allowing participants the opportunity to engage with those from other specialisations. The advantage of residing at the Mount Carroll campus for the duration of the course is that participants can focus entirely on their chosen area of study and utilise the extensive library facilities available on the campus grounds. This and other courses offered at the Campbell Center provide a unique opportunity not only to develop and learn specific skills, but also to connect with contemporaries overseas and gain new insights and perspectives. This poster provides an overview of the course detailing the daily schedule, structure, content and images of a workshop in progress.

Further information on the course can be found on the McRI and Campbell Center websites as follows: www.mcri.org and www.campbellcenter.org.

Biography

Analiese Treacy is a Paper Conservator at the Art Gallery of New South Wales. Previously Analiese has worked at a number of cultural institutions including the National Gallery of Ireland, Museum Boijmans Van Beuningen (Holland), Bowes Museum (UK), Trinity College Dublin, Museum Victoria, State Library of New South Wales, Australian National Maritime Museum and the Powerhouse Museum. Analiese holds a BA Joint Honours in Art History and Italian from University College Dublin, and an MA in Fine Art Conservation (Specialisation – Paper) from the University of Northumbria, Newcastle, England.

E-mail: analiese.treacy@ag.nsw.gov.au Tel: 02 92251773