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V&A Conservation Journal No.52

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Editorial

Sandra Smith

Head of Conservation

At the recent Museums Association Conference I listened to a very inspiring speech by Jude Kelly from the London Organising Committee for the Olympic Games (LOCOG), who talked of the original concepts of the founder of the 'modern' Olympics, Pierre de Coubertin. Through this event he encompassed his beliefs and values; believing that education and striving for perfection would ultimately create a better society. For him, the Olympic Games would be far from a simple sports competition; they were to be egalitarian and chivalrous; evoking compassion and understanding across humanity.

In line with these ideals LOCOG wants the London Olympics to make a real and lasting difference to the lives of the people of Britain by leaving behind a 'cultural legacy'.

The global London culture, with over 300 different languages spoken in the Greater London area. contributed to the success of the bid, but the expectations of such a cosmopolitan population for the cultural legacy will be correspondingly diverse. In a multicultural society there is the need for different ethnic groups to have a sense of belonging without loosing site of their own individualism. Kelly and the Deputy Mayor of London, Nicky Gavron, eloquently highlighted the significant role that museums can make to realising the vision of an on-going cultural legacy and made a plea that we actively engage in this process. Museums can provide a tangible link to and between different cultures, challenge current perceptions and show how cross-cultural interchange inspires and creates. Through museums (and other cultural activities) individuals can find a sense of belonging and pride in who they are.

Reflecting on the Olympic goals it is easy to see how such a beautiful, global and tangible collection as the V&A can rise to this challenge, and in reading through the contributions in this edition of the Journal I was struck by how Conservation continuously, but perhaps unconsciously, already contributes to these concepts. Allen, Tovar, and Patel & Costaras highlight links between cultures and how the collection preserves identity which leads to a sense of belonging, of pride, of reference. Marques shows how cultures draw on each other for inspiration.

For many museums the Olympic success is a mixed blessing; whilst we all look forward to additional visitor numbers and the associated revenue, we are downhearted by the realisation that most funding will be directed to sport-related activities over the next seven years. But maybe we should rise to the challenge that the London 2012 Committee has set us, and look at this as an opportunity to make a real difference to the multicultural society in which we now live and realise that this is something in which we can all actively become involved.

The Restoration Programme of the Chinese Palace, Oranienbaum, St Petersburg

Zoë Allen

Frames and Furniture Conservator



Figure 1. The Exterior of the Chinese Palace

The Chinese Palace is situated in Oranienbaum, a historical complex of parks and palaces on the southern coast of the Finnish gulf forty kilometres from St Petersburg near Peterhof (Figure 1).

The Palace is truly unique in that much of the dazzling interior decoration, furniture and objects on display are original and date back to the Palace's construction. Oranienbaum has survived a turbulent history and unlike many outlying palaces it remained unscathed during the Nazi siege of St Petersburg. At the beginning of the siege the collections of the Oranienbaum palaces were evacuated. Remarkably it was opened briefly during the war as a sign of hope and encouragement for the people. Other Russian palaces had not fared so well and many were almost totally destroyed. In the post war period funds were therefore allocated elsewhere and the Chinese Palace suffered a period of neglect.

The freezing cold winters, hot summers and wet springs and autumns cause great fluctuations in temperature and humidity. These extreme weather conditions and time have taken their toll on the fabric and interior of the building. The main problems are a leaking roof, rising damp and poor drainage.

In response to the damage the World Monuments Fund (WMF) in Britain launched an appeal to assist in rescuing the palace. Funds have been raised and the Chinese Palace Restoration Programme is now underway. Emergency repairs have been carried out on the roof, drainage has been improved and an environmental monitoring system has been installed to take readings from both inside and outside the building. Work has now begun with a view to replacing the roof and repairing and reinforcing the foundations of the building and surrounding terraces.

Another further stage in the Chinese Palace Restoration Programme is to address the damage occurring to the interior decoration. I was approached by the WMF in Britain to join a team of conservators to assist with this part of the programme.

I travelled to St Petersburg in May 2005 for a two-week visit together with Will Black (Russian Projects Director, WMF), Jürgen Huber (Senior Furniture Conservator, Wallace Collection) and Karl Stacey (Independent Restorer). Our main remit was to help set in motion a programme of works for the conservation of what is perhaps one of the most dazzling of all the rooms, The Glass Beaded Salon (Figure 2).

The park and palace ensemble dates from the start of the eighteenth century. Former residents have included Prince Menshikov, the founder of the Oranienbaum estate, and later Tsar Peter III. Both had palaces built there. In 1762 Oranienbaum was the setting for one of the most dramatic episodes in Russian history - Catherine the Great's seizure of power. Whilst in residence at the estate Tsar Peter III was arrested and overthrown by a court coup led by



Figure 2. The Glass Beaded Salon

his wife. After his deposition, he was imprisoned and soon after assassinated by Alexei Orlov, Catherine's accomplice and brother of her lover Gregory Orlov.

After her seizure of power the Empress Catherine II made her first commission as Tsarina. She wanted a private estate (*Dacha*) to be built within the grounds of the Oranienbaum Park. Two pleasure pavilions were constructed for her on the estate, the Chinese Palace and The Sliding Hill Pavilion which included a 532m long sloping structure, designed for riding down in special carriages with wheels. The two were built as part of an effort to charm and dazzle Europe and as a place for entertaining Catherine's friends and lovers during the summer white nights, when daylight prevails for twenty-four hours.

The Chinese Palace has been described as the unique example of Rococo art in Russia and one of the most exquisite monuments of Rococo style in Europe. It was built between 1762 and 1768 by Antonio Rinaldi with the help of some of the great craftsmen and artists of the day including Giovanni Tiepolo, Guiseppe and Serafino Barozzi. The Palace consists of 17 rooms. The wealth and variety of their décor is breathtaking. Mythological paintings, painted silk, scagliola and delicately modelled stucco work adorn the ceilings and walls while the intricately patterned floors, designed by Rinaldi, have been executed using many different varieties of rare local and foreign wood. The Chinese Palace was so named at the end

of the eighteenth century due to the style of decoration in four of its rooms. Chinoiserie, being a trend within the Rococo movement was in architectural vogue in England at the time and was very much admired by Catherine.

The walls of The Glass Beaded Salon are covered with 12 panels depicting fanciful scenes of birds, flowers and exotic landscapes. These scenes, surrounded by pink scrolls, leaves and other Rococo motifs, have been intricately embroidered and are set against a backdrop of shimmering white glass beads. The vast palette of colours used in the embroidery retains much of its original vibrancy. Serafino Barozzi designed the panels, which were all sewn by Russian seamstresses using locally made glass bugle beads.

The panels are surrounded by richly carved and gilded frames (Figure 3). These comprise palm-tufted columns (approx. 300cm x 16cm), garlanded with exotic flowers and horizontal ornamented sections, which reflect the Rococo detail, embroidered in pink, on the main panels.

The carved frames are both oil and water gilded. The combination of the two techniques makes the framework gleam and glisten: the oil-gilded areas give a pearly glow in contrast to the sparkling burnish of the water-gilded highlights. Astonishingly, the room originally contained a glass floor made in floral patterns with different sections of coloured glass. This was later replaced with the current floor, which follows the original glass design using different timbers. One can only imagine the scintillating effect of the glass floor, beaded panels and twinkling burnished gold when lit by candlelight.

The overall condition of the carved and gilded architectural framework is very good. The worst damage occurred when the frames and embroidered panels were quickly dismantled, stored and subsequently re-installed during and after the war. Physical damage resulted in small losses to the carved detail and gilded surface. The textile panels however are extremely fragile. Due to weakened fibres they are sagging and unable to hold their own weight. They are in urgent need of attention.

LAYER STRUCTURE OF MATT OIL GILDED AREAS 5. Gold leaf 4. Mordant 3. Yellow Ochre plus medium 2. White 'gesso'* ground layer 1. Wood

LAYER STRUCTURE OF BURNISHED WATER GILDING 4. Burnished Gold leaf 3. Dark red bole 2. Same white 'gesso' ground layer as above 1. Wood

*Russian gilding conservators confirmed that this almost certainly comprises Calcium
Carbonate (CaCo3) with animal glue as opposed to true gesso, the Italian for calcium
sulphate (Caso4). Further analysis will identify all materials used which will be interesting
in order to compare both Russian and English gilding techniques

Figure 3. Visual examination of the original 18thC gilded scheme

A preliminary step in the conservation of the interior of the room began last year when Jürgen Huber was invited to carry out a condition survey of the gilt wood elements, propose treatments and contact conservation professionals for this visit. The survey of the gilt wood elements showed some areas of lifting and active flaking of the gilded surface. Consolidation of these areas will need to be carried out before any other work proceeds.

Further steps in the treatment of the room will include a condition survey and proposals for treatment of the embroidered and beaded panels (to be carried out by a textile conservator) and eventual dismantling of both frames and panels for conservation treatment. Working closely together conservators from both disciplines will devise new methods for re-hanging both frames and panels.

The emphasis of our visit was to initiate professional collaboration and establish relationships in order to set a programme of works in motion. It was important to liase closely with staff at the Palace and Russian experts to exchange knowledge and ideas.

The head curator of the Palace, Vladimir Klementyev has spent years studying original bills for craftsmen and artists' work at the Palace. His research resulted in a great understanding of how the Palace originally appeared and which parts are later additions or repairs. His knowledge is invaluable for any conservation or re-instatement of original schemes

During the visit we carried out further investigations of the room with Russian gilding conservators, from KGOP² (The Russian equivalent of English Heritage) and the Chinese Palace. We were able to confirm that the majority of the gilding on the carved architectural frames is the original eighteenth century scheme. It is quite rare to find original gilding on

interior architectural decoration, which is often regilded many times. Methods and materials proposed for consolidation of the gilt wood frames were also discussed and agreed with these gilding conservators. We also discussed environmental control and housekeeping with staff at the Palace. They have their own climatologist and the problems of deterioration caused by adverse environmental conditions are well understood and controlled to the best of their ability with limited resources and equipment. The staff work extremely hard to ensure the Palace is well cared for and they have a very good housekeeping regime. We have together been able to identify what equipment will be needed by staff to help with the existing programme of care and what equipment is needed for conservation work on the interior to commence such as lighting, lightweight scaffolding etc.

To further develop relationships WMF in Britain kindly arranged visits to other institutions. As well as visiting the recently restored palaces and gardens of Peterhof and Tsarkoe Selo we were taken round the Furniture and Gilding Conservation Studios at The Hermitage Museum in St Petersburg. The recently restored palaces demonstrate the wealth of

extraordinary craftsmanship and conservation skills in Russia. This is possibly due to the tradition of handing down skills through apprenticeship, or from father to son, which is still very much alive today. Whilst visiting the conservation studios we met two father and son teams working there.

Our trip has helped to highlight the practicalities, which need to be addressed to allow the proposed programme of work for the conservation of The Glass Beaded Salon to commence. During the two weeks it became apparent that bureaucratic requirements can be quite complex.

Logistical problems have been addressed such as when the first stage of consolidation could begin. This would have to be in the warmer months so the internal temperature is warm enough for materials to work. Furthermore the implications of conservation works proceeding at the same time as allowing public access will need to be addressed.

Funds are now available for the treatment of the room and with initial research carried out works are due to start soon. Russia is a truly magical place and I thoroughly enjoyed my time there. It was a great pleasure and very valuable to meet the Chinese Palace staff and fellow professional conservators there.

Acknowledgements

I would like to thank the WMF in Britain and Jürgen Huber for inviting me to participate as a consultant on such an interesting project, our hosts - particularly Vladimir Klementyev, Elena Harkova and Tatyana Korolyova for their warm reception and tour of the Oraninbaum Estate, Ivan Garmanov for his time showing us round the Hermitage. I am grateful to Amy Anderson for reading through this text and making helpful additions and adjustments.

References

- 1. The World Monuments Fund (www.wmf.org.uk) was founded as a charity in 1965 in New York and is the foremost private non-profit making organisation to work with local communities and partners. So far WMF has helped to stem the loss of more than 400 important sites in 80 countries. The UK office is leading the Chinese Palace restoration programme (tel: 020 7730 5344).
- Komiteta po gosudarstvennomu kontroliu, ispol'zovaniiu i okhrane pamiatnikov istorii i kul'tury Sankt-Peterburga (In translation: Committee for State Control, Use, and Preservation of Monuments of History and Culture of St. Petersburg).

Conserving the copies of the Ajanta cave paintings at the V&A

Divia Patel, Curator, Asian Department **Nicola Costaras,** Head Paintings Conservator

In June 2005, 81 oil on canvas copies of the Ajanta cave paintings, unseen by Museum staff for the past 13-25 years, became the focus of a major conservation and storage project which resulted in the 're-discovery' of some important paintings.

The 31 caves of Ajanta have inside them the earliest extant examples of mural painting in India. Dating from the 1st century BC to about AD480, these sophisticated, elegant, and detailed paintings depict Buddhist scenes and are considered of primary importance to the history of Indian art. Since the discovery of the abandoned caves in 1819 by a British army officer out on a hunting trip in the mountains of Maharashtra, scholars were quick to recognise the importance of the caves and were aware that the exposure of the paintings, after lying in secluded darkness for hundreds of years, was leading to their rapid deterioration. With a view to preserving these images several attempts were subsequently made to produce facsimile copies.

The copies in the V&A were produced between 1844 and 1885 under two separate initiatives. Major Robert Gill, commissioned by the Royal Asiatic Society, was stationed at this remote setting from 1844 to 1863 and painted about 30 large scale canvases. Displayed in the Indian Court of the Crystal Palace in Sydenham, most were destroyed in a fire there in 1866, leaving only four surviving examples. The importance of the project was such that in 1872 the Government of Bombay commissioned John Griffiths, the principle of the Bombay School of Art and his students to make a new set of copies. It took 13 years to complete the project at a cost of £30,000. Three hundred paintings were shipped to London, and many were put on display at the Imperial Institute (current site of Imperial College) alongside the vast collection of Indian objects now housed at the V&A. However, in June 1885 disaster struck once again and another fire in one of the stores in the institute destroyed well over a hundred canvases.

The V&A currently has 166 paintings varying in size from half a metre square to 3×6 metres. Some, because of their large size are rolled, but most are

mounted on stretchers or strainers. Since 1955, when five of the paintings came off display, the whole set has been in storage in various locations in London. A combination of factors including their large size, has meant that they have been inaccessible and undocumented. The aim of this conservation and storage project was to move the 81 paintings on the V&A site to better storage.

With the help of six conservation students from the University of Northumbria at Newcastle and Lara Wilson, a paintings conservation intern in the Department, the paintings were assessed and surface cleaned. Minor treatments were undertaken to make the paintings stable enough to be moved. Mike Wheeler, Senior Paper Conservator at the V&A, also assisted with the project.

Several areas of flaking paint and torn canvas had been faced by V&A paintings conservators 25 years ago as a 'temporary' first aid measure. Due to similar time constraints on this occasion we had to concentrate on repairing tears that had occurred on ten paintings in the intervening period rather than providing a more permanent treatment of the earlier damage. Over a period of three weeks all the paintings were examined, documented and photographed. Each painting was checked to ensure that the stretcher was sound, missing wedges were replaced and all the wedges were secured. In instances where any new flaking paint had occurred. this was consolidated and the tacking edges of three of the canvases were reinforced where they had split. In consultation with the curator, we carried out the facing removal and fixing of paint on selected areas of special interest because of the rarity of the depicted scenes in Buddhist iconography so that these could be photographed. Each painting was photographed by the V&A Photographic Studio before being wrapped and transported to their new off-site storage. We received invaluable help from Technical Services both with the handling of the larger works and with the completion of the project: the wrapping, transport and storage.

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Through the process of assessment and surface cleaning some previously undocumented discoveries were made on both sets of paintings. One of the most interesting discoveries was on the painting procedure of Griffiths and his students. On several of the paintings excess canvas extending around the reverse of the stretcher revealed writing in red paint all along the upper and lower edges of the paintings. The writing turned out to be start and finish dates and indicated that large scale paintings were completed in narrow vertical strips. One example being IS.89-1887, measuring 1.98 x 4.3 metres. On the upper edge of a 93 cm wide strip is inscribed 'begun on 30th Jan 1882' and on the lower edge 'finished 13 Feb 1883', the adjoining 83 cm wide strip was begun the day after on 14th Feb 1883 and finished on 6th March 1883, this continues until the final finish date which is 11th June 1883. Thus revealing that the time taken on a painting of this scale was approximately five months. It is also likely that only one student worked on each painting rather than a group of students working as a team. This theory was supported by finding a signature in a corner of one of the paintings (IS.92a-1887): written in pencil was the name 'Pestonji Bomanjie'. In his annual reports to government Griffiths praised Pestonji Bomabji as being his most valued student. Until this discovery it had not been possible to attribute any particular painting to an individual artist.

As the project progressed and more of the surface dirt was removed from the canvases, the beauty of the paintings and the sheer amount of detail within them began to be revealed. When compared to recent photographs, many of the paintings show the extent of deterioration of the actual cave paintings. See for example, Gill's painting IS.53-1885 (Figure 3). Today, a large patch is missing from the patterned skirt-cloth of the dancing lady. We know from written accounts of the time that even in the gap between Gill finishing his painting in 1863 and Griffiths and his students starting their painting in 1872, that the caves were under constant threat from people as well as swarms of bees and bats. However, as Griffiths appears not to have re-painted any of the four scenes

that remained of Gill's work we have no overlapping examples to indicate if the damage occurred during this ten-year period or much later. This highlights the importance of the V&A copies as accurate documents. With the continued deterioration of the caves, these paintings will prove invaluable to scholars of the future, thereby fulfilling their intended purpose as envisioned over 160 years ago when the commission was first given to Robert Gill.

Although this three week project did not allow time for an in-depth investigation of the paintings, or for the complete conservation of any of them, it highlighted the potential for the use of these paintings in future V&A projects. In 2007 selected paintings will be part of a major sculpture touring exhibition entitled *Indian Art and Devotion*. This will provide the opportunity for more extensive conservation and study of a few of these works and thereby contribute to this new and growing body of knowledge about the Ajanta cave paintings.



Figure 1. Students using a bridge to clean one of the larger paintings



Figure 2. Students strip lining one of the paintings

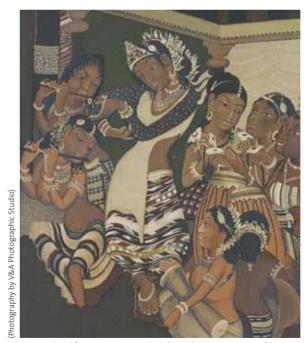


Figure 3. Detail from Ajanta painting by Robert Gill. Museum no. IS.53-1885

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The ethics of conservation practice: A look from within

Titika Malkogeorgou

Visiting Researcher

A new territory for conservation was marked by the discussion of the conservation profession in the IIC Melbourne Congress (2000). Initiated by a members' survey carried out a year earlier, it reflects a much current self-critical approach that looks at conservation and its practice from within the field. More writing of books and conservation articles in journals and periodicals have since followed on this theme. My own research project is also concerned with this opening up of the field. In particular I am investigating the role of the conservator in the construction, preservation and transmission of cultural knowledge and, within the setting of the Victoria and Albert Museum, I am gaining a better understanding of how conservation practices are shaped and adapted to the requirements of a major national institution.

Conservation as it developed in the twentieth century has traditionally been viewed as a scientific practice in which the conservator applied technical skills to preserve cultural material. In particular it is the codes of ethics on one hand that are seen as the profession's necessary process of articulating collective ideals (by defining a moral ground from which to operate), while on the other, ethics in conservation practice are applied through a rationalistic scientific approach based on evidence and hard facts. This provides the foundation for conservation practice and continues to be its defining paradigm. For the profession it is both this moral ground defined by the codes of ethics and the scientific foundation based on the rationalistic approach that underpins practice for conservators as they provide evidences of past knowledge, and the means by which these maybe transmitted into the future.

Museum collections are repositories of communication and cultural memory, and so conservation is a practice that focuses on the preservation of cultural knowledge in objects, the authentication of which creates an inseparable bond between the conservator and the conserved object. Moreover, conservation practice is carried out in particular settings which define how communication and cultural memory influence national identities. Hence heritage preservation policies and decision-making influence conservation as a professional practice. They contribute to the creation of a shared sense of cultural memory and impact on the ethical codes of the conservator.

The nexus of the two: the conservator's knowledge on the one hand and the setting of conservation practice on the other, defines the field of conservation. Because in the eighteenth and nineteenth centuries (mainly) restorers were being accused of falsification and therefore fabrication of truth - either by making old things look beautiful and new, or of making new things look old and valuable according to taste - an aesthetic and philosophical shift of values started to occur resulting in conservators becoming more concerned with not altering the meaning of objects. With Ruskin as the main ambassador for the 'age value' and 'unity of feeling', exercising great influence on the idea of conservation ethics, the concept of truth became fundamental in preservation challenging the desire for completion which prevailed until then. Conservation thus as a new profession developed a profile that privileges the idea of knowledge based on information and evidence as truth. Within this structure conservators set themselves as advocates for the object with an aim to preserve and not alter, to secure but not to change, to maintain rather than recreate, and this is how 'the conservator-restorer's activities are distinct from those of the artistic or crafts profession. A basic criteria of this distinction is that by their activities, conservator-restorers do not create new cultural objects' (ECCO Professional Guidelines: http://www.ecco-eu.info/ last checked 24/11/05)

After World War II official bodies were created that codified a set of values. The first international conferences on aspects of museum practice took place in Rome in 1930 and Athens in 1931, hosted by the International Museums Office of the League of Nations (later ICOM) and the first charters were drafted. The Charter of Athens (1931) was followed by the Charter of Venice (1964) formulating codes in order to create a common ground. Now codes of practice are expressed through, and as part of the European Confederation of Conservator-Restorers'

Organisation (ECCO); the American Institute for

the Victoria and Albert Museum Conservation

Department's Ethics Checklist (revised 2005).

Conservation of Historic and Artistic Works (AIC); the

United Kingdom Institute for Conservation (formerly

known as UKIC. now ICON). On a more local level is

Conservation is thus established as both ethical and scientific, based on a theoretical approach of: 'being the methodological moment in which the object is appreciated in its material form, and its historical and aesthetic "duality", with a view to transmitting it to the future'. But could this 'materials science' focus, versus the 'historical-aesthetic' approach be problematic or even counter productive? After all we normally think of conservation in its context. Taking away the discourse from conservation by focusing the argument on technical issues, and the pragmatics, means also bypassing questions directly relating to the practice. According to Winter on issues of Values in Archaeology what we call science is composed of value statements. So if conservation is not simply about unearthing values inherent in the object but it involves destruction and recreation then what about the role of the conservator? Latour in his Pandora's Hope explores the dichotomy between object and subject, human-non-human, where the argument science-ethics resides and asserts why humans can not be separated from their creations.

This debate in conservation is illustrated by Annie Hall's research project at the Victoria and Albert Museum and her 'A Case Study on the Ethical Considerations for an Intervention upon a Tibetan Religious Sculpture' published in *The Conservator*, No 28 (2004). This is a case that most conservators at the Museum are probably familiar with and it brings out not just the practical ramifications of certain theories adopted in conservation, such as the dichotomy between science and ethics, and the consequent effort to reconciliation, but also change in the meaning of objects as they move from one context to another and the conservator's power to control, or not, interpretation. Here the debate was specifically into whether the scrolls found inside the cavity of the Tibetan - gilded and pigmented copper alloy sculpture of the Buddha Shakyamuni could be removed, and displayed separately, and on what basis the decision was based. Examples of the conflicting values that the need for preservation brings into the open certainly beg for a more in-depth analysis of the practice and in a way that can happen from within the field. Hall's research shows that there is not a straightforward distinction of what constitutes a religious as opposed to an art or design object. She vividly demonstrates that there is a multitude of views coming from the various stakeholders. While not all conservators share the same opinions, the curators and trustees of the Museum were also involved, and they had their own views too.

Much of the debate about the sculpture of the Buddha Shakyamuni takes us back to issues to do with the conservator's relationship to objects and to context. Conservation ethics and museum ethics shape and are shaped by practice as it takes place everyday. What interests me is why do such cases arise and what is their impact in the way the actual practice is carried out? The need for preservation can bring into the open a variety of conflicting issues but

also opportunities for reconciliation. A complex object in terms of conservation practice, could be sculpture. metal, colour, paper, and in need of environmental control, handling and mounting all at once. It can also be religious, archaeological, aesthetically important and, in terms of cultural knowledge, priceless. And because conservation continuously changes as it is shaped everyday through what goes on in practice in the studio, while it shapes cultural knowledge by preserving culturally important artefacts, it is worth observing and analysing what conservation practice is about. It can strengthen professionalism in the field and can encourage innovation and development of excellence through confidence.

The author is studying Material Culture at the UCL Anthropology Department and is based at the V&A Sculpture Conservation Studio. Her Ph.D. Research is funded by the AHRC.

References

- 1. Brandi, C., 'Theory of Restoration, I', Historical and Philosophical Issues in Conservation of Cultural Heritage (The J. Paul Getty Trust, 1996)
- 2. Winter, J. C., 'The Way to Somewhere: Ethics in American Archaeology', in Green, E.L., ed. Values in *Archaeology.* (New York: Free Press, 1984)
- 3. Latour, B., Pandora's Hope: Essays on the Reality of Science Studies (Harvard University Press, 1999)

Further Reading

Avrami, Mason, and De La Torre, eds. Values and Heritage Conservation, Research Report (The Getty Conservation Institute, Los Angeles, 2000) www.getty.edu/conservation/resources/valuesrpt.pdf (last checked 03/11/2005)

Buchli, V., The Material Culture Reader, (Oxford: Berg,

Layton, Stone & Thomas, eds. The Destruction and Conservation of Cultural Heritage (London: Routledge, 2001)

Treasures of Fairford

Paul Williamson, Director of Collections and Keeper of Sculpture, Metalwork, Ceramics & Glass Kathrin Rahfoth, Stained Glass Conservator



Figure 1. C.12-2004, before treatment, transmitted light

The Museum has recently acquired two early sixteenth century panels (C.12-2004 and C.13-2004) which belonged originally to the extensive and celebrated decorative scheme at Fairford Church in Gloucestershire. Showing the upper two-thirds of the apostle Matthias and an angel, the panels shed valuable light not only on English Late Gothic glass but also on the processes of restoration in the eighteenth and nineteenth centuries (Figures 1 & 2).



The stained and painted glass at Fairford is the most extensive glazing programme still surviving in any English parish church. Twenty-eight windows have been preserved, all dating from the period c.1500-15, and together with those at King's College Chapel, Cambridge, they constitute the greatest ensemble of Anglo-Netherlandish glass in existence. The Fairford glass escaped iconoclasm but not the effect of weather, and in 1703 a storm badly damaged the upper part of the great west window and several windows on the south side of the church. These were subsequently repaired, using the fragments that had been blown out and replacement glass, but in the middle of the nineteenth century further interventions were made which were responsible for the removal of the V&A's figures.

First, in about 1860, a window (s.VIII) in the south aisle, next to the entrance porch, was repaired by Chance Brothers of Smethwick. This window contains four standing figures of the apostles, and of these the two westernmost (Sts Jude Thaddeus and Matthias) were effectively replaced with new figures, utilising only a few original fragments. Most of the two figures was taken away by the restorers and since the early 1860s had been lost sight of.

The second campaign of restoration undertaken by Chance Brothers, carried out in about 1861-62, was much more controversial. This consisted of replacing the entire upper half of the great west window, dedicated to the Last Judgement, with a new if faithful version based on what had survived the 1703 storm. Despite protestations to the contrary, the restorers certainly removed all the old glass and in 1890 Canon Carbonell of Fairford, who did more than any other to protect and preserve the glass in the second half of the nineteenth century, claimed that W. E. Chance 'had the greater part of the old glass in his possession, leaded up and framed'. This was confirmed by the appearance of the two V&A panels at the time of their acquisition in 2004, which were both tightly framed in wood. The Museum's angel originated from the bottom left hand side of the upper part of the Last Judgement and, with the exception of one other angel's head now in the Getty Museum, is the only fragment of the Fairford west window to have resurfaced.4

The two panels had lain unnoticed in the workshop of G.King & Son of Norwich, the renowned restorers of stained glass, until its clearance in 2003, and their history after the early 1860s is not known. It is likely that they were passed from Chance Brothers to other restorers or were perhaps sold to be used as stopgaps. Long before 2003 their importance had clearly gone unrecognised. Given the recent reappearance of these fragments and the further angel's head, there is the chance that other pieces from Fairford will eventually be identified.

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The panels were prepared for the new Sacred Silver & Stained Glass gallery by Kathrin Rahfoth in 2005. They had previously been re-glazed into two panels measuring approximately 910 mm x 560 mm with clear, unpainted glass surrounding the original fragments. The way the panels were glazed presented a challenge for display in the gallery. As the majority of the glass is clear, it allowed too much strong light through, making it difficult to read the detail and colours of the medieval glass. The clear glass also allowed the viewer to see into the lightbox behind the panels, which presented a distraction.

Possible solutions to these problems were discussed and agreed by the curator, head stained glass conservator and conservator. What at first looked to be random shapes of clear glass leaded to surround the medieval glass did in fact have some basis in the original window design. Replacing this clear glazing with coloured painted glass to match the original window design would not have been possible without extensive research and would not in any case have been desirable. It was decided that something should be added/painted onto the clear glass of both panels to allow the medieval fragments to be more easily read and to obscure the contents of the lightbox.

The criteria used to select the paint medium was that it should be easily reversible, should not come into contact with or harm the original medieval fragments, should last for as long as the panels are expected to be on display in the new gallery without fading or peeling and should not wipe off during handling and installation. To select the most appropriate paint medium, a test panel of clear float glass and lead was constructed. Each section was painted with a different medium using both matt (smooth) and stipple (allowing small pin pricks of light through) applications to determine the best and most effective treatment.



Figure 3. C.12-2004, after treatment, transmitted light

Materials tested:

- Traditional glass paint (trace paint Keracolour Versand) mixed with water and applied to the glass. This was sprayed with Paraloid® B-72 acrylic resin dissolved in ethanol, in solutions ranging from 5-30%, to fix the paint to the surface and make it more durable. A solution of 15% was found to be the most effective.
- A mix of traditional glass paint, water and approximately 20% powdered gum arabic was used. When firing it is normal to use only 5% gum arabic but because the paint will not be fired, a higher percentage of gum was used.
- Acrylic paint (Daler Rowney)

Each medium was applied to the test panel using both a stipple and matt finish to determine which was the most effective in diffusing the light, hiding the lightbox and allowing the eye to read the medieval glass more effectively.



Figure 4. C.13-2004, after treatment, transmitted light

Results

- Although the glass paint mixed with water achieved both good matt and stipple effects on the glass, once it was consolidated with Paraloid B-72 unattractive marks could be seen, particularly in reflected light.
- Glass paint mixed with gum arabic achieved good matt and stipple effects matching the medieval paint. The gum arabic made it sufficiently stable and no undesirable effects were created in either reflected or transmitted light.
- The acrylic paint was relatively easy to apply in both matt and stipple effects but the surface appeared shiny in reflected light and did not match the medieval paint.

The glass paint mixed with gum arabic applied as a stipple finish produced the best result. Having determined the medium and application method it was necessary to decide on a colour that enhanced the appearance of the medieval glass without dominating it. Various colours were tested directly on several sections of the clear glass adjacent to the original fragments. Both panels needed to be treated with the same colour finish since they have the same origin and history. The chosen colour worked well with the predominantly red tones of the St. Matthias panel and the predominantly green tones of the angel panel. Tests showed that a mix of brown, green and black provided the right level of colour to make the clear glass recede and the medieval glass stand out. It also intensified the colours of the medieval glass, adding to the dominant effect (Figures 3 & 4).

The panels were brushed to remove dust prior to cleaning with a solution of ethanol and deionised water 1:1 on cotton wool swabs to remove grease and to enable an even covering of cold paint. Breaks in the clear and medieval glass were bonded using HXTAL NYL-1 epoxy resin then retouched using acrylic paint. The clear glass was painted on the back surface with the glass paint mixed with water and 20% gum arabic.

The final solution met all the criteria demanded for the museum environment. It can only be used in a controlled climate, however, so this solution would not be suitable for panels installed in an external architectural setting unless effective protective glazing was employed.

References

- 1. Wayment, H. The Stained Glass of the Church of St. Mary, Fairford, Gloucestershire, (London, 1984), and Brown, S. and MacDonald, L. (eds), Life, Death and Art: The Medieval Stained Glass of Fairford Parish Church, (Stroud, 1997).
- 2. Wayment, *op.cit.*, pp.9, 48-51, pls.XVIIb, XVIII; Barley, K. 'Conservation and Restoration', in Brown and MacDonald, *op.cit.*, pp.118-19, col. pl.12.
- 3. Wayment, *op.cit.*, pp.9-10, 56-57, pls.XXII, XXIIIa; Barley, *op.cit.*, p.119, col. pl. 15.
- 4. For the Getty angel head see Barley, op.cit., p.122, fig.65, and Michael, M. Images in Light: Stained Glass 1200-1550, (London (Sam Fogg), 2002), cat. no. 37, pp.84-85, 120.

Acknowledgements

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Thanks are due to Dr Tim Ayers for his assistance in the acquisition of the panels. Kathrin Rahfoth would like to thank Sherrie Eatman and Ann Marsh for their feedback during difficult stages of this project.

The development of English black japanning 1620-1820

Katja Tovar Azuero

Furniture Conservator

Oriental lacquer objects were first imported into Europe in the late sixteenth century. Imitations of lacquer and other decorative surfaces by European craftsmen using their own materials and techniques were known as 'japanning'. The art of japanning evolved in the next two centuries, as new varnishing methods were developed, and additional materials became available. Japanned objects consist of a variety of materials that were often applied in complex layer structures. The different properties of the numerous substances can cause stress, which in turn damages the coating.

- nomenclature and the historical background $% \left(1\right) =\left(1\right) \left(1\right) \left$
- the development of materials and techniques
- the existence, use and reliability of historic written sources
- examination of four japanned cabinets of the V&A's collection

This article presents a brief summary of the main issues of my studies.

The Portuguese were the first to discover and conquer cities in India, China and Japan in the sixteenth century where they set up trading centres

to supply Europe with a variety of Oriental goods, such as spices, silk, porcelain and lacquered objects. Raw materials such as shellac and mother-of-pearl were also imported. However, it was not before the seventeenth century, with the foundation of 'The Governor and Company of Merchants of London Trading into East Indies' in 1600 (later the 'Honourable East India Company'), that Oriental lacquer objects were imported into Britain on a large scale.

In the beginning of the seventeenth century first attempts were made by English craftsmen to imitate imported Oriental decorative objects. But the big Oriental boom and great production of japanned objects with spirit varnishes started with the reign of Charles II in 1660. Oil varnishes were developed in the early eighteenth century which were applied to new materials, such as tinplate

mâché. These opened new possibilities for utilisation, for example coatings for coaches and all kinds of household items, especially tea trays. Pontypool in the south of Wales was the first place in Britain to produce tinplate in the 1720s and became later the leading centre for the production of japanned metal objects.

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and from the 1770s on, increasingly to papier

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Figure 1. Japanned cabinet, around 1765 (W.61-1931)

Black japanned surface coatings which were produced in England and Wales between the seventeenth and the nineteenth centuries (Figure 1) were the subject of my final year research project, part of the RCA/V&A Conservation Course. In order to provide a better understanding of japanned surfaces and their conservation my studies concentrated on the following aspects:

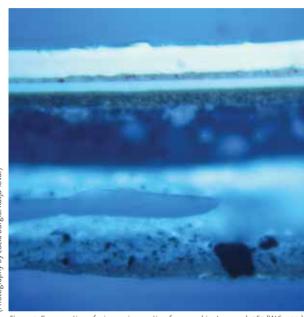


Figure 2. Cross-section of a japanning coating from a cabinet, around 1765 (W.61-1931);

A great number of materials were employed for the manufacture of japanned objects. A typical structure for a japanned surface is a combination of base, ground, varnish and decoration layers (Figure 2). These layers can be made of various materials, such as wood, leather, whiting, natural resins, alcohol, oils, pigments, metal leaves and powders. In the beginning the most common base material for japanned furniture was certainly wood. Almost all japanned surfaces produced in the late sixteenth century were made from spirit varnishes (natural resins in alcohol), often applied onto a whiting ground. Decoration layers were often made of metal leaves and powders, or gold paint, depicting chinoiserie scenes. Later, in the eighteenth century, tinplate and papier mâché were primarily used as substrates, and were covered with the more durable and resistant oil varnishes (natural resins in oil). Polychrome floral designs became the common form of decoration.

Parallel to the rising manufacture of japanned objects, methods of production were written down in recipe books in order to provide guidance for the professional as well as for the amateur. Historic treatises were written throughout the history of japanning and present information about the development of japanning with view to availability and use of materials, changes and improvements of application techniques, and social functions of japanned objects. The following books were analysed and partly reproduced for this project: John Evelyn's Sylva (1670), William Salmon's Polygraphice (1672), John Stalker and George Parker's A Treatise of Japanning and Varnishing (1688), 'chiefly the MSS. of the Great Mr. Boyle' The Method of Learning to Draw in Perspective made easy and fully explained (1732), Robert Dossie's The Handmaid to the Arts (1758). A clear development of materials and techniques could be observed, as well as progress in layer structures and production methods.

Four japanned cabinets from the V&A's collection were examined as part of this study. The cabinets were all almost certainly made in England between 1620 and 1820. Three of the four cabinets have a uniform black varnish coating; one is varnished in several colours in imitation of tortoiseshell (see cover image) and is covered, at least partly, with a black coating. The examination included visual observation of the objects with the naked eye, and visible and ultraviolet light microscopy. The following deterioration patterns could be identified:

 Damage caused by changes in environmental conditions could be observed on all cabinets. Extreme changes in relative humidity set off shrinkage and cracking in the wooden substrates, which in turn caused stress, damage and loss in the japanning coating. UV light discoloured clear resinous varnishes and increased the breakdown of the materials.

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- Coarse-grained and uneven woods such as pine and oak were employed in all cabinets. To provide an even, smooth base for the varnish layers, a whiting ground was always applied onto the wood. This whiting ground was occasionally subject to deterioration and also caused the deterioration and loss of varnish layers on all cabinets. On the other hand, if no whiting is present, the adhesion of the japanning varnish to the wood was very strong and stable.
- · With an increasing number of varnish layers the visual quality of the objects improved, but the multilayered coatings are more vulnerable to damage. The combination of a variety of materials can increase and accelerate the deterioration process. Different ageing properties of the materials and reactions within and between the individual substances can weaken the stability of the coating.
- Previous restoration treatments, in particular the application of paint and additional varnish layers, could be observed on all cabinets. Although these additional coatings might at first glance improve the appearance of the object, they can cause severe damage to the underlying japanning layers. The contraction during the drying process of the applied material and its reaction with original japanning layers, as well as environmental influences can cause mechanical stress which eventually leads to damage and loss.

Acknowledgements

I am grateful to Dr Nigel Bamforth and Alison Richmond for tutoring me during this project. I would also like to thank Dr Lucia Burgio, Margaret Ballardie, Nicola Newman and Miho Kitagawa for their help and advice.

Transforming the Conservation Library

Laura Jiggins & Michelle Murray

Conservation Administrators

The V&A Conservation Library houses nearly 3000 books and is a valuable resource for conservators. students, interns and placements working within the Conservation Department. It can also be accessed by other members of museum staff and visitors from outside the Museum by appointment. The library has an international reputation for being a model for the provision of conservation resources and it has recently been visited by conservation professionals from India and Australia specifically for the purpose of conducting research into how it achieves such high standards as a conservation library. Not only is the library a borrowing facility, but it is also a quiet place to read or study. In May 2003, the Conservation Administration Section moved to a new location within the Museum taking the Conservation Library with it. This inevitably caused considerable disruption to the organisation and structure of the library. In the months following the move Conservation Administration ensured that the library remained accessible despite the fact that, due to staff shortages, it was not possible for admin staff to oversee every aspect of its functionality. The library's original lending and returning system became increasingly 'self service' which allowed conservators easy access to resources within the library without time consuming procedures. However, there were crucial consequences in that after a time, there was no way of monitoring the whereabouts of the books. Before long it became impossible to track whether a book was in the library, on loan to another member of museum staff or to the National Art Library (NAL), or even if it was missing altogether. This rendered the library database inaccurate and therefore redundant.

During the closing months of 2004 Conservation Administration, headed by Tim Carpenter, identified that the library was in need of a reformation that would be based on the following principles: That the library would function as a valuable resource for Conservation Department staff; that it would be managed within the Conservation Department by administration staff; that it would be a controlled operation to ensure continual high standards of efficiency; that its contents would be relevant to the conservation profession. The Library Committee was set up to agree these principles and action the positive re-direction of the Conservation Library.

The committee consisted of five members of V&A conservation staff: Tim Carpenter, Information Systems Manager; Michelle Murray and Laura Jiggins, Conservation Administrators: Albert Neher. Head of Furniture, Textiles and Frames; Harriet Standeven, RCA/V&A Conservation Tutor. The advantages of handing the Conservation Library over to the National Art Library, also located within the V&A, were considered as it would mean that the books could be accessed by a wider audience. However, this would mean that the books would not continue to be housed within the Conservation Department and conservators, students, interns and placements would no longer benefit from easy access to the valuable information and resources that the library has to offer. These implications would contradict the agreed principle that the library should be a resource for and managed by the Conservation Department. Conservation Administration therefore decided to treat the need to reform the library as an opportunity to initiate the extensive re-structuring, updating and promotion of the library so that its potential as a valuable resource could be reached and maximised within the Conservation Department.

In November 2004 Michelle Murray and Laura Jiggins undertook the colossal task of auditing the Library as the information held on the library database no longer coincided with the library's tangible state. This was a proactive process which would enable admin staff to identify exactly which books were on the shelves and which books were lost or missing. An amnesty was declared and a request was made for conservation staff to return all books belonging to the library. The Department was also searched for library books that had gone astray. The audit involved scrupulously checking the details of each individual book on the shelves against the records held on the library cataloguing system. The outcome of the audit, which took many weeks to complete, was an accurate list of all books held in the library which has since been transferred onto the library database. This has restored the function of the database as a tool for monitoring the status of each individual book, whether it be available on the shelves, on loan, or with the NAL. The new system also tracks the name of the last person to borrow each book and the date that it was issued. The database has became a

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controlled system showing when it was last updated and it has also been given a new look and location within the Conservation Department's network with the aim of encouraging users to try the new system and promote its efficiency. Users can now have confidence in the accuracy of the information that the Conservation Library Database provides.

Having restored the overall function of the library, it is crucial to educate users with regard to procedures for borrowing and returning books and reinforce that it is vital these procedures are followed in order for admin staff to maintain the library's organization and efficiency. New guidelines in the form of the Conservation Library Manual have been introduced to outline the new procedures and are available to staff on the Conservation Department's network. Printed copies are also on hand within the library so that external visitors are aware of the cataloguing system. The manual is also available on the new Conservation Library intranet site which was created by Laura Jiggins to promote the Conservation Library throughout the Museum and to give staff access to developments within the library. It is the aim of admin staff to continue to build on the already wide ranging material that the library houses to represent all areas of conservation and support the RCA/V&A Conservation course. The new intranet site therefore has facilities so that staff may request the purchase of particular books for the library's collection.

The audit also revealed over 100 volumes which had been added to the library by staff over time but had skipped the process of being allocated a catalogue number and recorded onto the database. These books were therefore isolated during the audit and on completion, the process began of gradually adding them to the database. Once books have been recorded onto the Conservation Library system, they are then loaned to the NAL for cataloguing. This ensures that, should a book that is housed in the Conservation Library be sought via the NAL by an external enquirer or a member of museum staff, NAL staff are directed to liaise with Conservation Administration staff on the enquirer's behalf. Conservation Administration have therefore worked with the NAL to implement an ongoing cycle of exchanging books that are new to the Conservation

Library system but not yet registered with the NAL, for books that have been added to the NAL system and are therefore being returned to Conservation. While a book is on loan to the NAL for auditing its status as such is marked on the Conservation Library Database so that it is clear that the volume will be available shortly. It is only after these books have been returned to Conservation that they can be made available for borrowing. This long process of cataloguing the unrecorded books that surfaced during the audit is now reaching completion. However, updating and improving the library's existing collection of books and also Conservation Administration's associations with the NAL are ongoing processes.

The Conservation Library now functions according to the agreed principles. It remains a valuable resource for Conservation Department staff, ensuring that it is responsive to departmental needs and that the material it houses is highly relevant to the conservation profession. Its operation is controlled and overseen by administration staff and the changes to the Conservation Library continue to be reinforced by all library users. The work of Conservation Administration to re-promote the Library, encourage users to follow procedures, manage and maintain its organisation and resources and instigate developments is ongoing. It is the aim of administration staff that the library continue to operate as a valuable efficient and continually improving resource for all areas of the Conservation Department, the Museum and beyond.

Apollo Flaying Marsyas: bringing marble to life

Sofia Marques

Sculpture Conservator



Figure 1. The two sculptures in the V&A Sculpture Conservation Studio (A.6-1967) (A.5-1967)

Apollo Flaying Marsyas (A.6-1967) is one of two lifesized marble sculptures that were originally commissioned by the King of Poland and Elector of Saxony, Augustus the Strong from the Venetian sculptor Antonio Corradini (b.1668; d.1752) between 1723 and 1728 for the gardens of the Höllandisches Palais in Dresden.

In 1836, this group of figures and its pendant *Zephyrus and Flora* (A.5-1967) were sold, and soon afterwards entered the collection of Easton Hall, Lincolnshire. They were acquired by the Victoria and Albert Museum in 1967. The sculptures are not linked by subject matter, but they were listed sequentially in the Dresden inventory and auctioned together.

Both sculptures, *Apollo Flaying Marsyas* and *Zephyrus and Flora* (Figure 1), are now occupying a place of importance flanking the door leading to the new garden that was inaugurated in July 2005.

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This short article invites the viewer to share with the conservator some observations made while treating *Apollo Flaying Marsyas*, to think of its original appearance, the process of carving and previous conservation treatments.

At first glance, the surface clearly shows signs of weathering and environmental pollution - the surface looks grey (especially at the bottom), rough, and is fairly porous. Some details of the carving have, as a result, lost their original sharpness. In the conservation of such a piece I have tried to enhance the carving and volume in order to reinstate what has been lost over time. This has been partly achieved through selective and careful cleaning. The conservator is in a unique position to observe the details created by the artist through the very act of cleaning.

The satyr Marsyas was a flute player who challenged Apollo to a music contest. He was defeated and was consequently at the mercy of the god, who decided to flay Marsyas alive as a punishment for losing. The realism of the facial expressions of Apollo and Marsyas became evident during the cleaning process (Figures 2 & 3). Apollo's eyes reveals what is in his mind, a mixture of cruelty, superiority and fury, while Marsyas is in great pain, despair and anguish. His eyes look upwards, and his tongue lolls to one side.

Close examination of the surface also allowed me to recognise areas of unweathered stone, and has enabled me to recreate in my mind's eye the original appearance of the surface: a pure white, polished marble. The weathering observed is both natural and artificial. The sculpture stood outside in all weathers for more than two hundred years. The cracks found at the base might well have been caused by water infiltration, followed by an expansion of water during severe weather in winter. A black crust (sulphation) caused by environmental pollution also formed on the surface over the years. Micro-organisms have grown in the pores of the marble (this is especially visible on the bottom half).



Figure 2. Detail of Apollo's face



Figure 3. Detail of Marsyas' face

In addition to this natural decay, a major conservation operation took place when *Apollo flaying Marsyas* was acquired by the Museum, in order to eliminate both the obscuring crust and the micro-organisms. The general appearance was undoubtedly improved, but not without some risks. Various poultices were used, as well as ultrasonic dental tools. Despite the care taken, this last tool caused some damage, and lines in the marble can be observed where the tool abraded not only the crust but the original marble.

Elements of the carving have been lost over time. Several attempts have been made to replace these. In the 1968 intervention, corrections were made to the replacement pieces following the discovery of an early print (Figure 4). This print was taken from an early set of illustrations of the Dresden marbles, the Recueil des Marbres Antiques qui se trouvent dans la Galerie du Roy de Pologne a Dresden compiled by the court architect of Augustus the Strong, Raimond le Plat, in 1733. The entire knife and index finger held by Apollo were altered on the basis of this. These added elements were made of a mixture of a hard paste, glass chips, crushed and sieved to the grain-size of the original marble and mixed with epoxy resin. The resin has, since then, severely darkened. As the cast elements are of good quality, it was decided at this point only to touch up with paint the discoloured areas to match the original colour of the marble.

It is important to mention that Apollo flaying Marsyas was carved from one block of marble. The back was never meant to be seen, which explains why the surface has been left rough (tool marks are still visible) and is flat. The wings of the angel on the right at the top are now missing, but the proper left one appears in Le Plat's illustration. This gives an indication of the shape and angle of the missing wing. The back of the angel currently has two white shapes of unweathered (but not polished) marble at the wing position. There is a lip around the edge of the proper left one, suggesting that the wing was originally carved from the same block of marble. We can presume that the side wing was broken at some time in the past, and the broken edge was then cut back to the level of the back in order to fix a

replacement. The second white mark has two holes, one still with a rusted iron dowel in it. This supports the idea that there would have been later additions or, at least, repairs.

Corradini pushed his art and technique to the limit, and ingeniously made use of the whole block of marble by designing the wings from within the block. *Zephyrus and Flora* similarly exemplifies his skilful technique. In this sculpture, the artist also carved the wings of the angels from the same block (although only one now survives intact), but this time, the wings protrude backwards, again efficiently using the entire block of stone.



Figure 4. Early print of Apollo flaying Marsyas

Finally, there is another interesting aspect of Corradini's technique while carving this large sculpture. In order to carve all the different elements at the top - Marsyas' legs, the tree trunk, and Apollo's head - the artist decided to omit the right arm of the angel that was not meant to be seen from the front, in order to give himself more room to work on these elements from the back of the sculpture. The right arm has therefore been left flat, with tool marks showing the use of claw chisels, normally used to rough out the stone.

The great achievement of *Apollo flaying Marsyas* is in my view the figure of Marsyas, carved upside down, and yet with a real sense of gravity that can be seen in the musculature.

I hope this article has not only contributed towards the understanding of certain aspects of the carving process of *Apollo flaying Marsyas*, but has also given an idea of the challenges the artist set for himself. Working on such large sculptures requires virtuoso skills and good health. Corradini died at the age of eighty-four, and was about sixty years old when he completed these large sculptures. He became well-known for his veiled female figures, and developed a compelling mannered style, especially in his representations of the human form. He displayed his mastery of working marble by bringing it to life.

Bibliography

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Hempel, K.F.B., 'The Restoration of Two Marble Statues by Antonio Corradini', *Studies in Conservation*, 14 (1969), pp.126-131.

Hodgkingson, T. 'Two Garden Sculptures by Antonio Corradini', *V&A Bulletin*, Vol.4, no 2, April 1968.

New Staff



Brendan Catney

Sculpture Conservator

Initially employed to work on objects destined for the new Jameel Gallery of Islamic Art due to open in July 2006, I am now becoming increasingly concerned with the removal and treatment of stone objects as galleries are decanted. In the near future many large scale wall-mounted monuments will need to be dismantled, removed and treated prior to their eventual re-display when the many gallery refurbishments to the Museum are complete. I shall be involved in all aspects of this. A wide material knowledge is expected, combined with an ability to apply ones skills both at the microscopic level and on an architectural scale. The challenges of this privileged role are both welcome and gratefully accepted.

After an art college background and years of work as an illustrator and cabinet maker, I returned to college and in 1993 qualified from The City and Guilds of London Art School with a diploma in conservation studies. For nine years I worked with Taylor Pearce Restoration Services in a huge variety of locations. Work ranged from treating medieval carvings for the Palace of Westminster to emergency repairs for the Saatchi collection. Time spent in the stately splendour of the Royal palaces would rapidly be followed by winter weeks in a Walthamstow graveyard. A hugely varied experience. Surprising, challenging and rewarding. This was followed by two and a half years working with a restorer of antiquities where my main role was the mounting and restoration of Roman and Byzantine mosaics. Most interesting.



Johanna Puisto

Sculpture Conservator

After studying at the Helsinki Vocational School of Decorative Painting until 1991 I worked in Helsinki mainly refurbishing historic interiors for nearly six vears. To improve my skills I did a course in gilding and framing, which lead me to study conservation at the De Montfort University in Lincoln. This offered me an opportunity to study a wide range of materials and I specialised in the conservation of ceramics and ethnographic artefacts. My work placement at the Royal Albert Memorial Museum and Art Gallery in Exeter gave me valuable experience in working in a museum environment. After graduating with BA (hons) in conservation and restoration in 1999 I worked in the private sector on prestigious projects such as the conservation of an historic interior in Belton House in Lincolnshire, the Hereford Screen (on display at the V&A) and the restoration of St Paul's Cathedral.

I will be working at the V&A until June 2006 and I am focusing on conserving objects for the newly refurbished British Sculpture Galleries. I am also involved in other projects such as dismantling monuments for the Medieval & Renaissance galleries. My work is both inspiring and challenging because of the variety of responsibilities it involves. Apart from practical work I participate in documentation, historical and scientific research and collaborate with people from different professional fields. I have always aimed to work in a museum environment and therefore I am very excited to have the opportunity to work in the V&A with its remarkable collections.

RCA/V&A CONSERVATION



Richard Mulholland

The drawing media and working technique of David Smith 1940-1965 and its significance to his aesthetic philosophy

2 year MPhil

I completed a degree in Art History at the University of Leicester in 1996. After working at the National Library of Ireland in Dublin for a year as an intern in the Paper Conservation Department, I attended the University of Northumbria, Newcastle, obtaining an MA in Conservation of Fine Art in 2000. I stayed at the University for an additional two years as Senior Research Assistant and Conservator. From 2002 to 2003, I was Advanced Level Intern in Paper Conservation at the Straus Center for Conservation and Technical Studies, Fogg Museum, Harvard University. I then joined the team of conservators on the Straus Center's restoration of John Singer Sargent's 'Triumph of Religion' mural cycle at the Boston Public Library. Most recently, I was Andrew W. Mellon Conservation Fellow at the Sherman Fairchild Center for Works on Paper and Photograph Conservation at The Metropolitan Museum of Art, New York, and I presently work as a private paper conservator in London.

I developed an interest in the materials and working technique of the American artist, David Smith while working at the Fogg Museum. I hope to prove through analytical study of David Smith's media, that a new perspective on the relationship between his drawing and sculpture can be found, and a more informed approach to the conservation of his drawings can be reached.



Lirica Lynch
Natural History Conservation
(with the Natural History Museum)

2 year MA

In the course of my undergraduate degree in Archaeology I did quite a lot of excavating and gained an interest in specimens and their preservation. I have previously volunteered in the Natural History Museum's Palaeontology Department and later in the Conservation Department, doing a variety of different jobs. I learnt a lot - in particular that I wished to pursue conservation as a career. Prior to this I had also spent a couple of weeks volunteering at the Ceramics and Glass Warehouse of the Museum of London where I helped with managing data and sorting items.

I have travelled extensively in Europe, Central and South America. I backpacked around the Yucatan in Mexico visiting various sites and I also visited Mexico City along with nearby Teotihuacan. In 2001 I spent a month at the Museum of La Plata in La Plata Argentina (I am bilingual and have family in Argentina) where I learnt about the pottery and technology of various South American cultures. There I spent time in discussion with Rodolfo Raffino, an expert on the Inca. I also attended the 14th National Argentine Archaeology Conference in Rosario where I had the opportunity to communicate with various specialists. I have excavated twice at a Mayan site in Belize called Lamana. Whilst there, as well as finding artefacts and ensuring their safe-keeping, I learnt about how tropical environments can affect the preservation of finds.

RCA/V&A CONSERVATION



Lucy McLean

Conservation of Post-Nineteenth-Century Bronze Sculpture

3 year part-time in-post MA

I have been in private practice for a decade working on a variety of large scale objects *in situ*. My work covers monumental sculpture, contemporary artworks and historic facades. I am an accredited conservator and a member of the ICON Metals Group committee.

I have come to the course hoping to gain an insight into museum conservation. I will be aiming to learn about techniques that I may not have had the opportunity to use previously in my career, develop my analytical skills and partake in further academic study in the form of research. Most of all, I hope to be able to gain from an environment where many conservation professionals practice and debate.



Simon Bloxham

Characterisation of Photographs in The National Archives Collection (in association with The National Archives)

2 Year MPhil

I began my career in science upon entering Liverpool Polytechnic in 1988 reading applied chemistry. In 1990 I worked on a short project in a government laboratory looking at novel pest control methods that utilised aromas and pheromones. I returned to Liverpool in 1991 and specialised in surface science. In 1992 I joined the University of Kent at Canterbury and used the phenomenon of surface-enhanced Raman scattering (SERS) to investigate a variety of coatings. In 1994 I undertook industrial research into paint's UV stability. Following this in 1997, I travelled to Lithuania where I was employed by the Institute of Chemistry. There I looked at the possibility of using computational chemical methods to aid in the investigation of biologically interesting molecules. This work was very successful and in 1998 I entered the joint doctoral programme, run by the Institute and the University of Vilnius, looking at the SERS from selfassembled monolayers of sulphur containing molecules on copper. In 2003 I returned to the UK and took a career break to look after my young children. This year, 2005, seeking a new challenge and a more fulfilling application of my scientific skills I entered the V&A/RCA Conservation Programme where I shall be looking at The National Archives' collection of Felice Beato's photographs.

Mazarin Chest Project Interns



Nanke Schellmann

3 year PhD

I began my professional education by studying the making and restoring of violins, violas and cellos in Mittenwald, Bavaria. This was followed by internships in the conservation departments of the National Gallery and the Wallace Collection in London, the Bayerisches Nationalmuseum, Munich, and the Germanisches Nationalmuseum in Nuremberg, before I joined the RCA/V&A Conservation Programme for a three-year MA in Furniture Conservation. After completing my MA in 2003 I returned to Germany to work as a Furniture and Historic Wooden Interiors Conservator.

The provisional title of my PhD, a collaborative effort between the V&A and the Hochschule für Bildende Künste (University of Applied Arts), Dresden, Germany, is "Investigating the problem of consolidating East Asian lacquer". This research aims to approach systematically any problems encountered by conservators when consolidating degraded East Asian lacquer surfaces and coating structures. I will investigate methods and materials that may help to approach and ideally solve some practical consolidation problems of lacquer. I also hope to enhance the understanding of East Asian lacquer coating structure and help advance the knowledge essential to its conservation. During my PhD I will be closely linked with the Mazarin Chest Project and will be working with the Conservation Department at the V&A, while being supervised by Prof Dr Christoph Herm, University of Applied Arts, Dresden, Germany.



Florence Whaap

Textile Conservation Intern

I am in my last year of training in "Conservation-Restauration des Biens Culturels" ('Conservation-Restoration of Cultural Heritage') at the Sorbonne University, Paris where I am studying textile conservation. My seven-month internship in the Textile Conservation Studio is a highly interesting and enriching opportunity. I will be working on a loan of Diaghilev costumes to Italy, a loan of eighteenth to nineteenth century Greek Island embroideries, and on the proposed Phase 2 of the refurbishment at the V&A Museum of Childhood. I will also participate in the preparation of the J.C. de Castelbajac exhibition at the V&A due to open November 2005. This will give me an insight into the exhibition process from beginning to end. My aim during this period is to further my knowledge of approaches to conservation, addressing assessment and ethical issues of preventive and curative treatments, techniques such as cleaning, consolidation and mounting and also the history of

Before commencing my Masters at the Sorbonne, I studied Art History, Archaeology and the History of Textiles. During my conservation training, I have completed several internships in Parisian museums including Musée de la Mode et du Costume, Musée national du Moyen Age, Département des Arts Décoratifs de la BNF, Musée de l'Armée, as well as following practical courses at the textile studio of the Musée des Art Décoratifs.

Interns



Laura Zukauskaite

Paintings Conservation Intern

In 2001 I completed a three-year course studying the Restoration/Conservation of Paintings at the Kaunas College of Art in Lithuania. The course involved a short placement at the Art Department of the History Museum in Kaunas where I had an opportunity to learn more about preventive conservation, the setting up and maintenance of correct environmental conditions and cleaning and sorting the museum collection. Since moving to London I have worked on a variety of projects, including the removal of oxidised shellac varnishes from eighteenth century benefaction boards; cleaning ingrained dirt and grime from marble and slate monuments; the removal of nineteenth century restoration and in-painting losses on a Grinling Gibbons carving and on a diverse range of painted art works.

I am very pleased that I have been given the opportunity of a three-month internship at the V&A. I am also interested in understanding how the Conservation Department functions and how different departments interact within the Museum. As I have a thirst for research and learning new techniques and materials, I hope that from working in an institution such as the V&A, at the cutting edge of conservation and with excellent research resources, that I obtain knowledge of the most up-to-date and advanced methods, materials and ethical issues.



Thomas Geissler

Furniture Conservation Intern

The internship program at the Victoria and Albert Museum is offering me the chance to experience conservation from a museum viewpoint. I look forward to gaining an insight into how a museum's treatment of the objects it collects differs from that of private collectors, how it displays objects and how it educates the public about conservation. During my four-month internship I hope to increase my knowledge about preventive conservation as well as widen my knowledge about special techniques used in treating Asian lacquer, Japanning and Boulle-Work.

Before finding my way into conserving furniture and woodwork I completed an apprenticeship as a joiner and worked for several years in this field. With increasing interest in old furniture, I started an internship with a local furniture conservator in my hometown of Jena (Germany). Subsequently, I studied Conservation of Furniture and Woodwork for three years at a school in Munich. With newly acquired theoretical knowledge and basic skills in practical conservation I went to a studio in Graz (Austria). After two years working in Graz I took the opportunity to do a six-month internship in a private conservation studio in New York City (USA).