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V&A Conservation Journal No.48

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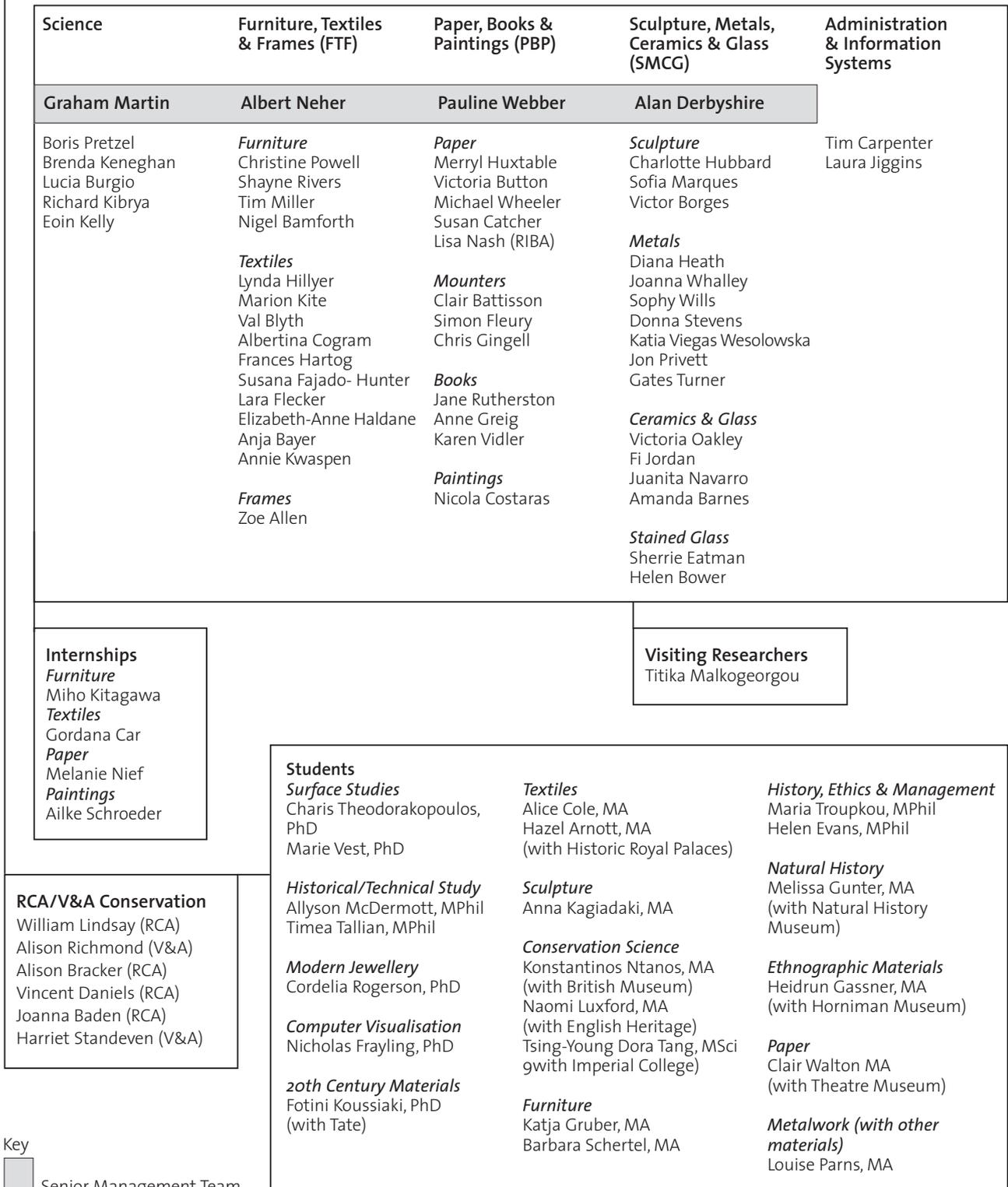
Front Cover image: Architectural model of the Shrine & Mausoleum Gate of Yomeimon of Toshogu. (W.5-1918)  
Photography by Ian Thomas, V&A Photographic Studio

**Head of Conservation**  
Sandra Smith

*PA & Dept Secretary*  
Fiona Campbell

# Conservation Department

## Staff Chart Autumn 2004



Key

Senior Management Team

# Editorial

Sandra Smith

Head of Conservation

Earlier this month I went to the UKIC conference, 'Working with the Project Culture', in Liverpool. The various papers highlighted the need for conservators to be able to understand their role within a project team, and to contextualise conservation within a project culture. Organisations such as the National Trust, English Heritage and Historic Royal outsource much of their work to private conservation studios and have therefore become quite adept at predicting and costing conservation within a project. National museums, like the V&A, whilst increasingly working within a project culture lag behind our colleagues in these project planning skills. The Collections Services Division has taken a leaf out of project management practice by creating an estimating tool to predict resource requirements across the Division from known and comparable data. Nick Umney, Tim Carpenter and Sue Ridley explain how this tool evolved and how it can be used to assess the impact of projects on the divisional work load and to negotiate for additional resources.

Though we may need to evolve the planning process, involvement with projects is very much part of our lives. Pauline Webber's article shows the conservation input into an international project, Nigel Bamforth gives an insight into the fascinating project that we have been undertaking with the RIBA on their architectural models and plans and Victor Borges and Sofia Marques add their knowledge to the development of this new gallery. Amid this we have been trying to share development in joint research initiatives through a departmental seminar, and we are grateful to David Thickett of English Heritage for providing an external review of the day.

Autumn heralds a new intake of students for the RCA/V&A Conservation MA course and their biographies, together with those of contract staff and interns, show how departmental numbers are swelling even if it is only for a short time.

Sadly, this is also the point for saying goodbye to some members of the Department; Maria Walklin, Production Editor of the Conservation Journal has left the Museum and her skills have already been missed by the editorial team, who she kept on the straight and narrow with remarkable patience. The second goodbye is to Jonathan Ashley-Smith. Although he technically left the Conservation Department in 2002 to join the V&A Research Department, he remained in contact with Conservation, always offering support and advice. His work for the Museum, the Department and the conservation profession has been outstanding and we will all miss seeing him around the Museum. Our best wishes to them both for a happy and successful future.

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# A Souvenir From Guangzhou

Pauline Webber

Head of Paper, Books & Paintings Conservation

A selection of approximately 200 Chinese export<sup>1</sup> paintings from the V&A's collection were exhibited at the Guangzhou [formerly Canton] Museum of Art in China from 28 September 2003 to 4 January 2004.

Very few export paintings of this type remain in the collections in Guangzhou; consequently they are regarded with great interest by Chinese scholars as an invaluable documentation of the history, activities and socio-cultural exchanges that took place around the Pearl River Delta during the eighteenth and nineteenth centuries. The paintings were produced in the port cities of China and became popular souvenirs sold to western travellers and merchants. They represent the images of Chinese culture taken back to the West in an age that pre-dated photography. Appropriately, the exhibition was entitled *Souvenirs from Canton*.

During the eighteenth century no visit to Canton was complete without purchasing some artwork from one of the new painting studios in New China Street. Watercolours had an added attraction because they were of a convenient size, were relatively inexpensive, and could be bound into albums and books for ease of storage and display. The artists worked in both transparent and opaque colour on a surface of European or Chinese paper, as well as silk, ivory and pith<sup>2</sup>.

The paintings exhibited in Guangzhou date from the second half of the eighteenth century, the V&A possessing very few from the first half of the century. The subjects include boats, trades, birds, flowers, insects, musical instruments, merchants, tea and silk production, and porcelain manufacture.

Out of the 'One Hundred Occupations' series, an important part of the collection, 53 were selected, illustrating the trades and occupations of Canton. They were acquired in 1898, not for their artistic content, but as pictorial documentation of the 'industrial arts'<sup>3</sup>. The variety of street activities and traders that could be seen at the time are illustrated including cobblers, wok-menders, dumpling-sellers, glass grinders, porcelain repairers and street theatre performers.

Out of the V&A's collection of 50 boat paintings, 30 were selected for exhibition. They illustrate the great variety of mainly riverboats in use in the late eighteenth and nineteenth centuries. Transport by river and sea was the most important means of connecting Ghangdong Province with other coastal cities of China. There were many shipyards in port cities such as Guangzhou and so boats were a popular subject matter. They were named according to their shape, function, place of origin or the cargo they carried. The Duck Boat (Figure 1) was used to transport ducks whilst the Flower Boats, a euphemism for floating brothels, were elegantly decorated boats moored permanently, with Pimp Boats that ferried the clients to and fro.

The paintings of the 'One Hundred Occupations' were executed on thin, good quality Chinese *xuan* paper, made from the fibre of the *than* tree. It was first sized with alum and animal glue and after drying, brushed with a lead white (lead sulphide) ground. The images of the traders were traced from other copies or copybooks, possibly with a metal stylus. The outlines were filled in with colour and details added later.

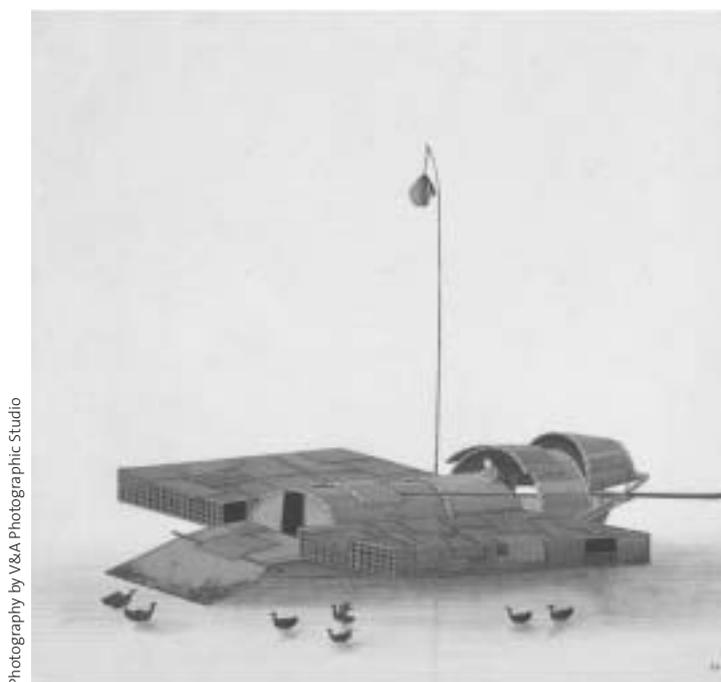


Figure 1. Duck boat (8655:28), watercolour on paper

When the paintings were removed from their poor quality mounts, Chinese inscriptions at the bottom of each sheet were discovered. Large areas of the paper that had been masked by the mounts revealed that the white lead carbonate ground had become blackened. A decision was made to treat some of the most disfigured areas. The Gortex™ and hydrogen peroxide method was used to alter the black lead white back to white<sup>4</sup>. The most damaged of these paintings were lined with a thin *kozo* Japanese mulberry paper, while others were flattened to remove creases and indentations caused from previous mounting methods.

The boat pictures were painted in gouache-type colours (pigment bound with animal glue and some colours mixed with lead white) onto a very thin Chinese bamboo paper. Due to the fragile nature of the paper and losses and tears to the edges of the sheets caused by inappropriate mounting methods some 50 or 60 years ago, it was decided to line each painting. The colours used in the paintings were extremely sensitive to water and so, to minimise risk to the work, a treatment programme was devised to control the amount of water used in the various processes. The procedure involved flattening, removing discolouration, lining, drying and pressing between felts and boards. The lining was later trimmed down to approximately 5cm and the paintings hinged into new mounts.

Sixty paintings depicting birds, insects and plants were exhibited. Botanical subjects represent an important category in Chinese export painting. The V&A collection of flora painting spans the period between 1770 and 1840, and the exhibition presented the opportunity for some of them to be studied by the South China Institute of Botany, Chinese Academy of Sciences. The flora paintings were produced primarily for technical study in a standard format, to include the subject with branch, leaves and blossoms. These paintings, categorised as belonging to the *yuanti* (Academy) style<sup>5</sup>, were produced by traditionally-trained artists. Whilst it is thought some guidance may have been received from the European customers in rendering the subjects as true to life as possible, they still contain elements that are

inherently native, thus embracing aspects of both western and Chinese traditional painting. They combine native vegetable colours such as indigo and madder red, and mineral colours, including azurite blue, malachite green, cinnabar red, and lead white. Although many botanical paintings in the collection are on Chinese paper, there are a number on watermarked paper made in England by J. Whatman and dated 1812 and 1821.

Subject matter such as porcelain manufacture, tea growing and harvesting, and silk production was often produced in sets of 12 or more sheets and these were very popular between 1785 and 1820. The loan included a set of 12 paintings depicting tea production, (Figure 2) 20 paintings of porcelain manufacture, and a set of 16 watercolours illustrating the stages of silk production.



Figure 2. Transporting tea by river (D.355-1894), watercolour on paper

The porcelain manufacture paintings are executed with gouache-type colours on to a xuan paper prepared with a ground of lead white, alum and animal glue. Some areas are glazed, possibly with vegetable gums, to add depth and richness to the paintings. Several steps of the manufacturing process are often depicted on one sheet. Each painting has been pasted onto a secondary support of coarse,

open-weave canvas. The sides of the painting and the protruding canvas were bound with strips of marbled paper (Extra & Spanish Drag pattern 1850-1890), often extending over the edge of the painting. There is clear evidence from the pattern of dirt and damage that these paintings were removed from strainers and may previously have been displayed as framed pictures. Underneath the marbled paper was a painted blue border 1.5cm wide on the canvas framing the painting. This is more in keeping with other contemporary export paintings, such as pith paintings, which generally have borders of blue silk, or paintings of similar subject matter and technique incorporated into wallpaper schemes like those at Saltram House in Devon. I have also seen a set pasted similarly onto canvas and fixed onto wooden strainers with paper mache frames. It could be that they were prepared this way in Canton, since after 1780, many of the water-colourists also painted in oils, and so straining up canvas on a stretcher would have been a familiar technique. Most of these paintings were in fair condition, but in the past had been displayed unglazed. They were dulled by ingrained and surface dirt which, after removal with chemical sponge and soft grated erasers, revealed blue skies, pink sunsets and green leafy landscapes.

The paintings of silk, tea and porcelain manufacture are interesting in that they are accurate in their depiction of technical detail, but are set in fanciful and idyllic surroundings far removed from the realities of where they would have been produced. Porcelain, for example, was manufactured in a town five hundred miles north of Canton. Perhaps the artists wished to present an idealised setting in order to appeal to the European imagination.

The majority of the paintings underwent some conservation treatment and all were remounted. In the museum's large exhibition space, they were displayed in cases without frames using simple Perspex clips to hold them in place. The curators and technical staff were all extremely helpful and generous. Indeed, on the first day of installation it seemed as if the whole museum staff was inside the long wall-cases, measuring and fixing. The display system, however, was uncomplicated and the exhibition was installed smoothly.

Before the opening, we were treated to a day's excursion with colleagues from the Guangzhou Museum of Art, Macau University and the Chinese University in Hong Kong. We boarded a boat and travelled the old trade route along the Pearl River! The opening of the exhibition was celebrated in grand style with ribbon cutting, firecrackers, streamers, speeches and gifts, followed by a series of lectures and a lavish banquet of many courses.

The magnificent exhibition catalogue brings together scholarship from the V&A, the Guangzhou Museum of Art, the Guangzhou Museum, Sun Yat Sen University and the South China Institute of Botany. The exhibition curator was Ming Wilson from the V&A Asian Department. It was organised by the V&A, the Guangzhou Cultural Bureau and the British Council, and was sponsored by Swire Properties Ltd, Cathay Pacific Airways, and Mr and Mrs Edwin Davies OBE. The exhibition was the first joint venture between the V&A and the Guangzhou Museum and was met with great enthusiasm. The Guangzhou Museum sees it as a landmark in their activities and it is hoped that it may encourage further exchanges between the two museums in the future.

#### References

1. The term only came into use after 1949. Wilson, Ming, *Bridging China & The West - Chinese Export Art in the V&A*
2. The inner pith of the tree *Trexapanx Papyrifera* (in Chinese *Tongacao*) and frequently incorrectly called "rice paper".
3. Clunas, Craig, *Chinese Export Watercolours*, V&A Publications, 1984
4. Derbyshire, Alan, Hydrogen Peroxide and Gortex. *Paper Conservation News*, No 67, 1993
5. An organisation producing paintings for the Song Dynasty (960-1279). It stressed the importance of form-likeness and included paintings in imitation. Yin, Chen, *Guangzhou Museum of Art Exhibition Catalogue* pp64-69

# Conservation Department Seminar report

David Thickett

Senior Conservation Scientist, English Heritage

The Victoria and Albert Museum hosted a joint meeting with the Institute of Conservation Science on 5 May 2004. Over 50 people attended the meeting, which consisted of a series of five presentations on three topics.

Hannalore Römich gave an introduction to the LiDo (light dosimeters) project (EVK4-CT2000-00016) that has developed the Lightcheck dosimeters over the past three years. Two light dosimeters have been developed - *Light Check Sensitive*, LCS, for light doses up to 100,000 lux hours and *Light Check Ultra*, LCU for doses up to 400,000 lux hours. Each dosimeter comes with a 'calibration' card to enable the light dose to be read from it by eye. The LCU and LCS mainly respond to light, but are influenced by light source, temperature, relative humidity and the oxidising pollutants nitrous oxide and ozone. They do not respond to UV. Issues of quality control and production were discussed by Ron Buxton of Particle Technology Ltd., the company manufacturing the dosimeters. The LCU dosimeters are presently available at €40 for five, with LCS presumably available in the near future. The dosimeters have many obvious uses, but will need to compete with the established blue wool standard methods, whose use has been pioneered by the National Trust. They are extremely useful to rapidly assess a location for display and have already been used for this by the author. More detail on the LCS and LCU dosimeters is available at [www.lightcheck.co.uk](http://www.lightcheck.co.uk).

Boris Pretzel and Martin Hancock reported on the development of the OCEAN project at the V&A and the new generation of Hanwell radio sensors and software developed for this project. The extremely large scale of the monitoring planned (over 800 sensors) has led to some major developments in the hardware used. As is often the case in such work, these impressive improvements will not be obvious to the user who will only see a working system, but the auto-registration function for sensors will be appreciated with those users with large systems.

The changes to the software are however both obvious and significant. The most fundamental being a CAD type system of scalable maps to view and interrogate the sensors. This moves beyond the present limitations of the map views with large galleries/buildings. Such a large-scale system will require considerable resources to ensure the sensors are calibrated (which is all too often overlooked for monitoring systems) and functioning properly. The V&A have negotiated a contract with Hanwell to undertake this work. It was interesting to note that keeping the system maintained will cost almost as much as the initial system cost over five years and refreshing to see 'lifetime' costs built into a project.

The widespread availability of the data within the V&A drew some comment after the presentation, with questions about who had responsibility for acting when conditions moved outside those set for a particular gallery or display case. Clear lines of responsibility for reaction to 'out of limit' situations need establishing for any monitoring system of controlled areas and higher tech solutions do not overcome this basic requirement.

Oliver Stahlman described the European Cultural Heritage Network website (see [www.echn.net/echn/](http://www.echn.net/echn/)). This is funded by Cologne University and provides tools for communication, file sharing and project management between researchers on a project and for public dissemination of information from that project. The system allows both public and private areas with seven different levels of access and seems to be a much more user-friendly version of that used by many EC projects. The software appeared to provide several easy to use tools, to allow file sharing and controlled updating, news, and dissemination of graphics. As work becomes more collaborative to spread costs and risk amongst institutions, this approach seems an easy and very practical way to manage communications for projects between partners in several locations.

# An away day to Belgium - washing tapestries

Frances Hartog

Senior Textiles Conservator

On a bright sunny day in June the Textile Conservation Section set off on an away-day to Belgium to witness the washing of a tapestry. The process was being carried out in a specially designed facility using an innovative system that we hope to employ on objects for the new Medieval & Renaissance Galleries.

One of the objects chosen for the galleries is a tapestry from the 'The War of Troy' series woven in Tournai 1475-90, in wool and silk and measuring 4.13 x 6.80m. Over the years it has suffered a noticeable amount of damage and been poorly repaired. Indeed it has been cut into seven pieces and rejoined. Its condition could be categorised as 'fair' to 'poor' and before it can be hung for display it is in need of full conservation treatment. The first phase of treatment will be dedicated to cleaning, including washing. The fragile condition of the tapestry and the relatively recent developments in wet cleaning, led us to re-evaluate past methods.

In the past, tapestries were most commonly washed in temporary baths made up in a large enough space for them to lie out flat. The baths were constructed from polythene sheeting with plastic drain pipes for the sides. Large quantities of softened and de-ionised water were required on tap, as was adequate drainage. This system allowed for the complete immersion of the tapestry during the washing and rinsing processes. To facilitate efficient soil removal,

mechanical action in the form of sponging was essential. In order for the whole surface of the tapestry to receive the same treatment, the tapestry would be rolled on a roller in the bath as the sponging progressed across its entire surface. To lessen the amount of rolling, some studios invested in specially designed gantries from which sponging could be carried out. However, it was still necessary to roll the tapestry to clean the bath between washes and rinses. Though this method of washing is highly efficient at soil removal, there are drawbacks.

Using this method the tapestry undergoes considerable physical stress as it is repeatedly rolled and re-rolled in its vulnerable wet state. The sponging inevitably dislodges damaged weft yarns and areas of weak silk frequently suffer loss. It is a lengthy process taking on average 10 to 12 hours. At the end of the wash the tapestry is blotted and laid out to dry. Drying can take anywhere between 12 to 24 hours, any fugitive dyes in the tapestry or repairs (it is usual for tapestries to have undergone generations of repair over the centuries) have plenty of time to migrate into neighbouring yarns. As the soiling is released into the bath there is a possibility of re-deposition. The complete immersion of the tapestry for lengthy periods, though very effective at soil removal, results in the swelling and realignment of the fibres which can cause dimensional change.



Figure 1. The 'Gang' on arrival in not-so-sunny Belgium.

# Yomeimon of Toshogu

Nigel Bamforth

Senior Furniture Conservator



Figure 1. Gate of Yomeimon of Toshogu

Photography by Ian Thomas, V&A Photographic Studio

There were a great many models conserved for the Architecture for All Gallery, but none is more intricate than that of the Shrine and Mausoleum Gate of Yomeimon of Toshogu, built for the founder of the Tokugawa Shogunate (1603-1868) (W5-1918) (Figure 1). The splendour of Japan's greatest architecture was replicated in scale and detail, testifying to the skills of the nineteenth-century craftsman. The model was displayed at the Japan British Exhibition 1910 at the Great White City, Shepherd's Bush, London.<sup>1</sup>

The substantial model (85 x 65 x 45cm) is constructed of a series of platforms, each supporting the next, terminating with the roof load. The galleried first floor, borne upon columns, exemplifies the fine quality of the urushi lacquer employed in the model. The intricately carved tableaux set within the gallery rails, depict scenes from Japanese mythology and are decorated with water based pigments. Copper deposits found at Ashio, south-west of Nikko, used on the celebrated mausoleum are reproduced on the model's copper roof tiles.<sup>2</sup>

## Condition

The general structure, although retaining some stability, had suffered approximately two hundred losses. A great many detached and fractured architectural components were fortunately preserved in the V&A's stores. Detached screens, doors, fencing and brackets, all elements undertaken by various



Figure 2. Paper towelling being unrolled over a tapestry during the drying process.

The alternative system that we visited in Belgium is housed in, and operated by, the De Wit Royal Manufacturers in Mechelen. Set up in 1889 to manufacture and restore tapestries, their washing experience therefore stretches back for more than a century. About 13 years ago they developed an innovative new system which uses a combination of aerosol spray and vacuum suction. It is fitted with integral sensors to control pH, temperature, water flow and pressure.

The facility consists of an enclosed chamber with glass panels. The base is a large suction table 5 x 9m. Ranged across the ceiling are 45 aerosol sprays approximately 1.75m above the platform. During the cleaning process the tapestry is held in place by continuous suction. When the aerosol is turned on the whole chamber fills with almost weightless micro-bubbles of water vapour which are drawn down evenly through the entire tapestry. A low concentration of a non-ionic detergent is introduced to the aerosol system for as long as is deemed necessary for soil removal. This is replaced by softened and then de-ionised water during the rinsing process. In cases of extreme soiling sponging can be carried out from a gantry. The tapestry is still held under suction whilst being sponged, therefore there is no possibility of movement which would result in damage to weak areas of silk.

The aerosol/suction combination creates a very even and intense cleaning system with the advantage of the entire tapestry being treated simultaneously. The continuous flow through the tapestry means dirt is loosened from the fibres efficiently and then immediately drawn away avoiding the danger of re-deposition. There is no movement of the tapestry, therefore no mechanical damage from manoeuvring a wet textile can occur. The tapestry is never completely immersed in water thus avoiding dimensional change or shrinkage.

The pH, conductivity and temperature readings are displayed on a television monitor.

The client is presented with the graph of the readings, a very useful piece of documentation, and a DVD of the entire procedure which has been filmed via a roving digital camera attached to a bridge. During washing, any part of the tapestry can be examined in close up through this camera.

During drying there is continuous suction. Towelling is unrolled over the tapestry's entire surface, covered with polythene and left for a few minutes. The process is repeated. Finally the towelling is replaced by absorbent paper. After blotting the tapestry is left uncovered with the vacuum on. The air being circulated through it is pulled in from outside, filtered and heated to 30°C before use. After use it is extracted back outside.

The whole process takes approximately eight hours including the drying. The speed of the process and continuous suction avoids the danger of fugitive dyes migrating. For the historically important Troy tapestry which is pieced and heavily repaired with numerous painted patches, this system would appear to offer a very safe, controllable and, most importantly, effective method of wet cleaning.

The National Trust have been using De Wit to clean a number of tapestries each year since 1996. Notably, the Hardwick Hall tapestries with a particular type of black, sticky soiling that is extremely difficult to remove. They have been very satisfied with the results and encouraged us to "go and see for ourselves". Armed with away-day tickets from London to Mechelen - we did.

craftsmen, were generally complete. The losses to the antlers, lions, dragons and intricate miniature joinery were more intrusive. Finger imprints found on the first floor had clearly etched into the translucent lacquer surface, sustaining unacceptable surface damage.

The loss of roof tiles affected the overall appearance of the model where vertical timber beams are overlaid with copper sheet to simulate tiles (Figure 2). Powdery discoloration on the ridges and flat tiles was caused by bird

excrement. Minor corrosion was evident on the metal mounts located on beams and brackets, affecting blemishes on the surface.

The ground floor polychrome ceiling was in perfect order, having sustained no deterioration from dust and movement. The carved interior panels, due to dislocation, had surface abrasions. The loss of the temple guards aesthetically affected the visual statement of the temple, a dominant force presiding over the whole.

## Treatment

The structural treatment needed to stabilise the object required the total dismantling of the architectural structure. Brass rods rise uppermost through the plinth to screw into the roof beams allowing stability for the separation of the construction levels. By gaining access to the interior, it enabled a thorough survey of the construction methodology to be recorded. On close inspection areas of architectural losses were revealed, enabling an identification process to be undertaken and a systematic component replacement schedule to proceed.

A gentle vacuuming was undertaken to remove visible surface dust. Working from the plinth upwards, major horizontal shrinkage across the floor was filled with pigmented (carbon black) Fine Surface Polyfilla (emulsion of poly (vinyl alcohol), poly (vinyl acetate), cellulose ethers and mineral fillers). The carved screens located on the ground floor within the guards' quarters



Figure 2. Roof section showing losses of tiles

Photography by Nigel Bamforth

required the removal of dust with a squirrel brush. A gentle surface clean with saliva-moistened swabs removed surface dirt.

To remove the finger imprints, a fine cotton t-shirt cloth was dampened with Stoddard solvent (white spirit) via a pipette, the lacquer surface was lightly wiped in 5cm areas. The heavy imprints were treated with de-ionised water using the same method.

The metal mounts were cleaned with Shellsol A (aromatic hydrocarbon) and reapplied to the joinery where necessary using Paraloid B-72 in acetone. All loose and unstable roof tiles were re-attached with Canadian fish glue. Original roof and ridge tiles and gilded ridge elements were re-located and glued in place. The tiles were surface cleaned with Shellsol A applied on swabs, taking care not to affect the patination.

The loss of approximately 40 tiles distracted from the overall appearance. Replacements were created from a copper sheet milled down to 25mm thickness, cut into the required lengths and formed around dowelling. Tests were carried out on copper sheet to replicate the tile patination. A solution of 5g copper sulphate, 20g sodium chloride, 2g potassium sulphide in 20ml de-ionised water was applied by brush prior to gluing the replacement tiles in place.

The missing temple guards were reproduced by Justin McMorro, Senior Conservator, National Maritime Museum. One figure was modelled in plasticine, working from monochrome photographs of the original figures on the model of the gateway. As insufficient visual data existed to carry out an exact replica, it was decided after discussions with the gallery's curators that an impressionistic approach should be adopted with the aim of replicating the dimensions, posture and colour of the original to blend within the model. The plasticine model was cast in Sicovoss BL (silicone rubber), using a plaster casing to support a thin silicone layer. Two figures were cast in polyester resin with fillers of <40% synthetic amorphous silica, flake white dry powder pigment and barium sulphate. The catalysed mixture was placed on the open mould. After the gel coat had cured a fine layer of glass fibre and polyester resin was laid into each half of the mould. A catalysed mixture of gel coat was applied to the joining edge and



Photography by Justin McMorro

Figure 3. Figures cast in polyester resin

both halves of the mould were quickly assembled and held together (Figure 3). The beard was removed from one figure to comply with the original, the details drawn in pencil and painted in acrylic artist's paint. The body armour and floral decoration on the trousers were coated in yellow oil-based paint and gilded using tinted oil size. The gilded surface was distressed using acrylic pigments and airbrushed with a fine spray of white acrylic paint (Figure 4).



Photography by Ian Thomas, V&A Photographic Studio

Figure 4. Figures re-instated within the model

### Conclusion

The conservation treatment aimed to preserve the original decorative order. It was felt inappropriate to replace the losses of the carved gallery tableaux as no record of the design is available. The loss of roofing material and several lions did not intrude upon the visual appreciation of the gateway. However, the re-inclusion of the figures contributes to the appreciation of the overall scale of the model.

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2. Strong, K. *Ox against the storm*, Japan Library, Kent, 1995, p65.

### Acknowledgements

We are grateful for the work of Justin McMorro, Senior Conservator at the National Maritime Museum, who contributed by superbly replicating the seated figures.

# Nasrid plasterwork: symbolism, materials and techniques

Victor Borges

Senior Sculpture Conservator

As part of the display for the new Architecture Gallery, and to represent the art in architecture within the Spanish Islamic style, five fragments of plasterwork from the Alhambra Palace of Granada (Spain), were selected from the V&A Collection. These fragments date from the fourteenth century when Nasrid art was at its most splendid. This article, based on the analysis<sup>1</sup> of samples taken from mortars and paint layers and on observations during conservation treatment, forms an introduction to traditional materials and techniques used in Nasrid plasterwork as well as explaining their style and symbolism.

The first Islamic invasion of the Iberian peninsula occurred in 711 AD; three years later almost the whole Iberian territory was under the rule of Berber troops. The occupation lasted almost eight hundred years, giving place to one of the most extraordinary periods of art and culture in medieval Europe. Al-Andalus, the name given to the occupied Iberian territories, was slowly re-conquered by the Christian Kings through the centuries. However it was not until 1492 that the Catholic Kings finally conquered the last standing Muslim kingdom in Europe, Granada, ruled at the time by the Nasrid dynasty. Muhammad ibn Nasr I was the founder of this dynasty, which ruled this kingdom from 1238 to 1492. They originated the most monumental, sophisticated and lavish period within Spanish Islamic art, making Granada the artistic centre of North Africa (Marinid Art) and the Iberian Christian Kingdoms (Mudéjar Art).

The best example of Nasrid art is the Royal residence of the Alhambra (Al-hamra = the

red), a world of luxury and comfort, obtained through a combination of splendid architecture and formally designed gardens with numerous fountains and pools. The main architectural features within the buildings are ceramic mosaics, plasterwork and carved wooden ceilings all profusely decorated, reflecting the Islamic tendency to cover all surfaces with complex ornaments (Horror Vacui), and blended together with subtle light effects, carpets, curtains and hanging textiles.

Nasrid plasterwork covers almost every single surface of walls, arches, vaults and ceilings, gaining an almost textile quality through their intricate ornament and vibrant palette of colours. Its almost overwhelming appearance is the result of the interconnection and superimposition of different ornamental elements: calligraphic inscriptions, geometric lazo, ataurique and mocárabes.

The calligraphic inscriptions found in the Alhambra correspond to two different styles: Kufic (dry style) and Nashkhid-Thuluth (cursive style). Kufic calligraphy, which usually refers to quotations from the Holy Koran, consists of a combination of square and angular lines with bold circular forms. When applied to plasterwork it tends to form part of the decoration becoming almost illegible. In Figure 1, the kufic inscription at the bottom of the panel elongates and transforms its characters into decoration. References to some invocations as the "baraka" (blessing), with its elongated "kāf" and "tā' marbūṭa" letters, appear in the centre and corners of the panel. And on top of the central baraka the letter "nūn" makes an invocation to happiness (yumn).

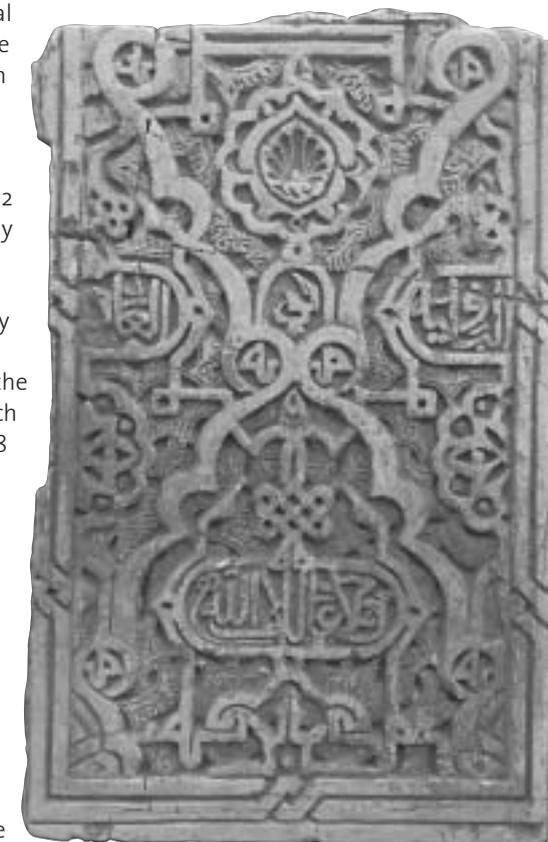


Figure 1. Plaster fragment with ataurique and calligraphic inscriptions combined

Photography by Victor Borges



Figure 2. Section of a 16 pointed star rueda

Photography by Victor Borges

Nashkid-Thuluth calligraphy is a more elegant style used for describing the function of the rooms or as a reference to poetic quotations. In later periods, the Nasrid used it as a vehicle for their propagandistic aims, displaying their dynastic motto “Wa la ghalib ila Ala” (“There is no conqueror but God”) in key locations of the design (bottom centre of Figure 1).

Geometric lazo: These geometric compositions (so popular in Islamic art) appear in Granada with such distinctive, accurate and rigorous design that they form a western school within Muslim art. Creations peculiar to Nasrid art are the square grid, the geometric lazo of eight and the eight pointed star. These stars were the central point for bigger compositions called “ruedas” (wheels) where the lazo creates a geometric composition around the star (Figure 2).

Ataurique (al-tawrīq = leaves, foliage, flora) is the name given to Nasrid floral and vegetal decorations. These patterns come from classic decorative elements, such as fruits, flowers and acanthus leaves, which evolved into more typical Hispano-Muslim abstractions. These are found as free decorations on arches and windows, or filling spaces created by the geometric lazo (Figure 2) and the calligraphic inscriptions (Figure 1). During the time of Muhammad V (1354) more themes and variations appear: complex palm leaves (background of Figure 1), shells (symbol of the origin of life, Figure 3), peppercorns, pine cones, and for the first time, they begin to appear intertwined with calligraphic inscriptions.

Mocárabe is a type of ornament built up from vertical prisms applied one over another. They would be joined in multiple different arrays resembling stalactites, probably relating to the cave where the prophet Mohammed received the inspiration for the Koran. The mocárabe is found located on capitals (Figure 3) and friezes, expanding to windows, arches and vaults at the time of Muhammad V. Nasrid mocárabes are characterised by their immense variety of geometrical shapes and precise mathematical proportions, making them unique in western Islam.

The main component of Nasrid plasterwork is gypsum (hydrated calcium sulphate). Retardants such as salts, glue or calcium carbonate were added to slow the setting and permit carving while panels were still damp. Sometimes the back would be reinforced with a rougher gypsum plaster containing sand and fibres. On the samples taken from the mortars, only gypsum was found. As a retardant, salts or glue may have been used. No trace of calcium carbonate was found.

During the first period of Nasrid Art (1232-1314) the carving process took place in situ with the “naqch hadída” technique (sculpture with iron tools). The gypsum plaster was applied and then carved, following the design previously outlined with dry point. The ornamental motifs were then carved at



Figure 3. Mocárabe fragment with ataurique decoration.

Photography by Victor Borges

different levels with the most important on top. To finish off, several white washes of lime or gypsum were applied to soften the edges of the carving and blur the transition between light and shadows. Only gypsum was found on Figures 1 and 3.

With Muhammad III (1302) the technique became more standardised: moulds began to be used. The design was drawn and cut in sections in order to make moulds on wood or plaster. The casts obtained would be set in place while damp with dabs of clay and sealed in with a gesso slurry. Finally the whitewash and the polychromy, when required, were applied. All the fragments studied were cast.

Mocárabes were produced following a more elaborate process depending on whether the design was intended for a capital, frieze, arch or vault. The number and variety of prisms (jairas) required for the design were calculated. The variety of cuts on the ends of the prisms created different geometrical shapes (called adarajas). The cut prisms were then joined with liquid gesso into rectangular sections (medinas), reinforced with a rougher plaster mixture and set in the final destination with clay (Figure 3).

Nasrid masons loved playing with light and colour effects in their plasterwork designs. Some panels were simply whitewashed (Figures 1 and 3), while others were richly painted, using high quality

pigments in a wide range of colours: red, blue, green, purple and black combined with gold and silver leaf. The painting technique, as seen in Figure 2, was extremely delicate and precise: plain background colours, silver or gold leaf on the high relief, and carefully executed sgraffito and fine painted miniatures creating exquisite effects.

In the case of the fragment in Figure 2, traditional pigments were found. The high degree of fluorescence obtained with the Raman analysis in all samples could be

due to the presence of an aged binding medium, probably gum arabic or egg. Two of the most significant pigments traced are: red vermilion, probably produced by the so-called dry process, used in China in antiquity and thought to have been introduced in the West by the Arabs; and blue lazurite, which is obtained from lapis lazuli. This mineral, mainly extracted in Afghanistan, was so expensive at the time that its value was equivalent to gold, reflecting once more the luxury of this polychromy and the sophistication of Nasrid plasterwork. Traces of other materials were found, but further analysis of these is required

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# Mixed media object: large and fragile structure

Sofia Marques  
Sculpture Conservator



Photography by V&A Photographic Studio

Figure 1. Model of Portion of the Tower of the Captive, Alhambra, Granada, Spain.

The architectural model, signed by Enrique Linares, of the Tower of the Captive in the Alhambra's palace, Granada, will be one of the many curious objects selected for the Architectural Gallery, (Figure 1). This model aims to reproduce one of the great achievements of Hispano-Muslim architecture.

The model of the tower, built in the 14th Century in Southern Spain, was made around 1880 with velvet, wood, paper, painted plaster and marble.

The variety and fragility of the materials, the weight (99kg) and the size (95x92x63.5cm) makes this object a complex one in conservation terms. As a result of this complexity, the conservation treatment varied in nature and degree of difficulty. Overcoming the handling of this object in order to sort out structural problems was a major concern. Consolidating the structure was also a challenge.

The model is made of painted plaster and consists of three walls and a ceiling. A wooden case, covered with red velvet, houses the model. Torn paper has been placed in between the wooden case and the plaster model to secure the plaster within its case and also to absorb any potential impact. This case resembles, in shape and colour, the original tower with plain walls of a reddish colour. The red colour of the velvet enhances the polychromy, which decorate the walls and ceiling of the interior. The painting on the plaster aims to represent painted tiles just above floor level, painted and gilded stucco panels above the tiles and the wood ceiling and door. The floor, the columns dividing the windows and the windowsills are made of white marble. Like a painting, a frame surrounds a big opening that is in place of the fourth wall, inviting the viewer to look inside. The two lateral windows offer different views on the interior.

The velvet, which covers the wooden case that houses the model is unfortunately in a very poor condition. Textile conservators of the V&A were consulted for advice that stated that the conservation of the velvet is practically impossible. Even the use of Parylene<sup>1</sup> as a consolidant was ruled out. The method of application of Parylene takes place in vacuum and creates a thin (less than 1µm), even and transparent film. It has been used to rescue very fragile objects such as leaves! To ensure a successful consolidation, removing the velvet from the case would have been ideal but was an operation presenting high risks. Consolidating the velvet in situ brought other problems for the rest of the object. Further this co-polymer is renowned for having bad ageing properties and reversing the treatment is impossible<sup>2</sup>. The velvet, therefore, was not consolidated and was only lightly vacuumed using a very soft natural hairbrush.

Before any further decisions are made this non-intervention will require regular assessments in order to monitor the rate of degradation once it is on display.

Three steps were established to address the object's structural problems whilst minimising contact with the badly damaged surface. The first step was simple

but effective: a plywood board, longer than the base of the model and with handles at each end, was cut so the object could be moved and transported according to the need without touching the velvet.

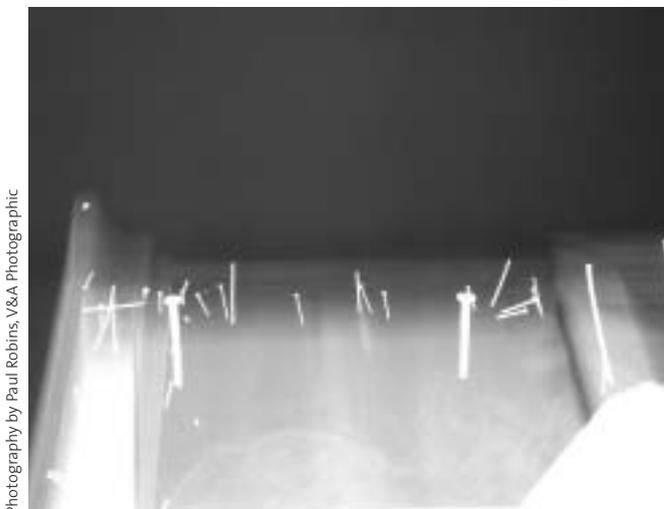
The second consisted of building an "L" structure in plywood padded with two lengths of Plastazote<sup>®</sup>, one at the top and one at the bottom edge of the back of the model. This enabled the model to be tilted on its back so that work could be carried out on the base of the model, where three of the feet were detached or loose. This way, handlers did not touch the model and instead, only two points of the velvet were in contact with Plastazote<sup>®</sup> covered with acid-free tissue.

Finally, a template, provisionally made of plywood, was sprayed three times with a polyurethane coating (Selabond RJ119) and left to cure for two weeks. It was to go underneath the model and in between the feet that are at the base (Figure 2). The board was a few millimetres thicker than the height of the feet. It took the weight off the four feet that even after treatment were still considered to be too weak to carry the whole weight of the object. A permanent structure was to be made of sprayed metal and an acrylic sheet.



Photography by Sofia Marques

Figure 2. Bottom of model showing structural problems. The feet on which the case stands are missing



Photography by Paul Robins, V&A Photographic

Figure 3. X-ray radiograph of top corner of wooden case

Some precautions were taken prior to tilting the object to stabilise the base. X-ray radiographs (Figure 3) showed nails and screws of different sizes and shape in the wood indicating that the wooden structure had many times been repaired. In order to ensure that the plaster model would be able to sustain its own weight in a horizontal position, balls of acid-free paper were closely packed to fill the inside space of the model.

Having overcome the problem of handling the model, the next difficulty was the fixing of the loose wooden velvet-covered mouldings to the main body of the case. The mouldings were originally fixed to the main body with nails passing through both the velvet and the wood. The nail heads were cut off to be less obtrusive and no glue had been used. Most of the nails protruding from the loose mouldings were removed, but some were simply pushed back in their original hole. Stainless steel brads were also used on existing holes. Wooden dowels and High Tack Fish Glue were used where wood was in contact with wood.

In some cases two loose pieces of moulding were fixed together from the inner angle with an “L” shape metal plate before being fixed back to the main body. The metal plates are made of mild steel (previously coated twice with Paraloid B72 in acetone). A piece of spun bonded polyester fabric was fixed with rabbit skin glue onto the metal plate and the visible wood to avoid the metal scratching the velvet covering the case. As the space between the two sections of moulding was tight it was possible to place the mouldings in position using a light pressure. Acid-free tissue was used to fill voids that could potentially cause further structural problems, following the principle of torn paper mentioned before.

Several strategies were formulated in order to maintain the present condition of the velvet, i.e. avoid handling the object while solving urgent problems such as the structure of the wooden case supporting the velvet without conserving it. Both being in direct contact made the challenge even greater. The poor condition of the velvet is one of the reasons why the model won't be seen in its entirety when exhibited. Nevertheless, this article provides an opportunity to analyse the integrity of this object as a whole.

I am grateful to Tim Miller, Frances Hartog, Marion Kite and Boris Pretzel from the Conservation Department, Tanishka Kachru from the Word and Image Department and the handlers from Technical Services for their contribution towards this project.

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## Planning and estimating

Nick Umney, Director of Collections Services Division, Tim Carpenter, Conservation Information Systems Manager, Sue Ridley, Head of Technical Services

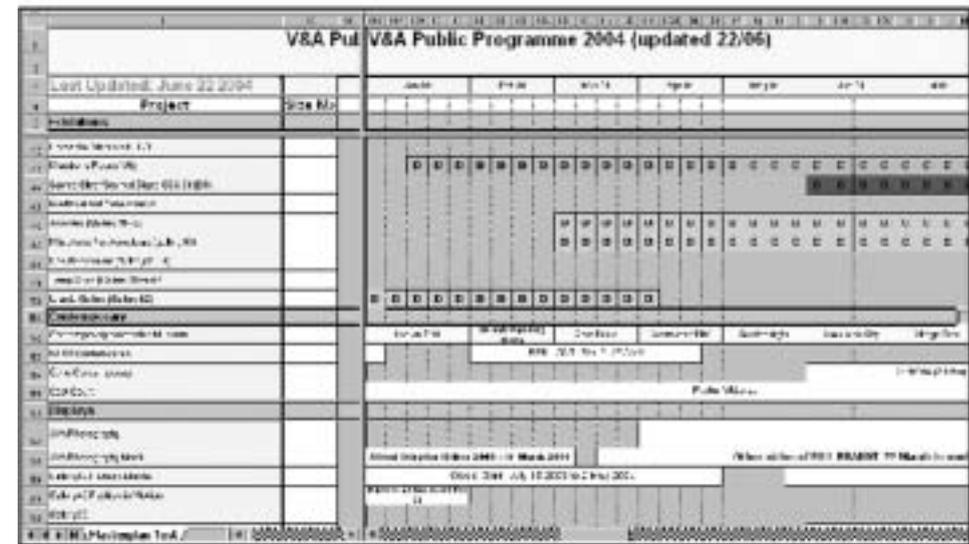


Figure 1: Extract from CSD Public Programme

Responsible project management requires broad understanding of costs before commitment. Traditionally, the Collection Services Division have found it difficult to assess their capacity to deliver a mixed programme of gallery displays, exhibitions, publications and loans in the absence of object lists. From a planning perspective waiting until an object list appears is too late because a commitment to proceed with a project has generally been made well before this point. We therefore needed a tool that would allow us to make credible predictions about the resource implications of medium to long-range programme proposals.

The bringing together of the Departments of Conservation, Exhibitions, Photography, and Records and Collections Services into a Collections Services Division (CSD) at the beginning of 2002 created opportunities for more joined up thinking about these museum operations. A Planning Group representing all CSD departments was quickly set up to help achieve this. As a first step, a document, the Public Programme Chart (figure 1) was created to bring together in one place a list of all the planned, public-facing, object-based activities over the next five years.

The group then turned its attention to long range estimating and forecasting of our capacity to deliver the projects listed on the programme. The aim was to come up with a simple method of predicting the resource implications of proposed projects based on previous experience. One way this might be achieved was by looking at statistical averages of numbers of objects per square metre in different types of display and the average treatment times for objects and bring this together into a framework that would enable predictions to be made. The challenge was then to apply this to a different population of objects.

Given the bewildering range of different object types and materials, the Planning Group first reduced this complexity to just six simple, easily recognisable groupings based on size and object complexity. A simple matrix of small vs large and 2D vs 3D was established and tested against sample groups of objects in the Museum to see if this would provide a reliable basis for classification. This then led to the adoption of the following six categories of object:

- 1 Small and simple 2D
- 2 Large and/ or complex 2D
- 3 Small and/or simple 3D
- 4 Large and simple 3D
- 5 Large and/or complex 3D
- 6 Outsize or complicated (exceptional)

The group then asked conservators, photographers and technicians to predict how long it would take them to conserve, photograph, move and install objects in the different categories.

To achieve good predictions it was also necessary to take account of the purpose of the work for which the estimate was being made. This was formally expressed as class of activity. The five classes of activity were established as: loans and acquisitions, exhibitions, new gallery displays, gallery/store clearances, publications. Once this was adopted, more consistent and reliable estimates could be produced.

Each CSD section then determined the average amounts of time required to carry out their work on the different categories of object for the different classes of activity. Each activity was given a separate calculation matrix (figure 2).

The Public Programme was used to identify projects that required resource calculations. Information on the number and category of objects for a project was then obtained by either research or assessing the objects in situ. The resource required was then calculated by entering the data onto the Template (figure 2).

The figures from each project were then automatically transferred to a master sheet showing cumulative levels of resources required to service all projects within a given period of time. Units of time were reported on in quarters of a year. Levels of available resource are put into the master sheet: this enables spare capacity or over-scheduling to be highlighted.

The model aims to provide a rational basis for decision making in the overall museum planning process. It provides base line figures but can be adjusted where more accurate assessments of objects are required or where a certain project breaks the 'norm' (e.g. when all of the objects in a project are large tapestries). Data from areas outside the CSD (e.g. Collections) can also be incorporated into this tool. As projects are completed, actual data can be input to increase the validation of the results.

Figure 2: CSD Resource Estimator: Estimator Template with Gallery/Store clearance data

We have used the Estimator already to demonstrate where there is insufficient staff time to deliver museum projects. This has not only helped in securing additional staff resources, but has also enabled managers to review priorities and deadlines for work. Responses such as moving opening dates and changing resource focus have also been possible.

Since the Public Programme Chart was first created, it has been adopted by a wide range of colleagues. At first the brightly coloured programmes were a curiosity at meetings, but others quickly saw their use and began asking whether they might take copies. Now a circulation list exists and monthly updates are spread around the institution. It is hoped a similar pattern of interest and adoption will be seen with the Estimator. There is already interest outside the Division, with requests for projects to be run through the Estimator to see what the resource implications are.

Our long term vision is for the Estimator to become a core tool in the overall planning process. To achieve this, we must simplify the inputting process for proposed projects and agree a management structure for reviewing the output. This will then provide a simple and easy to read interface which will give clear predictive messages for managers to engage with and make decisions.

## RCA/V&A CONSERVATION

# Postgraduate Conservation Programme

Alison Richmond

Deputy Head, RCA/V&A Conservation

It is always a pleasure to reflect on the many achievements of our students over the academic year just passed. Yet again, one of our students was short-listed for the Pilgrim Trust Student Conservator of the Year Award. Nanke Schellmann's submission for the award was based on her research into the influence of pH on the cleaning of East Asian lacquer, and the short-listing is also a recognition of the support and guidance she received from her supervisors in the V&A.

At the Convocation ceremony held in the Albert Hall, the Rector of the College requests the audience to give the graduating students a round of applause. This year we applauded:

- Iwona Jurkiewicz-Gotch – MA Paper Conservation: Architectural Works (with the V&A)
- Emma Schmuecker – MA Conservation of Social History Objects (with the Museum of London)
- Sherrie Eatman – MA Stained Glass Conservation (with the V&A)
- Nicole Ingram – MPhil Risky Business? Heritage Hospitality: The impact of special events on the contents of historic buildings (with English Heritage)
- Harriet Standeven – PhD The technical and historical development of alkyd-based gloss housepaints, with reference to 20th century artists

The range and depth of learning, teaching and research undertaken on the programme is certainly reflected in this list. The quality of our programme is reflected in two recent appointments: Sherrie Eatman MA to the position of Stained Glass Conservator at the V&A following the departure of her supervisor, Drew Anderson – himself a graduate of RCA/V&A Conservation – for the Metropolitan Museum in New York and Dr. Harriet Standeven to part-time Tutor on the programme.

We are looking forward to welcoming the new students, whose biographies you will find on the following pages.



**Alice Cole**

Textile Conservation

3 Year MA

BA(Hons) Textile Design: Chelsea College of Art. LINST

During her degree Alice studied a wide range of textile and garment production techniques. She specialised in knitwear design and particularly enjoyed the dyeing of yarn. Her studies took her to Italy and New York where Alice began to get a sense of textiles in a wider historical context whilst also developing an interest in stained glass and ecclesiastical art.

After graduating two years ago Alice began training as an oriental rug restorer with a studio in London. This introduced her to a diversity of different textiles including tapestries and upholstery fabrics. Alice hopes that her time with the V&A will be the start of a lifelong career in textile conservation. She wishes to continue learning about as broad a range of textiles as she can and the cultures that produced them. She would particularly like to develop a greater understanding of ecclesiastical artefacts and also the migration of dye stuffs. Alice would love to travel with her work and gain experience of conservation practices around the world.

## RCA/V&A CONSERVATION



### Naomi Luxford

Conservation Science in the Care of Historic Interiors (with English Heritage)  
2 Year MA  
Msci Chemistry, University of Bristol

Naomi was unsure whether to study art or chemistry at the end of her A-levels. Having chosen and completed a chemistry degree she decided to combine the two areas. Conservation offered this opportunity.

During a year out she worked as a volunteer two days a week in Conservation Science in the Conservation Centre, NMGM, Liverpool. Here she learnt about environmental monitoring, which led to a three month internship studying environmental conditions at the Lady Lever Art Gallery. She also spent a week at Birmingham Museum and Art Gallery learning about the effects of light in galleries. Both experiences developed an interest in collection care.

She is looking forward to gaining a better understanding of how science can be used in conservation, particularly within historic collections.



### Barbara Schertel

Furniture Conservation  
2 Year MA  
HND Furniture Restoration, London Guildhall University  
BSc Restoration and Conservation, London Metropolitan University

Barbara gained her first experience in furniture conservation during a placement in a furniture restoration workshop in Munich. Her interest in studying abroad combined with the wish to gain more practical experience led her to the HND in Furniture Restoration at the London Guildhall University in Autumn 2000.

After completing the HND in Furniture Restoration and in order to gain more knowledge and experience she enrolled in the BSc Restoration and Conservation at the London Metropolitan University. As part of the BSc course, and in order to learn about conservation practice abroad, Barbara went on a placement to the Austrian Museum of Applied Art (MAK) in Vienna. During the two and a half months placement Barbara enjoyed experiencing museum conservation practises first hand.

Barbara is looking forward to studying at the RCA/V&A. The MA course will complement Barbara's wish to deepen and broaden her experience in the field of furniture conservation. This will be further enhanced by the unique possibility to work at the V&A with the guidance of the present experts and its unique collection of modern and old objects.

## RCA/V&A CONSERVATION



### Hazel E Arnott

Conservation of Tapestries and Textiles in Historic Interiors  
3 Year MA

Born and brought up in West Yorkshire, textiles and needlework combined with history has always been a passion of Hazel's. Attending the University of York to complete a BSc degree in Archaeology, the study of material culture and the ethics surrounding historical archaeology were of particular interest to her.

After graduating in 1999 Hazel applied to, and was successful in gaining a place on the Royal School of Needlework Apprenticeship. This three year Apprenticeship teaches the fundamentals of traditional embroidery skills with a strong emphasis placed on the high standard of workmanship. A work experience placement during the third year of the Apprenticeship was undertaken with the Textile Conservation Department of the National Trust. This experience confirmed that training as a conservator within the field of textiles was the perfect opportunity to combine her interests.

A further two years have been spent working for the Royal School of Needlework since completing the Apprenticeship in 2002, before moving on to study for a MA in the Conservation of Tapestries and Textiles in Historic Interiors.



### Helen Evans

"An Analysis of the Ethical Concerns Raised by the Conservation of War-Damaged Objects"  
2 year MPhil

After graduating in 1998 with a History of Art degree from the University of Warwick Helen spent three years working in the financial conferences sector before returning to higher education to do a post-graduate diploma and MA in paper conservation at Camberwell College of Arts. It was during her time at Camberwell that she developed an interest in conservation ethics in general and the conservation of war damage objects in particular.

Museology was an integral part of the Camberwell course and during her post-graduate diploma she studied the ethics of vehicular conservation and display in order to broaden her horizons beyond the boundaries of paper conservation. Visits to the Imperial War Museum and the National Army Museum over the years resulted in an MA essay on the ethics of the conservation and display of war-damaged objects and provided the catalyst for her current research.

This work aims to explore the myriad of moral issues presented by objects damaged by war and to assess how these can best be approached. Her intention is for this work to be used as a reference tool by practical conservators rather than being an academic treatise irrelevant to the realities of a real conservation studio.

## RCA/V&A CONSERVATION



### Louise Parris

MA Conservation of Metalwork with Other Materials

Louise worked for 10 years in Barbados making and selling jewellery in Bridgetown Cruise Ship Terminals and from her gift shop Poro Mariama, which sold items of art exclusively handmade in Barbados.

Louise left Barbados in 2000 to do a 2-year diploma in Design, Silversmithing, Jewellery and Allied Crafts, at the end of which she was awarded a Commendation from the Worshipful Company of Goldsmiths for commercial design and manufacture. She went on to study a Postgraduate Diploma in the Conservation and Restoration of Fine Metalwork at West Dean College, where she was awarded The British Antique Dealers Association Frank Gutteridge Prize for her research project on the ancient decorative metalwork technique of Granulation, as well as the British Antique Dealers Association Harold Davies Prize. She then enrolled on the Professional Development Diploma Course in the Conservation and Restoration of Fine Metalwork at West Dean, during which she did a six-week internship in the Metals Conservation Department of the British Museum.



### Tsing-Young Dora Tang

MSci Chemistry with Conservation Science, RCA/V&A Conservation with Imperial College of Science, Technology & Medicine

Dora has always possessed an interest in art, archaeology and science; being an active member of an amateur archaeology society taking part in digs, field walking and documentation and studying art alongside science at school. After studying A-levels in Hertfordshire, Dora studied a BTEC diploma foundation studies in art and design at Middlesex University. She specialised in fine art for eight months, during which Dora was able to experiment and learnt to manipulate and use oil paints, black and white photography and print making as visual devices.

Dora is currently studying Chemistry with Conservation Science at Imperial College, London and will begin the third year of a four year course. She recently spent eight weeks in the Department of Conservation, Documentation and Science at the British Museum.

Dora is very interested in the links between science and art, with a passion for art specifically painting and a knowledge of chemistry she looks forward to studying Conservation Science with the RCA and the V&A.

## New Staff



### Eoin Kelly

OCEAN Support Scientist

I came to London four years ago to study for an MA in Paper Conservation at Camberwell College of Arts. In Ireland, I had initially done a Fine Art degree, and spent the rest of the 90s working as an artist and theatre designer. Following the MA, I spent a pleasant summer in Oxford working on a book conservation project at the Queen's College. As an Intern, I had spent the previous summer working on the Dean Aldrich Conservation Project of seventeenth century prints and drawings at Christ Church College. From Oxford, I spent two happy years as a Conservation Mounter & Framer in the Paper Conservation Section of the National Maritime Museum. This involved working with items as diverse as Augustine Ryther's Armada Charts of 1590, to Hergé's twentieth century drawings of Tintin. In addition to preparing items for loan out and display, I became involved in strategies to protect and improve the reserve paper collections in store. Greenwich convinced me, once and for all, that museum work was definitely for me and provided an invaluable grounding in the mechanics of working with a large and varied collection.

Whilst at the V&A, I'll be working on the OCEAN Project and welcome the opportunity of approaching collections care from a different perspective. I look forward to gaining further insights into the developing technology involved in monitoring the environmental conditions of the various V&A sites.



### Gates Turner

Metals Conservator

I have come to work in conservation through a process of elimination. Having completed a BA in Mandarin Chinese, I decided I did not want to work as a translator. At this point I produced a list of qualities I wanted my career to encompass; independent of one another, two trusted friends both came up with archaeology (surprisingly, neither of them had any connection to archaeology or the museum world!).

After working on a field excavation in China, I decided I was more interested in the objects rather than the vast amount of soil and strata. I completed a MA in Principles of Conservation from the Institute of Archaeology at UCL and went on to be awarded a Postgraduate Diploma and Professional Development Diploma in Conservation/Restoration of Fine Metalwork at West Dean College, Sussex.

I am now involved in Metals Conservation at the V&A to help prepare objects for the upcoming Brass, Pewter & Cutlery Gallery opening in November 2004.

## New Staff



### Anne Kwaspen

Textiles Conservator

I'm very pleased to introduce myself a second time on these pages. After two years study in Textile Conservation in Antwerp, internships in South Bohemia and Hampton Court Palace, and the seven months internship at the V&A, this is my first contract as a textile conservator.

For just over five months I shall be working on a costume from the Theatre Museum's Diaghilev Collection. It is the Coronation Coat worn by Chaliapin in the Mussorgsky opera Boris Godunov. This opera was the first production that Diaghilev brought to Paris in 1908. The coat is in such poor condition that it has not been possible to display it before. The entire duration of my contract will be needed to carry out the treatment of this object.

From December 2004 till March 2005 the costume will be on display at the Working for Diaghilev exhibition in the Groningermuseum (The Netherlands).



### Anja Bayer

Textiles Conservator

For long time I cherished the wish to become an archaeologist. I wanted to dig out and reveal the remains of ancient daily life, and it was always exciting for me to imagine how people lived in former centuries. At some point in my life, I had to make the decision what to do and finally I found the field of conservation. Here you really handle the objects and may discover interesting facts about the object's history. As a textiles conservator, I still have a special interest for archaeological finds.

I started my career in 1995, spending two and a half years in a private workshop in northern Germany, working on a wide range of textile objects. Afterwards, I had the opportunity to study textile conservation at the Berner Fachhochschule – Abegg-Stiftung in Switzerland. After two contracts at the Abegg-Stiftung and a number of short contracts at the private workshop, I applied for a six month contract at the V&A to gain a broader view about conservation outside Germany.

I consider myself lucky to have a contract here and am now preparing some amazing and colourful Diaghilev Ballet costumes to go out on loan. I enjoy the work and find it interesting to work in such a great museum!

## New Staff



### Amanda Barnes

Ceramics and Glass Conservator

After working for a number of years at a large insurance company in Norfolk, firstly in Information Technology and then as Personal Assistant to their Marketing Director, I came to the decision that it was time to make a change in my career. I studied for a degree in History of Design and Architecture at the University of Teesside, Middlesborough and then decided to develop my interest in ceramics by undertaking a two year postgraduate diploma in ceramics and glass conservation at West Dean College, Sussex. I then returned to Norfolk to set up my own workshop. Together with my private work, I have also undertaken a number of contracts with the National Portrait Gallery, London and Cliveden Conservation Workshop Ltd, Berkshire.

I am delighted to have the opportunity to work at the V&A for the next ten months and to contribute to the new Jameel Gallery of Islamic Art, which is scheduled to open in 2006.

## New Intern



### Miho Kitagawa

Furniture Conservation Research Intern

I studied Japanese lacquer (urushi) at Tokyo National University of Fine Arts and Music, and also studied at Goldsmiths' College, London for a year while I was an MA student. After finishing, I worked at private conservation workshops as well as freelance. I worked in the Museum Science Section of the National Museum of Japanese History and in the Conservation Section of the Tokyo National Museum before coming to London to study western lacquer (also called japanning) with a grant from the Japanese Agency for Cultural Affairs.

I attended the Conservation Post Graduate Diploma course and then became a Research Fellow at the City and Guilds of London Art School. I have taught short courses on Japanese and western lacquer for students there. In April, I was accepted by my old university in Japan as a PhD candidate on Conservation Studies. My research at the V&A is focussed on historical manuscripts relating to western lacquer.