

V&A Conservation Journal

The Quarterly Publication of
the Victoria & Albert Museum
Conservation Department



October 1999 No 33
ISSN 0967-2273

Jonathan Ashley-Smith

Editorial

Nick Umney, Victoria Oakley

The British Galleries Project

Albert Neher

'Methods in Our Madness': Method Statements & the British Galleries

John Dowling

Removal & Installation of Mirrors for the British Galleries

Fiona Jordan

The Remounting of a Victorian Tile Panel

Clair Battison

A Brief History of Mounts

Derek Balfour

Don't Sit Down! The Investigation & Conservation of An Upholstered 17th Century Settee

Paula Mills

Off-Site Radio Telemetry

Science and Information Section

Science Surgery

New Students

Conservation Department Staff Chart

Contents

V&A Conservation Journal No 33

- 3 Editorial – Changing Landscapes**
Jonathan Ashley-Smith, Head of Conservation
- 4 The British Galleries**
Nick Umney, Project Manager
Victoria Oakley, Head of Ceramics and Glass Conservation
- 6 ‘Method in our Madness’: Method Statements & the British Galleries**
Albert Neber, Head of Furniture Conservation
- 8 Removal & Installation of Mirrors for the British Galleries Project**
John Dowling, Museum Technician, Technical Services
- 10 The Remounting of a Victorian Tile Panel**
Fiona Jordan, Senior Conservator, Ceramics and Glass Conservation
- 13 A Brief History of Mounts**
Clair Battisson, Conservation Mounting
- 14 Don’t Sit Down! The Investigation & Conservation of an Upholstered 17th Century Settee**
Derek Balfour, Senior Upholstery Conservator, Textile Conservation
- 17 Off-Site Radio Telemetry**
Paula Mills, Conservation Scientist, Science and Information Section
- 19 Science Surgery**
Science and Information Section, Conservation Department
- 20 New Students**
- 23 New Staff**
- 24 Staff Chart**

Editorial Board

Jonathan Ashley-Smith
Head of Conservation Department

Helen Jones, Course Tutor
RCA/V&A Conservation

Paula Mills, Conservation Scientist
Conservation Department

Mike Wheeler, Senior Paper Conservator
Conservation Department

Managing and Production Editor
Victoria Button, Senior Paper Conservator
Conservation Department

Designed by V&A Print Unit

Photographs are credited individually

© Victoria & Albert Museum. ISSN 0967-2273

All enquiries to:
Conservation Department
Victoria & Albert Museum
London SW7 2RL, UK
Telephone: + 44 (0)20 7 942 2091
Fax: + 44 (0)20 7 942 2092
Email: journal@vam.ac.uk

The cover shows V&A Technicians removing a mirror from the British Galleries
Photo: V&A Technical Services

Editorial – Changing Landscapes

Jonathan Ashley-Smith
Head of Conservation

At a recent meeting someone who has to deal with a range of Government Departments and Agencies remarked that ‘the whole landscape is changing’. This conjured up a colourful psychedelic image of shifting hills, trees and clouds. However he said it so forcefully that this description of uncertainty about the future made ‘the goalposts have changed’ seem fairly low key and an ‘uneven playing field’ seem quite attractive. There are clear indications from the Government about the direction in which publicly funded museums should be heading. There is less clarity about the final destination or about the effects of the process of change.

The changing landscape includes the newly formed body MLAC, (Museums, Libraries and Archives Council), an advisory and strategic body independent of government but working closely with it, particularly on areas such as access, education and social exclusion. The fate of what most of us know as the Conservation Unit (although it changed its name some years ago), currently administered by the defunct Museums and Galleries Commission, is uncertain. Political pressure for increased access is bound to have some long term effect on perceptions of the importance of preservation.

Another geophysical change is the new recognition of separate nations within the United Kingdom. This provides potential for development of influential conservation centres in Scotland and Wales where there was little hope of a central institution for the UK. The development of the regions, not just as ‘places somewhere outside of London’, but as powerful local administrations will have effects on training and education. But there is just too much uncertainty to make predictions let alone plans.

Closer to home the landscape is also changing. Galleries on two floors at the front of the Museum have been completely stripped in preparation for the installation of totally new displays of objects depicting British art and design from the years 1500-1900. This project, known to those involved as ‘The British Galleries’, or noted simply in most people’s diaries as ‘BG’, is the largest gallery project that the Museum has attempted for fifty years. Early stages of the development of this project were described in Volume 27 of this Journal. Many of the articles in this issue relate to this project, as it has become the central focus of the Department’s work and will continue to be so until after the galleries open in two years time.

The very size of the project has meant that the Department has had to come to terms with uncertainty at several levels. The design of the galleries has been a slow, organic process with inevitable changes of mind about the importance and method of display of individual objects. Meanwhile the conservators have had to plan programmes of work based on estimates derived from specific items. These estimates, each of which inevitably involves a degree of possible error, must be built into bids for the necessary resources. The estimates cannot contain too much leeway or the funds will not be granted, nor can they be so precise that there is no room for manoeuvre.

The size of the project and the necessary method of working in project teams with project funding is bound to have a long term effect on future work patterns within the Museum.

The British Galleries 1500-1900: An Overview

Nick Umney, Museum Project Manager, British Galleries Project
Victoria Oakley, Head of Ceramics and Glass Conservation

Background

The refurbishment of the British Galleries is one of the largest and most exciting projects the V&A has ever undertaken. The world's most important collection of British art and design will be redisplayed in a new and glorious setting. Fifteen galleries will house, in an area of about 3000 m², some 3000 exceptional pieces of decorative and fine art spanning the four centuries, 1500-1900. These include a wide variety of ceramics, glass, furniture, metalwork, textiles, costume and wallpapers as well as books, sculpture, prints, paintings and drawings. The new galleries will provide a stimulating, dynamic experience giving visitors a real sense of involvement with the collections. Improved display, clear organisation and fuller explanation will heighten interaction and enjoyment. Air-conditioning, careful management of light and rotation of sensitive objects will provide greater accessibility to rare exhibits and minimise the risk of damage and deterioration.

The project is in receipt of a grant from the Heritage Lottery Fund of £16m towards the total redevelopment cost of £31m. The transformed galleries are scheduled to re-open to the public in November 2001. The brief represents a marvellous opportunity for V&A conservators to be involved with all aspects of the examination, cleaning, repair, mounting, documentation and display of some of the most important objects in the Museum. It offers the opportunity to work with internationally renowned designers to help develop innovative displays. At the same time it presents a challenge to the management of the Conservation Department to plan, co-ordinate, monitor and control a wide range of diverse activities and to communicate effectively with many different project stakeholders. This means understanding the requirements of the project, setting targets and monitoring progress to ensure that they are met.

Project planning

A concept team was set up in 1995, reporting to the Head of Major Projects, Gwyn Miles, to develop the idea for the gallery. Shortly afterwards a project manager, Ross Shute, from Bovis Programme Management was appointed to

complete the process of tendering for a full team of design consultants and to manage the construction related aspects of the project. Three gallery teams, reporting to the Concept Team, were set up to develop the themes and choice of subjects and objects for the galleries. The three teams represent the Tudor and Stuart, Hanoverian and Victorian sections of the galleries. In January 1998, Nick Umney was seconded from the Conservation Department to the post of Museum Project Manager.

In order to plan the tasks required to complete the project in detail and to manage the complex interactions between different activities, a series of master programmes were developed for construction, content and museum operations. The latter programme included individual programmes for object relocation, loans, setting up of temporary displays, photography and conservation.

The conservation activities identified in the programme include: object assessment and technical examination; preparation of objects for relocation, loan, photography and final display; conservation advising on design; trial assemblies and test runs; materials testing; environmental monitoring; management and control. It was recognized that these activities would to a large extent be phased. The first phase would be an assessment of objects for relocation closely followed by preparation of objects for temporary displays, to ensure their continued availability for public viewing. Subsequently, preparation for photography and the final display would become the main focus of activity.

Preliminary assessment for conservation requirements

A preliminary assessment was carried out during the summer and autumn of 1997 to determine the probable extent of conservation needs for the project. This information was submitted as part of the Museum's funding bid to the Heritage Lottery Fund. The objectives of this assessment were to determine:

- The overall condition and damage types of objects

- Conservation needs for relocation of objects from the former British art and design galleries and associated stores
- Conservation requirements for loan/return of relocated objects – to satisfy demands for access and/or to provide suitable locations
- Special packing needs of objects for relocation and storage offsite
- Environmental susceptibilities of objects and environmental requirements for new displays to be communicated to designers and others
- Objects requiring technical analysis
- Objects requiring treatment before photography
- Objects requiring treatment before final display
- Possibility of working on objects offsite following relocation

The methodology¹ used, aimed to provide consistency across all Conservation Sections and object types. The basic descriptive information was imported from the Museum's Collections Information System (CIS) to a local database that was then used for data collection. The local database was structured to preserve the integrity of the central system and allow the collection of further information that could later be returned to the central system. This was done in anticipation of sharing data between stakeholders. Although the object list has been considerably refined, the assessment has provided a firm foundation for analysis of project needs and for monitoring progress of the work.

The work so far and more still to come

Two galleries were converted for use as temporary galleries to provide temporary display space for some of the most important objects relocated from the former British art and design galleries. Preparation of objects for photography is currently the pressing priority. Photography is required for a major publication to accompany the opening of the gallery and for interpretative devices, particularly for multimedia interactives. Deadlines for photography considerably predate those for final display. Sharing of up-to-date centrally recorded data with all interested parties is vital to the success of this approach.

While these activities have been in progress, the Department has also been providing an input to the design effort. Victoria Oakley who represents the Department on the Project Team has provided day-to-day input. Two volumes of generic method statements have been produced by the Department to assist the designers, one for mounting objects on open display, the other for mounting objects in

display cases. To ensure that it will be possible to erect the Melville bed under gallery conditions, a trial has been successfully completed. The bed was on display for a limited period and the opportunity was used to create publicity for the Museum. The work was filmed and will be seen in the new galleries. A small team of conservators has audited all of the designers' plans and elevations for preservation issues and have had to make some tough decisions about displays.

Conservation scientists continue to be involved in the project. Environmental monitoring has helped to ensure that conditions in new locations to which objects have been moved are appropriate. Analysis has been undertaken variously to determine whether objects should be included in the object list for the galleries, to provide essential information for conservation treatments, to increase our understanding of "star" objects for displays and to enable tender specifications to be written for the period rooms.

Conclusion

The Conservation Department is striving to ensure that the objects selected for final display are stable, in optimum visual condition and technically understood. Work being done to achieve these aims includes scientific and technical examination, cleaning, stabilisation, consolidation, repair, restoration and mounting of objects and includes preparation for interpretative devices. The project offers unique opportunities for professional development of conservators undertaking the work. However, the resource implications are considerable and a combination of approaches are being used to manage available resources to meet the requirements. Compromise inevitably plays a large role in any project on this scale and where it is necessary to limit resources to any area, it is important for all concerned to work within the agreed allocation.

In the meantime, the assessment of objects has continued as the list has been refined, ensuring that the overall estimate of work required remains current. Each month figures are published to show the amount of work completed, the amount remaining and the estimated versus actual amounts of time spent. This information is vital to ensure that the project delivers on time.

References:

1. Keene, S., *Audits of Care: A Framework for Collection Condition Surveys*, Storage, papers given at UKIC Conference: Restoration '91, London, October 1991, pp6-15. Published by UKIC ISBN 1 871656 125

'Method in our Madness': Method Statements and the British Galleries

Albert Neher
Head of Furniture Conservation

This is the story of how the V&A approached the thorny problem of moving a vast number of objects with the relative certainty that they would be handled, packed and transported quickly, safely and economically. Method statements are not a new concept, but this was a new application for the V&A and, if successful, could have interesting implications for our traditional approaches.

British Galleries 1500-1900

The V&A has embarked upon an enormous project: the complete revamping of the British Art and Design Galleries into what will be called British Galleries 1500-1900. The fifteen galleries are being completely transformed with funds from the Heritage Lottery Fund. Where once there were stores and other non-gallery areas, now virtually all of the space will be used for display and these displays will be radically different. But nothing meaningful happens without some sacrifice, so we have had to close and completely clear the galleries in order to carry out essential changes to the fabric of the building.

Every single object within those galleries (and the eight stores they contained) has had to be removed – either to another gallery in the Museum or to our principal storage site. 6000 plus objects, from the very smallest objects the Museum displays, to entire built-in period rooms, have had to be “decanted.”

The goal

The decant requirement of the V&A was clear and unambiguous: to decant all the objects to their temporary homes with no damage or loss, in the most economical way possible and to schedule. Further, it had to be done without interfering with our visitors' enjoyment of the rest of the Museum, disrupting the Exhibition's schedule and other long-planned projects and the day-to-day running of the Museum.

The problem

In order to execute to above instructions, the decision was made early on to obtain the services of an outside firm to carry out the decant. This was done to free our own Object Handlers (from the Technical Services Department) to take care of the day-to-day operations within the Museum. The firm chosen was Momart Ltd¹, whom we had worked with in the past.

The initial hurdle was the traditional procedure for moving objects in the Museum, involving the Object Handlers, the relevant collection, conservation and, if necessary, the Museum Packers. An understanding of what is expected and a sort of shorthand has developed over the many thousands of object-moves to allow us to communicate our concerns and solutions quickly and efficiently. How were we going to develop that kind of understanding with Momart?

Also, procedure dictated that whenever an outside firm moved an object outside the Museum, a condition report must accompany it. This is a detailed document which includes a general description of the condition of the object and photographs of the object with all the previous damage pointed out in various ways, plus notes on handling, display conditions, etc. A conservator would have had to create the report; Momart would then have to agree to the findings. Then, at the end of the move, it would have to be checked for any changes in condition. Multiply that by 6000.

Figure 1: Dismantling of a period room in the British Galleries. Photo: Julie Taylor

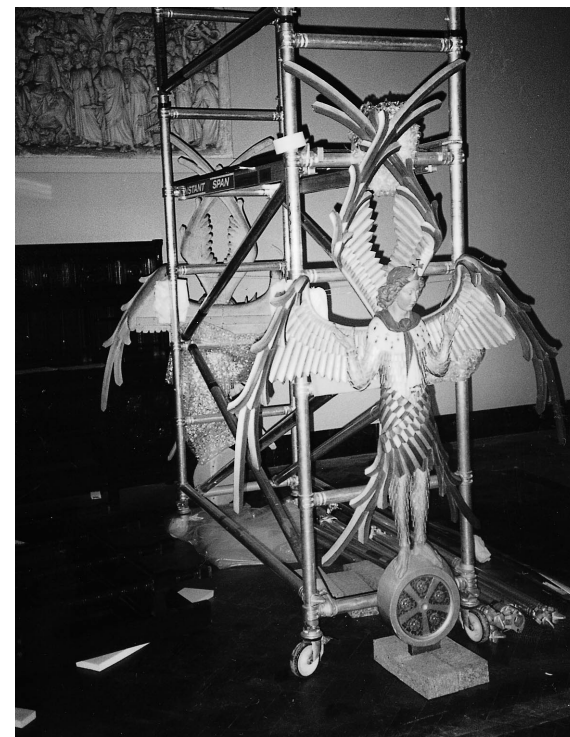


Figure 2: One of the 6,000 objects prepared for removal. Photo: Julie Taylor

The solution

After some to-ing and fro-ing, a sensible solution began to emerge. Group together objects of similar materials, structure and size, and produce a *general* statement describing the method for handling, packing, transporting and storing these objects.

The Conservation Department had already carried out an assessment of the objects' condition to determine their travel-worthiness and estimate how much “first aid” would be required. These assessments would be used along side the method statements as a brief condition report.

Essentially, these Method Statements would anticipate the potential problems and solve them. Because each stakeholder involved with the object would have a different perspective – Momart would have a certain set of concerns, Conservation another, the British Gallery team and Collections yet another – each would be allowed input. There was overlap, but the statements had to satisfy all those concerned.

Once all parties had had their say and consensus reached on conditions then all involved would sign off on the statements. This was vital, because in the absence of the usual condition report, the contents of the method statement was to be the guarantee of the safety of the object. As long as the method statement was followed, any damage that occurred (other than catastrophic) would be the Museum's responsibility.

Momart was given the task of writing up the Method Statements because they would have to perform the task. The statements were based on extensive discussions carried out on “walk-throughs” of the galleries with representatives of the British Galleries Team, Momart and relevant Collections and Conservation sections, looking at the objects and talking through how each would be moved.

This process ultimately produced twenty one different Method Statements. This did not include the Period Rooms, which were given separate statements for each room plus a general statement of aims.

To complete the procedure, an Object Dispatch Receipt (ODR) was produced for each object with an attached photograph. The ODR contained all the essential information, including its assessed condition, the appropriate method statement to follow etc. Also included were any special considerations not covered by the method statement that emerged during or after the discussions.

Results

The decant began in October 1998 and was completed to schedule on 21st May 1999. The method statements worked extremely efficiently. Any questions, doubts or clarifications were dealt with on the spot and, if necessary, noted on the ODR.

There was one object damaged by the move and it is unlikely that the situation that caused it could have been anticipated.

The decant could not have been carried out using the traditional procedures the Museum has built up over the years. It needed an innovative solution and willingness on the part of all involved to adopt the innovation quickly and adapt it when necessary. It also meant a shift in approach to the problem of moving an object. The Method Statement forces one to anticipate the problems and solve them before they arise, as opposed to the somewhat reactive Condition Report. It also gives us the ability to go back and sum up how well the statements matched the actual situation by checking the additional comments on the ODRs. We can then adjust the Method Statements appropriately. This is fortunate, because it will soon be time to bring the objects back. The British Galleries 1500-1900 are due to open in December 2001.

References:

1. Momart Ltd 199-205 Richmond Road, London E8 3NJ

Removal and Installation of Mirrors for the British Galleries Project

John Dowling

Museum Technician, Technical Services

This article describes the advantages of backboards and the use of the "batten method" in the movement of fragile and ornate wall-hung objects.

Introduction

During the course of work undertaken in the Spring of 1999 on the temporary relocations for the British Galleries Project it was necessary to remove and redisplay a number of large, fragile, highly decorated gilt framed mirrors. This combination of adjectives, when referring to Museum objects, presents some serious handling problems¹. When handling anything of this sort the risk of damage to delicate high-relief carving and tracery can be quite high, as there are usually few, if any, handling points which do not involve applying pressure to fragile elements of the frame.

From an absolute conservation perspective, the ideal solution would be to avoid any movement and handling altogether. Needless to say, this is not a very feasible concept in the museum world. Not surprisingly, curators of exhibitions and galleries don't often support the idea of keeping Museum objects permanently locked up in a secure environment, safely away from the hands, breath, bodies and eyes of humanity. As technicians concerned with conservation issues, we like to keep physical contact with objects to a minimum. Yet no matter how much we wish to avoid it, travelling exhibitions², gallery redecoration, etc. invariably necessitate the moving and handling of objects.

The use of backboards

One answer to the problem is to fix the object to a backboard upon which it can remain permanently, whether in storage or on display. An example of this can be seen in the 17th Century Silvered Mirror, W37-1949 presently on display on the North wall of Gallery 62. This effectively eliminates all physical contact with the object itself, and transfers the stresses of lifting and moving directly to the support and away from the fragile elements of the object. This not only improves the ease with which a delicate object may be stored or installed, but also facilitates rapid removal in the event of

emergency. A further benefit of backboards is the provision of rigidity to objects that may have suspect structural integrity. This is especially helpful for objects made up of various component parts, where fixings between those parts may be insecure. The advantage to an object where the major component is glass is obvious. Multi-paned mirrors such as those moved for the British Galleries demonstrate this need very plainly. A rigid backboard will help hold the structure and components together, while also preventing any direct flexing/stress to the glass, which could prove disastrous.

One of the disadvantages of fixing to a backboard is the resultant increase in weight. This will obviously increase the difficulty of manual handling, often necessitating the use of mechanical lifting equipment. It has also been found that solid backboards are only advantageous up to a certain size. When the board becomes bigger than about 1.5m x 2m it begins to flex significantly under its own weight defeating the objective of providing rigidity, and increasing the risk of damage to the object. Adding structural support/framing to the backboard can reduce this distortion. However this will add further weight to the whole equation, increasing difficulty of handling and still being of questionable benefit over a certain size.

Another significant disadvantage is that the backboard becomes a visible part of the object's display environment. This is something, which at times, many gallery designers and curators do not wish to contemplate. However, technicians still have to face up to the problems of handling, moving and hanging these objects safely and without damage; so, a viable alternative must be found.

Removal of the mirror using the "batten method"

A successful solution to the disadvantages of using a backboard was developed during the temporary redisplay project for the British Galleries. Several very ornate gilt-framed 18th Century mirrors were removed from the upper British Galleries to be moved and redisplayed in Gallery 62. The first stage in the operation was to replace the screws fixing the object to the wall with extra long ones. These were done one-at-a-time in rotation, so the

object remained fixed to the wall throughout. Each screw went into the same hole as the one it was replacing, however rather than being driven fully home, the last 20-25 mm was left protruding beyond the thickness of the object/mirror plate.

The object was then gently eased away from the wall onto the ends of the screws. This created a gap between the object and the wall, allowing lengths of 100mm x 25mm battens to be passed up behind and aligned with the mirror-plates or fixings on the object (see Figure.1). These battens needed to extend some distance beyond the top and bottom of the object in order to create "handles" and to facilitate the fixing of cross-bracing at a later stage. Each fixing/plate on the object was then attached to one of the upright battens. Again, this was done in rotation by first removing one of the long screws, inserting the batten behind the plate and fixing in with a 20mm screw. The next fixing was undone from the wall, the same batten then rotated into position behind it, a screw fixed through the plate into the batten, and so-on until all plates/fixings are connected to the 100mm x 25mm battens. Care needs to be taken in situations where there are multiple fixing points so that maximum strength is maintained. It is not uncommon to find some mirror plates which are very loosely connected to the object, or which have been connected to a very fragile area. If it is not possible to align the boards behind all of the fixing points on the object, it is important to select the plates/fixings which will offer the most support to the object while it is being handled.

During this process it becomes necessary for technicians to hold the battens to the wall and begin to support the weight of the object. When all of the fixing points have been transferred from the wall to the battens, the object can be lowered to the ground (using the battens to "handle" the object). Once the object has been lowered, cross-braces are added to the 100mm x 25mm battens for extra structural support. This framework can then be used to handle and transport the object without the need to touch any sensitive or fragile areas around its edges. It is also possible for this whole assembly to be fitted into a carrying frame, which will further improve rigidity/stability during movement over any distance and, if necessary, will vastly improve conditions for safe storage.

It is possible to arrange the battens and cross bracing in such a way that it allows for the use of various items of lifting equipment. This can be essential if the object being removed is of

considerable weight and would be too difficult to control manually. The use of lifting equipment can also be particularly useful in the process of re-hanging the object. It allows for much more careful and accurate positioning than manual handling as there is no concern over the time taken to hold the object in position. It is simply a matter of resting the support frame on top of the lifting device and raising it to the desired height.

Re-hanging the mirror

When the object is to be refitted to the wall, the process for removing it is reversed. First the whole assembly (object and support) is secured to the wall using long screws. The screws are withdrawn one at a time in sequence to allow the removal of the support frame, and then driven home to secure the object in position. Attention must be paid to any cross bracing to ensure it is not fixed from the back, which could render removal impossible. Thus the objects are removed, transported, and re-hung with relatively little physical contact and in such a way that the visual effect of their display is not altered significantly from what may have been originally intended.

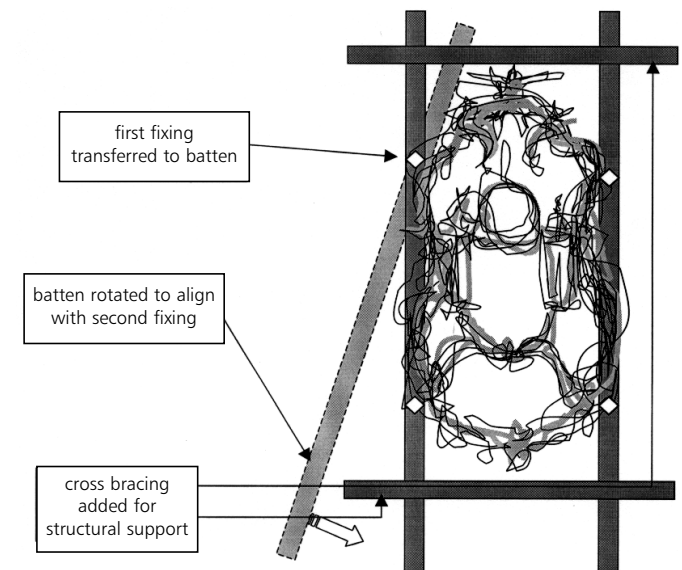


Figure.1: Positioning of battens behind (fictional) mirror Illustration by J.Dowling

References:

1. Movement of each object would be preceded by a detailed condition report before any handling is carried out
2. Fragile frames that are likely to be moved on a fairly regular basis, such as those for touring exhibitions, are best fitted on to a rigid backboard if size and weight will permit, to reduce risks encountered each time the frame is taken down.

The Remounting of a Victorian Tile Panel

Fiona Jordan

Senior Conservator, Ceramics and Glass Conservation

Introduction

Tiles of diverse form, use and decorative theme will be on view in the British Galleries. They range from medieval floor tiles, through hand-painted and transfer-printed tin-glazed earthenware tiles from the seventeenth and eighteenth centuries, to the eclectic designs of the Victorian Age, a time when widespread use was made of tiles in private and public buildings. The display will include encaustic floor tiles designed by A.W.N. Pugin for the Palace of Westminster and the highly decorative glazed wall tiles of William Morris and William De Morgan.

Most of the panels will be displayed vertically. This article describes the method used for mounting one of the largest panels. Tiles are frequently mounted together as a group. Previous methods of mounting have included the attachment of tiles directly onto wooden boards or the use of bolts and wires in holes drilled through the backs of the tiles. Others have plaster or synthetic resins forming the backing material. These can present reversibility problems or become unsafe with the breakdown of unstable materials.

The Membland Hall Panel

The 'Membland Hall Panel' (Museum No. C.36-1972) comprises sixty-six slip-covered and hand-painted glazed tiles and measures 1600 x 915 mm. It was designed by William Morris and produced by William De Morgan in 1876 on earthenware blanks from the Architectural Pottery, Poole (Fig. 1). It is one of only six surviving panels commissioned to decorate a room at Membland Hall, Devon, which was demolished in 1928. The William Morris Gallery, Walthamstow, has a note alongside the original design for the panels indicating that they were intended for a bathroom. It is the only floral pattern by Morris for a tile panel on this scale and is executed in dark greens, browns, purple and white on a dark ground¹.

The panel has been displayed in the V&A since the 1970s and was included in the 1996 exhibition at the V&A, *William Morris, 1834-1896*. It was subsequently proposed for loan to the

William Morris Exhibition at three venues in Japan in 1997 and for display in the British Galleries in 2001.



Figure 1 Panel of tiles designed by William Morris, William De Morgan, 1876. Museum No. C.36-1972, 1600 x 915mm

Condition of the panel

The condition of the Membland Hall panel is representative of a number in the V&A Ceramics Collection where the tiles are in relatively good condition compared to the mounting systems which have deteriorated or failed. The tiles had been mounted in the 1970's as four separate panels held together in a wooden frame. They were backed with polyurethane foam reinforced with expanded aluminium mesh and containing wooden blocks for screw attachments. All these components formed a single heavy object.

By 1996 movement of the panels had caused areas of grouting to become dislodged, allowing the tiles to touch each other and increasing their vulnerability to impact damage. For the duration of the *William Morris* exhibition at the V&A it was decided to position Plastazote® strips between the frame's backboard and the tile backing material to minimise the movement of the four panels during handling. Before this exhibition went on to tour Japan, the panel underwent further condition assessments which concluded that it was not suitable to travel with its present mounting system.

Polyurethane foam is a rigid material formed by mixing two liquid components and the rate of foaming can be difficult to control. In places it had not foamed sufficiently and was hard and brittle. Also, in some areas the foam layer was so thin that the aluminium mesh almost rested on the backs of the tiles, making it difficult to remove.

There were also a number of old repairs and minor damages which required treatment. Large areas of the original tile surface had been over-painted in an attempt to disguise abraded or pitted areas. A small number of tiles have large areas of loss but most of the structural damage is minor in the form of chipped edges. All areas of loss had been filled and skilfully retouched in the past but the restored areas had become dull and discoloured.

Conservation treatment proposal

A treatment proposal and time estimate was agreed prior to the loan being approved. It was proposed to remove the tiles from the aged backing materials, to clean and upgrade the existing repairs before remounting them as one panel.

The criteria for a suitable tile backing material include the need for it to be a rigid and strong, though lightweight, means of support. It should be easy to apply, have good ageing properties, should not be hazardous to the health of the user and be reversible with no risk to the tiles. Aerolam 'F-Board'®² (26.5 mm thick) was selected. It comprises a core of Aeroweb® aluminium honeycomb with a woven glass fibre reinforced plastic skin and two layers of glass cloth giving an average weight of 4.21kg/m. The benefits of the honeycomb sandwich structure include a very low weight and rigidity in several directions³. The method described below for mounting a large number of tiles as one panel was designed to minimise the risk of damage during travelling and for hanging on open display.



Figure 2 Removing the polyurethane foam backing, photography by Fiona Jordan

Conservation treatment

Hand tools were used to cut through the brittle foam and remove the aluminium mesh (Fig 2). This was a slow process involving the removal of the top layer of foam to prize the mesh away from the tiles section by section. When a number of the tile backs became exposed, the surrounding grouting could be cut through and the tiles separated. The tile backs were cleaned, the disfiguring repairs to the glazed surface prepared for retouching and the tiles numbered in sequence.

The Aerolam 'F-Board'® was cut to size and the tile positions marked out. To allow the tiles to be easily reversible, a number of holes were drilled

through the board where the adhesive would be positioned at the corners of each tile. The holes would allow solvent fumes to be used to reverse the procedure in the future by penetrating to the adhesive on the tile backs. The backs of the tiles were sealed at each corner with Paraloid B72™ in acetone (10-20% (w/v)). The board was lightly abraded prior to bonding. Araldite® 2015, a two part epoxy resin in paste form, was applied to each tile corner. A working time of forty minutes at 25°C allowed all sixty-six tiles to be correctly aligned and levelled before curing. (fig 3). All Purpose Polyfilla™ tinted with dry artist's pigments was used to grout between the tiles.

A wooden frame was constructed, Plastazote® foam placed in the rebates and dove-tailed battens attached to the back of the frame. The complete object weighs 69 kilograms, considerably less than in its previous form, allowing for easier handling and display.

Since the panel was remounted, it has successfully travelled to three exhibition venues in Japan and is currently in the 'Best of British' display at the V&A prior to being hung on open display in the new British Galleries.

Honeycomb sandwich panels, of various thicknesses, have proved to be a versatile backing material for ceramics and in other conservation disciplines.

Health and safety

Local extract ventilation and protective clothing were used when dismantling the tiles, cutting and drilling the Aerolam® board and using the epoxy resin.

Materials

Plastazote® (closed cell polyethylene foam) Zotefoams Ltd, 675 Mitcham Road, Croydon, Surrey CR9 3AL

Aerolam® F-Board (Hexlite® 620), Hexcel Composites, Duxford, Cambridge, CB2 4QD.

Paraloid B72 (ethyl methacrylate methyl acrylate copolymer) Rohm and Haas (UK) Ltd, Lennig House, 2 Masons Avenue, Croydon, Surrey, CR9 3NB.

Araldite® 2015 (epoxy resin) Ciba Specialty Chemicals, Duxford, Cambridge, CB2 4QA.

All Purpose Polyfilla (calcium sulphate hemihydrate with cellulose ethers) Polycell Products Ltd, 30 Broadwater Road, Welwyn Garden City, Herts. AL7 3AZ

References

1. Myers, R & H. (1996) William Morris Tiles, Richard Dennis, pp 123-124
Opie, Jennifer H. (1996) Tiles and Tableware, pp180-197. William Morris, edited by Linda Parry, Philip Wilson Publishers, London.
2. Aerolam® F-Board is now known as Hexlite® 620.
3. Ciba Composites. Aerolam Boards Publication No LGC 35C, March 1986.

A Brief History of Mounts

Clair Battison

Conservation Mounting

A standard mount for a two-dimensional object consists of two pieces of Museum Board¹. One has an aperture (window) cut out of it and the other is the backboard. The two are hinged together along the long edge to produce an overthrow mount, opening either right to left if portrait, or bottom to top if landscape.

The current refurbishment of the British Galleries will take both historical and contemporary mounting techniques into consideration when deciding housing styles. The correct type of display is important for enhancing an object, ensuring its safety and for engaging the viewer.

The Museum Board mount, is one of the most popular systems used within museums and galleries to house two-dimensional objects. Mounts enhance the object but primarily provide a safe carrier. If the correct mount is employed it will provide full protective housing and allows the object to be handled, framed, displayed, stored and travel safely².

Historic mounts can be regarded as part of the object they accompany. The mount not only enhanced the drawing but was seen as an extension of the creative process of the artist or the collector. During the sixteenth century, collectors stored their collections between the pages of books. This not only protected the work but also provided plain borders around the artwork which collectors began decorating with washlines, watercolour wash panels, gilding and drawings (such as scrolls and nameplates) to enhance the object. Washlines were deliberately repeated in tones complementary to the drawings in an attempt to soften the hard edges of the mount and to make the drawing and the mount a unified flat decoration. This presentation technique was adopted and adapted by other collectors, leading eventually to what is known as the 'back mount'. The back mount was made either by the collector or a craftsman and the object was attached to a piece of paper/board cut larger than the object. The borders were then decorated. The back mount was seen as a support that would strengthen the drawing and was a uniform size to compliment the rest of the collection. Collectors would show their objects to visitors and the back mount provided the necessary protection from viewers' hands whilst the decoration indicated the collector's enthusiasm and flamboyancy.

The standard mount (bevelled aperture and backboard) was introduced around the 1800's. The introduction of mechanised printing techniques and increased distribution saw a boom in the print trade. Prints initially had an ephemeral quality, pinned to walls and replaced when old and worn or when bored of subject matter. When prints began to be framed, dealers would design elaborate borders to exaggerate the importance of the object. Standard sizes were adopted by printmakers and framers. It was not until the end of the 18th century, with the advent of heavier printing techniques, which commanded heavier gilt frames and even more elaborate mounts, that prints began to rival oil paintings and became more acceptable as works of art in their own right.

The Victorians introduced the idea of a wider border of mount along the bottom edge. This was because pictures were usually hung high on walls and it was argued that if the object was mounted centrally, the lower border would appear narrower than the rest of the mount. Fashion has traditionally played a big part in decoration. Gilt mounts were very popular in the late 19th Century. They could be produced with little effort yet made the person buying the object feel that they were getting a more ornate, fancier product. Likewise, in the mid-20th Century, there was a fashion for fabric covered mounts and coloured board mounts. Unfortunately, some of these fashionable methods chosen by collectors resulted in the deterioration of many works of art usually due to poor housing materials. Poor quality mount boards can lead to acid burn and some types of adhesives used to attach objects to mounts often produce staining.

Most objects mounted in the V&A are housed in standard size cream or off white mounts. Decorations, annotations, coloured mounts etc are only added if it is part of the bequest or at a curator's request. Historical mounts are kept with their object when ever possible. This may mean lining the old mount if it is very acidic to create a barrier from the mount to the object. Conservation Mounting and the Department of Prints, Drawings and Paintings in the V&A have a collection of historical mounts for reference.

References:

1. 100% cotton, acid free board
2. Some objects are safer in another means of storage after exhibition and may need to be removed from their mounts to be rehoused in alternative methods of protection such as folders, encapsulation and melinex sleeves. This is usually due to lack of space.

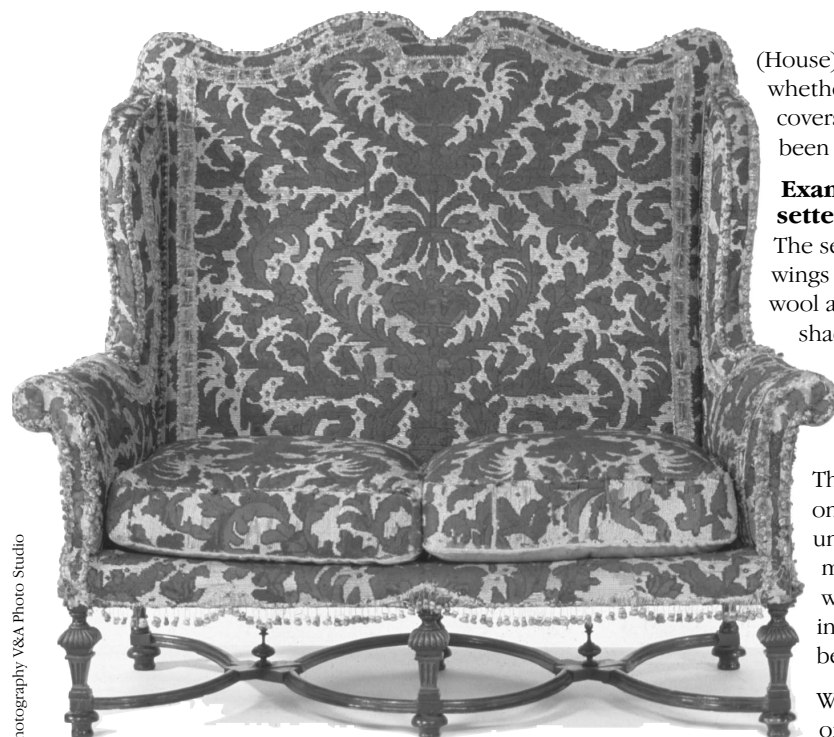


Figure 3 Mounting the tiles on a prepared Aerolam® board, photography Fiona Jordan

Don't Sit Down! The Investigation and Conservation of an Upholstered Seventeenth Century Settee

Derek Balfour

Senior Conservator (Upholstery), Textile Conservation



Photography V&A Photo Studio

Figure 1: Hampton Court House settee (W15-1945) before conservation.

Introduction

The settee, (Museum No. W15 1945), shown in Figure 1, will form part of a display which will emphasise upholstery, in the Tudor and Stuart section of the new British Galleries. It is an interesting example of late seventeenth century seat furniture because of its overall design and its covers. It retains its original under-upholstery, canvas-work embroidery top covers, silk and linen trimmings and stamped yellow wool outside covers.

The settee was part of the contents of Hampton Court House, a mansion outside Leominster, Herefordshire auctioned on March 16th 1925. The settee did not come into the V&A until 1945. There is a note on Museum Registered Papers stating: "December 1971. There are still about six tall back chairs of this design at Hampton Court

(House)." Unfortunately it is not known whether they retained their canvas work covers at that time and have subsequently been dispersed.

Examination and condition of the settee

The settee has a high back, scroll arms, wings and two cushions. Its inside covers are wool and silk canvas work embroidery in shades of dark red, brown and cream with the foliate design outlined in black.

The outside back, wings and arms are covered in yellow wool with a meandering design stamped into it.

This wool fabric, harrateen, is also used on the bottom of the cushions and their unseen borders and other areas that are mostly not visible. The settee is trimmed with a wide cream and blue braid woven in linen and silk and a similarly-coloured bell fringe.

When the settee was first inspected in one of the furniture stores as part of the British Galleries conservation survey, there was doubt about the authenticity of the upholstery for various reasons. The trimming was blue and cream but there was no blue in the canvas-work and there were sections that lacked trimming for no obvious, logical reason. The position on the arms, where the inside and outside covers joined together, looked rather strange. The motif on the cushions appeared to be upside down. Why were the outside covers yellow when there was no yellow in the canvas-work? To resolve these questions the settee came into the Textile Conservation Studio for investigation. The whole object was inspected and parts of the cover lifted to reveal some of the under-upholstery. By looking at tacks and tack holes and their positions in relation to the various layers of materials, and also at stitching threads and repairs, it was possible to deduce that although there had been some repairs and

minor alterations, the upholstery was all original, making this an important object to include in the British Galleries.

During the investigation, areas of fabric that had been long hidden were revealed, showing some of the original striking, almost garish, colours. The inside covers were originally worked in bright red and dark red wool with the design outlined in black. The 'cream' silk had in fact been a bright yellow, which explains why the stamped yellow wool fabric was used on the outsides. This too was originally bright yellow and quite large areas remain which have not been exposed to light and pollution. Although the blue of the trimming is now mostly pale and drab, parts of it were once bright with some dark areas to contrast with the pale cream sections. The covers of the arms and wings are made up of several sections of the canvas work embroidery, not all running in the right direction. This could indicate that the covers were not worked especially for this piece but were cut and fitted by the upholsterer from fabric supplied by the client.

Blue linen thread has been used (double) throughout for the making up of cushions and stitching of the trimming. Hand-made iron upholstery tacks have been used to attach the covers and fringe to the frame. Although the tacks are dark, they remain fairly visible. This seems rather crude for a piece of upholstered furniture that must have been dazzling when new.

Although once glowing with colour, the settee's present condition gives little idea of its original appearance. As well as the fading of some colours, the wool and silk fibres have also absorbed dirt, possibly from coal fires, making them dark and drab. Some parts of the linen and silk in the wide blue and cream border have degraded, leaving the trimming looking threadbare. In other areas, such as the tops of the arms, the loss is much greater, leaving only the edge of the trimming to show that there was once trimming there. The silk bell fringe is very degraded, especially around the bottom of the settee. Worn areas on the canvas-work embroidery have been re-embroidered: evidently this was done at different times and long after manufacture because the colours that were used match the faded colours rather than the original ones. The stamped yellow wool on the outsides is very dirty – black in places – and there are small holes due to insect damage.

Treatment

A treatment proposal was drawn up with the aim of improving, or at least stabilising, the condition of the settee and improving its overall appearance. The intention was to do this without removing too many of the original fixings (upholstery tacks and stitching threads). The treatment was discussed with Curators from the Furniture and Woodwork Department. We agreed the first steps and planned for further meetings as the work progressed.

Removing the canvas-work embroidery for cleaning was not an option because all the original tacking would have been lost. The dirt on the wool and silk embroidery was, in any case, not as obvious as it was on the yellow wool. While the fibres could have been made less acidic and brittle by cleaning, the appearance may not have been greatly improved. However, we considered that wet cleaning the yellow wool would remove much of the dirt improving both its condition and its appearance. The original tacking to the outside back cover had been lost when it had been removed to facilitate repairs to the frame some time in the past. A support fabric had also been inserted because of large losses in the wool due to insect damage. Wet-cleaning the yellow wool would improve its condition but a number of questions were raised. Would it be so clean that it would make the canvas work embroidery look dark and dreary? How much would it shrink and was it strong enough to be tensioned out to its original dimensions? Would the stamped design be lost due to the swelling and relaxing of the fibres? It was agreed that the outside back cover should be washed first and the results evaluated.

Deborah Trupin, a colleague from the New York Bureau of Historic Sites, in Textiles Conservation on an exchange programme¹, helped with this part of the project, (see Figure 2). Test-cleaning a small sample of the wool confirmed that the dye was fast and that the stamped decoration would not be harmed by the proposed cleaning process. The outside back cover was carefully removed from the frame and its surface cleaned by low-suction vacuuming. Old sections of support fabric that had been stuck to the wool as part of a much earlier conservation treatment were removed as was all the remaining adhesive, probably wheat starch paste as it swelled and softened in water. A template was made of the cover, including the areas of loss, by drawing around it on Melinex® (polyester sheet). The fabric was then wet cleaned in de-ionised water



Figure 2: D. Balfour and D. Trupin wet cleaning outside back cover.

with Synperonic N²® non-ionic detergent at room temperature. We used standard processes of soaking, rinsing, soaking and sponging to force the washing solution through the material. Several rinses in clean water followed until the water was clear and detergent-free.

Absorbent paper was used to remove excess water before pinning the fabric out face down over the template, on polyethylene-lined soft board. Melinex® had been laid on top of the template to isolate the marker ink from the fabric. It was then left overnight to dry completely. The wet cleaning was judged a success because the wool is soft and pliable again, the colour is much improved and the stamped design more visible.

Curators and conservators compared the newly-clean wool cover from the outside back with the covers remaining on the settee. The yellow wool on the outside covers of the arms and wings have faded much more than the outside back cover and it was agreed that these outside covers should be wet cleaned too. They are decorated with the blue and cream trimming and, if possible, the cleaning should proceed without removing the trimming.

In the meantime the canvas-work embroidery and accessible parts of the under-upholstery have

been surface cleaned and non-visible parts of the insect damaged wool supported and protected by nylon net. The process of cleaning and correcting the orientation of the cushion panels is underway.

Conclusion

Whilst it would be preferential to complete a project such as this without interruption, discussions and planning for the rest of the British Galleries has to continue too. This means that the work is carried out over a longer period, but at least we have the advantage of allowing time to pause and consider – or reconsider – the object’s treatment.

References:

1. The exchange involved Deborah and the author working together for six weeks in each of their institutions, September-December 1998. Their thanks to the Getty Grant Program for financial support and to their respective institutions.
2. *Synperonic N* (nonyl phenol ethoxylate) will be phased out for industrial use from 2000. The Textile Conservation Section is in contact with other institutions to review and research alternative detergents. See also Daniels, V, *Synperonic N and NDB*, Paper Conservation News, March 1999

Off-site Radio Telemetry

Paula Mills

Conservation Scientist, Science and Information Section

This article looks at monitoring the climate of the Blythe House store in which many objects destined for the British Galleries are housed. Blythe House is a Museum store about two miles from the main South Kensington site. It will discuss the specification, reliability and security of equipment, and suggest improvements in access to climate data.

Monitoring temperature, relative humidity, light and ultra-violet radiation levels is not unusual – in fact it is part of “curating a collection”. Although the task is typical, the personnel involved are often of mixed background and training. Responsibility for collection and interpretation of climatic data can fall into the lap of the curator, conservator, scientist, manager or buildings engineer.

More typically, it may lie somewhere in-between. The V&A team combines all of the above; this is largely for historical reasons but it does have the advantage of promoting links between departments.

The Museum uses a wide range of monitoring equipment. Table 1 compares some of the characteristics of systems using typical data loggers and radio telemetry. In terms of staff time and costs it would be more efficient to use a radio telemetry system for the off-site store.

Radio-telemetric monitoring equipment for museums was developed at the V&A². The general principle is that the sensors do not hold the data themselves but transmit the data as a radio signal to a repeater. This then sends the signal back to the base station receiver. The range over which signals can be received depends on the building fabric and internal fittings – the more metal between sensor transmitter and receiving aerial, the shorter the range. The base station stores the data and allows remote interrogation.

The store

The British Galleries objects are housed on two floors of a Victorian Post Office building. This is situated approximately twenty minutes from the main V&A site by vehicle. The approximate floor area of the store is 1350 m². The refitting of the stores with metal rolling racks was completed by October 1998.

The system

Monitoring of the store was to commence prior to, and continue during, the store refit and then perform well for the duration of the stores’ life. Access to the data was possible on site but remote access to data anytime required a dedicated telephone line.

	Data Loggers	Radio Telemetry
Sensor size	107 x 74 x 22 mm	100 x 80 x 36 mm
Appearance	Small plain box	Plain box with digital display
Recording interval	Various	Various
Data capacity	32K bytes	Unlimited
Battery life	10 years	22 months
Data interrogation	Needs downloading, frequency depends on interval	Live
Support	Software, cables	Software, cables, repeaters, aerials
Staff time needed for annual data from 1 sensor	30 minutes + retrieval trips + spreadsheet work	5 minutes
Staff time needed for annual data from 10 sensors	10 times above	Same as above

Table 1. Comparison of data loggers to radio telemetry.

The system (see Table 2) was commissioned in March 1998 after a site survey. Installation began in late May and was completed in September. The sensors were strapped to the top of the structural columns to ensure that a constant and fixed location was maintained throughout the refit. Some of the sensors were later moved inside the metal rolling racks that are part of a built in storage system.

Despite the fact that radio telemetry is more efficient than previous methods, there have been a number of “teething” problems. In the year that has passed since the system was commissioned there has been a number of challenges, summarised below:

- system delivered in parts rather than all at once
- computer unable to interface to off-site station
- base station being switched off
- power failures during building works
- change in internal fixtures caused radio reception changes
- re-routing of dedicated telephone line
- dismantling of sensors
- loss of sensors
- upgrade of aerials

However, since April 1999 the system has worked well and we are looking for ways to improve access to the data. Currently, there is a dedicated stand-alone computer at South Kensington, which interfaces with the off-site base station. This means the data is duplicated (a rather convenient way of providing data backup). Reports can be produced directly from this machine but to enable access, the report must be transferred on to the Museum’s network.

Careful planning of computer resources could mean that anyone in the Museum could have access to live climate data at the push of a button. At the moment a modem links to the off-site station, but it should be possible for the base station to interface to the internet. The resulting website could then be accessed by all Museum personnel who have the appropriate security clearance. A website of climate data could mean that immediate responses to “incidents” would become possible without reliance on any single individual for reporting the climate. Although not a perfect solution to the long-running questions “who is responsible for Museum climates and for equipment maintenance?”, radio telemetry has provided a great leap in the right direction.

Equipment	Number
Base station	1
Computer + modem	1
Repeater + aerial	3
T/RH sensor	12
Lux/uv sensor	2

Table 2. A Breakdown of the Radio Telemetry System

References:

1. S. Staniforth, Chapter 26 in *Manual of Curatorship – A guide to museum practice*, edited by J.M.A.Thompson, p192-203, Butterworths, 1984.
2. G. Martin & D. Ford, Data from the Ether, *V&A Conservation Journal* Issue 4, July 1992, p7-8.

Samples: What is their worth ?

A sample can be taken from an object which is representative of a section of that object or a part of the whole object. The worth of such samples, beyond their short term usage, can be called into question. Assuming that the examination process does not destroy the sample, what ‘status’ does it hold in relation to the original object, or other Museum property? Is it a museum object in its own right; still considered ‘part’ of the object; or merely property? Who has rights of ownership, access and use?

Arguably, for the museum scientist, and perhaps, curator, a sample may have a greater value than the whole. It can provide more readily accessible information (otherwise why take it?). It does not necessarily follow that the sample loses its value even if the object itself ceases to exist. In other words, the sample has a cultural value of its own.

In the Museum context, the answers to the above may radically change how the sample is handled, used, stored, or destroyed. Of course, the final decision may be a political, rather than a scientific or ethical one.

involved in a number of projects and areas of research within the section.

The main topic was vibration and shock monitoring, looking predominantly at the potential effects of transporting objects in museum hand carry cases. In order to study these effects, ShockLog™¹ vibration recorders were used. These showed the acceleration that would be experienced by an object when carried on a variety of different modes of transport or when being dropped. Further work in this area is planned, including vibration monitoring during construction work at the British Museum.

Another project was dust-monitoring of the Raphael Cartoons, as requested for the British Galleries Project. On a weekly basis glass slide deposit gauges were placed on the interior and exterior of selected display cases. The slides were then passed to Queen Mary & Westfield College for analysis. Further tasks included working with IRUG (Infra-Red Users Group) and assisting other members of the section with materials testing procedures.

References:

1. ShockLog™ manufactured by Lamerholm Flemming Ltd., Caxton Way, Stevenage, Hertfordshire, UK, SG1 2DE.

Conservation Science”. Discussion about what conservation science consists of and who is entitled to call themselves a conservation scientist was lively, but mercifully short. As Jonathan Ashley-Smith pointed out, members of the Group know who they are and what they do so we need not get too bogged down by rigid definitions. It was acknowledged that a wide range of knowledge and skills are needed and that it is not always helpful to concentrate on chemistry as a starting point.

Joyce Townsend from the Tate Gallery outlined the current state of play and her vision of what was needed. There was general concern about providing training for non-existent jobs, justified by the experience of a graduate of the De Montfort MSc in Conservation Science who was full of enthusiasm but had yet to secure a conservation science job. Another graduate of that course, however, had successfully taken her skills back to Mexico. On-the-job training was seen as a practical alternative to academic courses. Audrey Matthews of De Montfort University described their new distance learning courses which could fulfil this need and can lead to different levels of postgraduate qualification.

Helen Jones spoke about the activities of RCA/V&A Conservation, in particular the MSc in Chemistry with Conservation Science run in collaboration with Imperial College Chemistry Department. After only one year it is too early to judge the success of this course, but it has potential to inform and enthuse chemists about conservation, some of whom may go on to careers in this small, specialist field.

A Placement in Science and Information Conservation Scientists’ Group Meeting

Andrew Wingham

I am currently studying Chemistry with a Conservation Science option at Imperial College, London. My placement with the V&A Science and Information Section began in June 1999. Since that time I have been

The latest meeting of this informal group was held at De Montfort University, Leicester, on 15 September 1999. It was hosted by the Chemistry Department which offers Conservation Science courses so the theme was, appropriately, “Training in

New Students for the Academic Year 1999/00

Helen Jones

Tutor, RCA/V&A Conservation

Although this section is to introduce the new students, I'd like to start by reporting on the graduates of 1998/99. We are proud of our graduate employment record, with ex-students currently in the British Museum, the Metropolitan Museum of Art, National Museums & Galleries on Merseyside, the Tate Gallery and the V&A as well as in other institutions and private practices around the world. This success is graphically illustrated this year with 100% of graduates finding relevant, rewarding work. True, there are only seven of them, but we have always emphasised quality over quantity!

MA Graduates

Laura Davies, Conservation of Social History Objects (with the Museum of London), has secured a permanent position in the Conservation Department of the Science Museum.

Elizabeth-Anne Haldane,

Textiles Conservation, will go to Glasgow to take up the Scottish Conservation Bureau/Historic Scotland internship in textiles conservation based at the Burrell Collection.

Victoria Hobbs, Conservation of Ethnographic Materials (with the Horniman Museum) has taken up a conservator post with Stroud District Council, preparing for the opening of a new museum.

Cecilia Rönnerstam, Conservation of Portrait Miniatures, after a short spell working for the National Portrait Gallery in London, will return to Sweden as a conservator of paintings and miniatures based at the National Museum in Stockholm.

Metaxia Ventikou, Sculpture Conservation, has a contract with the Natural History Museum, London. She then hopes to combine research into laser cleaning of stone and fossils with a return to her native Greece, though this has yet to be confirmed.

MPhil Graduates

Lyndsey Morgan, "Characterisation of Artificial Patinas on Bronze Sculpture", is working at the Tate Gallery – where she was employed before embarking on her research – as a sculpture conservator in preparation for the opening of the new Tate Gallery of Modern Art at Bankside.

Silvia Valussi, "Characterisation of Modern Elastane Fibres", has moved to the Forensic Science Service – a change in direction but still a success in a highly competitive and demanding field. Silvia will undertake a PhD researching a new methodology for using fingerprint evidence.

We wish them all well! Should anyone wish to join them and appear in this space next year, watch out for the announcement of the Options for 2000/01 on the RCA/V&A Conservation website: <www.conservation@rca.ac.uk>, and in the conservation press.



Kathryn Hallett

Aged 22, British

Conservation Science (with the British Museum)

(3 year MA)

As part of her BSc in Archaeological Conservation, Kathryn gained a wide range of experience. She undertook placements at Salisbury Cathedral (architectural and sculptural stone conservation), Wiltshire County Council Conservation Centre (materials testing, museum liaison and preventive conservation), and the Mary Rose Trust in Portsmouth.

Kathryn's final year at the Institute of Archaeology, London, was divided between practical conservation and her research project which considered the effects of freezing on waterlogged archaeological leather. This project grew out of the work placement at the Mary Rose, which involved Kathryn in a research environment, in addition to developing her technical and manual skills. Several of Kathryn's final year projects lent themselves to analytical investigation. Amongst these, a Pleistocene mammoth tusk demanded the most diverse techniques to determine its condition, extent of fossilisation and most suitable treatment.

Recognising the necessity for specialised training in conservation science, Kathryn was attracted by the opportunity to strengthen her scientific understanding and apply her knowledge on the RCA/V&A MA Course. Kathryn is also looking forward to combining this with her continuing interest in archaeological materials at the British Museum.

Kathryn will be supervised by Susan Bradley, Head of the Conservation Research Group at the British Museum



Hannele Hentula

Aged 27, Finnish

Conservation of Ethnographic Materials (with emphasis on musical instruments) (with the Horniman Museum)

(2 year MA)

BA(Hons) Conservation and Restoration, De Montfort University, Lincoln 1998

Hannele first became interested in conservation while studying chemistry at the University of Turku, Finland. This interest led her to undertake conservation studies at De Montfort University, where she completed a BA in Conservation and Restoration.

As Hannele has a strong interest in many cultures, in her final year at De Montfort University she specialised in ethnographic conservation and undertook a placement at Canterbury Museum, Christchurch, New Zealand. Her main project there was the conservation of a chalk figure from New Ireland/New Britain. Being a keen musician, Hannele has also conducted research into conservation of musical instruments.

The subject of Hannele's thesis was conservation of rock art, with a reference to the current use of rock art sites by local indigenous communities. During the summer of 1999 Hannele was employed as a research assistant at the Institute of Archeology, University College London, where she was involved in a Rock Art Pilot Project. The Pilot Project was commissioned by English Heritage and aimed at establishing the current state of rock art studies in the United Kingdom.

Hannele will be supervised by Louise Bacon, Head of Conservation and Collection Care at the Horniman Museum. There are several exciting display programmes underway here, and Hannele will be particularly concerned with the re-display of the Music Room.



Nicky Ingram

Aged 37, British

Research in Risk Analysis: The impact of special events on the contents of historic buildings (with English Heritage)

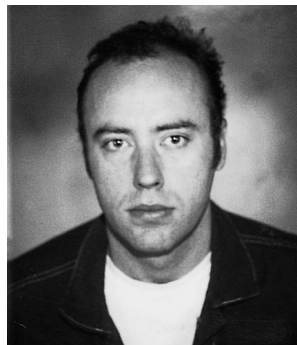
(MPhil by Thesis, 4 years part-time)

BA (Hons) History, New Hall, Cambridge, 1984

Nicky has been working as a Collections Manager at Petworth House for the last seven years and is responsible for the conservation, interpretation and display of The National Trust's finest collection of paintings and sculpture as well as the day-to-day management of one of the Trust's most important country houses. Before this she worked for the Museum Documentation Association and in local authority museums and has always had a special interest in the built heritage and its conservation.

Looking to give herself a new challenge, Nicky was attracted to research in risk analysis for the opportunities it presents to contribute to a relatively new area of study that is highly relevant to her present role. She is looking forward to applying theoretical study to practical situations and intends that the research will produce useful guidelines for making informed decisions about holding events in historic buildings.

Dr. Jonathan Ashley-Smith, Head of Conservation at the V&A and Amber Rowe, Head of Collections Conservation at English Heritage, will be joint supervisors.



Christos Maris
Aged 30, Greek

History, Ethics & Management Research: Risk analysis for historical sites and collections

(2 year MPhil by Thesis)

BA in Conservation of Antiquities and Works of Art, Technological Institution of Athens 1995

Since completing his degree course and his military service, Christos has worked on several conservation projects in Greece. These included both monuments and portable artefacts. During this time he came to realise that there is a gap in the Greek conservation sector for specialist managers. Every year many objects are excavated adding to those already in museums, galleries and monasteries, but there are no standard procedures for documentation, storage, setting of conservation priorities, research and display.

Through his research, Christos aims to increase his own knowledge of current conservation management practice and to develop tools to aid strategic planning in museums and galleries in Greece. There are many directions his research could take, but he is particularly interested in the application of computers to documentation systems and the management of information. Christos believes that having a real case study will focus his research on real problems and he plans to use the Lavra Monastery. This was founded in 980 AD and has a large and diverse collection which could be made accessible to the public by the establishment of a museum.

Christos will be supervised by the V&A Head of Conservation, Dr. Jonathan Ashley-Smith.



Maggie Roberts
Aged 42, British

Research into techniques for wood identification: British marquetry furniture

(MPhil by Thesis, 4 years part time)

BSc Hons Archaeological Conservation, 1979

Diploma Antique Furniture Restoration, West Dean, 1996

As an archaeological and museum object conservator for ten years, Maggie has been employed by Portsmouth City Museum, the Mary Rose Trust, and subsequently, as Conservation Officer, at the Wiltshire Conservation Centre, Salisbury.

A four-year spell in systems development followed, firstly in Oracle databases then as Project Leader for a major retail company.

Planning to specialise in Furniture Conservation, Maggie completed City and Guilds 555 certificate in Cabinet Making, then studied Furniture Restoration at West Dean College. She gained experience in commercial workshops before joining the National Museum of Wales as Furniture Conservator, and has recently produced a research paper on Welsh furniture. Currently a lecturer in Furniture Restoration at Rycotewood College in Oxfordshire, she is reducing this commitment to part time to accommodate this research project.

Maggie will be researching late C17 and C18 British furniture with particular attention paid to identification of the woods used in marquetry pieces.

Albert Neher, Head of Furniture Conservation at the V&A, will supervise the project.

Lars Björk
Aged 37, Swedish

History, Ethics & Management Research: Decision-Making in Conservation

(MPhil by Thesis, 4-6 years part time)

BA Conservation, Camberwell College of Art 1993

MA Conservation, Camberwell College of Art 1994

Lars joined the National Library of Sweden as a conservator in 1995 and became Head of Preservation in 1997. He will maintain this position while studying part-time with RCA/V&A Conservation. His interest in decision-making in conservation is clearly linked to his experience of working in the museum and library worlds.

Part of Lars' research will focus on the development of the conservation discipline with an historic perspective; what impact technical advances and ethical considerations have when making decisions regarding objects or collections. Another part will consider whether there might be a difference in approach to these issues, comparing institutions such as museums, libraries and archives. The current demand for access, especially in connection with IT/digital application, could also be an important factor when decisions are taken.

The project has several aims:

- to define and analyse key concepts
- to analyse how these concepts interact
- to study what factors might affect the interpretation and understanding of these concepts
- to describe and analyse the process of decision-making in this concept

Lars' supervisor will be Helen Shenton, Director of Preservation at the British Library.

New Staff



Drew Anderson
Senior Stained Glass Conservator, Conservation Department

This is my second spell at the Museum. I studied stained glass conservation on the RCA/V&A Conservation Course and graduated with an MA in 1993. I was offered a contract at the Museum shortly after completing my studies, so it was not until early 1994 that I moved on.

Funded partly by the Samuel H.Kress Foundation, I went to the Metropolitan Museum in New York for what was to have been a six month period. However, I was employed by the Met. to work on vessel glass for the Greek and Roman Gallery project and continued there for another year.

I was offered the opportunity to return to the UK to manage the stained glass conservation section at Goddard and Gibbs in London – a privately owned company. As with many small companies, individuals tend to fulfil a number of roles so eventually I became responsible for the production of new windows at G&G and combined conservation with the day to day running of the studio. The conservation of the West Window at Salisbury Cathedral was one of the last projects I supervised before my return to the V&A.

I am glad to say even though the surroundings have changed a little, there are plenty of familiar faces at the Museum. So many in fact that at times it's almost like I never left.



Kia Lamb
Administrative Assistant, Conservation Department

Determined to establish a career in anything creative, I graduated from Griffith University (Queensland, Australia) with a B.A. in Community Arts. I soon developed a bad case of 'post-uni-career-confusion' whilst working in Brisbane and decided to relocate with the notion of establishing a serious career. Within five months I found myself living in London along with 10 million other people, an exhilarating and terrifying realisation. I chose the capital because of its artistic energy and cultural opportunities, and have not been disappointed!

Like all Aussie-Londoners I travelled for some time through Europe before returning to full time work. I accepted a position with the London Montessori Centre (a teacher training college) as Admissions Officer for full and part-time students. This time was vital for developing my administrative skills and (on a personal level) discovering the local arts scene. I worked a four-day week, which gave me time to pursue a volunteer position with a contemporary photographic gallery. This was my first taste of gallery work and a great insight into the daily patterns of a small art space. One opportunity inevitably leads to another and I was offered my current position as Administrative Assistant within the Conservation Department. It's a privilege to be based in such a creative environment, and I look forward to the challenge of working and learning in the V&A.

Conservation Department Staff Chart

Head of Conservation

Jonathan Ashley-Smith

Secretary

Annabel Swindells

Head of Science and Information

Graham Martin

Science

Boris Pretzel
Brenda Keneghan

RCA/V&A Course Director

Alan Cummings

RCA/V&A Course

Helen Jones
Alison Richmond

Administration

Tim Carpenter
Abigail Wright
Kia Lamb

Furniture

Albert Neher
Tim Miller
Christine Powell
Tim Hayes
Nigel Bamforth
Shayne Lang

Textiles

Lynda Hillyer
Marion Kite
Val Blyth
Anne Amosford
Derek Balfour
Albertina Cogram
Audrey Hill
Frances Hartog
Zenzie Trinker

Ceramics & Glass

Victoria Oakley
Fi Jordan

Juanita Navarro

Stained Glass

Drew Anderson

Metals

Diana Heath
Simon Metcalf
Joanna Whalley
Ingrid Barré
Donna Stevens
Sophie Wills

Internships

Furniture

Henriette Stuchtey

Books

Mariuz Beltran de Gebara

Paintings

Genoveva Romero

Science

Andrew Wingham

Students

Kathryn Hallett, *MA*
Conservation Science
(with British Museum)

Lars Bjork, *MPhil*

Christos Maros, *MPhil*

William Lindsay, *PbD*

Nicky Ingram, *MPhil*

(with English Heritage)

History, Ethics &
Management

Maggie Roberts, *MPhil*

Techniques for Wood
Identification

Paul Cadman, *MPhil*

Display Cases

Francesca Cappitelli, *MPhil*

Fotini Koussiaki, *MPhil*

20th Century Materials

(with Tate Gallery)

Heather Porter, *MA*

Upholstery

Kirstie Reid, *MPhil*

Metal Patination

Shiho Sasaki, *MA*

Japanese Prints

Ricard Sundström, *MA*

Painted & Decorated
Surfaces

Silvia Valussi, *MPhil*

20th Century Materials

Thanasis Velios, *MPhil*

Computer Visualisation

Rowan Carter, *MA*

Furniture

Pedro Gaspar, *MPhil*

Cleaning Inorganic Materials

Victoria Doran, *MPhil*

Composition Frames

Nicholas Frayling, *PbD*

Computer Visualisation

Angela Geary, *MPhil*

Computer Visualisation

Annie Hall, *MA*

Metals

Hannele Hentula, *MA*

Ethnographic Materials

(with Horniman Museum)

Magdalena Kozera, *PbD*

Photograph Mounts and
Frames