

COPING WITH EMERGENCIES



UKIC
UNITED KINGDOM
INSTITUTE FOR
CONSERVATION

TEXTILE
section

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Postprints of the forum held at
the Victoria & Albert Museum
9th March 1995

Edited by
Frances Lennard

The Forum was organised by Katharine Barker, Gill Owens and Wendy Toulson. Thanks are due to them, and to all the speakers and those who provided posters, for contributing to such a lively and interesting day. Our thanks are also due to Jane Jeffery for typing the postprints.

CONTENTS

	Page No.
INTRODUCTION Wendy Toulson	1
COPING WITH FIRE AND ITS AFTERMATH Lynsay Shephard	2
COPING WITH FLOODED CARPETS Jonathan Tetley	8
COPING WITH SUBSIDENCE Louise Bacon	12
THE RECOVERY OF 130 FIRE AND WATER DAMAGED BANNERS FROM THE FREEMASONS CENTRE, CLERKENWELL	
Part 1: Ray Konyn	19
Part 2: Melanie Camu	21
COPING WITH A FLOODED MUSEUM Jane Henderson	23
THE ROLE OF THE LOSS ADJUSTER James Scott-Brown	27
THE JACOB BED: POSTER Gill Owens	30
17TH CENTURY FLEMISH TAPESTRY: POSTER Tapestry Conservation Department, The Textile Conservation Centre	30
DON'T PANIC: POSTER Lyndall Bond	31
INSECT INFESTATION: FREEZING AS A METHOD OF CONTROL: POSTER Val Blyth	32

INTRODUCTION

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'Coping with Emergencies' was the forum organised by the UKIC Textile Section to coincide with the Section's fourth Annual General Meeting.

Planning to avoid emergencies and to cope with them when they happen has had a high profile in recent years. The fires at Hampton Court Palace and Windsor Castle received a great deal of press coverage with attention being paid not only to the conflagrations themselves but also to the reconstruction and conservation that took place afterwards. The National Trust used the raising of Uppark from its ashes as an opportunity to celebrate conservation and craft skills across the board. Area Museums Councils have encouraged the museums on their patches to think the unthinkable and to come up with disaster plans: many conservators have been approached to allow their details to be included on a call-out list for just such a contingency. UKIC has been active in the area of disaster planning and the publication of the Disaster Planning Manual is imminent. Many conservators have contributed to the production of the Manual and its appearance will be a fitting marker of the newly restructured UKIC.

The aim of 'Coping with Emergencies' was to focus on five case histories that brought out the varied nature of emergencies, their impact on objects, whether singly or in collections, in museums or in other settings, and the range of responses that they demand. By generously agreeing to share their experiences and insights the speakers helped to highlight those aspects of emergency response that apply in most cases and those areas where individual circumstances pose particular challenges.

Surely all emergencies have one thing in common - the remedies for them cost money, which is frequently in short supply. It was in this connection that the Forum included an outline of the role of the fine art loss adjuster and its implications for objects in need of 'first aid' and more extensive conservation treatments. Mutual understanding and co-operation between conservators and those concerned with financing salvage and reconstruction after a disaster are surely vital to the well-being of the objects in our care.

COPING WITH FIRE AND ITS AFTERMATH

LYNSAY SHEPHARD

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Textile Conservation Studios, Historic
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The Textile Conservation Studios are unique in providing the continuity of a long tradition of caring for the magnificent collection of textiles belonging to the Royal Collection.

The TCS has been situated within Hampton Court Palace since 1912, and since 1991 has been an integral part of the Curatorial department of the Historic Royal Palaces Agency, providing four key responsibilities. They are:

- an involvement in the maintenance and preventive conservation programme for textiles within the agency palaces;
- an ongoing conservation research and development programme;
- a conservation programme based upon the needs of the collection;
- a response to emergency situations such as the fires at Hampton Court Palace in 1986 and at Windsor Castle in 1992.

I would like to discuss the manner in which the TCS participated in coping with both the event and the aftermath of such disasters.

In the early hours of Easter Monday 1986 a fire broke out which devastated much of the south range of Fountain Court.

All members of staff who were available over the holiday period were contacted and requested to assist. The removal of the contents of the State Apartments was initially the task of the Palace Salvage Squad. Conservators, from both the TCS and the Royal Collection, were only allowed into the damaged areas once the fire was declared under control. Further outbreaks of fire or structural collapse were still possible and therefore adjacent areas were also cleared of all objects.

Scaffolding was quickly erected and several tapestries, a throne canopy and a state bed were completely dismantled and moved to safety, their many component parts having been identified and labelled.

Where possible, textiles either damaged or

in danger were removed to the Conservation Studios and made physically as safe as possible by careful vacuum cleaning, swabbing and airing. We were fortunate in that all services were still functioning in that part of the building unlike, for instance, at Uppark where facilities were rather bleaker. Some items, such as the tapestries, were moved to other safer areas of the Palace where their size could be better accommodated.

The items rescued on the day were largely dry, with either smoke or rubble damage. Some, however, were badly water-stained.

For several days conservators worked alongside the fire brigade and soon after, archaeologists, to recover textiles from the rubble.

Many bundles of torn, blackened shreds were excavated and taken to the Conservation Studios where an energetic but controlled washing programme was begun. The objective was to keep these items wet to avoid the extremely acidic dirt bonding chemically to the fibres. Over the course of about a week each item was flushed through with de-ionised water, thoroughly wet cleaned and pinned out to dry. By the end of this exercise it was clear that the William III Canopy of State had been recovered almost in its entirety, albeit fragmented and weak.

The next phase of the work required priority planning. Many objects had been quite badly affected by the fire and yet were needed for the Palace to re-open to the public as soon as possible. These items were cleaned and given conservation repairs.

In some cases, woodwork had become distorted so that bed posts and frames had to be gently eased back into shape before the textiles would fit properly again.

That only one work of art was lost was largely due to the almost immediate response of the Palace Salvage Squad. Led by Joe Cowell, Superintendent of Paintings at Hampton Court for the Royal Collection, the Squad is made up of approximately fourteen individuals who meet on at least a monthly basis. The qualifications necessary are physical fitness, a good knowledge of the layout of the Palace, and to live within a short distance of the Palace.

The Salvage Squad are trained to be familiar with the location and handling of all objects within the Palace, including paintings, furniture, porcelain and textiles. They are familiar with all staircases and exits and have a set action plan and

priority list should they be required to act in an emergency. Although their monthly meetings usually involve merely routine activities such as re-hanging paintings or tapestries, this in itself is felt to be a good way of providing an understanding of handling objects methodically as part of a team under adverse conditions. They regularly meet up with local fire brigades and will advise other establishments on setting up similar groups.

It has to be said that on the priority list for objects to be removed in emergency situations, textiles, unless they are easy to remove, will generally take a secondary place. First on the list will be the most valuable paintings within a collection, followed by other more portable objects. In such emergencies there will not be the time nor the resources to dismantle and remove complicated objects such as beds or throne canopies. Often, only when tapestries, curtains or indeed any other textile wall hanging are in danger of spreading the fire, will their removal be considered by the fire brigade.

At the time of the fire at Windsor Castle, three conservators from the TCS formed part of the salvage squad who were present and their experiences confirm this. For instance, before they were eventually removed, carpets from the Grand Reception Room had to be walked on in the attempt to remove the paintings, furniture and tapestries.

In some cases, therefore, it simply is not possible to remove certain objects. The Green Drawing Room Axminster carpet, for instance, had been covered with boards before the fire, while rewiring work was taking place. Though ultimately the boards protected the carpet, the sheer size of the object, the amount of debris from the ceiling and roof and the instability of the building itself resulted in it having to stay in situ for almost two weeks before it could be safely removed. The carpet was saturated and extremely fragile, having had water pouring over it for such a length of time, and it was inevitably damaged further when it was eventually removed.

Two days after the Windsor Castle fire, twelve large tapestries and a carpet arrived at Hampton Court. Some were damp, all were folded and smelled strongly of smoke. The first phase in dealing with these textiles was to confirm the number of tapestries that had survived and to identify them.

The tapestries were taken to the TCS wash-building where they were carefully unfolded and surface cleaned both back and front. The priority was to find enough

space to lay each item out flat where there was good air circulation and where any damage could be assessed.

We found that, amazingly, all five tapestries of the 'Jason and the Golden Fleece' series from the Grand Reception Room had been saved. The sixth tapestry from the series was already off display and undergoing conservation treatment. The remaining seven tapestries were from the 'Esther' series and had been removed from the Castle as a preventive measure when the fire had begun to change direction.

Following identification, each tapestry was labelled with both its title and inventory number.

Several tapestries were laid out in the Mantegna Gallery at Hampton Court which was temporarily closed to the public. Although the artificial lighting was poor, the rooms were clean, accessible and fully air conditioned.

Ironically, most of the tapestries requiring longer term airing and storage and which were in the poorest condition, were placed in rooms directly above the King's State Apartments where rebuilding had only recently been completed after the Hampton Court fire. Here the light was good, and again the rooms were clean and spacious. Net filaments were attached to the windows so that they could be opened to provide good air circulation yet prevent insect infestation. Tyvek blinds were also fitted to all the windows to reduce light levels. The tapestries placed in these rooms were able to stay as long as necessary while their future was decided.

The second phase required full condition assessments to be provided.

The damage to the seven 'Esther' tapestries, though not severe, varied depending on the previous general condition. All twelve tapestries had been hung within frames using traditional heavy duty metal stud fastenings which had been fixed to the wall. In places, where the studs were already missing, broken or were incorrectly positioned, the tapestries had been nailed in place. In other instances the studs were too stiff and had remained on the wall when the tapestries had been pulled down. The resultant damage ranged from a few holes being torn in the outer selvedge galloon on the stronger tapestries, to large gaping splits through the already degraded silk weft on the weakest.

The tapestries from the 'Jason' series suffered most from their emergency

removal. The whole of this set had been subjected to a previous repair treatment that involved the application of an adhesive to the back of the tapestries. The adhesive had, over the years, degraded, discoloured and stiffened. On some of the tapestries considerable areas of weak silk weft had been totally consolidated, rendering the tapestry brittle and extremely acidic, its pH ranging from 2.5 to 3.0.

As already mentioned, the sixth tapestry was already undergoing conservation treatment at the TCS when the fire broke out. The fact that this tapestry had taken the best part of a day to take down and involved two full scaffolds and eight people, provides some indication firstly of the condition of the set as a whole, and secondly of the damage that had occurred to the remaining five during removal. Additionally, these five tapestries were very badly water stained and had cracked further along lines where they had been folded.

Assessing the fire damage to these five tapestries was relatively straightforward as comprehensive condition reports had been made for the complete series a short time before.

The priority now was to recommend that the cleaning programme, involving both wet and solvent cleaning, should begin as soon as possible. The tapestries could then be placed into storage in safety until the full conservation treatment could continue. This series had previously formed part of a six-year rolling programme of conservation with one tapestry undergoing treatment when the Court was away from Windsor Castle. Recent events now precluded this and it became urgent that the tapestries were cleaned and stabilised as soon as possible.

The remaining 'Esther' tapestries were prioritised into those requiring more or less repair work to facilitate re-hanging.

As with Hampton Court, it now became imperative to provide recommendations that could realistically be carried out to allow the safe re-hanging of as many tapestries as possible. We were required to assess how much damage had been a direct result of the emergency removal. This was much more complicated than with the 'Jason' tapestries where we were familiar with both the condition and the problems inherent in the tapestries. At least one of the 'Esther' tapestries was considered too weak to allow re-hanging before full conservation treatment could be carried out. A second was more difficult to evaluate.

Eventually we recommended some remedial treatments that could be carried out, yet easily reversed, so that whilst the tapestry was rendered safe in the short term to re-display, its long term future should form part of a full conservation programme.

We examined the tapestries closely, using the facilities of the TCS laboratory and building on what we had learned from the fire at Hampton Court Palace. All the tapestries examined were found to be extremely acidic, giving weight to our recommendation that they should be cleaned as part of their treatment.

Visually, in general, the colours and tones of the tapestries' silk and wool weft were dull and slightly discoloured, yet in some of the damaged areas where, for instance, exposed warps could be seen, the fibres were bright and clean. We felt that these areas indicated recent damage where the exposed fibres had had no time to discolour. We therefore worked through each tapestry, noting the size and degree of what we were confident were indications of recent damage.

The extent of this damage was found to be commensurate with the condition of the tapestry. Where there were large areas of weak degraded silk weft there were also numerous places where bare, clean-looking warps could be seen and many more areas of split seams and slits.

The third phase began when eventually we received the go-ahead to carry out repairs. Most of our recommendations were agreed to. Some basic conservation work was carried out, using support materials where necessary, and most of the ill-fitting or missing stud fastenings were replaced with Velcro.

One tapestry was considered too weak to be re-hung and has been placed in storage. However, the recommendations for the immediate wet and solvent cleaning of the 'Jason' tapestries were acknowledged and agreed to.

As with Hampton Court, there was some urgency in requiring as many tapestries as possible to be re-hung without delay so that parts of the Castle could re-open to the public. The first three tapestries were returned to Windsor in January 1993, just two months after the fire, and the remaining four were re-hung in May of the same year (one of these being a substitute).

All the 'Jason' tapestries have now been cleaned and the TCS are well into the conservation programme of all six

tapestries in good time for them to be available for re-hanging in 1998.

The ensuing problem of the cleaning and removal of the adhesive used on the 'Jason' tapestries was one that was accelerated by the occurrence of the fire. Where research and tests would have been carried out as part of a well-planned programme, the work was necessarily accelerated in order to deal with the predicament. This led to the development of equipment and methods that may not ordinarily have been necessary.

At the time of the Hampton Court fire the Studios had been in the planning stages of a new washing system for tapestries and other large fragile textiles. Space, as ever, had been a problem.

However, a huge adapted greenhouse in the Palace Nurseries offered the solution, where a 10 x 6 metre raised stainless steel tank with a motorised spray boom and raised drainage was built. As part of a long-planned Studio re-location in the Palace, a large versatile hot-table with vacuum suction was built. Other purpose-built equipment was designed and put to regular use as the conservation treatments involved in the two William III Canopies of State from Hampton Court Palace provided the TCS with its greatest challenge to date.

The approach to the conservation of these and other textiles from the fire of Hampton Court Palace and, to a lesser extent, that of Windsor Castle, was therefore to first assess the various options of what was realistically achievable in the context of the philosophy for the restoration of the State Apartments as a whole.

At Hampton Court, curatorial research into the original decorative scheme of the State Apartments had shown that many of the rooms were hung with tapestry.

When the magnificent 'Triumph of the Gods' tapestries were identified and located and permission granted from Her Majesty to re-hang them in these rooms, a new dimension to the work began. The loan of the copies of the 'Acts of the Apostles' cartoons from the Ashmolean Museum enabled several tapestries (destined to return to the Cartoon Gallery) to be hung throughout the King's State Apartments.

This produced an extensive programme of tapestry conservation work running concurrently alongside that of the throne canopies that, without the fire of 1986, would have been unimaginable.

By July 1992 the Studios had conserved ten tapestries, three throne canopies and eleven eighteenth century chairs. The installation itself took three months and led to yet more innovative methods of handling textiles including the development of new methods of re-hanging tapestries. The sheer size and scale of much of the tapestry collection emphasised the need for safe methods of re-hanging and display.

One of the lessons learned from the Hampton Court fire was that of ensuring the ease of removal of textile objects. Without exception, all tapestries and component parts of both throne canopies and state beds were re-assembled using Velcro as a re-hanging method, whilst retaining the original hanging system whenever relevant.

The use of Velcro provides not only a quick means of removal but also enables textile objects to be finely re-adjusted whilst hanging; something which in the case of tapestries, for instance, stud fastenings, rings or nails could never do. Velcro will also allow for re-adjustments to textiles at a later date when, say, a large, heavy tapestry, having been recently conserved after many years in storage, has finally had time to 'settle' and find its own level.

The tapestries that were re-hung in both the State Apartments of Hampton Court and Windsor were all extremely large and heavy. At Hampton Court, for reasons of authenticity, the tapestries were 'loose' hung, that is, supported along the top edge only. This was a curatorial request that we felt needed to be validated by further research.

We subsequently machine stitched two parallel lines of industrial weight Velcro to cotton webbing tape which, in turn, was hand stitched in place along the top edge of the tapestry.

With so many tapestries at Hampton Court to be re-hung in a relatively short time, it made us think through our methods of re-hanging. In many instances the tapestries had to go into rooms where other items had already been installed: state beds and throne canopies, for example.

The order of re-instatement and our own work programme required the handling and manoeuvre of large, heavy, fragile textiles in rooms where other works were still being completed.

The staff at the TCS, with the assistance of members of the Salvage Squad, devised

the introduction of two innovative yet simple methods of re-hanging tapestries where space and time was often limited.

The first method was used where tapestries were to be hung flat along an uninterrupted wall space. Firstly, the two lines of hook-side Velcro were attached to the wall. Tower scaffolding was erected to a good working height to the top of the tapestry and the entire width (or as near as possible). Lengths of wide cotton webbing tape were then fixed just beneath the Velcro at regular intervals, approximately one metre apart, across the entire width. These straps were then dropped to the floor and returned back up to the top guard rail of the scaffolding, where they were loosely tied in place. The straps then formed loops.

The tapestry, meanwhile, was rolled from bottom to top with the face side inwards. At this point it is worth commenting that whilst not the ideal way in which to roll a tapestry, it is in this predicament for such a short time that it easily outweighs any alternative which involves more handling. The tapestry is usually wrapped in either a protective dust sheet or tissue paper before being secured with fabric ties. It is then placed within the looped straps between the scaffolding and the wall.

At the top of the scaffolding, each strap is controlled by a person; slowly and gently as the straps are pulled up the tapestry will be lifted to the top of the scaffolding. The tapestry is temporarily secured while the top edge is fixed in place onto the Velcro. The straps are loosened and the tapestry allowed to gently unroll itself.

The straps are trimmed off just above the lower edge of the tapestry. They are left in-situ behind the tapestry so that, should it need to be removed from display at a later date, they can be re-used. The process is simply reversed to roll the tapestry up. The tapestry can then be re-adjusted to ensure that it is hanging correctly.

A different method was needed when hanging tapestries into corners of rooms. This time we rolled the tapestry in the conventional way, sideways and with the face side out. Each roller was cut to almost the exact size of the tapestry. As the tapestry was to be unrolled sideways it needed to be supported in the gap between the bottom edge and the floor level. As each tapestry differed in size we had a series of circular polystyrene blocks cut into shape which could be stacked to the appropriate height. These blocks were placed on a small, circular, rotating base which was fitted with castors.

The number of blocks could therefore be adjusted to our requirements and were held in place by a central vertical pole onto which each block was slotted.

The tapestry on its roller was carefully lifted vertically and supported at the bottom by the polystyrene blocks and at the top by one or two people according to the size and weight of the tapestry. The tapestry was then carefully turned so that it unwound off the roller as it was fixed onto its Velcro at the top.

The corners behind the tapestries were all padded out, providing a gentle radius that gives support.

These methods have been extremely successful in allowing large, heavy and fragile objects to be hung in a non-museum environment, and have done so with minimum handling and maximum control. Members of the TCS staff and the Salvage Squad have continued to use these methods.

The attachment of a pull cord to the top right hand corner of every tapestry has also now become routine and is always amongst our recommendations when providing consultations to other establishments. They provide a quick and safe method of removal in the event of an emergency. We use a polypropylene cord cut to just above the lower edge of the tapestry and usually terminating with a small wooden acorn.

Just recently a tapestry was taken down from display using such a pull cord when a leaking roof suddenly led to water running down the back of a tapestry. Normally the cord is lightly fixed in place to ensure that it remains hidden from public view, thus reducing the likelihood of non-emergency tapestry removal by inquisitive members of the public!

After the Hampton Court fire the TCS also put together its 'Disaster Kit'. This is a collection of materials kept solely for use in the event of an emergency. Items that have been found useful in such a kit should ideally include the following:

- rolls of bubble-wrap and plenty of polythene for wrapping, isolating and protecting objects;
- rolls of Tyvek, acid-free tissue paper and low tack tape;
- torches, screw drivers, cotton tape and tie-on labels;
- strong fabric straps for lifting and carrying objects;

- packing crates (preferably collapsible for easy storage).

Other items of equipment found useful by the Salvage Squad, particularly at the Windsor fire, were hard hats incorporating lights, and large lightweight tarpaulins.

The TCS kit has been specifically designed for the immediate post-disaster rescue of objects. Due to the general usefulness of most of the items, they tend to get used in the Studio's day to day activities. We therefore have one member of staff who has the specific role of maintaining and re-stocking the materials within the disaster kit. It is important, however, that all members of staff are familiar with the items and their location and that easy access is not a problem.

Much of the kit was dispatched to Windsor with the Salvage Squad. Whilst it was in no way enough for the scale and enormity of the fire, it went some way in providing invaluable packing materials, especially for some of the more delicate objects.

One of the differences between these two major disasters is that the Hampton Court fire was on a smaller, more contained scale and the Salvage Squad was almost entirely responsible for the rescue of the objects. The fire at Windsor was on a much larger scale and employed staff, contractors, the Army, plus members of the Hampton Court Salvage Squad. Many of these people had no experience whatsoever of handling historical objects; they relied on their own common sense and guidance from Sir Geoffrey de Bellaigue and his team. The fundamental requirements of good communications, discipline, adequate leadership and organisation are indisputable.

That so few items were lost in these fires is a testament to the people involved, their commitment, resourcefulness and consummate hard work.

Following the fire at Hampton Court a policy of re-presentation using all available evidence, salvaged materials and meticulous archival research led to the transformation of the King's State Apartments.

This suite of rooms had long suffered from an amalgam of decorative styles over the 300 years subsequent to Wren's construction. In July of 1992, with the restoration of the buildings and the conservation of their contents completed, the Apartments re-opened, not resembling a picture gallery as they had immediately before the fire, but fully re-instated to appear as they had in 1700.

And finally, it has now been almost nine years since the fire at Hampton Court. The Textile Conservation Studios have learned and developed a phenomenal wealth of expertise in many areas, notably:

- dealing with emergency situations and assessing the resultant damage to textiles;
- the conservation of fire and water damaged textiles;
- the development of re-hanging methods and re-presentation; and
- the collection of materials forming the disaster kit.

If nothing else, our experiences have taught us that disasters are indeed very difficult things to plan for. Hopefully this paper will have discussed a few of the dilemmas and issues faced when coping with fire and its aftermath.

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Historic Royal Palaces Agency

COPING WITH FLOODED CARPETS

JONATHAN TETLEY

Director

Carpet Conservation Workshop

Introduction

It is difficult to cover what is a big subject with both the limitations of the available space and also within the framework of the experience that we have had. After mentioning some of the general problems associated with flooding, particularly of carpets, I propose to draw on some case histories to raise points for discussion, thought and research. I would like to finish by enumerating some problems in more detail.

Setting the scene

The phone rings. The enquirer has suffered a major flood; water from the bathroom plumbing has made its way through the ceiling, bringing half of it with it, and ended up on her Persian carpet. What can you do? How can you help?

The first thing is to have some of the answers to these questions prepared in advance. How far away is she? When did the flood occur? I have found on occasion that the flood actually happened some time ago, so it is worth asking. Has there been dye run or staining? Is the carpet still wet? What sort of debris, such as ceiling plaster? Is there mould? Wet or dry? Is she insured? Insurers will usually sanction some emergency work, but will want an estimate before deciding to proceed to anything else, since this will be determined by the cheapest cost to them: replacement or conservation. However, even emergency work can be time-consuming and therefore expensive.

All these sorts of questions are doing several things. One is to give you time to think. You are also building up a list of primary needs and secondary needs; for instance, yes, the carpet has dye run and is full of ceiling plaster, but is now dry so does not have to be treated immediately, although should be soon. You do not have the luxury of the usual conservation snail's pace, flooded carpets are slightly different from carpets that have been flooded and are now dry. They need dealing with quickly. Possible chemical reagents, dye run, potential moulds and mildews all argue for speed.

Once the client and/or insurer have agreed that you can treat the carpet you will have to decide what to take with you. You may need to include equipment for cleaning, such as a water extraction machine, or even a wet/dry vacuum as well as some pre-mixed wash solution and rinse water. You may need to take cotton wool swabs and blotting paper in case there is dye run. Maybe waterproof clothing such as yachtsmen's overalls and rubber boots would be useful (the yachtsmen's ones are quite good because they don't have 'tractor tracks'). Equipment for drying, such as drying grids and towels and a de-humidifier should be added to the list. These can usually be hired and delivered at short notice by an equipment hire firm. You may need more people, for reasons of safe handling and speed. If there are moulds you may well need breathing apparatus, especially if they are dry. Last, but not least, are you insured to do this? You should be covered for Public Liability and Employers' Liability if you employ anyone else. Sometimes it may be the case that there is nothing further you can do.

Case histories

I would now like to discuss several different cases which may serve as a practical illustration of some of the problems associated with flooding.

A chenille carpet

This carpet was made in Glasgow by James Templeton & Co. for the Great Exhibition of 1851, later gracing the Privy Council Room at Osborne House.

The carpet was flooded whilst in storage. From 1930 to 1963 the carpet was stored in the Division of Anthropology at the Smithsonian Institution, Washington DC, USA. It was transferred to the Division of Textiles, cleaned and then crated. At some point water may have dripped onto the case and the carpet now has water-marking stains at regular intervals on the backing consistent with flooding whilst being rolled.

By the time we came to handle this carpet the damage was long since done and we decided to do nothing further to it - the stain was on the back, so was not ordinarily visible - and we could not come up with an appropriate treatment which would be anything but detrimental. Here was a case where we had a flooded carpet which we could not treat because of the length of time that had elapsed.

A Turkoman Tekke

This carpet, probably made in the 1920s, had suffered dye run and because it was still damp we were able to ameliorate the dye run. Also, thanks to the water extraction equipment, we were able to remove ceiling plaster and therefore lower the pH of the carpet to a safe pH level, round neutral.

The next two case histories are of interest because they were both problems which needed sorting out quickly.

One of the chief problems with this kind of job is the speed with which it is necessary to act. It makes for difficulties in the smooth operation of careful documentation and before and after photographs. On one of these occasions I actually forgot the camera, and on the other I left it behind and I have not yet managed to get it back from the client. With the on-site case history, I returned to the scene after the carpet had dried and took measurements and had 'after' photographs taken.

Eight flood-damaged rugs

We were contacted by an elderly lady on the recommendation of a paper conservator. Although this client lives in Wales, some 125 miles from us, it sounded like something had to be done quickly to deal with the carpets, which were still wet. She was distressed and it was difficult to obtain a clear idea of the size of the carpets, or what they were, and even of when the leak in the water system had caused the flood. It only later became clear that the flood had happened the previous week.

I faxed her some instructions as to good removers to use; a recommendation that she find a loss assessor to act for her; I told her to set aside one room in the house for de-humidification; and advised that she undertook a minimum of building work before obtaining the insurer's say-so. Insurers are usually reluctant to pay for any damage to anything before the point of issue, ie. the plumbing. Things moved quite quickly and I decided to drive down there and then. I took some polythene sheeting with the idea that I could bring back the smaller rugs for treatment at the workshop, and plan what to do with the rest, possibly returning the following day with the necessary equipment, people, etc.

I arrived to be offered tea and cakes; she was clearly not as distressed now as she had been, although she was confronted with some fairly big problems. While she had been away in London one of the pipes

had burst in a bathroom on the first floor and water had brought down quite a lot of the ceiling below as well as soaking furniture, books and carpets. A quick-thinking local builder had improvised a prop for the remains of the plaster ceiling. Two of the small rugs had been put in the room next door and were fairly dry. One, a small Turkoman Tekke, did not seem to have suffered any dye run but the other one, a Turkish prayer rug, most definitely had and needed emergency treatment. Worse was to come because I found that the other rugs were sodden and had been bundled together in the coachhouse which was damp and dirty, and left on the earth floor.

The client made clear that she did not have the space to set the rugs out to dry indoors - besides, she actually had less space than ordinarily because of the flooded room and all the other rooms had had to accommodate extra things from this room. There would have been a large enough space to erect a polythene tent with grids and a de-humidifier in the garden, but since she would not be there some of the time, this did not seem a very good option. The largest rugs were a pair of Chinese carpets measuring approximately 366 x 244cm (12 x 8 feet). These both had colour run problems and in my judgement needed to be washed before drying out because of the alkaline residues from the plaster ceiling and their effect on the dyes; we could not wait for the removers to fit us into their busy schedule. I came to the decision that the risk to the carpet by delaying prompt treatment outweighed the risk of damage from temporary folding. Although my estate car stayed nice and dry due to the polythene sheeting which I used to form a cocoon, I really regretted having forgotten my sailor's overalls and had horribly damp clothes all the way back. Also, although the smaller rugs were fairly manageable, even with help the two Chinese carpets were very heavy and represented a real handling problem.

Once back in the workshop the two Chinese carpets were 'extraction cleaned' with a 0.02% solution of Synperonic N and 0.005% CMC, rinsed with softened water, and as much water as possible taken up before being allowed to dry on grids. Four of the remaining carpets were only rinsed with softened water, even though one carpet, a Belouch, was fairly badly impregnated with ceiling paster, and although some swabbing of the fugitive colour on the Turkish carpet was tried, it had dried to the extent that it could not be ameliorated. This carpet and the small Turkoman were then set out to dry fully without the water extraction treatment. It

was quite difficult to judge what should be treated as an emergency - for instance, all the rugs were probably impregnated with an alkaline residue from the ceiling plaster - the Belouch conspicuously so - but where there was no dye run actually occurring after a week, it was difficult to justify the extra cleaning work as part of the unadvised emergency treatment.

The hope was that the client would sanction the further work needed speedily; as it was, this all happened seven months ago, we have been unable to establish contact with her, and she appears to have forgotten all about her carpets. The two Chinese carpets were definitely rescued by being cleaned and dried at this juncture, and possibly the four rugs by being dried.

A Wilton seamless patterned carpet

This carpet was caught in the Chichester floods of January 1994 and was another job which required a quick response.

We were able to hire a local remover whose Mercedes panel van we loaded with enough grids and more to amply cover the square footage we were given. We have found from experience that it is not wise to rely on clients' measurements! We also loaded extraction equipment, carboys of washing solution and rinse water, as well as a 2% acetic acid solution, waterproof clothing, polythene sheeting and bubble-wrap in the car and two of us and the remover set off in convoy the same morning. I had also advised the client to order two builders' de-humidifiers, which we found delivered by the time we arrived.

We decided that the carpet should be cleaned due to the possibility of bacteria from the flood water and set about extraction cleaning it in the room. We laid bubble-wrap where we had to walk and doubled the carpet over a roller to clean one half of the back, and then laid that half back on clean polythene and repeated the process with the other side. The front was then cleaned with one machine and an acetic acid solution rinse used with the other machine to avoid possible 'jute browning' and several dry passes made with the machine to dry it out as much as possible. It was difficult to ascertain what fibres the carpet's foundation was constructed from since it was soaking wet, so we acted on the assumption of the worst eventuality, ie. jute. It turned out that both the wefts and the warps were of dyed cotton, so there still might have been cellulosic browning or even dye run. This has to be set against the problem of using an acidic solution as a finishing rinse with a carpet partly composed of cellulose

which does not prosper in acidic conditions. The pile was of wool and this would be more tolerant of an acidic solution.

At the end of the cleaning operation we inserted drying grids row by row under the carpet, which had been close fitted to the room and followed the contours of pilasters and fireplace, so we had to double back some side pieces over grids on the carpet. We took care to arrange these so there would not be creasing or marking on the carpet. One de-humidifier was then set up in the doorway pointing into the room, with the other drying the air in the adjacent room. We have found that for some reason blowing dry air across a textile seems to dry it quicker than setting up to remove damp air.

Unfortunately, when the carpet was judged dry enough by the client, it was not actually dry enough, and a de-humidifier was placed on the carpet, resulting in a rust stain. They assured me that they had put something underneath to prevent this, but the de-humidifier had somehow been moved off it. This is one of the disadvantages of dealing with flood damaged pieces in situ - and perhaps in a wider sense for all conservation work - the clients behave just like we do at home. Still, I think that I should have anticipated this and we have drafted a do's and don't's sheet for flood victims. Furthermore, the client complained of a foul smell which lasted for about a month - probably until the carpet was fully dried out - but after this there was no further smell.

Interestingly, records of all this client's carpets survive from an inventory of December 1938. This particular carpet is probably a Grosvenor Wilton and therefore post-dates the First World War. The eponymous Grosvenor loom runs to this day and makes seamless carpets of 9 and 12 foot widths, and was designed in the trenches during the 1914-18 War. In December 1938 the carpet was valued at £73 10s 0d and measured 26' 6" x 12' 3". Its measurements in March 1995 were 25' 1" x 11' 8½". This represents a shrinkage of 5% on the warps and 4% on the wefts. I also measured the carpet in the next room which had not been flooded, a large, finely knotted Persian carpet. This showed a 3% shrinkage on the warps from the December 1938 inventory, which I found interesting. We have found with a collection of carpets from Brodsworth Hall in Yorkshire which we have been conserving that there has been a dimensional movement of between 3% and 12% on some of the carpets after being transferred to our workshops, but before washing. It is not conclusive but it

may be that the flood did not actually cause any shrinkage to this Wilton carpet.

The end result of the treatment showed no observable colour run or attributable shrinkage; the pile crush was much as before; the worn areas looked rather clean, but the fibres did not feel tendered and appeared to have stood up well over the intervening year; and there was one bad rust stain.

Emphasising the problems and the solutions

So to re-iterate some of the problems and solutions:

Client contact: It is important to have a set of clear questions and a list of options up your sleeve.

Dirt: It is important that the carpets should be cleaned as well as dried out as fast as possible due to possible sewage or chemical impregnation. With pre-prepared wash solutions, some extraction cleaning can be done on site but you will need waterproof overalls (sailor's), boots and gloves, as well as buckets and a safe access to a 240 volt electricity supply. You will need to check with your insurers as to your cover for working on site.

Water damage to structure / safe handling: You need enough people on hand to move the carpet onto grids or roll for removal. Stabilising support treatments: you may need to consider on-site support treatments before the carpet is moved whilst wet. If the carpet has had structural damage to the fibres or weave, extraction should be undertaken with care and monofilament net to reduce suction pressure.

Chemical problems: Some candidates might be: strong reducing agents from WC bleach, should be washed out as soon as possible; petrol or other solvents from flooding in from a road, carefully consider extraction option re. inflammability and disposal of waste water.

Debris: A wet/dry vacuum cleaner is useful; wear gloves in case of glass.

Dye running / staining: Quick treatment while still wet or at least damp to deal with dye run. You may need cotton wool swabs, blotting paper.

Mould: Freezing will not deal with mould - only biocidal treatment or possibly washing. Flood washing has worked well for us on one carpet; after leaving it to dry, it was surface cleaning (wear

breathing apparatus) and then washed.

Equipment for on site work: You may need extra people, drying grids, extraction machine, towels, cotton wool swabs, buckets, wet/dry vacuum cleaner, monofilament net, prepared wash solution and rinse water, waterproof overalls, gloves, boots, extension cable with earth trip.

So, in conclusion, when and if you are confronted with one of these phone calls, try to ascertain as much information as possible from the enquirer; also try to be prepared in advance for as many problems as possible. And once you are on site, try to establish priorities - what must be treated now and what can be treated later.

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LOUISE BACON

**South Hall Co-ordinator
Horniman Museum and Gardens**

Introduction

It all began with a depression in the floor in the north west corner of the South Hall Ethnography Gallery. This particular corner of the Gallery displayed large and heavy objects from Asia, mainly made of stone, and the depression was attributed to the heavy weight causing the floor to sink. By 1990 it was noticed that objects only recently installed in the South Hall Balcony handrail showcases, also in the north west corner of the Gallery, were frequently moving and having to be repositioned. Again this depression of the desk top showcases was attributed to the heavy sculptures below. The statues were removed to storage and the showcases were jacked up with steel girders.

However, by 1991 cracks were also appearing in the balcony and monitoring of the movement of the building began in earnest. By 1993 it was obvious that there was a continuous shift downwards of the floor of the South Hall which had nothing to do with the heavy statues.

In July 1993 the first investigative trial pit was dug through the floor. The result was dramatic, not only for the builders digging the hole, but also for the future plans of the Museum. As the builders broke through the concrete slab of the floor to the clay underneath, a geyser of hot air and dust shot up into the air. A six inch gap was revealed between the natural clay and the floor. It was now obvious that for many years the South Hall Gallery floor had been suspended over a six inch gap of hot air.

The cause of the problem

Charles Harrison Townsend designed the Museum for Frederick John Horniman with sub-floor ducts, covered with wrought iron grilles, through which heated air flowed to warm the galleries. Later a hot water system of pipes and radiators was installed. These pipes were laid in the hot air ducts and covered over. As the clay dried out around them, fissures opened up which allowed the hot air to penetrate to an even greater depth. Consequently the brown London clay under the South Hall Gallery was subjected to direct heat for nearly a century. The Museum was

informed that the Gallery should be closed to the public after 1st April 1994 otherwise the advising structural engineers could not guarantee the stability of the floor nor the safety of the public, staff and objects.

Analysis by the Building Research Establishment of borehole drillings taken from the South Hall showed that the desiccated clay needed to be removed to a depth of 5 metres, the foundations underpinned and the affected floor replaced to ensure the long term stability of the building.

Preliminary planning

By August of 1993 the Museum management had sufficient information to know that the objects would have to be cleared from the Gallery and the floor replaced. At this stage, borehole tests had not been carried out and preliminary trial pits had shown only that the desiccated clay continued to an undetermined depth.

At this early stage it was clear that a new temporary entrance would have to be constructed at the side of the museum for public access, as the original entrance opened onto the South Hall and could not be maintained while the subsidence was being dealt with; the shop, sited in the South Hall, would also have to be relocated; staff offices would have to be moved because of the noise and disruption; and as the Library would be inaccessible to the public and staff it would also need relocating. As far as the decant programme was concerned, two things were immediately obvious: the first was that the staff complement could not cope with the extra work and the second that there was insufficient storage space available at the Study Collections Centre (SCC).

Impact of the South Hall on corporate planning

Since 1990 and the abolition of the Inner London Education Authority, the Horniman Museum and Gardens has been an independent charitable trust with core funding from the Department of National Heritage (DNH). The Museum's subsequent Corporate Plans have stated its aims, objectives, policies and programme. Programming has been a key part of the future development of the Museum. In particular, a rolling programme of much needed Gallery refurbishment has been in hand. A new aquarium, Living Waters, was opened in 1992, and a gallery of musical instruments, The Music Room,

was opened in 1993. The next aim of the Corporate Plan submitted to the DNH in that year was the total refurbishment of the Museum's North Hall Natural History Gallery. The South Hall Ethnography Gallery was earmarked for redevelopment in the year 2000.

"However the urgency, scale and complexity of the South Hall subsidence problem has overridden these plans by creating a new and higher priority in the short-term; the repair to the structural damage to the South Hall."¹

The effect was felt throughout the Museum. Management in discussions with staff had to rethink their total strategy for the development of the Museum. The Natural History Department had to postpone the redevelopment of their gallery, even though one year's work had already been carried out right up to the stage of appointing a Lead Consultant. The Ethnography Department suddenly found itself having to plan a strategy for the refurbishment of the South Hall which they were not expecting to do until the year 2000 and shelve other temporary exhibition plans they had. The Conservation Department had to change all their exhibition conservation strategy, as well as being thrust into the forefront of the organisation and works to clear the objects out of the South Hall.

The Museum was also in the process of preparing a major temporary exhibition on Village Life in India² which Ethnography, Conservation and Exhibition staff still had to complete even with the massive workload of the South Hall problem. Needless to say, all projects across the board, especially documentation and day to day departmental schemes, suffered a setback.

An ethnography presence

The musical instruments had previously been displayed in a small room off the North Hall of the Museum and in a series of showcases at one end of the North Hall Natural History Gallery. With the opening of the new gallery these showcases became available. They had been earmarked to be passed over to the Natural History Department. However with the subsidence problem in the South Hall, the room and these cases were re-allocated to the Ethnography Department for a display on World Cultures which would still maintain an ethnography presence in the Museum.

One of the Museum's key objectives during the disaster was that the Museum

should remain open, still perform a service to the public and still give visitors something to see!

The Ethnography Department, in conjunction with the Exhibitions Department, selected objects to be transferred from the South Hall to these new displays. Two contract conservators were employed, each for four months from December 1993, to carry out the conservation work on the objects.

The specimens in the South Hall had suffered considerably from the dust 'explosion' from the trial pits and the badly fitting 1960s showcases which had distorted and opened up more and more as the floor subsided. All the objects were filthy and many were cracking and dusting due to the hot, dry atmosphere that had long been a problem in the South Hall.^{3,4} The source of this heat had always been put down to the under-floor heating and the inner case lights, but the trial pits had revealed that the heat from the pipes had also been heating up the air in the gap between the floor and the clay, and the whole space was in fact acting as a giant storage heater. Some of the more dirty objects destined for storage were given a superficial clean by the contract conservator taken on to up-date the condition survey assisted by the Volunteer Conservation Corps of the Dulwich Decorative and Fine Arts Society.

Programme

The new temporary entrance and the relocation of staff offices and the Library had all been completed by 1st April 1994. The programme for the decant could then proceed unhindered in the following manner:

- 1 Documentation
- 2 Organisation of storage space
- 3 Decant of the objects
- 4 Post-decant.

Documentation

The Ethnography Department contracted one Documentation Assistant to assist their existing documentation team with the identifying, numbering and labelling of the objects on display - a total of 2,764 objects. A rolling programme of redisplaying some of the showcases in the South Hall had been in progress at the time of the subsidence, but many of the displays of the Horniman Collections had been there for up to thirty years or more. Consequently identification and numbering

of objects was either not satisfactory or non-existent.

The identification of each object was a vital part of the transfer and the decant of the objects. The recording was computerised, which enabled the Documentation Assistants to order the objects and produce lists in whatever format was required for the decant of the objects, including lists of the objects to be transferred to the showcases in the North Hall.

Objects in store at the Study Collections Centre of the Horniman are stored by type of object, all of which have an individual code. For example, all hammers (43C1) are together, all shields (3B1), all waistcoats (11A6). However, on display the objects were exhibited by country or theme rather than type of object. Because of the limited space available at the SCC for sorting objects it would be a useful part of the exercise if the objects could be sorted and packed by their type groups in the Gallery before being transported to the SCC. Consequently, being able to print out lists of objects by their storage grouping and display case number made retrieval of each object and packing much more efficient and less time-consuming.

Control of the database remained in the hands of the Ethnography staff while they were dealing with the inputting and then passed to the Conservation Department when the objects were being conserved for transfer to the new World Cultures display, and then after the decant passed to the SCC for their input with location of the specimens. In this way it was always clear who had control of the data inputting and any confusion was avoided. It was also clearly defined who had responsibility for adding or changing entries, for example the Ethnography Department for anything to do with numbering and identifying, the Conservation Laboratory for lab numbers, photo numbers, materials etc. and the SCC for location of specimens.

The Conservation Department had carried out a condition survey of the collections on display in 1987.⁵ This survey was on paper. The South Hall Balcony displays, however, were relatively new and there was no existing survey. A contract conservator was appointed to computerise the condition survey for the Balcony area, up-date the paper record and to undertake basic cleaning of objects before they went into store.

Storage premises

A rough eyeball survey and count of the

objects on display was sufficient to highlight that although the bulk of the small objects could possibly be fed into their correct groupings within the SCC, there was no space for large objects or for the individual showcase display panels of objects from the South Hall Balcony which would probably be re-used after the subsidence works were over.

Various off-site premises were investigated including an ex-National Portrait Gallery archive store, a commercial warehouse and also the possibility of shared storage with other museums. For a variety of reasons none of these options either came to fruition or in the end proved suitable.

However, as plans for finding off-site accommodation for the staff offices progressed, suitable premises were found which could not only take the staff offices but also the Library. This then freed the Library area to act as a store. Monitoring of the environment had taken place in this area over the years and consequently by locating two humidifiers in the space, turning down the heating and covering the large expanses of window, it was possible to turn the Library into a viable store.

To free sufficient space in the SCC, Stores Officers, with creative space management, moved groups of objects from one area to another and increased spaces on the stacks. Fortunately the recent opening of the new gallery of musical instruments had released space which allowed some movement of the collections. At the end of the exercise it was possible to earmark the major part of one room as the post-decant receiving and sorting room.

The decant

Timetable and staff: The programme for decanting the objects was very tight indeed. From the closure of the Gallery on 1st April 1994 the objects had to be decanted as quickly as possible so that the showcases could be cleared from the area and boreholes drillings taken. The disruption and dirt from the boreholes would have been too great to have allowed it to happen while objects were still in the Gallery. Analysis of the borehole deposits, which had to go away to a specialist laboratory, would take at least three months. It was vital, therefore, that these samples were sent off as soon as possible so that the full extent of the desiccation and what was needed to remedy it could be assessed.

Based on an estimate of how long it would take to decant and pack one showcase, it was calculated that with three teams of

two people the actual decant could be done in eleven days.

Decanting the objects not only required a team of people who could handle objects and keep up with the documentation, but also a firm of removers who could assist with the removal and packing of the specimens as well as transport the objects from the Museum to the SCC. They would also be required to transfer the objects from the Gallery to the Library area and make any trolleys or specialist crates required. The plan was to have one decant contract staff member matched with one removal person.

The final staffing complement on contract for the South Hall decant was:

- 3 decant staff (15 day contracts)
- 1 conservator (3 month contract)
- 2 post-decant staff (3 month contracts)
- 3 removal men augmented when necessary for heavy and major moves (11 day contract)
- 1 Documentation Assistant.

Training: The three decant staff had two days' training and two days' practice before the removal firm appeared on site. During that time they were introduced to the Museum, the way the collections were ordered, what they would have to do, how the documentation system worked and how the Museum wanted objects packed. Staff from the Ethnography Department, Conservation Laboratory and the SCC led training sessions and practical demonstrations. The three staff were selected for their interest in museums and objects and their manual dexterity. None of the decant staff needed to be conservators, but as it transpired one member was a furniture restorer and the other two have since been accepted for the University of Durham Masters Course in Conservation. The removal firm was selected by competitive tender and on the basis of their experience with museum objects and by speaking to institutions who had used their services.

The method: When the removal team arrived on site, the three decant staff had their sheets of computer print-outs and their areas of responsibility marked out and were ready to train their removal person counterpart. At the time on the permanent Museum staff, the Keeper of Conservation was the only person available to supervise the decant. The sterling services of a volunteer were also crucial to the success

of the project. The three teams worked together incredibly well and under great pressure achieved their targets within the time allowed.

The Ethnography collections were decanted in two main groups: those requiring fumigation and those that did not.

The Museum has had problems with pest infestations and although a rigorous pest monitoring regime had been in hand for some years, it was decided that before being introduced into the SCC the specimens should be fumigated. The Museum has its own methyl bromide fumigation chamber and this was augmented with a Rentokil bubble. In this way, a bottleneck of objects was avoided going into the SCC through fumigation and up to the post-decant receiving room.

Within these two main groups the objects were selected from the display cases by their type, coded and packed accordingly. Computerised labels had already been produced by the Documentation Assistants and were in position by each object on display. As the objects were removed from display, this label was placed in the bag / box / container with the object and a label was also placed on the outside of the box listing the contents. A large store code was stapled on for easy identification at the SCC. Each member of the decant staff ticked on their list when an object was found and packed. Each showcase group was photographed.

Objects going into storage in the Library were all photographed individually, covered with Tyvek and the photograph and label stapled to the outside. Most of these objects required trolleys. The panels from the balcony wall showcases with their objects still attached were placed upright in position on metal racking, wedged in position by cross-braces, but easily slid out from one end if necessary. Loose objects from these displays were packed separately in boxes and placed on the Library mobile book racking, again, clearly labelled as to which panel they belonged to.

At the time of the decant it had not been necessary to remove the objects from the balcony at the extreme south end of the South Hall. For protection these were covered with Tyvek within the showcases and then the outer frames covered with polythene sheeting.

Post-decant

The objects were moved to the SCC by

the removers where they were fumigated. The removers also returned after each fumigation to carry objects from the ground floor to the top floor (ten flights of stairs) to the post-decant room where they were grouped by store code. At the SCC each object was checked against the computer database and when a space for it had been identified in the storage areas, its location was recorded.

Putting the objects away involved a great deal of repacking and more space management. Some of the larger objects, especially pottery, had crates or trolleys made for them, but Correx (corrugated polythene) boxes were made up for other large, awkwardly shaped objects as the cardboard boxes used to transport them to the SCC were not totally suitable for long term storage.

Finance

As a government funded institution, the Horniman Museum does not carry any insurance cover and obviously with a disaster of this nature the Museum has insufficient resources to cope with the financial scale of the problem. Application had to be made to the Department of National Heritage for additional funding and a full project economic appraisal carried out and submitted to the Treasury for approval to implement the necessary level of works.⁶

1995/96 is a lean financial year for all ministerial departments and although the Treasury approved the full option to create a new basement and to refurbish the gallery structure, the full amount was not available from the DNH. A generous grant from the Museums and Galleries Development Fund (Wolfson Fund) has gone part way towards filling the gap. The Museum is actively seeking sponsorship and other grants in order to complete all the access and finishing works that it would like to carry out in order to explore fully the opportunity presented by such a crisis. As a result of the scale of the problem, a site evaluation carried out for the Horniman Museum has provided a blueprint for developing the space in the Museum for the future.⁷

Making the best of a disaster

From the time of removing the objects from the Gallery to the arrival of the contractors on site on 13th February 1995, the South Hall Gallery was empty. In addition, the heating pipes were cut off and the source of wild heat eliminated. A firm of consultants was appointed to carry

out an investigation into the impact of air infiltration, lighting and the thermal response of the Horniman Museum building on internal conditions. The study was part-funded under the Energy Design Advice Scheme of the DTI. The aim was to assess how the building envelope (particularly in relation to the South Hall) exerts control on the environment and what energy savings, if any, could be made. The empty gallery provided the ideal opportunity to carry out tracer gas and smoke tests. Measuring how the building performs in terms of air changes per hour gives a clearer picture of the additional ventilation, temperature and humidity needs of the Gallery. This was particularly useful to the Conservation Department and the mechanical and electrical engineers in view of the dramatically changed circumstances in the South Hall, with all the wild heat now eliminated.

Throughout the study the Conservation Department deployed relative humidity and temperature sensors in a profile through the Gallery from the vault of the roof to the floor. All this information, plus the results of the tracer gas and smoke tests, formed the final report.⁸

In conjunction with the Department of Environmental Studies of the University of East Anglia, dust samples were taken from the surface of mummy coffins within a display case and also from a Japanese model pagoda that had been on open display on top of a showcase. The samples were analysed by a student at the University of East Anglia and a dissertation presented as part-fulfilment of the degree of Master of Science.⁹

Lessons learned

- The importance of having every object individually identified, numbered and labelled while they are still in the display cases.
- The convenience and time-saving aspect of the need for all the documentation stages to be on computer.
- That time should have been made to co-ordinate the condition survey of the South Hall Balcony (if not of the Main Hall as well) in with the South Hall documentation database.
- The need for a proper loading platform for the van, so that loading and unloading objects was not so treacherous.

- The need for an overall co-ordinator so that if major decisions are changed then the information is passed on rapidly. For example, the late decision that the South Hall Balcony wall cases had to be cleared as well as all the other showcases in the Gallery. This had not been anticipated before 1st April 1994 and therefore had not been calculated in with the decant time.
- Apart from the added workload of decanting the wall cases, in practice another team of two was required. The decant was completed on time, but partially due to the fact that the Keeper and a volunteer doubled up as the fourth team. In any case, a fourth team would have relieved some of the pressure, particularly on the permanent members of staff who were typically working late into the night in order to do their 'day' job.

The new beginning

Faced with such a massive excavation to remove 5 metres of desiccated clay the Museum, within its revised Corporate Plan, set a scheme to develop the space as a whole and in the context of the overall future development of other spaces in the Museum. The works therefore will include the creation of a basement area as a space for a new, improved museum shop, a store and an exhibitions workshop. A new staircase will be constructed down from the existing central staircase to serve the new area. Part of the Natural History Gallery redevelopment had included plans for a lift in the central staircase area. To take advantage of the excavation, the pit for the lift shaft will also be constructed.

The opportunity will also be taken to reinstate the original Charles Harrison Townsend curve to the balcony at the north end of the Gallery. In addition, the balcony at the south end will be extended which will enable the space underneath to be developed as an orientation area with a glazed screen separating it from the main Ethnography Gallery. The Museum would also like to establish a new ramped entrance into the Library from the South Hall Balcony, but further funding is required for this.

As a final touch the Museum would like to reinstate replicas of the original ornate plaster friezes around the columns to the balcony area which were removed in the 1950s and replace the non-sympathetic modern central lights with replicas of the original wrought iron gasoliers.

This overall development of the South Hall,

to tie in with future developments of the Museum and the creation of desperately needed extra space, will also give the Horniman back some of its original Charles Harrison Townsend features which Frederick Johnson Horniman approved of nearly 100 years ago.

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THE RECOVERY OF 130 FIRE AND WATER DAMAGED BANNERS FROM THE FREEMASONS CENTRE, CLERKENWELL: PART 1

RAY KONYN

**The Antique and Fine Art Disasters
Emergency Mobile Unit**

Very briefly, the aims of the Recovery Unit are:

1. To provide an accessible 24-hour early response facility
2. To provide essential equipment and materials in order to stabilise and prevent further deterioration of damaged artifacts
3. To network and co-ordinate a team of competent restorers and conservators who have pre-registered on the database.

We are very grateful to the Conservation Unit who have closely observed the operation from its inception and who have offered guidance and assistance throughout. The Recovery Unit has recently been accepted as a full member of DRN (Disaster Response Network) owned by Stralis, and the Rapid Response Helpline in the Fine Art and Antiques Recovery sector.

We carry a range of equipment which includes portable generators, a 30' field tent, two-way radios, wet and dry vacs, safety clothing, reams of acid-free blotting paper and tissue paper, hair dryers, rolls of plastic and carpet sleeves, emergency food rations as used in the services, and, probably the most useful tool of all, plastic fold-boxes, and so on the list is endless and will be covered in the forthcoming UKIC Manual on Disasters.

We are called in to many diverse situations; we never know what is coming next.

Case history

On Tuesday 24th May 1993 an electrical fault occurred in the top floor Banner Room of the London Masonic Centre at Clerkenwell, London. The Fire Brigade was alerted and controlled the blaze using water jets, finally handing the building back on Wednesday 25th May 1993.

Ellis & Buckle were appointed by the insurers as loss adjusters and James Scott-Brown telephoned us at 4.00pm. It is of interest that a few weeks earlier, James had accepted an invitation to look over the Disasters Unit, the equipment and drying room at our premises near Sevenoaks in Kent. Being an inquisitive sort of chap, he had fired all sorts of 'What if ...', 'How ...', 'When ...', and 'Why ...' questions before he left and the result of that visit provided him with exactly the right damage mitigation information which he put into effect before our arrival.

It was decided that since the building was about to be security sealed and the power was down anyway, it was too late to do anything more that day, although we were ready to go. A safety and overview assessment meeting was scheduled for 9.00am the following day, at which Melanie Camu was requested to report in.

At 9.00am on Thursday 26th May 1993 in the Banner Room it was clear that the flames had curled up the walls and licked across the ceiling, igniting the top straps of each banner, supported on wooden poles, each resting on hooks of a steel cage. The combination of this effect, and sections of the ceiling collapsing onto the racks, had resulted in most of the banners dropping off the poles onto the floor. We can only guess that the top banners would have extinguished the flames of those underneath as the pile increased and this may have been fortunate in preventing a total loss.

We do not know at which point members of the Fire Brigade entered and used their water jets, but needless to say, everything was very wet indeed. It was also raining through the roof which had burnt through. To compound the situation the contractors were anxious to clear this part of the building and Melanie and I had to forcefully prevent them from entering the Banner Room until we had conducted our searches, despite various helmeted apparitions outside the remains of the windows, three floors up, trying to get in. We were given until 2.00pm to be out of the Banner Room and we agreed that this was reasonable.

The task of physically sifting through the debris began and every inch of charred remains was sieved through in our search for remnants. It was clear that more assistance would be required and at 11.15am authorisation from Ellis & Buckle was received to bring in an additional operator, who arrived at 1.00pm. Meanwhile, a couple of complete banners were removed from the builders' skips in

the road, where the contractors had got there first.

At 3.00pm we handed the Banner Room over to the irate contractors and a costings report was telephoned through to Ellis & Buckle.

The final conclusion of this salvage operation is unsatisfactory from a conservator's point of view. Decisions were made which were beyond our control about the fate of the banners; it was decided to re-make them rather than to restore them and the contract was awarded to a banner manufacturing company. The manufacturers have not been forthcoming with photographs or progress reports but some of the original material has been lifted, cleaned and attached to the new banners and the re-making would have been impossible without the evidence provided by the salvage operation. Some banners are, as we understand it, still in a state of limbo, awaiting instructions.

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THE RECOVERY OF 130 FIRE AND WATER DAMAGED BANNERS FROM THE THE FREEMASONS' CENTRE, CLERKENWELL: PART 2

MELANIE CAMU

Private Textile Conservator

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My involvement with the recovery of these fire and water damaged banners started with a phone call from Raymond the day after the fire. On arrival at the Centre I was confronted with the rather desperate scene of lots of little piles of waterlogged and fire-damaged banners. These had all been laid out flat, one on top of the other, on trestle tables in the dining room during the course of the fire. At the instruction of James Scott-Brown of Ellis & Buckle, each banner had been interleaved with sheets of fine plastic and the whole lot overlaid with builders' plastic in order to prevent the banners from drying out too quickly.

Having combed through and sorted the debris, an assessment meeting was held at which decisions were made and a plan of action was devised. The top priority for the Disasters Team was now to carry out emergency treatment on site to each banner and then to prepare them for transport to the drying rooms at base where drying could be controlled and monitored. At this point crates were ordered to box the banners for transport and Raymond set up a generator as the power was still down.

Most of the banners were constructed of silk with linen interlinings and wool backings and were either painted or embroidered, or both, with substantial braids, tassels and trimmings (and padding in the embroidered areas).

Each banner was removed from its pile and laid out onto a table. During the fire, the burning ceiling had fallen in and down onto the racks of hanging banners. Many of the pole sleeve areas on the banners had been singed and at worst burnt and destroyed. This had weakened them and greatly embrittled the top halves of many of the banners. This made careful handling essential. Most of the banners were partially covered with damp, sooty, particulate soiling. The worst of this was removed from each banner by vacuuming using low power with a wet/dry cleaner. Great care was taken not to smudge the wet sooty deposits onto the surface of the

banners. This action was taken to reduce the risk of further staining.

We had been given a list by the Freemasons of the banners so far rescued from the fire. These had been listed as the banners were brought downstairs and laid out onto the trestles. There were 107 identified banners on this list and four unidentified. And so began a nightmare of documentation.

We marked off each banner from the list as we treated it and prepared it for transport. Throughout the course of this operation, more and more banners kept appearing. A couple had been retrieved from a skip and we had unearthed quite a few in the debris and a few had turned up in their bags. Every banner was catalogued and given a brief condition report.

After each banner had been catalogued and given first aid treatment, it was covered with acid-free blotting paper to soak up the excess water and to reduce the risk of colour run. The banners were then separately encased in plastic upholstery bags and carefully rolled in on themselves using rolls of bubble wrap as a support and to protect any vulnerable areas. The bottom edge of the banner was rolled in first and the top edge was placed supported along the top of the roller. Care was taken to ensure that any brass pole furniture, trimmings etc., were not touching any textile area.

We soon realised that further assistance was required as pressure to move out from the site was mounting steadily and the piles of soaking banners on the trestle was diminishing very slowly. (As a measure of the lack of understanding we were receiving, somebody produced banner no. 309 and asked us to have it ready, fully conserved, early the following week. It was now late Thursday, we were filthy, exhausted and somewhat depressed at the prospect of the monumental task still ahead of us.) Time really was of the essence now as there was slight evidence of mildew and of paint lifting.

Raymond sought authorisation from Ellis & Buckle and contacted Paola Camuso from his database, a registered conservator whose studio was 500 yards away. She arrived fresh and ready to go. This created an immediate surge of energy in the team which motivated us to press on with new vigour.

After wrapping, the banners were placed into the rented crates ready for transport. Any intact poles were positioned, where possible, through the carrying handles of

the crates and secured down. Where the poles were too long to do this, they were laid resting on top of the crate. The charged crates were then piled into the van, those crates with extruding poles on the top of each pile, and driven back to base.

On arrival at base my colleague, Naomi Goldberg, was brought in to lay out the banners to dry and to compile a damage report.

The banners were removed from the crates and unwrapped. Where necessary, further vacuuming was carried out to remove any dried ash and soot deposits.

Each banner was labelled and laid out flat on drying grids. The grids form part of a stacking system of shelves which allow for careful monitoring of the drying process. Air is able to circulate freely around each item and the drying is even and controlled. Constant checks were easily made by drawing out a shelf and examining a banner. Fans were used to speed up the drying process, as mildew and flaking paint were evident on the more waterlogged banners, and to prevent further dye bleeding.

The banners had to be assessed and a damage report drawn up. To do this in an organised and effective way we designed a table recording the degree of fire and water damage caused, the condition of each banner and whether or not they were salvageable. The table summarised the condition of each banner into columns which could mostly be given a yes/no or good/bad answer.

The fate of the banners is still to be decided. The question of salvageability was slightly contentious; from a conservator's point of view many could have been conserved and indeed restored, however, as we understand it, most have been re-made.

COPING WITH A FLOODED MUSEUM

JANE HENDERSON

Conservation Manager
Council of Museums in Wales

On Thursday 10th June 1993, Llandudno, a holiday town on the north coast of Wales, suffered severe flooding. Following heavy rain the sewers were unable to cope and in many areas several feet of water covered the ground floor of houses and filled basements with contaminated water. Llandudno Museum was in one of those areas and the basement, which acted as the museum store, was filled with over three feet of water. This report details how conservators 'coped' with the ensuing damage. Unfortunately, the lack of a disaster plan, no curator at the museum, and having no money to deal with the problems, meant that there were severe limitations on the rescue. My dictionary describes the word 'cope' as 'grapple successfully with' and whilst I am sure we grappled with the problems, I hope that this paper can help others be more successful with their disasters.¹

Llandudno Museum is a small, independent museum with a collection based on the Chardon family's private collection. This has been added to with social history material relating to town life and some military material. The collection contained paintings, books, prints, documents, archival material, archaeology, natural history, costume, furniture, ethnography and social history material. The flooding covered one complete layer of shelving and the bottom of the second layer of shelving. Of the material described above, only the furniture escaped completely as it was all on display upstairs.

The flood affected the whole of Llandudno and for the first day after the flood the town was closed off by the Police. Over the weekend the Assistant Director of the Council of Museums in Wales attended the museum and helped the custodian pull objects out of the water and move some material upstairs into the drier galleries. Unfortunately there was no emergency call out list of conservators and no-one could be contacted until 9am on Monday morning. As Conservation Manager of CMW, attempts were made to contact me but as I was out visiting other museums I was unable to get to the flood until Wednesday morning. Llandudno Museum is a four to five hour drive from my Cardiff base and after collecting materials and volunteers the rescue was finally started

on Friday 18th June, more than a week after water first filled the basement. This scenario alone serves to highlight the value of disaster planning even if only at the level of collecting some phone numbers of conservators and others who could help.

The lessons learned in this disaster were extensive but for the purposes of this paper I will discuss the following issues: being on, or drawing up a disaster call out list; conservators' documentation and insurance; the role of specialists in a disaster; coping with a rescue; and techniques used on damaged textiles. This paper will describe what happened at Llandudno (text in italics) and then discuss lessons learned and subsequent recommendations.

Emergency call out lists

As museums begin to compile disaster plans, conservators are being approached to be included on the lists.² Both public and private sector conservators may be approached. At Llandudno we contacted a paintings conservator, Jenny Williamson, of the Glynn Vivian Art Gallery in Swansea and asked her to attend.

Llandudno Museum has no curator. It is administered by trustees and maintained by a custodian who opens the building, keeps it clean and manages the shop etc. The Museum has no budget except its income from entry fees, income from the shop, and any grants that it can apply for. As Conservation Manager of CMW I offer conservation advice to all affiliated museums but have no authority to run a museum. However, as no-one else was in a position to deal with the disaster, I assumed responsibility for the operation. With a degree in archaeological conservation and some experience in dealing with antiquities, there were many areas of the collection beyond my experience. Fortunately a museum development officer and two archival conservators from Gwynedd Culture and Leisure had been approached and had agreed to come and help with the rescue. The lack of a curator or a disaster plan meant that we had no curatorial assessment of prioritising materials in the collection. The areas prioritised were based on our general experience rather than from specialised curatorial knowledge. Fear of dealing with waterlogged paintings, and the suspicion that paintings are often the most valuable part of a collection, meant that I approached a paintings conservator to come and help. When she arrived we agreed the material she should deal with, how long she would spend, and an area to

work in. In the three days she was available she was able to remove all the soaked paintings from the basement, dry them and remove paintings from their frames where appropriate.

The lesson for conservators is that these are issues which should be decided well in advance of a disaster and not on a stressed Friday morning up to your knees in sewage. If you are approached to be included on an emergency list, or are compiling an emergency list, various aspects of financial, management and safety issues should be resolved before you agree to inclusion. A disaster plan should include what a conservator will charge per day, if weekends or evening work will be charged extra, what rates the conservator charges for travelling, and if an overnight stay is required will the conservator claim a fixed fee or will providing a spare bed in a curator's house be acceptable? Will the conservator expect to be paid quickly, or can they wait until insurance money comes through, even if this means the next financial year? Agreement on budget limits may be useful. This should include all the expenses including time, travel and materials and address the question of whether work should be stopped once this figure has been reached. Beyond financial limits other issues should be agreed, particularly reporting and responsibility. In a disaster will the conservator, curator, head attendant or chair of the trustees be in charge? Outside conservators need to know to whom they will be responsible, particularly where a conflict of interests may arise. Ask for a copy of all or part of the museum disaster plan so that you know which aspects of the collection are priorities, what other emergency services will attend and any other procedures which may affect your work. Finally with safety and insurance issues you must consider that disasters are risky events both to people and to objects. Will your insurance cover you if you stand on a painting while rescuing a dress? What if you blow the electricity when you plug in a fan and who is responsible if you or someone else gets hurt? In a disaster the sense of co-operation, heroic effort and coping takes over and these hard-headed business issues can be forgotten.

Insurance

Insurance is a subject which can be seen as tedious, boring or just someone else's problem. Yet if conservators consider the fate of their favourite object being held in the balance of an insurance decision they can see the relevance for them.

*At Llandudno we immediately agreed an estimate rescue figure with the insurers. At several thousand pounds, it seemed a lot at first but simply sending a few bags of waterlogged books for freeze drying at £2,000 m² soon ate into the funds. We considered our work to be the stabilisation of the collection until money could be found to treat it. This meant we had to remove from danger, dry and repack every item. In this process many objects were moved around and reboxed. We quickly discovered that the insurers required an item by item claim which described every object which had been damaged or treated. This is explained in more detail in an article shortly to be published in **The Conservator**. Fortunately, the Chairman of the Friends of the museum and two other museum volunteers were able to come in and begin to relabel every repacked box, to trace accession numbers and to put objects together as collections. Once the information was gathered we were able to produce a list of every object affected by the flood with an estimate of the scale of damage. This information was sent to the insurers who considered it in deciding the claim. No payout was to be made until all the information was presented and we had to leave the museum in a state of limbo with some objects, such as the paintings, in a very vulnerable condition.*

The main lesson from this experience was how important it is to collect systematically the data on every object dealt with in order to process the insurance claim as quickly as possible. Insurers like to see evidence of damage and are as concerned with the carpets as they are with the collection. In our haste to dry out the stores we had disposed of items which were not in the collection by throwing them in a rubbish lorry. Such actions could reduce your claim as insurers may wish to assess the loss on these items. A compromise that we could have considered would have been to photograph non-collection material before it was thrown away. As insurance is normally calculated item by item and not by collection, it may be the case therefore that the insurers will pay more out to have a valuable (market value) item conserved than a non-valuable item. Perhaps items of no market value but great local interest should be prioritised for rescue as you know you will not get money to fix them, whilst you leave your Picassos in the water knowing the payouts will be higher.

Specialist or generalist

This discussion has been organised by the Textile Section, and most textile conservators are keen to learn how to deal

with textiles in various emergency situations. If that is the only problem that you face, you may find yourself well prepared, but are you confident that is all you will be asked?

At Llandudno the restricted budget meant that we could not invite as many specialist conservators as we would have liked. Limitations on space for the rescue, attempts to guess curatorial priorities and which sections of the collections were the worst affected by the floods, all influenced which materials were treated. We decided to treat two groups of material at a time. Two were chosen as we had two rooms with water supplies, so one sink was allocated per group. As a result I found myself organising conservation of books, prints and drawings, followed by textiles and paintings, social history material and archaeology, and so on. This pattern of work meant we could introduce some order into the situation and give people a chance to work on a particular area and develop responsibility for it.

The relevant issue here for textile conservators is whether they would consider giving advice about another category of material if no other specialist is available. It also raises the question of bringing in specialists in stages rather than all at once. If the museum prioritises paintings, a textile conservator may find that the best facilities are being used by someone else. Textiles conservators need to find out, in the event of a shortage of resources such as space, volunteers, money etc., where they will fit in the pecking order.

Coping with a rescue

No-one ever promises that it will be easy but that does not mean conservators need to make it any harder on themselves.

At Llandudno we worked fairly long hours, about nine hours a day and over a weekend. I went out and bought tea, coffee and biscuits straight away and kept the small kettle going. As co-ordinator I spent quite a lot of time walking around informing other people what was going on. One of the archive conservators was practically chained to the kitchen sink and might have felt left out if not informed. We also had to clean the store quite quickly as we had such limited space. This involved scraping and bagging up some pretty foul and disgusting soggy masses. It was impossible to ask people to do this without being prepared to help and so I spent quite a lot of time cleaning and scraping. The sense of everyone pulling together was enough to keep us

going but some worries undermined this sense of purpose. It was easy to feel directionless without curatorial advice on priorities, and worries such as how the financial issues would work out and how to maintain a safe working environment were a drain on energy.

Most of these problems could have been planned away. Decisions made in advance and responsibilities agreed in calm circumstances would make organising a salvage operation far simpler. Beyond this, if nothing else, remember in a disaster to pace yourself, take enough breaks, avoid getting over tired or overwrought and you will probably be far more effective.

Textiles at Llandudno

Treatment of material on site in a disaster presents difficulties in terms of providing the best possible care whilst facing severe restrictions on your work. The description of textile conservation at Llandudno is left without conclusions as this judgement should come from textile conservators and those who wish to use the Museum's collections in the future.

Sodden costumes presented several problems at Llandudno. The first significant problem was gauging how much textile material was in the store. All the costumes and samplers etc were boxed and so it was often necessary to open every box to find out what it contained. This was probably the main reason why textiles were not in the first groups of materials selected. The next problem we found was identifying what the items actually were. Most items had been folded in tissue and once soaked it was necessary for us to unfold the item to find out what it was. Limits on space and taps meant that textiles were cleaned in the toilet. We established a 'conservation lab' by attaching a small piece of hosepipe to the taps and using photographic developer trays as simple washing areas. In order to keep the area clean we rather cruelly restricted its use as a toilet and only allowed people to use it at lunchtime. Most items which had been soaked were washed. This decision, possibly incorrect, was based on the following considerations:

- *the water was contaminated and dirty;*
- *if items were dried and then not promptly and properly cleaned by a conservator, the residues may have been very damaging;*
- *the objects were already wet;*

- any colour run or shrinkage would already have happened.

Unsure whether to soak items with lots of water, or to try to use just minimum amounts of water, we decided to rinse small, flat, simple items and to sponge water through more complex areas. Two slurpex sponges had been borrowed for the rescue and these were used to 'push' water through the textile. After water ran through clean we used them to absorb as much excess moisture as possible. On advice we had purchased the complete stock of nylon tulle from the local market and used this for drying. Several layers were stretched out to provide drying areas with ventilation for flat objects. All costumes were hung on hangers padded with this net, and the clothes were filled out with net. This seemed an excellent method for providing support whilst allowing air circulation. Also the net could be washed easily and dried and re-used.

After all the textiles which had been soaked were drying, we identified all the boxes of textiles which had been in the store. Although these boxes had been above water level they had been exposed to humidity levels of 90-100%, some of them for several days. A volunteer opened every box and touched the tissue and costume to see if any felt damp. Anything which was of any concern was brought out and aired. One of the reasons that we did not air everything was a complete lack of space. For example, the paintings conservator had paintings drying on the floor whilst we had textiles hung on lines above them.

Conclusion

There is no better lesson from a disaster than the need to plan. For conservators, this issue is as important as it is for those responsible for museum or gallery buildings. Make sure that the planning covers issue of budget, insurance and responsibility. If these issues are dealt with, a textile conservator may be fortunate enough to attend a disaster when all they have to worry about is conserving textiles.

References

- 1 Fowler, H W and Fowler, F G (eds), *The Concise Oxford Dictionary of Current English*, Oxford University Press (1964).
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THE ROLE OF THE LOSS ADJUSTER

J A SCOTT BROWN
Ellis & Buckle, Reading

Introduction

The purpose of the talk was to introduce the audience to the role of the loss adjuster in dealing with claims of a fine art nature where restoration, conservation, replacement or repair is required. The talk was aided by slides highlighting actual cases.

Ellis & Buckle are a major firm of UK based loss adjusters with the head office in Reading. They employ approximately 700 staff throughout 50 regionally based offices, and have affiliations in Hong Kong, Australia and Europe.

The Chartered Institute of Loss Adjusters is the official body of the profession. It received its Grant of Arms in 1979 and its Royal Charter in 1961, but its history goes back to the Great Fire of London in 1666, where it is said that the roots of loss adjusting began. Soon after that date fire insurance was introduced which heralded the beginning of the profession. In the early days, managers of insurance companies assessed the amounts of losses and soon independent surveyors or builders were employed to advise on the settlement of building claims. It was not practical for insurance officials to inspect country losses and a certificate that a claim was in order was required by insurers from the minister and church wardens of the parish.

This method of authenticating fire losses continued for over 100 years and was ended by the growth in population following the Industrial Revolution and by other pressures including the multiplication of new fire insurance offices.

By 1800 two or three principal fire offices were appointing independent loss assessors to act for them exclusively. For example a particular auctioning business in London was, in 1790, designated in an advertisement by a leading insurer as its assessor of damaged goods.

Reliance by insurers on their own agents produced frauds and failures and in the middle of the 19th century there were increasing suspicions of arson and fraudulent claims. Other firms of assessors evolved from trades and professions such as builders, surveyors,

valuers, dealers and the like.

There are a number of present day loss adjusting firms that have recorded histories dating back more than 100 years. It was not until 1941 that a number of prominent members of the profession formed themselves into a body of the Association of Fire Loss Adjusters and it was really at this time that the word 'adjuster' came into common usage. Hitherto those individuals had been known as assessors.

The Institute today is still an institute of individual members and not of firms and it has a president who is elected annually and a council of 28 members including the president. The body is not only a disciplinary body but also an examination body and to become an Associate of the Chartered Institute of Loss Adjusters one primarily has to have either passed the Chartered Institute of Insurers exams or hold another professional qualification such as Chartered Surveyor, Chartered Accountant, Associate of the Society of Valuers and Auctioneers, Lawyer, Chartered Building Surveyor and the like. The exams are very difficult with an annual pass rate in the region of 35%.

Definitions of a loss adjuster

It has been said by a past president of the Chartered Institute of Loss Adjusters that a loss adjuster could be defined as:

A person who produces an infinite variety of incomprehensible figures calculated with micro-metric precision from the vaguest of assumptions based on debatable evidence and inconclusive data derived from persons of doubtful reliability for the sole purpose of confusing an already hopelessly overworked group of people who never read his reports anyway.

Alternatively, a loss adjuster is somebody who gives a claimant half of what he asks for and leaves him feeling that he has got twice as much as he deserved.

Very often the work of an adjuster falls within these two definitions and may be summarised as that of an independent claims specialist, who usually takes instructions from an insurer.

Adjusting a claim is the work of ascertaining the proper liability of an insurer for a loss within the terms and conditions of the policy of insurers involved.

The role of the adjuster

The actual roles of the adjuster are legion and range from being insurers' ambassadors to specialist fraud investigators.

Loss adjusters receive their instructions predominantly from insurers or on occasion from brokers when they have authority either in connection with nominations or as a result of handling arrangements on behalf of insurers.

Once instructions are received the insured is contacted and a visit is arranged as soon as possible. At the time of the visit the adjuster ascertains the interest of the party in the insurance and the circumstances surrounding the loss. During that time he should also ascertain whether a liability attaches, ie. whether the cause of the loss is covered under the terms and conditions of the policy. The loss has to come within one of the insured perils such as theft, fire, flood, storm, malicious damage and the like. The adjuster also has to establish at an early stage what the likely settlement of the claim is to be in order that he may inform his principals what sort of money they should set aside to pay the claim once it has been concluded. This is called a reserve.

The loss adjuster is not there purely and simply to hack the claim in half. This is a popular misconception. The adjuster is there to handle the matter on behalf of insurers and to act professionally, impartially and as expeditiously as possible. In this professional capacity he may be able to mitigate any loss that an insured may have suffered. An example of such mitigation was the saving of approximately 150 Masonic lodge banners that had been damaged by fire on 24 May 1993 at the Freemasons' Meeting Rooms, Clerkenwell, Central London. The banners were discovered in a mulch of debris and, after careful sifting, instructions were given to remove the damaged banners from the room they were in to one of the dining rooms that had not been as badly affected by the fire, to lay them out on trestle tables and to interleave them with plastic. Instructions were then given to a specialist restoration company, Antique Restorations, who arrived the following day at the earliest opportunity. This action not only reduced the potential claim from in the region of £300,000 to £170,000, but also meant that many of the lodges retained their original banner and the history behind it, albeit that it had been damaged.

Another misconception is that adjusters are paid on a percentage of what they

save insurers. In fact, if a claim is reduced, the fees are less, which would appear to be a strange business practice as most people would think that in business the idea is to make as much money as possible. This reflects the adjusters' professionalism in dealing with the claim. Adjusters are instructed to ensure that the insured are compensated for their loss, under the terms and conditions of the policy and, should everything be in order, to make sure that they receive what is due to them; no more and no less. The insured should not view an insurance claim as a means of making a profit out of a disaster.

It is essential that the adjuster investigates fully the claim submitted and this is not only in respect of the circumstances, especially when dealing with claims where the adjuster suspects fraud, but also the quantum, which is where specialisation comes in: for instance it is no good sending a building surveyor to deal with a fine arts claim or vice versa.

Case histories

Ellis & Buckle are the nominated adjusters for all National Trust properties.

During the talk, slides were shown of Uppark, a National Trust property damaged by fire, rendering it an almost gutted shell. The property has now been restored to the condition it was in the day before the fire. This is, after all, one of the purposes of insurance - to put the insured back in the position prior to the loss. Much criticism has been levelled against the National Trust for their decision to restore Uppark this way and I dare say had it been dealt with any other way criticism would have been levelled for other reasons. The property was covered by insurance and although the restoration costs exceeded £20m, the Trust received in the region of £14.3m from their own insurers.

A second example, from a National Trust property a few years ago, involved the research, quantum investigation and settlement of a claim for two stolen tapestries. I checked Marillier's archive in the Victoria & Albert Museum and traced the provenance and history of the two tapestries 'Marcus Aurelius' and 'America' from his original hand-written notes. I also discussed the matter with a leading London tapestry dealer who had Marillier's archive on microfiches and it was an interesting exercise to see where the tapestries had been in the last hundred years before ending up at their last but one resting place, their last being wherever the thieves had them secreted or with

whoever has bought them. Following my investigations, the matter was fairly concluded on a cash basis in the sum of about £70,000.

Tools of the trade

The tool of a surveyor's trade is a theodolite; for an accountant, an abacus; and for a fine art adjuster, the Art Loss Register and, more importantly, Thesaurus.

The Art Loss Register is a database in London that records losses logged by insurance companies, loss adjusters, the police and private individuals. These losses are checked against the major auction house catalogues and when a match is made the relevant parties are contacted.

More importantly, Thesaurus is a much larger database on the Isle of Wight that receives every single auction catalogue from every single auction house in the United Kingdom and is now spreading to America and Europe; these catalogues are screened and held indefinitely on the database. Should we deal with a loss of a fine art nature, we can access the database through our on-line facility and search historically to see if the item has already been sold through an auction and, if so, we can try and instigate recovery procedures. Alternatively, if the details are accurate enough, we can log the lost item on Thesaurus. What we have then logged will be checked against every single item coming up for sale in the UK. At the present time this amounts to some £2.5m lots per annum and as the checking is done electronically there is no worry of human oversight. The item will remain on the database for ten years and should a match occur we will be notified immediately and hopefully the item can be returned to the rightful owner.

The dilemma of a fine art loss adjuster

Conserve, repair, restore, renew? When presented with a loss to an item that has not totally vanished either by theft or fire, what is one to do? It would be wonderful to have an open cheque book and regardless of the item's age, value or condition, seek advice from a conservator or restorer and ask what would be the best thing to do, but one has to keep a perspective on these things and retain a commercial view. For instance, if a print worth in the region of £100 was damaged by water and it was going to cost £150 to have it restored or conserved, it clearly would not be economically viable to suggest this. We would therefore have to

recommend that it be regarded as a total loss even though it was still in evidence and that the policy holder be paid for the value of the item less possibly a nominal figure for retaining the salvage. I do not propose to go into the wealth of arguments on what is the value of an item, as a single item can have many different values depending on the purpose of the valuation such as sale, purchase, insurance, willing buyer, willing seller, probate, auction and many others.

In the commercial world in which we live and work, if we were to recommend that our principals paid on every occasion to have an item restored or conserved, depending on the item and the damage, and these costs were either prohibitive or were in excess of the item's true worth, they would not thank us. They would soon dispense with our services and seek the services of another firm of adjusters that might not be as sympathetic and would deal with the matter on a purely commercial footing without the understanding of the delicacy of the matter and the aesthetics of the items. We therefore try to display the judgement of Solomon.

Summary

I trust that the foregoing has been enlightening, although I have really only touched the surface of the role of the loss adjuster. It can be a difficult job: you cannot please all the people all the time and often one's hands are tied by the terms and conditions of the policy and various policy restrictions such as policy limits and single article limits or endorsements and warranties.

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THE JACOB BED: POSTER

GILL OWENS

Conservator

Victoria and Albert Museum

In the summer of 1993, while work was proceeding on the installation of a fire voice alarm system in the Jones Gallery at the Victoria and Albert Museum, asbestos was found in the ceiling. The Gallery had to be cleared while this asbestos was removed.

The 'Jacob Bed' (French, c 1780) had to be totally dismantled, packed and stored. Some good resulted from this essential but disruptive course of action.

Weak areas were found on the front of the blue silk damask bed cover and curtains. These were protected with dyed nylon tulle before the re-erection of the bed. The bed cover was included in the forward planning of the Textile Conservation Section.

The upholstered back and sides were discovered to have insect damage. They were sealed into polythene with the correct size of Vapona Strip until the reinstatement of the Gallery.

There were no original mattresses or bolsters. Instead a wooden construction had been made to support the bed cover. A reproduction straw-filled mattress covered the wooden structure. The cellulose fabric covering the wood was extremely degraded and the structure itself unstable.

The wooden structure was strengthened. The old cotton cover was removed. The wood was isolated. A double layer of polythene wadding, held down with poly-cotton, was fixed over the wood. This did away with the need for the mattress.

When the bed was reinstated in its case, fibre optic lighting replaced the spotlighting.

c Victoria and Albert Museum

17TH CENTURY FLEMISH TAPESTRY: POSTER

TAPESTRY CONSERVATION

DEPARTMENT

Textile Conservation Centre

A 17th century Flemish tapestry on display in Peterborough Cathedral, Cambridgeshire, was damaged by graffiti, the initials of a football team being marked on it in black felt-tip pen.

Conservators were faced with the problem of removing the graffiti in situ from the tapestry which was already generally soiled, wet cleaning not being permitted by the clients. Tests with a range of organic solvents indicated that a 50:50 mix of Industrial Methylated Spirits (95% ethanol / 5% methanol) and acetone was the most effective.

After initial surface cleaning by vacuum suction of the area affected, conservators, wearing personal protective equipment, applied the chosen solvent to the marks. The solubilised ink was absorbed onto filter paper. Cool-blow hair dryers were used to speed up the rate of evaporation, limiting the formation of a ring mark.

The treatment was successful in removing the graffiti from the tapestry without the formation of an obviously cleaner area, but a further wet cleaning treatment is still thought to be advisable.

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DON'T PANIC !: POSTER

LYNDALL BOND

**Private Textile Conservator
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When dealing with a disaster there are additional challenges to those normally found working on site; this poster is not an exhaustive list but it notes some of them. During the past eight years we have dealt with floods in seven places, from a historic house to a colleague's home.

Shock

One may start out dealing with people in shock who are finding it difficult to face the flood, which has often been left behind firmly locked doors.

Immediate problems and safety

The most obvious things are often not checked in the panic; for example, turning off the water. Is it safe? Is there a danger of electrocution? Will the floor, ceiling or roof fall in?

Secondary problems

There can be a secondary problem with water; for example, water in a wet carpet will wick up a textile touching it.

Who takes responsibility?

Who is the owner, and who is in a position to commission conservation work?

Money

Who pays? We have a supply of basic contracts that can be picked up in the workshop and receive a signature, authorising the immediate work and expenditure. One may need large sums of money to pay for materials and sub-contractors at a moment's notice, and the reimbursement of this money may take many months.

Waiting

Waiting for the loss adjusters to arrive may seem frustrating, especially when watching stains travel and wooden

veneers lift. It can give valuable time to prepare for later emergency treatments, getting equipment, staff and accommodation, packing, hiring vehicles and buildings, plus buying materials etc.

Preventing further damage

One example is that old lime and hair plaster is a great deal stronger than modern gypsum plastering and there can be a considerable build-up of water within a ceiling before it gives way. Lime plaster can be reformed, so building teams should be encouraged not to hack all the old plaster down.

Staff

Finding local experienced staff who are willing and able to start work can be a problem at 4.30 on Friday afternoon.

Security

The client's premises may not be secure as a result of the disaster. Security is also a problem when one has moved an extremely valuable textile away from the disaster into an unsecured building overnight.

Whose insurance covers it? Is someone prepared, and able, to camp with the textile overnight if necessary for security? If this is one of the conservation team, what state will they be in for the long day's work the following day?

Miscellaneous observations

Knowing that prompt action can save a textile, the first impulse can be to start work immediately and to work for as long as possible. But sleep is important. One's decision-making can be impaired if tired. An unexpected problem we found was that the water pressure on the estate, which was from a private supply, was lowered at the weekend. This was revealed when we set up a temporary bath to wash a carpet. It was simply a question of asking the Clerk of Works to turn the water pressure up! Coldness can be a problem working for hours in a improvised workshop which is not adequately heated. Food is also essential: the right sort, an adequate amount and at the correct time.

Insurance

Some insurers will not pay for conservation if the cost exceeds the sale

room value of the textile, irrespective of its personal or historical value. Even if one is authorised to go ahead with a treatment, if it has not been possible to reverse the water damage, the client and the insurer may wish to write off the textile, and it might then be thrown away. It can be rather distressing to see this happen immediately after spending a considerable amount of time trying to save a textile.

My conclusion

Dealing with a flood can be challenging. Unexpected people help and can come up with very different solutions to a problem. For example, the antique dealer and horologist working together to set up a syphon to help empty a wash bath. The results can be surprising and successful.

© Lyndall Bond

INSECT INFESTATION - FREEZING: METHOD OF CONTROL: POSTER

VAL BLYTH
Senior Conservator
Victoria and Albert Museum

A poster on this subject was contributed, but unfortunately is not suitable for reprinting here without the photographs.

The text was taken from a paper by Lynda Hillyer and Val Blyth in *The Conservator*, Number 16 (1992) pp 65-77.

