



University  
of Glasgow

Thompson, K., and Wild, J. (2005) *Normansfield theatre scenery: project planning and practical solutions for vulnerable painted*. In: Big Issues, Institute of Conservation (ICON) Textile Group Forum, London.

<http://eprints.gla.ac.uk/58887/>

Deposited on: 10 January 2012

# **NORMANSFIELD THEATRE SCENERY: PROJECT PLANNING AND PRACTICAL SOLUTIONS FOR VULNERABLE PAINTED TEXTILES**

Paper written by **Karen Thompson** and **Jane Wild**, Conservators  
Textile Conservation Centre, University of Southampton.

## **Introduction**

The Textile Conservation Centre (TCC) Conservation Services section has been responsible for the conservation, display and storage of what is thought to be Britain's largest collection of late nineteenth century painted theatre scenery. The treatment of over 100 items of scenery was the culmination of research and planning spanning an 8 year period.

This paper focuses on the challenges of conserving, handling, storing and installing these large and often vulnerable painted textiles rather than supplying a case history featuring technical details of the treatments. (Details of the consolidation of the False Proscenium Border were presented at the AICCM Textile Symposium 2004<sup>1</sup> and we hope to publish more details of other treatments in the future.) This paper discusses the vital role that project management played in planning the ever changing work schedule and motivating colleagues to work for many months often on repetitive tasks. It also describes how clear team communication, flexibility and commitment were vital for a project of this scale.

## **Background**

The scenery is part of Normansfield Hospital theatre in Teddington, London. The hospital was founded by Dr. John Langdon-Down, a pioneer in the care of people with learning difficulties, particularly Down's Syndrome. His approach focussed on training and encouragement of patients through a variety of activities which provided opportunities for them to express themselves rather than merely being confined in an asylum environment. To this end the theatre/amusement hall was built in 1877 for use by both staff and patients.

Normansfield is widely recognised as being one of the most important private theatres in Britain and is Grade II listed. It was designed in the Arts and Crafts style with gorgeous painted and gilded stage surrounds. The stage is the only known surviving complete example of its kind with working grooves which were used to hold the scenery in position on the stage and allowed for quick changes of set.

The stock scenery was made by a variety of scene painters and is thought to date from c.1870-1930. There are over 100 painted textile pieces including: backdrops, borders, flats and walk-through cloths. Backdrops and borders are rolled cloths which hang from wooden battens. The function of backdrops is self explanatory; borders hang across the top of the stage to create the sky/ceiling effect. Flats are canvases nailed to tall rectangular wooden strainers; some have shaped profile board extensions. They are used at the sides of the stage to create a sense of perspective. Walk-through cloths are hybrids, based on an outsize flat which is extended upwards by a rolled cloth. They feature openings for the actors to pass through. The scenery is painted with a variety of images to create woodland, street, country cottage and rococo room and

other indoor scenes. The pieces can be used in a variety of combinations to create a range of settings. The largest single items measure approximately 6 metres square, with the others being either almost as tall or wide.

The Theatres Trust commissioned the TCC to undertake a survey of the scenery in 1997. A team of conservators worked on-site documenting, cleaning and packing as many pieces as possible in a 6 week period and submitted a report including initial proposals for future care. The scenery was then removed to a container in an ex-aircraft hanger whilst its future was decided and the theatre and surrounding buildings underwent restoration and refurbishment.

The hospital was purchased by Laing Homes who undertook to restore the theatre and conserve the scenery as part of a package that included development of the rest of the site for housing. In 2001, they commissioned a TCC consultancy to clarify the future role and conservation needs of the scenery. This resulted in an agreed brief to conserve one set of scenery and reinstate it for static display on the stage and make the rest of the items safe for accessible storage in specially constructed racking units to be housed in the basement of the theatre.

### **Research Phase**

Karen Thompson ACR (TCC textile conservator) and Ambrose Scott-Moncrieff ACR (freelance paintings conservator) carried out research and testing on a representative selection of items, to determine which set should be conserved for stage display. They refined the conservation approach and selected techniques and materials for treatment.

The scenery was extremely dirty from years of use and unprotected storage in the polluted London environment. It was soiled with dust, cobwebs and particulates from gas lighting. The paint was crumbling, cupping and powdering rendering it in a vulnerable state. The condition of the paint was partly due to the continuous flexing of the canvases from use and due to environmental fluctuations and partly to its composition with a low binder to pigment ratio. Many of the canvases also had tears and areas of loss.

The objects with potential for display all required cleaning, paint consolidation and support treatments to stabilise them. All the remaining items, destined for accessible storage, required cleaning and some also needed minimal emergency repairs. Conservation techniques and materials were chosen taking into account not only the need to stabilise the objects for their future roles but also health and safety issues, implications for handling and other practicalities of treating such large painted textiles.

The complex issues presented by treating these huge multi-media objects, with water-soluble and cupping paint on flexible canvas substrates which were often mounted on both sides of strainers, required detailed discussion with colleagues both inside and outside the TCC. Input was sought from painting conservators, object conservators and wood conservators as well as textile conservators.

The sheer number and size of the pieces of scenery made space and logistics crucial factors in defining the treatment proposals. It was clear that a standard approach had

to be identified to ensure that the work could be completed to an appropriate standard, within budget and in the timescale available. The conservation approach was chosen to ensure that the best possible treatment could be achieved for the maximum number of items within these constraints.

The Street Scene was identified as the most attractive and feasible set to display on stage. Estimates for conservation treatment for this and the sets to be stored were based on the results of initial tests and data collected during the research phase, combined with study of the images and brief condition reports from the 1997 survey. A representative time for cleaning/consolidation/support was worked out per unit area and calculated for the size of each object. This proved to be a very effective means of estimating.

### **Storage and Handling**

The practicalities of where to carry out the work and how the items would be stored during conservation were other factors that had to be addressed; it was simply not possible to house this many huge items in the TCC. The option of conserving the scenery on-site was considered as this would have reduced the handling involved in transportation. However, this would also have increased the cost of conservation because of staff time spent travelling. It would also have conflicted with the timing of the restoration work on the theatre.

Since it appeared that conservation would have to be carried out at the TCC it was clear that it would be necessary to store the scenery outside the TCC building. As the scenery was to be stored outside in large metal container units located in the grounds of the theatre during building work anyway, a decision was reached to relocate it to two 6 metre container units in the car park at Winchester School of Art. This did not provide ideal environmental conditions but was a relatively short term expedient. It was also considered better to have the pieces in a container close to the TCC where they could be monitored.

The scenery was delivered to the TCC by a removal firm rather than art handlers. This proved to be a testing situation as it was difficult to convey the importance of these extremely dirty and damaged canvases and how they needed to be handled with particular care.

Storing items in an outside unit brought new challenges and environmental control and the weather became significant factors to take into account in the daily TCC routine. The TCC had stressed the significance of providing a stable environment and the containers provided by the client were lined with polystyrene and wood to provide a degree of buffering against the outside environment. However, this proved to be of limited effectiveness as both the temperature and humidity were prone to fluctuations. Air conditioning units were considered but the practicalities of installing them meant this was not feasible. Dehumidifiers were employed inside the units to prevent the RH% from rising above 55% which was important because the scenery was susceptible to further mould growth if the RH% became too high. Thermohygrographs were placed in the units and the readings were checked every day to ensure the environment was within safe limits. High summer temperatures were a concern in one unit due the direction of the sun. This problem was over come because

it was possible to return a load of treated items to the theatre and house the rest in the TCC building and the more stable container.

Moving the items was a major undertaking both within the TCC and to and from the container units, an activity that was only possible when fair weather conditions prevailed. Moving sometimes had to be done earlier than planned or delayed because of unpredictable weather changes. Handling and moving tested the conservators and TCC building to their limits. Manoeuvres had to be choreographed to ensure that the scenery was kept as stable as possible and were operations that always required at least three and often more people. A mix of tall, short, strong and petit conservators, clear team briefing and good communication were essential for handling the scenery.

Figure 1. Moving scenery to outside storage units

Turning objects during treatment was challenging due to their size and awkward shape. The rolled cloths had to be taken out into the corridor, lifting the ceiling tiles to give maximum height and turning circle, and then returned to the workroom. The fragile nature of the flats meant that they could only be held in certain places when moving them. Labelling of packed items was a key factor in identifying where it was safe to hold them when it was not possible to see their shape and condition. This was crucial to create a foolproof system for TCC staff and the removal firm employed to transport the scenery after conservation.

## **Project Management**

Project management was an enormous task. The main team consisted of six full time conservators working on the project from October 2003 until July 2004, with additional staff and students called in to help at certain stages of the project. Careful and constant planning was necessary to ensure that all the people involved in the project had sufficient work that could go ahead smoothly during the course of each day in order to ensure that financial targets and the completion deadline were met.

Time management was critical. With such a large team working on single items even minor delays in the progress of the work had huge knock on effects. If a stage of treatment was delayed by a technical problem or lack of materials, four or six people stopping work for half an hour could add up in many lost hours. Flexibility and the ability to think on our feet were crucial. The ability to adapt the identified plan of action at short notice was a skill that we became quite adept in as the project developed. We also held regular weekly meetings with the whole team to communicate progress to date and discuss any problems.

The sheer size of the objects meant that four or five people had to be working on one item at times. This had implications in terms of consistency as well as keeping the project moving. It was vital that all members of the team had exactly the same approach. While it was important for the project manager to keep an overview of all the work being carried out, the team were also encouraged to self regulate. They learnt to be critical of each other's work in a constructive way and to ask questions to clarify details of treatment in order to help to maintain the focus of the entire team.

Figure 2. Team work

Good team morale was essential to keep the project moving forward even when the team were faced with weeks of surface cleaning on what seemed to be a never ending list of similar items. It was important to try and assess the morale of the various conservators and, where possible, flexibility was introduced to help keep interest and enthusiasm alight. The teams working on the repetitive tasks were varied so they did other activities at times and worked with groups of different people. Team members were given responsibility for co-ordinating particular tasks, which not only helped with morale but also distributed some of the management responsibilities.

## **Documentation**

In the early stages of the project, the need for a slightly different type of documentation to usual became apparent. This went beyond the normal thorough recording of condition and treatment to include additional information related to tracking the location and the progress of treatment.

It is difficult to imagine losing a 4 metre long piece of theatre scenery but it can be done when it is one of 100 with some pieces looking very similar. Each item was moved from room to room for treatment and, at any time, there could be up to 20 pieces of scenery circulating the TCC building. A list and brief description of the 100 items was recorded in a portable Progress Summary folder. The location of each item was noted every time it was moved enabling all items to be located accurately.

The progress of the treatment of each piece of scenery was also tracked. Coloured stickers indicated: treatment required, treatment completed and highlighted items destined for storage that were stable but would benefit from further treatment if time permitted. The Progress Summary folder had a cotton strap so that it could be hung in a prominent area or carried from room to room, becoming known affectionately as 'The Handbag'.

Treatment documentation became an invaluable method of communication between team members, one which was essential due to the large number of conservators involved in the project. A system was devised whereby conservators could express their progress to the rest of the team using a form of non-verbal communication. Initial brief sketches documenting the condition of each piece of scenery were stored in a workroom based folder. The sketch and associated description recorded damaged areas of wood and canvas, the degree of corrosion of metal components and the progress of all stages of surface cleaning. Melinex™ templates were also used to register how far consolidation treatment had proceeded. These easily accessible systems were fundamental in maintaining a steady flow of work and making sure that aspects of treatment were not accidentally repeated or omitted.

## **Time Saving Devices**

The conservation treatment of 100 huge objects required large quantities of conservation materials. Sufficient preparation time had to be set aside each day to ready the equipment and materials. Alternative processes were developed to reduce the time required and improve the consistency of the materials.

Isinglass was used to consolidate several of the scenery items chosen for display on the stage. It comes in the form of a dry leaf which must be cut into very small pieces and cutting it by hand is a difficult and time consuming task. A coffee grinder was found to be very effective at chopping the Isinglass. The grinder achieved a much finer consistency and reduced labour time by what would have added up to days when spread over the whole project.

Up to four conservators at a time would work on consolidation of the large rolled cloths. The consolidant solution needed to be kept warm and at a constant temperature. Baby bottle warmers provided an excellent bain-marie system. They were small and sufficiently compact for each conservator to have close by on a trolley, as is required for easy and flexible access when working on large objects. They also proved to be safer than the hotplates that have been used on previous occasions.

Adhesive support treatments were required for the back drop and border cloth of the Street Scene, items that would be hung for display on the stage. The treatment required the use of 15 metres of support fabric and adhesive film. A commercially prepared adhesive (Beva™ 2µm) film was chosen because it provided a consistent and strong support for these heavy textiles. Initially it was proposed that the adhesive film be attached to the support fabric using a hand-lining iron. However it became clear that this would be a very time consuming process because of the large amount of fabric. Southampton Art Gallery generously allowed the TCC to use their Willard © heated suction table, which produced excellent results and reduced the preparation time by half.

### **Work On-Site**

It was necessary to undertake some of the surface cleaning and emergency repair work on-site at Normansfield because it wasn't feasible to store all the rolled cloths, mounted on their long battens, and the massive and semi-rigid walk-through cloths in the container units at the TCC. The theatre auditorium provided a large space that allowed work on several items at one time. The rolled cloths were cleaned, re-rolled and prepared for storage. Two 8 metre long storage boxes were built *in-situ* behind the stage to house the rolled cloths. After cleaning and emergency repairs the walk-through cloths were packed in Tyvek™ and stored behind the stage.

A vertical compacting racking system, incorporating 32 sliding units, has been purpose built to store the flats in the large basement space under the stage that also houses a museum. This racking system provides researchers and other visitors with access to both faces of the many double-sided flats. The TCC was involved in early discussions of proposals for the racking and identified the need for a smooth running system that would not cause vibration damage to the paint.

The flats are held in frames each measuring 5 metres in length and 1.5 metres in height and there are two frames to each sliding unit. Unfortunately, the units were designed and built without further consultation. The scenery was found to be too fragile to withstand clamping around all 4 edges and this, coupled with insufficient access to insert items into the racking, necessitated the need for modification. A good solution involved the use of strategically positioned cross braces. The metal frame is

lined with Plastazote™ to prevent it from damaging the paint and further strips are used to cushion the metal braces.

64 fabric covers were made to encase the individual units of the racking and protect the scenery from light and dust. Each measured 5 x 3 metres and therefore required 640 metres of fabric in total. The covers were made from unbleached calico with a continuous strip of loop fastener sewn along the top edge and tabs on the lower and side edges. The production of the covers was a major undertaking due to their size, weight and quantity needed. A space with large tables and industrial sewing machines was required to make the covers. The Fashion Department conveniently located next to the TCC at Winchester School of Art proved ideal.

Figure 3. Storage units for scenery flats

### **Installation of Stage Scenery**

As mentioned above, the scenery that was chosen for static display on the stage received full conservation treatment at the TCC. The stage scenery includes the Street Scene set, with 4 flats and a backdrop, and the False Proscenium set, which includes a border cloth and a pair of hinged flats with functional inbuilt doors. The installation of the scenery on the stage was carried out in collaboration with David Wilmore, a well known theatre consultant who had carried out the restoration of the stage mechanisms. His knowledge of the workings of a Victorian theatre was invaluable in understanding how these huge and unusual items should be displayed on the stage. The installation was an exciting culmination of the many months of work on the project.

To install the flats they had to be lifted vertically into their correct orientation. Five people were required to carry this out, a heart in mouth moment, as the strainers are not rigid and flex. Once upright the flats could be manoeuvred into position in the original groove system in the rafters.

The Street Scene backdrop and False Proscenium border hung from battens for display. Initially, the plan was to re-attach the cloths to the original wooden battens using hook-loop fasteners thus avoiding the need to nail through the painted fabric. This would also have provided an easily adjustable hanging mechanism. However, based on his prior experience Wilmore advised that hook-loop fasteners would not be sufficient to hold the heavy weight of the rolled cloths. The hoisting action used to raise them into position is an unavoidably jerky movement and could cause the hook-loop fasteners to pull away from each other. The solution involved adding an extension of linen lining fabric to the top of the backdrop and border which was used for nailing them to the battens. This produced a strong method of attachment which did not damage the paint, would not fail over time and was historically accurate.

### **Conclusion**

Prior to installation, the refurbished stage had looked magnificent but was lacking something fundamentally important to any theatre – the scenery. Installing the scenery breathed life back into the theatre. Today visitors can see all aspects of a



small Victorian theatre in context and imagine how it might have functioned. The full collection of flats is accessible for study in its bespoke storage system.

The theatre and its building are now in the care of the Langdon Down Centre Trust and is the headquarters of the Down's Syndrome Association. The scenery is part of the living museum which is being developed in memory of Dr Langdon-Down, one which charts the history of the hospital and its patients. Today the theatre hosts many activities which include ongoing work involving people with learning disabilities. The TCC hopes to continue working with the custodians in creating displays which will help people to understand the historic scenery.

Conservation of the Normansfield theatre scenery was a huge, complex and challenging project spanning a long period and involving many dedicated individuals from first to last. Careful project management, thorough documentation and clear communication have shown what can be achieved on a major and initially quite daunting project. Despite some setbacks and constant technical challenges, excellent team work, quick thinking, hard work and commitment, as well as a good sense of humour have been key factors in the successful completion of this fascinating project.

Figure 4. The theatre today with conserved scenery

### **Acknowledgements**

All colleagues, from and outside the TCC, who provided invaluable information and encouragement during the of the project and, in particular, Amber Rowe, Carla Petschek and Dinah Eastop. Peter Longman and John Earl of the Theatres Trust for commissioning the 1997 survey. David Wilmore and Paul Boyes for their help with reinstallation. Laing Homes and Bourne Wood Partnership for commissioning the conservation work. Carol Boyes Director of the Down's Syndrome Association for her enthusiasm and support.

### **Notes**

1. Jane Wild. 2004. 'Isinglass: Consolidating Powdering Pigment on a Painted Linen Border at Normansfield Theatre'. Preprints AICCM Textile Symposium 2004. Melbourne, Australia.