

THE ZIBBY GARNETT TRAVELLING FELLOWSHIP

Report by Nikki Chard



**Textile Conservation
At Te Papa Tongarewa, Museum of New Zealand, Wellington,
New Zealand**

15 June - 22 July, 2011

Contents	Page
Introduction	3
Te Papa Tongarewa, Museum of New Zealand	5
Conservation at Te Papa	7
New Zealand in Vogue	8
Oceania	9
Titi treatment	13
Outside of work	19
Conclusion	22
Bibliography	24

Introduction

My name is Nikki Chard, and I am a twenty-seven year old British student studying for an MPhil in Textile Conservation at the University of Glasgow. I undertook my internship during the summer break between the first and second year of study. It is my aspiration to gain employment in textile conservation following my graduation next summer, but most importantly I would like to have developed a wide range of skills and problem-solving abilities to become a successful and confident textile conservator.

I intend to achieve these aims through completion of my studies in textile conservation and I am fortunate to have been given the opportunity to study on the new programme for textile conservation at the University of Glasgow, having formerly been located in Winchester. The course consists of two years of study, where conservation theory, chemistry and textile conservation techniques are taught to provide a good grounding in the practical skills and analytical problem-solving abilities required to work as a textile conservator. Textiles have been provided from Glasgow Museum's collections enabling the students to experience working on genuine museum objects, alongside the vast range of textiles in the Textile Conservation Centre's Reference Collection.



Figure 1: Wet cleaning a textile as a student at the University of Glasgow

It can take many years of practice to gain the judgment and decision-making abilities to become a competent textile conservator and although I am able to practice both my hand skills and test my problem-solving capabilities on my course, I feel it would be beneficial for my career to gain as much experience within a professional conservation environment before I seek employment. My aim over my summer break was to consolidate the skills I have learned through an internship, and I was particularly interested in widening my knowledge of textile conservation by working at an institution where the textiles are both compositionally and culturally different to those that I am used to working on in the UK. I am hoping that any new techniques and knowledge that I learn from this internship will help me in my future career and will be viewed favourably by employers.

I chose to do my internship at Te Papa Tongarewa, Museum of New Zealand in Wellington following a recent visit to the country and museum, where I developed a real appreciation for Māori culture and artefacts, and it had been my desire since that visit to try to find the opportunity to experience working in the New Zealand heritage industry. I arranged my internship directly with Te Papa, for a period of just under five weeks, to work in the textile conservation studios during a busy period of preparation for a forthcoming exhibition.

The total cost of my internship at Te Papa was £1771, and the Zibby Garnett Travelling Fellowship awarded me £1600. Working throughout my 2010 Christmas break raised the additional funds. Nell Hoare, of the Textile Conservation Centre Foundation, encouraged me to apply to the Zibby Garnett Travelling Fellowship.

Te Papa Tongarewa, Museum of New Zealand

New Zealand (Māori: Aotearoa) is made up of two islands, the North and the South Island, and is located in the south-western Pacific Ocean. Te Papa Tongarewa is the national museum and art gallery of New Zealand and is situated in the country's capital city, Wellington, at the bottom of the North Island. Te Papa Tongarewa is interpreted in Māori as 'our container of treasured things and people that spring from Mother Earth here in New Zealand'.¹ The museum prides itself on its bi-cultural approach through its representation of both indigenous and non-indigenous New Zealanders: 'Tangata Whenua (Māori, the indigenous people of New Zealand) and Tangata Tiriti (people in New Zealand by right of the Treaty of Waitangi)'.²



Figure 2: Left: A map of the North and South Islands of New Zealand, with Wellington and other major cities highlighted (Image source: <http://www.maps-for-free.com/>) Right: The main entrance of museum building

¹Museum of New Zealand Te Papa Tongarewa, 'Meaning of Te Papa Tongarewa', Museum of New Zealand Te Papa Tongarewa, <http://www.tepapa.govt.nz/AboutUs/history/Pages/MeaningofTePapaTongarewa.aspx> (accessed 29th August, 2011).

² Museum of New Zealand Te Papa Tongarewa, 'Our History', Museum of New Zealand Te Papa Tongarewa, <http://www.tepapa.govt.nz/AboutUs/history/Pages/default.aspx> (accessed 29th August, 2011).



Figure 3: Location of Te Papa on the waterfront

When I visited Te Papa I was extremely impressed by the museum and its bi-culturally sensitive approach, plus the way the collections communicated to a variety of audiences. The exhibits span five floors and are not only educational, but are also fun, interactive and engaging for all ages, covering Art, History, Pacific, Māori, and Natural Environment.

These five themes also describe Te Papa's five main collection areas. Many of the textiles I saw were objects from the Pacific collections, notably those collected by Captain Cook during his Pacific Voyages of the eighteenth-century. The Māori taonga (treasures) are particularly significant, and Te Papa provides the expertise and resources to care for and allow access to these collections, whilst consulting and working closely with iwi (tribes) to whom the taonga belongs, to ultimately acknowledge the spiritual and cultural connections of taonga with their owners, makers and ancestors.³

³Museum of New Zealand Te Papa Tongarewa, 'Māori Collection' Museum of New Zealand, Te Papa Tongarewa, <http://tepapa.govt.nz/ResearchAtTePapa/CollectionCareAndAccess/HistoryOfCollections/Pages/Maoricollection.aspx> (accessed 29th August 2011).

Conservation at Te Papa

Conservation work on Te Papa's collections was carried out in well-equipped studios situated around a fifteen minutes walk away from the main museum building, where the following conservation disciplines are represented within Collection Services: textiles, objects, paintings, frames, and paper. There is also a preventive conservator, plus a team of object support specialists who create bespoke frames and mounts for artefacts, and devising solutions for storage and transit. I was fortunate to meet nearly all of these people, and found them all to be welcoming, friendly and helpful.

I worked closely with the three textile conservators in the department: Rachael Collinge, Rangi Te Kanawa and Anne Peranteau, who was my placement supervisor. I am extremely thankful to all three who helped to make my internship a really valuable and useful experience, especially during a busy period of conservation for a forthcoming exhibition.



Figure 4: The textile conservation studios at Te Papa

New Zealand in Vogue

One of the first tasks I was given was to 'pad out' mannequins to mount dresses on that were featuring in the new Te Papa exhibition, *New Zealand in Vogue*. The exhibition showcases designs and creations for garments and accessories by New Zealand designers during the period of 1957-1968, when New Zealand had its own *Vogue* magazine. I was slightly apprehensive about this task as I had minimal costume-mounting experience, but it proved to be a useful introduction to this common textile conservation procedure as the dresses were comparatively modern, resulting in them being in a good condition, plus the silhouettes of this period were less challenging to replicate on the mannequin than an older garment could be.

Anne had already mounted all the other dresses in the exhibition prior to my arrival at Te Papa, so her experience was useful in ensuring that we could perform the tasks efficiently but effectively. The primary aim of costume mounting is to provide support for the costume so that it is not placed under any undue stress whilst on the form, as well as to ensure that the garment is displayed to its full potential. Fortunately, the dresses already fitted well on the standard-sized forms so using polyester wadding, I simply padded out the hips and stomach area to create a more realistic silhouette for the dress. I covered the wadding to hold it in place with a nylon slipcover that was cut appropriately around the arms and neck to reveal the areas of the mannequin that represented the flesh. It can be difficult to manoeuvre the dresses onto the form without damaging it – especially difficult with fragile costume – and Anne demonstrated a useful approach to this problem that involved slowly easing the dress on without pulling at it. A petticoat made by a volunteer was added to support the skirt and enhance the look of the dress. Although brief, this task helped me to appreciate the deadlines involved in preparing for an exhibition as well as enhancing my understanding of costume mounting, a very useful skill to acquire as a textile conservator.

Oceania

Te Papa was preparing for a temporary exhibition entitled *Oceania: Early Encounters*, collaborating with Wellington's City Art Gallery to explore the encounters between Pacific, Māori and Europeans during the eighteenth and nineteenth centuries. The exhibition was appropriately timed to coincide with the Rugby World Cup that is to be staged in New Zealand throughout September and October 2011, and to resonate with tourists who were to 'encounter' New Zealand and its history and culture.

The artefacts featuring in this exhibition afforded me a unique opportunity to interact with Māori textiles, to learn about their significance, materials and construction, and to help conserve them. Many of the textiles were already in a good condition and did not require much conservation, but all required surface cleaning to ensure they were free of loose particulate soiling before going on display. Particulate soiling can be damaging to textiles in a number of ways: particles can cause mechanical damage to textile fibres, the textile can lose its 'handle' and become inflexible, plus particles can become a food source for insects. The visually disfiguring effects of the soiling can also be an issue.

As the weeks progressed, I had the opportunity to surface clean a large selection of Māori and Pacific textiles, including whariki (woven mats), many pieces of tapa (bark cloth), tivaevae (ceremonial quilts), a kete kiwi (basket with kiwi feathers), and various Māori cloaks. Most of the textiles were surface cleaned with a low-suction museum vacuum cleaner or dental aspirator and a soft brush, whereas more robust or larger textiles could be cleaned with a more powerful vacuum cleaner.



Figure 5: A tivaevae, a ceremonial quilt from the Cook Islands, during surface cleaning

Surface cleaning these textiles meant that I could get a closer look at their construction, which was particularly useful in helping to understand Māori weaving techniques. I am especially thankful to Rangi Te Kanawa, who was extremely helpful in informing me about the construction and significance of these various Māori textiles, and who allowed me to observe her at work conserving these artefacts. Rangi also provided me with useful information about the traditional black dye used on various Māori textiles, a combination of tannins from bark and paru (mud rich in iron), which can be problematic for conservators as the acidity of the dye can cause fibres such as muka (flax fibre), to quickly degrade. Methods to consolidate and stabilise these dyed fibres are being investigated, which Rangi is also involved in.

A contemporary nylon Māori flag to be displayed in *Oceania* featured some disfiguring stains, so together with Rangi, I used a vacuum suction table to clean these areas of the flag. It would have been more time-consuming to wet clean the entire flag, so it was considered more efficient to locally treat the stains. We used a detergent solution of Lissapol applied with a brush, and flushed through with de-ionised water, to reduce the intensity of the

stain. It was challenging to both remove the stain but avoid spreading the stain outwards which could cause rings to appear when dry, but the suction table helped to draw the detergent solution through the textile, so it was much easier to control the process. The flag was much cleaner as a result of the treatment, and it was interesting for me to experience the benefits of using the suction table.



Figure 6: Localised cleaning of a Māori flag on the vacuum suction table

Te Papa contains many examples of tapa in its collections, and I surface cleaned a number of these. Tapa is made in many of the Pacific Islands and is constructed from the inner bark of trees such as the paper mulberry tree, which is beaten until the bark fibres become flat and thinner, and form a large sheet. The tapa is often painted, and the designs on the cloth are unique to each island group. Having previously trained as a paper conservator, it was of particular interest to me to understand how tapa was conserved and exhibited, and I was fortunate to observe the paper and textile conservators in undertaking this task. Both Japanese paper, a strong, lightweight and long-fibred paper from the paper mulberry tree, and Cerex®, a spun bonded nylon which can be custom dyed and laminated, can

be used as patch supports for damaged areas of tapa, and adhered to the cloth.

Hanging the tapa is also a challenge; unlike other textiles, Velcro cannot be sewn to it as the resulting stitch holes can weaken the cloth, so covered magnets are a common alternative. There were many examples of tapa to be hung in *Oceania*, so I was required to cover magnets with Japanese paper, toned with acrylic paints and adhered to the magnet, to provide a strong, secure and visually inconspicuous solution. This was an interesting exercise in identifying how many magnets are required to adequately support tapa, as well as testing my colour-matching abilities to create an effectively toned piece of Japanese paper.



Figure 7: The toned Japanese paper discs before adhesion to the magnet. A completed magnet is to the left.

Titi treatment

I spent the majority of my weeks at Te Papa undertaking a challenging stitched stabilisation of a Samoan dance skirt, known as a titi. The titi was created for Edward, Prince of Wales, later King Edward VIII and Duke of Windsor, to commemorate his visit to Samoa in 1920.⁴ The titi consists of a skirt of hibiscus bark fibre, secured to a waistband featuring an appliquéd union jack design.



Figure 8: The titi before treatment. © Museum of New Zealand Te Papa Tongarewa, Wellington.

The titi was intended for display on a three dimensional form in the *Oceania* exhibition, and required conservation to ensure it was safe to be exhibited in this manner. The hibiscus bark fibre of the skirt was particularly brittle, and the fibres detached from the skirt easily. As the titi could be better appreciated as an item of clothing on a form, it was decided that the potential loss of more fibres was worth the risk to display it vertically, rather than flat, plus the exhibition was planned for a relatively short period

⁴ Museum of New Zealand Te Papa Tongarewa, 'Collections Online' Museum of New Zealand, Te Papa Tongarewa, <http://collections.tepapa.govt.nz/objectdetails.aspx?oid=151267&term=titi> (accessed 4th November 2011).

of time, at three months. It was understood that the waistband was created from finely woven woollen cloth, but was now in a poor condition due to the many holes caused by insect damage, and not only were the holes compromising the stability of the skirt, they were also visually disfiguring. The dyes used on the fabric of the waistband were differentially faded, which became apparent when investigating the concealed areas within its many creases.

My first task was to choose a support fabric to create custom dyed support patches for the areas of loss. To complement the weave structure and material of the waistband, nun's veiling was selected as an appropriate support fabric, with Dukeries nylon net for the protective overlay. The waistband had faded differentially from a vivid blue to varying shades of blue and green, so it was challenging to create an appropriate shade of dye for the support fabric. Dyeing support fabrics can be a lengthy process for a textile conservator, as the exactitude of the colour is important, and the process itself is time-consuming. My experience of dyeing was reasonably limited, however I had become accustomed to researching a recipe and recreating it, but the dearth of existing green/blue recipes meant that it would be my responsibility to devise a new recipe from scratch, and hope it proved successful.

I formulated a recipe and dyed eight samples of the nun's veiling, and eight samples of the nylon net, using the same combination of colours of Lanaset® dyes, a range of synthetic dyes with reliable fastness. It was pleasing to discover that my nylon net samples were suitable, but only one of the eight Nun's Veiling samples was useful for the more bluish areas of fading on the waistband. It can be disheartening to invest so much time in the dyeing process, only to discover the colours are inaccurate, so I was very glad that the second attempt was much more successful. My second attempt involved modifying the shades to include more green tones, which matched the damaged areas much more effectively. It is common to firstly dye small samples of fabric, and then choose the appropriate sample shade to recreate

on a larger piece of fabric. However in this instance, I decided to make my samples much larger, primarily to save time in the event of success, and also to provide me with a range of varied samples to choose from to match the varying shades of fading on the waistband.



Figure 9: The dyed samples of nun's veiling and nylon net, which after one dyeing attempt are almost accurate enough to be used

I found it useful to 'map' the areas of damage to the waistband by tracing the shapes onto a sheet of transparent Melinex®, which then helped me to consider the size and location of each support patch. The patches were to be inserted under the fabric of the waistband, then sewn in place using threads drawn from woven polyester Stabiltex®. The Stabiltex® was a good colour match, and strong enough to use to fix the patches in place. A commonly used conservation stitching technique known as 'couching' was employed, to ensure that the patch was adequately secured in place and the damaged hole stabilised.

The holes ranged in size from the size of a two-pence piece to pin holes, and it required precise planning to decide where to insert the patch, how to do so without causing any further damage, and where to sew the patch in place. The fabric was very damaged, so it was important to consider where the

stronger areas were in which to sew into, and prevent further harm to the weakened areas. It was important to consider that whereas I was sewing the patches in place when the titi was laid out flat, it was ultimately going to be mounted on a three-dimensional form, so the resulting tension would require the patches to be sufficiently secured to prevent them from either moving around, or dislodging, thus jeopardising the stability of the titi.

It was frustrating to discover that the nun's veiling frayed very easily when cut, and I had difficulty attempting to insert the patch into the holes without the patches fraying further. It was suggested that either a solution of Paraloid B72 and acetone, or a coating of matt acrylic onto the patches would help to stiffen them and prevent them from fraying. I experimented with coating the entire patch in both solutions, however this resulted in the patches becoming too stiff, which could be hard to insert and potentially damage the waistband. I also found that the matt acrylic had an undesirable sheen, but coating just the edges of the patches with the Paraloid B72 solution was much more effective, as it allowed me to cut the patches with less fraying, but they still retained their flexibility. This was a really useful exercise for me and vastly improved both the efficiency and the success of the treatment.

Once I had secured the patches in place, I then sewed a layer of the dyed nylon net over the top of the blue areas of the waistband, to function as a protective overlay. Nylon net is beneficial as it is flexible and hard to perceive when on the textile, and as the waistband was not completely flat, it was easy to manipulate it to conform to undulating surface of the fabric.

The next task was to infill the areas of loss from the appliquéd flag design, and provide support to these areas. Once again, I had to dye the support patches, again creating a recipe from scratch, and was thankful that this only took two attempts to achieve the correct colour. By dyeing the nylon net a more golden tone, and the patches a red-brown tone, I was able to overlay the net to blend and alter the colours to reflect the tones of the damaged

original fabric. These patches were inserted and then sewn with dyed red hair silk, with then net secured over the top. The Union Jacks were even more damaged than the blue areas of the waistband, and it was a demanding task inserting and securing the patches in place, as I had to thoroughly consider the options for insertion and stitching locations to ensure the stitches would be secure, and not cause any damage to the original fabric.



Figure 10: The completed stitched supports for the Union Jacks

The final task was to machine-stitch the 'loop' side of the Velcro to cotton tape, and then using a herringbone stitch, secure the tape to the back of the waistband of the titi. The 'hook' side of the Velcro was attached to the mount, which was designed to support the titi once on display, and visually suggest a human waist wearing the titi. Although I did not have the opportunity to actually install the titi for the exhibition, I had to consider how easy it was for someone else to attach the titi to the mount, and then take it off again, with minimal handling. I solved this problem by sewing the Velcro in four sections, so that one could use to areas where there was no Velcro to help manoeuvre it onto the form, and then detach it from the hooks more comfortably.

The titi took around two and a half weeks to treat, and I was very pleased with the final result of the treatment. This was by far the most challenging conservation treatment I have undertaken during my training, and it was extremely useful for me to have the opportunity to work on such an exciting and demanding object. I certainly feel that my decision making and problem solving abilities have improved as a result of this treatment, as I was constantly evaluating my practice. It was heartening to devise my own solutions to the problems I encountered, and my confidence in my abilities increased as a consequence.



Figure 11: The titi after treatment. © Museum of New Zealand Te Papa Tongarewa, Wellington. Photograph by Kate Whitley, 2011.



Figure 12: The titi on display in *Oceania*. © Museum of New Zealand Te Papa Tongarewa, Wellington. Photograph by Kate Whitley, 2011.

Outside of Work

Having previously travelled around New Zealand in 2009, I was already familiar with the country and culture, and had enjoyed many of its heritage attractions and outdoor pursuits. My previous trip to Wellington had been marred by rain, and I had not had the opportunity to visit many of the sites in and around Wellington – except for Te Papa, so this was a fantastic chance to experience the city. There is a saying in Wellington that you cannot beat it on a sunny day, however its reputation as ‘Windy Wellington’ is not without foundation, and a wet and windy day can be a frequent occurrence! That said, although it was winter when I visited, I enjoyed many beautiful sunny days.



Figure 13: Wellington Harbour on a sunny day

I lived with a lady who provided ‘homestay’ accommodation for females, and who made me feel very welcome. She had a lovely single-storey villa in the suburb of Melrose, and generally had international students to stay, with most trying to improve their spoken English. During my stay I shared her house with a French girl, a German girl, and a Belgian, who were all a similar

age to me and were very friendly. They all informed me that they enjoyed my English accent as it helped to improve their grasp of the language, and it was a good exercise for me to reflect on my knowledge of English grammar to help answer their questions!

I ensured that I filled my weekends with exploring Wellington and the surrounding areas, and I really enjoyed learning more about the history and culture of Wellington through visits to the Wellington Museum of City & Sea, the Petone Settlers Museum, the City Art Gallery, as well as further visits to Te Papa. I am a keen photographer in my spare time, so visits to the City's Botanic Gardens, its bays, and a local wildlife sanctuary gave me an opportunity to appreciate Wellington's natural side. Wellington is also known for its café culture, and it was one of my pleasures to enjoy coffee and homemade orange and date scones, particularly in one idyllic location near where I lived that overlooked a bay.



Figure 14: A delicious hot chocolate courtesy of Maranui café staff in Lyle Bay



Figure 15: Lyall Bay, near where I stayed

I was fortunate to have the opportunity to participate in a series of Māori pronunciation lessons, organised for Te Papa employees to understand the Māori language. This was really useful, and gave the objects that I was working with greater meaning through being able to appreciate and understand the stories that the words originate from.



Figure 16: A New Zealand tree fern

Overall, I found Wellington an attractive and exciting place to stay, and it had a strong arts and media scene. As a capital city it is comparatively small, but has integrity and charm, and all the Wellingtonians that I encountered were friendly.

Conclusion

I thoroughly enjoyed my internship at Te Papa, and felt like I learned so much to improve my existing skills and knowledge. Having the opportunity to conserve the titi was particularly valuable as my abilities were constantly challenged, but I felt so much more confident about working on my own initiative as I progressed through the treatment. My objective to gain an appreciation of Māori textiles and the various treatment options was fulfilled, and I feel that I have broadened my knowledge of their cultural significance and construction alongside this. My only disappointment was that I was not able to participate in the later installation of *Oceania*, as this would have been an opportunity to expand my experience of working within a museum setting and the types of activities this entails. Five weeks felt like they went very fast and I regretted that my time constraints permitted me from arranging a longer internship and experiencing more.

I was extremely impressed by all of the textile conservators that I worked with, and was grateful to them for the trouble they took to include me in discussions, for allowing me to observe their conservation work, and for treating me like a colleague and a friend. It was a very busy time for the conservators, so I was particularly thankful to Anne, who not only impressed me with her knowledge and abilities, but also for her patience and helping to make my internship so enjoyable.

Lastly, I am indebted to the Zibby Garnett Travelling Fellowship for making this internship financially possible. I am proud to have been chosen to receive a travel grant and to be associated with the Fellowship.



Figure 17: From left: Rachael Collinge, myself, Anne Peranteau in the textile conservation studio

Bibliography

Museum of New Zealand Te Papa Tongarewa,

<http://tepapa.govt.nz/Pages/default.aspx> (accessed 29th August, 2011).

Images

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