



## **Contexts for Conservation**

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### **Treating a Century Old Silk Lithograph**

**Victoria Gill & Alexa McNaught-Reynolds**

#### **Abstract:**

The National Library of Australia's recent Centenary Exhibition included a framed silk lithograph from a private lender. On arrival at the National Library concerns were raised and the frame was opened for examination. What was discovered was a silk in need of urgent treatment. Immediate discussions were held on whether the National Library should treat a privately owned item with such a limited time frame. The course of treatment also caused some debate as to whether to treat the object as a whole, frame and silk, or treat them as separate items. A treatment plan was submitted and accepted by the owner as well as the National Library team; it was successfully carried out and was a star showing in the exhibition.

#### **Keywords:**

Silk lithograph, Marion Mahoney Griffin, Lining, artist intent

#### **Introduction:**

The National Library of Australia's recent Centenary Exhibition 'Dream of a Century: the Griffins in Australia's Capital' included a number of items from a private lender. One of these was a silk lithograph by Marion Mahoney Griffin mounted into an original frame also designed by Marion Mahoney Griffin. It is believed to be the last known surviving silk forest lithograph still in its original frame.

The collection arrived at the National Library, two weeks before the exhibition was due to open. The consultant conservator immediately raised concerns about the condition of the silk. There were visible water stains and soiling, and what appeared to be a few mould spots. Concerns existed that once the object was on display the mould could become active behind the glass with the risk of trapped moisture from previous storage conditions in Sydney unknown. After opening the frame, the issues, which were quite numerous, brought on the discussion of whether it could be displayed in the upcoming exhibition. To include it in the exhibition would mean that urgent treatment was required, and yet, as an object from a private collection it was outside normal parameters for the National Library. This was a conservation challenge requiring decisions that would test the aesthetic of the object, ethics and the owner's courage.

## **The Exhibition and the Object:**

The Exhibition 'Dream of a Century; the Griffins in Australia's Capital' illustrated the life and works of both Marion Mahoney Griffin and her Husband Walter Burley Griffin and their contribution to Australian architecture and landscape.

Their partnership won the competition to design Canberra and during the centenary of Canberra their contribution is being celebrated.

As part of this exhibition a collection of items was borrowed from a private lender in Sydney. They arrived two weeks before the exhibition was due to open and included a framed silk lithograph by Marion Mahoney Griffin.

Marion's artwork is renowned as she incorporated her love of Australian flora and landscape into her work. Many of Walter Burley Griffin's designs were brought to life by the artwork of his wife.

This silk lithograph is the image of the 'Eucalyptus Urnigera', originally drawn by Marion on a trip to Tasmania in 1919. The image of the Eucalyptus Urnigera was number 11 in a series of 24 drawings of Australia's natural environment completed by Marion. Often more than one silk print was produced from the original drawing (Fisher 2005: 42-44).

The silk is mounted in a frame that was also designed by Marion. It was pressed against the glass, a wooden moulding held it to the larger panel, which contributed to the aesthetic of the frame. Shaped with an angled bevel, the wooden moulding is characteristic of the profile of many of the low building lines seen in Marion's panoramic cityscapes.

**Figure 1:** Diagram showing side view of framed work

### **The problems:**

On arrival at the National Library of Australia a number of issues were quickly identified. The owner gave permission for the frame to be opened so that an examination of the silk could begin and the true condition of the object could be identified.

On careful removal of the frame moulding, which was securing the glass to the front in the pressure system, it was found that the mouldings were independently screwed to the backing board. Once free of the frame, the silk and glass were placed face down and the back of the silk could be examined. On viewing the verso it was evident that significant fading had occurred to the front of the silk as the verso was a deep pink, not the faded shell apricot seen on the front. The silk was firmly stuck to the glass from the 100 years of being pressure mounted. The adhesion to the glass and colour loss gave the greatest indication of exactly how friable the silk had become.

The silk was folded around a piece of drawing paper, which had ink, text and various doodles on it - significant provenance as it is believed that the paper had been drawn on by Walter and Marion Griffin. The silk had several loose threads 'lacing' the item

to the paper and had split along the folds as a result of being wrapped around the drawing paper and where it was in contact with the timber, see figure 2.

**Figure 2:** Verso of the silk, still attached to the front of the glass, showing the drawing paper and lacing.

The 100 years of pressure mounting in the frame resulted in the silk fibres having broken and adhered to the glass surface through the action of cycling temperature, relative humidity and sunlight. It was this that had caused the visible striations on the front of the silk. The image of the lithograph was also visible on the glass as the oil based ink had left an off-set line where broken blackened micro fibres carried the ink.

A lithograph on silk is an oil/water resist print method on an un-primed surface, which introduces a deterioration factor that decreases the archival nature of the work. The silk is also a weighted fabric and has been dyed with a metal mordant, the use of tin and other metals enhanced colour and added weight to the silk. However the cations of the mordant react with the silk protein chain causing chain scission. As protein fibres age they become more acidic; this makes them inherently weak at a microscopic level causing the fibres to break. The addition of dye and metal mordant can also contribute to this chemical reaction. The silk had insect frass and soiling on the front, which appeared to have been carried into the frame by previous water damage. Even though there was evidence of insect activity, due to the weighted fabric, there was no insect damage on the actual silk.

There was also an additional split across the lower edge and there were holes in the silk where the screws from the frame's moulding had been attached to the backing panel through the silk edge.

Once the frame had been opened it was not possible to seal it back up as this would cause the silk to slump and split further. Re-entering the screws into the exact entry holes was difficult due to the damage from the screws on the silk and the mould and soil remained sandwiched between the silk and glass. Moving forward appeared to be the only option.

### **Conservation considerations:**

The foremost question was: can and should the National Library of Australia treat this object? The degraded state of the object itself meant that it would be a tricky and very risky treatment. The Library, as a general rule, does not treat items from private collections and this was going to be a costly exercise for an item that did not belong to the Library. The curators made it clear that the object was very important to the exhibition. As this silk is one of the only known silk lithographs still housed in its original frame they wanted to see it on display. The question was, 'is it our place to pursue this course of action and what does it mean for the owner? A decision was made at the Library to make a one-off exception to the rule and treat the item. Although of course, nothing could go ahead without the express consent of the owner.

Registration staff consulted the owner who courageously supported the decision, announcing "the life of the work is finite, however if it can have one last chance of glory I will be pleased. I have spoken to my son and we think you should go ahead". She gave consent for the work to be treated with the intent it be displayed. "No point

treating it if no one is going to see it and it may never get another opportunity” (M. Nicholls 2013: pers.comm.). The owner was made aware of all the risks involved and with their blessing the work began. Extensive photographs were taken by the National Library photographers and a treatment plan was discussed that would allow the object to be returned to private hands at the end of the exhibition.

The owner’s conviction certainly stimulated debate about conservation’s duty of care and whether decisions would be different if the item was collection owned, not loaned. Debate on whether to treat the painting and which course of action to take was rigorous. The critical question - should the silk and frame be treated as individual items or together as a complete object, maintaining the design aesthetic and artistic intention of Marion Mahoney Griffin.

Discussions of artist intent are always robust. In this case, a photo of the interior of the Griffins home in Castlecrag, held at the National Library of Australia, was used to inform the debate. The photo shows at least three framed prints, see figure 3.

**Figure 3:** Interior view of living room of the Grant house, Castlecrag, Sydney, New South Wales: <http://nla.gov.au/nla.pic-vn3918333>

They appear to have been made specifically to fit the pillars in-between the windows of the exterior wall.

As it is believed that this is the only silk print remaining in its original frame, separating them for the exhibition was finally thought to be inappropriate.

With a strict timeframe to complete the work a treatment plan with the intention of keeping the silk within the frame was developed. Keeping the two pieces together meant that the frame had to have some alterations in order to re-house the silk so the main priority was to keep the aesthetic feel that was designed by Marion.

## **Treatment:**

### ***Silk:***

Removal from the glass was not possible until some strength has been provided to the silk via a lining. The item required an adhesive lining on Stabiltex®, painted out with Lascaux® 360HV 15% Lascaux® 498HV 10% combined to make a 25%w/v solution, this is acetone vapour reversible into the future. The lining was done while the item was still attached to the glass and it didn’t move or statically shift when the lining was being applied. To reduce the logistical challenge the backing plastic was removed from the adhesive sheet first and over lapping 2cm strips of plastic backing were placed on the Stabiltex® starting from either edge toward the centre. So that when ready, the centre line of the Stabiltex® could be laid down along the centre line of the art work. Working from the centre each successive 2cm strip was easily peeled away and heat set in place with a heated spatula set at 80 °C. This was repeated until the lining was secured to the inside measurements of the silk. As humidity had not yet been applied it was impossible to use the single sheet and fold back the silk on the

edges. Folding back the edges would have caused more silk snapping along the fold lines. These remained unlined until after the humidification-next step.

The lining provided enough support that with gentle humidification the silk could be slowly lifted off the glass.

**Figure 4:** The silk being lifted off the glass using a humidity pen.

Once the silk was lined it was secured to a fabric covered 3 ply mount board that had been cut to the original size of the framed silk. The board was covered with prewashed flannelette for humidity and acid buffering. Also, covering the board helped to soften the edges reducing the sharp snapline. Due to the fragility of the item, securing it to the board was achieved with Stabiltex® tabs rather than stitching.

Despite the support from the lining the fragile split edges did not wrap easily around the mount board. A tinted tissue edge was made to surround the edges and act as protection to any friction against the frame. This unfortunately increased the width, making it more difficult to return it to its frame.

The threads on the back that had been cut to release the paper from the back of the silk and expose the verso also no longer reached across the full distance. These were matched up as originally aligned secured into place with Stabiltex® and Lascaux® tabs.

As part of the treatment the paper backing was removed, it was frozen to kill any insects or insect eggs and brush cleaned. The paper was not replaced as part of the treatment plan. The curators of the exhibition were excited to see this find and wanted it to be part of the exhibition. In addition, the fabric covered board that the silk was wrapped around made it difficult to return to its original location. It was still important that the paper remain with the frame so that the context was not lost, as a result, at the end of the exhibition the paper was placed in a mylar pocket and secured to the back of the frame.

### ***Frame:***

To allow the silk to be returned to the frame some alterations had to be made. The aim was to adapt the frame without seriously altering the overall look.

It was decided that the glass would not be returned to the frame. It was heavy and had sharp edges posing a further risk to the silk. It was felt that the shattered silk fibres adherent to the inside of the glass gave a perfect image of the silk painting and should be maintained. This resulted in the glass being stored separately. Properly labelled it would not become separated from the frame and lose its context with the object.

The glass was replaced with Perspex but an 8mm spacer needed to be added to the frame to prevent any static attraction of the silk fibres to the front of the glazing. The additional depth of the mounted silk and the need for the extra space between the silk and the glazing meant that an insert had to be made.

To achieve the desired result a framing conservator was consulted and two options were considered. The first option was to try and keep the front profile of the frame by cutting into the back and extending it out. This was vetoed because cutting into the single piece of wood was deemed difficult and an unacceptable destruction of the original wood panel. The second option was to add a spacer to the original mouldings and then have the Perspex over the top, curved around the edge of the moulding and secured to the new spacer. This course of action was finally agreed upon as it needed the least amount of frame alteration, the original screw holes could still be utilised. The addition to the wooden moulding was tinted to match the frame to make it unobtrusive.

**Figure 5:** Diagram showing side view of frame with addition.

**Figure 6:** The treated framed silk on display with Marie Nicholls, owner, Alexa McNaught-Reynolds and Victoria Gill

### **Aftercare:**

The treatment was completed with the assumption that it was returning to the private lender at the end of the exhibition. Even with the extensive treatment that was undertaken the lender needed to understand the special storage and display needs that the silk lithograph now required. It would need to be displayed on a sloped shelf so the weight of the silk is not dragging on itself and gravity is not causing stress. The silk is still very weak and is unlikely to ever be retreated; therefore it will need to be kept in an environmentally controlled space. Appropriate conditions should ideally avoid rapid cycling of both temperature and relative humidity as the changes in both could have a detrimental effect on the lining and subsequently the silk itself due to the loss of support.

### **Conclusion:**

The treatment was successfully completed while keeping the artistic qualities of the object itself. The silk is still weak and needs ongoing care but its life has been prolonged. The owner was thrilled to see the object conserved and on display in the exhibition. Despite the success of this treatment it is hoped that this will not set a precedent. The short time frame and the poor condition of the object exerted significant pressure on the conservation team. It highlights how important it is for a conservator, not just the curators and designers, to attend the early inspections prior to the items being delivered for display. An early assessment would have flagged a problem from the beginning, giving time to consider the treatment options, or even replacement objects.

Despite the numerous challenges that were encountered we felt that while the treatment had been risky it was worthwhile. It was a pleasure to work with a team that, in the short time available, brought about the successful treatment of such a beautiful object. Hopefully, as a result, many more people will be able to enjoy the exquisite work of Marion Mahoney Griffin.

**Acknowledgements:**

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**Biographies:**

**Victoria Gill:** obtained a Bachelor of Fine Arts at the Australian National University and Bachelor of Applied Science in Conservation from the University of Canberra. On graduating she worked at the Australian War Memorial and the National Gallery of Australia for a short while before starting Endangered Heritage Pty Ltd. Victoria has been consulting in conservation and heritage management for over ten years. More recently she was residing in Asia doing large-scale conservation project management, including the establishment of the National Textiles Museum of Malaysia and heritage site assessments in Shanxi, China. Recently returned from Asia to pursue further study, Victoria is currently a PhD candidate at the Australian National University, investigating; How heritage preservation can facilitate poverty alleviation and create income growth. Victoria continues to take a keen interest in conservation practice and theory, believing there is no single way to do things, only a way to improve things.

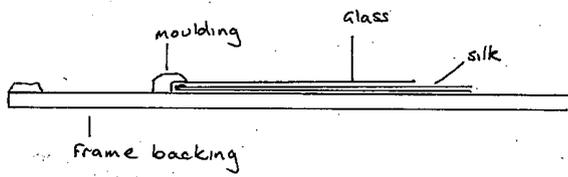
**Alexa McNaught-Reynolds:** received a Bachelor of Arts from the University of New England in 2005 and completed a certificate IV in Museum Practice from the Canberra Institute of Technology in 2006. She graduated with a Master of Arts in Cultural Materials Conservation, specialising in paper and a Postgraduate certificate in Photograph Conservation from the University of Melbourne in 2009. Alexa has worked at many institutions including the National Museum of Australia, National Archives of Australia and at the Australian War Memorial before moving to the National Library of Australia. She started in the role of paper conservator before moving into Exhibitions conservation at the end of 2010.

**References:**

Fisher, A 2005, 'Marion Mahoney Griffin's Forest Portraits: An Introduction' in Wood, D (ed) *Marion Mahoney Griffin, Drawing the Form of Nature*, Mary and Leigh Block Museum of Art and Northwestern University Press, Evanston, Illinois pp 42-95

**Materials:**

Lascaux® 360 HV - Talas New York  
Lascaux® 489 HV – Talas New York  
Stabiltex® – Endangered Heritage  
White Flannelette – Endangered Heritage  
Mount board – Rising mount board  
Wooden moulding – National Library of Australia  
Perspex – ACT plastics



**Figure 1:** Diagram showing side view of framed work



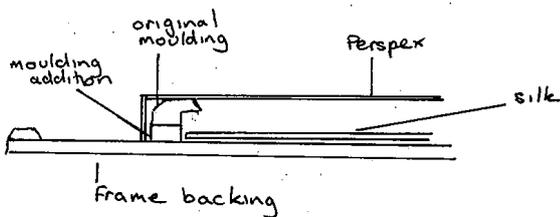
**Figure 2:** Verso of the silk, still attached to the front of the glass, showing the drawing paper and lacing.



**Figure 3:** Interior view of living room of the Grant house, Castlecrag, Sydney, New South Wales



**Figure 4:** The silk being lifted off the glass using a humidity pen



**Figure 5:** Diagram showing side view of frame with addition.



**Figure 6:** The treated framed silk on display with Marie Nicholls, owner, Alexa McNaught-Reynolds and Victoria Gill