

# **The Winston Churchill Memorial Trust of Australia**

Report by Musette Molyneaux

2006 Churchill Fellow  
The Gilbert Spottiswood Fellowship

Study of traditional woman's ballet costume construction techniques for use in both traditional and contemporary ballet productions.

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Date:

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## **INTRODUCTION**

To undertake my Churchill Fellowship, I went to the Royal Opera House, home to the Royal Ballet, Covent Garden, in London. Within the women's production workroom. During which time we worked on a modern ballet called 'seven deadly sin's' that incorporated the use of contemporary dress altered for ballet performance. I also undertook independent study, under the guidance of the Royal Ballet staff, in traditional ballet costume construction using the most recently available fabrics.

I chose to spend the whole of my fellowship time there because of the technical ability of their staff, all who have specific knowledge and experience with ballet costumes. The Royal ballet has one of the longest established workrooms in the world. The range of costumes that are produced for the Royal Ballet vary from the traditional 'swan lake' to the modern 'seven deadly sin's'.

This has been an incredible life experience and I wish to thank Gilbert Spottiswood for his generous gift that has enabled me to pursue my dream in this way.

Thank you to all the staff at the Royal Opera House you all gave me so much and made my experience such a rewarding one.

## **EXECUTIVE SUMMARY**

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My fellowship was undertaken from the 13 March till the 13 May 2007.  
The aim of my fellowship was to train in the production of women's ballet costumes for use in both traditional and contemporary ballet productions.  
To undertake this training I positioned myself within the production workroom of the Royal Opera House in Covent Garden, London.

### **Highlights**

- \* Working on up coming productions and being involved in all aspects of each production.
- \* Training under people with advanced ballet costume construction skills.
- \* Viewing numerous ballet and opera productions.
- \* Discovering new fabrics and habbadesstry.
- \* Viewing old costumes.

### **Major lessons**

- \* New techniques for the construction of the most traditional of ballet costumes, the tutu.
- \* Incorporating the use of newly developed stretch fabrics in the production of older style costume. Decoration that is safer for the dance than that of the past.
- \* Contacts with leaders in the field of women's ballet costume construction.

### **Conclusions**

The construction of ballet costumes is complex. Training is an essential component of any costume making course at a tertiary level.

Collaboration between the dancer, choreographer, designer and maker is essential through out the full pre production period of a production.

Experimenting with next generation fabrics enables greater design freedom and dancer comfort.

I intend to utilise the knowledge and skills I have gained through my work as a costume maker in established production workrooms in and around Sydney NSW. Through a future development of short courses I intend to impart these skills to students and professionals in the field. To enable me to achieve this, a training manual that covers basic ballet costume construction techniques will be produced. Students who have a specific interest in this field will be identified and mentored.

This will not only help in further developing this specialist area of costume production but will also create awareness of its specific requirements and prerequisites. It is very important to note that costume technicians with well developed skills give true creative freedom to our designers.

## **Programme**

### Tutors:

Fay Fullerton, head of costume.  
Ann Ruby, costume administrator.  
Tomoko Honda, costume cutter.  
Paul O'Farrell, costume maker.  
Pauline Parker, costume maker.  
Roz Culling, costume maker.  
Joy Di, costume maker.  
Amanda Hall, costume cutter.

## **Ballet Bodice**

A structured bodice that finishes at the waist or the high hip. Boned and partnered with either a long or short tulle skirt.

Fabrics: Can range from stretch fabrics to fine silks. Whatever the outer fabric, use a backing like washed cotton drill to give the bodice structure.

Boning: With steel spiral bones for flexibility. Channels out of cotton tape. Position the bones down the centre of each seam, except the side seam, before the top and bottom edges of the bodice are finished off. Make the length of each bone about one inch shorter than the finished seam length.

To bone the centre back, using 5cm seam allowance on the right hand side over lock the raw edge then fold back to the inside on the centre back line. Pin stitch in from the folded edge then again a foot width in to make the channel.

Piping: The top and bottom edges of the bodice can be finished off with piping cord. Leave 4 cm seam allowance on the bias so it can also be use as a facing for the seam edge by turning it under and hand stitching.

To finish off the ends, cut the fabric 3 cm longer than the desired length, fold it to the inside when making the piping leaving a tail of piping cord only past the centre back and side seam line. Sew the cord to the inside after fitting.

Fastenings: Make an extension on the left hand side 5cm wide machine down the centre back line and again a foot width into the facing to hold where the bars will be sewn. Use size 3 hooks and bars positioned one inch apart down the centre back making sure there is a hook and bar at the waist.

## **Basque**

Basque: Structure joining the skirt to the waistband that is used to set the position of the skirt, in relation to the proportion of the dancer and the look of the costume.

Fabrics: Predominately made from one or two layers of cotton drill depending on the weight of the drill. If teamed with a bodice that finishes at the waist the basque will be covered with a decorative fabric.

Sewing: With the centre back cut on the straight grain and an extension on the left hand side centre back. Sew the side seams and darts so that the seam allowance is on the outside this will keep the inside as flat as possible.

### **Waistband**

Use a double layer of cotton petersham ribbon. Cut the waistband 3 cm smaller than the waist measurement and add an elastic piece of 3cm finished into each side seam so that the dancer will have more comfort and freedom through the waist.

The waistband will still need an extension on the left hand side at the centre back for the fastenings.



**Figure 1**; Short tutu skirt

### **Short tutu skirt**

I have included in this report brief instructions for the construction of a short tutu skirt. This information is difficult to obtain as it is not readily available and I hope through this report will be accessible to all.

Fabrics: Pants are best made with soft cotton net called bobbin net, these are not readily available. However a soft homespun or soft but strong synthetic net will be a suitable alternative.

Cutting: Cut the pants out of double thickness (if using a net) with the side seams on straight grain. This will put the centre front and centre back on the bias giving some stretch through the crotch. Add 1.5 cm seam allowance on all seams except at the centre back and top edge where 4 cm is better. The pattern that is pictured on the final page is not to scale and has no seam allowance on it.

Mark: All the seam lines on the back of the fabric using tracing paper. Mark all the tulle layer lines on the right side of the fabric.

To make up the pants: The centre front can be sewn with a French seam or with the seam allowance encased within the two layers of net. Reinforce the centre back opening and clip into the notch, zigzag over the raw edge that is left. Double turn back the centre back opening edge to the inside and stitch down to the net to hold in place. The centre back opening of the pants do not need an extension as the fastenings are hooks and eyes for this section and an extension will only add bulk.

Tulle guide:

Leg frills- 2 widths 1”

Channel- 3 widths 1.5”

Layer 1-2 widths 2”

Layer 2-2 widths 3.5”

Layer 3- 3 widths 4”

Layer 4- 3 widths 4.5”

Layer 5- 3 widths 5.5”

Layer 6- 3 widths 6.5”

Layer 7-3 widths 7.5”

Layer 8- 3 widths 8.5” (channel layer)

Layer 9- 4 widths 9.5”

Layer 10- 4 widths 11.5”

Layer 11- 4 widths 12”

Layer 12- 5 widths 13”

Cutting the tulle: The guide is for a 12-layer tutu. The lengths and amounts will vary according to the desired look.

Number all the cut tulle with what layer they belong to.

Make a channel for elastic along the leg edge using bias binding. Sewing along the leg line turning to the inside and sewing down with a slight zig zag. Turn under the ends of the bias binding at the centre back and centre front crotch seam so they will not get caught in the seam.

Cut the decorative edges of the tulle at this point using a template, knife and cutting board.

Take all the pieces of tulle from one layer and using either a clear thread or matching colour lay the end of one over the end of another and stitch flat on top, continue till all the pieces form one long strip. Mark the half and quarters of the piece with coloured thread. The channel will need to be made for the steel hoop. Machine all the channel strips together to make one lone strip. Mark a half way mark along the length of the channel layer , position the channel strip to the inside of this mark on what will be the under side. With normal sewing thread on the sewing machine, take a strong button hole thread zig zag over the thick thread and use it to gather the strip up to the length needed. Repeat for all remaining pieces.

Stitching onto the pants: Take the middle layer of tulle pin onto the pants matching the centre front and side seams. The seam allowance will be facing towards the crotch

and the main body of tulle to the top of the pants. Stitch on the marked line with a slight zigzag. Repeat for the rest of the layers below this. Gather the leg frills in the centre of the frill. Sew on the marked line and in fill if needed.

The layers above the middle layer will be sewn in the other direction with the seam allowance facing towards the top of the pants and the main body of tulle facing towards the crotch.

The top layer of tulle will be sewn onto the top line on the pants.

Basque to the pants: Place the pant tulle section over the Basque matching the hip line of the basque to the hip line of the pants. Machine along the pinned line leaving the pant seam allowance to the outside or top side of the basque. Press this seam allowance flat then zigzag the seam allowance flat 1.5 cm above the stitching line and cut back any excess seam allowance. Match the centre back of the pants to the centre back of the basque ignoring the extension that is on the basque as the pants do not have an extension.

Sew up the centre back seam, below the opening, using a French seam.

Join the centre backs in the same way that the tulle was stitched into layers leaving an opening as long as the pant opening.

Using 5mm sprung steel or plastic boning that is stitched together to make it stronger. Cover with coloured bias binding to match the colour of the tulle that was used. Thread through the boning channel and finish off with tape. Should be about 1.75m in length but will vary according to the skirt size. Too long and the skirt will buckle, too short and it will sit up not flat.

Stringing: Now that the tulle is sewn on it needs to be held into the desired shape. Use four layers of thick thread and wide tacks so that the tulle won't rip, this can be done on a stand or flat on a table. The tacks are positioned in three circles, inner that is inside the steel circle, middle will loop around that steel circle and the outer holds the top 4 layers at the edge of the tulle and is only required for a flat tutu.

Inner, turn the skirt bottom side up and on layer 1 loop out to layer 9 or the layer above the channel layer then back into layer one. When knotted the loop should be able to fit 3 fingers in it but can often need more length.

Middle, turn the skirt to the top. Sew from the top layer to layer 7 around the steel circle with the loop facing out at the top and inwards at row 7. Use four fingers in the length of the loop as a guide.

Outer, if desired will not need to be very long or have much of an angle.

Overskirt: If the design requires a decorative overskirt cut a pattern from the finished skirt and stitch on using a zipper foot on the domestic machine.

Catch this layer using the same tack stitches that have been used for the layers.

Covering the Basque:- if the bodice of a costume ends at the waist, cover the basque in a matching fabric. Cut the pattern the same as the base basque, hand catch the bottom edge of the basque piece where the skirt meets the cotton drill basque. Put on the stand and pin the top of the basque in place and sew by hand, you may also need to cover a waistband leave some ease to account for the elastic in the basque waistband.

Attaching the bodice and skirt together:- Pin skirt to the bodice from the outside along the waistline. Put on the stand and then pin in the gap between the piping cord and the bodice catching the bottom of the basque. If the bodice has a pointed front then do not pin into the tulle leave it free. Stitch using double strong thread a long where the pins are stopping 4 cm from the centre back so that you can get in to do up the back of the bodice. Do one inch swing catches between the waist mark of the bodice to the petersham waistband at the centre front, side front, side seam and side back leaving the centre back. Hand sew the crotch seam of the pants.

Design notes: The length of the tulle used in the list above is a guide. Design will determine the length of the tulle required and if a steel hoop is also required. A long line skirt will use fewer layers of tulle and structure and will allow for greater design variation.

### **Conclusion**

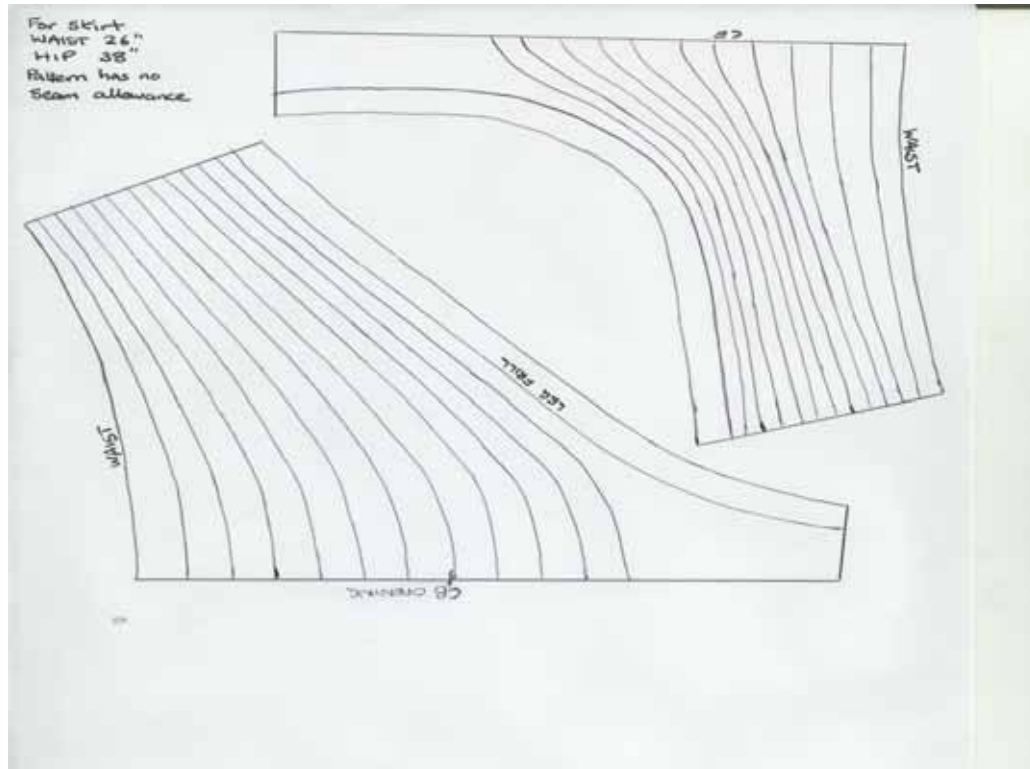
Ballet costumes are constantly developing and evolving through the use of stronger yet finer fabrics. These fabrics more often than not involve an element of stretch that when used in collaboration with proven construction techniques will produce costumes that are strong and safe for the dancer whilst giving freedom of movement and enhancing the choreography.

The skills that I learnt through my fellowship will be shared with other trained technicians as I work for such companies as Opera Australia, Sydney Theatre Company and Sydney Dance Company.

I will also seek out the opportunity to impart my skills through current and future theatre technician courses and through the mentorship of students who have a specific interest in ballet costume construction.

Character costumes, mascots, mime and pantomime costumes all require similar construction as that is found in ballet costume construction. Knowledge of these techniques will make costume production faster, cheaper and enable the performer longer rehearsal time which in turn will help the production process.

The training of ballet costume construction is essential to a costume maker's skill base and as such needs to be taught as a component subject for theatre crafts courses in Australia.



**Figure 2:** The pattern of tutu pants is not to scale. This pattern is for a 12 layer tutu but as little as 9 layers can be used. The top layer of tulle will always be sewn on the line that is marked the waist on this pattern.

**Figure 3:** Underside of tutu skirt showing hoop.

