

# HSC 2002 – Textiles and Design

## Major Textiles Project

TEXTILE ITEM/S FOCUS AREA: Apparel

Band 4/5

Sample 1



APPAREL



DETAIL 1



DETAIL 2



DETAIL 3

Consideration given to aesthetic aspects by coordinating specialised fabrics, fringe and decorative techniques.

A range of intricate fabric surface techniques used in leaf shapes, detail 2.

### Inappropriate

- weight of surface decoration, makes outer fabric hang lower, detail 1

### Inaccurate

- spacing of fringing, detail 3



Inspiration clearly relates to textiles item.

## Design Inspiration

The stole which I produced for my major work has many influences which contribute to its design, colouration and construction. These influences include cultural, historical, natural, artistic and contemporary influences. I have a personal interest in women's apparel and the history of women's fashion and I have tried to demonstrate different aspects of women's fashion through my design.

Shawls, wraps and stolls have played a major part in women's fashion throughout history. In the late parts of the 17th and 18th centuries and the early part of the 19th in Europe (especially when the empire line came into fashion), large, embroidered rectangular wraps were common for day and evening wear.

In 1856 when the crinoline was introduced, large triangular shawls with long trims became fashionable. These shawls were highly embroidered and were worn for everyday and evening wear. In the late 1930's and the 1950's, wraps and stolls can be seen in women's evening wear.

Over the turn of the 20th century, a style of art emerged in Europe called Art Nouveau. This form of art was seen in architecture, paintings, jewellery, furnishing etc. and consisted of complicated designs being created using simple lines and stylised shapes. These simple lines and stylised shapes combine to be very effective wherever they are used. Natural objects were widely used, including flowers and leaves, particularly in works by the famous artist William Morris.

I wanted the overall feel of my stole to be elegant, and mystical and I wanted it to resemble a dark and magical pond. The choice of 2 tone silk used for the outer fabric gives the impression of water reflecting different colours when the fabric moves or light shines on certain parts and not others.

Impressionism artworks by the artist Claude Monet have influenced the design of the water lilies on my stole. 'Pink Clouds' and 'Water Lilies' by Monet include simple yet effective brush strokes that give the basic shape of water lilies.

Contemporary bridalwear is another major influence for my stole. From 1998-2002, large stoles and wraps can be seen in bridalwear.

These stoles are usually made to match the wedding dresses and are made from satins, silks and other luxurious fabrics. Embroidery and beading on these stoles usually match the wedding dress, and these luxurious fabrics inspired the use of satin and silk on my stole.

Various artworks

Natural lilies

Feature nestled in corner of stole

2 tone fabrics

Art Nouveau

Large Wraps seen in evening wear and bridalwear



Many different fabric surface decoration and colouration techniques have influenced the design of my stole, more specifically the design of the lillies which are featured on my stole. The petals for each of the lillies use one or more techniques on them to create interest and surface texture. Hand embroidery is feminine, intricate and has been a leisure activity predominately for women all throughout history. The historical use of hand embroidery influenced me to use French knots and other hand embroidery stitches.

Machine embroidery became very popular in the later part of the 20th century. 'Un-controlled' machine embroidery has been used as a creative outlet for lots of sewers, and I wanted to use this technique on my stole.

Elegant long beaded or plain trims are commonly found on wraps and stoles, and are often knotted using the Macramé technique. On my stole I wanted to use this technique but in a simple and elegant way.

In contemporary bridal wear, there is an increasing amount of different techniques which are being used to create individual designs to meet current demands.

Pleating and layering of fabrics can be seen in bridal wear and formal dress designs, and I wanted to incorporate these techniques into my design.

Smocking was an interesting technique used in women's fashion from 1960-70. Smocking is still seen today in children's wear. Smocking creates an interesting surface texture and was an appropriate technique I wanted to use in my design.

Marbling is a fascinating way to subtly or boldly colour fabrics, and I was very enthusiastic to use this technique on my stole.

I also wanted to use beading (including sequins) on my stole as I find it elegant, colourful and eye catching.

Good visual and textual links to inspiration.

Layering of fabrics

Beaded trims

1930's

Sequins

Machine embroidery

Marbling

Hand embroidery

Long fringing

Applique, hand embroidery and beading

Pleating and smocking



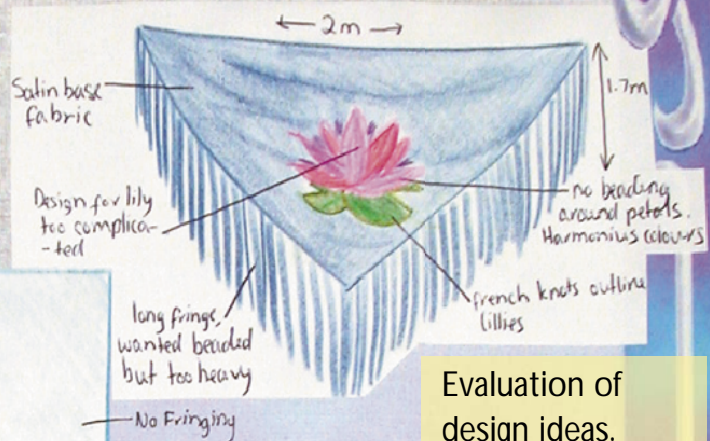


# Visual Design Development

The choice of design and fabric used for my stole has been developed from many different influences to create a satisfying end result. With my stole, I wanted to use as many different techniques as I could so that I could develop a better understanding of these techniques and their applications.

The shape of my stole was influenced by current trends in bridal wear and other woman's wear fashion trends throughout history.

Originally I wanted to create a triangular shawl which was warm and versatile. I wanted the shawl to be large and I would have to have used 2m of fabric. This would create a lot of unusable wastage and the triangular shape wouldn't be able to take too much stress without distorting, so I decided to make the stole rectangular.



Evaluation of design ideas.



Silk flowers  
Silk lilly-pads  
Beading around all features  
Sequins sewn under all beads  
100% silk fabric

I did not want to use any fringing on the stole as I thought the stole would be too long. After thinking about how elegant a fringe would look, I settled for a long fringing that was lustrous and in a similar colour to that of the lining and one of the two colours (purple) which made up the silk.

The fabric of my stole was originally going to be satin, but I wanted a more elegant and 'rich' looking fabric. I found silk which had bright Purple warp threads which were complimentary to Jade green weft threads and I liked the effect this use of colours created. The reflection of different colours when the fabric moved I thought resembled water, and this went with the water lily theme I was trying to get across.

The layout of the lillies and Lilly pads was good when the stole was lying flat, but when the stole was being worn, the lillies were on their sides.

Because of this I decided to change the design so that the lillies would appear to be the right way up however the stole was being worn.

The Lilly design was based on a natural design, and I found this design was too difficult to reproduce with fabric and did not look stylish, so I decided to change the design to a more simple series of shapes.

The simple stylised lines of Art Nouveau designs and painted water lillies by Monet inspired me to simplify the shape of the lillies. The end result was a symmetrical lilly that consisted of two different sized petals.



Limited evidence of design development.

Sketches based on natural designs too complicated



Final Design



At this stage I decided to eliminate the use of ripples and the lilly pads. I found that including these would take away from the simplicity and stylishness of the design.

I used applique and beading to attach the lillies to the silk because of the simple lines which could be achieved using this technique. Beading is an effective eye catching technique and beading around all of the lillies makes the flowers stand out and gives the impression of richness.

Functional aspects of my design include the fabric chosen and the size and shape of my stole. The lining of the stole is 100% Rayon. Rayon is a poor conductor of heat (that is, insulates and keeps in the heat). This in turn keeps the wearer warm, which is a feature of stoles and wraps. The use of silk as the outer fabric does not contribute much to the warmth of the garment as it is not a very tight weave.

My stole is quite large, and can be wrapped around the upper body to keep the wearer warm. The lining chose is smooth and does not irritate the wearer.

The metallic stitching which borders the entire stole is both functional and aesthetic. The stitching helps to hold down the edges of the stole so the lining does not roll over the silk and become visible.

The rayon used for the lining was a poor choice of fabric to use with silk. The rayon is much heavier than the silk and made the problem of the lining 'rolling' over the silk.

The fringing is also held in by this stitching. The stitching creates a subtle sparkle from a distance and up close it finishes off the design of the stole by creating a border, making the stole similar to a framed artwork.

Aesthetic aspects of my design include the techniques used on the petals for each of the lillies, positioning of the lillies, the fringing, fabric choice, beading and the decorative metallic stitching which borders the stole.

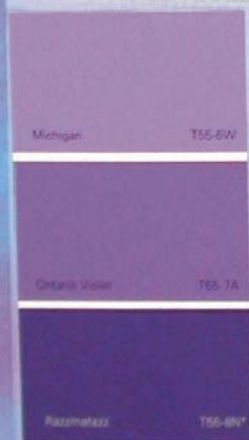
Colours used on the lillies are harmonious and this combined with the use of lustrous fabrics and threads attracts interest. The silk and rayon both have a luxurious drape which appealed to my theme of elegance and a magical pond.

The lillies are positioned in a symmetrical way, which helps to create a sense of simplicity. They lillies are outlined with beads and sequins in harmonious colours to colours used on the petals.

This beading and the inclusion of sequins again attracts the eye and creates emphasis on the ends of the stole.

The positioning of the lillies creates an emphasis on the ends of the stole, taking the eye to the knotted fringing. This emphasis combined with the ling fringing slims the wearer.

The silk outer fabric appears to be mostly green, and the silk, lining and fringing complement each other creating an interesting effect.



Harmonious Colours

Describes and lists functional and aesthetic aspects with limited analysis.









# Manufacturing Specification

## Description

Rectangular lined reversible silk stole with fringing. Stole features 4 small stylised lillies, one in each corner, two of which are pink, and the other two are violet.

Lillies are symmetrical and consist of five petals each which are assembled using various construction and surface decoration techniques including; machine and hand embroidery, marbling, smocking and pleating.

Assembled lillies are applied onto outer silk and are outlined with beading and sequins.

Stole is finished on ends with a long fringing which is knotted to create an interesting addition.

Metallic straight stitching borders the entire stole.

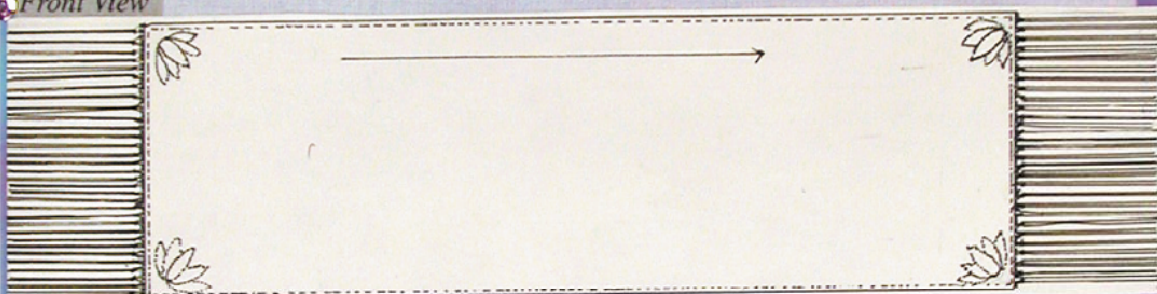
Vogue pattern no: 7710 pattern piece 4 was used as the basis for the shape and size of the stole, but was modified to create an end size of 182cm in length (not including fringing) and 54cm in width.

Pattern pieces for lillies and guide for fringing were designed by me.

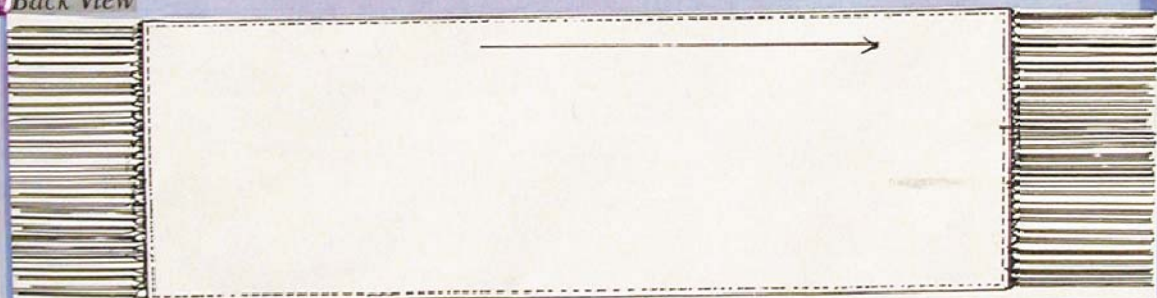
Production drawing is of an elementary standard.

## Production Drawing

### Front View



### Back View

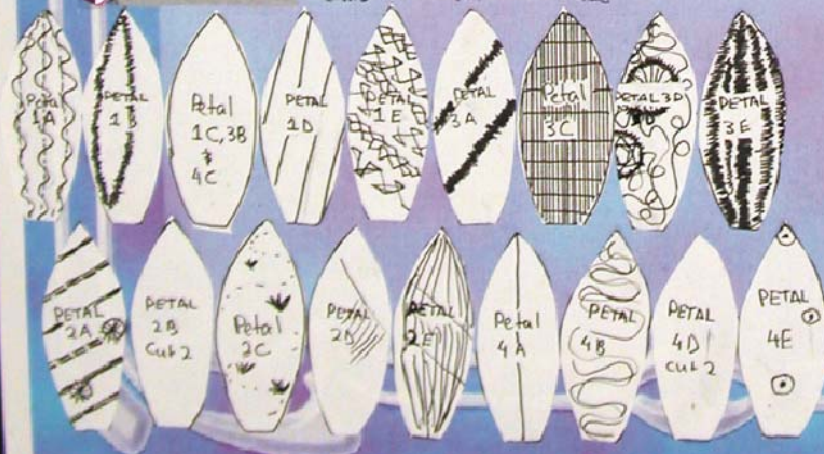


### Pattern Pieces

Petals - 1cm:2cm actual size

1cm:20cm actual size

Trim Guide



1cm on Diagram = 20cm Actual Size

Cut 2 (1 lining)  
(1 fabric)



## Fabrics Used



## Notions Required



## Product Label



To be sewn in end of  
Stall when fringing is  
attached. Purple tag  
with black writing.

### Front

**'Allure'**  
Designed and made in  
Australia  
One size fits all  
100% Silk outer fabric  
100% Rayon lining and  
fringing.  
Embellishments  
various fabrics.  
See reverse for care  
instructions

### Back

Cold hand wash gently  
in very mild detergent  
Lay flat in shade to dry.  
Do not spin dry  
Do not wring  
Do not dry-clean  
Cool iron around  
embellishments.





## Costing

Item	Cost \$	Quantity Used	Total \$
<b>Fabrics</b>			
100% Rayon Plain Weave	3.99/pin	2m length, half width	3.99
100% Silk Plain Weave	22.95/pin	2m length, half width	22.95
Nylon Netting	1.59/pin	0.1m	0.16
Silk Plain Weave	16.37/pin	0.05m	0.82
Silk Plain Weave	16.00/pin	0.05m	0.80
Spot Silk	12.95/pin	0.05m	0.64
Silk Like Polyester	8.65/pin	0.1m	0.87
Duchess Satin	10.95/pin	0.05m	0.55
<b>Notions</b>			
Gutermann thread col. 463 (and col. 29)	1.67/p100m	5m and 50m	0.92
Mettler Metrosene Plus thread col. 953& 161	1.20/p100m	60m	0.72
Metallic Embroidery Thread	8.14/p1000m	6m	0.49
Scandi 40	6.49/p100m	10m	0.65
DMC embroidery thread Pink, violet	1.70/p2m	8m pink, 3m violet	2.21
Birch polyester thread	1.00/p1000m	100m	0.10
Wadding	nil	0.05	nil
Beads (purple) and Beads (light Purple)	1.00/p1000pcs (pieces)	300 purple, 300 light purple	0.60
Sequins (light pink)	0.33/p100pcs	300	0.99
Sequins (dark pink)	1.00/p1000pcs	300	0.30
Plastic Sequins	nil	3	nil
Solvie	1.12/pin	4m	4.48
16" "Silk Fringing" 100% Rayon	15.25/pin	1.2m	18.3
<b>Total</b>			<b>\$60.54</b>

## Order of Construction

### Cutting

Lay out lining and outer fabric right sides together with selvages parallel

Pin pattern printed side up on layered fabric and cut out.

### Petal and Lily construction

Pleat fabric for petal 1D and smock (using smocking machine) petal 3C Cut out required fabric shapes for petal construction. Layer solvie, wadding, tulle, satin (optional), marbled polyester (optional), polyester (optional), marbled silk (optional), silk (optional), lace (optional), sequins (optional), tulle (optional) and solvie and secure in large embroidery hoop. Pin petal guides to appropriate areas of fabric and straight stitch around petal guides. Release from hoop and cut out petals, careful not to cut through straight stitching.



Machine and hand embroider designs onto petals following petal design pattern pieces.

Satin stitch around individual petals to create a neat finish.

Cold hand wash with no detergent to remove solvie.

Construct petals into lillies according to diagram.



Stitch outer pairs of petals together



Stitch center petal over pairs

Stitch on to fabric



Pin constructed lillies into position on outer fabric and stitch on using machine straight stitch.

Sew on beads and sequins around lillies, knotting thread after every 3 beads.

### Stole Construction

To construct stole, pin lining and outer fabric (with embellishments attached) right sides together.

Straight stitch 1.5cm from edge down both longest sides of stole and overlock edges.

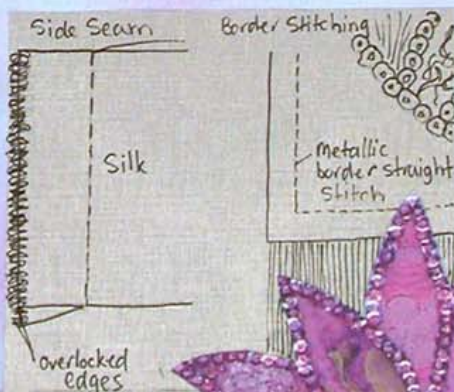
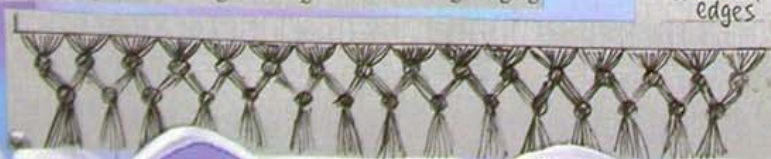
Turn right side out and press edges so outer fabric and lining sit flat.

On ends of stole, fold under 1.5cm of lining and outer fabric. Place fringing between folded layers and pin in position.

Starting from bottom left corner, straight stitch around whole stole, approximately 5mm from all edges. Do not reverse.

Darn start and finish of stitching neatly and securely

### Fringing Follow design on diagram for knotting fringing





# Investigation, Experimentation and Evaluation

The outer fabric which I chose for my stole needed to be elegant, colourful and luxurious. I chose to use a plain woven silk which has been woven using different coloured warp and weft multifilament yarns. The fabric produced reflects both of these colours when it moves.

After I had purchased the fabric for the outer layer I washed the silk to remove the finishes which had been applied to make the fabric more attractive for sale.

When washing there was a strong odour and a lot of green dye ran out of the fabric.

After washing, the fabric had shrunk approximately 3cm on all edges and was much softer.

The Rayon I purchased was also a plain weave assembled from multifilament yarns and had been sized (to make it more presentable for sale). I washed the rayon to remove excess dye and the rayon did not shrink as much as the silk.

The fabrics I used in my stole are predominately Silk, Polyester and Nylon.

All the fabrics I purchased I pre washed to ensure that no dyes ran when the garment was used and first washed.

Drape was an important consideration in the choice of outer fabric.

I tested the drapeability of several fabrics, including silk and found that silk had the best drapeability.

A description of how I carried out the experiment is below.

1. I cut out a 10cm by 40cm strip of Rayon, Duchess Satin and Silk.
2. I then placed each of the fabrics over the edge of a table so that part of the strip was hanging down the side of the table.
3. I then measured the angles formed by the fabric falling over the edge of the table.



Results indicated that Duchess Satin had the largest angle (indicating poor drapeability), Rayon had smaller angle and silk had the smallest angle and the best drapeability.

This further justified my decision to use silk as the outer fabric.

The lining for the stole needed to be a good insulator of heat. Originally I wanted to line the stole with silk, but I thought that Rayon would be cheaper and warmer.

To test the heat conductivity of the rayon I carried out the following experiment.

1. I cut out 2.8cm circles of fabric. One silk, the other rayon.
2. I then placed a thermometer in boiling water and removed it when it reached 100 degrees celcius.
3. I quickly secured the silk to the end of the thermometer and recorded how quickly the temperature declined.
4. I repeated steps 2-3 again but used rayon instead.



After 30 seconds of the silk covered thermometer being out of the water, the temperature had dropped to 86 degrees, but after 15 seconds of the rayon covered thermometer being out of the water, it had only dropped to 92.



When I had decided on the basic design for my stole, I experimented with colouration techniques for the silk outer fabric.

I decided to see what marbling in gold would look like, hoping it would replicate gold swirling around on the water.

On the right is a sample of the result.

I did not like the effect this marbling gave as it took too much attention from the beauty of the silk.

I decided that instead of marbling my outer fabric, I would marble a few of the petals for the lillies.

I was pleased with the results of marbling on lighter colours and on smaller areas and used this technique in the final design.



Unstable

I wanted to use smocking on my stole, and experimented with which fabric was best for smocking. I experimented using silk and polyester, and decided that the polyester gave a firmer finish.

After I had smocked the polyester (using a smocking machine) I stabilised the petal shape by hand sewing through the smocking. The end result was a stable smocked petal which I machine embroidered and use in my final design. An example of an unstable silk smocked petal is on the left.

Not pleased with result 1



Happy with these results.



Visafix used to attach petals

I experimented with different methods of attaching the lillies to the silk. The first method I used was using Visafix. I cut out petal shapes in silk and Visafix and bonded the petals to the silk.

This appeared to be an appropriate method until I noticed that the edges of the petals were fraying. Also the Visafix came unstuck in a few places and could not hold the petals on adequately.

I combined the use of visafix with hand stitching and then beading, and this gave a nice clean edge.

The material was still fraying so I decided not to use Visafix as a method of attaching the petals to the silk.

I decided that the best way to attach the petals would be to create them individually, machine sew them on and then bead through satin stitched edges. This method seemed the most effective so I decided to use this method



I liked the effect of the beading.





There were quite a few petals which I created which I did not end up using for various reasons. The one on the right is one petal I did not use because the sequins between the layers of satin and tulle stood out too much and took away from the sequins and beading around the lily.

After I had sewn the side seams together and turned the garment right side out, I noticed that the edges would not sit flat. After pressing I realised that I would have to secure the edges with stitching so that the lining did not roll over and become visible when the stole was being worn. To solve this problem I tested stitching with different colour threads, including monofilament thread. No matter which thread combinations I tried, the stitching was still visible so I decided that instead of trying to hide the stitching I would make a decorative feature of the stitching. I decided to use straight stitch, 5mm from edges, in a metallic gold thread with purple thread in the bobbin. The use of this thread resulted in an effective feature which adds more interest to my stole. Also, the use of the purple thread in the bobbin allows the stole to be worn reversed.

Sequins reflect too much light takes attention away from other Sequins which outline lilies

Gold decorative stretch stitch too obvious

Monofilament top and bottom.

I decided to use straight stitch, as above, but with metallic golden top and purple underneath.

Decorative stretch stitch in green. Subtle but not attractive

Provides no evidence of experimentation or investigation of equipment.

Stretch stitch in purple. Subtle but too complicated in design

Stretch smocking stitch, too bold





### *Evaluation*

- The materials which I have used in my stole I think perform well according to their intended end use.
- The outer fabric of the stole needed to be exquisite, stylish and effective, and the silk I chose I think is a combination of those three.  
I chose the silk because of its high lustre which was important to create a luxurious, stylish and elegant look, and because of the good drapeability of silk (as demonstrated in the experiment for drapeability).
- Rayon is a good insulator of heat, and this was an important property which was required for my stole. Through experimentation I justified the use of Rayon for the lining of my stole on the basis that it is a good insulator of heat.  
Also because the rayon was a tightly woven fabric, this also helps to make the rayon a good insulator of heat.
- Threads and notions I used are mostly made from man made fibers, and they fulfil their purposes.  
The polyester thread used to stitch the stole together has good tensile strength which is a property which was required for the chosen thread.  
Other threads I have used in embroidery (machine and hand) have high lustre which was a property which was required for them.
- The long trim which I used has a high lustre and is smooth and elegant and suited its end purpose, although being smooth and lusturous, the knots sometimes came undone if they were not tied tightly enough.
- I used sequins and beads on my stole in order to attract attention to specific areas of the stole.  
I think that the positioning and colouration of these sequins, combined with the metallic content and shape of the sequins successfully catches the eye and creates interest.

Poor description of properties of fabric, yarn and fibre.

