

Fabrics 101

Before you can make a costume of any period, you must have fabric to create it from. How well that costume looks at the end has a lot to do with the type of fabric that went into it, perhaps even more than the skills you used to put it together! If the fabric is inappropriate for the design, the garment will not hang properly, and the most wonderful sewing job in the world will not be able to rescue it!

So what sort of fabrics would be appropriate? Well, that depends on the type of garment you are making, the time period and the class of person you are trying to emulate.

In this class we will talk about the general properties of different kinds of fabrics, how to care for them, and why you might want to use them for certain jobs, and not others. As well, there is a set of samples that you can use to refer to while planning a garment or shopping in general.

Fibers

There are two main categories of fibers: Natural, and Man-made. Natural fibers are where we will be spending most of our time in this class (Since, of course, these are what the people of our period used), though we will touch on Man made fibers, since they are all too frequently blended with the naturals. Natural Fibers can be divided into Cellulosic (Plants- Cotton, Flax, Ramie) and Protein (Animals-Sheep and Silkworms).

Natural fibers can also have different lengths, and this will affect the thread that they make, and therefore the fabric that can be made from them. Generally, the longer the staple fiber is, the smoother the thread, and the resultant fabric, will be. Short staple fibers will make a fuzzy thread that will make a fuzzy, nappy fabric that may pill more easily than the long staple fabric. Sometimes it is easy to tell the difference in the store, sometimes it is not, but learning more about the different fabrics will help you get what you need.

We will discuss the different fibers in more detail below. They are ordered by how common they were to our medieval predecessors.

Linen

Linen may well be the oldest natural cellulosic fiber, having been used by Swiss lake dwellers as early as 8000 BC. Egyptian linen fragments have been dated to 4500 BC. It was used extensively in our period for underclothes and items that required more frequent washing. Unfortunately, it is often not well preserved, since it is made from plants, it decomposes, leaving little record for archeologists.

Made from the stem of the Flax plant, linen fibers, which are from 2" to 36" long, are spun into yarn, then woven into fabric..

Available in a variety of weights from handkerchief linen to heavy suiting, linen has a natural luster, high moisture absorbency (12%), and no static electricity.

Cool and comfortable to wear in warm climates, linen fabrics are quick drying, lint free, and resistant to moths and the alkalis in detergents, Borax, ammonia, and washing soda. They have good shape retention; and even though strong when dry, they are even stronger when wet. They shed surface dirt, resist stains, and are not damaged by sunlight, but they yellow with age.

Linen fabrics wrinkle easily, even when treated with a crease resistant finish. They shrink, have poor elasticity, and are damaged by silverfish and mildew.

Linen dyes well, but it does not dye as easily as cotton. Darker colours crock (develop 'crease' or 'fold' lines in the dye itself) and fabrics wear and fade at fold lines and edges. Compared to cotton, linen is usually more expensive, more absorbent and faster drying.

Fabric Characteristics:

- Linen fabrics fray badly
- Linen shrinks (in the first few washings, but little after that)
- Linen fabrics lose their crispness when laundered
- Linen wrinkles badly and, once pressed, unwanted creases are difficult to remove. Linen can get a shiny, waxy finish when pressed on the right side without a press cloth.
- Linens have good moisture absorbency, and are comfortable to wear
- Linen dries quickly
- Some linen fabrics are sheer, while others are bulky.

Selecting linen

Good quality linens feel cool, firm, wiry, smooth, and supple while heavily sized, inexpensive fabrics frequently feel harsh. To distinguish better fabric, examine the finish and fineness of the yarns as well as the number of threads per inch. Look for fabrics that have straight, even and smooth yarns and firm close construction. the finer the yarns and the more threads per square inch, the better the fabric.

Since linen is more expensive than cotton, it is important to know the difference between the two. High quality linens are smoother with less fuzz on the surface than cotton. Linen fibers are longer and more difficult to tear; the torn fiber ends are straighter and smoother, while the fuzzy cotton fibers tend to curl. Linen threads are stronger and harder to break than cotton ones of the same size; once broken, the linen ends are pointed; the cotton ends look like brushes.

Care:

Most linens can be washed and dried in the machine without trouble, as long as they were subjected to this before they were made up to remove the shrinkage. (Please to not do this to your store bought suit, it probably wasn't preshrunk!) Remember that dark colours will fade with repeated washings. In period, fabrics would be 'bleached' by laying them out in the sun-line drying on a sunny day can have the same effect for you!

If you dislike wrinkles, remove the garment from the dryer while still warm and hang. Or hang the garment to dry completely, after straightening things like the front and sleeves by hand. Press if you would like, but be assured that the wrinkles will return shortly, and that dark fabrics in particular can get shiny patches from the heat of the iron!

Wool

According to legend, wool garments were worn by the Babylonians as early as 4000 BC; and by 3000 BC., Britons were wearing crude woolen garments, which may have been felted instead of woven. In 2000 BC, the tablets of Ur described women and girls weaving wool.

Several hundred breeds of sheep produce wool fibers. Most are bred for wool production and sheared or clipped each spring to remove the fleece.

After the fleece is sorted by length, fineness, colour, and quality, the wool is scoured in a warm, soapy, alkaline solution to remove dirt, sticks, burrs, perspiration, and natural oils. Then it is processed on a carding machine, where the fibers are separated to form a fine web. Short wool fibers are rolled into a loose rope, which is spun into woolen yarns. Long wool fibers are combed to remove short fiber, to straighten the remaining fibers, and to lay them parallel before they are spun into worsted yarns.

Wool can be dyed at any stage: fiber, yarn or fabric.

Woolens and Worsteds

There are two types of wool fabrics: woolens and worsteds. Woolens are woven from woolen yarns; worsteds, from worsted yarns.

Woolens are usually soft, with a rough or fuzzy texture. The yarns are made of short fibers, loosely spun with a low- to medium- twist and are used to make bulkier, heavier, and warmer fabrics such as bulky tweeds, coatings, washable wools and some flannels.

Compared to worsteds, woolens are easier to sew, less expensive, and better suited to casual designs; they pill, matt, and soil more easily; but stains are easy to remove.

Worsteds are smooth, strong, and more lustrous than woolens. The yarns have a medium to high twist and the weave is quite prominent. Worsteds are used to make lighter weight, clear surfaced, hard- textured fabrics such as gabardine, serge, twilled, ribbed and suiting fabrics.

Worsteds wear longer, crease, and press well. Tightly woven, they rarely sag or bag. They have a smooth, hard surface which wears well but shines easily.

Fabric Characteristics

- Wool is comfortable to wear; it is warm in winter and cool in summer.
- Wool absorbs moisture better than any other natural fiber. It can absorb moisture up to 30% of its weight without feeling wet.
- Wool is water repellent, flame-retardant, elastic, and resilient.
- The natural crimp of the fibers allows fabrics to resist wrinkling and to return to their original shape. Wool recovers more quickly when steamed.
- Wool can be stretched as much as 35% when dry and 50% when wet.
- Wool resists creasing and wrinkling better when dry than when wet.
- Wool felts when exposed to heat, moisture, abrasion, and pressure.
- Wool is lightweight in relation to its bulk.
- It will hold a deep nap without matting.
- Wool tailors well; it is easy to shape, crease, shrink, and stretch with steam.
- It resists static electricity except when the air is very dry.
- Wool can be blended with less expensive wools, other natural fibers, and manmade fibers to reduce the cost or to extend the use.
- Wool resists fading and crocking.
- Wool can be laundered or dry cleaned, depending on the dyes, finishes, fabric structure, and garment designs. Check the end of the bolt and make notes, or test a sample.
- Wool is easily damaged with improper pressing and hot irons.
- Wool is damaged by moths, carpet beetles, alkalies, chlorine bleach.
- Wool is discolored by sunlight; and it will deteriorate with prolonged exposure.

Selecting the fabric

Carefully examine the fabric to be sure it is clean and not shopworn with faded lines at the fold, spots, dust streaks, or pulled threads. Hold the fabric up to the light to check for imperfections and moth holes.

Scrape the fabric with your thumbnail; if the yarns separate easily, the fabric will ravel and may not wear well. Closely woven fabrics are more durable and less flammable.

To examine the fabric drape, hold up the corner of one end. Woolens generally drape softly into several bias folds, while worsteds tend to hang stiffly in a cone shape.

Fabric preparation

Wool fabrics labeled "needle ready" or "London Shrunken" are ready to sew and do not need to be preshrunk **if** you will be dry cleaning them. If they do not say this (And most don't) then you must decide first how you will take care of them- dry clean or wash. Many wools can be washed **IF** you are willing to tolerate a (Sometimes dramatic) change in texture. Test a sample before you commit to anything large.

To test a sample. Cut and finish a rectangle of cloth- it needn't be large, I usually use 4" by 6", where the 4" is cut along the selvedge and the 6" into the body of the cloth. (4" (or 10 cm) is usually the smallest amount you can buy from a fabric shop.) Measure the sample carefully, and finish the edges with a serger or by zigzagging around them with a sewing machine. If possible, leave the selvedge on the sample. Wash and dry the sample once or twice in hot water, unless the colour is quite dark, then in warm, just in with your regular laundry. Then re-measure the sample and examine it against the unwashed remainder. How much has it shrunk? Does the new texture appeal to you? Note if the selvedge has shrunk as much as the rest of the cloth. Remember to take the amount of shrinkage into account when buying your yardage.

The whole yardage should be washed in warm to hot water with soap at least twice and dried twice before you cut into it. If selvedge on your sample did NOT shrink along with the rest of the cloth, then cut it off, and serge or zigzag those edges, as well as the cut ends or the whole fabric will come out very strangely!

Test pressing techniques on a fabric scrap before beginning the garment. The amount of moisture, heat, and pressure varies with the fabric and remember that, since wool is weaker when wet, it should be handled carefully when pressing or steaming. Dark coloured fabrics- navy, brown and black- shine easily. To avoid shine, press as much as possible from the wrong side. Use a damp press cloth. Press, do not slide the iron; and do not press the fabric completely dry. Let the section dry before moving it.

To remove shine, cover the area with several layers of a damp press cloth. Hold the iron against the press cloth and press until damp and steaming. Using a fabric scrap, brush the garment lightly to restore the surface. Repeat if needed.

Also note- Washed wools frequently get a nap or 'fuzzyness' to them. Be cautious how you press these fabrics- if you crush or flatten the nap in one section, it could look odd if you don't do it everywhere! Sometimes brushing with a clothes brush will help to restore the nap.

Care

Since most wools don't soil and spot readily, they are easy to keep clean.

After each wearing, hang the garment immediately and brush it with a firm, soft brush . To prevent matting, avoid brushing when damp. Allow the garment to rest 24 hours between wearings, so it can shed its wrinkles. (Baggy seats and knees till recover with a good steaming and light pressing.)

To freshen garments, air them near an open window or in the shade outside. To prevent soiling, wear a washable under tunic.

Hang damp garments away from heaters and sunlight, so they can dry naturally. When dry, brush well with the nap. Never put garments away wet.

Treat spots immediately. Use a clean cloth to absorb any excess liquid; then clean with a mild solution of soap and cool water or cleaning fluid. (test cleaning solutions on a fabric scrap first.) To prevent pilling and felting, avoid rubbing vigorously. To prevent shrinking or bleeding, use a hairdryer on the cool setting to dry the cleaned area.

Repair rips and tears as soon as possible. And to avoid damage by moths and carpet beetles, clean garments before storing. When using moth balls, do not let them touch the fabric. remember that cedar keeps moths away too, doesn't hurt fabrics, and smells better!

If your wool has been pre-washed as above, you should be all right to wash it again in cold water, and hang it, or if you have the room, lay it flat, to dry. Exceptions to this would be if you had to press the fabric a fair amount to remove the 'crimped' texture from it. If you had to do that, when it is washed, it will crimp up again, and it will be Small, and you will be sad. In this instance, and for all other cases, dry cleaning is your best and safest route.

Lightweight wools

Examples: Challis, batiste, crepe, tropical worsteds, and Cool Wool

Fabric characteristics

- Although many lightweight wools are firmly woven and easy to sew, most will fray badly if over handled.
- Some are transparent and should be handled accordingly
- Lightweight wools are easily marred by too large needles and ripping
- Seam slippage (fabric coming apart) may be a problem at stress points.
- Light weight wools are easily damaged with improper pressing techniques.

Textured woolens

Available in various weaves and textures, all weights and a variety of qualities, textured woolens are usually woven in a combination of two or more colours or two or more shades of the same colour. These fabrics frequently have a rough surface, which helps to hide stitching irregularities. Some fabrics such as Harris tweed are named after the district in which they are made, while others such as Herringbone and salt and pepper are known for their physical characteristics.

Fabric Characteristics

- Many textured woolens are firmly woven and easy to sew.
- Many textured woolens have a nap
- Woolens are easy to shape with heat and moisture, but can be damaged with improper pressing techniques.
- Woolen with slubs and low twist yarns tend to pill more.

Worsted suiting

Examples: Gabardine, serge, wool poplin, tropical worsteds, worsted flannel

Fabric Characteristics

- Worsted suiting are firmly woven with a smooth hard surface
- Most are medium-weight, but they range from lightweight tropical worsteds to heavy whipcords.
- They crease and pleat well, and are frequently difficult to ease
- Many worsted suiting are very springy and difficult to press
- They are easily shined when pressed improperly
- Most worsted suitings spot badly and fray easily

Coatings

Examples: Melton, Boiled wool

Fabric characteristics

- Coating fabrics are very bulky and warm
- Most coating fabrics have a prominent nap.
- Most coating fabrics fray very little so seams and hems are usually left unfinished; however a few coatings are loosely woven and fray badly
- Coatings are difficult to press well
- Coating fabrics wear at the edges and some pill.

Silk

Sericulture is the cultivation of silkworms to produce silk. The silkworm goes through four stages of development: the egg, larva, chrysalis, and adult moth. One moth lays from 400-600 eggs on specially prepared sterile papers. The eggs, which are about the size of a pin head, are stored in a cool dry place until the breeder is ready to begin their incubation

The eggs are then moved to a warm area to incubate. After about 30 days, they hatch into tiny worms, called ants. Only 1/8" long, the young silkworms are fed numerous times a day for 30-40 days. During this time, they consume about seventy times their own weight and grow so rapidly that they must shed their skins four times.

When fully grown, the silkworms, now about 3 ½ inches long, begin to rear their heads, looking for a place to attach themselves so they can weave their cocoons. They are transferred to a surface of twigs and straw. The silkworm attaches itself to the straw; then, by moving its head in the a figure-eight pattern, it surrounds itself with a peanut-sized cocoon made of silk filament.

The silk filament is composed of two strands of silk (Fibroin) and sericin, a gummy substance which cements the strands together. Several days later, most cocoons are heated to kill the silkworm inside. This prevents them from maturing and breaking the cocoon into thousands of short fibers. A few selected cocoons are allowed to mature in order to produce new eggs.

After the unbroken cocoons are sorted according to colour, texture, size and shape, they are placed in hot (140 degree) water to soften the sericin that holds the cocoon together. Once the sericin is softened, the filaments are unwound by a reeling process.

Since the filaments are too fine to be used alone, filaments from 2 to 20 cocoons are reeled together to make strands of raw silk which are uniform in size and strength. Each cocoon yields only 300-1600 yards of filament, so the reeler is constantly attaching filaments from new cocoons to keep the raw silk even and to make a longer skein. The skeins are combined to make a book; then the books are combined to make a bale- the basic unit for shipping.

Since the raw silk is too fine to be woven, two or more strands are twisted together to make fine filament yarns for weaving. Short fibers from the outside and inside of the cocoons, fibers from broken cocoons, reeling waste, and gum waste are spun to make spun silk.

Silks which will be yarn dyed are washed in an olive oil soap bath to remove the sericin. Degummed silks are white and soft and may weigh up to 25% less than before degumming. Better quality silks have less sericin than cheaper quality silks. Some silk fabrics, such as wild silk, have had none of the sericin removed.

Wild silk

Wild species or "tussah" silkworms live on oak leaves instead of mulberry leaves. This coarser food produces an irregular, coarse filament, tan in colour. Tussah fabrics such as shantung, raw silk, and pongee are durable with a coarse, irregular, ribbed surface. The fabric washes well, but it shrinks badly and should be preshrunk before cutting.

Characteristics of Silk

- Silk is comfortable to wear, cool in summer, and warm in winter.
- Silk is warm, yet lightweight.
- Silk is resilient and elastic; it holds its shape and resists wrinkling.
- Silk can be used in a variety of fabric constructions from very sheer to very heavy.
- Silk can be supple and drapable, as well as stiff and bouffant.
- Some silks have a high luster, others have a nap
- Silk has little static buildup.
- Silk absorbs moisture well, and dries quickly
- Cultivated silks dye and print well
- Silk does not pill or soil easily
- It is resistant to mildew, but susceptible to moths and insects.
- Silk can be bleached with hydrogen peroxide, or sodium perborate type bleaches but not with chlorine bleaches.
- It is weakened by sunlight, yellows when exposed to light, excess heat, and with age.
- Silk is damaged by perspiration and body oils
- Silk fiber doesn't shrink, but many silk fabrics do.
- Most silks require dry cleaning; but some can be laundered, depending on the fabric structure, finish, dye, and the garment structure.
- Silk is easily damaged by strong soaps and detergents, hot irons, acids and alkalies.
- Silk is easily damaged by improper pressing.
- Silk is the strongest natural fiber when dry; but it is much weaker when wet.

Selecting silks

Silks can be made into many different types of fabric, all suited to different types of projects, so consider carefully which one to choose. Examine solid colour fabrics carefully for imperfections in the weave. Surface variations which are considered attractive in shantung, tussah silk, wild silk and silk noile, are considered imperfections in satin, charmeuse, crepe, chiffon, georgette and decorative surface fabrics.

Generally fabrics with a higher number of threads per inch have more body, are stronger and more durable; however, they do not drape as well and may wrinkle more.

Fabrics with fewer threads per inch or yarns with little or no twist pick and pull more. And if the garment is fitted tightly or has strain at the seam lines, these fabrics slip (come apart) at the seams.

Care

Let silk garments air overnight before hanging them in the closet. To freshen wrinkled garments, hang them in the bathroom while you bathe. Store garments on padded or sturdy hangers in cloth garment bags when possible.

Clean soiled and stained garments as soon as possible. To avoid setting stains on garments that must be dry cleaned, don't try to remove them yourself. Show the dry cleaner all stains even if they seem to have disappeared, and explain what caused them.

Then removing stains on washable garments, don't rub the fabric; blot instead to avoid breaking the fibers and removing the colour. To remove grease stains, dust generously with talcum powder. Brush away the powder after an hour; repeat as needed. (Protect your silks from kitchen stains by removing them or by wearing an apron.)

Firmly woven, plain weave fabrics in pastel colours generally wash well, but other fabrics don't; dark and bright coloured fabrics fade, lose their luster, and slick when ironed. Crepes shrink badly, suitings lose their body, and satins pick and pull.

Remember that silk is a protein fiber, just like your hair. For most silk fabrics, hand laundering is best. Dissolve a mild detergent like Zero or castile shampoo in warm water. Handle the garment carefully since silk is weaker when wet. DO not rub, bleach, or leave the garment to soak. For dark colours, add vinegar to the soapy water (1/4 cup to a gallon of water). Rinse thoroughly, and add 1/4 cup of white vinegar to the final rinse. Roll the garment in a towel to remove excess moisture; do not wring. Smooth and straighten the seams; iron the garment or fabric dry.

Some simple designs and close weave fabrics can be machine washed on the delicate cycle and tumbled dried with several terry towels. Remove the silk garments when damp. Smooth and straighten the seams. If they need ironing, iron immediately. If not, hang on a rustproof hanger to dry.

I used to regularly wash my silk noile costumes in the regular machine with the rest of my costumes, and hang them to dry. However, please note that silk noile 'sheds' little silk balls that get onto *everything* else in the load. So now I do a separate silk load, or do them with items which are destined for the dryer (like towels or underwear), since the drier knocks off the little silk bits.

Cotton

The use of cotton in fabrics may have begun in Egypt as early as 8,000 BC. By 3000 BC it was well established in India and Peru. Some fragments found from this later period are actually finer than the finest cottons we have today. Not much evidence of its use in Europe has been found, either in archeological evidence, or in documentary evidence, until fairly late in our time period. In the 1300's, Italian documents start to show evidence of a native cotton weaving and importation trade. But it also notes that it is mainly inferior goods, meant for local lower class persons.

Cotton grows on cotton plants in warm climates with adequate rain. The cotton fibers, which are taken from the boll or seed pod, are sometimes as long as 2 1/2" and sometimes as short as 3/8". The long-staple cottons are the most expensive, the hardest to produce, and the least abundant. Once the cotton is picked, it is separated from the seeds by ginning. Long fibers are spun into thread; linters, too short for spinning, are made into rayon (in earlier times these might have been used as stuffing or wadding in quilts and quilted garments); and the seeds are used for fertilizer, and cottonseed oil. The quality of cloth depends on the fineness of the fiber, its colour and brightness, and the amount of foreign matter.

Compared to flax, cotton is weaker; compared to rayon, it is stronger.

Fabric Characteristics

- Cotton is comfortable, durable, and very flammable.
- It has a high moisture absorbency, conducts heat well, and resists abrasion, pilling and moths.
- Cotton drapes well, and has good covering power. It is relatively dense, which makes it feel heavier than comparable fabrics.
- It also conducts electricity, and does not build up static electricity.
- Cotton is stronger wet than dry.
- Cotton has little elasticity and resiliency; it wrinkles easily.
- Cotton fabrics frequently shrink.
- Cottons weaken and deteriorate when exposed to extended periods of sunlight.
- Cotton soils easily
- Cotton can be laundered, or dry cleaned, depending on the dyes, finishes, fabric structure and garment design.

Prepare your fabric

Preshrink all cotton and cotton blend fabrics before cutting. Cotton fibers do not shrink, but cotton fabrics do. During the weaving process, the yarns are held under tension. When the fabric is removed from the loom and washed the first time, the fabric relaxes and shrinks.

In practice, cotton garments will often continue to shrink through their life, not only to their starting position (think how your jeans feel after a wash), but also in the length (your jeans get shorter over time). This can be forestalled by washing in cold water, and hanging things to dry

as opposed to hot washing and machine drying. Loosely woven cottons will shrink more than tightly woven ones.

Garments should be cleaned frequently as the short fibers pick up soil easily - once the dirt is embedded, it's difficult to remove. To set colours and reduce fading, add a cup of vinegar to the wash water. To remove excess soil and to whiten whites, use a chlorine bleach; or boil them in water.

Cotton stored in warm damp places will mildew, mold and rot; be careful to avoid putting garments away damp. (Remember this at Pennsic, and after Fencing/fighting practice) Cotton is resistant to moths and carpet beetles, but not to silverfish.

Ramie

Sometimes called "China Grass", Ramie is a soft, hairy fiber which is less expensive than linen; but, like linen, it is very lustrous, naturally strong, comfortable, and wrinkles easily. It doesn't shrink and it resists mildew.

Ramie is frequently blended with natural and synthetic fibers. It is more absorbent and easier to dye than linen; and it is more resistant to light than either Cotton or Linen. Depending on the dyes, fabric weave, finishes and garment construction, Ramie can be laundered or dry cleaned.

Weaves

The fiber content of your fabric is important, but so is how it is put together, or woven. Different weaves have different properties and characteristics, and were more and less popular as styles and weaving technology changed.

Weaving terms that are useful to know:

- Warp - set of yarns put onto the loom to run the length of the cloth and parallel to the selvedge. Sometimes called the 'ends' and 'woof'.
- Weft - Cross grain yarns that interlace with the warp. May be decorative; usually weaker than the warp, with less twist. Sometimes called: pick, shoot, shute, filling or woof.
- Grain - The yarn directions on woven fabric. The length wise or straight grain follows the warp. The cross grain or crosswise grain follows the weft. Off Grain describes the fabric when the weft is not at right angles to the warp. It cannot be corrected if the fabric has a permanent press finish.
- Selvedge - Long woven edge on each side of the fabric which does not ravel. Frequently different from the body of the cloth. Sometimes called the self-edge or the selvage
- Float - Portion of the warp or filling yarns which cross two or more of the opposite (Warp) yarns to form the pattern.

Plain weave

Plain (or Tabby) weave is the simplest and most popular weave. It is simply one over and one under, repeated endlessly. Their surfaces are very plain and unremarkable. Examples include: chambray, muslin, broadcloth and sheeting.

Plain weaves become more plentiful in the 13th and 14th centuries when the Horizontal loom becomes popular. They are less easy than twill weaves to make on the warp weighted loom, the loom that was used before the horizontal.

Compared to twill weaves (see below), plain weave fabrics are lighter weight and print better; they are not as strong or as firm and do not drape as well. They ravel less, wrinkle more, and are less absorbent than twill and satin weaves.

Fabric Characteristics

- Most plain weave fabrics are easy to sew
- Many plain weave fabrics shrink and wrinkle easily
- Seam slippage and fraying are a problem in poor quality fabrics.
- Plain weave fabrics have poor elasticity and tear easily
- Many plain weave fabric garments can be washed successfully while twill or satin fabrics with the same fiber content cannot.

Selecting the fabric

Generally plain weave fabrics are judged by the number of threads per square inch. Hold the fabric up to the light and examine the weave. The weave should be uniform; patches of light and dark indicate poor construction, poor quality yarns, or heavy sizing. The threads should be fine, and closely spaced, if the fabric is not a novelty weave.

Generally, printed plaids, checks and stripes are less expensive than similar woven fabrics. Check to be sure that they are printed on grain, or avoid them altogether.

Twill Weave Fabrics

Twill is the most durable weave. Produced by a series of floats, the diagonal lines are typical of all twill weaves. The diagonals or wales vary from very steep to reclining with a 45 degree twill on the true bias. Examples of twill weaves include: Denim, Gabardine, chino.

Generally twill weaves on wool fabrics run from the upper left to the lower right; twills on cottons run from the upper right to the lower left. Fancy twills such as the herringbone and zigzag, which run in both directions, are used on wools, silk suitings, and cottons. Occasionally one can find lozenge, or diamond twill, where the weave makes diamond shapes- snap these up for early period costumes!

Twill weaves are rarely printed, or transparent. Compared to plain weave fabrics with the same number of threads per inch, twill weaves are softer and more expensive; they drape better and do not soil as easily; however, once soiled, they are more difficult to clean. Since twill has floats which allow more threads to be woven per inch, it then becomes heavier, stronger, firmer, and more wrinkle resistant than other weaves.

Fabric characteristics

- Most twill weaves fray badly
- Balanced twills and some herringbones may not require a nap layout; other twills do
- Many twill weave fabrics shrink
- Twill will wear and abrade at edges and fold lines
- Closely woven twills are naturally water repellent
- Some twill weaves are bulky (Denim)
- Some twill weaves have a obvious diagonal pattern.

Satin and Sateen

Satin fabrics have a smooth, lustrous surface. Woven in a satin weave from low twist yarns, satin features long floats on the fabric face. The floats are in the warp of lengthwise grain, except on sateen. (Many satin weave fabrics are not called satin)

Satin was used in period, but relatively sparingly and often as a lining, for the same reasons we do this today- it is smooth and moves well over other fabrics and the finish snags on things. It is

not a practical fabric, as it picks and catches on almost anything, and these picks make it look tired and old much faster than other weaves.

Types of satin that have uses in period costuming

Charmeuse is a soft light to medium weight fabric with a dull back. It is modernly used for blouses, lingerie and nightgowns, as well as evening wear. I have used it as a lining fabric for visible linings on decadent costumes.

Peau de soie is medium weight satin with a dull finish. Originally of silk, today it is frequently made of polyester. This is again good for visible linings on decadent costumes. Be aware that Polyester Peau looks different from the silk, and if you make a whole costume out of it you will look like a bridesmaid!

Duchesse satin is a very heavy, stiff satin. it is usually made from silk, acetate or polyester. See above.

Cotton satin is woven with long staple, combed cottons in the warp. This can sometimes be found as sheeting, and makes nice chemises. Heavier weights can look like Peau de soie, and to my mind would be a better substitute for silk than the polyester.

Cotton sateen is a dull luster, cotton fabric with filling, instead of warp floats. see above

Fabric characteristics

- Satins snag easily
- Satin fabrics are easily marred by pins, needles, rough hands, rough sewing surfaces, and ripping
- Some satins ravel badly
- Puckered seams are frequently a problem
- Satins are easily damaged with improper pressings.
- Satins are susceptible to seam slippage.
- Some satins are easily damaged by folding
- Some satins water spot; many will show perspiration stains.

Most satin fabrics are selected for their beauty, not their durability. The best and most expensive satins are silk, or silk faced. Satins with longer floats are more lustrous, but less resistant to abrasion and snagging.

Satins with a tighter weave fray less, are more durable, and more resistant to seam slippage; those with a looser weave have longer floats, more luster and drape better.

Satins can be easily bruised by folding. Examine the fabric before you buy it to check for damage, and if you won't be making sewing it for a while, ask for a tube to roll it up on (after unfolding it)

Pile Fabrics

Frequently called napped fabrics, pile fabrics are knitted or woven with an extra set of yarns to produce a pile on one or both sides of the fabric. The pile can be cut or uncut, all over or patterned, high, low or varying in depth.

Like pile (napped) fabrics reflect the light differently, depending on the direction of the pile. When it runs up, the fabric looks darker and richer, when it runs down, it looks lighter and shinier.

Pile fabrics range from very delicate, elegant cut velvets to rugged, casual fake fur fabrics. Other typical pile fabrics include corduroy, terry, chenille, velour and velveteen.

Chenille is a tufted pile fabric with a woven ground

Corduroy is a filling pile fabric. It is usually woven with vertical wales or ribs.

Terry is a warp-pile fabric. Unlike other piles, the loops are uncut and the fabric has no nap.

Velour is a warp pile fabric and used for casual garments

Velvet is a warp pile fabric used for elegant designs.

Velveteen is a filling pile fabric, with a short, close pile.

Fabric Characteristics

- Pile fabrics vary in weight, bulk, fiber content, pile length, use difficulty to sew, and care requirements.
- Pile fabrics have a nap
- Pile fabrics usually require extra fabric
- On some fabrics, the direction of the pile is difficult to determine.
- Pile fabrics are easily marred by pins, ripped seam lines, alterations, and improper pressing techniques. Some piles are marred by finger marks.
- Pile fabrics creep badly and sometimes pucker during stitching.
- Pile fabrics ravel and shed
- Some pile fabrics are bulky.

Generally pile fabrics are cut 'up' for beauty (e.g. velvet) and 'down' for wear (e.g. Corduroy). However, the pile can run in either direction, if you are consistent. To determine the direction of the pile, stroke the fabric parallel to the selvedge. One direction will feel more smooth than the other when you rub against it. Use white chalk or soap to mark arrows on the wrong side of the fabric indicating the direction of pile.

To decide which is better for your garment, drape the fabric around your shoulders so the two ends fall down on each side in front. Study the colour tones in the mirror.

Be careful when cutting and sewing pile fabrics as they tend to shift and move. The longer the pile and the more synthetic is in the fabric, the harder your job will be. Try cutting things in a single layer, and use pins generously, but only inside the seam allowances in case they leave marks. Be sure your pattern fits well before you start work, because alterations can be difficult

and may mar the fabric.

Always test your stitches on a scrap before starting to sew the garment. You may need to adjust the tension or the pressure of your sewing machine foot on the garment. Always stitch with the nap. Sometimes the easiest way to keep the fabric from shifting is to hand baste it before taking it to the sewing machine.

Woven Patterns

Brocade Embossed or raised floral and scroll design woven on a jacquard loom. Fabric back is easy to distinguish by floating threads. Made from all major textile fibers and often includes metallic threads. Sometimes crisp and heavy.

Damask Reversible fabric made on a jacquard loom. Features elaborate designs woven in cotton, linen, wool, worsted, silk, rayon and manmade yarns. Flatter than brocade, it is sometimes woven with gold or silver patterns. One of the oldest fabrics.

Jacquard Reversible tapestry design produced on a jacquard loom. Colours and pattern are reversed on fabric back. used for all major fibers

Jacquard loom Loom with utilizes plain, twill and or satin weaves to create intricate designs.

Bibliography

- Crowfoot, Elizabeth: Pritchard, Francis: and Staniland, Kay.
Textiles and Clothing c. 1150-1450. London: HMSO, 1992.
- Shaeffer, Claire
Fabric Sewing Guide. Radnor, Pennsylvania, USA: Chilton Book Company, 1994
ISBN 0-8019-7802-5

Finishes

After a fabric is woven, many things are done to finish the cloth. Many of these processes are very old, and perfect for our period, but many are much newer and could only be done with modern machinery. Still others have fallen into disuse, or out of fashion, and are now only used for a few types of cloth. Some are only done (or can only be done) on particular types of cloth, woven in a certain way out of certain fibers.

Fulling and napping wool

After woolen fabrics have come off the loom then and now, they are fullled. In our period they often took longer with this than we do now. The following description is of what happened in the fourteenth century, but similar things were done all through period and even now with modern machines.

Fulling was a process of washing the woven cloth where by it was cleaned of the natural oils and thickened and shrunk through agitation (in period it was done by hand or foot). Napping or teasing was a process where a pile was raised on the surface of the textile (using a teasel), making it soft and almost shaggy. Shearing gives the surface of the cloth a haircut, and makes the nap one uniform length. Many fine fabrics in this time were subjected to this process repeatedly being given "one, two or three shearings each, with four to seven 'trecken' or nappings per shearing" (Munro, in *Cloth and Clothing*, p. 33). Dying would take place after weaving and fulling (since lanolin, an oil from the sheep, can resist the dye) and before napping and shearing.

Most woolens now don't go through that napping and shearing process, unless they are to be used for overcoats, since the modern fashion is to see the weave, which is obscured by the napping process. If you throw your modern wools in the washing machine, it fulls them one more time, and often raises more of a nap than they had before, rendering them closer to a 'period' state.

Brushing Finishing process to raise the nap. Used on wool cotton and denim.

Cut pile Pile fabrics like corduroy and velvet made by forming extra loops on the surface, which are then cut to form the pile

Cut velvet 1) any velvet with cut loops 2) brocade pattern on sheer fabric.

Embossed fabrics Any fabric with a relief pattern which has been pressed into it by passing it between heated rollers. Usually permanent now. Used on satins and velvets mainly.

Printing and painting This was done on a relatively small scale in period, usually as quick ways to get heraldry into the hall or around a tourney field. Much less common for clothing. It would often be done by hand, like block printing.

Sizing Starch, gelatin, or resin finish added to a fabric for body and smoothness. May be temporary or permanent.

Sample Set Information

Type: Plain weave Linen (heavy)

Fiber used in sample: 100% Linen **Colour of Sample:** White

Can also be found in these fibers: N/A

Usual Widths (in inches): 60" (sometimes 45")

Expect to pay about: \$15-25/m

Characteristics: Stiff when on the bolt, due to sizing, softens when washed and dried

: Will Shrink in first wash or two

: Breathes well, seems to wick moisture from the body

: Easily creases sharply when new, less so after repeated washings

Care: If you wish to keep a very crisp look to your linen, dry cleaning is the easiest way. However, if you want a softer more comfortable look, feel free to wash it. IF you hang it to dry, it will stay reasonably flat and crisp. If you dry it in the dryer, it will be softer, and almost bouncy.

If you dislike wrinkles, either hang garments to dry, or remove them from the drier while still warm, and hang.

Uses: Underclothes of all periods and most classes, usually in white/natural colours.

: Over tunics for earlier periods, or working clothes for later periods

: Veils and head rails of the more opaque type

Type: Plain Weave Linen (Light)

Fiber used in sample: 100% Linen **Colour of Sample:** Yellow

Can also be found in these fibers: N/A

Usual Widths (in inches): 54"-60"

Expect to pay about: \$15-25/m

Characteristics: Stiff when on the bolt, due to sizing, softens when washed and dried

: Will Shrink in first wash or two

: Breathes well, seems to wick moisture from the body

: Easily creases sharply when new, less so after repeated washings

Care: If you wish to keep a very crisp look to your linen, dry cleaning is the easiest way. However, if you want a softer more comfortable look, feel free to wash it in the machine. IF you hang it to dry, it will stay reasonably flat and crisp. If you dry it in the dryer, it will be softer, and almost bouncy. If you dislike wrinkles, either hang garments to dry, or remove them from the drier while still warm, and hang.

Uses: Underclothes for wealthier persons of all periods, but particularly later ones, usually in white

: Veils and head rails for most periods

Type: Plain Weave Cotton/Linen

Fiber used in sample: 50%Cotton/ 50%Linen **Colour of Sample:** Pink

Can also be found in these fibers: N/A

Usual Widths (in inches): 60" (occasionally 45")

Expect to pay about: \$10-15/m

Characteristics: Less stiff/crisp than the linen on the bolt, softens when washed and dried

: Will often continue to shrink throughout its life

: Breathes well, but doesn't wick moisture

: Easily creases when new, less so after repeated washings (it is more crease resistant than Linen)

Care: Can be machine washed and dried, hot temperatures will generally encourage shrinkage. If you dislike wrinkles, either hang garments to dry; or remove them from the drier while still warm, and hang.

Uses: As for Linen in a similar weight i.e.: Underclothes, over tunics, veils

Type: Wool Flannel

Fiber used in sample: 100% Wool **Colour of Sample:** Gold/beige

Can also be found in these fibers: Some wool blends are occasionally found

Usual Widths (in inches): 60"

Expect to pay about: \$6-15 (on sale) \$15-30 regular and high qualities

Characteristics: Plain, dull surfaced with a light nap. Usually, nap can be raised further with machine washing and drying.

: Can be made in tabby or twill weave, but most commonly twill.

: Can drape well, particularly after washing, has plenty of body.

: Will shrink in first 1-2 machine washings- test a sample first to see if you will like the result!

Buy extra yardage against shrinkage losses (buy 10-20% more than usual).

Care: If you have machined it first, you should be able to safely wash the completed garment in cold water and hang it or lay it flat to dry. The safer option is Dry-cleaning, though they will sometimes press away the glorious nap. Mention that you don't want that to happen when you drop it off.

Uses: All periods of costuming, for over clothes. Late periods it is most appropriate for Middle class.

Type: Herringbone weave

Fiber used in sample: 100% Wool **Colour of Sample:** Charcoal

Can also be found in these fibers: Since this is a weave, it can be made in any fiber. Wool and silk are most common.

Usual Widths (in inches): 60", sometimes 45"

Expect to pay about: \$10-30/m depending on fiber content, quality and "saleness"

Characteristics: This is an example of a weave type. It will always look like this, but in different colours!

: Wools can be stiff and heavy like this sample of coating, or soft and drapable in a suiting weight.

: Silks are generally softer with plenty of body

Care: As for the appropriate fiber type. If there is a great deal of difference in the colours that the weave is made out of, try a sample in cold water to see if it bleeds.

Uses: Often perfect for earlier period costuming (through 13C or so) since the warp weighted loom made this sort of thing well. Can be used in later periods, but it would be less common.

Type: Wool Tropical/ Summer suiting

Fiber used in sample: 100% Wool **Colour of Sample:** Brownish small check

Can also be found in these fibers: Imitations can be found in wool blends, or pure synthetics

Usual Widths (in inches): 60"

Expect to pay about: \$12-30/m (and up) for 100% wool, \$7-30/m for blends and synthetics

Characteristics: Can be crisp or soft on the bolt, but always quite thin and light.

: Can be woven in solid colours, or with multi coloured yarns

: Wool breathes, Synthetic imitators don't

: Reasonably easy to make up, but can fray

Care: IF it has been pre-washed and IF it stayed a similar texture after it was washed, you should be able to machine wash it again. If not, dry-cleaning is safest

Uses: All kinds of over clothes. In interesting weaves or plaids, try earlier period.

In a solid colour, it is a safe bet for quality mid period (13-15th C), or for middle class late period (15-16th C)

Type: Silk Noile

Fiber used in sample: 100% Silk **Colour of Sample:** Natural/ivory

Can also be found in these fibers: N/A

Usual Widths (in inches): 36" to 48"

Expect to pay about: \$5 (on sale) to \$15

Characteristics: Rough textured, soft, drapey when washed, as well as on bolt

: Breathes well, comfortable to wear year round.

: Is not strictly speaking a period fabric, the waste silk they use to make this was less plentiful in period due to different processing techniques. What there was was usually used for stuffing, or filling, where we would use cotton or poly-fill today

: easy to work with and to wear, though the seams can pull apart if the garment is tight.

: Machine washable and dry able, though it will shrink in the first few washings.

: You may wish to wash this separately from other fabrics, as it can pill and shed onto other clothes. These pills can be knocked off in the dryer, but if you were intending to hand the other garments, you will be in a mess.

Care: Pre wash and dry this fabric if you intend to wash it afterwards, it will shrink. For intense jewel tones, wash it in cold, warm if you are feeling daring.

: For dark colours: consider pre-washing even if you intend to dry clean later, since the fabric often has a lot of dye in it, which may come off on your underclothes! After making the garment up, hanging to dry will prevent more shrinkage and wrinkles.

Uses: Early and Mid period (6 to 14 th C) under and over clothes, later period lower class and camping clothes.

Type: Silk Douppioni

Fiber used in sample: 100% Silk **Colour of Sample:** White

Can also be found in these fibers: something similar in Polyester is sometimes available

Usual Widths (in inches): 40" to 54"

Expect to pay about: \$10 (extremely low quality) to \$15-30 (good quality, depending on sales)

Characteristics: Slubbed, ribbed, bumpy texture, from selvedge to selvedge

:Crisp, rustling, full of body

: Silk varieties come in many colours, including shot varieties, with different colours in each direction. Polyester tends to only come in single colours

: Can crease in the silk varieties

: Low qualities have large irregular bumps and a loose weave. Better qualities are more even, and regular and tightly woven.

: The smoother it is, the closer it would be to a period quality

: It is washable, but much of the stiffness is lost, and the fabric is very pliable. See next sample in set!

: It will shrink when washed.

Care: If you wish to keep it crisp, dry cleaning is the easiest way, unless you wish to spend a lot of time starching and ironing. For uses where that is not an issue, feel free to wash and dry.

Uses: Linings, and facings on all periods of clothes when washed. Linings on garments that require a stiff lining, unwashed.

Type: Silk Habotai (Lining silk)

Fiber used in sample: 100% Silk **Colour of Sample:** White

Can also be found in these fibers: N/A, closest thing is Rayon Bemberg, see below

Usual Widths (in inches): 40"-45"

Expect to pay about: \$12-20

Characteristics: Very soft, drapable, almost sheer

: Can crush, and wrinkle easily

: Can be washed on delicate in a bag or pillow case or by hand, will shrink

Care: Dry-cleaning and washing by hand safest. Picks in the washing machine can damage it

Uses: Linings, Veils

Type: Taffeta

Fiber used in sample: 100% Silk **Colour of Sample:** Burgundy

Can also be found in these fibers: Polyester and Acetate.

Usual Widths (in inches): 40" to 60" depending on make and fiber

Expect to pay about: \$ 20- 40 for silk \$5-20 for synthetics

Characteristics: Smooth finished, crisp, stiff and rustling, Lots of body!

: Creases easily, even in synthetics.

: Take care when cutting and sewing, pin holes may stay in the fabric, hard to alter

: Stands away from the body

: Can be woven with more than one colour to make patterns or "shot" with different colours in each direction

Care: Dry cleaning is safest, though some may be washable. Acetate dislikes water intensely! Try a sample first to see what happens to it.

Uses: Later period costumes (14th on) as a face fabric, or as a lining where stiffness is required.

Type: Charmeuse

Fiber used in sample: 100% Silk **Colour of Sample:** Dark gold

Can also be found in these fibers: Polyester

Usual Widths (in inches): 45" sometimes 60"

Expect to pay about: \$17-30 for silk \$7-15 for Polyester

Characteristics: Very soft, flowing, smooth, shiny fabric

: Silks can crease, polyester will not.

: Silk glows, polyester versions shine. The difference is subtle, until you see a large piece

: Silk breathes well, synthetics don't

: Can be difficult to sew, will slide around. Be careful when cutting and marking.

: take care when sewing this fabric, a catch in your fingernail, or rough wood or metal will damage this fabric.

Care: Dry cleaning, or hand washing recommended, even for polyester. The long floating yarns that allow this fabric to reflect light are easily snagged on small imperfections on washing machine and dryer surfaces. One small burr will ruin this fabric.

Uses: Visible linings (e.g.. inside sleeves, collars etc.) Could be used as decadent underclothes

Type: Peau de soie

Fiber used in sample: 100% silk **Colour of Sample:** Ivory

Can also be found in these fibers: Polyester

Usual Widths (in inches): Silk 48" to 54" Polyester 60"

Expect to pay about: For silk \$80-120/m, depending on weight, Polyester \$14-20/m

Characteristics: Heavy, stiff, lustrous, smooth

: Breathable, though sometimes warm

: Sometimes found as a 'shot' fabric with different colours in the warp and weft

: DO NOT attempt to machine wash this, your machine will damage the finish

: Take care when sewing this fabric, a catch in your fingernail, or rough wood or metal will damage this fabric

Care: Dry clean, or better yet, don't get it dirty so you won't need to wash it!

Uses: Linings where stiffness and decadence is required. If you make a whole garment of the silk, be really careful with it, and ask people to wash their hands before touching you. If you make a whole garment from Polyester, you will look like a bridesmaid. Helen has Spoken.

Type: Brocade- Shiny

Fiber used in sample: 35% Silk/ 65% rayon **Colour of Sample:** Red and Gold

Can also be found in these fibers: 100% silk, and synthetics

Usual Widths (in inches): Chinese patterns 30" others up to 60"

Expect to pay about: For silks and silk/rayon \$30-100/y

Characteristics: Stiff, lustrous, full of body, heavy

: Usually a multi-coloured woven pattern, but single colours also available.

: Often found in very 'Chinese' motifs, but sometimes more 'medieval' motifs are found

: DO NOT attempt to machine wash this, your machine will damage the finish

: Take care when sewing this fabric, a catch in your fingernail, or rough wood or metal will damage this fabric.

: Take careful note of the width, these are often narrow so you will need quite a bit more than usual to complete your project. Allow extra to match patterns, and remember the patterns are often directional, so use a 'nap' layout

Care: Dry clean, or better yet, don't get it dirty so you won't need to wash it!

Uses: Decadent doublets for later period costumes (14-16th C)

Type: Damask weave

Fiber used in sample: 100% Silk **Colour of Sample:** Mustard

Can also be found in these fibers: Cotton, Polyester, Rayon and Blends

Usual Widths (in inches): 45", 54" , 60" (sometimes wider)

Expect to pay about: Depends highly on fiber content and quality From \$4- 50 This was \$33

Characteristics: Usually crisp, and full of body.

:depending on fiber content, it can crease badly, or not at all

:Pattern can be made tone on tone, or with multiple colours

Care: Washing instructions will vary with the fabric content. Because the weaving process can leave long threads 'floating' across the surface of the cloth, machine washers can damage this fabric, as they often have small imperfections on their inside surfaces. Definitely try a sample first, and use caution. Dry cleaning is safest.

Uses: Late period over clothes.

Type: Drapery brocade

Fiber used in sample: 100% Cotton **Colour of Sample:** Burgundy

Can also be found in these fibers: Poly/Cotton, other cotton blends

Usual Widths (in inches): 54" sometimes 48" or 60"

Expect to pay about: \$10-17 (on sale or as remnants) \$17-50 (regular or special order)

Characteristics: Drapes well, has lots of body

: Usually has a directional pattern, and will therefore require a napped layout, and the purchase of additional fabric to match the pattern on the garment.

: can be one colour, or multicolour.

: Some may wash well, others not at all, depending on fiber content, weave, finish and colour.

Always test a sample.

Care: Count on dry cleaning, but if the fibers are cotton or poly-cotton and the colour not too strong, try testing a sample (see the "wool" section for instructions) and see how it turns out.

Possible results can include a dramatic difference in texture, body, colour and size.

Uses: Mid to late period (14th to 16th) costume, over clothes. Larger patterns are better suited to clothes that are made up of large pieces (e.g.: 16th c overskirts).

Type: Corduroy

Fiber used in sample: 100% Cotton **Colour of Sample:** Pale blue

Can also be found in these fibers: very rarely, cotton blends

Usual Widths (in inches): 45" sometimes 36" or 60"

Expect to pay about: \$3-15/m depending on width, quality and "saleness"

Characteristics: Can be stiff or drapery, depending on thickness of cloth and sizing

: Has a soft napped face side, with 'wales' or lines on it. These have a nap, so a nap layout is required, and extra fabric may be needed.

: Can crease badly, particularly if left to cool in the dryer

: Cottons will shrink in first few washings. Wash well before sewing

: Examine fabric carefully to see if the surface has been damaged on the fold, if the nap has worn away, there will always be a line there. Store it rolled on a tube if possible.

Care: Pre wash and dry this fabric if you intend to wash it afterwards, it will shrink. : After making the garment up, hanging to dry will prevent more shrinkage and wrinkles. : If you can, store the fabric rolled until you make it up to prevent further wrinkles.

: Take care when Pressing, so you don't ruin the nap.

Uses: Late period costumes of the middle class variety. Good for 'camping' versions of things, since it is washable.

Type: Velveteen

Fiber used in sample: 100% Cotton **Colour of Sample:** Purple

Can also be found in these fibers: Very rarely in Polyester/Cotton blends

Usual Widths (in inches): 36" or 45"

Expect to pay about: Between \$5/m (on sale) and \$15/m (very good quality)

Characteristics: Bulky compared to other cottons, it is the thinnest of the cotton velvets shown

: It is the softest and most drapery of the cotton velvets shown here

: Like all napped fabrics, it can creep when you sew it, though less than the others

: Requires a Nap layout and may require extra fabric.

: Can soften and lose dye in washing, test a sample first to see what happens to it

: Examine fabric carefully to see if the surface has been damaged on the fold, if the nap has worn away, there will always be a line there. Store it rolled on a tube if possible.

Care: Pre wash and dry this fabric if you intend to wash it afterwards, it will shrink. Since it mainly comes in intense jewel tones, wash it in cold, warm if you are feeling daring.

: Consider pre-washing even if you intend to dry clean later, since the fabric often has a lot of dye in it, which may come off on your underclothes! After making the garment up, hanging to dry will prevent more shrinkage and wrinkles.

: If you can, store the fabric rolled until you make it up to prevent further wrinkles.

Uses: Over clothes of the mid to late period (14-16 th C)

Type: Drapery Velvet

Fiber used in sample: 100% Cotton **Colour of Sample:** Plum

Can also be found in these fibers: Polyester/cotton, Acetate/cotton Blends

Usual Widths (in inches): 54" Sometimes 45" or 60"

Expect to pay about: \$10/y (on sale) to \$60/y (on special order)

Characteristics: Medium weight amongst cotton velvets, can be bulky

: Has more body and a longer nap than velveteen

: Is often more lustrous than velveteen, due to the longer nap, and the synthetic fibers

: Requires a nap layout and extra fabric

: Will creep badly when sewing, pins may damage it, hand basting helps

: Usually available in a wide range of colours, but you might have to order it.

Care: Take note of the fiber content! Cotton and poly/cotton should wash and dry reasonably well. However, Acetate usually doesn't react well to water, so if you must wash them, test a sample first.

: Dry cleaning is almost always safest.

: If you can, store the fabric rolled until you make it up to prevent further wrinkles.

Uses: Over clothes in Late period costuming (15 and 16th C) may be too bulky for 14th,

Type: Upholstery velvet

Fiber used in sample: 100% Cotton **Colour of Sample:** Black

Can also be found in these fibers: Cotton/Poly blend

Usual Widths (in inches): 54" sometimes 60"

Expect to pay about: \$20/y (on sale) to \$60/y (Special order)

Characteristics: Very bulky and stiff. May or may not soften with washing

: Requires a nap layout and extra fabric.

: Longer nap than velveteen, will wear better than either velveteen or drapery velvet.

: Will creep badly, synthetics are worse than 100% cotton.

: If you can, store the fabric rolled until you make it up to prevent further wrinkles.

Care: Take note of the fiber content! Cotton and poly/cotton should wash and dry reasonably well. However, Acetate usually doesn't react well to water, so if you must wash them, test a sample first.

: Dry cleaning is almost always safest.

Uses: Fitted parts of Late period (16th), it may not drape well enough for an over skirt.

Type: Brushed Cotton, Light weight

Fiber used in sample: 100% Cotton **Colour of Sample:** Khaki

Can also be found in these fibers: N/A but poly/cotton is sometimes made this way too

Usual Widths (in inches): 45" or 60"

Expect to pay about: \$4-15 for cotton \$4-10 for poly/cotton (depending on sales and width)

Characteristics: On the bolt it can be stiff or drapery, the surface is always soft.

: After washing, it is usually reasonably drapery.

: May require a nap layout, check to see if there is a difference.

: Mimics a felted wool reasonably well for the first few wearings, the "brushed" feel can wear off over time and repeated washings. It can sometimes be raised a bit by tumbling it in the dryer.

: Can crease badly, particularly if left to cool in the dryer

: Cottons will shrink in first few washings. Wash well before sewing

: Examine fabric carefully to see if the surface has been damaged on the fold, if the nap has worn away, there will always be a line there. Store it rolled on a tube if possible.

Care: Machine wash and dry. To prevent additional shrinkage, wash in cool water, and hang to dry. If you must iron it, do it from the reverse side, or you will harm the 'brushed' effect.

Uses: Over clothes for most periods, though in later periods, it will be more 'working class' looking. Works well for camping! For fencing costumes, though you may need 3-4 layers

Type: Brushed Cotton, Heavyweight

Fiber used in sample: 100% Cotton **Colour of Sample:** Rust

Can also be found in these fibers: N/A

Usual Widths (in inches): 45" or 60"

Expect to pay about: \$8-15 depending on sales and width

Characteristics: More stiff than the lightweight version, though the surface will be as soft.

: Doesn't crease as badly as the lightweight, but it takes more work to flatten!

: Can mimic felted wool or even suede for the first few wearings, the "brushed" feel can wear off over time and repeated washings. It can sometimes be raised a bit by tumbling it in the dryer.

: Can crease badly, particularly if left to cool in the dryer

: Cottons will shrink in first few washings. Wash well before sewing

: Examine fabric carefully to see if the surface has been damaged on the fold, if the nap has worn away, there will always be a line there. Store it rolled on a tube if possible.

Care: Machine wash and dry. To prevent additional shrinkage, wash in cool water, and hang to dry. If you must iron it, do it from the reverse side, or you will harm the 'brushed' effect.

Uses: Over clothes for most periods, though it may not drape well enough for gored tunics, and will look "lower class" for late periods. Makes great fencing armour, 2 layers is often sufficient.

Type: Canvas

Fiber used in sample: 100% Cotton **Colour of Sample:** White

Can also be found in these fibers: Sometimes Poly/cotton, sometimes Nylon

Usual Widths (in inches): 54" or 60"

Expect to pay about: \$7-12/y regular \$10-20/y specially treated

Characteristics: Heavy, stiff, crisp and hard textured.

: Can crease badly, particularly if left to cool in the dryer

: Cottons will shrink in first few washings. Wash well before sewing

: Some canvases may be treated for water repellency and/or fire retardancy (It will be listed as a feature). Don't wash these unless you know that you can from the manufacturer, you may wash the treatments off!

Care: Regular: Machine wash and dry. To prevent additional shrinkage, wash in cool water, and hang to dry. If you wish to water proof it your self, wash and dry it a few times first, or the waterproofing will shrink it for you (usually not in the direction you would prefer)! Specially treated: follow manufacturers instructions.

Uses: Corsetry, Fencing armour, Tents

Type: Broadcloth

Fiber used in sample: 100% Cotton **Colour of Sample:** Green

Can also be found in these fibers: 65% Polyester 35% Cotton (Very occasionally wool)

Usual Widths (in inches): 45" or 60" (usually P/C)

Expect to pay about: \$5-10/m for 100% cotton \$1.50-4/m for P/C

Characteristics: On bolt: sometimes crisp, sometimes soft, depending on the surface treatment.

:After washing: soft, and can be wrinkly

:Cotton will continue to shrink throughout its life.

: Breathes well, but doesn't wick moisture like linen

Care: Machine wash and dry, hot temperatures will generally encourage shrinkage. If you dislike wrinkles, either hang garments to dry; or remove them from the drier while still warm, and hang.

Uses: Underclothes, veils, over tunics for very hot weather (Pennsic)

Type: Bemberg Lining

Fiber used in sample: 100% Rayon **Colour of Sample:** Charcoal

Can also be found in these fibers: N/A closest is Silk Habetai

Usual Widths (in inches): 54"-58"

Expect to pay about: \$8-13/ m depending on quality and thickness

Characteristics: Very soft, drapable, almost sheer

: Can crush, and wrinkle easily

: Can be washed on delicate in a bag or pillow case or by hand, will shrink

Care: Dry cleaning and washing by hand safest. Picks in the washing machine can damage it