## CHAPTER VIII

## ORIGIN AND STYLE OF COSTUME AND FABRICS

Since the average person naturally becomes interested in one point of a costume, such as the hat, skirt, etc., there is a tendency to disregard the entire costume as a unit. Therefore we should make it a practice to study the outline or silhouette so as to see the proper relation of each part and the costume as a whole.

Silhouette. The style is determined by the silhouette or the outlines of the garment when seen from a distance. As we have seen in the history of costume, the silhouette may be the real lines of the figure frankly revealed by beautifully fitting clothes, or it may be a false outline, wisely or unwisely produced by a certain mode of dress.

One authority divides these silhouettes roughly into six classifications and states that every woman comes under one of these heads.

First of all there is the square silhouette, produced by clothes that broaden and flatten.

Second, the rectangular silhouette, which is oblong, straight up and down, narrow, and with no waistline, making a person look like a rectangle, expresses dignity and stateliness. This sort of costume is slenderizing but severe, and hides the real personality of its wearer. It is essentially the costume of the business woman.

Third, the outline may be narrow at the shoulders, and become increasingly wide toward the bottom of the skirt, like a triangle with the point (vertex) cut off. The triangular silhouette is for the woman who has a small, flat bust and large hips. Her most becoming costume is the tight-fitting blouse and voluminous skirt, the Marie Antoinette costume, the wide skirts of the Spanish dancer.

Fourth, the inverted triangle is for the woman whose hips are

small but whose bust is large. There is much cleverness needed to dress this type to advantage.

Fifth, the oval or egg-shaped silhouette, widening at the hips. This is for the woman of symmetrical form who is gracious and feminine and charming. It carries the suggestion of lovely trailing tea gowns, of chiffons and laces, and afternoons at home, of tea by candle light. Naturally this sort of dress is not intended to be worn on the street or at the office.

Sixth, there is the round silhouette adapted to the very thin, short, or tall person.

The difference in style or outline is affected noticeably by changes, especially in the three following points:

1. Sleeves, which vary from long, plain, and tight-fitting to very full balloon effects, full at the shoulder (leg o' mutton) or full at the wrist (bell or bishop sleeve)

2. Waistlines, which may be long, medium, or short, causing

a complete change in the figure.

3. Skirts, which may be straight and narrow, plain at the top, full at the bottom, or full from the waistline to the bottom. The outline of a skirt is also changed by the waistline.

In looking at fashion magazines to see what the new styles are, always notice the three points mentioned above and see what changes have taken place. Notice the outline of a person far enough to see the effect, and be sure that your eye is not distracted by the trimmings.

Fabric of the Costume. As soon as the style of the costume for the season has been determined, the question arises, what fabrics will bring out the style effects to the best advantage? It may be that existing fabrics on the market will suffice for the style of the costume, or it may be necessary to make new fabrics with distinct characteristics for the new style.

In order to know the kind of fabric necessary to bring out the style effect, it is desirable to know the different types of fabrics and their adaptability for producing different effects.

The materials that enter into the construction of a costume

are as important as the lines or color, because the cut and line effects depend upon the characteristics of the fabric.

To illustrate: A stiff silk, like taffeta, should not be used, as it might give a bouffant effect in a period when fashions are soft and clinging; a soft, clinging material like crepe de chine should be used. For the same reason chiffon — a very light, sheer, silk fabric — should not be used for a circular skirt, because it lacks body and stiffness. It might be used as an overslip where a stronger fabric is used underneath. Taffeta, satin, etc., would be suitable materials for a circular skirt. This is the reason why the fabric of an old costume cannot be used to advantage in making a new one, for the style effect is lost. Each style calls for a certain style of fabric; if this is violated, we lose the effect.

**Texture.** A word used frequently by costume drapers or designers in describing cloth is *texture*. It refers to the feel or finish and weave of the fabric — to the sensation we experience when we close our eyes and feel of a fabric. A fabric may be fuzzy, napped, stiff, fluffy, soft, etc. The texture is governed by the composition and twist of the yarn, weave, and finish.

The texture of a fabric determines the degree of reflection of light. To illustrate: Satin reflects the light to the face, bringing out the lines and shadows; a dull soft texture, like crepe de chine, will not reflect as much, hence, will appear to better advantage on an older person.

We saw on page 181 the importance of the (a) weave (structure), (b) construction, and (c) twist of the yarn in the fabric. That the (1) plain weave gave a structure of strength and firmness, particularly in resisting — tensile strength, (2) high construction, that is, closeness of threads, gave also a firm and strong fabric, (3) the highly twisted yarn or ply yarn gave stiffness and strength to the yarn. Consequently, a plain woven fabric closely woven, of high twist or ply, is the strongest and firmest. We see that by reducing or changing any or all of these factors, (1), (2), and (3), we alter the strength and stiffness or firmness of the fabric proportionally.

Thickness of Fabrics. The thickness of a fabric is due to the diameter of the filling yarn plus the diameter of the warp yarn.

Therefore, thick fabrics are due to the structure or weave composed of thick yarns. Thin fabrics, on the other hand, are due to a structure or weave of yarns of small diameter or fine yarns. The thinness depends upon the fineness of the yarn. Since fine yarn can be made only from long fibers highly twisted, it follows that they are the expensive fabrics.

Weighty Fabrics. A heavy fabric is due not only to thickness but also to closeness of weave. A light-weight fabric is due to thinness and low construction.

There are materials such as velvets, ratines, and napped (fuzzy) wool fabrics, such as broadcloth, bulky linens, and stiff cotton fabrics, that are quite heavy and when made into costumes make the figure appear larger because of the apparent bulk of the material. Hence they are not desirable fabrics for stout people. On the other hand, these fabrics are very useful for costumes requiring service.

Light Fabrics. Very thin (sheer) materials, such as voiles, organdies, and georgette crepe are sufficiently transparent when made into costumes to show the outline of the figure and thus prevent the form from appearing either larger or smaller. These fabrics are made of highly twisted fine yarns which gives a strong (due to twist and long fiber) light-weight fabric.

Finish. A fabric may have different types of finish. These different types of finish are very useful in bringing out different style effects. A hard-finish fabric is due to (a) smooth yarn (made by the process of combing, which adds to the expense), (b) highly twisted yarn, (c) ply of the yarn, (d) closeness of weave. A hard finish makes a fabric stiff, which has a tendency to make it hang in straight lines, thus preventing its use for draping purposes. Stiff fabrics that stand out from the body are composed of hard-twisted ply yarns, closely woven and, perhaps, with the additional use of sizing. Hair and very stiff fibers, (mohair, etc.) give added stiffness to fabrics.

The hard-finished fabrics that hang in straight lines or clumsy

folds, such as men's serge, taffeta, etc., bring out the harsh lines and wrinkles of the face and take away from its attractiveness. Hard-surface fabrics look well only on a young, slender person, as the severity of the hard surface magnifies the lines of the body and face. Some of the finishes are more wiry than others, but nevertheless they are stiff in character. Stiff, wiry fabrics are adapted to severe tailored effects and should be worn with tailored hats and shoes.

Fuzzy or Nap Surfaces. If we desire a fuzzy surface, the cloth is made (in part or whole) of loosely spun yarn and is loosely woven. Nap is the downy, fibrous covering on the surface of various kinds of cotton, silk, and woolen textures — specifically, the surface-covering of short fibers combed out from the threads of a woven fabric and lying smoothly in one direction. It is of many varieties and forms, as the covering raised up on the surface of flannels and cheviots, the uniform nap of frieze, chinchilla cloth, and other heavy waterproof fabrics. If a very fuzzy surface is desired, a pile weave is used.

Soft Fabrics. Soft, light-weight fabrics are used for draping purposes, so that when the fabric is made into garments it will fall in graceful folds and cling to the body. The softness is given to the fabric by fineness of yarn with a fair amount of twist and very little, if any, sizing.

While soft fabrics drape well they will not fall into the straight lines of pleats. They should be worn with less severely tailored hats, coats, and shoes. The texture of the trimming material should be still finer. Soft, fluffy fabrics naturally add to the bulk by an after-image of extension and also give a softness to the outline of the form.

Some fabrics are very thin and soft, so much so as to float in the air, and are called filmy fabrics. These have a tendency to float outward, like chiffon, etc. The thinness is due to fineness of yarn and low construction in weave. The softness is due to slight twist and lack of sizing.

Lustered Fabrics. As explained in the previous chapter, the

luster on a fabric varies and depends upon the (1) composition, (2) smoothness of yarn, (3) weave, (4) finish. The different degrees of luster are used to advantage in different style effects.

There are certain fabrics such as satin, panne velvet, etc., called lustrous fabrics, with a distinct high luster which, when made into costumes, tend to make one look larger because of the bright light reflected from the surface, which calls attention to the size, width, and roundness of the figure. Hence they should not be used by the larger, broader women.

Then again, the lustered fabrics reflect the light to such a marked degree as to bring out the lines and wrinkles of the

face and form by leaving a strong after-image.

Watered Effect is an effect produced upon grosgrain silk by which the surface assumes a variety of shades, as if the cloth were covered with a multitude of waving lines, the transition from bright to dull effects giving beauty to the fabric. There are two methods of watering silk. It is known that if a silk tissue be pressed with a hot metal roller engraved with a vapory design, that the design on the roller is reproduced on the tissue, which takes, on the portions affected, a distinct appearance without changing color. These, which might be termed grained or marbled effects, can be produced on goods of any width, ribbons or dress fabrics, rollers of the proper width being all that is necessary.

The watered effect may also be produced by wetting the silk and expelling the air and moisture under great pressure. The air in trying to effect its escape, drives before it the moisture, and hence causes the appearance of the curiously tortuous lines, resembling waves, called *moiré* effect. The object of developing upon woven textiles the effect known as moiré is the production of a peculiar luster resulting from the divergent reflection of the light rays from the material, a divergence brought about by compressing and flattening the warp and filling threads in places, and so producing a surface the different parts of which reflect the light differently. The moiré effect may be obtained on

silk, worsted, or cotton fabrics, though it is impossible to develop it on other than a grained or fine-corded weave. The pressure applied to the material being uneven, the grained surface is flattened in the parts desired.

In the Middle Ages moiré was held in high esteem and continues to enjoy that distinction. It is used for women's dresses, wraps, and for facings, trimmings, etc. Fabrics with well-defined and firm ribs, such as bengalines, etc., respond best to this operation, and a wide variety of effects is obtainable by treating the fabrics in various ways.

The classic way of making true moiré, called *moiré antique* or *moiré anglaise*, is by folding the ribbed material lengthwise, face in, the selvedges covering each other and stitched together at intervals to prevent slipping. The fabric is placed between closely and very evenly woven linen or cotton, which is dampened. The whole is calendered several times; sometimes the cloth is not dampened before calendering. Very light fabrics are dressed on their reverse side with glue, size, etc., and after drying run between heated rollers. The moiré thus produced will have large designs showing a great variety and without repetition, but symmetrical on the sides.

Although cross-ribbed materials are usually selected for the moiré process, flat fabrics, like taffeta or satin, are also given similar finish by means of rollers engraved with a moiré design which is pressed into the face of the cloth. Another process of quite recent date produces a moiré effect by means of printing irregular surfaces with several opalescent colors irregularly overlapping each other. The former process (printing with engraved cylinders) always produces repeat in the design, while in the color printing the repeat can be avoided by using rollers with different diameters for the various colors.

Embossing. Embossing is an effect produced on goods by passing them through pairs of correspondingly engraved rollers. This is usually applied to thin goods, although embossed effects are produced on velvets by the pressure of a roller engraved in

relief. Soft, lusterless fabrics will subdue the lines of the figure and also the size, if chosen in proper colors.

We have discussed the characteristics of the texture of fabrics that make them valuable for costumes. Now we shall consider how the (1) styles of fabrics are made, (2) different degrees of style, (3) designs on fabrics.

Degrees of Style. Fabrics may be divided into four style classes, according to the degree of the appeal to the public — conservative, popular, ultra, and exclusive. Since fabrics like serge will always be in style; serge may be considered a staple, and the person who wears it as conservative in style. Conservative fabrics and costumes are appropriate for church and street wear.

There are certain fabrics that consist of a new weave with high coloring and which usually appeal to young men and women. Such a style is extreme or ultra stylish, and is suitable for sport wear or social occasions. On the other hand, midway between these two limits, conservative and ultra, there is a fabric like georgette crepe that appeals to the majority of people. We call this a popular style. Lastly there are certain fabrics, like imported satin broadcloth, that are so expensive that only people with considerable means can purchase them, and because they are restricted to this group are said to be exclusive in style.

Styles of Fabrics. Each piece of cloth is made originally to meet a certain style requirement. That is, once a style is determined, the problem is to produce fabrics that will bring out the style. To illustrate: If the style of coats and capes is to be loose, then elaborate silk linings with novelty designs must be produced, because the interior of the loose garments will be displayed.

Substitutes. The tendency is to place on the markets substitutes which are cheaper than the staples. For example, a fabric composed of cotton and wool may be placed on the market and called albatross, when the original fabric was composed of wool only. A number of firms have on the market cotton fabrics with printed checks and insist on calling them ginghams. A true gingham is a yarn-dyed fabric. Of course, these printed checks are novelty ginghams of a cheaper grade, and not true ginghams in terms of the original fabric.

Staples. Since the style effects repeat themselves from time to time, it follows that there are some fabrics, called staples, that are durable, popular, and constantly in demand, and there are new fabrics that are made from season to season to meet certain style effects and then disappear. These fabrics are called novelties or fancy fabrics. In other words, we always have on the market staple fabrics like taffeta, broadcloth, gingham, satin, etc., and in addition fabrics differing from the staples in small changes that appear from season to season, called novelties. The staples may be illustrated by the following fabrics:

Brilliantines	Cheviots	Nun's Veiling
Sicilians	Panamas	Cashmeres
Mohairs	Batistes	Shepherd Checks
Imperial Serges	Taffétas	Serges
Storm Serges	Voiles	Broadcloths

Fancies are fabrics produced to meet the demands of style. They may remain in favor a year or two. The fancies are fabrics differing from staples in weave, color, and composition, and are produced through: (1) variation of weave; (2) variation of color; (3) variation of color and weave.

Examples: Brocades, cuspettes, meliores, hopsacking, etc. Coloring includes: stripes, checks, plaids, melanges, mixtures.

Styles of Fabrics. Ideas for new fabrics for men's clothing originate usually in London, while those for women's clothing originate in Paris. This information is collected by an expert called a *styler*. From all the information that he obtains from Paris and London, aided by information with regard to the tendencies of style in general, he selects to have made for the coming season 200 or 300 fabrics. These fabrics, called blankets, are made at the mill

and given to the styler, who then decides on 40 or 50 which the house will offer to the trade. The selling house opens its season with these 40 or 50 novelties plus the regular staples.

Every large selling house places on the market every season the usual staples, and a larger or smaller number of novelties or fancy fabrics. The staple fabrics will be sold because there is always a demand for them. The selling of the novelties is a problem. It all depends on how successful the styler has been in determining the popular taste or style. If they do not sell as soon as they are placed on the market, it is extremely doubtful if they will be in any considerable demand.

Mills obtain the designs for fabrics from foreign countries—Paris (for women's fabrics) and London (for men's fabrics); and also from passing events. These designs must appeal to the popular fancy and conform to the standards of beauty and good design as outlined in Chapter II.

The Instinct to Decorate. The desire to decorate or beautify is so natural an impulse that we find from the beginning of the human race traces of different kinds of textile decoration. In response to this desire, decorations were copied from Nature — flowers, birds, and scenery.

Since decorations are expected to be pleasing, it is only natural that people should select designs and colors of the most beautiful flowers, scenes, and symbols of pleasure and religion, as well as those of conquest and other achievements.

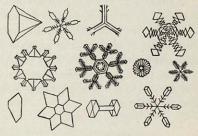
Each civilization, race, and country has adopted a form of decoration. To illustrate: There is the Egyptian decoration, which represents the designs used during the early Egyptian civilization.

The designs of clothing, etc., of people in one part of the world are different from those in another part. This may be due to climatic conditions, the temperament of the people, and environment. The flowers and birds of countries near the equator have the most radiant colors, and we find that the people of those countries use the radiant colors in their clothing and other decorations. As we pass to the north, we notice that the colors of the animals are darker and not so brilliant, and the tastes of the people of the northern countries in dress and decorations tend to neutral colors. So we find people with different tastes and standards as to decora-

tion, clothing, and color, due to inheritance, education, and environment.

Geometrical Designs. Designs found on fabrics may be either (a) geometrical, (b) perspective, (c) naturalistic, or (d) conventional.

Look at a gingham and notice the square and rectangular appearance. Notice that this design gives the impression of being seen by looking squarely at a rectangle. By changing the point from which one looks, different views of the object may be obtained. The views usually drawn are of the front, top, and side. The front view, obtained by looking squarely at the object from the front,



GEOMETRICAL DESIGNS
Snowflake forms are frequently used in designs.

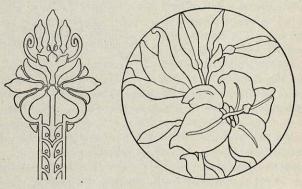
is called the *elevation*. The top view, obtained by looking squarely at it from the top, is called the *plan*. The side view, obtained by looking squarely at the object from the side, is called the *profile*.

Many of the designs in ginghams, etc., are simply square and rectangle plans and elevations of square and rectangular blocks. Egyptian designs represent the front and side views.

Perspective Designs. The perspective view is the one that portrays an object as it appears to the eye from one point of view. The rails of a car track, for instance, appear to converge. The parallel lines of any object appear to the eye to converge in like manner, and a perspective drawing will show this. Any picture or photograph furnishes an example of perspective. It reproduces the way the eye sees and is the natural method of presenting an object for pleasure. The early oriental artists did not know how to secure perspective; hence, the early drawings and designs of the Egyptians appear flat and not natural because they are presented in the geometrical (profile) rather than the perspective manner. The Greeks introduced the perspective conception.

We usually see the human body by a front or back view, sometimes called "elevation," and a side view, called profile view. The outline or contour of the front or back view shows a tapering form of straight and curved lines from the head to the feet, while the side or profile view, sometimes called silhouette, shows the curves of the bust, waist, and hip lines. The silhouette view of the human form differs in most profiles from a front or back view.

Naturalistic Designs. The best designs are those that follow Nature. In fact, the best designers use Nature's pattern book for ideas. A design copied exactly from Nature is called *naturalistic*. Sometimes it is necessary to place a design of a flower in a small space and to use it as a unit in part or as a whole. In order to modify the shape of the flower to fill the space, sometimes only the general form is used, and the design is then called *conventional* and not naturalistic.



CONVENTIONAL DESIGN

NATURALISTIC DESIGN

Naturalistic designs, such as buds, flowers, butterflies, and landscapes, are not very desirable for dress fabrics. The conventionalized designs are far more interesting because they do not appear so conspicuous and outstanding on the fabric.

The designs that we see on fabrics have been handed down from centuries. They appeal to us because they arouse a feeling or an emotion that is pleasing. To illustrate: The zigzag or chevron is probably the earliest ornamental form. The worship of the sun, the moon, and of lightning at the dawn of civilization is handed down to us in spiral, crescent-shaped, and zigzag ornament, mystic symbols having been gradually converted into decorative schemes.

Artisans of olden times, particularly in the Orient, possibly for superstitious reasons, evolved a symbolic and decorative instead of a naturalistic art.

The Greeks developed an art for art's sake, turning toward Nature for their conception, and emphasized the naturalistic method of representing objects. They also developed perspective to a marked degree. The Greek or classical conception of representation influenced the Renaissance art, and thus we find paintings or designs of fruit so cunningly made as to tempt one to seize and eat it.

This form of art has been called naturalistic and has dominated the Christian countries within a generation or more. Thus we find through civilization two forms of art or ideals of decoration — one

developed in oriental countries (conventionalized designs) and the naturalistic or realistic designs of the western countries.

Cubism. A modern art movement that dates from 1908 is called *cubism*. It attempts to make objects solid and endurable, and represents them by means of planes. This method of expressing the values of objects is considered powerful, effective, and interprets the structure rather than the appearance. To illustrate: Nature and human forms are represented by cubes, cones, and cylinders.

The influence of cubism has been far-reaching. It has affected furniture and women's dress and has fruitfully inspired both architecture and interior decoration.



CUBIST FIGURE

The Futurists. While the cubist designers specialized in the third dimension, another group of artists, called futurists, went one better and specialized in the fourth. When a futurist designed a costume he recognized the profound truth that although he could not see it, the back or side of the costume was there. He also realized that however long the person wore the costume, a time would come when he would move about, and the back of the costume would become visible. These things being so, why not paint the side of the person, or the person in another position — walking? The futurists were

particularly successful in the rendering of movement, but they secured this by their adroit use of diagonal and slanting lines. This



idea has been carried out successfully in displaying costumes on persons walking or sitting in different positions. The aim is to express the idea of a form rather than an appearance.

Psychological Value of Costume. There is a strong appealing influence that is really

emotional in character in fabrics or costumes which differ according to the (a) composition, (b) weave, and (c) finish. To illustrate: Look at georgette or chiffon costume that is cut to meet the requirements of the person and see if it does not attract us in a flattering manner — alluring. Then change by looking at an elaborate velvet costume and see how the velvet gives a quality that inspires dignity, loftiness, reverence, and in some cases an elevation of rank.

Then notice the tulle trimmings of a cashmere and notice the love, kindness, or good-will that it conveys. A satin costume, on the other hand, associates with its softness and luster an irresistible power to please and attract — charm. A lace costume brings out all the feminine charm of a person, that is, the power to attract in different degrees.

The costumes containing metal cloth convey a suggestion of military spirit or ambitious display — ostentation. Costumes of fur give one the impression of richness and elegance and gorgeousness — splendor. Fabrics of linen are forceful and active in appearance, and give the impression of efficiency. Organdie we associate with youth. Serge costumes always convey the idea of durability, due to the tightness of weave, hence suggest service. A broadcloth costume is made of one of the oldest fabrics and gives a conservative, mild impression, hence we associate it with genteel or well-bred people.

Similar results may be obtained by the proper use of color which has been described in the chapter on color, on page 63.

Fabric Designs. As far back as we go in history, we shall find attempts made to make fabrics and costumes attractive by means of designs. This is not surprising when we consider that Nature has used design and color in all its creations, and we naturally desire color decoration in order to satisfy our tastes. The history of design, like everything else, has passed through all stages of development from the simple to the complex.

The primitive designs and those that are used today in textile fabrics are either vertical or horizontal forms, or diagonal lines repeated, giving us stripes, cords, checks, etc. The square gives us checks and zigzag lines. Geometrical forms of all kinds have been used — lines, triangles, squares, rectangles, hexagons, circles, ellipses, etc. The blooming flower has furnished much artistic inspiration. The tapering stem and spreading petals with graceful curves offer a contrast to the upright pistils.

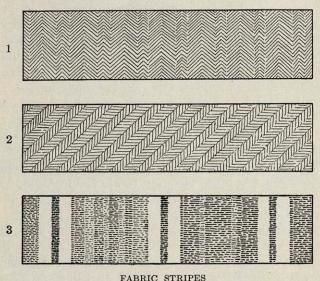
If we examine striped fabrics we shall find that the proper spacing of the parallel lines is what appeals to us. Proper spacing differs according to use, texture, color, and composition. To illustrate: Striped materials for clothing should be different from furniture coverings. The stripes may be modest, or broad and self-asserting, or in bold, striking colors.

**Lines.** The different kinds of lines in fabrics as in costumes may be used in three distinct ways: (a) repetition, (b) contradiction, (c) transition, each of which affects the appearance of the shape on which the lines are placed.

A fabric may be improved by being associated or placed with another fabric that differs slightly from it, by contrast or likeness.

Notice a pattern or design in a fabric. It may be a woven or printed pattern. In either case, notice that the pattern breaks up the surface into lines, squares, dots, or large masses of color in the form of lines, geometrical forms, flowers, etc. The pattern adds to the attractiveness of plain fabrics, and hence the woven or

printed design fabric is more attractive. As we examine the patterned fabrics we shall find that those that have the stronger contrast are the most conspicuous.

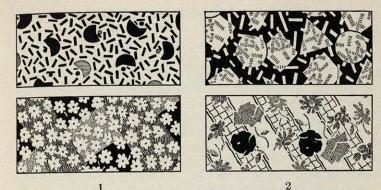


1. Chevron Stripe. 2. Diagonal stripe. 3. Sports stripe.

Look at a plaid fabric and note that it consists of nothing but unevenly spaced straight lines or rectangles, and yet gives a distinctive effect. There is a certain tailored appearance that the use of plaid materials produces, and they are extremely smart.

The proper distribution of lines, masses of light and dark, and color, give an excellent chance for harmony in design. This is shown in the plaid with harmony of unequal spaces and color notes. Remember that color emphasizes good proportion and spacing and easily points out defects.

Fabrics with large designs or plaids and checks when made into costumes tend to attract attention to all points of the body, thus making the body appear larger.



FABRIC DESIGNS (one-fourth size)
1. Good for large women.
2. Good for small or thin women.

Woven and Printed Designs. Designs may be produced by weaving, dyeing, and printing. The design effects produced by weaving have been described on pages 182–188. Since the effects in woven design are produced by the interlacing of colored threads or threads of different sizes, it follows that shading can be done only in terms of the color of a single thread or yarn. In other words, the shading takes place from thread or yarn to yarn, and naturally the design does not appear as smooth or as even as a printed design. Woven designs are usually spoken of as dobby or Jacquard designs, which have been discussed on pages 185–186.

A single color is given to a fabric by a process of dyeing, im-

mersing the fabric in a solution of dyestuff.

Printed designs may be placed on the fabrics by means of copper rollers. The dye paste, a mixture of dye, starch, etc., is impressed on the fabric by means of the etched design on the rollers. Each color requires a separate roller with the portion of the design in that color etched on the roller.

Some of the common designs for fabrics are as follows:

Pepper-and-Salt. In textile designing, a term used to denote a color effect, consisting either of a light ground (as white, drab, or grey) finely dotted or flecked with a dark color, as black or dark grey; or, of a black or dark grey ground thickly and evenly specked

with white or light grey. The term is especially applicable to fabrics and garments of wool.

Polka Dot. In textile designing, a name used to denote a pattern of large round dots or spots sparsely scattered over the surface of the fabric. The pattern may be produced by any of the prevailing methods of ornamentation; by weaving, printing, embossing, embroidering, etc.

Pompadour. In textile designing, a name used to denote small flowered designs printed or brocaded in bright colors; pink and blue are always intermingled in the pattern, and these are frequently heightened with vivid yellow. Pompadour effects are confined chiefly to silk and cotton fabrics. The pompadour parasol is a style of sunshade having a folding handle, and usually covered with moiré antique or other heavy silk.

Mélange is a term used to denote a black and white color mixture; also, by extension, small broken-up effects of different colors. Usually, melange is applied to woolen fabrics produced from yarn that has been either printed in the wool, or dyed in different colors and mixed together before being spun.

Clay Worsted. A variety of flat-twilled worsted woven with a twill similar to that of serge, the diagonal lines lying flat on the surface and barely perceptible. On account of the warp and weft being slackly twisted the cloth does not take a gloss as in the case of the ordinary hard-twisted worsteds. The name is derived from an English manufacturer, and it is from England that the best qualities are obtained.

Corkscrew Worsted. (So-called from its fancied resemblance to the twists of a corkscrew.) A particular weave which has for several years been extensively employed in the manufacture of worsted goods, more especially in cloths intended for men's wear. The prolonged duration and success of the corkscrew pattern has had but few parallels in the history of cloth manufacture, though at present clay worsted and cheviot are fast driving it out of popular favor. The structure of the ordinary class of corkscrew worsted is based on the sateen-twill principle. It is predicted that the time is not far distant when fickle fashion will cease entirely to smile on this particular weave, and then it will have had its run—together with broadcloth and doeskin, it will exist only as a memory of things that have been.

Bandanna Fabrics. Bandanna fabrics are fabrics made by the tie and dye method, in which the cloth is tied in knots at certain places to prevent the parts from receiving the dye. This method is a very remarkable means of producing designs in spots — round, oval or square — and plaids.

Antique is a term used to describe fine thread-lace wrought in former times and which has grown yellow with age; also applied to hand- or machine-made imitations of ancient styles of lace. In textile designing, antique signifies a pattern that is indistinctly or irregularly woven, printed, or watered, in imitation of those made by processes in vogue in previous centuries.

Iridescent is a term used in textile fabrics to describe a color effect produced by the use of warps and wefts of different tints and hues in silk fabrics. Properly, iridescent effects exhibit alternating or intermingled colors like those of the rainbow, as in mother-of-pearl. In its more general application the term describes any glittering of colors which change according to the light in which they are viewed, without reference to what colors they are, so long as they present a changeable metallic sheen.

Honeycomb. An ornamental weave produced in cotton and linen canvas by drawing the warp and weft threads so that the small lozenge-shaped spaces between them shall appear sunken, and the designs in relief. So called from a resemblance to the concave cells of a comb of honey.

Gossamer. (A contraction of "Godsummer," a name given by our very religious ancestry to the filmy cobwebs which float in the air in summer time, so called because these flying webs were considered as being the shreds and remnants of the Virgin Mary's shroud which she dropped to earth on her ascension to heaven.) A variety of gauze, softer and stronger than the ordinary kind, much used for veils. Also a thin, waterproof outer wrap, worn especially by women.

Woven Designs. Compare woolen and worsted suitings. Note that the worsted suiting with its fine diagonal effect is attractive in itself, due to the weave, while the woolen fabric, lacking this effect in such a prominent way, has more coloring to brighten and improve the quality of the design. In fact, color shades have improved the elegance of the design and appearance of all woolen

fabrics. Of course, color is used and does develop the design in worsted, but color is much more important in woolens.

The common designs or patterns in woolen and worsted fabrics are stripes, cords, checks, figures, or mixture — which is an intermingled effect. The stripes are produced by inserting a different colored thread as, for example, a single thread twisted around a worsted thread, making a two-ply yarn, inserted in weaving at definite places would give a very attractive stripe effect. The stripe effect would be enhanced by the pearly luster of silk against the deep luster background of the wool. Cord effects are made by inserting a heavier ply or twisted yarn in definite places.

Patterns in dress fabrics, shirtings, and other articles made entirely of cotton are frequently mere combinations of fancy shades, while fabrics composed of silk and jute, including silk ties, handkerchiefs, etc. — in fact, the cloths in which fancy shades are used — show that coloring and its combinations in all woven products embellished with design are elements which give the tone and character to the styles. Though the cloth may be soft to the touch, substantially made, of uniform structure, and skilfully finished, yet a lack of brightness and elegance in coloring so detracts from the appearance of the pattern that these qualities alone are not sufficient.

Look at a worsted serge and notice that the decorative or artistic quality is due to the diagonal effect, to the twill weave (which is due to the oblique lines), or to a stripe in the weave and the color, and then notice a Scotch plaid and gingham and observe the check effects and the colors.

The fundamental elements of the design in fabrics are one or all of the following: (1) the weave, (2) combination of lines that make the form of the design, and (3) the combination or blend of colors. Since the weave is the build or structure of a fabric, it is the most important element in the design.

The various methods of employing fancy shades in woven fabrics

may be briefly summarized:

1. In mixture cloths, that is, with different colored threads used in weaving suitings, coatings, etc.: (a) By combining or blending various colors of materials in carding so that the different colors are in the yarns or threads. (b) By combining several classes of twist threads of different colors and kinds, wool and silk, etc.

2. In plain, twilled, mat and fancy weave designs for trouserings, coatings, suitings, jackets, dresses, costumes, flannels, shirtings, etc.: (a) By introducing colors in the warp, forming stripes. (b) By introducing colors in the filling, producing spotted patterns. (c) By introducing colors into both warp and filling, giving checks, broken styles, etc., called Jacquard or fancy dobbies in double weave.

3. In figured designs for dresses, vestings, etc.: (a) By using one or several series of extra warp yarn. (b) By using one or several

series of extra filling.

Cotton Finishes. There are many special designs and finishes in cotton fabrics. Some are permanent like the (a) luster on mercerization, (b) printed design on a printed fabric, (c) stripes and checks, (d) stiffness, as in a washable organdie. On the other hand, there are other designs and finishes, degrees of luster, stiffness, etc., that are only temporary — disappear on washing. See Trade Edition of Dooley's *Textiles*, page 250.

Decorative Fabrics Used for Dress Goods. Within the last few years the creators of women's fashions have appropriated many of the upholstery fabrics formerly devoted solely to the use of the decorator, and have taken them for use in clothing. Brocades, chintzes, cretonnes, and all sorts of similar fabrics have appeared as frocks, smocks, coats, and bathing suits.

Summary. As we glance at a beautiful fabric or costume or, in fact, any piece of artistic work, our emotions are aroused and sentiments of admiration are quickly formed. When we begin to analyze our feeling as to why we admire the costume or work of art, we begin to see the underlying principles giving beauty to a good design.

The following facts underlie the principles of good design in

fabrics:

1. Motifs of the same size and proportion of color appear monotonous. Hence motifs should be different, sizes and color should vary in space and intensity to add interest. This applies particularly to polka dots, stripes, checks, and plaids.

2. Motifs should have unity in all parts.

- 3. There must be harmony of line, shape, and proportion in the motifs.
- 4. The design should be adapted to the wearer. For example, large motifs or patterns are not suitable for large or stout people.

5. The design should not be too large to be covered completely

by folds of the dress.

- 6. Motifs should be adapted to the purpose naturalistic designs are out of place on dress fabrics.
- 7. Designs on fabrics should not be too conspicuous or take attention from one wearing the fabric.
  - 8. The colors should be suitable as to design and wearer.

## QUESTIONS

- 1. What is the relation between the fabric and the style of a costume?
- 2. What determines the style of a costume?
- 3. What determines the style of a fabric?
- 4. Give a clear definition of the texture of a fabric.
- 5. What does the textile of a fabric depend upon?
- 6. Explain how (a) weave, (b) construction, (c) twist of the yarn influence the fabric?
- 7. How is the (a) thickness, (b) thinness, and (c) weight of a fabric influenced?
- 8. What is meant by the finish of a fabric? Why is it an important factor in the style effect of the fabric and costume?
  - 9. Explain how the nap of a fabric is produced.
  - 10. State the effect of luster and non-luster fabrics.
- 11. What is meant by moiré and embossed? State the style values of each.
- 12. What makes one fabric soft and clinging while another which is crisp gives a bouffant effect?
- 13. What makes some fabrics wiry in feel and adapted for plaits but not for gathers?
- 14. Why are some fabrics well adapted for tucks and others that have a nap surface do not tuck well?
  - 15. Why should velvets be made plainly so as to give a rich effect?
  - 16. What is the difference between staple and fancy fabrics?
  - 17. Why is it necessary to have staple and fancy fabrics?
  - 18. How can one determine the true staple fabric from the fancy fabric?
  - 19. How are the styles of fabrics determined?
  - 20. Give the different degrees of styles, with examples.
  - 21. Why do we have designs on fabrics?